# THE PRUDENTIAL ASSURANCE COMPANY LIMITED 

## Year ended 31 December 2013

## Supplementary Notes to the Forms

## APPENDIX 9.1

0101* Waivers modifying the Accounts and Statements rules

Section 68 (Insurance Companies Act 1982) Orders modifying 1996 Regulation provisions continued under transitional arrangements

The Financial Services Authority (the UK insurance regulator at the time) used its powers under section 156(2) of the Financial Services and Markets Act 2000 to allow waivers granted under section 68 of the Insurance Companies Act 1982 to continue without the need for companies to request a waiver under the Financial Services and Markets Act 2000.
(826) The Treasury issued to the Company in February 1999 an Order under section 68 of the Insurance Companies Act 1982 modifying the provisions of Regulation 13 of The Insurance Companies (Accounts and Statements) Regulations 1996 so that the Company is not required to submit a Form 31 in respect of the business written through its Dutch branch in the years 1976 to 1979. The section 68 Order under the Insurance Companies Act 1982 continues to have effect under the transitional arrangements set out in the Supervision manual. Regulation 13 of The Insurance Companies (Accounts and Statements) Regulation 1996 has been replaced by Rule 9.19 of the Interim Prudential Sourcebook for Insurers.

Application of Sections 138 and 138A (previously Section 148) Waivers
(1245544) The FSA (the UK insurance regulator at the time), on the application of the firm, made a direction under section 148 of the Financial Services and Markets Act 2000 in November 2010. The effect of the direction is to reduce the level of detail reported in Forms 23, 24, 25, 31 and 32 (by showing all business as written in prior years), and to exclude Forms 28, 29, 34, 37, 38 and 39 in the firm's return to the FSA (the UK insurance regulator at the time), in respect of the firm's UK commercial lines general insurance business, which has been in run-off since 31 December 1992. This direction expired on 30 June 2013.
(1614497) The PRA, on the application of the firm, made a direction under section 138 of the Financial Services and Markets Act 2000 in May 2013. The effect of the direction is to reduce the level of detail reported in Forms 23, 24, 25, 31 and 32 (by showing all business as written in prior years), and to exclude Forms 28, 29, 34, 37, 38 and 39 in the firm's return to the PRA, in respect of the firm's UK commercial lines general insurance business, which has been in run-off since 31 December 1992. This direction ends on the earlier of the date the relevant rules are revoked or no longer
apply to the firm in whole or in part and 01 April 2018. This waiver is an extension of waiver 1245544 which expired on 30 June 2013.
(948128) The FSA (the UK insurance regulator at the time), on the application of The Prudential Assurance Company Limited, made a Direction under Section 148 of the Financial Services and Markets Act 2000 in September 2008. The effect of the direction is to modify GENPRU 2 Annex 7R and INSPRU 3.2.33R so as to permit the firm to value debts arising from amounts advanced as commission to approved credit institutions and wholly owned subsidiaries of approved credit institutions in respect of certain long term insurance policies sold on or before 09 September 2013, and to take such debts fully into account. This direction expired on 09 September 2013.
(1664660) The PRA, on the application of The Prudential Assurance Company Limited, made a Direction under Section 138A of the Financial Services and Markets Act 2000 in September 2013. The effect of the direction is to modify GENPRU 2 Annex 7R and INSPRU 3.2.33R so as to permit the firm to value debts arising from amounts advanced as commission to approved credit institutions and wholly owned subsidiaries of approved credit institutions in respect of certain long term insurance policies sold on or before 31 December 2018. This direction ends on the earlier of the date the relevant rules are revoked or no longer applies to the firm and 31 December 2018. This waiver is an extension of waiver 948128 which expired on 09 September 2013.
(1270416) The FSA (the UK insurance regulator at the time), on the application of the firm, made a direction in February 2011 under section 148 of the Financial Services and Markets Act 2000. The effect of the direction is to enable the firm to contract to pay benefits under linked long term contracts relating to (i) Ex- Prudential Holborn Life Limited (PHL) funds in The Prudential Assurance Company Limited (PAC) (Prudential European, Prudential International, Prudential Managed, Prudential Strategic Growth, Prudential Japanese, Prudential North American and Prudential Equity (Life only)); (ii) Ex-Scottish Amicable Life (SAL) funds in PAC (Prudential European, Prudential International, Prudential Managed, Prudential Japanese, Prudential North American and Prudential Equity (Life only)); (iii) Ex-Scottish Amicable Life (SAL) funds in PAC (Prudential European, Prudential International, Prudential Managed, Prudential Japanese, Prudential North American and Prudential Equity (Pension only)); (iv) Ex-M\&G funds in PAC (Pru Equity Pension fund (ex M\&G), Pru Equity Life fund (ex M\&G), Pru Managed life fund (ex M\&G) Pru Managed pension fund (ex M\&G) and Pru Personal Pension fund (ex M\&G) (Life \& Pension)); and (v) PAC fund (Prufund Managed Fund) which are themselves determined, either wholly or partly, by reference to units in the Prudential European QIS Fund, Prudential Japanese QIS Fund, Prudential North American QIS Fund, and Prudential UK Growth QIS Fund. This direction ends on 8 February 2016.
(1388495) The FSA (the UK insurance regulator at the time), on the application of the firm, made a direction under section 148 of the Financial Services and Markets Act 2000 in September 2011. The effect of the direction is to modify the provisions of INSPRU 3.1.35R and IPRU(INS) Appendix 9.3 so that a more appropriate rate of interest is used for certain assets taken in combination. This direction ends on 31 March 2014 or, if earlier, the date the relevant rule is revoked or no longer applies to the firm (in whole or in part).

Total assets per Form 13 (other than long-term business) line 89
Total assets per Form 13 (long-term business) line 89
Less: the sum of lines 11, 12 and 49 in Form 14
Less: liabilities per Form 15 line 69
Add: assets backing the capital resource requirements of dependants
Add: preference shares
Net assets per Form 3 line 79

4,106,281
123,672,746
101,490,272
1,548,676
1,115,778
1,000
25,856,857

## *0305* Details of other financing arrangements

Not included in lines 91 to 95 are two arrangements. a) An arrangement with Swiss Re Europe S.A., UK branch provided financing for Prudential Protection contracts. The amount to be repaid is a proportion of the difference between the office premium (net of an allowance for renewal expenses) and the reinsurance premium for the time that the policy remains in force. The payment of a proportion of each future premium to the reinsurer has been allowed for when calculating the mathematical reserves. b) An arrangement with Hannover Rueck SE provided financing for Flexible Protection and PruProtect Plans. Payments to the reinsurer are a proportion of the office premium for the time that the policy remains in force. Allowance has been made for the repayment of this financing in calculating the level of the reserves required for these contracts.
*0308* $\quad$ Nature of outstanding contingent loans
Included in Line 94 is a contingent liability that arises from a contingent loan arrangement with Prudential Health Holdings Limited. This agreement was entered into on 3 September 2007 and allows The Prudential Assurance Company Limited to borrow from Prudential Health Holdings Limited, sums from time to time in an aggregate amount of up to $£ 250 \mathrm{~m}$. The loan amount is unambiguously linked to the emergence of regulatory losses arising in respect of all income and costs associated with selling and underwriting the Flexible Protection Plan and PruProtect Plan. The loan is to be repaid as regulatory surplus arises in the future.

The commutation value of this arrangement is $£ 67.0 \mathrm{~m}$.
The Prudential Assurance Company Limited is entitled, if it has given Prudential Health Holdings Limited prior notice to that effect, at any time, to repay any amount of the loan balance.

Included in Line 92 is a contingent liability that arises from a financial reinsurance treaty. This agreement was entered into on 9 August 2013 and provided an advance of $£ 135 \mathrm{~m}$ to The Prudential Assurance Company Limited. The repayments are linked to
the emergence of regulatory surplus on specified lines of business in the Non-Profit Sub-Fund. No repayments were made during 2013. Under the terms of the treaty nothing will become due in 2014.

The commutation value of this arrangement including interest is $£ 136.7 \mathrm{~m}$.

## *0310* Details of valuation differences

Other than long-term 2013
Positive valuation differences in respect of assets where valuation in GENPRU is higher than the firm uses for external reporting purposes being:-
Mortgages and loans valuation difference including the deferred tax effect 208,186

Total line 14 column $1 \quad \underline{\underline{208,186}}$
Long-term 2013
Positive valuation differences in respect of assets where valuation in GENPRU is higher than the firm uses for external reporting purposes being:-
Mortgages and loans valuation difference
20,663
Positive valuation differences in respect of liabilities where Valuation in GENPRU is lower than the firm uses for external reporting purposes being: -
Deferred tax on accounts DAC
Deferred tax on other valuation differences 113,698
Difference in valuation basis for actuarial liabilities $9,766,220$
Creditors in respect of contingent loans and financial reassurance accepted

203,670
Negative valuation differences in respect of assets where Valuation in GENPRU is lower than the firm uses for external reporting purposes being:Pension deficit funding net of tax - see note 1405

Total line 14 column 2

## *0313* Reconciliation of the profit \& loss a/c movement to the profit and loss retained on Form 16

Form 3 line 12 column 3 (2013) 4,604,028
Form 3 line 12 column 4 (2012) 4,409,307
Movement in profit \& loss a/c per Form $3 \quad \underline{194,721}$
Long-term business results retained within the long-term fund 107,513
Form 16 line 59 column 1 profit \& loss for the year $\underline{302,234}$

## *1301* Aggregate value of certain investments

There are no units held in collective investment schemes, no unlisted investments, no listed investments which are not readily realisable, and no reversionary interests or remainders in property other than land or buildings in the other than long-term funds.
*1302* Aggregate value of hybrid securities
The aggregate value of hybrid securities is nil for the other than long-term business fund.
*1304* $\quad$ Use of set off
Amounts have been set off to the extent permitted by generally accepted accounting principles.

## *1305* Counterparty limits

Under the Company's investment guidelines, the maximum permitted exposure to any one counterparty is set at $5 \%$ of the business amount, with the exception of short-term deposits with approved credit institutions, where the limit for any one institution is $20 \%$. The $5 \%$ limit for the other than long-term fund has not been exceeded.
*1306* Exposure at the year end to large counterparties
There were no exposures in excess of 5\% of the relevant business amount within the other than long-term business fund at the year-end.

## *1307* Secured Obligations

No secured obligations were held by the other than long-term fund.

## *1308* $\quad$ Aggregate value of certain investments

The long-term business fund held unlisted investments with an aggregate value of $£ 2,132 \mathrm{~m}$ and units of beneficial interest in collective investment schemes with an aggregate value of $£ 4,270 \mathrm{~m}$. There are no listed investments which are not readily realisable, and no reversionary interests or remainders in property other than land or buildings in the long-term fund.
*1309* $\quad$ Aggregate value of hybrid securities
The aggregate value of hybrid securities is $£ 1,634 \mathrm{~m}$ for the long-term business fund.
*1310* Use of set off
Amounts have been set off to the extent permitted by generally accepted accounting principles.
*1312* Exposure at the year end to large counterparties
There were no exposures in excess of $5 \%$ of the relevant business amount within the long-term business fund at the year-end.
*1313* Secured Obligations
At the year end the Company's long-term business fund had an exposure of $£ 567 \mathrm{~m}$ to secured obligations to which para 14 of part 1 of Appendix 4.2 applies.
*1314* Tangible lease assets
No tangible lease assets are included for the other than long-term business fund.

## *1316* Tangible lease assets

No tangible lease assets are included for the long-term business fund.
*1318* Particulars of other assets adjustments
The amount in line 101 is made up of the following:
Other than long-term assets:
£’000

Assets netted off with liabilities 54

Total Line 101 (other than long-term) $\underline{54}$

Long-term assets:

$$
£^{\prime} 000
$$

Long-term assets netted off with liabilities
Total Line 101 (long-term)
$\underline{21,147}$
*1319* Counterparty limits
Under the Company's investment guidelines, the maximum permitted exposure to any one counterparty is set at $5 \%$ of the business amount, with the exception of short-term deposits with approved credit institutions, where the limit for any one institution is $20 \%$. During the year the $5 \%$ limit for the long-term fund was not exceeded.

## *1323* Acquisition of Scottish Amicable Life Assurance Society

In 1997 the business of Scottish Amicable Life Assurance Society (SALAS) was transferred to the Company. In effecting the transfer, a separate sub-fund, the Scottish Amicable Insurance Fund (SAIF) was established within the Company's long-term fund. This sub-fund contains all the with-profits business and all other pension business that was transferred from SALAS and is closed to new business. As separate assets are managed for SAIF, separate Forms 13, 14 and 17 have been prepared for that fund.
*1324* Distribution rights
Also included in Form 13 line 93 are the distribution rights relating to facilitation fees paid in relation to the bancassurance partnership arrangements in Asia for the bank distribution of insurance products for a fixed period of time. The distribution rights amounts are amortised over the term of the distribution contracts.
*1401* Provision for "reasonably foreseeable adverse variations"
No provision has been made for reasonably foreseeable adverse variations as all contracts are strictly covered by assets.
*1402* Long-term charges, contingent liabilities, guarantees and commitments
a) There were no charges over assets.

The Company has adopted the provisions of Financial Reporting Standard 19 Deferred Tax. Full provision has been made.
b) The ordinary long-term business fund held a provision of $£ 0.3 \mathrm{~m}$ for potential tax on capital gains in respect of linked business in the ordinary long-term business fund, in line 11 of Form 14. Provision of $£ 667 \mathrm{~m}$ for tax on capital gains in respect of other long-term business has been included in line 21 of Form 14, including $£ 44 \mathrm{~m}$ in respect of SAIF. These provisions have been determined in accordance with the procedures outlined in paragraph 3 of the

Valuation Report in Appendix 9.4 of this Return. The actual provisions and the maximum potential tax are the same.
c) The Company has contingent liabilities in respect of insurance and other agreements entered into in the normal course of business and in respect of litigation arising therefrom.
d) For guaranteed annuity products sold in the UK, the Company held a provision of $£ 68 \mathrm{~m}$ at December 31 2013, (2012: £115m), within the With-Profits SubFund to honour guarantees on these products. The Company's main exposure to guaranteed annuities in the UK is through SAIF and a provision of $£ 710 \mathrm{~m}$ was held in SAIF at 31 December 2013, (2012: £722m) to honour annuity and other guarantees.
e) Inherited Estate in the With-Profits Sub-Fund.

The assets of the main with-profits fund within the long-term insurance fund of the Company comprise the amounts that it expects to pay out to meet its obligations to existing policyholders and an additional amount used as working capital. The amount payable over time to policyholders from the with-profits fund is equal to the policyholders' accumulated asset shares plus any additional payments that may be required by way of smoothing or to meet guarantees. The balance of the assets of the with-profits fund is called the 'inherited estate' and has accumulated over many years from various sources.

The inherited estate represents the major part of the working capital of the Company's long-term insurance fund. This enables the Company to support with-profits business by providing the benefits associated with smoothing and guarantees, by providing investment flexibility for the fund's assets, by meeting the regulatory capital requirements that demonstrate solvency and by absorbing the costs of significant events or fundamental changes in its long-term business without affecting the bonus and investment policies. The size of the inherited estate fluctuates from year to year depending on the investment return and the extent to which it has been required to meet smoothing costs, guarantees and other events.
f) In common with several other UK insurance companies, the Company used to sell low-cost endowment products related to repayment of residential mortgages. At sale, the initial sum assured was set at a level such that the projected benefits, including an estimate of the annual bonus receivable over the life of the policy, were equal to or exceeded the mortgage debt. Because of a decrease in expected future investment returns since these products were sold, the Regulator is concerned that the maturity value of some of these products will be less than the mortgage debt. The Regulator has worked with insurance companies to devise a programme whereby the companies write to customers indicating whether they may have a possible shortfall and outline the actions that the customers can take to prevent this possibility.

The Company is exposed to mortgage endowment products in respect of policies issued by Scottish Amicable Life plc (SAL) and policies issued by Scottish Amicable Life Assurance Society (SALAS) and transferred into the Scottish

Amicable Insurance Fund (SAIF). Provisions of $£ 1 \mathrm{~m}$ in the Non-Profit Sub-Fund and $£ 13 \mathrm{~m}$ in SAIF were held at 31 December 2013 to cover potential compensation in respect of mortgage endowment product mis-selling claims. As SAIF is a separate sub-fund of the Company's long-term business fund, this provision has no impact on shareholders.

In addition, the Company's main with-profits fund paid compensation of $£ 1 \mathrm{~m}$ in respect of mortgage endowment products mis-selling claims in the year ended 31 December 2013 and held a provision of $£ 20 \mathrm{~m}$ at 31 December 2013, in respect of further compensation. This provision has no impact on the Company's profit before tax.
g) Contingent liabilities arise in connection with the contingent loan and financial reinsurance arrangements described in note 0308 . The total of these is $£ 203.7 \mathrm{~m}$.
h) There are no other fundamental uncertainties.
i) There are no other guarantees, indemnities or other contractual commitments effected, other than in the ordinary course of its insurance business, or in respect of related companies. The Company is however, and in the future may be, subject to legal actions and disputes in the ordinary course of its business. Whilst the outcome of such matters cannot be predicted with certainty, the directors believe that the ultimate outcome of such litigation will not have a material adverse effect on the Company's financial condition and results.
*1405* Particulars of other adjustments
The amount in line 74 is made up of the following:
Difference in valuation basis for actuarial liabilities
9,766,220
Pension deficit funding (note 1)
Creditors in respect of contingent loan 203,670
Deferred tax on other valuation differences 113,698
Long-term liabilities netted off with assets 21,147

Total Line 74
10,073,691
Note 1 - The pensions surplus in the statutory accounts is the actual pensions surplus for the Company's main schemes. The amount provided for in the PRA returns is the deficit reduction amount i.e. the additional funding (net of tax) that will be required to be paid into that schemes by the firm over the following five year period for the purpose of reducing the firm's defined benefit liability. The deficit shown at line 22 of the With-Profits Sub-Fund Form 14 is $£ 29.0 \mathrm{~m}$ and the deficit shown at line 22 of the SAIF Form 14 is $£ 2.0 \mathrm{~m}$. The surplus in the statutory accounts is $£ 23.3 \mathrm{~m}$ and is included in line 93 of the With-Profits Sub-Fund Form 13. The net difference between the PRA returns ( $£ 31.0 \mathrm{~m}$ ) deficit and the accounts $£ 23.3 \mathrm{~m}$ surplus is therefore £54.3m.
*1407* Creditors taxation
The creditors taxation on line 37 was negative for the Non-Profit Sub-Fund. However overall the balance for the long-term fund was a liability. A right of set off exists with the counterparty and the disclosure is considered appropriate. Reclassification of the creditor as an asset would have incorrectly grossed up Forms 13 and 14 and created a reconciling difference with the financial statements.
*1501* Provision for "reasonably foreseeable adverse variations"
There is no provision for reasonably foreseeable adverse variations as all contracts are strictly covered by assets.

## *1502* Other than long-term charges, contingent liabilities and guarantees

a) There were no charges over assets.
b) The potential tax on capital gains in respect of the other than long-term business assets shown on Form 15 is nil.
c) Under the terms of the Company's arrangements with the Prudential Group's main UK bank, the bank has a right of set-off between credit balances (other than those of long-term business funds) and all overdrawn balances of those group undertakings with similar arrangements. The Company also has contingent liabilities in respect of insurance and other agreements entered into in the normal course of business and in respect of litigation arising therefrom.
d) The pensions review by the Financial Services Authority (FSA), the UK insurance regulator at the time, of past sales of personal pension policies required all UK life insurance companies to review their cases of potential mis-selling and record a provision for the estimated costs. The Company met the requirement of the FSA (the UK insurance regulator at the time) to issue offers to all cases by 30 June 2002. Provisions in respect of the costs associated with the review have been included in the change in long-term technical provisions in the Company's long-term technical account and the transfer to or from the fund for future appropriations has been determined accordingly.
The directors believe that, based on current information, the provision, together with future investment return on the assets backing the provision, will be adequate to cover the costs of pension mis-selling including administration costs. Such provision represents the best estimate of probable costs and expenses. However, there can be no assurance that the current provision level will not need to be increased.
The costs associated with the pension mis-selling review have been met from the inherited estate. Accordingly, these costs have not been charged to the asset shares used in the determination of policyholder bonus rates. Hence policyholders' payout values have been unaffected by pension mis-selling.
In 1998, the Company stated that deducting mis-selling costs from the inherited estate would not impact its bonus or investment policy and it gave an assurance that if this unlikely event were to occur, it would make available support to the fund from shareholder resources for as long as the situation continued, so as to ensure that policyholders were not disadvantaged. The assurance was designed to protect both existing policyholders at the date it was
announced, and policyholders who subsequently purchased policies while the pension mis-selling review was continuing.
This review was completed on 30 June 2002. The assurance will continue to apply to any policy in force at 31 December 2003, both for premiums paid before 1 January 2004, and for subsequent regular premiums (including future fixed, retail price index or salary related increases and Department of Work and Pensions rebate business). The assurance has not applied to new business since 1 January 2004. New business in this context consists of new policies, new members to existing pension schemes plus regular and single premium top-ups, transfers and switches to existing arrangements. The maximum amount of capital support available under the terms of the assurance will reduce over time.
The bonus and investment policy for each type of with-profits policy is the same irrespective of whether or not the assurance applies. Hence removal of the assurance for new business has had no impact on policyholder returns.
Prudential plc and the Company have put in place intra-group arrangements to formalise circumstances in which capital support would be made available by Prudential plc (including in the scenarios referred to in Pension Mis-selling Review above). While it is considered unlikely that such support will be required, the arrangements are intended to provide additional comfort to the Company and its policyholders.
e) The Polish branch became operational in March 2013. The Company's inherited estate is contributing to the costs of establishing the branch. The inherited estate is expected to recoup this funding over time from charges levied, however, if experience is not as expected there is an obligation of the Company's shareholder funds to ensure the inherited estate will be repaid in full with interest. The maximum amount of support that could be required at 31 December 2013 is $£ 37.3 \mathrm{~m}$.
f) There is an obligation of the Company's shareholder funds to support Prudential Financial Planning Ltd, another group company, which became operational in 2013. Part of the acquisition costs incurred in the early years of operation are to be spread over five years to reflect the period over which the benefit, in terms of sales, would arise. Where the initial funding is provided by the Company's with-profits fund, it is subject to support from the shareholder funds that in the event of a closure during this period, the amortisation will be reversed and the shareholder fund will reimburse the consequent estate drain. The maximum amount of support that could be required at 31 December 2013 is $£ 22.1 \mathrm{~m}$.
g) With effect from 1 January 2014 the Hong Kong branch has been domesticated. The branch was transferred on 1 January 2014 to two new Hong Kong incorporated companies, both subsidiaries of the Company, one providing life insurance and the other providing general insurance - Prudential Hong Kong Limited (PHKL) and Prudential General Insurance Hong Kong Limited (PGHK) respectively. Following the domestication of the Hong Kong branch a series of intra-group capital support arrangements have been put in place:
New Business Support Commitment:
For a period of three years from the transfer date capital support shall be provided from the Company's shareholders' fund to its with-profits fund to enable it to maintain the expectations of its with-profits policyholders as if the
assets of the inherited estate had not been transferred to the new business subfund of PHKL. The maximum amount of support available is $£ 270 \mathrm{~m}$. In the event that the Company has to provide capital support under this arrangement, Prudential plc shall, in turn, provide capital support to the Company to the extent that there are insufficient assets in the Company's shareholders' fund for it to provide the capital support required by the with-profits fund.
PHKL Pension Mis-selling Costs Assurance:
The PHKL shareholder fund will provide capital support to enable PHKL to satisfy its obligations to manage its in-force sub-fund as if the Company's pension mis-selling costs had not been deducted from the PHKL inherited estate The Company, in turn, will provide capital support from its shareholders' fund to PHKL to the extent that there are insufficient assets in the PHKL shareholders' fund to enable PHKL to support its obligations to its in-force subfund.
Capital Support from Prudential plc:
Prudential plc will also provide capital support as necessary to PHKL and PGHK to support new business growth and to maintain solvency. These support arrangements meet a condition set by the Hong Kong regulator (amongst other matters) for its approval of the domestication of the Hong Kong branch.
h) As a proprietary insurance company, the Company is liable to meet its obligations to policyholders even if the assets of the long-term funds are insufficient to do so. The assets, represented by the unallocated surplus of with-profits funds, in excess of amounts expected to be paid for future terminal bonuses and related shareholder transfers ('the excess assets') in the long-term funds could be materially depleted over time by, for example, a significant or sustained equity market downturn, costs of significant fundamental strategic change or a material increase in the pension mis-selling provision. In the unlikely circumstance that the depletion of the excess assets within the longterm fund was such that the Company's ability to satisfy policyholders' reasonable expectations was adversely affected, it might become necessary to restrict the annual distribution to shareholders or to contribute shareholders' funds to the long-term funds to provide financial support.
i) There are no other fundamental uncertainties.

## *1503* Dividend on Cumulative Preference Shares

A dividend on cumulative preference shares of £nil had accrued at 31 December 2013.
*1504* Deficit in valuation of insurance undertakings
An amount of $£ 6,533 \mathrm{k}$ has been included in line 22 of Form 15 in respect of a deficit on the valuation of certain insurance and insurance holding undertakings.

## *1507* Particulars of other adjustments

The amount in line 83 is made up of the following: $£ 000$
Deficits in subsidiaries
Deferred tax on lifetime mortgages
$(59,775)$
No negative equity guarantee on lifetime mortgages 15,952
Liabilities netted off with assets 54
Total line 83
$(50,302)$
Note 1 - In respect of the Company's main pension schemes there has been no provision in these returns for any deficits impacting the shareholders fund. For the Prudential Staff Pension Scheme (PSPS) the shareholders element of the surplus/deficit is being met by the holding company. In respect of the Scottish Amicable Pension Scheme (SAPS), the shareholders element of the surplus/deficit is being met by another group company.

## *1601* Basis of foreign currency conversion

Foreign currency revenue transactions have generally been translated at average exchange rates for the year.
*1602* $\quad$ Restatement of brought forward balances
Brought forward balances in the Return denominated in foreign currencies have been retranslated at 2013 rates of exchange.
*1603* Other income and charges
£000
Transfer to closure provision for
operations in run-off
Commission received on sale of general insurance products 29,275
Shareholder expenses incurred on overseas subsidiaries $(36,761)$
Expenses incurred on acquisition of equity release
business from another group company
Share based payments
Other items
Total line 21
$(18,688)$
Operations in run-off include the former UK general insurance broker and commercial, London Market, marine and aviation and overseas agencies business which the Company ceased writing between 1990 and 1992, and the UK general insurance personal lines business.

## *1701* Variation margins

No excess variation margin has been received. A variation margin of $£ 21 \mathrm{~m}$ has been included in line 38 of Form 14 of the long-term business fund. No variation margin is included in respect of the other than long-term business fund.
*1702* Quasi-derivatives
Convertible securities of $£ 461 \mathrm{~m}$, with the features of a quasi-derivative, have been included in line 46 of the Long-term Form 13.

## *1901* Adjustment to future policy related liabilities

Line 49 column 1 of the Defined Charge Participating Sub-Fund is negative due to an adjustment required to ensure that the working capital (line 68 column 1 ) is zero.

## APPENDIX 9.2

## *20Aa* Details of risk categories

No contracts of insurance were allocated under Rule 9.14B.
*20Ab* Death or injury to passenger risk categories

No such contracts were entered into.
*20Ac* Business allocated to categories 187, 223, 400 \& 700
Risk category 187 relates to credit card products with the following features:-
Death benefit - cash payment equivalent to the outstanding balance of nominated credit card up to a maximum amount if the insured cardholder dies while the policy is still in force.

Temporary total disability benefit - monthly cash payment equivalent to $10 \%$ of the outstanding card balance, up to 10 months.

Unemployment benefit - monthly cash payment equivalent to $10 \%$ of the outstanding card balance, up to 6 months.

## *20Ad* Details of claims made policies

No amount reported on Form 20A contains both claims made policies and policies that are not claims made.

## *20Ae* Amount of facultative business included under category 002

All business included under category 002 relates to direct business.
*20Af* $\quad$ Amounts reported under categories 113, 274 \& 343
All business within category 113 has arisen from business falling within classes 1 and 2 (Accident and Health).

*20Ag* $\quad$| Gross premiums written attributable to home foreign or |
| :--- |
| $\underline{\text { overseas business }}$ |

> Gross premiums
> Written (£000)
Category No. Overseas ${ }^{1}$

Medical Insurance 111
Healthcare cash plans 112
Travel 113
Personal accident or sickness 114
Private motor - comprehensive 121
Private motor - non-comprehensive 122
House and domestic all risks 160
Other personal financial loss 187
Commercial vehicle (non-fleet) 222
Commercial property 261
Consequential loss 262
Contractors or engineering all risks 263
Employers liability 271
Professional indemnity 272
Public and products liability 273
Fidelity and contract guarantee 281
Total primary and facultative goods 350
20,319
100
4,216
9,102
2,127
230
4,054
472
67
844
79
83
4,058
14
1,026
148
195 in transit

Total
47,134

1. All overseas business is written and carried on in Hong Kong.
2. The above notes may disagree in some instances with the Forms as the underlying figures feeding into the Forms are in pounds whereas the Forms are in $£$ ' 000 's.

## *20Al* Differences between Form 20A and Form 15

The gross provision for unearned premiums in Form 20A differs from Form 15 by $£ 1,320 \mathrm{k}$ due to the revenue account and the balance sheet being translated at different rates of exchange.
*2005* Other technical income or charges
The other technical income at line 25 of Form 20 is the 5\% handling charge income for processing a Hong Kong Government levy.

## *2007* Material connected party transactions

The payment of a 2013 interim dividend of $£ 231 \mathrm{~m}$ to the holding company (Prudential plc). The dividend was settled by a transfer of cash.

Two loans during the year totalling $£ 146 \mathrm{~m}$ to the holding company (Prudential plc).
A loan of $£ 31 \mathrm{~m}$ from a fellow subsidiary Prudential Corporation Holdings Limited.
The assignment of a loan of $£ 49 \mathrm{~m}$ from a fellow subsidiary Prudential Corporation Holdings Limited to the holding company (Prudential ple).

The issue of a loan of $£ 60 \mathrm{~m}$ and a repayment of $£ 41 \mathrm{~m}$ of an existing loan from the wholly owned subsidiary Prudential International Assurance.

The issue of a loan of $£ 5 \mathrm{~m}$ from a subsidiary Prudential European Assurance Holdings plc.

The issue of a loan of $£ 12 \mathrm{~m}$ from a fellow subsidiary Prudential Financial Services Limited.

The repayment of $£ 31 \mathrm{~m}$ of a loan to a fellow subsidiary Prudential Financial Services Limited.

The issue of $£ 17 \mathrm{~m}$ share capital of to a new subsidiary Prudential Hong Kong Limited.

The issue of $£ 16 \mathrm{~m}$ share capital to a new subsidiary Prudential General Insurance Hong Kong Limited.

## *2102* Provision for unearned premiums

Unearned premiums continue to be calculated on a daily basis to give a strict day by day apportionment.

The net provision for unearned premium in Forms 13 and 15 differs from Form 21 by $£ 1,172 \mathrm{k}$ due to the balance sheet and revenue account being translated at different rates of exchange.
*2202* Claims management expenses
Claims management expenses comprise internal and external costs directly attributable to claims negotiation and settlement and indirect costs incurred in respect of maintaining a claims settlement function. Claims management expenses carried forward are based on the level of outstanding claims. The expense ratios applied to outstanding claims are determined separately for motor and non-motor accounting classes. Lower ratios are applied to the reported outstanding claims to allow for claims expenses, which have already been paid on these claims.

## *2204* $\quad$ Acquisition expenses

Acquisition costs comprise fixed and variable costs arising from the completion of an insurance contract including commission, sales related bonuses, initial processing costs, underwriting costs, marketing costs and a proportion of customer servicing costs based on time allocation. Other overhead costs are included in administrative expenses. Acquisition costs are deferred and released on a 24th's basis to approximate the method used to recognise earned premiums.

## APPENDIX 9.3

## *4002* Other income and expenditure in the long-term business revenue accounts (£000)

|  | WPSF | NPSF | SAIF | DCPSF | Consolidation | Summary |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Other income |  |  |  |  |  |  |
| Transfer in respect of support assets | 10,510 |  |  |  | $(10,510)$ | - |
| Annual management charges received from DCPSF /NPSF | 11,485 | 26,519 | 11,216 |  | $(49,220)$ | - |
| Rebate from the fund manager | 1,281 | 16,771 |  |  |  | 18,052 |
| Refund of guarantee charge | 5,413 |  |  |  |  | 5,413 |
| Reinsurance profit share |  | 329 |  |  |  | 329 |
| Adviser charge received from another Group Company | 5,838 | 1,570 |  |  |  | 7,408 |
| Financial reinsurance receipts |  | 136,675 |  |  |  | 136,675 |
| Total | 34,527 | 181,864 | 11,216 | - | $(59,730)$ | 167,877 |
| Other expenditure |  |  |  |  |  |  |
| Transfer in respect of support assets |  |  | 10,510 |  | $(10,510)$ | - |
| Annual management charges paid to the NPSF/DCPSF/WPSF/ SAIF |  | 13,943 |  | 35,277 | $(49,220)$ | - |
| Annual management charge paid to another group company |  | 16,060 |  | 5,847 |  | 21,907 |
| Contingent loan repayments |  | 10,065 |  |  |  | 10,065 |
| Financial reinsurance repayments |  | 7,536 |  |  |  | 7,536 |
| Total | - | 47,604 | 10,510 | 41,124 | $(59,730)$ | 39,508 |

Notes:

1. The transfer in respect of support assets reflects $1 \%$ of the Capital Support Fund paid by SAIF to the With-Profits Sub-Fund.
*4006* Apportionment of income and expenses of the long-term business
The Company's long-term business fund comprises four separately managed subfunds, namely the Scottish Amicable Insurance Fund (SAIF), Defined Charge Participating Sub-Fund (DCPSF), With-Profits Sub-Fund (WPSF) and Non-Profit Sub-Fund (NPSF), with separate pools of assets.

## 1 Scottish Amicable Insurance Fund

a) Investment income is determined by the assets held.
b) The increase or decrease in the value of assets is determined by the assets held.
c) Expenses are charged in accordance with the provisions under the Scheme of Transfer.
d) The tax charge is determined on the equivalent of a mutual office basis as provided under the Scheme of Transfer.

## 2\&3 Defined Charge Participating Sub-Fund and Non-Profit Sub-Fund

a) Investment income is determined by the assets held.
b) Expenses which are incurred directly are charged to the revenue account. In addition for the Non-Profit Sub-Fund other expenses are allocated having regard to such measures as business volumes or time spent as considered necessary.
c) The tax charge is incurred directly and charged to the revenue account.
$4 \quad$ With-Profits Sub-Fund
a) A single pool of assets is maintained in respect of the With-Profits Sub-Fund which comprises two separate elements, these being the ordinary (other) and ordinary (pensions). Investment income and investment expenses are apportioned between the two elements of the fund on a mean fund basis.
b) The increase or decrease in value of non-linked assets brought into account by way of transfer from investment and revaluation reserves and allocated to the ordinary (other) and ordinary (pensions) elements is apportioned so as to maintain reasonable compatibility in the amounts payable to the respective policyholders.
c) Expenses (except investment expenses which are apportioned on a mean fund basis) which are incurred directly for the purpose of an element of the fund are allocated to that element. Other expenses are allocated having regard to such measures as business volumes or time spent as considered appropriate.
d) The tax charge is allocated directly to the three elements of the fund to the extent that the charge can be separately identified. The balance of the charge is apportioned using a mean fund basis or a derivative thereof.
*4008* Statement on provision of management services
a) The Company was provided with management services by M\&G Investment Management Limited, Silverfleet Capital Limited, Prudential Services Limited, Prudential UK Services Limited, M\&G Real Estate Limited, PPM America Inc, PAM Singapore, Prudential Distribution Limited and Prudential Polska sp.z o.o., Aztec Financial Services (UK) Limited and Prudential Financial Planning Limited.
b) The Company seconded employees to provide management and other services throughout the year to Prudential Pensions Limited, Prudential Holborn Life Limited, Prudential Annuities Limited, Prudential Retirement Income Limited, Prudential Health Holdings Limited, Prudential Lifetime Mortgages Limited, and Prudential Distribution Limited.
*4012* Consolidation adjustment to income and expenses
Lines 12 and 22 of the summary form 40 include a consolidation adjustment of 23.2 m to remove the license fee paid from the NPSF to the WPSF.

## *4101* Refund of reinsurance

Line 13 of the With-Profits Sub-Fund Form 41 column 2 is negative due to a switch of reinsurer from external to internal resulting in a refund of reinsurance.
*4102* Refund of reinsurance
Line 15 of the Non-Profits Sub-Fund Form 41 column 3 is negative due to a recapture of reinsurance.

## *4302* Reinsurance commission

Line 41 of the With-Profits Form 43 column 2 is negative as it includes an amount of $£ 12.1 \mathrm{~m}$ in respect of reinsurance commission for business reinsured to another group company.

## *4303* Refund of investment management expenses

Line 45 of the Defined Charge Participating sub-fund Form 43 column 3 includes a refund of investment management expenses of $£ 5.2 \mathrm{~m}$.

## *4304* Consolidation adjustment to income and expenses

Line 13 of the Summary form 43 includes a consolidation adjustment of 23.2 m to remove the license fee paid from the NPSF to the WPSF.

## *4401* $\quad$ Basis of valuation of assets

The assets have principally been valued at a bid price. Funds closed to new business have been valued on a bid basis.
*4701* Number of group schemes for which there is no member count

| Product Code | Product description | Number of <br> schemes |
| :---: | :--- | :---: |
| 735 | Group money purchase <br> pensions property linked | 10 |

*4702* Approximations used on Form 47
For some group pension policies, the split of the amount of new business premium for product codes 535 and 735 is estimated from the premiums for in force policies.
*4802* Assets where the payment of interest is in default
There are 28 assets in the WPSF, 3 in the NPSF, 4 in the DCPSF and 14 in SAIF where the payment of interest is in default. The expected interest from these assets has been reduced to nil.
*4803* Securities that may be redeemed over a period
Securities with an issuer option to redeem early are assumed to redeem at the next call date. The only exception to this are Government perpetual bonds, which can redeem at anytime.

## *4806* Assets used to calculate investment returns

The returns shown in lines 21-29 column 5 are those arising on assets backing the UK asset shares in each of SAIF, WPSF and DCPSF.

## *4807* Investment returns

The returns shown in lines 32 and 33 column 5 are before investment costs and, for the WPSF and SAIF, exclude any allocation to asset shares arising from surplus on non-profit business.

## *4901* Credit rating agency

Credit ratings used on Form 49 are the second best of three external rating agencies, namely Fitch, Standard \& Poor's and Moody's.
*5101* Number of group schemes for which there is no member count

| Product Code | Product description | Number of <br> schemes |
| :---: | :--- | :---: |
| 165 | Conventional deferred annuity <br> with-profits | 38 |
| 175 | Group conventional deferred <br> annuity with-profits | 2,522 |
| 390 | Deferred annuity non-profit | 2,067 |
| 415 | Collective life | 1 |
| 425 | Group income protection <br> claims in payment | 6 |

*5104* Approximations used in apportioning between product codes on Form 51
For UK protection policies that can include:

- term and decreasing term assurance
- accelerated or stand-alone critical illness insurance by guaranteed or reviewable premiums
- income protection insurance by guaranteed or reviewable premiums annual office premiums are estimated from the reinsurance premiums.
Mathematical reserves are then estimated from this split of office premiums.


## *5105* Double counting of policies

404 UK Pension non-profit immediate and deferred annuities were double counted in Forms 51 and 54.
*5201* Number of group schemes for which there is no member count

| Product Code | Product description | Number of <br> schemes |
| :---: | :--- | :---: |
| 535 | Group money purchase <br> pensions UWP | 66 |

## *5204* Approximations used in apportioning between product codes on Form 52

Prudential Investment Bonds with both regular and single premiums invested have been included in product code 505 .
*5301* Number of group schemes for which there is no member count

| Product Code | Product description | Number of <br> schemes |
| :---: | :--- | :---: |
| 735 | Group money purchase <br> pensions property linked | 177 |
| 755 | Trustee investment plan | 37 |

## *5304* Approximations used in apportioning between product codes on Form 53

For M\&G Personal Security policies included in product codes 700 and 710, the current death benefit and the other liabilities are split in proportion to the value of units.
*5405* Double counting of policies
404 UK Pension non-profit immediate and deferred annuities were double counted in Forms 51 and 54.
*5601* Credit rating agency
Credit ratings used on Form 56 are the second best of three external rating agencies, namely Fitch, Standard \& Poor's and Moody's.

## *5602* Other assets

Other assets contain deposits with Prudential Retirement Income Limited and Prudential Annuities Limited.

## *5701* Negative mathematical reserves

Negative reserves, net of reinsurance, (-£219.3m) are held for PruProtect Plan. These negative reserves, and the positive cashflows expected to repay them, are offset against positive reserves required to fund negative cashflows emerging from certain annuity policies.

## *5702* Waiver

The FSA (the regulator at the time), on the application of the firm, made a direction under section 148 of the Financial Services and Markets Act 2000 in September 2011. The effect of the direction is to modify the provisions of INSPRU 3.1.35R and $I P R U(I N S)$ Appendix 9.3 so that a more appropriate rate of interest is used for certain assets taken in combination.

Asset yields before risk adjustment and the yields adjusted for risk shown in Form 57 as required by waiver 1388495 (effective from 22 November 2011, see note *0101*), are as follows:

NPSF

| Product group | Risk adjusted yield on <br> matching assets (Form <br> 57 column 5) | Corresponding <br> asset yield |
| :--- | :---: | :---: |
| UK Pension Form 51 NP immediate annuities <br> (direct written) | $3.94 \%$ | $4.54 \%$ |
| UK Pension Form 51 NP immediate and <br> deferred annuities (reassurance accepted) | $3.95 \%$ | $4.60 \%$ |

WPSF

| Product group | Risk adjusted yield on <br> matching assets (Form <br> 57 column 5) | Corresponding <br> asset yield |
| :--- | :---: | :---: |
| UK Pension Form 51 NP immediate and <br> deferred annuities (direct written) | $3.58 \%$ | $4.40 \%$ |
| UK Pension Form 51 NP immediate and <br> deferred annuities (reassurance accepted) | $3.85 \%$ | $4.63 \%$ |

## *5801* Other bonuses

Line 44 of the With-Profits Sub-Fund Form 58 includes the cost of final (terminal) bonus in the following year on conventional with-profits whole life and endowment assurances in the ordinary and industrial branches and on conventional with-profits deferred annuities. These bonuses are declared out of surplus arising at the valuation date and not declared in anticipation of surplus arising subsequently.

## THE PRUDENTIAL ASSURANCE COMPANY LIMITED

Year ended 31 December 2013

## Statement of information pursuant to Rule 9.25 of the Interim Prudential Sourcebook for Insurers

Rule 9.25: Additional information on general insurance business major treaty reinsurers

## Proportional Treaty Reinsurance

| Name of Reinsurer | Premiums <br> Payable | Amount due <br> to Company <br> $(£ 000)$ | Anticipated <br> Recovery from <br> Reinsurer <br> $\underline{(£ 000)}$ |
| :--- | :---: | :---: | :---: |
| Asia Insurance Co. Ltd <br> 16/F World Wide House <br> 19 Des Voeux Road Central <br> Hong Kong | 1,092 | - | - |

Non-Proportional Treaty Reinsurance

|  | Premiums <br> Payable <br> $(£ 000)$ | Amount due <br> to Company <br> $(£ 000)$ | Anticipated <br> Recovery from <br> Reinsurer <br> $(£ 000)$ |
| :--- | :---: | :---: | :---: |
| $\underline{\text { Name of Reinsurer }}$ | 125 | - | - |
| Munich Reinsurance Company <br> 11 $1^{\text {th }}$ Floor <br> Fairmont House <br> 8 Cotton Tree Drive, Central <br> Hong Kong |  |  |  |
| Taiping Reinsurance Co (HK) Ltd <br> 29A United Centre <br> 95 Queensway, Admiralty <br> Hong Kong |  |  |  |
| The Toa Reinsurance Co Ltd (HK) <br> Room 801, 8 |  |  |  |
| Admiralty Centre, Tower 1 <br> 18 Harbour Road <br> Hong Kong |  |  | - |


| Name of Reinsurer | Premiums Payable (£000) | Amount due to Company (£000) | Anticipated Recovery from Reinsurer (£000) |
| :---: | :---: | :---: | :---: |
| Hannover Ruckversicherungs-AG Karl-Wiechert-Allee 50 D-30625 Hannover Germany | 91 | - | - |
| Sompo Japan Nipponkoa Re Co. Ltd 22/F, Bank of East Asia Harbour View Centre, 56 Gloucester Road, Wanchai, Hong Kong | 62 | - | - |
| Berkley Insurance Company (HK) Suite 6708, 67/F, Central Plaza 18 Harbour Road Hong Kong | 97 | - | - |
| Cassie Centrale De Reassurance <br> 31 Rue De Courcelles <br> 75008 Paris <br> France | 75 | - | - |

## Notes:

1. Premiums include amounts payable to companies connected with the reinsurer.
2. The Company was not connected at any time in the year with any of the above reinsurers.
3. No deposits were received from any of the above reinsurers.

## THE PRUDENTIAL ASSURANCE COMPANY LIMITED

## Year ended 31 December 2013

## Statement of information pursuant to Rule 9.26 of the Interim Prudential Sourcebook for Insurers

Rule 9.26: Additional information on general insurance business major facultative reinsurers
The Company had no major facultative reinsurers in the year.

## Statement of information pursuant to Rule 9.27 of the Interim Prudential Sourcebook for Insurers

Rule 9.27: Information on general insurance business major reinsurance cedants
The Company had no major cedants in the year.

## THE PRUDENTIAL ASSURANCE COMPANY LIMITED

## Year ended 31 December 2013

Statement of additional information on general insurance business ceded pursuant to Rules 9.32, 9.32 A and 9.32B of the Interim Prudential Sourcebook for Insurers

The objective of the Company's general business reinsurance strategy is to minimise the risk of significant adverse movements in the general business result and hence to protect shareholder value. This is achieved by the transfer of exposure risk to reinsurers at cost-effective rates. Cover is purchased in excess of a retention level that is set as low as is economically attainable and, where appropriate, in programme sizes above that level. Cover is placed across worldwide markets with reinsurers whose selection and capacity allocations are determined by security ratings supplemented by market knowledge and input from reinsurance brokers. There is no co-reinsurance.

The policies purchased are either quota share treaties or standard non-proportional reinsurance treaties providing excess-of-loss cover, which include a significant transfer of risk to the reinsurer.

None of the policies contain the features detailed in Rule 9.32B(5).
The Company has taken into account the effect of any agreements, correspondence (including sideletters) or understandings that amend or modify the contracts or their operation when considering whether a contract of insurance meets one or both of the conditions in rule $9.32 \mathrm{~A}(2)$.

The Company is satisfied that there are no contracts of insurance under which general insurance has been ceded by the insurer where -
(a) the value placed on future payments in respect of the contract is not commensurate with the economic value provided by that contract, after taking account of the level of risk transferred; or
(b) there are terms or foreseeable contingencies (other than the insured event) that have the potential to affect materially the value placed on the contract in the Company's balance sheet at, or any time after, the end of the financial year in question.

The Company is also satisfied that there are no financing arrangements which include terms for:
(a) the transfer of assets to the insurer, the creation of a debt to the insurer or the transfer from the insurer to another party of liabilities to policyholders; and
(b) either an obligation for the insurer to return some or all of such assets, a provision for the diminution of such debt or a provision for the recapture of such liabilities, in each case, in specified circumstances.

On 31 December 2001 the Company transferred its UK personal lines liabilities to Churchill Insurance Company, subsequently acquired by the Royal Bank of Scotland Group (RBS). The policies transferred left no net retention to the Company. Prudential branded new business policies are underwritten by U K Insurance Ltd (a subsidiary of RBS).

During 2005 the Company entered into a Solvent Scheme of Arrangement under Section 425 of the Companies Act 1985, in respect of certain closed Marine and London Market business.
All claims lodged by creditors by the Scheme submission date have now been settled, and related provisions released. In accordance with the terms of the Scheme claims notified after the final claims submission date are not valid.
On 30th June 2010 the Company entered into a $100 \%$ quota share reinsurance agreement with Swiss Reinsurance Company Ltd in respect of its UK commercial lines general insurance business in runoff. The effective date of the agreement is 1 January 2010.

Policies were purchased to protect the exposures of its Hong Kong branch operation. Details of these policies are set out below.

| Reporting categories covered | Type of cover | Period of cover | Policy limits |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & 113 \\ & 114 \\ & 187 \end{aligned}$ | Hong Kong Accident | $\begin{aligned} & \hline 1 / 1 / 13- \\ & 31 / 12 / 13 \end{aligned}$ | Reinsurers potential liability: $£ 4,944,000$ in excess of $£ 247,000$ |
| $\begin{aligned} & \hline 113 \\ & 114 \end{aligned}$ | Hong Kong Accident Catastrophe Excess of Loss <br> $1^{\text {st }}$ Layer <br> $2^{\text {nd }}$ Layer | $\begin{aligned} & \hline 1 / 1 / 13- \\ & 31 / 12 / 13 \end{aligned}$ | Reinsurers potential liability: <br> $£ 989,000$ in excess of $£ 247,000$ <br> $\mathfrak{£} 2,884,000$ in excess of $£ 1,236,000$ |
| $\begin{aligned} & 121 \\ & 122 \\ & 222 \end{aligned}$ | Hong Kong Motor and Liability Excess of Loss <br> $1^{\text {st }}$ Layer <br> $2^{\text {nd }}$ Layer <br> $3^{\text {rd }}$ Layer <br> $4^{\text {th }}$ Layer <br> $5^{\text {th }}$ Layer | $\begin{aligned} & 1 / 1 / 13- \\ & 31 / 12 / 13 \end{aligned}$ | Reinsurers potential liability: <br> $£ 247,000$ in excess of $£ 165,000$ <br> $£ 824,000$ in excess of $£ 412,000$ <br> $£ 1,236,000$ in excess of $£ 1,236,000$ <br> $£ 5,768,000$ in excess of $£ 2,472,000$ <br> Unlimited in excess of $£ 8,240,000$ |
| $\begin{aligned} & 271 \\ & 272 \\ & 273 \\ & \hline \end{aligned}$ | Hong Kong Liability Excess of Loss | $\begin{aligned} & 1 / 1 / 13- \\ & 31 / 12 / 13 \end{aligned}$ | Reinsurers potential liability: <br> $£ 1,483,000$ in excess of $£ 165,000$ |
| $\begin{aligned} & 111 \\ & 112 \\ & \hline \end{aligned}$ | Hong Kong Group Medical | $\begin{aligned} & \hline 1 / 1 / 13- \\ & 31 / 12 / 13 \\ & \hline \end{aligned}$ | Reinsurers potential liability: 75:25 Quota share |
| 350 | Hong Kong Marine Cargo Combined Quota Share <br> And Surplus | $\begin{aligned} & \hline 1 / 1 / 13- \\ & 31 / 12 / 13 \end{aligned}$ | Reinsurers potential liability: 40:60 Quota share <br> Surplus $£ 824,000$ in excess of £48,000 |
| $\begin{aligned} & 160 \\ & 261 \\ & 262 \\ & 263 \end{aligned}$ | Hong Kong Fire Surplus | $\begin{aligned} & \hline 1 / 1 / 13- \\ & 31 / 12 / 13 \end{aligned}$ | Reinsurers potential liability: <br> $£ 4,944,000$ in excess of $£ 247,000$ |


| Reporting categories <br> covered | Type of cover | Period of <br> cover | Policy limits |
| :--- | :--- | :--- | :--- |
| 160 | Hong Kong Fire | $1 / 1 / 13-$ | Reinsurers potential liability: |
| 261 | Catastrophe Excess of | $31 / 12 / 13$ |  |
| 262 | Loss |  | $£ 577,000$ in excess of $£ 247,000$ <br> 263 |
|  | $1^{\text {st }}$ Layer | $2^{\text {nd }}$ Layer |  |
|  | $3^{\text {rd }}$ Layer |  |  |
|  | Hong,000 in excess of $£ 824,000$ |  |  |
|  | Quota Share Bond | $1 / 1 / 13-$ | Reinsurers in excess of $£ 1,648,000$ <br> $£ 247,000$ |
| 281 | $31 / 12 / 13$ | $£$Qual liability: |  |

Details of the Company's maximum probable loss (net of reinsurance) for each business category are set out below:

| Risk category | No. | Any one <br> risk/event <br> $£^{\prime} 000$ |
| :--- | :--- | ---: |
| Travel | 113 | 247 |
| Personal accident or sickness | 114 | 247 |
| Private motor-comprehensive | 121 | 165 |
| Private motor-non-comprehensive | 122 | 165 |
| Household and domestic all risks | 160 | 247 |
| Other personal financial loss | 187 | 247 |
| Commercial vehicles (non-fleet) | 222 | 165 |
| Commercial property | 261 | 247 |
| Consequential loss | 262 | 247 |
| Contractors or engineering all risks | 263 | 247 |
| Employers liability | 271 | 165 |
| Professional indemnity | 272 | 165 |
| Public and products liability | 273 | 165 |
| Fidelity and contract guarantee | 281 | 247 |
| Total primary (direct) and facultative goods in transit | 350 | 48 |

The split of reinsurance premiums (as shown on forms 21) for each accounting class by facultative and non-facultative reinsurance is set out below:

| Risk category | No. | Facultative <br>  | Non- <br> Facultative <br> ' | Total |
| :--- | :---: | :---: | :---: | :---: |

## THE PRUDENTIAL ASSURANCE COMPANY LIMITED

## Returns for the year ended 31 December 2013

Statement required by Rule 9.29 of the Interim Prudential Sourcebook

## (a) Investment guidelines

As requested by Rule 9.29 of the Interim Prudential Sourcebook, the investment guidelines for the use of derivative contracts in the long-term fund are set out below. These are fully explained in the Company's Investment Management Agreement with its fund managers and are consistent with the investment strategy.
(i) Derivatives are used for the purpose of efficient portfolio management or to reduce risk, specific examples being to implement tactical asset allocation changes around the strategic benchmark, hedge currency risk, or control the risk profile of an identified strategy.
(ii) A number of restrictions on the use of derivatives have been agreed with the Company's fund managers and can only be overruled by prior agreement between the two parties:

- all derivatives that impose obligations on the fund are required to be covered.
- all derivative contracts must satisfy the definition of approved under the various Prudential Sourcebooks.
- the maximum allowable exposure to counterparties should not be exceeded.
- only certain permitted exchanges and contracts can be used.
(iii) The Company has used a number of derivative instruments; principally exchange traded futures and options, over-the-counter derivatives (including total return swaps, interest rate swaps, credit default swaps, currency swaps \& equity options), warrants and currency forwards. The Company has also used redeemable convertible corporate bonds. These bonds have not been categorised as derivative contracts as the derivative element is minimal and have therefore not been reported on form 17. The total value of these bonds on the long-term form 13 is $£ 461,306$.


## (b) Derivatives where exercise is unlikely.

There are no specific guidelines for the use of contracts not reasonably likely to be exercised. However the Investment Management Agreement only allows the use of derivatives for the purpose of efficient portfolio management or to reduce risk and the Company's investment managers work within these constraints.
(c) Quantification of derivatives in (b) above.

## Long-term funds

The largest exposure during the year to out of the money call options and warrant was $£ 12,747 \mathrm{k}$. The largest exposure during the year to out of the money put options was ( $£ 4,371,877 \mathrm{k}$ ).
(h) Derivatives not covered by the definition of an admissible derivative contract in the Interim Prudential Sourcebook.

## Long-term funds

A small portion of the swaps market value ( $£ 1,867 \mathrm{k}$ ) relating to a commercial mortgage loan (CML) deal are inadmissible, as they have not been traded with an approved counterparty.

## Other Than Long-term funds

The other than long-term fund has several derivative positions (over-thecounter equity index forwards) that are wholly inadmissible due to the nature of the underlying asset. However at the end of the year the current value is a liability of $£ 91,531 \mathrm{k}$ and is therefore included in the other than long-term form 17 and form 15.
(i) Consideration for granting rights under derivative contracts

## Long-term funds

No rights under derivative contracts have been granted.

## Other Than Long-term funds

No rights under derivative contracts have been granted.

## Statement of information pursuant to Rule $\mathbf{9 . 3 0}$ of the Interim Prudential Sourcebook for Insurers

Rule 9.30 of the Interim Prudential Sourcebook for Insurers: Additional information on shareholder controllers

Throughout the year Prudential plc held all the shares of the Company and controlled the whole of the voting power.

## THE PRUDENTIAL ASSURANCE COMPANY LIMITED

## Year ended 31 December 2013

## Statement of information on the actuary who has been appointed to perform the with-profits actuary function pursuant to Rule 9.36 of the Interim Prudential Sourcebook for Insurers

In accordance with Rule 9.36 of the above sourcebook, R G Myers was the with-profits actuary of the Company throughout 2013 and has provided the following information:
(a) The actuary held no shares of Prudential plc (the Company's parent undertaking) and no shares of any other group companies. The actuary has no pensions benefit provided by Prudential companies.
(b) The actuary has no policies of insurance with the Prudential companies.
(c) The aggregate amount of remuneration, bonuses and the value of other benefits under the actuary's contract of employment with Prudential Distribution Limited for the year to 31 December 2013 was $£ 347,618$ (2012: $£ 323,565$ ).

The particulars of this statement were provided to the Company by R G Myers at the Company's request.

# THE PRUDENTIAL ASSURANCE COMPANY LIMITED 

Global Business

## Directors' Certificate required by rule 9.34 of the Accounts and Statements Rules

## Financial year ended 31 December 2013

## We certify:

1. (a) that the return has been properly prepared in accordance with the requirements in IPRU(INS), GENPRU and INSPRU as modified by waivers as detailed in supplementary note 0101 issued under section 138 of the Financial Services and Markets Act 2000 and section 68 of the Insurance Companies Act 1982 which continues to have effect; and:
(b) We are satisfied that:
(i) throughout the financial year in question, the insurer has complied in all material respects with the requirements of SYSC and PRIN as well as the provisions of IPRU(INS), GENPRU and INSPRU; and
(ii) it is reasonable to believe that the insurer has continued so to comply subsequently, and will continue so to comply in future.
2. (a) that in our opinion, premiums for contracts entered into during the financial year and the resulting income earned are sufficient, under reasonable actuarial methods and assumptions, and taking into account the other financial resources of the insurer that are available for the purpose, to enable the insurer to meet its obligations in respect of those contracts and, in particular, to establish adequate mathematical reserves;
(b) that the sum of the mathematical reserves and the deposits received from reinsurers as shown in Form 14 constitute proper provision at the end of the financial year in question for the long-term insurance liabilities (including all liabilities arising from deposit back arrangements, but excluding other liabilities which had fallen due before the end of the financial year) including any increase in those liabilities arising from a distribution of surplus as a result of an actuarial investigation as at that date into the financial condition of the long-term insurance business;
(c) that the with-profits fund has been managed in accordance with the Principles and Practice of Financial Management, as established, maintained and recorded under COBS 20.3; and
(d) that we have, in preparing the return, taken and paid due regard to-
(i) advice in preparing the return from every actuary appointed by the insurer to perform the actuarial function in accordance with SUP 4.3.13R; and
(ii) advice from every actuary appointed by the insurer to perform the withprofits actuary function in accordance with SUP 4.3.16R

J Hunt<br>Chief Executive<br>25 March 2014

H A Hussain
Director

D J Belsham<br>Director

## THE PRUDENTIAL ASSURANCE COMPANY LIMITED

## Global business <br> Financial year ended 31 December 2013

Independent auditor's report to the Directors pursuant to rule 9.35 of the Interim
Prudential Sourcebook for Insurers ("IPRU(INS)")

We have examined the following documents prepared by the insurer pursuant to the Accounts and Statements Rules set out in Part I and Part IV of Chapter 9 to IPRU(INS) the Interim Prudential Sourcebook for Insurers, GENPRU the General Prudential Sourcebook and INSPRU the Insurance Prudential Sourcebook, ("the Rules") made by the Prudential Regulation Authority ("PRA") under section 137G of the Financial Services and Markets Act 2000:

- Forms 1 to 3,11 to 23,31 to 32,36 to 38,40 to $45,48,49,56,58$ and 60 , (including the supplementary notes) on pages 1 to 121, 132 to 141, 204, 209 to 213, 220 and 221 to 244 ('the Forms');
- the statements required by IPRU(INS) rules 9.25, 9.26, 9.27 and 9.29 on pages 245 to 247 and 252 to 253 ('the Statements'); and
- the valuation reports required by $\operatorname{IPRU}(\mathrm{INS})$ rule $9.31(\mathrm{a})(\mathrm{i})$ and $9.31(\mathrm{~b})$ ('the valuation reports'); and

We are not required to examine and do not express an opinion on:

- Forms $46,47,50$ to $55,57,59 \mathrm{~A}$ and 59 B (including the supplementary notes) on pages 122 to 131,142 to 203, 205 to 208 and 214 to 219 ;
- the statements required by IPRU(INS) rules 9.30, 9.32, 9.32A, 9.32B and 9.36 on pages 248 to 251 and 254 to 255 ;
- the certificate required by $\operatorname{IPRU}(\mathrm{INS})$ rule $9.34(1)$ on pages 256 to 257 ('the certificate').

This report is made solely to the insurer's directors, as a body, in accordance with the requirements of IPRU(INS) rule 9.35 . We acknowledge that the directors are required to submit this report to the PRA, to enable the PRA to verify that an auditor's report has been commissioned by the insurer's directors and issued in accordance with the requirements of IPRU(INS) rule 9.35 and to facilitate the discharge by the PRA of its regulatory functions in respect of the insurer, conferred on the PRA by or under the Financial Services and Markets Act 2000. Our work (including our examination) has been undertaken so that we might state to the insurer's directors, as a body, those matters we are required to state to them in an auditor's report issued pursuant to

IPRU(INS) rule 9.35 and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the insurer and the insurer's directors as a body, for our work (including our examination), for this report, or for the opinions we have formed.

## Respective responsibilities of the Company and its auditors

The insurer is responsible for the preparation of an annual return (including the Forms, the Statements and the valuation reports) under the provisions of the Rules. The requirements of the Rules have been modified by waivers issued under section 138 of the Financial Services and Markets Act 2000 and orders granted under section 68 of the Insurance Companies Act 1982 which continue to have effect as referred to in supplementary note 0101 on pages 221 and 222. Under IPRU(INS) rule 9.11 the Forms, the Statements and the valuation reports are required to be prepared in the manner specified by the Rules and to state fairly the information provided on the basis required by the Rules.

The methods and assumptions determined by the insurer and used to perform the actuarial investigation as set out in the valuation reports, are required to reflect appropriately the requirements of INSPRU 1.2 and 1.3.

It is our responsibility to form an independent opinion as to whether the Forms, the Statements and the valuation reports meet these requirements, and to report our opinions to you. We also report to you if, in our opinion:

- adequate accounting records have not been kept or returns adequate for our audit have not been received from branches not visited by us; or
- the Forms, the Statements and the valuation reports are not in agreement with the accounting records and returns; or
- we have not received all the information we require for our examination.


## Basis of opinion

We conducted our work in accordance with Practice Note 20 'The audit of insurers in the United Kingdom (Revised)' issued by the Auditing Practices Board. Our work included examination, on a test basis, of evidence relevant to the amounts and disclosures in the Forms, the Statements and the valuation reports. The evidence included that previously obtained by us relating to the audit of the financial statements of the insurer for the financial year. It also included an assessment of the significant estimates and judgements made by the insurer in the preparation of the Forms, the Statement and the valuation reports.

We planned and performed our work so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the Forms, the Statements and the valuation
reports are free from material misstatement, whether caused by fraud or other irregularity or error, and comply with IPRU(INS) rule 9.11.

In accordance with IPRU(INS) rule 9.35(1A), to the extent that any document, Form, Statement, analysis or report to be examined under IPRU(INS) rule 9.35(1) contains amounts or information abstracted from the actuarial investigation performed pursuant to IPRU(INS) rule 9.4, we have obtained and paid due regard to advice from a suitably qualified actuary who is independent of the insurer.

## Opinion

In our opinion:
i) the Forms, the Statements and the valuation reports fairly state the information provided on the basis required by the Rules as modified and have been properly prepared in accordance with the provisions of those Rules; and
ii) the methods and assumptions determined by the insurer and used to perform the actuarial investigation as set out in the valuation reports appropriately reflect the requirements of INSPRU 1.2 and 1.3.

Robert Lewis
For and on behalf of KPMG Audit Plc, Senior Statutory Auditor Chartered Accountants
15 Canada Square
London
E14 5GL
25th March 2014

# The Prudential Assurance Company Limited 

## Annual PRA Insurance Returns for the year ended 31 December 2013

(Appendix 9.4 valuation report)

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## VALUATION REPORT ON THE PRUDENTIAL ASSURANCE COMPANY LIMITED AS AT 31 DECEMBER 2013

## 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 of Prudential (AN) Limited (PANL) and Prudential Holborn Life Limited (PHL) was transferred into PAC on 31 October 2010.

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 permanent health business written directly by PAC in respect of which the directors have determined that profits should accrue $100 \%$ to shareholders.
(2) The protection and linked business written directly by PAC, including linked business issued in France and business issued in Hong Kong and Poland, in respect of which the directors have determined that profits should accrue $100 \%$ to shareholders.
(3) The loan protection business transferred into PAC from SAL on 31 December 2002 and such business 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 4(1) below).
(5) 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(1) and 5(3) below).
(6) Reassurance of $15 \%$ of the liabilities in respect of non-profit annuity business in Prudential Retirement Income Limited.
(7) The with-profits bond, non-profit annuity and linked pensions business written by PANL and the linked life business (including internal linked funds) written by PHL which were transferred into PAC on 31 October 2010 and any new premiums arising on those products, excluding the accumulated with-profits premiums which are held in the WPSF (see 5(4) below).

## Structure of the long term business (continued)

All profits from this business in the NPSF accrue $100 \%$ to shareholders.
(8) PruProtect business which is administered and distributed by Prudential Health Services Limited (PHSL) on behalf of PAC. Profits from this business are passed to PHSL via the PAC shareholder fund under a white-label agreement. PHSL is wholly owned by PruHealth Holdings Ltd (PHHL). PHHL is $25 \%$ owned by PAC and $75 \%$ by Discovery Offshore Holdings Limited, the subsidiary of a South African insurer.

## 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 that 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

The business in this sub-fund comprises:
(1) 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.

A bonus smoothing account is maintained in the WPSF 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. It is intended that these smoothing transfers should generate neither profit nor loss to either fund over the long term.
(2) With-profits annuities transferred from Equitable Life Assurance Society to PAC on 31 December 2007. A separate bonus smoothing account for this business is also maintained in the WPSF. It is intended that transfers to and from this account should generate no net gain or loss to either the WPSF or DCPSF over the long term.

All profits in this fund accrue to policyholders in the DCPSF

## 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.

## Structure of the long term business (continued)

(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) The accumulated with-profits premiums in respect of business transferred into the NPSF from PANL on 31 October 2010 and any new premiums arising on those products.
(5) Reassurance of the liabilities in respect of non-profit annuity business in Prudential Annuities 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.

## 6. Reinsurance of annuity business

(1) Some of the non-profit and index-linked annuities in payment issued by PAC are ceded to Prudential Retirement Income Limited (PRIL). Most of the non-profit annuities in payment written in SAIF are ceded to PRIL. The non-profit and index-linked annuities reinsured from the WPSF to Prudential Annuities Limited (PAL) were recaptured as at 31 August 2011.
(2) PAC insures $15 \%$ of the liabilities in respect of the non-profit annuity business in PRIL under a quota share arrangement effected on 31 December 2008. The reinsurance arrangement includes deposit back of reserves with PRIL.
(3) PAC insures the liabilities in respect of the non-profit annuity business in PAL under a quota share arrangement effected on 31 October 2012. The reinsurance arrangement includes deposit back of reserves with PAL.

## VALUATION REPORT

## 1. Introduction

1.(1) The investigation relates to 31 December 2013.
1.(2) The previous investigation related to 31 December 2012.
1.(3) No interim valuations have been carried out for the purposes of IPRU(INS) 9.4 since 31 December 2012

## 2. Product range

(a) New products

The following new products were launched during the year.

## Delightful Life

This is a US\$ and HK\$ denominated whole of life participating product. Five payment term options are available covering $5,10,15$ and 20 year terms, plus a "pay-to-age 55 " option. The benefits include a bonus equal to the mandatory encashment of $70 \%$ of the sum of the cash value of the reversionary bonus (RB) and the cash value of its corresponding special bonus (SB) on the policy anniversary immediately after the Life Assured reaches 60. The death benefit is the sum of (a) $100 \%$ of the sum assured if the life assured dies before age 60 , or $30 \%$ of the sum assured otherwise, (b) the face value of the RB, and (c) the face value of the SB. The surrender value is the sum of (a) the guaranteed cash value, (b) the cash value of the RB, and (c) the cash value of the SB.

## PRUmyretirement monthly income plan

This is a HK\$ denominated participating annuity product with premiums paid for 3 years and a benefit term of 27 years or the period to age 100 (available only for an issue age between 55 and 72). The survival benefits include guaranteed and non-guaranteed monthly income starting from the 37th policy month, where the guaranteed monthly income would be increased by $3 \%$ a year. The death benefit is the higher of (a) $105 \%$ of the total premium paid less the total monthly income distributed, and (b) $105 \%$ of the guaranteed cash value plus $100 \%$ of the terminal bonus (TB). Instead of receiving the lump sum death benefit, the policyholder has an option for a beneficiary to receive the remaining monthly income. The surrender benefit is equal to the guaranteed cash value plus the cash value of the terminal bonus. At maturity, terminal bonus will be distributed.

## PRUmylife 5-year wealthbuilder (relaunch)

This is a HK\$ denominated non-participating single premium 5 year term endowment product. The benefits include a death benefit of the higher of (a) $101 \%$ of the single premium, and (b) the guaranteed surrender value. The guaranteed surrender value is expressed as a percentage of the single premium, and the maturity benefit is equal to $112.59 \%$ of the single premium.

## PRUdirect cancer protector

This is a HK\$ denominated non-refundable cancer protection product sold via the telemarketing channel. The plan is available for ages $45-65$ and renewed every 10 years up to age 85 . Guaranteed acceptance is offered for ages 45-60, whilst a simplified underwriting approach is applied for ages 61-65. The benefits include (a) a major cancer benefit with 3 sum assured options of HK\$150k, HK $\$ 300 \mathrm{k}$ and HK\$500k, (b) an advanced critical illness and sickness benefit of $20 \%$ of the sum assured, (c) a death benefit of $20 \%$ of the sum assured, restricted to a refund of premiums if death occurs in the first year, and (d) an extra caring cash payment of $1 \%$ of the sum assured on death.

## 2. Product range (continued)

## PRUmyhealth crisis multi-care

This is a US\$ or HK\$ denominated non-participating whole of life crisis protection product combining major / early stage / late stage / multiple critical illness conditions. Four payment term options are available covering $10,15,20$ and 25 year terms. Critical illness conditions are categorized into 5 disease groups with a total coverage of $700 \%$ of the sum assured before age 86 . Multiple claims of early and major critical illness will be allowed as long as the benefit limit of the respective disease group has not been exhausted. On or after age 86, the maximum benefit of the policy will be reduced to $100 \%$ of the sum assured less prior claims. A free 10 -year crisis cover term benefit is available with a sum assured equal to $35 \%$ of the basic sum assured for ages $19+$, and $50 \%$ of the basic sum assured for ages 1-18. It covers death, major disease and late stage major disease benefits, and is payable only once. No surrender benefit is payable in the event of claim or expiry of this 10 year term benefit.

## PRU Child / PRU Pension / PRU Savings

This is a Polish Zloty (PLN) denominated regular premium conventional with-profits endowment product with a guaranteed sum assured at maturity. There is also an optional return of premium guarantee at maturity. In the Savings and Pension packages, the death benefit is the greatest of (a) the guaranteed maturity sum assured plus annual bonuses already declared, (b) the return of all contractual endowment premiums (including those yet to be paid), and (c) the surrender value. In the Children's package, the death benefit is the greater of (a) 25,000 PLN plus premiums paid before the life assured's death, and (b) the surrender value. The payout at maturity is the greater of (a) the guaranteed maturity sum assured plus annual bonuses already declared plus final bonus, and (b) the return of endowment premiums, if the return of premium guarantee has been chosen. Rider benefits are available on the endowment product as for the PRU Protection term assurance product below, along with children's critical illness and total permanent disability riders (both 5 year renewable terms), and a fixed term accidental death rider, with waiver of premium benefits, in the Children's package.

## PRU Protection

This is a PLN denominated standalone regular premium non-profit fixed term assurance product. It provides a lump sum payable on the death of the life assured. Riders available in addition to the term assurance cover include critical illness, total permanent disability, and waiver of premium on all benefits (all 5 year renewable terms).
(b) Products withdrawn

The following products were withdrawn during 2013:

- PRUlink assurance / PRUlink assurance plus
- Flexible Investment Plan
(c) New bonus series

New bonus series were added during the year for the following:

- Better Life Assurance and Better Life Plus
- Achiever Life Assurance.


## 2. Product range (continued)

(d) Changes to options or guarantees under existing products

## Income Choice Annuity

Changes to the product terms for new business were made to the Secure Income Level (i.e. the guaranteed minimum level of income), and to the range of incomes that the policyholder can choose each year.

| Start Date | Required Smooth <br> Return (RSR) Range | Secure Income Level ${ }^{(2)}$ |
| :--- | :---: | :---: |
| Start Date before <br> 6 April 2013 | $1 \%$ to $6 \%$ | $1 \%$ |
| Start Date on or after <br> 6 April 2013 | $0 \%$ to $5 \%$ | $0 \%$ |

(1) The policyholder's choice of income level is equivalent to selecting a Required Smoothed Return (RSR), which is the smooth return required from the With-Profits fund in order to maintain that income level.
(2) The guaranteed minimum income level, expressed in terms of an RSR at policy commencement.

The charges for guarantees in relation to new business written over 2013 were updated to reflect changes to product terms and market conditions, as follows:

| Start Date | Guarantee Charge p.a |
| :--- | :---: |
| 1 January 2013 - 5 April 2013 | $1.16 \%$ |
| 6 April 2013 - 13 May 2013 | $0.40 \%$ |
| 14 May 2013-31 December 2013 | $0.29 \%$ |

Prudential International Investment Bond, Prudential Investment Plan, Flexible Retirement Plan, Trustee Investment Plan

## i) Guarantee charges

A number of changes to the level of guarantee charges were made to both the PruFund Protected Growth and the PruFund Protected Cautious Funds during the year, as set out in the tables below:

PruFund Protected Cautious Fund

|  | Guarantee Charge p.a |  |  |
| :--- | :---: | :---: | :---: |
| Start Date | 8 year term | 9 year term | 10 year term |
| 1 January 2013 - 20 May 2013 | $0.95 \%$ | $0.45 \%$ | $0.30 \%$ |
| 21 May 2013 - 21 November 2013 | $0.80 \%$ | $0.60 \%$ | $0.45 \%$ |
| 22 November 2013 - 31 December 2013 | $0.60 \%$ | $0.45 \%$ | $0.35 \%$ |

## PruFund Protected Growth Fund

|  | Guarantee Charge p.a |
| :--- | :---: |
| Start Date | 10 year term |
| 1 January 2013 - 31 December 2013 | $0.50 \%$ |

## ii) Regular Withdrawals

For Prudential Investment Plan and Prudential International Investment Bond policies sold before 11 November 2013, regular income and adviser charges up to $5 \%$ p.a. could be taken without the application of a Market Value Reduction (MVR). For policies written on or after 11 November 2013, the maximum regular withdrawal limit has increased to $7.5 \%$, but an MVR can be applied to all regular withdrawals, if appropriate.

## 2. Product range (continued)

iii) Minimum Term

For Flexible Retirement Plan and Income Drawdown policies written before 11 November 2013, the minimum term to invest in the With-Profits Fund was 5 years and any regular or ad-hoc income and adviser charges could be taken without the application of an MVR. For policies written on or after 11 November 2013, the minimum term was increased to 10 years and an MVR (if applicable) can be applied to any regular or ad-hoc income and adviser charges taken.
iv) Final Conversion Date

For Income Drawdown policies written before 11 November 2013, the Final Conversion Date was the policyholder's $75^{\text {th }}$ birthday. From 11 November 2013 this was increased to the policyholder's $99^{\text {th }}$ birthday, for all business.

## Flexible Investment Plan, PruFund Investment Plan

From 13 October 2008 the PruFund Protected Growth Fund was added as a fund choice on the above products, including a rollover option on the 5th policy anniversary. The charge on the 10 year spot guarantee available on rollover was set and amended for in-force policies during 2013 as follows:

| Guarantee Date | Guarantee Charge p.a |
| :--- | :---: |
| 13 October 2013-21 November 2013 | $0.70 \%$ |
| 22 November 2013-31 December 2013 | $0.75 \%$ |

## International Prudence Bond

i) Guarantee charges

A number of changes to the level of guarantee charges were made to both the PruFund Protected Growth and the PruFund Protected Cautious Funds during the year, as set out in the tables below:

PruFund Protected Cautious Fund

|  | Guarantee Charge p.a |
| :--- | :---: |
| Start Date | 10 year term |
| 1 January 2013 - 21 November 2013 | $0.85 \%$ |
| 22 November 2013 - 31 December 2013 | $0.65 \%$ |

## PruFund Protected Growth Fund

The PruFund Protected Growth Fund was withdrawn with effect from 1 January 2013.

## ii) Regular Withdrawals

For International Prudence Bond policies sold before 11 November 2013, regular income and adviser charges up to $5 \%$ p.a. could be taken without the application of an MVR. For policies written on or after 11 November 2013, an MVR can be applied to all regular withdrawals, if appropriate.

## 2. Product range (continued)

## iii) Guarantee rollover option

From 13 October 2008 the PruFund Protected Growth Fund was added as a fund choice, including a rollover option on the 5th policy anniversary. The charge on the 10 year spot guarantee available on rollover was set and amended for in-force policies over 2013 as follows:

| Guarantee Date | Guarantee Charge p.a |
| :--- | :---: |
| 13 October 2013-21 November 2013 | $0.65 \%$ |
| 22 November 2013-31 December 2013 | $0.70 \%$ |

(e) With-profits sub-funds

The With-Profits Sub-Fund and the Defined Charge Participating Sub-Fund are both open to new with-profits business.

The Scottish Amicable Insurance Fund is closed to new business except by increment.

## 3. Discretionary charges and benefits

## 3.(1) Market value reduction

Market value reductions have been applied throughout 2013. The policy years of entry to which market value reductions were applied during 2013 are summarised below:

| Product | Policy years of entry |
| :--- | :--- |
| SAIF | $1988,1989,1992-1995,1997$ |
| SAL pensions | $2000,2002,2004-2013$ |
| Prudence Bond | $1993,1995,1997,2000-2011,2013$ |
| PSA/PIB | $1995,1997,2007$ |
| Personal Pensions | $1987-1989,1992-1994,2000$, |
|  | $2007-2008,2012-2013$ |
| Corporate Pensions | $1973-2013$ |
| International Prudence Bond | $2002-2013$ |
| PruSaver, PruWelath and <br> PruAsset (US dollar) | $2002-2008$ |

For the Corporate Pensions business noted above not every policy year within the range of products offered will have a market value reduction applied.

## 3.(2) Reviewable protection policies

There was a review of premium rates for the PRUmed Series (including PRUmed better care, PRUmed care, PRUmed health care and PRUmed lifelong care plan). Premiums were increased by an average of $4.5 \%$ for these plans from 1 October 2013, with annual in force premiums of HK $\$ 859 \mathrm{~m}$. An increase in premiums was permitted but did not occur for plans (PRUmyhealth prestige medical plan and PRUhealth secure top-up plan) with annual in force premiums of HK $\$ 55 \mathrm{~m}$.

## 3. Discretionary charges and benefits (continued)

## 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 $2.6 \%$ in 2013 for those linked products where the fees increase in line with Retail Price Index (RPI) inflation, based on the increase in RPI from September 2011 to September 2012.

## 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> $£ m$ | New charge <br> $\%$ | Old charge <br> $\%$ |
| :--- | :---: | :---: | :---: |
| Prudence Bond - Pre Mk9 and Establishment Charge <br> new business and top ups to this business up to 30/09/02 | 5,445 | 0.722 | 0.629 |
| Prudence Bond - Top ups to pre Mk7 and all <br> Establishment Charge options made between 01/10/02 <br> and 06/11/11, inclusive |  | 0.872 | 0.779 |
| Prudence Bond - Top-ups to pre Mk7 and to all <br> Establishment Charge options paid on or after 07/11/11 | 429 | 1.072 | 0.979 |
| Prudence Bond - Mk9 and post Mk9 new business <br> written and Mk7 and post Mk7 top ups made between <br> 01/10/02 and 06/11/11, inclusive | 339 | 0.972 | 0.879 |
| Prudence Bond - Post Mk 9 new business and Mk7 and <br> post Mk 7 top ups and made on or after 07/11/11 | 75 | 1.172 | 1.079 |
| Prudence Bond - Pre NIC3 new business and top ups to <br> pre NIC3 up to 30/09/02 | 287 | 1.022 | 0.929 |
| Prudence Bond - All NIC new business (NIC3 and post <br> NIC3) and all NIC top ups made between 01/10/02 and <br> 06/11/11, inclusive | 1,212 | 1.272 | 1.179 |
| Prudence Bond - All NIC new business (post NIC3) and <br> all NIC top ups made on or after 07/11/11 | 435 | 1.472 | 1.379 |
| Prospects Bond - All business written between 06/10/03 <br> and 06/11/11, inclusive |  | 1.672 | 1.579 |
| Prospects Bond - All business written on or after <br> 07/11/11 | 30 | 1.872 | 1.779 |
| Ex-PANL Bond |  | 36 | 1.272 |

The notional charges for all UK pensions business, Hong Kong policies and DCPSF policies were unchanged.

## 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 per month. The rate to be credited is determined from the value of the fund assets, with 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 those pensions contracts where the linked liabilities are wholly reassured to Prudential Pensions Limited (PPL) are described in PPL's regulatory returns.
(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 (except for the Jupiter Merlin funds which use the prior day mid day valuation); 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 HM Revenue and Customs.

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 2013 were as shown in 3.(9) below.

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

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

## Other business written by PAC - life business

As described in 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 nonloan 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 but are carried forward and offset against future gains or deemed disposals in 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 $18.5 \%$ |
| Unit trusts and OEICS | $20 \%$ | $15 \%$ to $20 \%$ |
| Gilts and bonds | $20 \%$ | $20 \%$ |

For policies 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.(10) Discounts and commission 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.

## 3. Discretionary charges and benefits (continued)

In some cases, for business formerly written in PHL, where investments are in Prudential Unit Trusts, a fund management charge is included in the price of the fund. In such cases Prudential Unit Trusts rebate the fund management charge deducted from the unit trusts. The full rebate is credited to the respective linked funds with the deduction for investment management expenses being met by non linked funds.

## Other

The unit pricing methods for those pensions contracts where the linked liabilities are wholly reassured to PPL are described in PPL's regulatory returns.

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

4.(1) Valuation methods

Unless specified to the contrary in 4.(1). 6 on page 16, the following valuation methods apply.
4.(1). 1 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 (NPV) method). Policies where negative reserves could arise have been valued individually and the mathematical reserves increased to zero so that no policy is treated as an asset. Otherwise, contracts with a common attained age and number of years to run to maturity or premium cessation are grouped together.
4.(1). 2 The mathematical reserve for accumulating with-profits business, except PruFund, is 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 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 that are used to recoup initial expenses.

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.

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.

Section 32 Buy Out contracts include a specific provision for the Guaranteed Minimum Pension.

## 4. Valuation methods and bases (continued)

4.(1).3 The mathematical reserve for PruFund, including PruFund as a Fund Link, business is the higher of:
(a) the unsmoothed fund value after deduction of surrender penalties, plus a reserve for accrued shareholder transfers, and
(b) a prospective valuation of all future cashflows, assuming no future growth in the unsmoothed fund value as this is not guaranteed,
plus a reserve for the guarantee on PruFund Protected funds, which is determined stochastically.
The comparison of the unsmoothed fund value and the prospective valuation of future cash-flows is carried out on a policy-by-policy basis.
4.(1).4 The mathematical reserve for property-linked contracts is the 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.

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 that are used to recoup initial expenses.

A non-unit liability for mortality and expenses is determined for each policy using a discounted cash flow method. For UK property-linked contracts in the NPSF the non-unit liability provides only for attributable expenses and an additional reserve for non-attributable expenses is calculated at a homogeneous risk group level as described in section 6.(6) on page 33. The total non-unit liability 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 is at least equal to the surrender value. Provision is also made 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 inflation-linked annuities is, in general, determined without an explicit allowance for future increases in annuity payments, which is consistent with the treatment of the matching assets. The treatment of inflation-linked annuities which are subject to maximum and/or minimum percentage increases, is as follows:
(a) Inflation-linked annuities subject to a minimum annual increase of $0 \%$ and a maximum annual increase of $5 \%$ are, for valuation purposes, treated as being identical to normal inflation-linked annuities.
(b) Inflation-linked annuities subject to a minimum annual increase of $0 \%$ and a maximum annual increase of $12 \%$ are, for valuation purposes, treated as being identical to normal inflation-linked annuities.
(c) Inflation-linked annuities subject to a minimum annual increase of $2.5 \%$ and a maximum annual increase of 5\% are, for valuation purposes, treated as annuities with fixed 5\% annual increases.
(d) Inflation-linked annuities subject to a minimum annual increase of $4 \%$ and a maximum annual increase of $8.5 \%$ are, for valuation purposes, treated as annuities with fixed $8.5 \%$ annual increases.
(e) Inflation-linked annuities subject to a minimum annual increase of $3 \%$ are, for valuation purposes, treated as annuities with fixed $6 \%$ annual increases.
(f) Inflation-linked annuities subject to a minimum annual increase of $3 \%$ and a maximum annual increase of $5 \%$ are, for valuation purposes, treated as annuities with fixed $5 \%$ annual increases. They are, however included in these returns as linked business.

## 4. Valuation methods and bases (continued)

(g) Inflation-linked annuities subject to a minimum annual increase of $0 \%$ and a maximum annual increase of $3 \%$ arising from Guaranteed Minimum Pension liabilities are, for valuation purposes, treated as annuities with fixed $3 \%$ annual increases. This business is reported on Form 51 as nonlinked business.
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.

Prudential Protection policies sold from 1 August 2000 and PruProtect Plan are valued using a gross premium valuation method. For policies written in the NPSF, prudent lapse assumptions are allowed for in reserve calculations. Policies are valued individually. Negative mathematical reserves for Prudential Protection policies are increased to zero so that no policy is treated as an asset. The negative mathematical reserves held for PruProtect Plan business, and the positive cashflows expected to repay them, are offset against positive reserves required to fund negative cashflows emerging from NPSF annuity policies.

Mortgage Protection (Home Protect/Synergy Protect) policies are valued using a gross premium valuation method with no allowance for lapses. Any negative mathematical reserves are increased to zero

For UK protection business changes to the tax regime were introduced from 1 January 2013. Prior to this date all protection business was taxed on an "I-E" basis and this basis still applies to policies written up to 31 December 2012. In valuing business taxed on an "I-E" basis explicit allowance is made for policyholder tax.

However, protection business written from 1 January 2013 is instead taxed on a profits basis at the shareholders' tax rate. This effectively means that all valuation interest rates should be gross of tax for protection policies written from 1 January 2013 onwards. For business written on a profits basis, no allowance for tax is required, as no tax will be payable if the valuation assumptions are borne out in practice.

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

The mathematical reserve for some individual deferred annuities is the accumulation of 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. The concessionary rates are the interest rates used in determining the benefits payable.

For non-profit immediate annuities and some deferred annuities the mathematical reserve is the value of future annuity payments plus the value of future expenses, allowing for expense inflation.

For deferred annuities where benefits include revaluation in deferment in line with RPI, followed by fixed escalation in payment, the revaluation in deferment is generally subject to a minimum annual increase of $0 \%$ and a maximum annual increase of $5 \%$. For valuation purposes these are treated as annuities with fixed $5 \%$ annual revaluation throughout the remaining deferred period followed by the actual fixed escalation in payment.

## 4. Valuation methods and bases (continued)

For single premium loan protection policies the reserve 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. For the life and critical illness elements 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. As the schemes are now in run-off, minimum reserving methodologies have been introduced to mitigate the reduction in the pooling effect.

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.

Policy reserves equal to the claim value are held for Industrial Branch whole life and endowment assurances where the policy benefit has not been claimed in the 15 years following the maturity date or (for whole life policies) the policy anniversary after age 90 . The policy reserves for endowment assurances also include interest between the maturity date and the valuation date.

For the Hong Kong branch, the mathematical reserves for the assurances reported on From 51 is the difference between the present value of the benefits plus expenses and the value of the future premiums, calculated with a prudent allowance for future lapses (a gross premium valuation method).

## 4.(2) Valuation interest rates

Valuation interest rates are reported in the tables in Appendix 1 on pages 49 to 51.
The FSA, on the application of the firm, made a direction under section 148 of the Financial Services and Markets Act 2000 in September 2011. The effect of the direction is to modify the provisions of INSPRU 3.1.35R and IPRU(INS) Appendix 9.3, so that a more appropriate rate of interest is used for certain assets taken in combination.

In applying the section 148 waiver, the yield on property is taken to be the lower of the current rental yield and the "redemption yield", which is the interest rate at which the market value equates to the present value of future rental income and the disposal value. No allowance is made for non-contractual increases in rental income. As an allowance for the risk of falls in value, the disposal value of the property at the end of the lease is taken as $75 \%$ of the current market value.

## 4.(3) Risk-adjustments to yields

## 4.(3). 1 Fixed interest securities

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

The allowance for credit risk is calculated as the long-term expected level of defaults plus the long-term credit risk premium plus the long-term downgrade resilience reserve plus an allowance for the impact of additional short-term credit events reflecting the market conditions at the valuation date.

The long-term expected levels of defaults are determined from data supplied by our 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 40 year period, produces mean default rates according to credit quality and term to redemption.

## 4. Valuation methods and bases (continued)

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 aggregate provision for the long-term expected levels of defaults and the long-term credit risk premium, 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. This further amount for credit risk (the long-term credit risk premium) is determined as the excess over the best estimate level of default, of the $95^{\text {th }}$ percentile of historic cumulative defaults, reduced to allow for the expected recovery of capital and subject to a minimum margin over best estimate of $50 \%$.

The default rates for each category of credit rating and level of security, in basis points per annum, are set out below:

| Term to <br> Redemption | Seniority | AAA | AA | $\mathbf{A}$ | $\mathbf{B B B}$ | $\mathbf{B B}$ | B <br> and lower |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 0 to 10 years | Senior Secured | 7.4 | 7.4 | 10.2 | 23.4 | 95.5 | 234.2 |
|  | Senior Unsecured | 16.2 | 16.2 | 22.4 | 51.4 | 210.2 | 515.3 |
|  | Subordinated | 23.6 | 23.6 | 32.5 | 74.8 | 305.8 | 749.5 |
| 10 to 20 years | Senior Secured | 5.6 | 5.7 | 13.3 | 28.6 | 97.5 | 189.8 |
|  | Senior Unsecured | 12.3 | 12.6 | 29.3 | 62.9 | 214.5 | 417.5 |
|  | Subordinated | 17.9 | 18.3 | 42.6 | 91.5 | 312.0 | 607.2 |
| 20 to 30 years | Senior Secured | 4.0 | 9.6 | 18.7 | 31.4 | 93.0 | 158.4 |
|  | Senior Unsecured | 8.9 | 21.1 | 41.1 | 69.0 | 204.5 | 348.4 |
|  | Subordinated | 12.9 | 30.7 | 59.7 | 100.4 | 297.5 | 506.7 |
| Over 30 years | Senior Secured | 3.7 | 11.5 | 20.6 | 31.8 | 93.0 | 158.4 |
|  | Senior Unsecured | 8.1 | 25.4 | 45.3 | 69.9 | 204.5 | 348.4 |
|  | Subordinated | 11.7 | 36.9 | 66.0 | 101.6 | 297.5 | 506.7 |

The long-term downgrade resilience reserve is determined as the hypothetical impact on the aggregate provision described above of a one-notch downgrade of the entire credit-risky asset portfolio.

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 bond portfolios. Further implicit margins for prudence are held in the difference between the risk adjusted yields and the relevant valuation interest rates.

| Sub-Fund | Credit risk adjustment <br> (in basis points) |
| :--- | :---: |
| With-Profits Sub-Fund - direct written <br> annuities recaptured from PAL | 76 |
| With-Profits Sub-Fund - annuities accepted <br> from PAL | 81 |
| With-Profits Sub-Fund - other | 98 |
| SAIF | 96 |
| Defined Charge Participating Sub-Fund | 130 |
| Non-Profit Sub-Fund - direct written annuities | 60 |
| Non-Profit Sub-Fund - annuities accepted <br> from PRIL | 62 |
| Non-Profit Sub-Fund - other | 82 |

## 4. Valuation methods and bases (continued)

## 4.(3). 2 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 in 4.(3). 1 to the constituents of the index.

## 4.(3). 3 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 a risk adjustment calculated by applying the methodology in 4.(3). 1 to the constituents of the index.

## 4.(3). 4 Overseas equities

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

## 4.(4) Mortality rates

Mortality rates are reported in the tables in Appendix 2 on pages 52 to 54.
Specimen expectations of life for deferred and immediate annuities are shown in the table in Appendix 3 on pages 55 to 56 .

## 4.(5) Morbidity rates

Morbidity rates are shown in Appendix 4 on pages 57 to 63

## 4.(6) Valuation expense bases

Expense assumptions except for the DCPSF are shown in Appendix 5 on pages 64 to 66. Expenses for UK life products are assumed to attract tax relief at $20 \%$.

A third party administers the accumulating with-profits business in the DCPSF and the renewal expenses allowed for in the valuation are based on the actual tariff in the service agreement. The expenses for with-profits annuities in the DCPSF are met by the NPSF.

## 4.(7) Unit growth and inflation rates

4.(7).1 Unit growth rates for linked business before management charges (net of tax for UK life business)

|  | 31 December 2013 | 31 December 2012 |
| :--- | :---: | :---: |
|  | $\%$ | $\%$ |
| UK - Life | 4.40 | 4.00 |
| UK - Pensions | 5.50 | 5.00 |
| Overseas - Hong Kong | 5.86 | 4.66 |
| Overseas - other | 5.00 | 5.00 |

4.(7).2 Expense inflation assumptions and future increases in policy charges

|  | 31 December 2013 | 31 December 2012 |
| :--- | :---: | :---: |
|  | \% per annum | \% per annum |
| UK | 4.00 | 3.50 |
| Overseas - Hong Kong - US\$ WP, <br> NPSF | 2.50 | 2.50 |
| Overseas - Hong Kong - HK\$ WP | 2.75 | 2.75 |
| Overseas - other | 3.50 | 3.50 |

## 4. Valuation methods and bases (continued)

## 4.(8) Future bonus rates

For conventional with-profits business, a gross premium valuation method is only used to value business written in Hong Kong. In valuing this business the future annual bonus rate is assumed to be zero.

For unitised with-profits business the future annual bonus rates are assumed to be the higher of zero and any guaranteed rate.

## 4.(9) Lapse, surrender and paid-up assumptions

Prudent discontinuance assumptions are used in the NPSF, for some protection assurances on Form 51 and linked assurances and pensions on Form 53, and in the WPSF, for conventional non-linked business in Hong Kong.

| Product |  | Average lapse / surrender / paid-up rate for the policy years |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} 1-5 \\ \% \end{gathered}$ | $\begin{gathered} 6-10 \\ \% \end{gathered}$ | $\begin{gathered} 11-15 \\ \% \end{gathered}$ | $\begin{gathered} 16-20 \\ \% \end{gathered}$ |
| Level term | lapse | 14.90 | 7.00 | 4.90 | 4.90 |
| Decreasing term | lapse | 14.90 | 7.00 | 4.90 | 4.90 |
| Accelerated critical illness | lapse | 3.27 | 2.25 | 2.25 | 2.25 |
| Income protection | lapse | 14.90 | 7.00 | 4.90 | 4.90 |
| CWP savings endowment | surrender | 3.27 | 2.25 | 2.25 | 2.25 |
| UWP bond | surrender | 1.13 | 21.75 | 15.00 | 15.00 |
| UWP bond | automatic withdrawals | 100\% of current experience |  |  |  |
| UL savings endowment | surrender | 4.80 | 5.07 | 5.07 | 5.07 |
| UL target cash endowment | surrender | 4.00 | 4.00 | 4.00 | 3.50 |
| UL bond | surrender | 3.28 | 9.60 | 8.00 | 6.00 |
| UL bond | automatic withdrawals | $100 \%$ of current experience |  |  |  |
| UL individual pension regular premium | PUP | 11.20 | 10.60 | 8.00 | 8.00 |
| UL individual pension regular premium | surrender | 7.20 | 7.20 | 7.20 | 7.20 |
| UL group pension regular premium | PUP | 14.40 | 14.40 | 14.40 | 14.40 |
| UL group pension regular premium | surrender | 4.80 | 4.80 | 4.80 | 4.80 |
| UL individual pension single premium | surrender | 5.90 | 5.60 | 5.60 | 5.60 |

## 4.(10) Other material assumptions

There are no other material assumptions.

## 4.(11) Derivatives

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 longterm business to reflect the underlying investment exposure.

## 4. Valuation methods and bases (continued)

SAIF and WPSF hold US dollar/sterling, euro/sterling and yen/sterling currency forwards in connection with fixed interest securities denominated in those currencies. Taken 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, euro and yen assets are reduced if the corresponding risk-free yield curve exceeds the sterling risk-free yield curve.

## 4.(12) Effect of change in methodology

There have been no changes made to the mathematical reserve methodology at the current valuation date as a result of the changes to the INSPRU rules at 31 December 2006.

## 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 market consistent valuation interest rates appropriate to each scenario were used in deferment.

## SAIF products

Guaranteed annuity options apply to the following products:

- 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


## 5. Options and guarantees (continued)

For accumulating with-profits and linked business, an additional reserve is calculated by projecting 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 $42 \%$ PMA92/47\% PFA92 (c=2004) and a valuation interest rate of $3.25 \%$ 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 excess of the annuity guarantee over the projected fund value is discounted at $4.5 \%$ per annum. 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 $1.65 \%$. This discount rate in deferment has been reduced by $0.6 \%$ to allow for mortality improvement in deferment. The valuation interest rate (before the $0.6 \%$ reduction for mortality improvement) is $2.25 \%$ in deferment.
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 $86 \%$ PCMA00/78\% PCFA00. A description of the PCXA00 tables is included in Appendix 2 (page 54). The valuation interest rate is $3.00 \%$ in deferment and $3.25 \%$ in possession.

The adequacy of the reserve has been verified using stochastic modelling.
An additional expense reserve of $£ 51.0 \mathrm{~m}$ 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 | Guarantee reserve £m | Guaranteed annuity rate $\%$ for a male aged 65 | Are increments permitted? | Form of the annuity | Retirement ages |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WPSF <br> Group cash accumulation | 358 | 0-18 months | 10 | 6.22 | No | Single life, monthly in advance, guaranteed for 5 years | $50-70$ |
| Executive Pension Plan Mark 1 | 101 | $0-35 \mathrm{yrs}$ | 27 | 10.29 | Yes - in first 5 yrs of scheme | Single life, monthly in advance, without guarantee | $\begin{aligned} & 60-70(\mathrm{M}) \\ & 55-70(\mathrm{~F}) \end{aligned}$ |
| SAIF <br> Flexipension | 508 | $0-40$ yrs; average 10 yrs | 504 | 10.90 | No | Single life, yearly in arrears, without guarantee | 60-75 |
| Individual Endowment/Pure Endowment | 97 | $\begin{aligned} & 0-40 \mathrm{yrs} \\ & \text { average } 10 \mathrm{yrs} \end{aligned}$ | 71 | 10.00 | No | Single life, monthly in advance, guaranteed for 5 years | $\begin{aligned} & 60-70(\mathrm{M}) \\ & 55-70(\mathrm{~F}) \end{aligned}$ |
| Individual Pension Account | 51 | $\begin{aligned} & 0-40 \mathrm{yrs} ; \\ & \text { average } 10 \mathrm{yrs} \end{aligned}$ | 30 | 10.00 | No | Single life, monthly in advance, guaranteed for 5 years | $\begin{aligned} & 60-70(\mathrm{M}) \\ & 55-70(\mathrm{~F}) \end{aligned}$ |

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

## 5. Options and guarantees (continued)

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

(a) There are no guaranteed unit-linked maturity values. The methods and bases used for guaranteed surrender values were as follows.

PruFund Investment Plan
This is a single premium whole-life accumulating with-profits contract written in the WPSF.

At the fifth 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 minimum fund value (the initial premium adjusted for withdrawals). Policies sold up to 25 July 2005 received this guarantee for no extra cost. Between that date and 12 October 2008, policyholders choosing the guarantee pay an additional annual management charge for 5 years.

Policyholders who invested between 13 October 2008 and 22 February 2010 have the option, at the fifth anniversary, to rollover their guarantee into a new 5 year guarantee (with the amount guaranteed equal to the fifth anniversary fund value). At this point the amount charged for the guarantee can be changed.

The reserve for the guarantee was set using stochastic simulations and is $0.5 \%$ of the current fund value.

## PruFund as a Fund Link

This is a fund choice for Flexible Investment Plan, Prudential Investment Plan, Flexible Retirement Plan and Trustee Investment Plan written in the WPSF and International Prudence Bond reassured into the DCPSF.

At the selected guarantee date, the smoothed fund value is increased by the value of additional units credited, if necessary, to give a total value equal to the guaranteed minimum fund value (the initial premium adjusted for allocation rates and withdrawals). Policyholders investing in the fund pay an additional annual management charge for the selected guarantee term.

Policyholders who invested between 13 October 2008 and specified dates in 2009 and 2010, which vary by contract, have the option, at the fifth anniversary, to rollover their guarantee into a new 10 year guarantee (with the amount guaranteed equal to the fifth anniversary fund value). At this point the amount charged for the guarantee can be changed.

The reserve for the guarantee was set using stochastic simulations and ranges between $0.5 \%$ and $1.0 \%$ of the current fund value for life business, between $0.5 \%$ and $1.0 \%$ for pensions business and is $3.0 \%$ for International Prudence Bond business.

## 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 DCPSF.

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 2013, the basic policy reserves exceeded the minimum guaranteed surrender values to the extent that no additional reserve was considered necessary.

## 5. Options and guarantees (continued)

## Hong Kong

Conventional with-profits contracts issued in Hong Kong have guaranteed surrender values based on a net premium valuation on specified bases. The valuation reserve is tested against the guaranteed surrender value on a policy-by-policy basis and no additional reserve is required.

Single premium whole life accumulating with-profits contracts (PRUsaver series) issued in Hong Kong have guaranteed surrender values at the fifth policy anniversary. In addition, in 2008, a 10 year guarantee was added to policies which have passed their fifth anniversary at 30 October 2008. The reserve for the 5 -year guarantee is taken as the excess of the guaranteed capital over the asset share discounted at a risk-free rate. The reserve for the 10 -year guarantee is the estimated market consistent price of the guarantee.

## 5. Options and guarantees (continued)

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

| Product name | Basic reserve £m | Spread of outstanding durations | $\begin{gathered} \hline \text { Guarantee } \\ \text { reserve } \\ £ m \\ \hline \end{gathered}$ | Guaranteed amount £m | MVA free conditions | In force premiums £m | Are increments permitted? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WPSF |  |  |  |  |  |  |  |
| PruFund Investment Plan | 1,175 | $0-10 \mathrm{yrs}$ | 2 | Fund increased to initial premium (adjusted for withdrawals) after 5 years | N/A | 953 | No |
| PruFund as a Fund Link Flexible Investment Plan | 4,746 | $0-10 \mathrm{yrs}$ | 28 | Fund increased to initial premium (adjusted for withdrawals) at selected guarantee date | N/A | 4,299 | No |
| PruFund as a Fund Link - <br> Prudential Investment Plan | 1,264 | $0-10 \mathrm{yrs}$ | 3 | Fund increased to initial premium (adjusted for withdrawals) at selected guarantee date | N/A | 1,217 | No |
| PruFund as a Fund Link Flexible Retirement Plan \& Trustee Investment Plan | 836 | $0-10 \mathrm{yrs}$ | 3 | Fund increased to initial premium (adjusted for withdrawals) at selected guarantee date | N/A | 751 | No |
| DCPSF |  |  |  |  |  |  |  |
| Prudential Europe Vie | 52 | Whole-Life | - | 28 | Regular withdrawals up to $5 \%$ per annum | 43 | Yes |
| PruFund as a Fund Link International Prudence Bond | 465 | 0-10 years | 14 | Fund increased to initial premium (adjusted for withdrawals) at selected guarantee date | N/A | 424 | No |
| Hong Kong |  |  |  |  |  |  |  |
| Better Life | 1,955 | Whole-Life | - | 1,493 | N/A | 107 | No |
| Better Life Assurance II | 644 | Whole-Life | - | 418 | N/A | 97 | No |
| Better Life Plus II | 24 | Whole-Life | - | 19 | N/A | 1 | No |

## 5. Options and guarantees (continued)

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


## 5. Options and guarantees (continued)

## 5.(3) Guaranteed insurability options

(a) There are a number of insurability options 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 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.

## Maximum Investment Plan and Flexible Investment Plan (Ex M\&G Life)

Maximum Investment Plans have 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. Flexible Investment Plans have 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)

Most policies have 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 are 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 50th birthday and within 3 months of the event occurring.

## 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.
5. Options and guarantees (continued)

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.

## $\underline{\text { Series A \& Premier Pensions plans with Waiver Benefit or Comprehensive Waiver Benefit }}$

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).

## 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.

## PruProtect Plan

The Guaranteed Insurability Benefit gives the planholder the option to increase Life Cover, Serious Illness Cover, Disability Cover or Income Protection Cover under certain circumstances without providing any evidence of health. Any increase in cover is subject to the applicable maximum cover limits.

Other
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.

## 5. Options and guarantees (continued)

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.

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 may 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.
(b) Conversion and renewal options where the total sum assured exceeds $£ 1$ bn are as follows:

| Product <br> name | In force <br> premiums <br> $(\mathbf{f m})$ | Sum <br> assured <br> $(\mathbf{f m})$ | Description of option | Guarantee <br> Reserve <br> (£m) |
| :--- | :--- | :--- | :--- | :--- |
| Personal <br> Pension Life <br> Cover | 3.9 | 1,275 | If a member becomes ineligible to continue <br> premiums under a Pensions Term <br> Assurance, they have an option for one <br> month to maintain life cover with a <br> replacement policy, issued without further <br> medical evidence, which has term and sum <br> assured no greater than those under the <br> Scheme benefit when it was cancelled. Any <br> extra premiums on the original policy will <br> also apply on the replacement policy. | Implicit in the <br> basic reserve |

## 5.(4) Other guarantees and options

## 5.(4).1 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.

Stochastic modelling is used to calculate the reserves for these guarantees. The distributions of investment returns over the remaining period to retirement and long-term interest rates at retirement were provided by the economic scenario generator used to derive market-consistent returns for use in the Peak 2 valuation. In deferment, allowance is made where appropriate for salaries to increase by $2 \%$ per annum in excess of RPI.

The basic policy reserve held at 31 December 2013 was $£ 274$ m and the guarantee reserve was $£ 399 \mathrm{~m}$.

## 5.(4). 2 Guaranteed Minimum Pensions (GMPs) 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.(1).1 (page 15). 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.

## 5. Options and guarantees (continued)

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 with-profits have been calculated using stochastic modelling. The distributions of investment returns over the remaining period to retirement and long-term interest rates at retirement were provided by the economic scenario generator used to derive marketconsistent returns for use in the Peak 2 valuation.

The guarantee reserve for a small number of accumulating with-profits contracts (ex-SAL and SAIF) 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 $2.25 \%$, with future increases in National Average Earnings assumed to be at 5\% per annum.

The total basic reserve for Section 32 contracts is $£ 178 \mathrm{~m}$ and the guarantee reserve was $£ 279 \mathrm{~m}$.

## 5.(4). 3 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 is 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 $2.25 \%$. The benefits were projected to maturity using a range of future investment returns and a return of $5.5 \%$ p.a. was chosen as a prudent assumption.

The basic reserve for these policies is $£ 423 \mathrm{~m}$ and the guarantee reserve is $£ 2 \mathrm{~m}$.

## 5.(4). 4 Cash Fund

The Cash Fund (ex SA) and the Exempt Cash Fund (ex SA) provide a guarantee that the price of both initial and accumulation units will not decrease.

The guarantee reserve is calculated by projecting cash returns in a range of scenarios (using an economic scenario generator) and estimating the future annual guarantee costs in each scenario as the excess of the annual management charge over the cash return. The estimated guarantee costs are discounted and averaged over the range of scenarios.

The basic reserve for policies invested in these funds is $£ 397 \mathrm{~m}$ and the guarantee reserve is $£ 8 \mathrm{~m}$.
6. Expense reserves
6.(1) Expense loadings of $£ 532$ million, grossed up for tax, are expected to arise during the 12 months from the valuation date. This comprises $£ 332$ million of explicit and $£ 200$ million of implicit loadings.

The following table shows a breakdown of the expense loadings by homogeneous risk group where some expenses are treated as non-attributable and total expense loadings for products where all expenses are treated as attributable.

| Homogeneous risk group | Implicit <br> allowances | Explicit <br> allowance <br> (investment) | Explicit <br> allowance <br> (other) | Non- <br> attributable <br> expenses | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | $£ \mathrm{fm}$ | £m | $£ \mathrm{~m}$ | £m | $£ \mathrm{~m}$ |
| Individual unit-linked life <br> single premium business |  | 6.3 | 1.2 | 2.7 | 10.2 |
| Individual unit-linked life <br> regular premium business |  | 1.8 | 0.4 | 0.9 | 3.2 |
| Individual unit-linked <br> pensions single premium <br> business |  | 4.9 | 0.7 | 1.5 | 7.1 |
| Group unit-linked pensions <br> single premium business |  | 0.4 | 0.2 | 0.4 | 1.0 |
| Individual unit-linked <br> pensions regular premium <br> business |  | 4.0 | 1.3 | 3.2 | 8.5 |
| Group unit-linked pensions <br> regular premium business |  | 7.1 | 1.6 | 10.3 | 19.0 |
| Stakeholder |  |  | 0.3 | 0.3 | 0.7 |
|  | 200.4 | 43.3 | 238.2 | - | 481.9 |
| All expenses attributable |  |  |  |  |  |
|  |  | 68.2 | 243.7 | 19.3 | 531.6 |
| Total |  |  |  |  |  |

6.(2) Implicit allowances are calculated as follows:

- For contracts valued using 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.
- A margin between the risk-adjusted yields on assets in the WPSF and DCPSF ( $0.057 \%$ for non-profit annuities in payment, $0.176 \%$ otherwise) and the NPSF ( $0.064 \%$ for direct written annuities in payment, $0.053 \%$ for annuities accepted from PRIL, $0.1 \%$ otherwise) and that required to support the valuation interest rates to cover fund management expenses.
- A margin in property yields to cover maintenance costs and leases.
6.(3) Maintenance expenses shown at line 14 of Form 43 are $£ 528$ million. These include one-off items and exceptional expenses. Excluding these items, the expense loadings in 6.(1) exceed the adjusted Form 43 expenses by an appropriate margin for prudence.
6.(4) As the surplus from in-force business is projected to exceed the new business strain in 2014, a new business expense reserve is not required at 31 December 2013.


## 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 by the net premium method, 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 in sub-paragraph (2) above 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 $4.00 \%$ 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 2013 a reserve of $£ 87$ million is held in the WPSF and $£ 44$ million 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 $20 \%$ 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. For non-annuity business, the projected per policy costs have been capped after 15 years. At this point, the projected per policy costs are expected to have doubled in real terms compared with the current open-fund costs. The proposed methodology reflects an assumption that, with much higher unit costs, and a much lower volume of in-force business, the fixed costs would be more aggressively reduced, or the administration of the business would be outsourced. For the valuation at 31 December 2012, there was no cap on the projection of expected future per policy costs. 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 2013, an additional reserve of $£ 392$ million is held in the WPSF, $£ 24$ million in SAIF, and $£ 68$ million in the NPSF.
6.(6) An additional reserve of $£ 11.1$ million is held in the NPSF to cover non-attributable expenses. The additional reserve for each homogeneous risk group is calculated as the present value of all future expenses less charges, subject to a maximum of the non-attributable expenses, for the policies in that homogeneous risk group. All future charges and expenses are projected allowing for lapses on a prudent basis. Any future valuation strain is removed at the homogeneous risk group level.

The following table shows the reserve for each homogeneous risk group.

| Homogeneous risk group | Additional reserve |
| :--- | :---: |
|  | $\mathbf{\text { fm }}$ |
| Individual unit-linked life single premium business | - |
| Individual unit-linked life regular premium business | 1.8 |
| Individual unit-linked pensions single premium business | - |
| Group unit-linked pensions single premium business | - |
| Individual unit-linked pensions regular premium business | - |
| Group unit-linked pensions regular premium business | - |
| Stakeholder | 9.3 |
| Total |  |

## 7. Mismatching reserves

## 7.(1) and (2)

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 £m | \% of reserves | Value of backing assets in currency: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | £ | US\$ | HK\$ | Euro | Other | Total |
| £ | 79,437 | 90.6 | 79,437 | - | - | - | - | 79,437 |
| US\$ | 5,323 | 6.1 | - | 5,323 | - | - | - | 5,323 |
| HK\$ | 1,945 | 2.2 | - | - | 1,945 | - | - | 1,945 |
| Euro | 931 | 1.1 | - | - | - | 931 | - | 931 |
| Other | 34 | - | - | - | - | - | 34 | 34 |
| Total | 87,669 | 100 |  |  |  |  |  | 87,669 |

7.(3) No reserve is held for currency mismatching.
7.(4) to (6) Not applicable for a realistic firm.
7.(7) Reserves totalling $£ 160 \mathrm{~m}(£ 106 \mathrm{~m}$ in the WPSF and $£ 54 \mathrm{~m}$ in the NPSF) were held in respect of the test for cashflow mismatching under INSPRU 1.1.34R(2).

This reserve was set at a level that was sufficient to ensure that it covered the result of projecting (i) the riskadjusted cashflows of the assets backing the liabilities and (ii) the future liability payments on the valuation assumptions. In carrying out this test, the asset cashflows have been adjusted to allow for a level of defaults equivalent to the short-term element of the company's credit risk assumptions occurring immediately followed by a longer term rate of default equivalent to 35 basis points per annum for both directly written and reinsurance accepted business in the NPSF and 40 basis points per annum for reinsurance accepted business in the WPSF.

In determining the risk adjusted cashflows of the assets, two scenarios are tested:

- Scenario A: in any year where asset income exceeds liability outgo, the excess is invested in a notional cash asset, and this cash asset is assumed to accumulate at $97.5 \%$ of the maximum reinvestment rate specified in INSPRU 3.1.45R. 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 below zero, then the shortfall is assumed to be borrowed at a rate $2 \%$ higher than $97.5 \%$ of the maximum reinvestment rate.
- Scenario B: in any year where asset income exceeds liability outgo, the excess is invested in a notional cash asset, and this cash asset is assumed to accumulate at the valuation rate of interest. 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 below zero, then the shortfall is assumed to be borrowed at a rate $1.2 \%$ higher than the valuation rate of interest.

The reserve held is that required to satisfy the more onerous of these two scenarios.

## 8. Other special reserves

Other special reserves in excess of $£ 10$ million are as follows:
Reserves totalling $£ 34$ million ( $£ 20$ million in the WPSF, $£ 13$ million in SAIF and $£ 1$ million 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, and the average amount of compensation.

Reserves totalling $£ 77$ million ( $£ 53$ million in the WPSF, $£ 17$ million in SAIF and $£ 7$ million 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 $£ 49$ million ( $£ 32$ million in the WPSF, $£ 5$ million in SAIF and $£ 12$ million 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 schemes' membership.

Reserves totalling $£ 568$ million ( $£ 474$ million in the WPSF, $£ 31$ million in SAIF, $£ 13$ million in DCPSF and $£ 50$ million in the NPSF) are held to cover general contingencies, taking into account an internal assessment of operational risk.

Reserves totalling $£ 55$ million ( $£ 29$ million in the WPSF and $£ 26$ million in the NPSF) are held in respect of extra premiums on individual Hong Kong policies where an extra premium is charged to cover occupational or other extra risks. One half-year's premium is reserved to cover the unexpired extra risk at the valuation date for unit-linked business, while extra premiums accumulated from inception at the valuation interest rate are reserved for other business (with-profit and non-profit non-linked).

A reserve of $£ 28$ million is held in the NPSF for the tax credit on losses in the unit-linked funds which will be carried forward and offset against gains in future years.

A reserve of $£ 31$ million is held for the Prudential Personal Retirement Plan (PPRP), a conventional withprofits 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.

Reserves totalling $£ 17$ million ( $£ 12$ million in the WPSF and $£ 7$ million in the NPSF) are held to cover potential deflation losses.

A reserve of $£ 50 \mathrm{~m}$ is held in SAIF to cover potential additional amounts due in respect of guaranteed annuity options.

## 9. Reinsurance

(1) No premiums were paid in 2013 in respect of reinsurance business ceded on a facultative basis to reinsurers not authorised to carry on business in the United Kingdom.
(2) The reinsurance treaties shown in the table below meet the PRA criteria for being reported in this section and were in force as at 31 December 2013.

## 9. Reinsurance (continued)

Reinsurance treaties:
UK

| (d) Reinsurer | (e) Nature of cover | $\begin{gathered} \text { (f) Premiums } \\ \text { £'000 } \end{gathered}$ | (h) Open <br> / Closed | (j) Reserves Ceded £'000 | (k) Retention |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BlackRock Life Ltd | Linked benefits under GPP3, GPP4, MPP3, stakeholder pensions and the Company Pension Transfer Plan (Bulk Section 32 Buy-Out) where the member has chosen to invest in BlackRock's funds, on a $100 \%$ quota share basis. The assets under this treaty are covered by a pari passu charge. | $(2,746)^{1}$ | Open | 18,986 | Nil |
| Aberdeen Asset Management PLC | Linked benefits under unit linked pension contracts where the member has chosen to invest in AAM's funds, on a $100 \%$ quota share basis. The assets under this treaty are covered by a pari passu charge. | 3,523 | Open | 37,634 | Nil |
| Munich Reinsurance Company UK Life Branch | Individual UK term insurance issued before 1 January 2000 in surplus form on an original terms basis. | 2,613 | Closed | 12,189 | Nil |

${ }^{1}$ Negative premium due to switches to internally managed funds

## 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 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Munich Reinsurance Company UK Life Branch | Life, critical illness and disability cover sold through arrangements with NDF Administration Limited and Synergy Financial Products Limited. This treaty also includes a financing arrangement. <br> (i) Financing payments to the reinsurer are a proportion of the reinsurance premium in benefit years three, four, five and six for all in-force benefits. If a policy exits 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. | 2,329 | Closed | 2,885 | Mortality benefits and critical illness (per life) $33.33 \%$ up to $£ 50,000$ <br> Nil above $£ 50,000$ <br> Sickness and accident (per life per month) <br> $33.33 \%$ up to $£ 625$ <br> Nil above $£ 625$ |
| Prudential Annuities Limited* | Annuities originally issued by $\mathrm{P}(\mathrm{AN}) \mathrm{L}$ where there is an option to purchase an annuity on death or retirement. This is to a member of the Prudential Group and is covered by a pari passu charge on assets. | Nil | Open | 52,645 | 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. | 710,626 | Open | 4,558,703 | Nil |
| Prudential Retirement Income Limited * | Two related treaties for annuity liabilities for relevant annuities originally issued by P(AN)L. One covers annuities written from 1 July 2004 to 25 November 2004 and the other covers annuities written after 25 November 2004. This business is covered by a pari passu charge on assets. | 588 | Open | 14,163 | Nil |

## 9. Reinsurance (continued)

| (d) Reinsurer | (e) Nature of cover | $\begin{gathered} \hline(\mathbf{f}) \\ \text { Premiums } \\ £^{\prime} 000 \\ \hline \end{gathered}$ | (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 covers annuities written from 1 July 2004 to 25 November 2004 and the other covers annuities written after 25 November 2004. This business is covered by a pari passu charge on assets. | 737,405 | Open | 8,099,088 | Nil |
| Prudential Retirement Income Limited * | Two related treaties for annuity liabilities for relevant annuities issued by the Scottish Amicable Insurance Fund (SAIF). One covers annuities written before 1 January 2006. The other covers annuities written from 1 January 2006 onwards. | 14,382 | Open | 471,079 | Nil |
| Suffolk Life Annuities Limited | Self-Invested Personal Pension (SIPP) option under the Flexible Retirement Plan policy. | 8,434 | Open | 52,205 | Nil |
| Swiss Re Europe S.A., UK branch | Linked business written before 29 November 1994, originally written by Prudential Holborn Life or reinsured into it from PAC, excluding benefits linked to real property assets, on a $50 \%$ quota share basis. | 193 | Closed | 114,280 | 50\% of first $£ 25,000$ |
| Swiss Re Europe S.A., UK branch | Two treaties covering unit-linked bond business on a quota share basis. <br> For certain Flexible Bonds linked to the Extra Yield fund, $89 \%$ of all unitlinked 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. | Nil | Closed | 48,521 | $\begin{aligned} & 11 \% \\ & 10 \% \\ & 75 \% \end{aligned}$ |

9. Reinsurance (continued)

| (d) Reinsurer | (e) Nature of cover | (f) Premiums £'000 | (h) Open / Closed | (j) Reserves Ceded £'000 | (k) Retention |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Swiss Re Europe S.A., UK branch | Four treaties covering Prudential Protection business over different periods on a quota share basis. The financing agreements with Swiss Re detailed below are connected to this business. | 6,836 | Closed | 35,543 | Mortality Benefits only (per life) <br> $10 \%$ up to $£ 50,000$ <br> Nil above $£ 50,000$ <br> Mortality plus Critical <br> Illness and stand alone <br> Critical Illness 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 Europe S.A., UK branch | 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 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. | 1,336 | Closed | - | N/A |

## 9. Reinsurance (continued)

| (d) Reinsurer | (e) Nature of cover | $\begin{array}{r} (f) \\ \text { Premiums } \\ \text { £}^{\prime} 000 \\ \hline \end{array}$ | (h) Open / Closed | (j) Reserves Ceded £'000 | (k) Retention |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Hannover Re UK | Risk reinsurance of all benefits other than Income Protection Cover and Unemployment Cover under the Flexible Protection and PruProtect Plans on a risk premium quota share plus surplus basis (including Hannover Rück SE surplus). | 12,435 | Open | 1,067 | Mortality, Serious Illness and Disability Cover (lower limits apply to certain products) <br> $50 \%$ up to $£ 150,000$ <br> Nil above $£ 150,000$ <br> Waiver of Premium $50 \%$ up to $£ 15,000$ p.a. Nil above $£ 15,000$ p.a. |
| Hannover Rück SE | Financing and risk reassurance arrangement in respect of Flexible Protection and PruProtect Plans. <br> (i) Payments to the reinsurer are a proportion of the office premium for the time that the policy remains in force. If a policy lapses within the initial commission period the Company pays the reinsurer a proportion of 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 exits due to a mortality 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. | 1,864 | Closed | 267 | Mortality Benefits (per life) <br> $50 \%$ up to $£ 150,000$ <br> Nil above $£ 150,000$ <br> Serious Illness Cover and <br> Disability Cover <br> $50 \%$ up to $£ 150,000$ <br> Nil above $£ 150,000$ <br> Waiver of Premium $50 \%$ up to $£ 15,000$ p.a. <br> Nil above $£ 15,000$ p.a. |

[^0]
## 9. Reinsurance (continued)

## Hong Kong

| (d) Reinsurer | (e) Nature of cover | $\begin{array}{r} (f) \\ \text { Premiums } \\ £^{\prime} 000 \\ \hline \end{array}$ | (h) Open / Closed | (j) Reserves Ceded £'000 | (k) Retention |
| :---: | :---: | :---: | :---: | :---: | :---: |
| China Life Reinsurance Company Ltd | Quota share risk reassurance arrangement in respect of Golden Harvest II and III plans. | - | Open | 60,494 | 1\% |
| RGA Global Reinsurance Company Ltd Bermuda \& RGA Reinsurance Company, Hong Kong | Quota share mortality and morbidity risk reassurance arrangement in respect of the PRUcrisis cover lifelong protector plan (CCL2) and PRUmyhealth lifelong crisis protector | 10,049 | Open | 59,979 | 25\% up to USD 405,000 |
| RGA Global Reinsurance Company Ltd Bermuda \& RGA Reinsurance Company, Hong Kong | Quota share mortality and morbidity risk reassurance arrangement in respect of PRUCrisis cover lifelong protector plan (CCL) and PRUmyhealth lifelong crisis protector plan | 848 | Open | 88,736 | 10\% |
| RGA Global Reinsurance Company Ltd Bermuda \& RGA Reinsurance Company, Hong Kong | Quota share mortality and morbidity risk reassurance arrangement in respect of Refundable crisis cover and Crisis Cover rider PRcrisis cover smartchoice and PRUcrisis cover smartchoice extra | 2,712 | Closed | 15,280 | 5\% |

(g) There were no deposit back arrangements under the above treaties.
(i) There are no "undischarged obligations of the insurer". Premiums are payable only if the gross business remains in force.
(1) All of the above companies to which UK business is ceded are authorised to carry on insurance business in the United Kingdom.
(m) An asterisk $\left({ }^{*}\right)$ 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.
(p) Indicated where relevant in the 'Nature of Cover' sections above.

## 10. Reversionary (or annual) bonus

Table 1 SAIF

| Bonus series | Mathematical reserves | Annual bonus rate for |  | UWP unit price increase during the year | Guaranteed bonus rate during the year |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2013 | 2012 |  |  |
|  | £m | \% | \% | \% | \% |
| Principal | 693 | 0.80/1.50 | 0.80/1.50 |  |  |
| Flexidowment (Second Series) | 152 | 0.70/1.70 | 0.70/1.70 |  |  |
| Net With Profits Fund 1 | 711 | 2.00/2.00 | 2.00/2.00 |  |  |
| Flexipension (First Series) | 457 | 0.25/0.50 | 0.25/0.50 |  |  |
| Superannuation (Second Series) | 95 | 0.25/0.50 | 0.25/0.50 |  |  |
| Group | 114 | 0.50 | 0.50 |  |  |
| Exempt With Profits Funds 1 | 59 | 4.00 | 4.00 | 4.00 | 4.00 |
| Exempt With Profits Funds 2 | 1,010 | 4.00 | 4.00 | 4.00 | 4.00 |
| Exempt With Profits Funds 3A* | 986 | 4.00 | 4.00 | $4.00{ }^{*}$ | $4.00{ }^{*}$ |
| Exempt With Profits Funds 3B* | 388 | 4.00 | 4.00 | 4.00 * | 4.00 * |
| Exempt With Profits Funds 4 | 10 | 4.00 | 4.00 | $4.00{ }^{*}$ | $4.00{ }^{*}$ |

*Bonus rate for investments made after 1 January 2006 is $2.00 \%$. Guaranteed bonus applies to pre 2006 investments only

## 10. Reversionary (or annual) bonus (continued)

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

| Bonus series | Mathematical | Annual bonus rate for |  | UWP unit price | Guaranteed bonus |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2013 | 2012 |  |  |
|  | £m | \% | \% | \% | \% |
| With-profits Industrial Branch assurances issued before 1 July 1988 | 961 | 1.10/2.30 | 1.10/2.30 |  |  |
| Other conventional with-profits assurances | 1,439 | 1.20/2.50 | 1.20/2.50 |  |  |
| Individual with-profits deferred annuities | 3,901 | 0.10/0.25 | 0.10/0.25 |  |  |
| UWP life assurance bonds |  |  |  |  |  |
| Prudence Bond - optimum return | 7,699 | 2.00 | 2.50 | 2.00 |  |
| Prospects Bond - optimum return | 17 | 1.60 | 2.10 | 1.60 |  |
| Prudence Bond - optimum bonus | 869 | 2.75 | 3.25 | 2.75 |  |
| Prospects Bond - optimum bonus | 13 | 2.35 | 2.85 | 2.35 |  |
| Prudential Investment Bond (accounts $£ 6,000$ and over) |  | 2.00 | 2.50 | 2.00 |  |
| Prudential Investment Bond (accounts under £6,000) | 2,395 | 1.00 | 1.50 | 1.00 |  |
| Group cash accumulation (defined benefit) with a 4.75\% guarantee | 81 | - | - | 4.75 | 4.75 |
| Group cash accumulation (defined benefit) with a $2.5 \%$ guarantee | 81 | - | - | 2.50 | 2.50 |
| Group cash accumulation (defined benefit) with a $0.01 \%$ guarantee | 196 | 1.24 | 1.24 | 1.25 | 0.01 |
| Other group cash accumulation with a $4.75 \%$ guarantee | 432 | - | - | 4.75 | 4.75 |
| Other group cash accumulation with a $2.5 \%$ guarantee | 1,193 | - | - | 2.50 | 2.50 |
| Other group cash accumulation with a $0.01 \%$ guarantee | 1,441 | 1.74 | 1.74 | 1.75 | 0.01 |

10. Reversionary (or annual) 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 | Guaranteed bonus rate during the |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2013 | 2012 |  |  |
|  | £m | \% | \% | \% | \% |
| Flexible Retirement Income Account | 41 | 0.25 | 0.50 | 0.25 |  |
| Individual UWP pensions other than FRIA | 11,899 | 2.00 | 2.50 | 2.00 |  |
| Pension Savings Plan | 90 | 1.25 | 1.75 | 1.25 |  |
| Group UWP pensions | 1,224 | 2.25 | 2.75 | 2.25 |  |
| Group UWP pensions with GMP guarantee | 43 | 1.25 | 1.75 | 1.25 |  |
| With-profits pensions annuities in payment | 1,938 | 0.25 | 0.50 | 0.25 |  |
| PCRS/PCPS annuities in payment | 73 | 0.50 | 0.50 |  |  |
|  |  |  |  |  |  |
| Former SAL products |  |  |  |  |  |
|  |  |  |  |  |  |
| Net With Profits Fund 2 | 209 | 1.75/1.75 | 1.75/1.75 | 1.75/1.75 |  |
| Exempt With Profits Funds 5 and 6 | 135 | 2.125 | 2.625 | 2.125 |  |
| Exempt With Profits Funds 7 and 8 | 225 | 2.00 | 2.50 | 2.00 |  |
| Exempt With Profits Funds 9 and 10 (or C and C2) | 164 | 2.00 | 2.50 | 2.00 |  |
| Exempt With Profits Fund 13 (F) | 111 | 1.75 | 2.25 | 1.75 |  |
| Exempt With Profits Fund 14 (G) | 187 | 1.55 | 2.05 | 1.55 |  |

10. Reversionary (or annual) bonus (continued)

Table 3 WPSF - Policies issued in Hong Kong

| Bonus series | Mathematical reserves | Annual bonus rate for |  | UWP unit price | Guaranteed bonus |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2013 | 2012 |  |  |
|  | £m | \% | \% | \% | \% |
| Conventional with-profits assurances - First series | 258 | 2.50/2.50 | 2.00/2.00 |  |  |
| Conventional with-profits assurances - Better Life | 1,986 | 0.80/1.10 | 0.80/1.10 |  |  |
| Conventional with-profits assurances - Better Life Assurance II | 653 | 1.00/1.40 | 1.00/1.40 |  |  |
| Conventional with-profits assurances - Better Life Plus II | 24 | 1.50/1.50 | 1.50/1.50 |  |  |
| Conventional with-profits assurances - PRUsave Plus | 508 | 0.60/0.60 | 0.50/0.50 |  |  |
| Conventional with-profits assurances - Better Life Assurance II - HK\$ | 544 | 1.20/1.70 | 1.20/1.70 |  |  |
| Conventional with-profits assurances - Better Life Plus II - HK\$ | 68 | 1.30/1.30 | 1.30/1.30 |  |  |
| Double Treasure Retirement Income Plan - US\$ | 76 | 1.20/1.20 | 1.20/1.20 |  |  |
| Double Treasure Retirement Income Plan - HK\$ | 207 | 0.60/0.60 | 0.60/0.60 |  |  |
| Evergreen Growth Saver RP - US\$ | 139 | 1.00/1.00 | 1.00/1.00 |  |  |
| Evergreen Growth Saver SP - US\$ | 59 | 1.10/1.10 | 0.80/0.80 |  |  |
| Evergreen Growth Saver RP - HK\$ | 178 | 1.50/1.50 | - |  |  |
| Evergreen Growth Saver SP - HK\$ | 38 | 1.30/1.30 | 1.00/1.00 |  |  |
| Group cash accumulation (HKDF and USDF) | 48 | 3.40 | 1.50 | 3.40 |  |
| Group cash accumulation (GCAPUS and GCAPHK) | 45 | 2.40 | 2.00 | 2.40 |  |
| PRUsavings Plan | 11 | 2.90 | 2.40 | 2.90 |  |
| Other UWP - US\$ | 16 | 0.50 | 0.50 | 0.50 |  |
| Other UWP - HK\$ | 253 | $\begin{gathered} \hline 1.00 \text { to } 3.00 \\ \text { (Vary by } \\ \text { cohort) } \\ \hline \end{gathered}$ | $\begin{gathered} 0.50 \text { to } 2.50 \\ \text { (Vary by } \\ \text { cohort) } \\ \hline \end{gathered}$ | $\begin{aligned} & 1.00 \text { to } 3.00 \\ & \text { (Vary by cohort) } \end{aligned}$ |  |

10. Reversionary (or annual) bonus (continued)

Table 4 DCPSF

| Bonus series | $\begin{array}{c}\text { Mathematical } \\ \text { reserves }\end{array}$ |  | $\begin{array}{c}\text { Annual bonus rate for }\end{array}$ |  | $\begin{array}{c}\text { UWP unit price } \\ \text { increase during } \\ \text { the year }\end{array}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | \(\left.\begin{array}{c}Guaranteed bonus <br>

rate during the <br>
year\end{array}\right]\)
10. Reversionary (or annual) bonus (continued)
10.(4) Cash bonus contracts issued in Hong Kong for which mathematical reserves were $£ 463.5$ million on the valuation date vary by product, by age at entry and by duration in force. Rates for the PRUflexilife product vary from $\$ 0.60$ per $\$ 1,000$ sum assured at duration 3 years to $\$ 8.00$ per $\$ 1,000$ sum assured at duration 15 years. Rates for the Galaxy product vary from $\$ 3.00$ per $\$ 1,000$ sum assured at duration 1 year to $\$ 13.80$ per $\$ 1,000$ sum assured at duration 11 years.

Appendix 1 - Valuation interest rates

| Product Group | 2013 | 2012 |
| :---: | :---: | :---: |
|  | \% | \% |
| With-Profits Sub-Fund |  |  |
| UK Life - Conventional With-Profits | 2.50 | 2.50 |
| UK Life - Conventional Non-Profit | 3.00 | 3.00 |
| UK Life - Unitised With-Profits | 1.60 | 1.60 |
| UK Life - Unit-linked | 3.00 | 3.00 |
| UK Pensions - Conventional With-Profits deferred annuities | 3.50 | 3.50 |
| UK Pensions - Conventional Non-Profit deferred annuities | 4.00 | 4.00 |
| UK Pensions - Unit-linked | 4.00 | 4.00 |
| UK Pensions - Deposit Administration with 4.75\% guarantee | 3.75 | 3.75 |
| UK Pensions - Deposit Administration with 2.5\% guarantee | 3.25 | 3.25 |
| UK Pensions - Deposit Administration with 0\% guarantee | 2.00 | 2.00 |
| UK Pensions - Unitised With-Profits | 2.00 | 2.00 |
| UK Pensions - Conventional With-Profits group deferred annuities | 3.00 | 3.00 |
| UK Pensions - Conventional Non-Profit group deferred annuities | 4.00 | 4.00 |
| UK Pensions - Non-Profit immediate annuities (fixed) | 4.00 | 4.00 |
| UK Pensions - Non-Profit immediate annuities (index-linked) | 1.00 | 1.00 |
| UK Pensions - Immediate annuities recaptured from PAL (fixed) | 3.43 | 2.99 |
| UK Pensions - Immediate annuities recaptured from PAL (index-linked) | 0.66 | 0.34 |
| UK Pensions - Immediate annuities reinsured from PAL (fixed) | 3.69 | 3.34 |
| UK Pensions - Immediate annuities reinsured from PAL (index-linked) | 0.00 | (0.02) |
| UK Pensions - With-Profits immediate annuity (except Income Choice Annuity) | 0.00 | 0.00 |
| UK Pensions - With-Profits immediate annuity (Income Choice Annuity) | 1.00 | 1.00 |
| HK Life - Conventional With-Profits - US dollar | 2.37 | 2.19 |
| HK Life - Conventional With-Profits - HK dollar (except PRUsave express) | 1.29 | 0.57 |
| HK Life - Conventional With-Profits - HK dollar (PRUsave express) | 0.15 | 0.00 |
| HK Life - Unitised With-Profits - US dollar | 0.65 | 0.65 |
| HK Life - Unitised With-Profits - HK dollar | 0.60 | 0.60 |
| HK Pensions - Non-Profit immediate annuities | 2.37 | 2.19 |
| Scottish Amicable Insurance Fund |  |  |
| UK Life - Conventional With-Profits | 1.75 | 1.75 |
| UK Life - Conventional Non-Profit | 2.25 | 2.25 |
| UK Life - Unitised With-Profits | 1.50 | 1.50 |
| UK Pensions - Conventional With-Profits deferred annuities | 3.00 | 3.00 |
| UK Pensions - Conventional Non-Profit deferred annuities | 2.75 | 2.75 |
| UK Pensions - Unit-linked | 3.25 | 3.25 |
| UK Pensions - Unitised With-Profits | 2.25 | 2.25 |
| UK Pensions - Conventional With-Profits endowments (Flexipension) | 3.00 | 3.00 |
| UK Pensions - Non-Profit term assurance | 2.75 | 2.75 |
| UK Pensions - Guaranteed annuity options | 3.25 | 3.25 |
| UK Pensions - Non-Profit immediate annuity | 3.42 | 3.42 |

Appendix 1 - Valuation interest rates (continued)

| Product Group | 2013 | 2012 |
| :---: | :---: | :---: |
|  | \% | \% |
| Non-Profit Sub-Fund |  |  |
| UK Life - Term assurance (excluding PruProtect) | 2.50 | 2.50 |
| UK Life - Term assurance (PruProtect) - written before 1 January 2013 | $\begin{array}{r} 3.00 / \\ 4.55 \end{array}$ | $\begin{array}{r} 2.70 / \\ 4.11 \end{array}$ |
| UK Life - Term assurance (PruProtect) - written on or after 1 January 2013 | $\begin{array}{r} 3.20 / \\ 4.55 \end{array}$ | n/a |
| UK Pensions - Conventional Non-Profit | 3.25 | 3.25 |
| UK Pensions - Unit-linked | 3.50 | 3.50 |
| UK Pensions - Non-Profit immediate annuity | 3.78 | 3.40 |
| UK Permanent Health Insurance | 3.25 | 3.25 |
| HK Life - Non-unit critical illness riders on unit-linked Crisis Cover | 1.92 | 1.89 |
| HK Life - Directly marketed refundable products | 1.05 | 1.20 |
| HK Life - Other unit-linked and protection riders | 0.00 | 0.00 |
| HK Life - Conventional Non-Profit - PRUcrisis lifelong protector - US dollar | 2.67 | 2.02 |
| HK Life - Conventional Non-Profit - PRUcrisis lifelong protector - HK dollar | 2.25 | 1.52 |
| HK Life - Conventional Non-Profit - PRUmyhealth lifelong crisis protector - US dollar | 2.67 | 2.02 |
| HK Life - Conventional Non-Profit - PRUmyhealth lifelong crisis protector - HK dollar | 2.25 | 1.52 |
| HK Life - Conventional Non-Profit - PRUmyhealth crisis multicare - US dollar | 2.67 | 2.02 |
| HK Life - Conventional Non-Profit - PRUmyhealth crisis multicare - HK dollar | 2.25 | 1.52 |
| HK Life - Conventional Non-Profit - 100\% Refundable Crisis Cover - US dollar | 1.92 | 1.89 |
| HK Life - Conventional Non-Profit - 100\% Refundable Crisis Cover - HK dollar | 1.04 | 1.00 |
| HK Life - Conventional Non-Profit - PRUcrisis cover smartchoice series - US dollar | 1.82 | 1.87 |
| HK Life - Conventional Non-Profit - PRUcrisis cover smartchoice series - HK dollar | 1.47 | 1.17 |
| HK Life - Conventional Non-Profit - other - US dollar | 0.14 | 0.13 |
| HK Life - Conventional Non-Profit - other - HK dollar | 0.00 | 0.00 |
| HK Life - Golden Harvest - US dollar | 0.00 | 0.00 |
| HK Life - Golden Harvest RMB Saving Plan | 3.90 | 3.82 |
| HK Life - Golden Harvest RMB Saving Plan versions II\&III | 1.55 | 1.63 |
| HK Life - My Wish Saver | 0.09 | 0.08 |
| HK Life - PRUuniversial life | 1.15 | 1.12 |
| HK Life - PRUmylife 5-year wealthbuilder | 1.65 | 1.72 |
| HK Life - PRUmyretirement RMB annuity income plan | 1.35 | N/A |
| HK Life - PRUmyretirement monthly income plan | 1.21 | N/A |
| HK Life - PRUmylife 5-year wealthbuilder (2013 relaunch) | 2.23 | N/A |

## Appendix 1 - Valuation interest rates (continued)

| Product group | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 2}$ |
| :--- | :---: | :---: |
|  | $\%$ | $\%$ |
| Defined Charge Participating Sub-Fund |  |  |
| UK Pensions - Immediate annuities | 2.25 | 2.25 |
| Overseas Life - offshore bond - sterling currency | 2.00 | 2.00 |
| Overseas Life - offshore bond - euro currency | 2.90 | 1.90 |
| Overseas Life - offshore bond - US\$ currency | 1.90 | 2.00 |
| Overseas Pensions - Unitised With-Profits immediate annuities from Canada <br> Life | 1.90 |  |

For PruProtect, the first rate of interest is used when total reserves are positive and the second rate when total reserves are negative. Valuation interest rates shown for UK Life business (other than PruProtect business written on or after 1 January 2013) are net of tax.

Appendix 2 - Valuation mortality bases

|  | 2013 | 2012 |
| :---: | :---: | :---: |
| UK Life - UWP and linked Home Purchaser | 85\% AM80 / 85\% AF80 | 85\% AM80 / 85\% AF80 |
| Industrial Branch assurances | A1967/70 rated up 1 year | A1967/70 rated up 1 year |
| UK Pensions WPSF - linked NPSF - linked individual and group money purchase pensions, except those issued by SAL | AM92 / AF92 both rated down 3 years | AM92 / AF92 both rated down 3 years |
| UK Life WPSF - conventional assurances except Prudential Protection, UWP assurances except those issued by SAL or SALAS <br> UK Pensions WPSF - term assurance, group deposit administration | AM92 / AF92 both rated up 1 year | AM92 / AF92 both rated up 1 year |
| UK Life - assurances issued by SAL or SALAS, Prudential Protection in WPSF UK Pensions issued by SAL or SALAS | AM92 / AF92 both rated up 1 year plus 1/3 AIDS 'R6A' for both males and females | AM92 / AF92 both rated up 1 year plus 1/3 AIDS 'R6A' for both males and females |
| UK Life NPSF - Prudential Protection | $110 \%$ of AM/AF92 both rated up 1 year plus 1/3 AIDS 'R6A' for both males and females | $110 \%$ of AM/AF92 both rated up 1 year plus 1/3 AIDS 'R6A' for both males and females |
| UK Life NPSF - PruProtect | $115 \%$ of AM/AF92 both rated up 1 year plus 1/3 AIDS 'R6A' for both males and females | $115 \%$ of AM/AF92 both rated up 1 year plus 1/3 AIDS 'R6A' for both males and females |
| UK Pensions WPSF - individual UWP pensions sold by DSF | AM92 rated up 1 year for men and down 3 years for women | AM92 rated up 1 year for men and down 3 years for women |
| UK Pensions WPSF - WP individual deferred annuities in deferment | AM92 rated down 3 years for men and down 7 years for women | AM92 rated down 3 years for men and down 7 years for women |
| UK Pensions SAIF - Flexipension in deferment <br> WPSF - group deferred annuities in deferment, direct written and accepted from PAL <br> NPSF - group deferred annuities in deferment, accepted from PRIL | AM92 / AF92 both rated down 4 years | AM92 / AF92 both rated down 4 years |
| UK Pensions WPSF - Direct written and accepted from PAL NPSF - individual annuities in payment, reassured to PAL | Modified 99\% PCMA00 <br> Modified 89\% PCFA00 | Modified 99\% PCMA00 <br> Modified 89\% PCFA00 |
| UK Pensions WPSF - WP deferred annuities in payment | Modified 102\% PCMA00 <br> Modified 86.6\% PCFA00 | Modified 99\% PCMA00 <br> Modified 89\% PCFA00 |

Appendix 2 - Valuation mortality bases (continued)

|  |  | 2013 |
| :--- | :--- | :--- |
| UK Pensions WPSF -group deferred annuities in payment (DAPA), <br> direct written and accepted from PAL | Modified 93\% PCMA00 <br> Modified 101\% PCFA00 | Modified 93\% PCMA00 <br> Modified 101\% PCFA00 |
| UK Pensions SAIF \& WPSF - individual annuities in payment, <br> reassured to PRIL <br> NPSF - individual annuities in payment, accepted from PRIL | Modified 91.1\% PCMA00 <br> Modified 84\% PCFA00 | Modified 92.5\% PCMA00 <br> Modified 84.5\% PCFA00 |
| UK Pensions SAIF - group immediate annuities in payment, <br> reassured to PRIL <br> NPSF - group immediate and deferred annuities in payment, <br> accepted from PRIL | Modified 95.8\% PCMA00 <br> Modified 97.4\% PCFA00 | Modified 96\% PCMA00 <br> Modified 97\% PCFA00 |
| UK Pensions SAIF - deferred annuities in payment <br> NPSF - individual annuities in payment | Modified 84.6\% PCMA00 <br> Modified 77.5\% PCFA00 | Modified 92\% PCMA00 <br> Modified 84\% PCFA00 |
| UK Pensions - Flexible Lifetime Annuity | Modified 66\% PCMA00 <br> Modified 63\% PCFA00 | Modified 64\% PCMA00 <br> Modified 61\% PCFA00 |
| UK Pensions WPSF - group deferred annuities in payment (GPDA), <br> direct written and accepted from PAL | Modified 126\% PNMA00 <br> Modified 117\% PNFA00 | Modified 126\% PNMA00 <br> Modified 117\% PNFA00 |
| UK Pensions WPSF - WP annuities in payment | Modified 69\% PCMA00 <br> Modified 66\% PCFA00 | Modified 69\% PCMA00 <br> Modified 66\% PCFA00 |
| UK Pensions, UK Life \& OS DCPSF - WP annuities in payment | Modified 79\% PCMA00 <br> Modified 68\% PCFA00 | Modified 75\% PCMA00 <br> Modified 68\% PCFA00 |
| Hong Kong - UWP assurances, Golden Harvest | $100 \%$ HKA93M / 100\% HKA93F | 100\% HKA93M / 100\% HKA93F |
| Hong Kong - Refundable products | $105 \%$ HKA93M / 105\% HKA93F | 105\% HKA93M / 105\% HKA93F |
| Hong Kong - PRUcrisis cover multiple | $65 \%$ HKA93M / 65\% HKA93F | 65\% HKA93M / 65\% HKA93F |
| Hong Kong - other assurances | $85 \%$ HKA93M / 90\% HKA93F | $85 \%$ HKA93M / 90\% HKA93F |
| DCPSF - Prudential Vie | $102.5 \% ~ T D 8890 ~ / ~ T V 8890 ~$ <br> both rated down 3 years | 102.5\% TD8890 / TV8890 <br> both rated down 3 years |
| DCPSF - other UWP business | AM92 / AF92 | AM92 / AF92 |

## Appendix 2 - Valuation mortality bases (continued)

## Annuity mortality bases used at 31 December 2013 (and 31 December 2012)

Annuities are generally valued using a percentage of the 00 series PCxA tables for annuitants and pensioners. In order to allow for mortality improvement, future improvement factors are applied from 2000. For males these future improvement factors are in line with Prudential's own calibration of the CMI 2012 mortality model (CMI 2011 for the 31 December 2012 valuation), with a long term improvement rate of $2.25 \%$ p.a. For females, future improvement factors are in line with Prudential's own calibration of the CMI 2012 mortality model (CMI 2011 for the 31 December 2012 valuation), with a long term improvement rate of $1.75 \%$ p.a.

Compared with the core CMI mortality model, Prudential's calibration:
(a) blends period improvements between ages 60 to 80 to the long term improvement rate over a 15 year period (compared with a 20 year period in the core CMI model), and
(b) assumes that cohort improvements dissipate over a 30 year period, or by age 90 if earlier (compared with a 40 year period, or by age 100 if earlier, in the core CMI model).

In practice, some deferred annuities in possession have been valued using percentages of single entry tables based on the 92 series tables for annuitants and pensioners, with calendar year 2004 (improvements in line with CMIR17 until 2004). The percentages have been chosen so that the rates used are equivalent to the double entry tables with future improvement factors as described above. For these deferred annuities, a further deduction from the valuation rate of interest has been made during the deferred period, to allow for expected mortality improvements prior to vesting. The deduction from the valuation interest rate was $0.65 \%$ for deferred annuities administered on the GPDA system and $0.60 \%$ for all other deferred annuities.

Appendix 3 - Immediate and deferred annuities: expectations of life at different ages

The table below shows the expectations of life at different ages for the mortality tables reported in Appendix 2 used to value annuities in possession.

| Basis description | Valuation Date | 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

Appendix 3 - Immediate and deferred annuities: expectations of life at different ages (continued)

The table below shows the expectations of life at different ages for the mortality tables reported in Appendix 2 used to value annuities in possession.

| Basis description | Valuation Date | 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 |
| Modified 69\%PCMA00 <br> Modified 66\% PCFA00 | $31 / 12 / 2013$ | men: 28.1 <br> women: 29.7 | men: 17.9 <br> women: 19.6 |  |  |
|  | $31 / 12 / 2012$ | men: 28.2 <br> women: 29.4 | men: 18.1 <br> women: 19.3 |  |  |
| Modified 79\%PCMA00 <br> Modified 68\% PCFA00 | $31 / 12 / 2013$ | men: 26.8 <br> women: 29.3 | men: 16.8 <br> women: 19.2 |  |  |
| Modified 75\%PCMA00 <br> Modified 68\% PCFA00 | $31 / 12 / 2012$ | men: 27.4 <br> women: 29.2 | men: 17.3 <br> women: 19.1 |  |  |

## Appendix 4 - Morbidity bases

## A4.1 Critical illness and total and permanent disability (TPD) business issued in Hong Kong

Annual rates per 10,000 sum assured. The rates were used at both 31 December 2013 and 31 December 2012.

A4.1.1 Contracts that cover 12 critical illnesses. These are closed to new business.

| Age next <br> Birthday | Critical illness rates |  |  | TPD rates |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male Non <br> Smoker | Male Smoker | Female Non <br> Smoker |  |  |
| 25 | 7.31 | 6.55 | 4.08 | 5.87 | 0.68 |
| 35 | 7.48 | 8.93 | 9.52 | 10.97 | 1.02 |
| 45 | 19.81 | 26.86 | 21.51 | 28.65 | 2.55 |
| 55 | 52.70 | 71.06 | 46.84 | 57.89 | 6.63 |

A4.1.2 Contracts that cover 30 critical illnesses.

| Age next <br> Birthday | Critical illness rates |  |  | TPD rates |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male Non <br> Smoker | Male Smoker | Female Non <br> Smoker |  |  |
| 25 | 7.31 | 7.23 | 8.25 | 9.86 | 0.68 |
| 35 | 8.67 | 9.86 | 10.37 | 10.71 | 1.02 |
| 45 | 20.32 | 27.12 | 19.30 | 28.56 | 2.55 |
| 55 | 52.53 | 71.23 | 58.40 | 76.16 | 6.63 |

## A4.2 Prudential Protection

The rates were used at both 31 December 2013 and 31 December 2012.

A4.2.1 Life and basic critical illness annual rates per $£ 10,000$ sum assured

| Age next <br> Birthday | Men |  | Women |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 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 |

A4.2.2 Top-up critical illness annual rates per $£ 10,000$ sum assured

| Age next <br> Birthday | Men |  | Women |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 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 |

For business written after 13 March 2005 the rates are increased by $14 \%$ to cover possible future changes in morbidity.

In the NPSF where prudent lapse assumptions are allowed for in the reserve calculations, the rates are increased by $10 \%$ to allow for the possibility of selective withdrawals.

## Appendix 4 - Morbidity bases (continued)

## A4.3 Benefits attached to Home Purchaser (Series 3) and Amicable Savings Plan

The rates were used at both 31 December 2013 and 31 December 2012.

A4.3.1 Home Purchaser (Series 3) version 2 issued on or after 29 July 1996
Level top-up critical illness annual rates per $£ 10,000$ sum assured

| Age next <br> birthday | Men |  | Women |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 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 |

A4.3.2 Home Purchaser (Series 3) other than those above and Amicable Savings Plan
Level critical illness annual rates per $£ 10,000$ sum assured

| Age next <br> Birthday | Men |  | Women |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 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 |

A4.3.3 Home Purchaser (Series 3)
Decreasing top-up annual critical illness annual rates per $£ 10,000$ sum assured

| Age next | Men |  | Women |  |
| :---: | :---: | :---: | :---: | :---: |
| Birthday | 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 |

A4.3.4 Home Purchaser (Series 3) and Amicable Savings Plan
Total and permanent disability annual 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 |

## Appendix 4 - Morbidity bases (continued)

## A4.3 Benefits attached to Home Purchaser (Series 3) and Amicable Savings Plan (continued)

## A4.3.5 Home Purchaser (Series 3)

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 |  |  |  |  |
| :---: | ---: | ---: | :---: | :---: | :---: |
|  | 5 | 10 | 15 | 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 |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | :---: |
|  | 5 | 10 | 15 | 20 | 25 |
| 25 | 4.32 | 5.88 | 6.72 | 6.96 | 6.96 |
| 35 | 6.72 | 9.36 | 10.80 | 11.04 | 11.40 |
| 45 | 17.16 | 24.48 | 27.96 |  |  |
| 55 | 54.48 |  |  |  |  |

No recovery rates are shown as claim inception and recovery are not modelled. Instead an inception annuity approach based on rates from the reinsurer is used. The rates therefore allow implicitly for both the probability of a claim and the expected length of the claim.

## A4.4 Synergy Protect

Synergy Protect 2 was written up to 30 June 2009. Synergy Protect 3 was written from 1 July 2009.
The rates were used at both 31 December 2013 and 31 December 2012.
A4.4.1 Synergy Protect 2
Level critical illness annual rates per $£ 10,000$ sum assured

| Age next <br> Birthday | Men |  | Women |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Non Smoker | Smoker | Non Smoker | Smoker |
| 25 | 10.92 | 15.30 | 7.28 | 10.63 |
| 35 | 15.70 | 23.76 | 15.53 | 23.37 |
| 45 | 44.46 | 76.98 | 38.20 | 64.87 |
| 55 | 130.84 | 243.04 | 88.98 | 163.85 |

## Appendix 4 - Morbidity bases (continued)

## A4.4 Synergy Protect (continued)

A4.4.2 Synergy Protect 3
Level critical illness annual rates per $£ 10,000$ sum assured

| Age next | Men |  | Women |  |
| :---: | :---: | :---: | :---: | ---: |
| Birthday | Non Smoker | Smoker | Non Smoker | Smoker |
| 25 | 8.19 | 11.75 | 6.56 | 7.76 |
| 35 | 14.10 | 21.08 | 18.35 | 21.46 |
| 45 | 33.79 | 66.28 | 36.17 | 48.89 |
| 55 | 94.72 | 209.17 | 78.53 | 124.27 |

A4.4.3 Synergy Protect 2
Top-up critical illness annual rates per $£ 10,000$ sum assured

| Age next <br> Birthday | Men |  | Women |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Non Smoker | Smoker | Non Smoker | Smoker |
| 25 | 6.95 | 9.74 | 6.85 | 9.71 |
| 35 | 12.41 | 18.78 | 15.54 | 23.38 |
| 45 | 41.51 | 71.87 | 39.82 | 67.63 |
| 55 | 129.26 | 240.09 | 93.42 | 172.02 |

A4.4.4 Synergy Protect 3
Top-up critical illness annual rates per $£ 10,000$ sum assured

| Age next | Men |  | Women |  |
| :---: | :---: | :---: | :---: | ---: |
| Birthday | Non Smoker | Smoker | Non Smoker | Smoker |
| 25 | 5.27 | 7.53 | 6.21 | 7.33 |
| 35 | 11.58 | 17.30 | 19.98 | 23.37 |
| 45 | 33.78 | 66.29 | 41.50 | 56.13 |
| 55 | 102.22 | 226.10 | 93.09 | 147.58 |

A4.4.5 Synergy Protect 2 and Synergy Protect 3
Mortgage payment benefit annual rates per $£ 1,200$ annual benefit without critical illness
Male aggregate lives, non smokers, occupation class 1, deferred period 26 weeks

| Age next <br> Birthday | Policy Term Remaining |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5 | 10 | 15 | 20 | 25 |
| 25 | 1.82 | 2.55 | 3.03 | 3.36 | 3.57 |
| 35 | 2.16 | 3.32 | 4.07 | 4.57 | 4.90 |
| 45 | 6.95 | 11.24 | 14.08 | 16.07 |  |
| 55 | 23.52 | 39.49 |  |  |  |

## Appendix 4 - Morbidity bases (continued)

A4.4.5 Synergy Protect 2 and Synergy Protect 3
Female aggregate lives, non smokers, occupation class 1, deferred period 26 weeks

| Age next <br> Birthday | Policy Term Remaining |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5 | 10 | 15 | 20 | 25 |
| 25 | 3.19 | 4.46 | 5.30 | 5.88 | 6.25 |
| 35 | 3.78 | 5.81 | 7.12 | 8.00 | 8.58 |
| 45 | 12.16 | 19.67 | 24.64 | 28.12 |  |
| 55 | 41.16 | 69.11 |  |  |  |

Male aggregate lives, smokers, occupation class 1, deferred period 26 weeks

| Age next <br> Birthday | Policy Term Remaining |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5 | 10 | 15 | 20 | 25 |
| 25 | 2.42 | 3.39 | 4.03 | 4.47 | 4.75 |
| 35 | 2.87 | 4.42 | 5.41 | 6.08 | 6.52 |
| 45 | 9.24 | 14.95 | 18.73 | 21.37 |  |
| 55 | 31.28 | 52.52 |  |  |  |

Female aggregate lives, smokers, occupation class 1, deferred period 26 weeks

| Age next <br> Birthday | Policy Term Remaining |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5 | 10 | 15 | 20 | 25 |
| 25 | 4.24 | 5.94 | 7.05 | 7.82 | 8.31 |
| 35 | 5.03 | 7.73 | 9.47 | 10.64 | 11.40 |
| 45 | 16.18 | 26.16 | 32.77 | 37.40 |  |
| 55 | 54.74 | 91.91 |  |  |  |

No recovery rates are shown as claim inception and recovery are not modelled. Instead an inception annuity approach based on rates from the reinsurer is used. The rates therefore allow implicitly for both the probability of a claim and the expected length of the claim.

## Appendix 4 - Morbidity bases (continued)

## A4.5 PruProtect

## A4.5.1 PruProtect Primary Serious Illness Cover

Life and basic critical illness rates per $£ 10,000$ sum assured
Rates vary by duration - the rates shown are as at duration 0 . Rates are also different for reviewable policies, whole of life policies, policies where life cover is not accelerated by serious illness cover and where child serious illness cover is excluded.

31 December 2013

| Age next | Men |  | Women |  |
| :---: | ---: | ---: | ---: | ---: |
| Birthday | Non Smoker | Smoker | Non Smoker | Smoker |
| 25 | 3.90 | 6.03 | 3.23 | 4.77 |
| 35 | 6.17 | 12.12 | 8.13 | 10.86 |
| 45 | 11.64 | 26.24 | 15.04 | 22.38 |
| 55 | 32.21 | 70.42 | 30.61 | 53.19 |

31 December 2012

| Age next | Men |  | Women |  |
| :---: | :---: | :---: | :---: | :---: |
| Birthday | Non Smoker | Smoker | Non Smoker | Smoker |
| 25 | 4.24 | 6.87 | 3.81 | 5.38 |
| 35 | 6.32 | 12.06 | 8.13 | 11.16 |
| 45 | 12.87 | 27.61 | 16.39 | 24.70 |
| 55 | 33.86 | 74.68 | 31.20 | 55.55 |

Top up critical illness rates per $£ 10,000$ sum assured
Rates vary by duration - the rates shown are as at duration 0 . Rates are also different for reviewable policies, whole of life policies and where child serious illness cover is excluded.

31 December 2013

| Age next <br> Birthday | Men |  | Women |  |
| :---: | :---: | ---: | ---: | ---: |
|  | Non Smoker | Smoker | Non Smoker | Smoker |
| 25 | 4.08 | 7.08 | 3.12 | 4.44 |
| 35 | 7.20 | 13.67 | 9.72 | 12.71 |
| 45 | 13.91 | 31.51 | 17.51 | 24.81 |
| 55 | 33.43 | 73.31 | 35.82 | 59.48 |

31 December 2012

| Age next <br> Birthday | Men |  | Women |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Non Smoker | Smoker | Non Smoker | Smoker |
| 25 | 4.18 | 6.93 | 3.26 | 4.69 |
| 35 | 6.63 | 12.54 | 9.28 | 12.84 |
| 45 | 14.17 | 29.94 | 18.04 | 27.19 |
| 55 | 31.36 | 67.58 | 34.21 | 60.29 |

## Appendix 4-Morbidity bases (continued)

A4.5.2 PruProtect Comprehensive Serious Illness Cover
Life and basic critical illness rates per $£ 10,000$ sum assured
Rates vary by duration - the rates shown are as at duration 0 . Rates are also different for reviewable policies, whole of life policies, policies where life cover is not accelerated by serious illness cover and where child serious illness cover is excluded.

31 December 2013

| Age next <br> Birthday | Men |  | Women |  |
| :---: | ---: | ---: | ---: | ---: |
|  | Non Smoker | Smoker | Non Smoker | Smoker |
| 25 | 4.74 | 7.83 | 4.06 | 6.21 |
| 35 | 7.49 | 15.11 | 9.33 | 13.14 |
| 45 | 13.31 | 30.43 | 16.48 | 25.02 |
| 55 | 35.45 | 78.42 | 32.05 | 56.77 |

31 December 2012

| Age next | Men |  | Women |  |
| :---: | :---: | :---: | :---: | :---: |
| Birthday | Non Smoker | Smoker | Non Smoker | Smoker |
| 25 | 4.95 | 8.40 | 4.32 | 6.40 |
| 35 | 7.23 | 14.30 | 8.95 | 12.68 |
| 45 | 14.30 | 31.07 | 17.61 | 26.84 |
| 55 | 36.30 | 81.06 | 32.22 | 58.19 |

Top up critical illness rates per $£ 10,000$ sum assured
Rates vary by duration - the rates shown are as at duration 0 . Rates are also different for reviewable policies, whole of life policies and where child serious illness cover is excluded.

31 December 2013

| Age next | Men |  | Women |  |
| :---: | ---: | ---: | ---: | ---: |
| Birthday | Non Smoker | Smoker | Non Smoker | Smoker |
| 25 | 5.16 | 9.48 | 3.84 | 5.88 |
| 35 | 9.12 | 17.75 | 11.39 | 15.59 |
| 45 | 16.55 | 37.97 | 19.18 | 28.04 |
| 55 | 37.38 | 83.20 | 37.85 | 64.13 |

31 December 2012

| Age next | Men |  | Women |  |
| :---: | :---: | :---: | :---: | :---: |
| Birthday | Non Smoker | Smoker | Non Smoker | Smoker |
| 25 | 3.98 | 7.04 | 3.77 | 5.61 |
| 35 | 5.81 | 11.52 | 10.30 | 14.78 |
| 45 | 11.21 | 24.14 | 19.56 | 29.84 |
| 55 | 28.52 | 62.72 | 35.63 | 63.73 |

## Appendix 5 - Valuation expense bases

A5.1
WPSF

|  |  | 31 December 2013 |  | 31 December 2012 |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Product <br> code(s) |  | Maintenance <br> expenses | Investment <br> expenses | Maintenance <br> expenses | Investment <br> expenses |
|  | £ per annum | basis points pa | £ per annum | basis points pa |  |
| 325,330, <br> 340 to 355, <br> 360 and 385 | Term assurance, critical illness and <br> income protection | 37.29 | 10.0 | 36.62 | 10.0 |
| 400 | Annuity | 18.71 |  |  |  |
| 500 | UWP bond | 47.82 | 17.6 | 46.84 | 17.6 |
| 510 | UWP savings endowment | 49.88 | 17.6 | 48.75 | 17.6 |
| 515 | UWP target cash endowment | 42.46 | 17.6 | 41.61 | 17.6 |
| 525 | UWP regular premium pension | 44.57 | 17.6 | 43.44 | 17.6 |
| 525 | UWP single premium pension | 38.13 | 17.6 | 37.28 | 17.6 |
| 535 | UWP group regular premium pension | 96.34 | 17.6 | 92.58 | 17.6 |
| 535 | UWP group single premium pension | 62.41 | 17.6 | 59.73 | 17.6 |
| 700 | UL bond | 28.86 | 25.0 | 28.52 | 25.0 |
| 715 | UL savings endowment | 42.46 | 25.0 | 41.61 | 25.0 |
| 720 | UL target cash endowment | 42.46 | 25.0 | 41.61 | 25.0 |
| 735 | UL group regular premium pension | 152.70 | 25.0 | 146.77 | 25.0 |
| 735 | UL group single premium pension | 99.04 | 25.0 | 94.96 | 25.0 |

UK Conventional contracts are valued using a net premium method, zillmerised for with-profits contracts and unmodified for term assurances. The zillmer adjustment is $3 \%$ of sums assured for with-profits life business and $2 \%$ of the value of the annuity at retirement for with-profits pensions deferred annuities.

Maintenance expenses are split between charges paid under a third party outsourcing agreement and expenses incurred directly by Prudential. Outsourced charges are as set out in the outsourcing agreement plus a $10 \%$ MAD.

## Appendix 5 - Valuation expense bases

A5.2 SAIF

|  |  | 31 December 2013 |  | 31 December 2012 |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Product <br> code(s) |  | Maintenance <br> expenses | Investment <br> expenses | Maintenance <br> expenses | Investment <br> expenses |
|  |  | $£$ per annum | basis points pa | $£$ per annum | basis points pa |
| 400 | Annuity | 46.65 | 5.3 | 38.79 | 5.3 |
| 525 | UWP regular premium pension | 40.56 | 17.6 | 44.47 | 17.6 |
| 525 | UWP single premium pension | 111.63 | 17.6 | 40.17 | 17.6 |
| 535 | UWP group regular premium pension | 74.00 | 17.6 | 107.61 | 17.6 |
| 535 | UWP group single premium pension | 45.56 | 25.0 | 70.90 | 17.6 |
| 725 | UL regular premium pension | 40.75 | 25.0 | 40.17 | 25.0 |
| 725 | UL single premium pension | 111.63 | 25.0 | 107.61 | 25.0 |
| 735 | UL group regular premium pension | 74.00 | 25.0 | 70.90 | 25.0 |
| 735 | UL group single premium pension |  |  | 25.0 |  |

Conventional contracts are valued using a net premium method, zillmerised for with-profits contracts and unmodified for term assurances. The zillmer adjustment is $3 \%$ of sums assured for with-profits life business and $2 \%$ for with-profits pensions.

Maintenance expenses are split between charges paid under a third party outsourcing agreement and expenses incurred directly by Prudential. Outsourced charges are as set out in the outsourcing agreement plus a $10 \%$ MAD.

## Appendix 5 - Valuation expense bases

## NPSF

|  |  | 31 December 2013 |  | 31 December 2012 |  |
| :---: | :--- | :---: | :---: | :---: | :---: |
| Product <br> code(s) |  | Maintenance <br> expenses | Investment <br> expenses | Maintenance <br> expenses | Investment <br> expenses |
| e per annum <br> basis points pa <br> $£$ per annum | basis points pa |  |  |  |  |
| 325,330, <br> 345,355, <br> 360 and 365 | Term assurance, critical illness and <br> income protection | $29.25-$ <br> 45.11 | 10.0 | $32.50-$ <br> 50.12 | 10.0 |
| 400 | Annuity | 33.36 | 6.4 | 32.26 |  |
| 700 | UL bond | 11.37 | 20.5 | 11.51 | 20.5 |
| 715 | UL savings endowment | 32.14 | 15.0 | 31.86 | 15.0 |
| 720 | UL target cash endowment | 11.17 | 25.0 | 16.75 | 25.0 |
| 725 | UL regular premium pension | 11.37 | 25.0 | 15.50 | 25.0 |
| 725 | UL single premium pension | 14.18 | 25.0 | 14.88 | 25.0 |
| 735 | UL group regular premium pension | 41.22 | 25.0 | 38.55 | 25.0 |
| 735 | UL group single premium pension | 25.69 | 25.0 | 23.83 | 25.0 |

For linked business, the figures are for per-policy attributable expenses only.
Maintenance expenses are split between charges paid under a third party outsourcing agreement and expenses incurred directly by Prudential. Outsourced charges are as set out in the outsourcing agreement plus a $10 \%$ MAD, with the exception of PruProtect which currently has a $30 \%$ MAD applied.

## APPENDIX 9.4A

## VALUATION REPORT FOR REALISTIC VALUATION OF THE PRUDENTIAL ASSURANCE COMPANY LIMITED AS AT 31 DECEMBER 2013

Throughout this document the abbreviations "CWP" and "AWP" are used for Conventional With-Profits business and Accumulating With-Profits business respectively.

## 1. Introduction

(1) The investigation relates to 31 December 2013.
(2) The date of the previous valuation related to 31 December 2012
(3) A valuation was carried out at 30 June 2013 in accordance with IPRU(INS) rule 9.3A.
2. Assets
(1) The economic assumptions used to determine the value of future profits on non-profit annuities in the WPSF are shown below. The investment return assumption reflects the yield on the backing assets minus an allowance for credit risk. Separate assumptions are used for fixed annuities and inflation-linked annuities, and for directly written business and reinsurance accepted from Prudential Annuities Limited (PAL), reflecting the separate asset pools backing them. The rates shown for linked business are real rates.

Directly written business

| Description | 31 December 2013 |  | 31 December 2012 |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Fixed <br> $\%$ | Linked <br> $\%$ | Fixed <br> $\%$ | Linked <br> $\%$ |
| Investment return | 3.575 | 0.738 | 3.128 | 0.405 |
| Less: Investment expenses | 0.067 | 0.067 | 0.067 | 0.067 |
| Discount rate | 3.508 | 0.671 | 3.061 | 0.338 |
| Inflation | 4.00 | 4.00 | 3.50 | 3.50 |

Reinsurance accepted from PAL

| Description | 31 December 2013 |  | 31 December 2012 |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Fixed <br> $\%$ | Linked <br> $\%$ | Fixed <br> $\%$ | Linked <br> $\%$ |
| Investment return | 3.846 | 0.056 | 3.486 | 0.040 |
| Less: Investment expenses | 0.067 | 0.067 | 0.067 | 0.067 |
| Discount rate | 3.779 | $(0.011)$ | 3.418 | $(0.026)$ |
| Inflation | 4.00 | 4.00 | 3.50 | 3.50 |

The value of future profits on other non-profit business written in the UK has been valued using the full gilt yield curve. At 31 December 2012 the 10 -year gilt yield was used. The full gilt yield curve is given in Appendix 9. The other economic assumptions used to value nonprofit non-annuity business are as shown below. .

| Description | 31 December 2013 |  | 31 December 2012 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Gross } \\ \% \end{gathered}$ | Net \% | Gross <br> \% | Net \% |
| Investment expenses | 0.160 | 0.128 | 0.160 | 0.128 |
| Inflation | 3.4 | 3.4 | 2.9 | 2.9 |

(2) For the WPSF, the economic assumptions used to determine any additional amount arising from the present value of future profits (or losses) from PAL in accordance with INSPRU 1.3.33R(3)(b)(iii) are shown in the table below. The investment return assumption reflects the yield on the backing assets minus an allowance for credit risk. Separate assumptions are used for fixed annuities and inflation-linked annuities, reflecting the separate asset pools backing them. The rates shown for linked business are real rates.

| Description | 31 December 2013 |  | 31 December 2012 |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Fixed <br> $\%$ | Linked <br> $\%$ | Fixed <br> $\%$ | Linked <br> $\%$ |
| Investment return | 3.846 | 0.056 | 3.486 | 0.040 |
| Less: Investment expenses | 0.067 | 0.067 | 0.067 | 0.067 |
| Discount rate | 3.779 | $(0.011)$ | 3.418 | $(0.026)$ |
| Inflation | 4.00 | 4.00 | 3.50 | 3.50 |
|  |  |  |  |  |
| Rate of tax on profits | 20 | 20 | 23 | 23 |

SAIF and the DCPSF have no assets valued under INSPRU 1.3.33R(3)(b)(iii).
(3) Not applicable
(4) Not applicable
3. With-profits benefits reserve liabilities
(1) The methods used to calculate the with-profits benefits reserves are as follows:

| Business class | Method |  | With-profits benefits reserves | Future policy related liabilities |
| :---: | :---: | :---: | :---: | :---: |
| WPSF |  |  | £m | £m |
| Ex-Direct Sales Force (DSF) Industrial Branch (IB) | Retrospective* | Individual | 1,647 | 170 |
| DSF CWP Ordinary Branch (OB) assurances | Retrospective* | Individual | 2,077 | 112 |
| DSF PPRP | Retrospective* | Individual | 3,205 | 769 |
| DSF AWP Life | Retrospective | Individual | 3,030 | (32) |
| DSF AWP Pensions | Retrospective* | Individual | 17,977 | 338 |
| Ex-ISC Pensions | Retrospective* | Individual | 995 | 227 |
| Group Pensions | Retrospective* | Individual | 6,488 | 70 |
| With profit immediate annuities | Retrospective | Individual | 4,938 | 91 |
| Prudence Bond | Retrospective | Individual | 11,391 | 4 |
| PruFund | Retrospective* | Individual | 7,992 | (30) |
| Ex-SAL AWP | Retrospective* | Individual | 1,262 | 10 |
| Hong Kong | Retrospective | Individual | 6,412 | 118 |
| Poland | Retrospective | Individual | 0 | 0 |
| Malta | Retrospective | n/a | 7 | 0 |
| Additional reserve | Other | $\mathrm{n} / \mathrm{a}$ | - | 748 |
| Sub-total |  |  | 67,421 | 2,597 |
| SAIF |  |  |  |  |
| CWP | Retrospective | Individual | 2,051 | 39 |
| AWP - Pensions | Retrospective* | Individual | 2,845 | 72 |
| AWP - Life | Retrospective* | Individual | 1,029 | 10 |
| Additional reserve | Other | $\mathrm{n} / \mathrm{a}$ | 7 | 707 |
| Sub-total |  |  | 5,932 | 828 |
| DCPSF |  |  |  |  |
| PAC France | Retrospective | Individual | 50 | - |
| Canada Life (Germany) | Retrospective | Individual | 305 | - |
| International Prudential Bond | Retrospective | Individual | 2,040 | - |
| With profit immediate annuities | Retrospective | Individual | 1,072 | - |
| Other | Other | n/a |  | (29) |
| Sub-total |  |  | 3,467 | (29) |
| Total PAC |  |  | 76,821 | 3,396 |

* Adjusted as described in section 5
(2) The with-profits benefits reserves and future policy related benefits correspond to the amounts shown in Form 19.


## 4. With-profits benefits reserves - Retrospective method

(1)(a)\&(b) The with-profits benefit reserve for all business is calculated on an individual policy basis.
(1)(c) Not applicable
(2)(a) Not applicable
(2)(b) Not applicable
(3) Directly attributable expenses are allocated to the products or product groups to which they relate. Other expenses are mostly apportioned by reference to such measures as considered appropriate, for example business volumes, time spent, or mean fund (for investment expenses).
(3)(a) The most recent full expense investigation related to 2013.
(3)(b) A full review of the company's cost allocation basis is carried out annually to ensure maintenance of an appropriate allocation of expenses to the with-profits and other parts of the long-term fund. Additional reviews are conducted quarterly.
(3)(c)(i)\&(ii) Expense allocation for 2013

| Description | WPSF | SAIF | DCPSF |
| :---: | :---: | :---: | :---: |
|  | £m | £m | £m |
| Initial expenses including commission ${ }^{\dagger}$ | 417 | 0 | 0 |
| Maintenance expenses | 164 | 17 | 32 |
| Investment management expenses | 152 | 11 | 0 |
| Total expenses charged to with profits benefit reserve | 733 | 28 | 32 |
| Total expenses not charged to with profits benefit reserve | 140 | 15 | 0 |
| Total | 873 | 42 | 32 |

Net of any expenses written off to the inherited estate rather than being allocated to asset shares, as described in (3)(c)(iv) below.

The investment expenses shown above exclude those incurred in respect of the assets backing the inherited estate.

For the DCPSF business, explicit charges are specified in the policy and passed to the Non-Profit Sub-Fund, which bears the actual costs incurred.
(3)(c)(iii) Expenses charged to the with-profits benefits reserve 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.
(3)(c)(iv) Certain expenses are not charged to the with-profits benefits reserve. In particular:

- Expenses relating to non-profit and unit-linked business.
- Deductions for initial expenses are restricted to the policy-specific charges used when illustrating benefits at the point of sale.
- For the WPSF, expenses associated with the personal pensions mis-selling review are met by the inherited estate rather than asset shares.
- For a number of pension contracts the net impact of deductions has been limited to $1 \%$ p.a. since April 2001, though this level of charge is not guaranteed to apply in future.
- Expenses in respect of certain one-off projects are met by the inherited estate rather than asset shares.

The charge for guarantees for With-Profits Immediate Annuities is expressed as a $0.4 \%$ p.a. reduction in the investment return credited to the with-profits benefits reserve for business sold since April 2009 and $0.16 \%$ for business sold prior to that date.

For the Income Choice Annuity, since April 2010, the guarantee charge applying for new business has been actively reviewed each quarter in response to changing market conditions.

For PruFund policies, the charge for guarantees is also expressed as a reduction in the credited investment return. The charge is set at policy inception and is actively reviewed each quarter for new policies in response to changing market conditions.

For business written through PAC's Hong Kong branch, guarantee charges are expressed as a percentage of the guaranteed basic surrender value. The guarantee charges for CWP business are varied dynamically in line with movements in interest rates.

For all other WPSF policies, the current charge for guarantees is $2 \%$ of asset shares.
For DCPSF policies, excluding the PruFund and the with-profits annuity business transferred from Equitable Life Assurance Society on 31 December 2007, the charge for guarantees is again expressed as $2 \%$ of asset shares.

For PruFund business in the DCPSF, the charge for guarantees is the same as for WPSF PruFund business.

For the with-profits annuity business in the DCPSF that was transferred from the Equitable Life Assurance Society (ELAS), the charge for guarantees is expressed as a $0.50 \%$ p.a. reduction in the investment return credited to the with-profits benefit reserve.

For SAIF, two charges were made to asset shares in 2013:

- An annual charge for the cost of guaranteed annuity options of $0.25 \%$ of asset shares. This is the maximum amount that the Scottish Amicable Board has currently determined should 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 the Scottish Amicable Capital Fund (SACF) of $0.15 \%$ of asset shares.

For the WPSF, SAIF and the DCPSF the level of charges deducted during 2012 and 2013 is shown below:

| Fund | $\mathbf{2 0 1 3}$ charges <br> $\mathbf{f m}$ | $\mathbf{2 0 1 2}$ charges <br> $\mathbf{f m}$ |
| :--- | :---: | :---: |
| WPSF | 182 | 215 |
| DCPSF | 13 | 13 |
| SAIF | 24 | 25 |

The with-profits benefits reserves are shown before these charges.
(5) For the WPSF, shareholder transfers are charged to the with-profits benefits reserve. In 2013 the shareholder transfers amounted to $£ 213 \mathrm{~m}$.
(6)

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. The claim values used exclude the cost of guaranteed annuity options and, for SAIF, they exclude enhancements to claim values arising from the distribution of the SAIF inherited estate.

| Fund | $\mathbf{2 0 1 3}$ <br> $\mathbf{\%}$ | $\mathbf{2 0 1 2}$ <br> $\mathbf{\%}$ | $\mathbf{2 0 1 1}$ <br> $\mathbf{\%}$ |
| :--- | :---: | :---: | :---: |
| WPSF | 100 | 105 | 108 |
| DCPSF | 100 | 103 | 103 |
| SAIF | 96 | 98 | 100 |

The 2013 rates of investment return, before tax and investment management expenses, allocated to the with-profits benefits reserves were as follows:

| Fund | Business | Investment <br> return <br> \% |
| :--- | :--- | :---: |
|  |  | 8.62 |
| WPSF | Prudence Bond Optimum Bonus | 5.07 |
|  | PruFund Cautious | 10.33 |
|  | Other UK | 0.69 |
|  | Hong Kong - CWP Hong Kong dollar funds | $(5.89)$ |
|  | Hong Kong - CWP US dollar funds | 6.95 |
|  | Hong Kong - AWP Hong Kong dollar funds | 12.52 |
|  | Hong Kong - AWP US dollar funds | 9.13 |
| SAIF | All | 10.33 |
| DCPSF | Sterling funds | 12.18 |
|  | US dollar funds | 10.97 |
|  | Euro funds |  |

## 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 on a prospective basis as follows:

- WPSF DSF 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 were merged. At that time, 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 WPBR for IB business is therefore based on the greater of a bonus reserve valuation approach using the OB bonus rates, and the IB asset shares.
- The Company has restricted the future implicit fund charge on many pension contracts to reflect its intention to restrict charges on personal pensions to stakeholder consistent levels, so restricting its 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). For these product lines, the charges asset shares are adjusted by the present value of future expenses and shareholder transfers less future charges and miscellaneous surplus, in order to ensure that the with-profits benefit reserve reflects the actual liabilities in respect of claims, expenses and shareholder transfers.
- The SAIF asset share liability is increased by the value of the Scottish Amicable Account (SAA) AWP life business, calculated on a charges less expenses basis, that is passed to the WPSF.

A prospective valuation is not performed for any business in the DCPSF.
The non-economic assumptions largely reflect the realistic component of the regulatory basis excluding the margins for adverse deviation (MADs).
(1)(a)(b)\&(c) The economic assumptions for the WPSF, SAIF AWP pensions and SAA AWP business are:

|  | 31 December 2013 |  | 31 December 2012 |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Gross | Net | Gross | Net |
| Investment return | $\%$ | $\%$ | $\%$ | $\%$ |
|  | 6.17 | 5.36 | 5.03 | 4.35 |
|  | 0.16 | 0.13 | 0.16 | 0.13 |
| Expense inflation | 6.01 | 5.24 | 4.87 | 4.22 |
|  | 3.40 | 3.40 | 2.90 | 2.90 |

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, thereby complying with INSPRU 1.3.130 R. The discount rates therefore differ from the risk free rates required by $6 .(4)(\mathrm{a})(\mathrm{iii})$.

Future reversionary and terminal bonus rates for WPSF significant product lines are shown in Appendix 8.

| Per policy expenses (year 1) |  |  |
| :--- | :---: | :---: |
| Product | Premium Paying <br> (£) | Single Premium / <br> Paid Up (£) |
| Prudence Bond | N/A | 42.66 |
| CWP Life | 41.05 | 34.21 |
| PPRP | 39.59 | 33.96 |
| Personal Pensions | 39.59 | 33.96 |
| AVCs | 96.38 | 61.25 |

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

Future persistency assumptions for significant product lines are as follows (using the same format as for paragraph 6.(6)):

| Product | Decrement | Average surrender/paid-up rate <br> for the policy years |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  |  | $11-5$ | $6-10$ | $11-15$ | $16-20$ |
|  |  | surrender | $3.50 \%$ | $5.50 \%$ | $3.00 \%$ |
| $3.00 \%$ |  |  |  |  |  |
| CWP savings endowment | surrender | $3.50 \%$ | $5.50 \%$ | $3.00 \%$ | $3.00 \%$ |
| CWP target cash endowment | surrender | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ |
| UWP savings endowment | surrender | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ |
| UWP target cash endowment | surrender | $2.90 \%$ | $7.20 \%$ | $4.40 \%$ | $4.00 \%$ |
| UWP bond | automatic <br> withdrawals | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |
| UWP bond | PUP | $2.20 \%$ | $2.50 \%$ | $2.50 \%$ | $2.50 \%$ |
| CWP pension regular premium | surrender | $1.25 \%$ | $1.25 \%$ | $1.25 \%$ | $1.25 \%$ |
| CWP pension regular premium | surrender | $1.50 \%$ | $1.50 \%$ | $1.50 \%$ | $1.50 \%$ |
| CWP pension single premium | UWP | $7.60 \%$ | $6.00 \%$ | $4.50 \%$ | $4.50 \%$ |
| UWP individual pension regular premium | PUP | $.50 \%$ |  |  |  |
| UWP individual pension regular premium | surrender | $2.50 \%$ | $2.50 \%$ | $2.50 \%$ | $2.50 \%$ |
| UWP individual pension single premium | surrender | $1.50 \%$ | $1.50 \%$ | $1.50 \%$ | $1.50 \%$ |

## 6. Cost of guarantees, options and smoothing

## (1) Not applicable

(2)(a) For the WPSF and SAIF, the value of guarantees, options and smoothing costs, net of the value of charges for guarantees is determined using market-consistent stochastic models as follows:

- For WPSF business issued in Hong Kong, the HK stochastic asset liability model (HKSALM) is used.
- The reserve in the WPSF for guarantees resulting from the personal pension misselling review is calculated using the Pension Mis-selling Reserve model.
- The reserve in the WPSF for the guaranteed minimum pensions (GMPs) on Section 32 type products is calculated using the Guaranteed Minimum Pension model.
- For all other WPSF and DCPSF business issued in the UK, the Prudential Stochastic Asset Liability Model (PSALM), our in-house model, is used to value product-related guarantees, except for the small volume of guaranteed annuity options (GAOs), for which the realistic reserve is set equal to the regulatory reserve.
- For SAIF business, including SAIF GAOs, PSALM is used.
(2)(b)(i)(ii) The reserves in respect of the personal pension mis-selling review and GMPs are \&(iii) valued on an individual basis.

All other product-related guarantees are valued using grouped model points. The number of model points and the number of contracts they represent are shown in the table below.

| Business | Valuation <br> model | Contracts | Model <br> points |
| :--- | :---: | :---: | :---: |
| WPSF-UK | PSALM | $2,748,926$ | 24,804 |
| WPSF-HK | HKSALM | 738,208 | 25,975 |
| SAIF | PSALM | 328,049 | 1,931 |

The model points used to determine the cost of guarantees and smoothing for the 31 December 2013 valuation were generated from in-force data extracted as at 31 December 2012, 30 June 2013 and 30 September 2013 for different product lines. These model points were then rolled forward to 31 December 2013.

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, 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;
- separate bonus series, where applicable;
- year of inception; and
- year of maturity, where applicable.

To more accurately group specific product lines, a number of additional fields are also used:

- For Prudence Bond: withdrawal option, age and fund value;
- For PruFund: age, guarantee type and guarantee period;
- For SAIF, ex-SAL personal pensions and PSA: age and asset share;
- For Group Pensions: initial allocation, commission type and front-end commission;
- For CWP IB and OB assurances and PPRP deferred annuities: asset share;
- For Hong Kong CWP business: outstanding premium term, age and premium frequency; and
- For Hong Kong AWP business: age and sex.

For With-Profits Immediate Annuities, the product type, joint life status, age, sex, anticipated bonus rate, guaranteed term, guarantee type and asset share have all been used as grouping variables.

For Income Choice Annuities, the joint life status, age, sex, required smoothed return, guaranteed term and asset share have all been used as grouping variables.

For ex-ELAS business, the product type, joint life status, age, sex, anticipated bonus rate, guaranteed term, interest rate, and type, have all been used as grouping variables.

Checks were performed to ensure that the model points suitably reflected the underlying data.

The ungrouped policy data and grouped model points were separately projected through the stochastic models. Key revenue and balance sheet items over the projection period were compared to demonstrate that the model points represent the policy data adequately. For the UK business, the key items tested were asset share and cost of guarantee (guaranteed amount less asset share). Other measures included asset share claims, premiums and policy count. For the Hong Kong business the key items tested were the present value of the cost of guarantees, the charges for guarantees and the shareholder transfers.
(4)(a)(i) For the WPSF and SAIF, the guarantees valued using the full stochastic models 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 by duration in force within each product line. The ratio of
reversionary bonus funds to asset shares at 31 December 2013 for separate AWP product lines ranged from $50 \%$ to $80 \%$, averaging $70 \%$ overall for the UK WPSF and $72 \%$ overall for SAIF business. Projected ratios using the risk-neutral economic basis for most UK product lines were in the region of $80 \%$, with the exception of PPRP deferred annuity business, for which the ratio of guaranteed benefits to asset shares was in the region of $120 \%$. The majority of the in-force business was sold in the 1980s, and the guarantees are now heavily in the money, due to reduction in interest rates and improvements in mortality since the business was priced.
(4)(a)(ii) The economic scenario generator

Risk neutral economic scenarios are generated by GeneSIS, which is Prudential's inhouse economic scenario generator. The models used for each asset class are as follows:

- Nominal interest rate model

The interest rate model is a key element of the modelling procedure and is used to drive all the other asset classes. The model chosen for nominal interest rates was a two additive factor Gaussian interest rate model (G2++ model).

The model is calibrated using instantaneous nominal forward rates and a set of swaption implied volatilities

- Equity model

Equity returns are generated for both domestic equities and overseas equities. These are generated using a lognormal model, subject to three enhancements:

- The drift of the process is the short rate, taken from the nominal interest rate model described above;
- The equity volatility in the model is time-dependant, and is determined using a combination of option-implied volatilities and expert opinion; and
- 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 riskneutral framework.
- Corporate bond model

The corporate bond returns are modelled by simulating the return on a risk-free bond, change in spread, expected defaults and a stochastic element representing any residual volatility explained by secondary factors.

- Property model

Property returns can be decomposed into a fixed income element representing the rental payments plus an additional volatility element which represents the residual value of the property. They are therefore modelled as a corporate bond (the rental payment) and an equity component (the residual value).

- Real interest rate and inflation model

The real interest rates are modelled by a one factor Hull and White model.
The inflation rate is defined as the difference between the nominal and the real interest rate.

## Calibration of asset models

The GeneSIS model has been calibrated to the market prices of traded derivative instruments as at 31 December 2013. Separate calibrations are produced for the three currencies for which there are material volumes of business (sterling for business written in the UK and Hong Kong dollars and US dollars for business written through PAC's Hong Kong branch).

The assumptions used in the calibration are as follows:

- Risk free interest rate

The yield curves used to calibrate the nominal interest rate model are as follows:

- For UK with-profits business, the risk free yield curve is set equal to UK government bond yields.
- For Hong Kong with-profits business, the risk free yield curves are set equal to the US Treasury and Hong Kong government bond yields for liabilities denominated in US dollars and Hong Kong dollars respectively.

A constant forward rate is assumed for durations beyond the last observable market data point. This is 25 years for UK gilts and 30 years for US Treasury bonds and Hong Kong government bonds.

The continuously compounded forward yield curves are shown below:


A table of the above interest rates is given in Appendix 9.
The parameters defining the fluctuation in modelled interest rates around these yield curves are calibrated to ensure that the model replicates market swaption implied volatilities.

- Equity volatility

For UK, Hong Kong and US equities, market put option implied volatilities with exercise dates from 1 to 10 years and a range of strikes were obtained.

The resulting volatility surfaces (based on moneyness and term) were converted into structures dependent only on term through determining an average moneyness of the policy guarantees. For UK business, the average strike was 0.80 for the first ten years. For US dollar and Hong Kong dollar business, the average strikes were 0.60 and 0.50 respectively for the first ten years.

The resulting volatilities are shown in the graphs below:




A table of the above volatilities is given in Appendix 10.

For periods over 10 years, no market data is available, so the volatility assumptions are based on internal expert opinion. We have assumed that the volatility in year 10 moves linearly towards a long-term volatility level of $20 \%$ for UK and US equities and $25 \%$ for Hong Kong equities over a period of five years.

Volatility assumptions are also required for the overseas equity asset class within each calibration. There is no deep and liquid market for put options on a basket of overseas equities. Thus, in the UK calibration, overseas equity volatility was pegged to that of UK equity to reflect the market data. The peg was set at $90 \%$, reflecting the diversification benefit of overseas equities. The same approach was taken to the Hong Kong dollar and US dollar calibration, with the peg set at $72 \%$ and $90 \%$ respectively.

- Corporate bonds

Spreads and losses are calibrated based on long term views, which are informed by analysis of historical data.

For the UK, two different portfolios of corporate bonds were modelled, denoted 'Corporate Bonds 1' and "Corporate Bonds 2'. The annualised residual volatility over the gilt return, after allowing for spreads and losses was determined from historical indices of corporate bond returns.

|  | Credit rating | Duration <br> (years) | Volatility |
| :--- | :---: | :---: | :---: |
| Corporate Bonds 1 | BBB | 7 | $4.24 \%$ |
| Corporate Bonds 2 | A | 3 | $4.03 \%$ |

- Property

Property is modelled for the UK only. 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
- For the UK calibration, the level of real interest rates is calibrated using real yield data from the Bank of England and current RPI data. The volatility of real interest rates was calibrated using 10 years of historical real forward rates data from the Bank of England.
- $\quad$ For the US Dollar calibration, the level of real interest rates is calibrated using real yield data from the Federal Reserve and current inflation data. The volatility of real interest rates was calibrated using historical real forward rates data from the Federal Reserve.
- For the Hong Kong Dollar calibration, no real interest data was available, so it was assumed that Hong Kong inflation was in line with US inflation.
- Correlations

Correlations between asset classes have been determined based on internal expert opinion and analysis of historical values.

The assumed correlations for the key UK asset classes are as follows.

|  | Corporate <br> Bonds | UK <br> Equities | OS <br> Equities | Property |
| :--- | :---: | :---: | :---: | :---: |
| Corporate <br> Bonds | $100 \%$ | $40 \%$ | $30 \%$ | $20 \%$ |
| UK Equities | $40 \%$ | $100 \%$ | $75 \%$ | $40 \%$ |
| OS Equities | $30 \%$ | $75 \%$ | $100 \%$ | $30 \%$ |
| Property | $20 \%$ | $40 \%$ | $30 \%$ | $100 \%$ |

(4)(a)(iii)
(4)(a)(iv)

The UK asset model was used to value the required example options. The same table applies to WPSF UK and SAIF liabilities. The results are set out in Appendix 6.

The initial yields assumed for assets backing WPSF UK and SAIF liabilities are shown below:

|  | 31 December 2013 |  | 31 December 2012 |  |
| :--- | :---: | :---: | :---: | :---: |
|  | UK <br> $\%$ | Overseas <br> $\mathbf{\%}$ | UK <br> $\%$ | Overseas <br> $\mathbf{\%}$ |
|  | 3.64 | 2.47 | 3.95 | 2.95 |
| Property | 6.89 | N/A | 7.15 | N/A |

In the UK calibration, all overseas territories for the UK business are treated together; we do not isolate significant territories within these.

The initial dividend yields assumed for assets backing Hong Kong dollar and US dollar liabilities are shown below:

|  | 31 December 2013 |  | 31 December 2012 |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Domestic <br> $\mathbf{\%}$ | Overseas <br> $\mathbf{\%}$ | Domestic <br> $\%$ | Overseas <br> $\mathbf{\%}$ |
| Hong Kong dollar | 3.33 | 2.47 | 3.12 | 2.95 |
| US dollar | 1.89 | 2.86 | 2.24 | 3.38 |

(4)(a)(v) Not applicable
(4)(a)(vi) A table of the outstanding mean durations of reversionary bonus claims for material UK products is:

|  | 31 December 2013 |  |
| :--- | :---: | :---: |
| Product | Proportion of <br> total RB <br> guarantee (\%) | Duration <br> (Years) |
| WPSF Bonds | 11 | 12 |
| WPSF OB/IB | 9 | 9 |
| WPSF Personal Pensions | 5 | 11 |
| WPSF PPRP | 41 | 7 |
| WPSF Group Pensions | 3 | 11 |
| With Profit Annuities | 26 | 17 |
| SAIF | 5 | 10 |
| Total | $\mathbf{9 9}$ | - |

A range of checks were carried out on the output from GeneSIS. The results for the UK model are shown below and demonstrate that the model is capable of reproducing market prices. Similar checks were carried out for the Hong Kong dollar and US dollar calibrations.

The chart below shows that the Monte Carlo swaption implied volatilities are reasonably similar to the market implied volatilities of the swaptions that are relevant to the liabilities.


The chart below shows that the Monte Carlo equity put options implied volatilities are reasonably similar to the market implied volatilities.

(4)(a)(vii) The model reproduces the current asset values for a wide range of securities, equity options and swaptions when the future income, gains and losses are projected and discounted to the valuation date.

A range of checks are performed on the asset model output for each calibration, including:

- martingale test to check risk neutrality;
- market consistency test of simulated zero coupon bond prices;
- market consistency test of swaption implied volatilities;
- market consistency test of equity put option implied volatilities; and
- reasonableness checks to ensure correlations and long term volatilities reflect targets.
(4)(a)(viii) PSALM projects 5000 scenarios over 40 years. HKSALM projects 5000 scenarios over 70 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 the same.

Not applicable
Not applicable
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 PAC Board. Details are given below.

The cost of guarantees, options and smoothing is very sensitive to the bonus, MVR and investment policies that the company will employ under varying investment conditions, and the stochastic modelling incorporates several management actions to protect the fund in adverse investment scenarios.

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 trigger points for management actions in PSALM are expressed in terms of the realistic solvency ratio, which is broadly equivalent to the Pillar I Peak 2 solvency ratio excluding the risk capital margin.

Two ratios are calculated, either including or excluding the cost of personal pension mis-selling costs (accumulated past and potential future costs, run-off in line with relevant policy asset shares) as an additional notional asset. The appropriate ratio is applied when deriving management actions in order to ensure that PAC's bonus and investment policy remain unaffected by the charging of personal pension mis-selling costs to the inherited estate in the WPSF.

Paragraphs (5)(a)(i) to (5)(a)(xiv) below set out the key management actions assumed for UK and Hong Kong business.

The following rules are assumed for WPSF business:

- The initial RB rates are shown in Appendix 7.
- When the solvency ratio (including the cost of personal pension mis-selling) is at or above $7 \%$, RB rates are determined by comparing the projected terminal bonus level with the theoretical terminal bonus level that would be consistent with targeting RB rates on $60 \%$ of expected future investment returns, net of charges. RB rates are increased if the projected terminal bonus level is too high or decreased if the projected terminal bonus level is too low, compared with a target range.
- If (on the RB declaration month) the solvency level is below 7\%, then RB rates are reduced by $50 \%$. If solvency recovers back above $7 \%$ then RB rates are assumed to revert back to the full level.

The following additional rules are assumed for SAIF business:

- The calculated RB rates (i.e. determined by projecting the terminal bonus level) are assumed to apply when the solvency ratio (including the cost of personal pension mis-selling) is at or above $10.5 \%$.
- If (on the RB declaration month) the solvency ratio is below 7\%, SAIF RB rates are assumed to reduce by $90 \%$. Between $10.5 \%$ and $7 \%$ solvency ratio, SAIF RB rates are reduced linearly. When the solvency ratio rises above $10.5 \%$, RB rates return to the full level.
- If the WPSF RB rates have been cut by $50 \%$, the SAIF RB rates derived above are also assumed to reduce by a further $50 \%$.
(5)(a)(ii) UK 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 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 claim value between year ends is determined by accumulating the previous yearend smoothed claim value at a rate of return equal to the risk-free rate plus a risk premium (which is the weighted average of the risk premiums for each asset class). The risk premiums are set to the levels shown below, based on expert opinion of the long term levels for each asset class.

| Asset Class | Risk Premium \% p.a. |
| :--- | :---: |
| UK equities | 3.25 |
| Overseas equities | 3.25 |
| Corporate bonds | 1.75 |
| Property | 2.50 |
| Cash | $(0.50)$ |

In the RCM scenario, the risk-free rate reduces in line with the interest rate event.

The yearly reviews adjust the claim value towards the asset share, as follows:

- If the claim value (before the application of smoothing) is within $+/-10 \%$ of the target asset share, the smoothed claim value is set equal to the target asset share,
- If the claim value (before the application of smoothing) is outside $+/-10 \%$ but within $+/-20 \%$ of the target asset share, the smoothed claim value is moved $10 \%$ (of the asset share) closer to the asset share,
- If the claim value (before the application of smoothing) is outside $+/-20 \%$ but within $+/-33 \%$ of the target asset share, the smoothed claim value is moved to $+/-10 \%$ of the asset share,
- If the claim value (before the application of smoothing) is outside $+/-33 \%$ of the target asset share, the smoothed claim value is moved two thirds of the way to the target asset share.

With-profit immediate annuities, including the ex-ELAS annuities, are constrained such that the year-on-year change in total annuity lies within the range $-5 \%$ to $11 \%$ (before application of the Anticipated Bonus Rate). For Income Choice Annuity business, the year-on-year change in the smoothed annuity is constrained to lie within the range $-4 \%$ to $12 \%$ (before application of the Required Smooth Return).

For PruFund business the model applies the actual rules for smoothed fund price movements. If the smoothed fund price is more than $5 \%$ different from the net asset value per unit at a quarter end date then it is moved half-way towards the net asset value per unit. At other times, if the smoothed fund price is more than $10 \%$ different from the net asset value per unit then it is moved to $2.5 \%$ above or below the net asset value per unit.

In addition to the modelling assumptions described above, smoothing is suspended if the solvency ratio (including the cost of personal pension mis-selling) is less than $6 \%$. That is, for non-annuity business, claim values on maturity or death are set equal to the greater of the guaranteed benefit and the asset share; for other decrements, claim values are set equal to the asset share. For annuity business, there is no limit to the fall in the smoothed annuity when smoothing is suspended. The solvency check is carried out monthly for AWP business and annually for CWP and annuity business, to reflect practical constraints on when claim values can be revised.

The smoothing rules modelled for SAIF are the same as those used for the WPSF.
(5)(a)(iii) UK market value reductions (MVRs)

It is assumed that the MVR-free limit to be applied to all AWP business in the sixth and subsequent policy years varies according to the solvency ratio (including the cost of personal pension mis-selling), as follows:

- when the solvency ratio is above $7 \%$, the MVR-free limit is $£ 25,000$.
- when the solvency ratio is between $6 \%$ and $7 \%$, the MVR-free limit is $£ 10,000$.
- when the solvency ratio is below $6 \%$, the MVR-free limit is zero.
- once the MVR-free limit has fallen to $£ 10,000$ or zero it does not return to $£ 25,000$ until the solvency ratio is at least $10 \%$.

For personal pensions, our current practice is to apply a reducing scale of MVRs on early retirement within six years of the selected retirement date. Reduced MVRs are also reduced to zero on Prudence Bond and PSA by the later of age 85 and in-force duration of 15 years. In both cases, it is assumed that reduced MVRs would be applied only if the solvency ratio (including the cost of personal pension mis-selling) is at or above $7 \%$. When the solvency ratio is below $7 \%$, full MVRs are assumed to be applied.

It is assumed that the maximum MVR (as a percentage of the pre-MVR claim value) is capped at $15 \%$, providing the solvency ratio (including the cost of personal pension mis-selling) is at or above $6 \%$. When the solvency ratio is below $6 \%$, the MVR is not capped.

## (5)(a)(iv) UK frequency of bonus declarations

Bonus declarations are made annually in the modelling. Additional mid-year declarations for AWP business only are made if both:

- the solvency ratio (including the cost of personal pension mis-selling) is less than or equal to $10 \%$, and
- the claim value to asset share ratio is either greater than $125 \%$ or less than $75 \%$.
(5)(a)(v) UK asset re-balancing and switching

Under "normal" investment conditions the equity backing ratios (EBRs) of the WPSF asset shares (excluding PruFund cautious) and SAIF asset shares are managed as follows:

- the EBR of each fund is allowed to drift in line with investment returns as long as it is within $\mathrm{a}+/-5 \%$ band around the long term strategic target EBR;
- if the EBR of either fund falls outside this range, it is rebalanced to the long term target by switching between UK equities and bonds at a rate of $2 \%$ per month. Rebalancing incurs an investment expense of $1 \%$ of the amount rebalanced.

The EBR of the PruFund Cautious asset shares moves in proportion to that of the other WPSF asset shares.

In addition to rebalancing, asset switching (pro rata from UK and overseas equities into corporate bonds) is triggered when the solvency ratio (including the cost of personal pension mis-selling) falls below $6 \%$. The amounts to be switched are determined as follows:

- When the solvency ratio is at or above $6 \%$, 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 the solvency ratio rises above $7 \%$.
- When the solvency ratio falls below $3.5 \%$, UK and overseas equities are assumed to be fully switched into corporate bonds.
- When the solvency ratio is between $6 \%$ and $3.5 \%$, 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. Switching incurs an investment expense of $1 \%$ of the amount switched.

If the solvency ratio (excluding the cost of personal pension mis-selling) is above $6 \%$, tax on shareholders' transfers is assumed to be paid from the WPSF inherited estate. If the solvency ratio (excluding the cost of personal pension mis-selling) falls below $6 \%$, tax on shareholders' transfers is assumed to be paid from shareholders' funds.

Hong Kong asset re-balancing and switching
HKSALM projects cash flows in annual steps. Therefore the asset allocations are rebalanced only once a year, in line with the agreed strategic asset allocation.

For AWP (HKD version), a "drift" strategy is applied during the pre-guarantee period (i.e. the first five years of the contract), whereby the percentage of equities held is allowed to drift up or down from its starting position depending on the actual equity return for the period. During the post-guarantee period, the strategic asset allocation is fixed at the long-term level. For the smaller AWP (USD version) fund, a "driftonly" strategy is employed throughout the projection term.

The bond portfolio is rebalanced to the target duration through adopting a "sell and repurchase all bonds" strategy in the model.

The HKSALM model includes a solvency-triggered management action for the CWP business, whereby the equity backing ratio varies according to the solvency position of the Hong Kong portion of the WPSF. The measure of the solvency position used for the purpose of the management action trigger is the "solvency margin cover ratio", which is calculated using the following definition:

Solvency margin cover ratio $=($ Total assets - Local statutory reserves $) /$ (Solvency Margin)
where:
the Solvency Margin is based on the Hong Kong regulatory formula ( $4 \%$ of statutory reserve plus $0.3 \%$ of sum at risk); and
total assets include the value of the Standard Chartered Bank (SCB) fees and the Hong Kong share of the costs of personal pension mis-selling.

Assets are switched from equities to fixed interest at the rate of $24 \%$ per annum to derisk the portfolio in the event of the Hong Kong solvency margin coverage ratio falling below $150 \%$. At $110 \%$ coverage, all assets are targeted to be in bonds, with a linear reduction in target equity backing ratio between $150 \%$ and $110 \%$. Assets are switched back to equities when the Hong Kong solvency margin coverage ratio recovers above $160 \%$.

A dynamic investment strategy applies for CWP business (apart from the PRUsave Plus product). The strategy is constructed as a 're-risk and drift' strategy which is a hybrid of (1) the long-term strategic asset allocation and (2) a formula-based de-risked EBR. The long-term strategic asset allocation is maintained when the 20-year spot rate ('reference rate') is higher than a benchmark rate of $4.0 \%$, whereas the EBR starts to be reduced linearly when the spot rate falls below the benchmark rate. The portfolio is completely de-risked to a zero EBR when the reference rate reaches $0 \%$.

The final EBR is set by taking into consideration the lower of the new dynamic investment strategy and the local solvency trigger rules.

RB rates are set to target a particular split between RB and terminal bonus (TB). The target $\mathrm{RB} / \mathrm{TB}$ split varies by product group, but is a uniform assumption across the projection in order to simplify the calculation. In each time period, the model calculates a supportable RB rate to achieve the target $\mathrm{RB} / \mathrm{TB}$ split. This calculation allows for an immediate fall in bond yields of $1 \%$, reflecting the actual practice used to set RB rates.

RB rates are subject to a maximum change of $0.5 \%$ (upwards or downwards) in any one year, and a minimum step change of $0.1 \%$.

In addition, some extreme management actions are in place to protect the financial position of the fund in adverse scenarios:

- For CWP business, when the solvency margin cover ratio (as defined above) falls below $150 \%$, the RB rates will be reduced by $50 \%$.
- For AWP business, when guarantees are biting for a bonus series, the income bonus is reduced immediately to $0.5 \%$. This is consistent with actual practice.
(5)(a)(ix) Hong Kong smoothing rules

Each policy's claim value at the beginning of a bonus year is projected forward to the end of the bonus year at the long-term expected investment return. The projected claim value is compared with the target asset share and the smoothed claim value is then derived as follows:

- if the projected claim value is within $+/-10 \%$ of the target asset share, the smoothed claim value is set equal to the target asset share;
- if the projected claim value is outside $+/-10 \%$ but within $+/-30 \%$ of the target asset share, the smoothed claim value moved $10 \%$ (of the asset share) closer to the asset share;
- if the projected claim value is outside $+/-30 \%$ of the target asset share, the smoothed claim value is moved one third of the way to the target asset share.

In contrast to the UK business, any smoothing profits or losses accrue to the remaining asset shares, rather than to the inherited estate.

Smoothing is suspended in adverse scenarios when the solvency margin coverage ratio falls below $150 \%$ for CWP business, or the asset cover ratio falls below $100 \%$ for AWP business.
(5)(a)(x) Hong Kong frequency of bonus declarations

Bonuses are declared at each year-end. Due to the annual time step in HKSALM, it is not currently possible to model mid-year declarations.

MVRs are only applied in practice in the event of a significant volume of surrenders or a significant fall in asset values.

In the model, an MVR management action is included for AWP policies. It applies when any of the following situations occur:

- asset values fall by more than $15 \%$ within a year and asset shares are less than $100 \%$ of surrender values; or
- asset values fall by more than $10 \%$ within a year and asset shares are less than $90 \%$ of surrender values; or
- asset values fall by more than $7.5 \%$ p.a. over a 2 -year period and asset shares are less than $90 \%$ of surrender values.

The asset value fall is measured at asset pool level. Upon application of MVRs, the surrender value is set equal to the asset share, except that at the fifth year principal guarantee point the surrender value is subject to a minimum of the "principal guarantee level". In the model, an MVR continues to apply until the asset share has recovered to the level of the pre-MVR surrender value.

## (5)(a)(xii) Hong Kong tax on shareholders' transfers

HKSALM does not calculate tax on shareholder transfers. The liability in respect of the tax on shareholder transfers in respect of Hong Kong business is therefore added to the liabilities as an out-of-model adjustment, on the assumption that it is met by the inherited estate. The agreed management action to charge this tax to shareholders when solvency is low is therefore not modelled.

## (5)(a)(xiii) 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 bonus smoothing charge or allocation applied to SAIF asset shares, with the intention of reducing the balance of the bonus smoothing account to zero over the remaining lifetime of the business;
- 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 policyholders over the remaining lifetime of the business; and
- merging SAIF into the WPSF when SAIF assets (including the bonus smoothing account but excluding SACF) fall below $£ 1$ bn, increased in line with RPI from the date of commencement of the Scottish Amicable scheme (1997).

The proportion of equities and level of reversionary bonus rates projected by PSALM after 5 and 10 years, assuming various specific rates of return, are shown below.
(i) Based on forward rates derived from the risk free interest rate curve

| Year | Rate of | Equity proportion |  | Proportion of initial RB rate |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | return | WPSF | SAIF | WPSF <br> Life | WPSF <br> Pensions | SAIF <br> Life | SAIF <br> Pensions |
|  | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ |
| Current | N/A | 40 | 37 | 100 | 100 | 100 | 100 |
| 5 years | 2.01 | 39 | 37 | 100 | 175 | 100 | 100 |
| 10 years | 3.16 | 39 | 39 | 100 | 175 | 25 | 100 |

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

| Year | Rate of | Equity proportion |  | Proportion of initial RB rate |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | return | WPSF | SAIF | WPSF <br> Life | WPSF <br> Pensions | SAIF <br> Life | SAIF <br> Pensions |
|  | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ |
| Current | N/A | 41 | 38 | 100 | 100 | 100 | 100 |
| 5 years | 2.62 | 40 | 38 | 113 | 188 | 63 | 100 |
| 10 years | 3.77 | 39 | 39 | 125 | 188 | 13 | 100 |

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

| Year | Rate of | Equity proportion |  | Proportion of initial RB rate |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | return | WPSF | SAIF | WPSF <br> Life | WPSF <br> Pensions | SAIF <br> Life | SAIF <br> Pensions |
|  | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ |
| Current | N/A | 40 | 37 | 100 | 100 | 100 | 100 |
| 5 years | 1.43 | 39 | 37 | 100 | 150 | 100 | 100 |
| 10 years | 2.56 | 38 | 38 | 100 | 150 | 50 | 100 |

The initial reversionary bonus rates are shown in Appendix 7.
(6)

A summary of the decrement assumptions is shown in the table below:

| Product | Decrement | Average surrender/paid-up rate <br> for the policy years |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  |  | $\mathbf{1 - 5}$ | $\mathbf{6 - 1 0}$ | $\mathbf{1 1 - 1 5}$ | $\mathbf{1 6 - 2 0}$ |
| CWP savings endowment |  | $3.15 \%$ | $4.95 \%$ | $2.70 \%$ | $2.70 \%$ |
| CWP target cash endowment | surrender | $3.15 \%$ | $4.95 \%$ | $2.70 \%$ | $2.70 \%$ |
| UWP savings endowment | surrender | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ |
| UWP target cash endowment | surrender | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ |
| UWP bond | surrender | $2.61 \%$ | $6.48 \%$ | $3.96 \%$ | $3.60 \%$ |
| UWP bond | automatic <br> withdrawals | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ | $0.00 \%$ |
| CWP pension regular premium | PUP | $1.98 \%$ | $2.25 \%$ | $2.25 \%$ | $2.25 \%$ |
| CWP pension regular premium | surrender | $1.13 \%$ | $1.13 \%$ | $1.13 \%$ | $1.13 \%$ |
| CWP pension single premium | surrender | $1.35 \%$ | $1.35 \%$ | $1.35 \%$ | $1.35 \%$ |
| UWP individual pension regular premium | PUP | $6.84 \%$ | $5.40 \%$ | $4.05 \%$ | $4.05 \%$ |
| UWP individual pension regular premium | surrender | $2.25 \%$ | $2.25 \%$ | $2.25 \%$ | $2.25 \%$ |
| UWP individual pension single premium | surrender | $1.35 \%$ | $1.35 \%$ | $1.35 \%$ | $1.35 \%$ |

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\%).

For UK business it is assumed that in extreme adverse market scenarios, the group actions of policyholders would serve to increase the costs of guarantees and smoothing. This is modelled by assuming that decrement rates will be $10 \%$ lower than our current best estimate. For Hong Kong business, no such group actions are assumed. This reflects the nature of the Hong Kong business, which is largely regular premium whole of life business with continuous surrender guarantes. The same assumptions are used in both the base valuation and the RCM.

## 7. Financing costs

Not applicable

## 8. Other long-term insurance liabilities

No liabilities are shown at line 46 of Form 19. Liabilities shown at line 47 of Form 19 are as follows:
With- Description Amount
profits
fund ..... £m
WPSF Tax payable from the inherited estate in respect of future ..... 450 shareholder transfers from the fund
Pensions mis-selling liabilities ..... 286
Contingency reserve ..... 200
SACF capital support fees receivable from SAIF ..... (50)
Capital support fees receivable from DCPSF ..... (40)
Reserve for compensation in respect of complaints on mortgage ..... 15 endowment policies
Other ..... 44
SAIF SACF capital support fees payable to the WPSF ..... 50
Prior year guaranteed annuity premiums provision ..... 50
Data integrity reserve ..... 9
Reserve for compensation in respect of complaints on mortgage ..... 8 endowment policies
Other ..... 7
DCPSF Charges payable to the WPSF ..... 122

## 9. Realistic current liabilities

The realistic current liabilities shown at line 51 of Form 19 are the same as the regulatory current liabilities (Form 18 line 22) except that the realistic current liabilities exclude the cash bonuses which had not been paid to policyholders at the valuation date. These are included within the asset shares in the Pillar I, Peak 2 valuation.

The reconciliation of realistic to regulatory current liabilities is shown below:

|  | WPSF <br> $\mathbf{f m}$ | SAIF <br> $\mathbf{f m}$ | DCPSF <br> $\mathbf{f m}$ |
| :--- | :---: | :---: | :---: |
| Realistic current liabilities (Form 19 line 51) | 2,536 | 423 | 8 |
| Current liabilities (Form 14 line 49) | 2,536 | 423 | 8 |
| Unpaid cash bonus (Form 14 line 12) | 9 | - | - |
| Regulatory current liabilities (Form 18 line 22) | 2,545 | 423 | 8 |

## 10. Risk capital margin

(a) The risk capital margin is $£ 894 \mathrm{~m}$ for the WPSF (plus the DCPSF) and zero for SAIF.

This has been calculated assuming:
(i) a percentage change in market values, in accordance with INSPRU 1.3.68R, of $20.0 \%$ for equities and $12.5 \%$ for real estate. The assumed percentage changes for each significant territory were the same as for United Kingdom assets. A fall in market values is the more onerous.
(ii) a change in the yields of United Kingdom fixed interest securities, in accordance with INSPRU 1.3.68R of 61 bps . For significant territories, the required change in yields is 62 bps for the United States and 43 bps for the member states of the European Union that have adopted the euro as their official currency ("the Eurozone"). A fall in yields is the more onerous. On materiality grounds, a fall of 61 bps has been applied for all currencies.

The assumed long-term gilt yields or nearest equivalent are shown below:

| Territory | Long-term gilt yield <br> in base valuation <br> $\%$ | Long-term gilt yield <br> in RCM <br> $\%$ |
| :--- | :---: | :---: |
| UK | 3.45 | 2.84 |
| USA | 3.52 | 2.91 |
| Eurozone | 2.44 | 1.83 |

(iii) in respect of credit risk, average changes in spreads and consequent changes in asset values as follows:

- for bonds, a credit stress in accordance with INSPRU 1.3.84R. The average increases in spreads and corresponding reductions in asset values for all bonds in each asset pool are shown below.

| Asset pool | Increase in spread <br> bps | Fall in value <br> $\%$ |
| :--- | :---: | :---: |
| WPSF UK asset shares (excluding <br> PruFund Cautious) | 117 | $6.5 \%$ |
| WPSF UK PruFund Cautious asset <br> shares | 108 | $6.3 \%$ |
| WPSF UK other assets | 64 | $2.8 \%$ |
| WPSF HK asset shares | 51 | $2.8 \%$ |
| WPSF HK other assets | 0 | $0.0 \%$ |
| SAIF asset shares | 113 | $5.6 \%$ |
| SAIF other assets | 72 | $5.5 \%$ |

- for debts, it is assumed that asset values fall in line with bonds as described above.
- no allowance is made for reinsurance credit risk as the volume of reinsured withprofits business is immaterial.
- no change is assumed for non-reinsurance financing agreements. These are not considered to present a significant credit risk.
- for other debtors reported in lines 78 and 79 of Form 13, it is assumed that asset values fall in line with bonds as described above.
(iv) the impact of the persistency risk scenario is equivalent to an increase in the realistic value of liabilities of $0.1 \%$ for the WPSF and $0.5 \%$ for SAIF.
(v) that any change in asset values in (iii) is independent of the change in liability values in (iv).
(b) In the risk capital margin calculation the management actions assumed are the same as those set out in 6.(5)(a).

There are no changes to other assumptions.
(c) (i) The assets allocated to support the WPBR, FPRL and the reserve for unrealised capital gains reflect the actual mix of the assets backing these liabilities. Current assets are used to support current liabilities. The RCM is backed by surplus fixed interest assets.
(ii) None of the assets held to cover the risk capital margin are outside the fund.

## 11. Tax

The treatment of tax is set out below.
(i) The investment returns credited to the with-profits benefits reserves include an allowance for tax deducted during 2013 at the rates shown below. Further adjustments may be made from time to time to bring the tax charged to asset shares into line with the aggregate tax actually paid and expected to be paid in the future.
(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 in the table below.
(iii) The realistic current liabilities include the regulatory reserve for unrealised capital gains.

| Source | Tax Rate |
| :--- | :---: |
| Franked Investment Income | $0.0 \%$ |
| Unfranked Investment Income | $20.0 \%$ |
| Capital Gains | $20.0 \%$ |
| Initial Expense Relief | $15.0 \%$ |
| Renewal Expense Relief | $20.0 \%$ |
| Shareholder Transfers (gross business) | $25.0 \%$ |
| Shareholder Transfers (net business) | $0.0 \%$ |

## 12. Derivatives

The WPSF and SAIF held the following major positions in derivative contracts at the valuation date:

- Equity index and fixed income futures. Positions are used either to reflect tactical asset allocation (short term) views around the strategic (long term) benchmark, or as a partial hedge for the WPSF cost of guarantees.
- Equity index options, as a partial hedge for the WPSF cost of guarantees.
- Forward currency contracts and swaps, primarily to hedge currency risk arising from overseas asset exposures.
- Fixed income derivatives positions to better match the liabilities.
- Inflation swaps to match the profile of inflation linked liabilities.
- Index and single name credit default swaps to increase or decrease credit exposure.

13. Analysis of change in working capital

|  | $\begin{gathered} \text { WPSF } \\ \text { £m } \end{gathered}$ | $\begin{aligned} & \text { SAIF } \\ & \text { fm } \end{aligned}$ |
| :---: | :---: | :---: |
| Working capital as at 1 January 2013 | 7,048 | - |
| Reversal of zeroisation for closed funds | - | 190 |
| Working capital at 1 January 2013 prior to zeroisation | 7,048 | 190 |
| New business | (95) | - |
| Emerging experience: |  |  |
| Claims (smoothing and guarantees) | 354 | (9) |
| Expenses | (26) | 7 |
| Investment return on asset shares | 230 | (27) |
| Investment return on other assets | (596) | 22 |
| Changes in valuation methods and assumptions: |  |  |
| Model enhancements | 41 | (37) |
| Changes in non-economic assumptions | 130 | (40) |
| Changes in economic assumptions | 759 | 67 |
| Management actions: |  |  |
| Hong Kong dynamic guarantee charges | (183) | - |
| Changes in asset mix | (74) | - |
| Non-profit business | 145 | - |
| Distribution of inherited estate | - | (31) |
| Prior year guaranteed annuity premiums provision | - | (50) |
| Other factors | 176 | (1) |
| Unattributed | 98 | (14) |
| Working capital at 31 December 2013 prior to zeroisation | 8,009 | 76 |
| Zeroisation for closed funds | - | (76) |
| Closing working capital | 8,009 | - |

## 14. Optional disclosure

Not applicable

## Appendix 6: Values of Specified Assets

This appendix relates to paragraph 6(4)(a)(iii).

|  | Asset type | $\mathrm{K}=0.75$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | n | 5 | 15 | 25 | 35 |
|  | Annualised compound equivalent of the risk free rate assumed for the period | 2.03\% | 3.67\% | 3.83\% | 3.83\% |
| 1 | Risk-free zero coupon bond | 904,563 | 582,248 | 390,266 | 268,261 |
| 2 | FTSE All Share Index ( $\mathrm{p}=1$ ) | 75,317 | 211,091 | 281,640 | 341,124 |
| 3 | FTSE All Share Index ( $\mathrm{p}=0.8$ ) | 69,931 | 169,690 | 204,008 | 228,174 |
| 4 | Property ( $\mathrm{p}=1$ ) | 31,793 | 109,913 | 177,839 | 235,655 |
| 5 | Property ( $\mathrm{p}=0.8$ ) | 28,270 | 78,765 | 115,391 | 141,292 |
| 6 | 15 year risk free zero coupon bonds ( $\mathrm{p}=1$ ) | 5,615 | 7,977 | 8,689 | 10,636 |
| 7 | 15 year risk free zero coupon bonds ( $\mathrm{p}=0.8$ ) | 4,464 | 2,216 | 1,044 | 495 |
| 8 | 15 year corporate bonds ( $\mathrm{p}=1$ ) | 12,623 | 30,857 | 46,780 | 62,983 |
| 9 | 15 year corporate bonds ( $\mathrm{p}=0.8$ ) | 10,573 | 15,855 | 18,022 | 19,564 |
| 10 | Portfolio of 65\% FTSE All Share and 35\% property ( $\mathrm{p}=1$ ) | 44,356 | 149,134 | 211,897 | 268,885 |
| 11 | Portfolio of 65\% FTSE All Share and 35\% property ( $\mathrm{p}=0.8$ ) | 40,180 | 113,595 | 144,351 | 168,273 |
| 12 | Portfolio of $65 \%$ FTSE All Share and 35\% 15 risk free zero coupon bonds ( $\mathrm{p}=1$ ) | 29,725 | 110,198 | 158,109 | 203,952 |
| 13 | Portfolio of 65\% FTSE All Share and 35\% 15 risk free zero coupon bonds ( $\mathrm{p}=0.8$ ) | 26,301 | 79,244 | 99,326 | 116,118 |
| 14 | Portfolio of $40 \%$ equity, $15 \%$ property, $22.5 \% 15$ year risk free zero coupon bonds and $22.5 \% 15$ year corporate bonds $(\mathrm{p}=1)$ | 13,787 | 61,459 | 97,910 | 136,015 |
| 15 | Portfolio of $40 \%$ equity, $15 \%$ property, $22.5 \% 15$ year risk free zero coupon bonds and $22.5 \% 15$ year corporate bonds $(\mathrm{p}=0.8)$ | 11,600 | 38,697 | 51,620 | 65,170 |
|  |  | $\mathrm{L}=15$ |  |  |  |
| 16 | Receiver swaptions | 10.23\% | 9.22\% | 7.03\% | 4.84\% |


|  | Asset type | $\mathrm{K}=1$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | n | 5 | 15 | 25 | 35 |
|  | Annualised compound equivalent of the risk free rate assumed for the period | 2.03\% | 3.67\% | 3.83\% | 3.83\% |
| 1 | Risk-free zero coupon bond | x | x | x | x |
| 2 | FTSE All Share Index ( $\mathrm{p}=1$ ) | 197,504 | 367,995 | 453,478 | 523,541 |
| 3 | FTSE All Share Index ( $\mathrm{p}=0.8$ ) | 185,984 | 301,137 | 334,997 | 356,324 |
| 4 | Property ( $\mathrm{p}=1$ ) | 134,337 | 244,893 | 329,327 | 398,633 |
| 5 | Property ( $\mathrm{p}=0.8$ ) | 123,214 | 185,312 | 223,073 | 248,879 |
| 6 | 15 year risk free zero coupon bonds ( $\mathrm{p}=1$ ) | 78,368 | 87,420 | 89,203 | 94,887 |
| 7 | 15 year risk free zero coupon bonds ( $\mathrm{p}=0.8$ ) | 68,104 | 41,918 | 22,722 | 14,046 |
| 8 | 15 year corporate bonds ( $\mathrm{p}=1$ ) | 98,233 | 132,425 | 156,265 | 181,692 |
| 9 | 15 year corporate bonds ( $\mathrm{p}=0.8$ ) | 87,672 | 81,134 | 74,681 | 70,851 |
| 10 | Portfolio of $65 \%$ FTSE All Share and $35 \%$ property ( $\mathrm{p}=1$ ) | 153,731 | 292,591 | 370,639 | 438,117 |
| 11 | Portfolio of $65 \%$ FTSE All Share and $35 \%$ property ( $\mathrm{p}=0.8$ ) | 142,548 | 230,317 | 260,000 | 282,833 |
| 12 | Portfolio of $65 \%$ FTSE All Share and $35 \% 15$ risk free zero coupon bonds ( $\mathrm{p}=1$ ) | 130,583 | 243,560 | 303,951 | 359,565 |
| 13 | Portfolio of $65 \%$ FTSE All Share and $35 \% 15$ risk free zero coupon bonds ( $\mathrm{p}=0.8$ ) | 119,799 | 184,302 | 201,430 | 216,412 |
| 14 | Portfolio of $40 \%$ equity, $15 \%$ property, $22.5 \% 15$ year risk free zero coupon bonds and $22.5 \% 15$ year corporate bonds $(\mathrm{p}=1)$ | 100,355 | 180,107 | 229,619 | 278,612 |
| 15 | Portfolio of $40 \%$ equity, $15 \%$ property, $22.5 \% 15$ year risk free zero coupon bonds and $22.5 \% 15$ year corporate bonds ( $p=0.8$ ) | 89,815 | 124,512 | 135,265 | 146,723 |
|  |  | $\mathbf{L}=\mathbf{2 0}$ |  |  |  |
| 16 | Receiver swaptions | 12.39\% | 10.91\% | 8.23\% | 5.66\% |


|  | Asset type | $\mathrm{K}=1.5$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | n | 5 | 15 | 25 | 35 |
|  | Annualised compound equivalent of the risk free rate assumed for the period | 2.03\% | 3.67\% | 3.83\% | 3.83\% |
| 1 | Risk-free zero coupon bond | x | x | x | x |
| 2 | FTSE All Share Index ( $\mathrm{p}=1$ ) | 568,387 | 746,046 | 841,811 | 923,805 |
| 3 | FTSE All Share Index ( $\mathrm{p}=0.8$ ) | 543,314 | 624,640 | 638,923 | 645,503 |
| 4 | Property ( $\mathrm{p}=1$ ) | 525,390 | 616,944 | 703,621 | 783,422 |
| 5 | Property ( $\mathrm{p}=0.8$ ) | 498,364 | 493,940 | 504,482 | 513,569 |
| 6 | 15 year risk free zero coupon bonds ( $\mathrm{p}=1$ ) | 503,145 | 505,599 | 503,475 | 505,262 |
| 7 | 15 year risk free zero coupon bonds ( $\mathrm{p}=0.8$ ) | 474,111 | 359,750 | 267,534 | 199,756 |
| 8 | 15 year corporate bonds ( $\mathrm{p}=1$ ) | 508,039 | 522,883 | 532,089 | 554,881 |
| 9 | 15 year corporate bonds ( $\mathrm{p}=0.8$ ) | 479,660 | 388,178 | 322,392 | 285,120 |
| 10 | Portfolio of 65\% FTSE All Share and 35\% property ( $\mathrm{p}=1$ ) | 535,391 | 662,494 | 748,546 | 825,070 |
| 11 | Portfolio of $65 \%$ FTSE All Share and $35 \%$ property ( $\mathrm{p}=0.8$ ) | 509,164 | 541,713 | 550,042 | 554,378 |
| 12 | Portfolio of 65\% FTSE All Share and 35\% 15 risk free zero coupon bonds ( $\mathrm{p}=1$ ) | 519,169 | 613,131 | 674,840 | 735,175 |
| 13 | Portfolio of $65 \%$ FTSE All Share and $35 \% 15$ risk free zero coupon bonds ( $\mathrm{p}=0.8$ ) | 492,130 | 490,732 | 477,199 | 471,133 |
| 14 | Portfolio of $40 \%$ equity, $15 \%$ property, $22.5 \% 15$ year risk free zero coupon bonds and $22.5 \% 15$ year corporate bonds $(\mathrm{p}=1)$ | 507,410 | 559,359 | 603,739 | 655,126 |
| 15 | Portfolio of $40 \%$ equity, $15 \%$ property, $22.5 \% 15$ year risk free zero coupon bonds and $22.5 \% 15$ year corporate bonds ( $\mathrm{p}=0.8$ ) | 479,157 | 431,048 | 400,227 | 387,075 |
|  |  | $\mathbf{L}=\mathbf{2 5}$ |  |  |  |
| 16 | Receiver swaptions | 14.26\% | 12.32\% | 9.25\% | 6.36\% |

## Appendix 7: Initial reversionary bonus rates in stochastic valuation

This appendix relates to paragraph 6(5)(a)(i).

|  | RB rates $\%$ |
| :---: | :---: |
| Life \& Pensions |  |
| PSA/PIB | 2.0 |
| Personal Pensions | 2.0 |
| OB assurances | 1.2/2.5 |
| IB assurances | 1.1/2.3 |
| PPRP | 0.10/0.25 |
| Annuities |  |
| WPIA | 0.25 |
| Ex-ELAS | 0.00 |
| Corporate |  |
| Unitised | 2.25 |
| DC Cash Accumulation | $1.75{ }^{1}$ |
| DB Cash Accumulation | $1.25{ }^{1}$ |
| AVC Cash Accumulation | $1.75{ }^{1}$ |
| Pension Savings Plan | 1.25 |
| IFA |  |
| Prudence Bond |  |
| - Standard | 2.00 |
| - High RB | 2.75 |
| Prudential Pensions | 2.00 |
| SAL Life | 1.75 |
| SAL Pensions | 2.125 |
| SAIF |  |
| Principal Endowment | 0.8/1.5 |
| Flexipension (series 1) | 0.25/0.5 |
| Life | 2.0 |
| Pensions - Funds 3 \& 4 | 2.0 |

[^1]Where two rates are shown, the first is the rate of RB added to the original sum assured and the second is the rate of RB added to existing RB.

## Appendix 8: Bonus Rates

The tables below show the Reversionary Bonus (RB) rates and the Terminal Bonus (TB) as a proportion of the Sum Assured. This appendix relates to paragraph 5(1)(d).

OB Assurances

| RB Rates |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2013 Actual | 2014 | 2015 | Ultimate |
| RB on SA | $1.20 \%$ | $1.20 \%$ | $1.20 \%$ | $1.20 \%$ |
| RB on RB | $2.50 \%$ | $2.50 \%$ | $2.50 \%$ | $2.50 \%$ |


| TB as a proportion of Sum Assured |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Term | 2013 | 2014 | 2015 | 2016 | 2017 |
| 10 | $19 \%$ | $18 \%$ | $20 \%$ | $20 \%$ | $24 \%$ |
| 15 | $31 \%$ | $39 \%$ | $42 \%$ | $42 \%$ | $37 \%$ |
| 20 | $39 \%$ | $45 \%$ | $46 \%$ | $46 \%$ | $51 \%$ |
| 25 | $62 \%$ | $69 \%$ | $71 \%$ | $66 \%$ | $61 \%$ |
| 30 | $63 \%$ | $69 \%$ | $63 \%$ | $67 \%$ | $62 \%$ |

## PPRP Regular Premium

| RB Rates |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | 2013 | 2014 | 2015 | Ultimate |
| RB on SA | $0.10 \%$ | $0.10 \%$ | $0.10 \%$ | $0.10 \%$ |
| RB on RB | $0.25 \%$ | $0.25 \%$ | $0.25 \%$ | $0.25 \%$ |


| TB as a proportion of Sum Assured |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Term | 2013 | 2014 | 2015 | 2016 | 2017 |
| 10 | $14 \%$ | $18 \%$ | $18 \%$ | $19 \%$ | $25 \%$ |
| 15 | $0 \%$ | $0 \%$ | $7 \%$ | $38 \%$ | $39 \%$ |
| 20 | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| 25 | $0 \%$ | $4 \%$ | $3 \%$ | $0 \%$ | $0 \%$ |
| 30 | $0 \%$ | $6 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |

## PPRP Single Premium

| RB Rates |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | 2013 | 2014 | 2015 | Ultimate |
| RB on SA | $0.10 \%$ | $0.10 \%$ | $0.10 \%$ | $0.10 \%$ |
| RB on RB | $0.25 \%$ | $0.25 \%$ | $0.25 \%$ | $0.25 \%$ |


| TB as a proportion of Sum Assured |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Term | 2013 | 2014 | 2015 | 2016 | 2017 |
| 10 | $29 \%$ | $35 \%$ | $33 \%$ | $25 \%$ | $30 \%$ |
| 15 | $0 \%$ | $0 \%$ | $0 \%$ | $53 \%$ | $67 \%$ |
| 20 | $4 \%$ | $11 \%$ | $6 \%$ | $2 \%$ | $0 \%$ |
| 25 | $0 \%$ | $4 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| 30 | $47 \%$ | $25 \%$ | $19 \%$ | $11 \%$ | $4 \%$ |

## PP Regular Premium

| RB Rates |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2013 Actual | 2014 | 2015 | Ultimate |
| RB rate | $2.00 \%$ | $2.00 \%$ | $2.00 \%$ | $2.00 \%$ |


| TB as a proportion of Sum Assured |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Term | 2013 | 2014 | 2015 | 2016 | 2017 |
| 10 | $12 \%$ | $13 \%$ | $14 \%$ | $15 \%$ | $16 \%$ |
| 15 | $16 \%$ | $18 \%$ | $20 \%$ | $23 \%$ | $23 \%$ |

## Appendix 9: Forward Rates

The table below shows the instantaneous risk-free forward rates used to calibrate the nominal interest rate model. This appendix relates to paragraph 6(4)(a)(ii).

| Year | Sterling |  | US Dollar |  | Hong Kong Dollar |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 31 \text { Dec } 2013 \\ \% \end{gathered}$ | $\begin{gathered} 31 \text { Dec } 2012 \\ \% \end{gathered}$ | $\begin{gathered} 31 \text { Dec } 2013 \\ \% \end{gathered}$ | $\begin{gathered} 31 \text { Dec } 2012 \\ \% \end{gathered}$ | $\begin{gathered} 31 \text { Dec } 2013 \\ \% \end{gathered}$ | $\begin{gathered} 31 \text { Dec } 2012 \\ \% \end{gathered}$ |
| 0 | 0.50 | 0.47 | 0.05 | 0.00 | 0.33 | 0.01 |
| 1 | 0.54 | 0.19 | 0.23 | 0.17 | 0.34 | 0.18 |
| 2 | 1.61 | 0.47 | 1.05 | 0.48 | 0.69 | 0.19 |
| 3 | 2.56 | 1.01 | 2.11 | 0.77 | 1.79 | 0.44 |
| 4 | 3.25 | 1.55 | 3.30 | 1.29 | 2.64 | 0.57 |
| 5 | 3.74 | 2.02 | 3.93 | 1.72 | 3.02 | 0.59 |
| 6 | 4.08 | 2.43 | 4.40 | 2.43 | 3.26 | 0.74 |
| 7 | 4.31 | 2.78 | 4.73 | 2.75 | 3.45 | 0.88 |
| 8 | 4.47 | 3.06 | 4.31 | 3.09 | 3.13 | 1.00 |
| 9 | 4.56 | 3.30 | 4.99 | 3.52 | 3.64 | 1.09 |
| 10 | 4.59 | 3.51 | 5.10 | 3.73 | 3.71 | 1.15 |
| 11 | 4.58 | 3.68 | 5.26 | 3.92 | 3.59 | 1.18 |
| 12 | 4.54 | 3.84 | 5.39 | 4.06 | 3.42 | 1.22 |
| 13 | 4.47 | 3.98 | 5.47 | 4.18 | 3.24 | 1.25 |
| 14 | 4.39 | 4.11 | 5.52 | 4.26 | 3.06 | 1.30 |
| 15 | 4.31 | 4.23 | 5.54 | 4.31 | 2.89 | 1.35 |
| 16 | 4.22 | 4.33 | 5.52 | 4.34 | 2.76 | 1.35 |
| 17 | 4.15 | 4.42 | 5.49 | 4.34 | 2.63 | 1.35 |
| 18 | 4.08 | 4.49 | 5.43 | 4.33 | 2.54 | 1.35 |
| 19 | 4.02 | 4.54 | 5.35 | 4.30 | 2.48 | 1.35 |
| 20 | 3.97 | 4.57 | 5.27 | 4.26 | 2.48 | 1.35 |
| 21 | 3.92 | 4.59 | 5.17 | 4.21 | 2.51 | 1.35 |
| 22 | 3.88 | 4.58 | 5.07 | 4.16 | 2.54 | 1.35 |
| 23 | 3.83 | 4.57 | 4.96 | 4.10 | 2.57 | 1.35 |
| 24 | 3.79 | 4.53 | 4.86 | 4.05 | 2.60 | 1.35 |
| 25 | 3.75 | 4.49 | 4.76 | 4.00 | 2.62 | 1.35 |
| 26 | 3.75 | 4.49 | 4.67 | 3.96 | 2.65 | 1.35 |
| 27 | 3.75 | 4.49 | 4.60 | 3.93 | 2.67 | 1.35 |
| 28 | 3.75 | 4.49 | 4.54 | 3.92 | 2.69 | 1.35 |
| 29 | 3.75 | 4.49 | 4.50 | 3.93 | 2.70 | 1.35 |
| 30 | 3.75 | 4.49 | 4.49 | 3.95 | 2.71 | 1.35 |
| 31 | 3.75 | 4.49 | 4.49 | 3.95 | 2.71 | 1.35 |
| 32 | 3.75 | 4.49 | 4.49 | 3.95 | 2.71 | 1.35 |
| 33 | 3.75 | 4.49 | 4.49 | 3.95 | 2.71 | 1.35 |
| 34 | 3.75 | 4.49 | 4.49 | 3.95 | 2.71 | 1.35 |
| 35 | 3.75 | 4.49 | 4.49 | 3.95 | 2.71 | 1.35 |
| 36 | 3.75 | 4.49 | 4.49 | 3.95 | 2.71 | 1.35 |
| 37 | 3.75 | 4.49 | 4.49 | 3.95 | 2.71 | 1.35 |
| 38 | 3.75 | 4.49 | 4.49 | 3.95 | 2.71 | 1.35 |
| 39 | 3.75 | 4.49 | 4.49 | 3.95 | 2.71 | 1.35 |
| 40 | 3.75 | 4.49 | 4.49 | 3.95 | 2.71 | 1.35 |

## Appendix 10: Equity Volatility Surface

The table below shows the UK, HKD and USD equity volatilities obtained for the GeneSIS asset model calibration. This appendix relates to paragraph 6(4)(a)(ii).

| Year | UK <br> calibration | HKD <br> calibration | USD <br> calibration |
| :---: | :---: | :---: | :---: |
| 1 | $20.16 \%$ | $30.41 \%$ | $26.10 \%$ |
| 2 | $18.77 \%$ | $26.91 \%$ | $25.59 \%$ |
| 3 | $20.72 \%$ | $25.61 \%$ | $25.40 \%$ |
| 4 | $21.63 \%$ | $24.82 \%$ | $25.31 \%$ |
| 5 | $22.17 \%$ | $24.23 \%$ | $25.09 \%$ |
| 6 | $22.87 \%$ | $23.84 \%$ | $24.84 \%$ |
| 7 | $23.35 \%$ | $23.60 \%$ | $24.48 \%$ |
| 8 | $23.83 \%$ | $23.47 \%$ | $24.32 \%$ |
| 9 | $24.20 \%$ | $23.43 \%$ | $24.06 \%$ |
| 10 | $24.49 \%$ | $23.45 \%$ | $23.79 \%$ |


[^0]:    Note: where appropriate, negative reserves have been set to zero.

[^1]:    ${ }^{1}$ Subject to a guarantee of $4.75 \%, 2.50 \%$ for certain earlier business

