Britannic Industrial Branch Fund

2. ASSETS

(1) Economic Assumptions For Valuing Non-Profit Business

The following table shows the principal economic assumptions that have been used to determine the value of future profits arising from non-profit life business written in the fund. The assumptions vary under the scenario of events assumed to occur when determining the risk capital margin and these are shown separately from the base scenario.

Economic Assumption*	Current \	/aluation	Previous Valuation		
	Base	RCM	Base	RCM	
Valuation interest rate p.a.	2.47%	n/a	3.02%	n/a	
Experience interest rate p.a.	4.28%	n/a	3.27%	n/a	
Risk discount rate p.a.	4.55%	n/a	3.84%	n/a	
Expense inflation p.a.	4.58%	n/a	3.54%	n/a	

^{*} Investment rates are shown net of investment expenses of 0.12% gross per annum.

(2) Amount Determined Under INSPRU 1.3.33(2)(R)

Not applicable

(3) Valuation Of Insurance Contracts Written Outside The Fund

Not applicable

(4) Different Sets Of Assumptions

Not applicable

(5) De Minimis Limit

Not applicable - the assumptions in (1) relate to all non-profit business within the fund.

3. WITH-PROFITS BENEFITS RESERVE LIABILITIES

(1) Calculation Of With-Profits Benefits Reserve

In determining the with-profits benefits reserve shown in Line 31 of Form 19, the company uses several methods. The methods can be summarised as:

(i) Asset Share Calculations

Asset shares are a roll-up, at historic achieved investment returns, of premiums, less expenses, charges and tax, adjusted for the profit or loss on providing death benefits and the profit or loss from contracts that terminated early.

(ii) Prospective Method

This method takes the basic policy reserve, including the long term insurance capital requirement, and deducts the present value of retained earnings. The present value of retained earnings is the present value of the surplus or deficit compared to the reserve, after taking into account all future policy-related income and outgo.

(iii) Regulatory Reserves

For some small classes of business it is not practical to apply either of the methods in (i) or (ii). In these cases the realistic reserve is taken as the regulatory reserve, excluding the long term insurance capital requirement.

The table below shows the breakdown of the with-profits benefits reserve into these methods.

Product Type	Method	With-profits benefits reserve	Future policy related liabilities	
		<u>£m</u>	£m	
Endowment	Asset Share	222	98	
Whole of Life	Prospective Method	129	22	
Miscellaneous adjustments	Regulatory Reserve	2		
Claims Pending	Regulatory Reserve	7	200000	
Total		360	119	
Form 19 Line 31		360	720	
Form 19 Line 49			119	

In the table above, the future policy related liabilities' split into the same detail as the with-profits benefits reserve is approximated. This is partly because the assessment of prospective items such as the costs of guarantees and smoothing relies on grouped data, and partly because certain realistic future liabilities are not calculated at product level.

(2) Correspondence With Form 19

The amounts in (1) above reconcile directly to Form 19.

(3) With-Profits Benefits Reserves Below De Minimis Limit

Not applicable

(4) Types Of Products

The level of disclosure in the table above corresponds to material groupings of contracts offering significant variances in policyholder benefits.

4. WITH-PROFITS BENEFITS RESERVE – RETROSPECTIVE METHOD

(1) Retrospective Methods

- (a) All contracts have been calculated on an individual policy basis.
- (b) No contracts have been valued on a grouped basis.

(c) Not applicable as no contracts have been valued on a grouped basis.

(2) Significant Changes to Valuation Method

- (a) There have been no significant changes in the method of calculating the with-profits benefits reserve.
- (b) No policies were valued using approaches more approximate than used for the previous valuation.

(3) Expense Allocation

For each with-profits fund, the basis of allocating expenses to that fund during the financial year in question is described in note 4006 to Form 40.

- (a) The previous expense investigation was carried out in respect of the financial year ended 31 December 2008.
- (b) Expense investigations are carried out in respect of each financial year. Interim investigations are carried out during financial years for use in interim valuations.
- (c) The method by which expenses are charged to the with-profits benefits reserve in respect of individual contracts depends on the type of business and the method of determining asset shares:
 - Traditional with-profits business asset shares are charged expenses based on the expenses charged by the outsourcers in respect of this business. The expenses are an amount per policy which varies by product type and by premium paying status. The amount charged to asset shares is subject to an uplift to cover direct costs and an element of project costs. Additional one-off project costs are not charged to asset shares. Investment expenses are charged to asset shares by reducing the investment return allocated.

The expenses charged to asset shares are all charged as maintenance expenses as the fund is no longer actively seeking new business and, for the purposes of this expense investigation all expenses have been treated as maintenance and consequently the subsequent analysis does not identify any initial expenses.

The expenses charged to the with-profits fund in addition to those allocated to the with-profits benefits reserve comprise:

- one-off costs not charged to asset shares;
- expenses in respect of with-profits policies that were in force at the previous financial year end and no longer in force at the current financial year end;
- the expenses incurred in respect of non-profit business in the fund;
- the investment expenses reduction not charged to asset shares;
- investment expenses associated with the investments backing other withprofits reserves and the estate;
- prior year adjustments; and

 balance between aggregation of the amounts charged to assets shares and the items identified above and the aggregate amount allocated to the fund.

The expenses allocated to the with-profits benefits reserve and the residual balance charged to the fund during the financial year were:

	item		Expenses £m
(i)	expenses charged to with- profits benefit reserve	traditional with-profits business	7.6
(ii)	other	other project costs	0.5
	expenses	exiting with-profits policies	1.0
	charged	non-profit policies	2.9
	to fund	investment expenses	0.2
		prior year adjustments	-0.1
		balance	-0.1
(iii)	Total expenses		12.0

(4) Significant Charges

Charges for cost of guarantees, cost of capital are not charged to with-profits benefit reserves.

(5) Charges For Non-Insurance Risk

No charges were deducted from this fund for non-insurance risk.

(6) Ratio Of Claims To Reserve

The average percentage of the ratio of total claims paid on with-profits insurance contracts compared to the sum of the with-profits benefits reserve for those claims plus any past miscellaneous surplus attributed to the with-profits benefits reserve less any miscellaneous deficit attributed to the with-profits benefits reserves in respect of those claims, for the three preceding financial years is:

Year	Average total with-profits claim ratio for financial
Previous year -1	99.0%
Previous year	106.0%
Current year	100.0%

(7) Allocated Return

The investment return before tax and expenses allocated to the with-profits benefit reserve in respect of the financial year in question is as follows:

Type of business	Investment return
All	12.87

5. WITH-PROFITS BENEFITS RESERVE - PROSPECTIVE METHOD

(1) Key Assumptions

Prospective methods of valuation are used in determining a proxy for an asset share calculation in respect of certain contracts. These methods are used where a retrospective asset share calculation may be inappropriate or impractical.

The prospective method was described in paragraph 3 (1) (ii).

The following table sets out the main assumptions used. There are no explicit risk adjustments made to assets.

Economic Assumptions*		
Valuation interest rate p.a.		2.47%
Experience interest rate p.a.		4.28%
Discount rate p.a.**		4.55%
Expense Assumptions		
Investment Expense p.a.		0.12%
Per policy Expenses p.a.	Valuation	£23.51
	Experience	£23.46
Expense Inflation p.a.		4.58%

^{*} Investment rates are shown net of the investment expenses of 0.12% gross per annum.

No future reversionary bonus is assumed in the projections. Sample terminal bonus rates are:

Sample Terminal Bonus Rates - %							
	Policy Term						
Year of Maturity	5	10	15	20	25		
2010	0.0	455.0	295.0	290.0	855.0		
2015	0.0	385.0	450.0	310.0	395.0		
2020	0.0	0.0	435.0	515.0	645.0		
2025	0.0	0.0	0.0	385.0	600.0		
2030	0.0	0.0	0.0	0.0	455.0		

^{**} This discount rate is the 15 year gilt yield + 10 basis points which is consistent with the risk free rates in paragraph 6 (4) (a) (iii) which are derived from the proprietary economic scenario generator model as described in paragraph 6 (4) (a) (ii) using the gilt yield curve + 10 basis points.

Sample lapse rates for products valued on a prospective basis, which are based on historic experience, are:

Sample Lapse Rates - %								
Policy Term								
Year of Maturity	5	10	15	20	25			
Whole of Life	1.0	1.0	1.0	1.0	1.0			

(2) Different Sets Of Assumptions

Not applicable

6. COSTS OF GUARANTEES, OPTIONS AND SMOOTHING

(1) De Minimis Limit

Not applicable

(2) Valuation Methods For Guarantees etc.

	Cost of Guarantees & Options	_	Extent of Grouping	No of Individual policies	No of model points
All Business	Stochastic model	Stochastic model	All business	294,709	432

(a) Cost of Guarantees & Options

The costs of guarantees are determined using a stochastic model, with the asset returns being generated by a proprietary model. The following items were calculated stochastically:

(i) The reserves required in addition to asset share to meet guaranteed benefits

The calculations were carried out using a risk neutral approach.

Cost of Smoothing

The cost of smoothing is determined using the same stochastic model.

- (b) (i) In the stochastic model, no projections are carried out on individual policy data.
 - (ii) The model uses grouped policy data. However, the values for the withprofits benefits reserve are calculated on an individual basis and added to the data file before the data is grouped.
 - (iii) The stochastic model uses a grouped policy data file.

Policies are grouped according to product type, premium status, year of maturity, year of entry, age and premium term. All policies are assumed to be male lives.

There are separate groups for each year of maturity up to and including 11 years after the valuation date. Policies maturing from 12 to 14 years after the valuation date are grouped, as are policies maturing after that time.

The year of entry grouping is carried out in 5 year bands.

Within each group, weights are applied to certain key policy features before averaging. For example, the elapsed duration is weighted by the total of the sum assured and attaching bonuses. For other data, such as premium term, a simple average is taken.

Grouping Validations

It is impractical to attempt to validate, using the stochastic model, projections that use grouped data against projections that use individual data. Instead, comparisons are carried out using deterministic projections.

Comparison is made of the present value of key variables as well as progression of these variables over a period of up to 40 years. The comparison includes items such as reserve run off, claims outgo and premium income, split by product type as necessary. Where material discrepancies arise, these may result in grouping being revisited.

(3) Significant Changes

There have been no significant changes since the previous valuation.

(4) Further Information On Stochastic Approach

- (a) (i) The stochastic model is used to place a value on:
 - Maturity guarantees on conventional endowments;
 - The impact of bonus smoothing.

The maturity guarantees on conventional endowments are strongly "in the money" at the valuation date.

As at 31 December, for a significant proportion of the with-profits business asset shares exceed maturity payouts. It is intended to reduce this underpayment in line with the company's smoothing policy subject to the level of guarantees. The impact of bonus smoothing is shown in Line 44 of Form 19.

An indication of the combined impact of guarantees and smoothing is provided in (vi) below.

- (ii) As for the Britannic With-Profits Fund (see below).
- (iii) As for the Britannic With-Profits Fund (see below).
- (iv) As for the Britannic With-Profits Fund (see below).
- (v) The asset model is not calibrated to any risk-free rates other than those derived from UK assets. There is no calibration to risk-free rates from overseas territories.

(vi) The following table shows the approximate percentage of the total present value of guarantees and smoothing by duration to maturity, as projected by the stochastic model. It is based on the average overpayment across all projected investment scenarios using the base assumptions.

Term to maturity (years)	Endowments	Whole Life		
1-5	70%	15%		
6-10	-3%	8%		
11-15	0%	4%		
16-20	0%	2%		
21-25	0%	1%		
26-30	0%	1%		

Calibration of the asset model to market data is shown, where available, in paragraph 6 (4) (a) (ii) for the Britannic With-Profits Fund.

- (vii) Comprehensive tests are carried out on the output produced by Barrie & Hibbert asset model as described for the Britannic With-Profits Fund.
- (viii) The stochastic model is run on 1,000 investment scenarios generated by the asset model.

The scenario generation process incorporates variance reduction techniques (antithetic variables) to ensure that the scenarios selected pass the tests described in (vii) to a close tolerance.

- (b) Not applicable
- (c) Not applicable

(5) Management Actions

(a) The stochastic model does not take into account the possibility of actions taken by management in the projected investment scenarios, other than to the extent described below.

Bonus Policy

Future reversionary bonus rates are assumed to be zero.

Maturity payouts are targeted to be 100% of asset share, subject to the company's smoothing policy. To achieve this, the model compares policies maturing in one year against similar policies maturing in the previous year and derives a scale of terminal bonus rates such that the maximum change in payout from year to year is 15%.

Investment Mix

The proportion of real assets (UK equities, overseas equities and property) is assumed to be 30% at the valuation date and to remain constant for all future periods.

(b) For the management actions assumed to determine the costs in paragraph 6.(4), the best estimates as to the future proportions of the asset backing the with-profits benefits reserve which would consist of equities and as the future annual bonus rates for significant accumulating with profits business as at the end of the financial year in question, in 5 years time and 10 years time, based on the 15 year gilt yield plus 10 basis points of 4.55%, that yield increased by 17.5% of the long-term gilt yield, that is 5.33% and that yield decreased by 17.5% of the long-term gilt yield, that is 3.77% are shown in the following tables.

Yield = 4.55%	Equity Proportion of assets backing with-profits benefits reserve				ersionary Bor ing with-profit	
Type of business	at end of In 5 years in 10 years financial time time		at end of financial	in 5 years time	in 10 years time	
Traditional Business	32% 18% 18%			n/a	n/a	n/a

Yield = 5.33%	Equity Proportion of assets backing with-profits benefits reserve				ersionary Bor ing with-profit	
Type of business	at end of In 5 years in 10 years financial time time		at end of financial	in 5 years time	in 10 years time	
Traditional Business	32% 18% 18%			n/a	n/a	n/a

Yield = 3.77%	Equity Proportion of assets backing with-profits benefits reserve			Future Reversionary Bonus Rate for accumulating with-profits business		
Type of business	at end of financial	In 5 years time	in 10 years time	at end of financial	in 5 years time	in 10 years time
Traditional Business	32%	18%	18%	n/a	n/a	n/a

(6) Persistency Assumptions

The surrender and paid-up assumptions are:

Product		Average surrender / paid-up rate for the policy years - %			
		1-5	6-10	11-15	16-20
CWP savings endowment	Surrender	3.0	3.0	3.0	3.0

The fund has no exposure to guaranteed annuity options.

(7) Policyholders' Actions

Not applicable

7. FINANCING COSTS

There are no financing arrangements currently in place for the fund.

8. OTHER LONG TERM INSURANCE LIABILITIES

No amounts have been included in Line 46 of Form 19. The amount shown in Line 47 of Form 19 is made up as follows:

	£m
Data	1.0
Litigation	0.8
Future Projects	0.9
VAT	0.4
Costs Falling Outside MSA	0.6
Strachan Policy Review	0.2
TCF Reserve	0.0
Additional provision for tax*	1.7
Investment Expense Rebate credited to future asset shares	2.0
Total	7.5

^{*} Consisting of: Tax on future shareholder transfers, CGT reserve, deferred relief on acquisition expenses, and any adjustments in respect of amounts included in current liabilities.

9. REALISTIC CURRENT LIABILITIES

The realistic current value of liabilities, shown at line 51 of Form 19, is taken to be equal to the value assessed on a regulatory basis, this being £48m. The figure includes creditors (including outstanding claims), provisions (including taxation), accruals and deferred income.

10. RISK CAPITAL MARGIN

- (a) The risk capital margin for the fund was calculated to be zero at the valuation date.
 - (i) The risk capital margin allows for a fall in equity values of 20%. This was compared to a rise in equity values of the same amount and found to be more onerous for the fund.
 - A fall of 12.5% was allowed for in the value of property assets, and again this was found to be more onerous than a rise in property values of the same amount.
 - (ii) The scenario of a rise in fixed interest yields of 17.5% of the long-term gilt yield was compared against a fall in yields of the same amount. The more onerous result was assumed and represented a rise in yields. The nominal rise and fall in the (annualised) yields was 65 basis points.
 - There are no significant overseas territories. Overseas stocks were subjected to the same basis point adjustment as for UK stocks.
 - (iii) The risk capital margin allows for a widening of the yields available on bonds, where the change in yields depends on the credit rating. The average change in spread for bonds subject to the test, weighted by market value, was 54 basis points for the fund. This change in yields resulted in a fall in the value of these bonds by an average of 6.68% for the fund.
 - (iv) Persistency rates were assumed to improve by 32.5%. This was allowed for in the projections by multiplying the assumed lapse, paid-up and surrender rates at each duration by 67.5%.

Applying the persistency test on top of the tests already described in (i) to (iii) results in an increase in the value of realistic liabilities of 0.54% but this is offset by a corresponding increase in planned enhancements as described below.

- (v) Not applicable
- (b) In the stress scenarios the assumption is made that the data contingency reserve will be increased from £2.5m to £5.0m.

The working capital takes into account planned enhancements which reflect the intention to distribute to policyholders excess assets within the fund. These enhancements are assumed to be removed in the risk capital margin conditions to the extent that they would not be payable due to reductions in the excess assets. This action has a value of £19m in the fund.

Some policies have been granted discretionary enhancements to investment returns attributed to asset shares. These enhancements will be removed if the estate of the fund is insufficient to finance them. Enhancements worth £7.1m have been assumed to be removed in the risk capital margin conditions.

- (c) (i) The risk capital margin is zero.
 - (ii) The scheme for the funds merger as at 31 December 2006 includes a provision that in the event that the value of the assets of any withprofits fund falls below the regulatory minimum, support will be provided to that fund by way of a loan arrangement from the Non Profit Fund or the Shareholders' Fund to the extent that the Board determines there are assets in those funds available to make such a loan.

11. TAX

(i) The investment returns used in the calculation of the with-profits benefits reserve are net of policyholder tax, where appropriate. The calculation of the net rate allows for tax on income and gains, split by asset class and using assumed rates appropriate to those assets. For unrealised gains, a reduced rate is used in order to reflect deferral of the gain.

Expenses attributed to the with-profits benefits reserve are reduced to reflect tax relief where appropriate, based on assumed rates.

Where asset share calculations are used, the value of outstanding tax relief arising on acquisition expenses is not capitalised. This asset is reflected in Line 47 of Form 19.

Additional tax arising on shareholder transfers is met from the estate and is not chargeable to asset shares.

(ii) In calculating the value of future policy related liabilities, tax is allowed for in a number of ways.

Asset shares (or proxies to asset shares) are projected by the stochastic model used to determine the value of guarantees and smoothing, and this allows for policyholder tax as described in (i).

Additional tax on shareholder transfers, which is payable from the estate, is reflected in Line 47 of Form 19 and is derived from the stochastic model results.

The accrued amount of any unrealised capital gains is included in Line 47 of Form 19. This is based on the actual unrealised gains on the valuation date multiplied by a tax rate that does not allow for deferral of the gain being realised.

Outstanding tax relief on acquisition expenses is allowed for in Line 47 of Form 19 and is based on outstanding amounts from the company's tax computation, discounted at a risk-free rate.

The tax relief from any deferred expenses from the company's tax computation is assumed to be recovered after one year, and the discounted value (at a risk-free rate) is included in Line 47 of Form 19.

In Line 47 of Form 19, adjustments are made in respect of any amounts already included as current liabilities.

(iii) The realistic value of the current liabilities is taken to be equal to the regulatory value. The value of any tax provisions resulting from the company's tax computation is included here.

12. DERIVATIVES

On the valuation date, the fund held futures contracts to sell indices as described in the table below:

Index	Units	Price on the valuation date	Settlement Price	Unit Multiple for Settlement	Settlement Date
CME-S&P 500 INDEX MAR 2010	19	10,648	10,577	10	18/03/2010
LIFFE-FTSE 100 DIV.INDEX DEC 2010 (INDEXxGBP 10)	-754	1,705	154	10	16/12/2010
EUREX-DJ ESTOX MAR10 STOXX 50	34	23,462	2,274	10	19/03/2010
LIFFE-FTSE 100 INDEX MAR 2010 (INDEXxGBP 10)	353	53,615	5,266	10	19/03/2010
TSE-TOPIX INDEX MAR 2010	37	400	40	10	11/03/2010
SFE-SPI 200 MAR 2010	36	37,831	3,625	10	18/03/2010
HKFE-HANG SENG INDEX JAN 2010	8	6,992	674	10	28/01/2010

13. ANALYSIS OF WORKING CAPITAL

The movement in working capital over the twelve months to the valuation date is shown in the following table:

	£m
Opening working capital	0.0
Write back planned benefit enhancements to zeroise working capital	8.5
Revised opening working capital	8.5
Opening adjustments	3.7
Restated opening working capital	12.2
Investment return on working capital	16.7
Mismatch profits and losses	(5.1)
Assumption changes	
- Non-economic	11.4
- Economic	(2.3)
- Policyholder actions	(1.2)
Impact of new business	0.0
Other variances	
- Non-economic variance	4.2
- Unexplained	1.6
Closing working capital before zeroisation	37.4
Planned benefit enhancements to zeroise working capital	(37.4)
Closing working capital	0.0

The following table shows a breakdown of the liabilities shown on line 47 Form 19 at the start and end of the year:

£m	Current Valuation	Previous Valuation
Data	1.0	2.5
Litigation	0.8	3.8
Future Projects	0.9	1.6
VAT	0.4	-
Costs Falling Outside MSA	. 0.6	0.1
Strachan Policy Review	0.2	ed
TCF Reserve	-	0.0
Additional provision for tax*	1.7	1.8
Investment Expense Rebate credited to future asset shares	2.0	2.0

The following table shows a breakdown of the liabilities shown on line 51 Form 19 at the start and end of the year:

£m	Current Valuation	Previous Valuation
Regulatory current liabilities	80.0	48.1
Total	80.0	48.1

14. OPTIONAL DISCLOSURE

None made.

Britannic With-Profits Fund

2. ASSETS

(1) Economic Assumptions For Valuing Non-Profit Business

The following table shows the principal economic assumptions that have been used to determine the value of future profits arising from non-profit business written in the fund.

Economic Assumption*		Current Valuation	Previous Valuation
		Base	Base
Valuation interest	Pensions		A CONTRACTOR OF THE CONTRACTOR
rate p.a.	Pre vesting	4.75%	4.00%
	Post vesting	4.26%	3.55%
	Life	4.07%	5.20%
Experience	Pensions	4.55%	3.84%
interest rate p.a.	Life	4.02%	3.37%
Risk discount		4.55%	3.84%
rate p.a.		,	
Expense inflation		4.58%	3.54%
p.a.	- A SANT TOWN CO. TO SANT		

^{*} Investment rates are shown net of investment expenses of 0.12% gross per annum.

(2) Amount Determined Under INSPRU 1.3.33(2)(R)

Not applicable

(3) Valuation Of Insurance Contracts Written Outside The Fund

Not applicable

(4) Different Sets Of Assumptions

Not applicable

(5) De Minimis Limit

Not applicable – the assumptions in (1) relate to all non-profit business within the With-Profits Fund.

3. WITH-PROFITS BENEFITS RESERVE LIABILITIES

(1) Calculation Of With-Profits Benefits Reserve

In determining the with-profits benefits reserve shown in Line 31 of Form 19, the fund uses several methods. The methods can be summarised as:

(i) Asset Share Calculations

Asset shares are a roll up, at historic achieved investment returns, of premiums, less expenses, charges and tax, adjusted for the profit or loss on providing death benefits and the profit or loss from contracts that terminated early.

For the former Century business, the with-profits benefits reserve is based on the amount transferred from the former Century Life With Profit Fund as at 31 December 2006 in respect of this business (excluding the value of future profits and loss transfers). The amount transferred was determined using a bonus reserve valuation approach with future bonuses set so as to equal the amount available for transfer. This amount transferred became the opening asset share as at 31 December 2006 in the Britannic With-Profits Fund in respect of this business. This opening asset share has been rolled up with the actual historic experience as described above.

(ii) Prospective Method

This method takes the basic policy reserve, including the long term insurance capital requirement, and deducts the present value of retained earnings. The present value of retained earnings is the present value of the surplus or deficit compared to the reserve, after taking into account all future policy-related income and outgo.

(iii) Shadow Funds

For most unitised with-profits contracts the with-profits benefits reserve is taken as the shadow fund available from the company's mainframe systems. The shadow fund is the result of accumulating premiums less policy charges at the earned investment rate.

(iv) Regulatory Reserves

For some small classes of business it is not practical to apply any of the methods in (i) to (iii). In these cases the realistic reserve is taken as the regulatory reserve, excluding the long term insurance capital requirement (and, in the case of the Insurance ISA, the sterling reserves).

The table below shows the breakdown of the with-profits benefits reserve into these methods.

Class	Product Type	Method	With-profits benefits reserve	Future policy related liabilities
Conventional	Premium-Paying	Asset Share	487	£m
Conventional	Regular Premium	Asset Share	487	62
	Endowments			
	Channel Islands Regular	Asset Share	6	1
	Premium Pensions			
	(Premium Paying)			-
	Regular Premium,	Asset Share	44	43
	Premium Paying			
	Pensions			
	Whole of Life	Asset Share	12	1
	Whole of Life	Prospective Method	12	1
٧.	Other Endowments	Prospective Method	4	0
	Other Channel Islands Pensions	Prospective Method	1	0
	Other Pensions	Prospective Method	4	4
	Miscellaneous pensions & With-profits annuity	Regulatory Reserve	21	0
	Provision	Regulatory Reserve	0	73
Unitised With- Profits	Insurance ISA	Regulatory Reserve	16	1
	Other UWP products	Shadow Funds	3,176	339
Additional				
Total			3,782	526
Form 19 Line 31			3,782	
Form 19 Line 49				526

In the table above, the split of the future policy related liabilities into the same detail as the with-profits benefits reserve is approximated. This is partly because the assessment of prospective items such as the costs of guarantees and smoothing rely on grouped data, and partly because certain realistic future liabilities are not calculated at product level.

(2) Correspondence With Form 19

The amounts in (1) above reconcile directly to Form 19.

(3) With-Profits Benefits Reserves Below De Minimis Limit

Not applicable as all products have been disclosed.

(4) Types Of Products

The level of disclosure in the table above corresponds to material groupings of contracts offering significant variances in policyholder benefits. For example, unitised with-profits business is separated from conventional with-profits business.

4. WITH-PROFITS BENEFITS RESERVE – RETROSPECTIVE METHOD

(1) Retrospective Methods

- (a) All contracts have been calculated on an individual policy basis.
- (b) No contracts have been valued on a grouped basis.
- (c) Not applicable as no contracts have been valued on a grouped basis.

(2) Significant Changes to Valuation Method

- (a) There have been no significant changes in the method of calculating the withprofits benefits reserve.
- (b) No policies were valued using approaches more approximate than used for the previous valuation.

(3) Expense Allocation

For each with-profits fund, the basis of allocating expenses to that fund during the financial year in question is described in note 4006 to Form 40.

- (a) The previous expense investigation was carried out in respect of the current financial year.
- (b) Expense investigations are carried out in respect of each financial year. Interim investigations are carried out during financial years for use in interim valuations.
- (c) The method by which expenses are charged to the with-profits benefits reserve in respect of individual contracts depends on the type of business and the method of determining asset shares:
 - Conventional business asset shares are charged expenses based on the
 expenses charged by the outsourcers in respect of this business. The
 expenses are an amount per policy which varies by product type and by
 premium paying status. The amount charged to asset shares is subject to
 an uplift to cover direct costs and an element of project costs. Additional
 one-off project costs are not charged to asset shares. Investment
 expenses are charged to asset shares by reducing the investment return
 allocated.
 - Unitised with-profits business asset shares are charged expenses using product charges, rather than actual expenses. The product charges cover acquisition, maintenance and investment expenses.
 - Smoothed return business, that is with-profits annuity business, overseas with-profits bond business and with-profits bond business, asset shares are charged expenses using product charges, rather than actual expenses. The product charges cover acquisition, maintenance and investment expenses.

The expenses charged to asset shares are all charged as maintenance expenses as the fund is no longer actively seeking new business and, for the purposes of this expense investigation, all expenses have been treated as maintenance. Consequently the subsequent analysis does not identify any initial expenses.

The expenses charged to the With-Profits Fund in addition to those allocated to the with-profits benefits reserve comprise:

- One-off costs not charged to asset shares;
- The difference between the expenses charged to the fund in respect of unitised with-profits business and smoothed business and the product charges charged to the associated asset shares;
- Expenses in respect of with-profits contracts that were in force at the previous financial year-end and are no longer in force at the current financial year-end;
- The expenses incurred in respect of non-profit business in the fund;
- The investment expenses reduction not charged to asset shares;
- Investment expenses associated with the investments backing other withprofits reserves and the estate;
- Wythall Green costs are netted off against the rental income when assessing the investment return on Wythall Green to be credited to asset shares and are thus only indirectly charged to asset shares;
- Prior year adjustments; and
- Balance between aggregation of the amounts charged to asset shares and the items identified above and the aggregate amount allocated to the fund.

The expenses allocated to the with-profits benefits reserve and the residual balance charged to the fund during the financial year were:

	Item		£m
(i)	Expenses charged to with	Traditional WP business	3.8
	profits benefits reserve	Unitised WP business	26.9
		Smoothed return business	0.9
(ii)	Other expenses charged to	Other project costs	0.7
	fund	Excess product charges	(15.4)
		Exiting with-profits contracts	0.8
		Non profit contracts	1.1
		Investment expenses	2.1
		Wythall Green Costs	5.1
		Prior year adjustments	(0.2)
		Balance	1.4
(iii)	Total expenses		27.1

(4) Significant Charges

Charges for cost of guarantees and cost of capital are not charged to conventional business or unitised with-profits business with-profits benefits reserves. Charges for cost of guarantees and cost of capital are included in the product charges for smoothed return business and hence are charged to the with-profits benefits reserves. The cost of capital funds the shareholder profit and loss transfer and associated tax in respect of this business. The amounts charged to the with-profits benefits reserves are:

Policies previously	During financial year		Preceding f	inancial year
written in	cost of	cost of capital	cost of	cost of capital
	guarantees		guarantees	
	£m	£m	£m	£m
BA	0.1	0.3	0.2	0.4

(5) Charges For Non-Insurance Risk

No charges were deducted from the With-Profits Fund for non-insurance risk.

(6) Ratio Of Claims To Reserve

Average ratio of claims to asset shares:

Year	Average total with-profits claim ratio for financial year
Previous year -1	100.0%
Previous year	107.0%
Current year	105.0%

(7) Allocated Return

The investment return before tax and expenses allocated to the with-profits benefits reserve in respect of the financial year in question is as follows:

Type of business	Investment Return
Policies previously written in BA other than Euro denominated business	13.79%
Policies previously written in BA - Euro denominated business (return in sterling terms)	13.38%
Policies previously written in Century	6.66%

The assets backing sterling and euro with-profits business asset shares and those backing former Century business are different and hence the investment returns in the above table are correspondingly different.

5. WITH-PROFITS BENEFITS RESERVE - PROSPECTIVE METHOD

(1) Key Assumptions

Prospective methods of valuation are used in determining a proxy for an asset share calculation in respect of certain contracts. These methods are used where a retrospective asset share calculation may be inappropriate or impractical.

The prospective method was described in paragraph 3 (1) (ii).

The following table sets out the main assumptions used. There are no explicit risk adjustments made to assets.

Policies previously written in BA								
Economic Assumptions*								
Valuation interest rate p.a.	Pensions							
	pre vesting	4.75%						
	post vesting	4.26%						
	Life	4.07%						
Experience interest rate p.a.	Pensions	4.55%						
	Life	4.02%						
Discount rate p.a.**		4.55%						
Expense Assumptions								
Investment Expense p.a.		0.12%						
Per policy Expenses p.a.	Valuation	£42.79						
	Experience	£42.73						
Expense Inflation p.a.		4.58%						

^{*} Investment rates are shown net of the investment expenses of 0.12% gross per annum.

No future reversionary bonus is assumed in the projections. Sample terminal bonus rates are:

Policies previously written in BA Sample Terminal Bonus Rates * - %								
Year of Maturity	5	10	15	20	25			
2010	0.0	21.0	2.5	8.5	38.5			
2015	0.0	26.0	37.5	30.0	39.0			
2020	0.0	0.0	50.5	62.5	53.0			
2025	0.0	0.0	0.0	58.5	84.0			
2030	0.0	0.0	0.0	0.0	92.0			

^{*} Other than deferred annuities, for which the projected rates are zero.

For deferred annuity products valued on a prospective basis, lapses are not modelled. Sample lapse rates for other products valued on a prospective basis, which are based on historic experience, are:

Policies previously written in BA									
Sample Lapse Rates	s - %								
Policy Term									
Year of Maturity	5	10	15	20	25				
Whole of Life	1.0	1.0	1.0	1.0	1.0				
Endowment	4.0	4.0	4.0	4.0	4.0				

(2) Different Sets Of Assumptions

Not applicable

^{**} This discount rate is the 15 year gilt yield + 10 basis points which is consistent with the risk free rates in paragraph 6 (4) (a) (iii) which are derived from the proprietary economic scenario generator model as described in paragraph 6 (4) (a) (ii) using the gilt yield curve + 10 basis points.

6. COSTS OF GUARANTEES, OPTIONS AND SMOOTHING

(1) De Minimis Limit

Not applicable

(2) Valuation Methods For Guarantees etc.

	Cost of Guarantees & Options	Smoothing Cost	Extent of Grouping	No of Individual policies	No of model points
All Business	Stochastic model	Stochastic model	Ex-BA conventional	72,971	678
			Ex-BA unitised	452,595	570
			Ex-Century conventional	4,136	318

(a) Cost of Guarantees & Options

The costs of guarantees are determined using a stochastic model, with the asset returns being generated by a proprietary model. The following items were calculated stochastically:

- (i) Guaranteed annuity option reserves;
- (ii) The reserves required in addition to asset share to meet guaranteed benefits.

The calculations were carried out using a risk neutral approach.

Cost of Smoothing

The cost of smoothing is determined using the same stochastic model.

- (b) (i) In the stochastic model, no projections are carried out on individual policy data.
 - (ii) The model uses grouped policy data. However, the values for the withprofits benefits reserve are calculated on an individual basis and added to the data file before the data is grouped.
 - (iii) The stochastic model uses three grouped policy data files: one for formerly Britannic conventional with-profits contracts, another for formerly Century conventional with-profits contracts and a third for unitised with-profits contracts.

Former Britannic Conventional Business Grouping

Policies are grouped chiefly according to product type, premium status, premium mode, year of maturity, year of entry, premium term, age and joint life status. For single life policies, all are assumed to be male lives.

Years of maturity are grouped into one or two year bands up to and including 14 years after the valuation date. Policies maturing from 15 to 20 years after the valuation date are grouped, as are policies maturing after that time.

For the 5 years preceding the valuation date, the year of entry is not grouped. Before that, years of entry are banded into 2-3 year intervals up to 22 years preceding the valuation date. Policies that were taken out from 23 to 37 years before the valuation date are grouped, as are any taken out earlier than that.

Within each group, weights are applied to certain key policy features before averaging. For example, the elapsed duration is weighted by the sum assured, as is the premium term. For other data, such as sums assured and premiums, a simple average is taken.

Former Century Business Grouping

Policies are grouped chiefly according to product type, premium status, year of maturity, policy term, entry age and joint life status. For single life policies, all are assumed to be male lives.

Years of maturity are grouped into one year bands up to and including 20 years after the valuation date. Policies maturing after 20 years after the valuation date are grouped together.

Policy terms are grouped into 5 year bands around terms of 10, 15 and 20 years. Policies of longer terms are grouped together.

Entry ages are grouped depending on whether greater than or less than age 40.

Within each group, weights are applied to certain key policy features before averaging. For example, the elapsed duration is weighted by the sum assured, as is the premium term. For other data, such as sums assured and premiums, a simple average is taken.

Groups which contain very small subsets of the business are grouped together.

Unitised With-Profits Grouping

Policies are grouped chiefly according to product type, series number (this being relevant for bonds that have different dates at which benefits can be taken without reduction), premium status, premium mode, year of maturity (where relevant), policy size (by units) and the ratio of the shadow fund to the value of policy units.

For policies other than whole of life bonds, the maturity year is taken as the earliest year in which benefits can be taken without reduction. The grouping by maturity year is carried out in ten year bands, excluding policies due to mature in the next year.

For the ratio of the shadow fund to the value policy units, banding is normally carried out in 5% intervals. However, individual bands may be sub-divided where it is felt that there would otherwise be a bunching of policies.

Within each group, simple averages are taken to determine a representative policy.

Grouping Validations

It is impractical to attempt to validate, using the stochastic model, projections that use grouped data against projections that use individual data. Instead, comparisons are carried out using deterministic projections.

Comparison is made of the present value of key variables as well as progression of these variables over a period of up to 40 years. The comparison includes items such as reserve run-off, claims outgo and premium income, split by product type as necessary. Where material discrepancies arise, these may result in grouping being revisited.

For unitised with-profits business a closed form model is used to compare the results from individual policy data and grouped data.

(3) Significant Changes

There have been no significant changes since the previous valuation.

(4) Further Information On Stochastic Approach

- (a) (i) The stochastic model is used to place a value on:
 - Maturity guarantees on conventional endowments;
 - Guarantees on vesting of deferred annuity contracts;
 - Guarantees on maturity or retirement for unitised with-profits contracts;
 - Nil-penalty guarantees on the surrender of with-profits bonds at certain durations;
 - The impact of bonus smoothing.

Of these, the guarantees which are strongly "in the money" at the valuation date are the maturity guarantees on conventional endowments and the guarantees on the vesting of deferred annuities.

As at 31 December, for a significant proportion of the with-profits business maturity payouts (including retirements) exceed asset shares. It is intended to reduce this overpayment in line with the company's smoothing policy subject to the level of guarantees. The impact of bonus smoothing is shown in Line 44 of Form 19.

An indication of the combined impact of guarantees and smoothing is provided in (vi), below.

ii) The asset returns in the stochastic model were generated by a proprietary model purchased from Barrie & Hibbert. The asset classes modelled are UK equities, overseas equities, UK property, UK corporate bonds and UK gilts.

Interest Rate

UK gilt returns are modelled using gilts + 10bps calibration in a Monthly LIBOR Market Model. The Government Nominal Bond yield curve is a direct input into the model.

The calibration at the valuation date was as follows:

Term	Govt. + 10bp	Model	Difference (Model - Market bp)		
1	0.97	0.97	(0.05)		
2	1.60	1.60	0.01		
3	2.19	2.19	(0.01)		
4	2.70	2.70	(0.02)		
5	3.13	3.13	(0.04)		
7	3.75	3.76	0.44		
10	4.35	4.36	1.05		
15	4.80	4.82	1.31		
20 25	4.86	4.87	0.21		
25	4.79	4.79	(0.23)		

The volatility within the model is calibrated to the market implied volatility for at the money swaptions (for 20 year swaps). The calibration at the valuation date was as follows:

Term	Market Implied Volatility	Model	Difference (Model - Market bp)			
1	20.70	20.55	15			
2	19.30	19.01	29			
3	17.90	18.07	(17)			
4	16.70	17.45	(75)			
5	15.90	16.59	(69)			
7	14.70	16.36	(166)			
10	14.10	15.02	(92)			
15	14.60	13.99	61			
20	14.40	12.87	153			
25	14.00	11.32	268			
30	13.00	10.90	210			

Equities and Property

Excess returns over risk free on UK equities, overseas equities and property are modelled using separate (but correlated) lognormal models. The equity model uses a volatility surface calibrated to market implied volatilities for a range of strikes and maturities. Volatilities are assumed to be constant beyond quoted strikes and maturities.

The UK equities asset model was calibrated by reference to the implied volatility of FTSE100 options for a range of strikes (from 0.8 to 1.2) and maturities of up to 10 years. All strikes are expressed as a proportion of atthe-money.

Implied volatility data at the valuation date is shown below:

Market

Term	Strike								
	0.8	0.9	1	1.1	1.2				
	%	%	%	%	%				
1	29.10	25.88	22.89	20.29	18.28				
3	28.75	26.78	24.92	23.17	21.59				
5	28.43 26.74		25.26 24.0		23.11				
10	28.67	27.57	26.57	25.65	24.83				

Model

Term		Strike								
	0.8	0.9	1	1.1	1.2					
	%	%	%	%	%					
1	30.87	28.44	25.74	23.37	21.64					
3	29.95	28.54	27.08	25.65	24.33					
5	28.97	28.97 27.78		25.51	24.68					
10	30.90	29.90	29.04	28.29	27.64					

Beyond 10 years the estimated volatility implied by the model calibration rises as follows:

Term	Strike								
	0.8	0.8 0.9		1.1	1.2				
	%	%	%	%	%				
15	33.64	32.70	31.88	31.14	30.48				
20	29.14	28.62	28.17	27.78	27.45				
25	29.95	29.50	29.15	28.86	28.58				
30	30.17	29.79	29.48	29.22	29.00				
30 35	28.74	28.54	28.54 28.34 28		28.02				
40	31.56	31.24	30.95	30.71	30.51				

Difference (Model - Market) %

Term	Strike								
	0.8	0.9	1	1.1	1.2				
	%	%	%	%	%				
1	1.77	2.56	2.85	3.08	3.36				
3	1.20	1.76	2.16	2.48	2.74				
5	0.54	1.04	1.35	1.47	1.57				
10	2.23	2.33	2.47	2.64	2.81				

There are no tests against market traded instruments for properties since there are no such instruments. A best estimate has therefore been used of 15% constant volatility

Corporate bond

Corporate bond returns are modelled using the extended Jarrow-Lando-Turnbull model. This describes bond prices in terms of a real-world transition matrix, which gives the probability of a transition to each credit rating over one year. Risk neutral transition probabilities are assumed to vary stochastically. The transition matrix is consistent with best estimates based on historic data of long term transition probabilities and spread volatilities and corporate bond

Britannic With-Profits Fund

prices. The model was fitted to a sample of predominantly investment grade sterling corporate bonds.

The following are examples of observed correlations of year 10 returns from the scenarios used (ZCB = zero coupon bond):

		<u> </u>								
		Output Correlations @ Year 10								
	Cash	Equities	Property	Overseas	5yr	15yr	5yr	15yr	5yr	15yr
				Equities	Govt	Govt	Corp	Corp	Index	Index
					ZCB	ZCB	ZCB	ZCB	Linked	Linked
Annier de la constant									ZCB	ZCB
Cash	1.00	0.04	0.15	(0.01)	0.48	(0.62)	0.34	(0.59)	0.68	0.22
Equities	·	1.00	0.05	0.16	0.04	(0.07)	0.26	0.04	0.10	0.09
Property			1.00	0.05	0.12	(0.08)	0.12	(0.07)	0.15	0.09
Overseas equities				1.00	0.12	0.04	0.14	0.05	0.11	0.19
5yr Govt ZCB				33.00040	1.00	0.19	0.78	0.17	0.36	0.16
15yr Govt ZCB						1.00	0.17	0.94	(0.41)	(0.07)
5yr Corp ZCB							1.00	0.35	0.29	0.15
15yr Corp ZCB								1.00	(0.38)	(0.05)
5yr Index Linked ZCB									1.00	0.78
15yr Index Linked ZCB										1.00

Britannic With-Profits Fund

(iii) The table below is based on 1,000 scenarios:

	Asset type (all UK assets)	K=0.75		the contract of the contract o		K=1				K=1.5			
٢		5	15	25	35	5	15	25	35	5	15	25	35
	Annualised compound equivalent of the risk free rate assumed for the period (to two	***************************************											
	decimal places)	3.13%	4.82%	4.79%	4.60%						TO CONTRACT OF THE CONTRACT OF	:	
<u> </u>	Risk-free zero coupon bond	860,353	493,905	310,711	207,157								
2	FTSE All Share Index (p=1)	122,986	262,588	345,824	420,165	235,640	411,568	516,359	607,015	577,983	759,762	899,302	1,007,012
3	FTSE All Share Index (p=0.8)	114,324	210,730	250,960	280,950	220,443	332,140	375,029	408,601	541,350	617,143	658,315	685,526
4	Property (p=1)	928'09	173,673	264,231	346,737	179,448	320,560	435,540	534,610	559,299	689,129	832,392	945,574
9	Property (p=0.8)	53,497	125,889	173,032	211,980	161,948	240,635	293,495	335,395	520,256	536,844	580,539	614,374
9	15 year risk free zero coupon bond (p=1)	21,374	21,798	18,015	32,340	96,122	90,252	94,102	145,509	500,006	499,630	507,864	549,090
	15 year risk free zero coupon bond (p=0.8)	18,054	10,964	6,580	5,706	82,642	45,739	24,295	28,289	455,241	309,924	229,777	214,589
8	15 year risk free bonds (p=1)	22,803	27,095	27,822	49,533	101,040	106,496	111,161	163,114	498,463	497,569	507,220	553,080
6	15 year risk free bonds (p=0.8)	19,463	13,711	9,842	11,661	87,250	56,771	36,745	45,085	454,264	315,083	238,798	228,117
10	Portfolio of 65% FTSE All Share and 35%												
	property (p=1)	66,161	174,418	258,480	331,230	172,259	312,865	417,910	507,396	538,043	674,890	792,235	900,261
<u> </u>	Portfolio of 65% FTSE All Share and 35%												
	property (p=0.8)	59,121	130,133	173,532	205,988	156,884	237,191	285,042	320,567	498,502	524,154	555,429	582,198
12	Portfolio of 65% equity and 35% 15 year risk												
	free zero coupon bonds (p=1)	61,736	159,590	221,986	285,168	161,842	288,344	368,273	444,989	524,454	625,450	727,931	818,273
13	Portfolio of 65% equity and 35% 15 year risk		,										
_	free zero coupon bonds (p=0.8)	55,047	118,184	145,719	173,655	147,356	217,769	246,479	275,602	484,563	483,282	497,961	515,289
14	Portfolio of 40% equity, 15% property, 22.5%												
·	13 year risk riee zero coupon bonds and 22.5% 15 vear comorate bonds (n=1)	95 671	86.039	13/ 571	102 701	114 280	100 570	260 177	340 810	508 057	554 231	628 ORA	711 282
15	Portfolio of 40% equity 15% property 22 5%		207500	10,50	105,101	207,	0.00	1111	210,010	20,000	1071.00	050,001	3034
	15 year risk free years courses bonds and					annius es	Oddinuss a,	5 W. S. C.					
**************************************	22.5% 15 year corporate bonds (p=0.8)	vi(2)				***************************************				e de la composição de l			
		21.327	54.774	73.106	99.189	99.628	135.443	156.044	184,398	465,441	400.141	394.196	408,812
\parallel													
			L=15				L=20	50				L=25	
16	Receiver swaptions	5.17%	6.92%	2.60%	3.89%	6.70%	8.50%	9.68%	4.56%	8.09%	9.74%	7.47%	5.01%
					-		8	2		*	Annual Control of the		

- (iv) In all investment scenarios the initial equity dividend yield is set to 3.44% and the initial property rental yield to 4.30% p.a.
- (v) The asset model is not calibrated to any risk-free rates other than those derived from UK assets. There is no calibration to risk-free rates from overseas territories, even where Britannic has significant investments in those territories.
- (vi) The following table shows the approximate percentage of the total present value of guarantees and smoothing by duration, as projected by the stochastic model. It is based on the average overpayment across all projected investment scenarios using the base assumptions.

	Conver	ntional	Unitised Wi	th_profits
Term to maturity (years)	Endowments	Whole Life	Endowments	Pensions
1-5	15.9%	0.0%	0.5%	14.5%
6-10	7.9%	0.0%	0.4%	13.9%
11-15	3.9%	0.0%	0.2%	11.2%
16-20	2.7%	0.0%	0.1%	12.5%
21-25	1.3%	0.0%	0.1%	10.7%
26-30	0.1%	0.0%	0.0%	3.6%
31-35	0.0%	0.0%	0.0%	0.3%
36-40	0.0%	0.0%	0.0%	0.0%

Calibration of the asset model to market data is shown, where available, in paragraph 6 (4) (a) (ii) above.

(vii) Comprehensive tests are carried out on the output produced by Barrie& Hibbert asset model as follows:

For UK and Overseas equities and for UK property the ratio of the average (over the simulated scenarios) of the discounted present values of projected asset values (with income reinvested) to the original asset value has been verified to be acceptably close to unity—the martingale property.

The same test has been undertaken for gilts and bonds with terms of 5, 10, 15, 20, 25, 30, 35 and 40 years. Departures from unity in the average discounted present values have not had a significant impact on the valuation result.

Zero coupon bond yields calculated from the model cash output have been verified to match yields calculated from input Government spot rates and initial spot rates output from the model at time zero within an acceptable error margin.

For UK equity options verification has been made, within acceptable limits, that the option prices calculated from the model output and converted into implied volatilities using Black-Scholes formula reproduce the expected volatility surface.

Verification has also been made, within acceptable limits, that implied volatility calculated from the simulation model output reproduces the market volatility term structure for 20 year at the money swaptions.

(viii) The stochastic model is run on 1,000 investment scenarios generated by the asset model.

The scenario generation process incorporates variance reduction techniques (antithetic variables) to ensure that the scenarios selected pass the tests described in (vii) to a close tolerance.

- (b) Not applicable
- (c) Not applicable

(5) Management Actions

(a) The stochastic model does not take into account the possibility of actions taken by management in the projected investment scenarios, other than to the extent described below.

Bonus Policy - Conventional With-Profits Business

Future reversionary bonus rates are assumed to be zero except for business formerly written in Century. For business formerly written in Century, the reversionary bonuses are those declared at the valuation date and are kept constant over the projection period. The cost of guarantees on business formerly written in Century is immaterial.

Maturity payouts are targeted to be 100% of asset share, subject to the company's smoothing policy. To achieve this, the model compares policies maturing in one year against similar policies maturing in the previous year and derives a scale of terminal bonus rates such that the maximum change in payout from year to year is 15%.

Bonus Policy - Unitised With-Profits Business

The reversionary bonus rate is zero for unitised with-profits life business. For pensions business, no reversionary bonus is paid unless the ratio (in aggregate) of the shadow fund to the unit fund (including bonus units) exceeds 105%. In this case a 3% bonus is paid.

Terminal bonus rates are calculated based on a vintage unit method, by month of purchase. The bonus smoothing logic as described for conventional business is then applied to each monthly payout. Terminal bonus rates for each calendar year are taken as an average of the calculated monthly values.

Investment Mix

Appropriate allowance is made for the expectation that the exposure of the fund to real assets (UK equities, overseas equities and property) will reduce as the portfolios reach maturity. The proportion of real assets is assumed to reduce by 0.12% per month from 49% at the valuation date to 20% after 20 years.

(b) For the management actions assumed to determine the costs in paragraph 6.(4), the best estimates as to the future proportions of the assets backing the with-profits benefits reserve which would consist of equities and as to future reversionary bonus rates for significant accumulating with-profits business are shown in the following tables. They are given as at the end of the financial year in question, in 5 years time and in 10 years time, and are based on the 5 year gilt yield plus 10 basis points (3.06%) and on that yield both increased (3.84%) and decreased (2.28%) by 17.5% of the long term gilt yield.

Britannic With-Profits Fund

	Policies	s previously write	tten in BA/Cent	ury		
Yield = 4.55%	Equity Proporti	on of assets bac benefits reserve			eversionary Bonu lating with-profits	
Type of business	at end of financial year	In 5 years time	in 10 years time	at end of financial year	in 5 years time	in 10 years time
Former Britannic Assurance traditional with-profits business	46%	39%	33%	n/a	n/a	n/a
Former Century Life traditional with- profits business	14%	12%	10%	n/a	n/a	n/a
Unitised with-profits life regular premium business	46%	39%	33%	0.00%	0.00%	0.00%
Unitised with-profits life single premium business	46%	39%	33%	0.00%	0.00%	0.00%
Unitised with-profits pensions business	46%	39%	33%	1.00%	1.00%	1.00%
Unitised with-profits ISA business	46%	39%	33%	0.00%	0.00%	0.00%
With-profits euro business	59%	67%	59%	n/a	n/a	n/a

	Policies	s previously wri	tten in BA/Cent	ury		
Yield = 5.33%	Equity Proporti	ion of assets bac			eversionary Bonu	s Rate for
Type of business	at end of financial year	In 5 years time	in 10 years time	at end of financial year	in 5 years time	in 10 years time
Former Britannic Assurance traditional with-profits business	46%	39%	33%	n/a	n/a	n/a
Former Century Life traditional with- profits business	14%	12%	10%	n/a	n/a	n/a
Unitised with-profits life regular premium business	46%	39%	33%	0.00%	0.00%	0.00%
Unitised with-profits life single premium business	46%	39%	33%	0.00%	0.00%	0.00%
Unitised with-profits pensions business	46%	39%	33%	1.00%	1.00%	1.00%
Unitised with-profits ISA business	46%	39%	33%	0.00%	0.00%	0.00%
With-profits euro business	59%	67%	59%	n/a	n/a	n/a

	Policies	previously write	tten in BA/Cent	ury		
Yield = 3.77%	Equity Proporti	on of assets bac	king with-profits	Future R	eversionary Bonu	s Rate for
Type of business	at end of financial year	In 5 years time	in 10 years time	at end of financial year	in 5 years time	in 10 years time
Former Britannic Assurance traditional with-profits business	46%	39%	33%	n/a	n/a	n/a
Former Century Life traditional with- profits business	14%	12%	10%	n/a	n/a	n/a
Unitised with-profits life regular premium business	46%	39%	33%	0.00%	0.00%	0.00%
Unitised with-profits life single premium business	46%	39%	33%	0.00%	0.00%	0.00%
Unitised with-profits pensions business	46%	39%	33%	1.00%	1.00%	1.00%
Unitised with-profits ISA business	46%	39%	33%	0.00%	0.00%	0.00%
With-profits euro business	59%	67%	59%	n/a	n/a	n/a

(6) Persistency Assumptions

The surrender and paid-up assumptions are:

Product				er / paid-up / years - %	
		1-5	6-10	11-15	16-20
CWP savings endowment	Surrender	4.0	4.0	4.0	4.0
UWP savings endowment	Surrender	5.5	5.5	5.5	5.5
UWP bond	Surrender	10.0	10.0	10.0	10.0
CWP pension regular premium	Surrender	0.0	0.0	0.0	0.0
CWP pension single premium	Surrender	0.0	0.0	0.0	0.0
UWP individual pension regular premium	PUP	5.5	5.5	5.5	5.5
UWP individual pension regular premium	Surrender	1.5	1.5	1.5	1.5
UWP individual pension single premium	Surrender	1.5	1.5	1.5	1.5

There is an exposure to guaranteed annuity options in respect of an agreement with the Alba With-Profits Fund. In summary the agreement is such that the Alba With-Profits Fund pays the Britannic With-Profits Fund 75% of the potential guaranteed annuity cost which could arise when a customer retires and the Britannic With-Profits Fund pays the actual cost. Thus the Britannic With-Profits Fund bears the cost (or takes the profits) if the take up rate is more (less) than 75%. The current take-up rate is less than 75% and no provision has been made for this liability under the "base" scenario, but a provision has been made under the "risk capital margin" scenarios.

(7) Policyholders' Actions

The model adds an extra 10% to the underlying rates shown in the table in paragraph 6 (6) above on no market value reduction dates for unitised with-profits whole life bonds when the guarantees are in the money.

7. FINANCING COSTS

There are no financing arrangements currently in place for the fund.

8. OTHER LONG TERM INSURANCE LIABILITIES

No amounts have been included in Line 46 of Form 19. The amount shown in Line 47 of Form 19 is made up as follows:

£m	Current Valuation
Mortgage Endowment Review	4.5
Pensions Mis-Selling	18.1
Costs Falling Outside MSAs	1.0
TCF Reserves	0.6
Pension Scheme	27.8
Stakeholder Pension Expenses	0.1
Data	5.1
Litigation	6.1
VAT	5.4
Solvency II	0.9
Strachan Policy Review	0.2
UWP Expenses less Charges Plus Shareholder Transfers	(19.3)
Additional provision for tax*	74.0
Total	124.6

^{*} Consisting of: Tax on future shareholder transfers, CGT reserve, deferred relief on acquisition expenses, and any adjustments in respect of amounts included in current liabilities.

9. REALISTIC CURRENT LIABILITIES

The realistic current value of liabilities, shown at line 51 of Form 19, is taken to be equal to the value assessed on a regulatory basis, this being £377.0m. The figure includes creditors (including outstanding claims), provisions (including taxation), accruals and deferred income.

10. RISK CAPITAL MARGIN

- (a) The risk capital margin for the fund was calculated to be zero at the valuation date.
 - (i) The risk capital margin allows for a fall in equity values of 20%. This was compared to a rise in equity values of the same amount and found to be more onerous for the fund.
 - A fall of 12.5% was allowed for in the value of property assets, and again this was found to be more onerous than a rise in property values of the same amount.
 - (ii) The scenario of a fall in fixed interest yields of 17.5% of the long-term gilt yield was compared against a rise in yields of the same amount. The more onerous result was assumed and represented a rise in yields. The nominal rise and fall in the (annualised) yields was 78 basis points.

There are no significant overseas territories. Overseas stocks were subjected to the same basis point adjustment as for UK stocks.

- (iii) The risk capital margin allows for a widening of the yields available on bonds, where the change in yields depends on the credit rating. The average change in the spread for bonds subject to the test, weighted by market value, was 151 basis points for the fund. This change in yields resulted in a fall in the value of these bonds by an average of 8.02% for the fund.
- (iv) Persistency rates were assumed to improve by 32.5%. This was allowed for in the projections by multiplying the assumed lapse, paid-up and surrender rates at each duration by 67.5%, with the exception of surrender rates on unitised with-profits contracts at dates when market value reductions cannot be applied.

Applying the persistency test on top of the tests already described in (i) to (iii) results in an increase in the value of realistic liabilities of 0.49% but this is offset by a corresponding reduction in planned enhancements as described below.

- (v) Not applicable
- (b) In the stress scenarios, the assumption is made that the data contingency reserve will be increased from £5.1m to £10.2m.

The working capital takes into account planned enhancements which reflect the intention to distribute to policyholders excess assets within the With-Profits Fund. These enhancements are assumed to be removed in the risk capital margin conditions to the extent that they would not be payable due to reductions in the excess assets. This action has a value of £55m in the fund.

Some policies have been granted discretionary enhancements to investment returns attributed to asset shares or shadow units. These enhancements will be removed if the estate of the With-Profits Fund is insufficient to finance them. No removal of enhancements has been assumed for the fund in the risk capital margin conditions.

For the fund, the effect of the above management actions would be to leave a working capital of zero in the risk capital margin conditions.

- (c) (i) The risk capital margin is zero.
 - (ii) The scheme for the funds merger as at 31 December 2006 includes a provision that in the event that the value of the assets of any withprofits fund falls below the regulatory minimum, support will be provided to that fund by way of a loan arrangement from the Non Profit Fund or the Shareholders' Fund to the extent that the Board determines there are assets in those funds available to make such a loan.

11. TAX

(i) The investment returns used in the calculation of the with-profits benefits reserve are net of policyholder tax, where appropriate. The calculation of the net rate allows for tax on income and gains, split by asset class and using assumed rates appropriate to those assets. For unrealised gains, a reduced rate is used in order to reflect deferral of the gain.

Expenses attributed to the with-profits benefits reserve are reduced to reflect tax relief where appropriate, based on assumed rates.

Where asset share calculations are used, the value of outstanding tax relief arising on acquisition expenses is not capitalised. This asset is reflected in Line 47 of Form 19.

Additional tax arising on shareholder transfers is met from the estate and is not chargeable to asset shares.

(ii) In calculating the value of future policy related liabilities, tax is allowed for in a number of ways.

Asset shares (or proxies to asset shares) are projected by the stochastic model used to determine the value of guarantees and smoothing, and this allows for policyholder tax as described in (i).

Additional tax on shareholder transfers, which is payable from the estate, is reflected in Line 47 of Form 19 and is derived from the stochastic model results.

The accrued amount of any unrealised capital gains is included in Line 47 of Form 19. This is based on the actual unrealised gains on the valuation date multiplied by a tax rate that does not allow for deferral of the gain being realised.

Outstanding tax relief on acquisition expenses is allowed for in Line 47 of Form 19 and is based on outstanding amounts from the company's tax computation, discounted at a risk-free rate.

The tax relief from any deferred expenses from the company's tax computation is assumed to be recovered after one year, and the discounted value (at a risk free rate) is included in Line 47 of Form 19.

In Line 47 of Form 19, adjustments are made in respect of any amounts already included as current liabilities.

(iii) The realistic value of the current liabilities is taken to be equal to the regulatory value. The value of any tax provisions resulting from the company's tax computation is included here.

12. DERIVATIVES

On the valuation date, the fund held futures contracts as described in the table below. A negative number of units indicates that a short position is held.

Growth Fund

Index	Units	Price on the valuation date	Settlement Price	Unit Multiple for Settlement	Settlement Date
S&P 500	(62)	10,648 GBP	10,577 GBP	10	March 2010
Dow Jones	1,127	2,346 GBP	2,274 GBP	1.0	March 2010
Hang-Seng	13	699 GBP	674 GBP	10	January 2010
FTSE 100 Dividend Yield	9,606	171 GBP	154 GBP	10	December 2010
FTSE 100	2,059	5,362 GBP	5,268 GBP	10	March 2010
SPI 200	(108)	3,783 GBP	3,625 GBP	10	March 2010
TOPIX	(189)	40 GBP	40 GBP	10	March 2010

Euro Fund

Index	Units	Price on the valuation date	Settlement Price	Unit Multiple for Settlement	Settlement Date
S&P 500	(3)	13,489 EUR	13,398 EUR	10	March 2010
Dow Jones	(43)	2,972 EUR	2,883 EUR	10	March 2010
FTSE 100	23	6,792 EUR	6,673 EUR	10	March 2010
SPI 200	(9)	4,792 EUR	4,592 EUR	10	March 2010
TOPIX	(4)	51 EUR	50 EUR	10	March 2010

Matched Fund

Index	Units	Price on the valuation	Settlement Price	Unit Multiple	Settlement Date
		date		for Settlement	
S&P 500	(18)	10,648 GBP	10,575 GBP	10	March 2010
Dow Jones	(173)	2,346 GBP	2,263 GBP	10	March 2010
Hang Seng	(6)	699 GBP	694 GBP	10	January 2010
FTSE 100	(725)	5,362 GBP	5,268 GBP	10	March 2010
SPI 200	(15)	3,783 GBP	3,592 GBP	10	March 2010
TOPIX	(41)	40 GBP	39 GBP	10	March 2010

13. ANALYSIS OF WORKING CAPITAL

The movement in working capital over the twelve months to the valuation date is shown in the following table:

	£m
Opening working capital	0.0
Write back planned benefit enhancements to zeroise working capital	128.5
Revised opening working capital	128.5
Opening adjustments (including provisions)	3.1
Restated opening working capital	131.6
Investment return on working capital	38.3
Mismatch profits and losses	44.3
Assumption changes	
- Non-economic	(7.2)
- Economic	(14.3)
- Policyholder actions	(12.9)
Impact of new business	0.0
Other variances	
- Retrospective changes to asset shares	2.0
- Unexplained	31.7
Closing working capital before zeroisation	213.6
Planned benefit enhancements to zeroise working capital	(213.6)
Closing working capital	0.0

The following table shows a breakdown of the liabilities show on line 47 Form 19 at the start and end of the year:

£m	Current	Previous
	Valuation	Valuation
Mortgage Endowment Review	4.5	6.1
Pensions Mis-Selling	18.1	18.5
Costs Falling Outside MSAs	1.0	0.7
TCF Reserves	0.6	0.2
Pension Scheme	27.8	0.0
Stakeholder Pension Expenses*	0.1	0.1
Data*	5.1	7.5
Litigation*	6.1	11.3
VAT	5.4	0.0
Solvency II	0.9	0.0
Strachan Policy Review	0.2	0.0
SERPS*	0.0	1.0
UWP Expenses less Charges Plus Shareholder Transfers	(19.3)	(14.3)
Tax on Shareholder Transfers Plus Tax on Shareholders's Share of Estate	67.0	51.7
Century Shareholder Transfers	4.0	5.0
Compensation for BAM Investment Expense	3.0	3.0
Other	0.0	0.0
Total	124.6	90.7

^{*} Indicates that at the previous valuation these liabilities were allowed for by increasing the With-Profits Benefits Reserve as shown in Line 31 of Form 19.

The following table shows a breakdown of the liabilities show on line 51 Form 19 at the start and end of the year:

£m	Current Valuation	Previous Valuation
Regulatory current liabilities	377.0	282.3
Total	377.0	282.3

14. OPTIONAL DISCLOSURE

None made.

PHOENIX WITH-PROFITS FUND

2. ASSETS

(1) Economic Assumptions For Valuing Non-Profit Business

The economic assumptions used to calculate the value of future profits on non-profit products are as follows:

	Current Valuation	Previous Valuation
Gross Investment return	See below	See below
Risk discount rate	See below	See below
RPI Inflation	3.58%	2.54%
Expense inflation	7.38%	6.34%

The value of future profits on non-profit contracts was calculated by assuming risk free rates of investment return and discount rates. These were based on a zero coupon gilt yield curve plus 10 basis points as at the valuation date.

Earned rates of return were assumed to be annual forward yields derived from the curve, net of tax and investment expenses.

Discount rates used were spot yields taken from the curve, net of tax and investment expenses.

The risk free yields (gilt yield curve plus 10 basis points) were:

	Risk Free Rate				
Term (years)	Current Valuation	Previous Valuation			
1	0.97%	1.22%			
2	1.60%	1.87%			
3	2.19%	2.31%			
4	2.70% .	2.63%			
5	3.13%	2.87%			
6	3.47%	3.06%			
7	3.75%	3.22%			
8	3.99%	3.35%			
9	4.18%	3.47%			
10	4.35%	3.58%			
12	4.60%	3.81%			
15	4.80%	4.13%			
20	4.86%	4.34%			
25	4.79%	4.08%			

Allowance has been made under INSPRU 1.3.39G for the illiquid nature of a proportion of the assets (namely the corporate bonds) backing the immediate non-profit annuities within the Fund.

(2) Amount Determined Under INSPRU 1.3.33(2)(R)

Not applicable

(3) Valuation Of Contracts Written Outside The Fund

Not applicable

(4) Different Sets Of Assumptions

Not applicable

(5) De Minimis Limit

Not applicable – the assumptions in (1) relate to all non-profit business within the With-Profits Fund.

3. WITH-PROFITS BENEFITS RESERVE LIABILITIES

(1) Calculation Of With-Profits Benefits Reserve

Product Type	Method	With-profits benefits reserve £m	Future policy related liabilities £m
With-profits – Whole Life	Prospective	113	16
With-profits – Other Life	Retrospective	1,681	236
With-profits – Pensions (Regular and Single Premium)	Retrospective	270	92
With-profits - Pensions (Paid-Up)	Prospective	260	88
UWP Life (including Whole Life With-Profits Bond)	Retrospective	524	96
UWP Pensions	Retrospective	601	128
Other		14	
Total		3,463	656
Form 19 Line 31		3,463	
Form 19 Line 49			656

In the table above, the future policy related liabilities for with-profits life business and with-profits pensions business have been split in proportion to the with-profits benefits reserves.

(2) Correspondence With Form 19

Not applicable

(3) With-Profits Benefits Reserves Below De Minimis Limit

The amount categorised as "Other" above falls within the de minimis limit.

(4) Types Of Products

The level of disclosure in the table above corresponds to material groupings of contracts offering significant variances in policyholder benefits. For example, unitised with-profits business is separated from conventional with-profits business.

4. WITH-PROFITS BENEFITS RESERVE – RETROSPECTIVE METHOD

(1) Retrospective Methods

- (a) All contracts have been calculated on an individual policy basis. Whilst the asset shares have been calculated using individual data in all cases, the method used for unitised with-profits (including Whole Life With-Profits Bond) has been the application, to the individual data, of a factor (the ratio of asset share to face value of units) which has been calculated by reference to grouped / sample data. This is consistent with the way the business is operated in practice
- (b) No contracts have been valued on a grouped basis.
- (c) Not applicable as no contracts have been valued on a grouped basis.

(2) Significant Changes To Valuation Method

- (a) There have been no significant changes in the method of calculating the withprofits benefits reserve.
- (b) No policies were valued using approaches more approximate than used for the previous valuation.

(3) Expense Allocation

- (a) The previous expense investigation was carried out in the fourth quarter of the current financial year.
- (b) Expense investigations are carried out annually.

(c)

	Item	£m
(i)	Initial Expenses	Nil
(ii)	Maintenance Expenses	10.1
(iii)	Investment Expenses	4.5
(iv)	Method	Average expense charge deducted
(iv)	Expenses charged other than to with- profits benefits reserve	13.3

Since the company is closed to new business (apart from contractual increments etc.), there are no material acquisition expenses.

Investment expenses were deducted from the with-profits benefits reserve at a rate of 0.125% p.a.

(4) Significant Charges

The charges deducted from the with-profits benefits reserve in the year to the valuation date and the preceding year were:

	Current Valuation	Previous Valuation
	£m	£m
Charges for guarantees and smoothing	4.0	4.0
Net losses on non-profit business	(0.7)	4.2
Proportion of up-front outsourcing costs attributable to the period	0.0	0.0
Write-off of initial spreads on derivative contracts	0.0	0.3

(5) Charges For Non-Insurance Risk

Not applicable

(6) Ratio Of Claims To Reserve

Terminal bonus rates are set in advance for conventional with-profits policies. The terminal bonus rate is set based on assumptions about future investment returns. Terminal bonus rates on maturing endowment life policies and pension policies vesting at the intended retirement date were set to give the following percentages of the with-profits benefits reserve plus any past miscellaneous surplus less any miscellaneous deficit attributed to the with-profits benefits reserve, for the following specimen products and terms:

	Endowment Policies	Regular Premium Personal Retirement Plan	Single Premium Personal Retirement Plan	Regular Premium Retirement Plan	Single Premium Retirement Plan
1/1/2007 to 30/4/2007					
10 year term	100	100	108	100	118
15 year term	100	100	100	102	100
20 year term	100	100	102	100	106
25 year term	101	100	104	102	109
1/5/2007 to 31/8/2007			- Miliona is		
10 year term	100	100	113	100	123
15 year term	100	100	100	100	100
20 year term	100	100	100	100	103
25 year term	100	100	105	100	109
1/9/2007 to 31/12/2007	7	Administration of the second o	With market visit		
10 year term	100	100	118	100	129
15 year term	100	100	100	100	100
20 year term	100	100	100	100	100
25 year term	100	100	106	100	112

	Endowment Policies	Regular Premium Personal Retirement Plan	Single Premium Personal Retirement Plan	Regular Premium Retirement Plan	Single Premium Retirement Plan
1/1/2008 to 30/6/2008				M (100)	
10 year term	101	101	124	100	142
15 year term	100	100	108	100	112
20 year term	100	100	100	100	100
25 year term	100	101	103	100	112
1/7/2008 to 31/12/2008		, and the same of			ing the contract of the contra
10 year term	100	100	134	101	154
15 year term	100	100	116	100	125
20 year term	100	100	102	102	104
25 year term	100	104	111	102	124
1/1/2009 to 30/6/2009					
10 year term	100	100	144	103	158
15 year term	100	100	112	104	127
20 year term	100	100	107	100	108
25 year term	100	100	111	100	116
30/6/2009 to 31/12/200	9		·		
10 year term	100	100	141	100	156
15 year term	100	100	101	101	117
20 year term	100	100	100	100	100
25 year term	100	100	100	100	108

Payouts on surrenders will generally have been based on a lower percentage of the with-profits benefits reserve plus any past miscellaneous surplus less any miscellaneous deficit attributed to the with-profits benefits reserve.

Payouts on surrenders of unitised with-profits bonds have been set to the following percentages of the with-profits benefits reserve plus any past miscellaneous surplus less any miscellaneous deficit attributed to the with-profits benefits reserve but not less any exit charge:

Year	Ratio of claims to asset shares
2006	100.00%
2007	100.00%
2008	100.00%
2009	100.00%

(7) Allocated Return

The rate of investment return attributed to the with-profits benefits reserve of a policy depends on the asset mix for it. The asset mix depends on the outstanding term and the level of guarantees under the policy (see PPFM for more details).

The average rates of investment return (before tax) added are:

Product Type	Gross Investment Return
Conventional Life	12.5 %
Conventional Pensions	13.1 %
UWP Bonds	11.9 %
UWP Pensions	12.8 %
Profit Plus Fund	9.2 %

5. WITH-PROFITS BENEFITS RESERVE - PROSPECTIVE METHOD

(1) Key Assumptions

A prospective method has been used for with-profits whole life business and for paidup with-profits pensions business.

Bonus rates on with-profits whole life business and paid-up pensions contracts are the same as the bonus rates on endowments and regular premium pension contracts respectively for the same term. A bonus reserve valuation is used to determine the with-profits benefits reserve, where:

- The bonus rates are the supportable bonus rates determined from the relevant product, and
- The economic assumptions are consistent with the supportable bonus rates

The supportable bonus rates are determined using one of the sets of economic assumptions that the company uses for illustrative projections on the business. Hence, the risk free rates are not directly relevant to the calculation of the prospective with-profits benefits reserves.

The assumptions underlying this method are as follows:

With-Profits Whole Life Business

The discount rate is the same as the investment return assumption. These rates together with the assumed rate for expense inflation are consistent with the assumed supportable bonus rates.

Economic Assumptions	TOTAL CONTROL
Discount Rate p.a. (net of investment expense)	5.15%
Investment Return p.a. (net of investment expense)	5.15%
Expense Assumptions	
Investment Expense p.a.	0.10%
Per Policy Expenses p.a.	£36.94
Expense Inflation p.a.	7.20%
Bonus Assumptions	
Reversionary Bonuses	
On Basic Sum Assured	0.25%
On Accrued Bonuses	0.25%

Future terminal bonus rates vary by duration in force (at time of payment) and the actual year of payment.

Sample terminal bonus rates are as follows:

Elapsed Term in Years	2010	2015	2020	2025	2030	2035	2040	2045	2050
5	5.6%	2.9%	n/a	n/a	n/a	n/a	n/a	n/a	n/a
10	11.1%	5.8%	0.0%	n/a	n/a	n/a	n/a	n/a	n/a
15	3.1%	38.2%	44.6%	47.4%	n/a	n/a	n/a	n/a	n/a
20	18.1%	21.4%	59.7%	67.5%	69.7%	n/a	n/a	n/a	n/a
25	22.9%	36.7%	39.6%	89.3%	94.7%	94.5%	n/a	n/a	n/a
30	40.3%	47.0%	43.7%	63.3%	111.8%	115.1%	109.3%	n/a	n/a
35	88.3%	61.3%	71.0%	55.5%	90.9%	94.1%	51.9%	0.0%	n/a
40	153.6%	116.6%	78.9%	106.9%	61.5%	60.0%	190.7%	171.4%	127.3%

There are no lapses.

Paid-Up With-Profits Pensions Business

The discount rate is the same as the investment return assumption. These rates together with the assumed rate for expense inflation are consistent with the assumed supportable bonus rates.

Economic Assumptions	2020
Discount Rate p.a. (net of investment expense)	5.88%
Investment Return p.a. (net of investment expense)	5.88%
Expense Assumptions	
Investment Expense p.a.	0.13%
Per Policy Expenses p.a.	£36.94
Expense Inflation p.a.	7.20%
Bonus Assumptions	
Reversionary Bonuses	
On Basic Sum Assured	0.20%
On Accrued Bonuses	0.20%

Future terminal bonus rates vary by duration in force (at time of payment) and the actual year of payment.

Sample terminal bonus rates are as follows:

Personal Retirement Plan

Elapsed Term in Years	2010	2015	2020	2025	2030	2035	2040	2045	2050
5	11.6%	8.3%	n/a	n/a	n/a	n/a	n/a	n/a	n/a
10	14.5%	18.1%	11.0%	n/a	n/a	n/a	n/a	n/a	n/a
15	6.8%	22.8%	22.6%	12.7%	n/a	n/a	n/a	n/a	n/a
20	27.2%	22.6%	44.0%	48.6%	46.0%	n/a	n/a	n/a	n/a
25	31.6%	39.6%	39.9%	57.5%	60.2%	52.7%	n/a	n/a	n/a
30	54.0%	43.6%	57.3%	61.3%	81.0%	83.7%	74.3%	n/a	n/a
35	131.0%	74.1%	53.6%	80.5%	82.5%	95.4%	87.5%	72.9%	n/a
40	190.3%	136.7%	86.5%	65.5%	113.3%	119.1%	139.6%	138.0%	126.3%

Retirement Plan

Elapsed Term in Years	2010	2015	2020	2025	2030	2035	2040	2045	2050
5	7.3%	10.8%	n/a	n/a	n/a	n/a	n/a	n/a	n/a
10	7.5%	15.7%	17.7%	n/a	n/a	n/a	n/a	n/a	n/a
15	0.0%	13.9%	18.6%	19.9%	n/a	n/a	n/a	n/a	n/a
20	12.2%	7.5%	24.1%	29.5%	31.0%	n/a	n/a	n/a	n/a
25	30.2%	24.9%	16.7%	33.9%	38.9%	36.5%	n/a	n/a	n/a
30	59.9%	44.7%	41.6%	32.4%	49.6%	53.6%	45.5%	n/a	n/a
35	122.1%	66.5%	59.1%	56.9%	57.2%	80.2%	85.1%	84.2%	n/a
40	112.7%	127.5%	75.0%	72.2%	71.3%	76.4%	109.5%	124.6%	124.5%

There are no lapses.

(2) Different Sets Of Assumptions

Not applicable

6. COST OF GUARANTEES, OPTIONS AND SMOOTHING

(1) De Minimis Limit

Not applicable

(2) Valuation Methods For Guarantees etc.

	Cost of Guarantees & Options	Smoothing Cost	Extent of Grouping	No of Individual policies	No of model points
All Business	Stochastic model	Deterministic calculation	All business	254,950	4,788

(a) Cost of Guarantees & Options

The costs of guarantees are determined using a stochastic model, with the asset returns being generated by a proprietary model. The following items were calculated stochastically:

- (i) Guaranteed annuity option reserves
- (ii) The reserves required in addition to asset share to meet guaranteed benefits
- (iii) Future retentions at maturity where payouts of less than 100% of asset share are being targeted (this applies to the risk capital margin only)
- (iv) Future profits and losses where amounts payable upon surrender are less or more than asset share
- (v) The value of future guarantee charges deducted from asset share

The calculations were carried out using a risk neutral approach.

Early Retirements

For Personal Retirement Policies the stochastic model does not allow for lapses in the period from the earliest possible retirement age up to normal retirement date. Such contracts allow benefits to be taken, with a guaranteed annuity rate at any age after 50 (60 for some earlier series). The use of a nil lapse rate after age 50 is considered to make suitable allowance for this early retirement option. For Retirement Plans a guaranteed annuity rate is not available on early retirements.

The calculations allow for the assumed expenses of paying the annuity.

The assumption is made that policyholders elect to take a proportion of their benefits as cash where permitted.

Cost of Smoothing

The small amount of smoothing cost was determined deterministically as the excess of the projected actual payouts over the projected target payouts.

For pensions policies the smoothing cost allows for any guaranteed annuity rates that will be provided on the overpayment.

Actual payouts at the valuation date are compared with target payouts.

Where there is currently an overpayment relative to the target, the assumption is made that payouts will be cut at 4 monthly intervals, the first cut being 4 months after the valuation date. The assumption is that payouts can be cut by up to 5% at any one change and 15% over 12 months until the target is reached. Projected maturity payouts are obtained for this calculation.

- (b) (i) In the stochastic model, no projections are carried out on individual policy data.
 - (ii) All of the contracts are valued on a grouped basis. However, the values for the with-profits benefits reserve are calculated on an individual basis and added to the data file before the data is grouped.
 - (iii) For each product type separate model points are initially created for each combination of year of commencement and year of maturity. For unitised with-profits bonds the split is by commencement month.

This grouping allows for the asset mix associated with each cohort of business. It is aligned with the way in which bonus rates are declared on the business — actual terminal bonus rate calculations are based on specimen policies split out in the same way, i.e. by product type, year of commencement and year of maturity, although at quinquennial rather than annual intervals with monthly cohorts for unitised with-profits bonds.

The initial model point files outlined above are then more heavily grouped to improve the run times in the stochastic model by amalgamating some of the smaller model points that were not making a significant contribution to the overall results. In order to test that this heavier grouping did not materially affect the results, 3,000 simulations were run at both levels of grouping and the results differed by less than 1.0% for the guaranteed annuity rate less than 1.2% for non-guaranteed annuity rate reserves.

One class of group unitised with-profits pensions business representing approximately 4% of with-profits liabilities is modelled as if it was an equivalent amount of similar individual pensions business.

Guaranteed annuity option liabilities were calculated assuming that all lives are male. This approach is conservative given the mortality tables used in the valuation and the nature of the guarantees given.

(3) Significant Changes

There have been no significant changes since the previous valuation.

(4) Further Information on Stochastic Approach

(a) (i) The guarantees and options being valued using a full stochastic approach are described in paragraph 6 (2) (a) above. The following tables give an indication of the extent to which the guarantees are in or out of the money at the valuation date. The table shows the percentage of the withprofits benefits reserve (including miscellaneous profits and losses) for each product that falls within each band. The bands are defined below.

% Asset Share	Band A	Band B	Band C	Band D
Endowments & Whole Life	0.0%	0.1%	0.1%	99.8%
Direct Written Pre 1997 Bonds	0.0%	0.0%	0.0%	100.0%
Conventional Pensions	0.6%	0.3%	0.6%	98.5%
Unitised With Profit Pensions	0.0%	0.0%	18.5%	81.5%
UWPB - Strong Guarantee	58.8%	0.0%	0.0%	41.2%
– Weak Guarantee	0.0%	0.0%	0.0%	100.0%

Where:

<u></u>	
Band A	Contracts would need to earn >10% p.a. (higher for shorter terms) on the equities & property backing their asset share to meet the maturity guarantee
Band B	Contracts need to earn between 7.5% and 10% p.a. (higher for shorter terms) on the equities & property backing their asset share to meet the maturity guarantee
Band C	Contracts need to earn between 5% and 7.5% p.a. (higher for shorter terms) on the equities & property backing their asset share to meet the maturity guarantee
Band D	Contracts need to earn <5% p.a. on the equities & property backing their asset share to meet the maturity guarantee

(ii) The asset returns in the stochastic model were generated by a proprietary model licensed from Barrie & Hibbert. The asset classes modelled are UK equities, overseas equities, UK property, UK corporate bonds and UK gilts.

Interest Rate

UK gilt returns are modelled using a gilts + 10bps calibration in an Annual LIBOR Market Model. The Government Nominal Bond yield curve is a direct input into the model.

The calibration at the valuation date was as follows:

Term	Govt. + 10bp	Model	Difference (Model - Market bp)
1	0.97%	0.97%	(0)
2	1.60%	1.60%	0
3	2.19%	2.19%	0
4	2.70%	2.70%	0
5	3.13%	3.13%	0
7	3.75%	3.75%	0
10	4.35%	4.35%	0
15	4.80%	4.80%	0
20	4.86%	4.86%	0
25	4.79%	4.79%	0

The volatility within the model is calibrated to the market implied volatility for at the money swaptions (for 20 year swaps). The calibration at the valuation date is as follows:

Term	Market Implied	Model	Difference
	Volatility		(Model - Market bp)
1	20.70	23.20	250
2	19.30	20.30	100
3	17.90	18.70	80
4	16.70	17.70	100
5	15.90	17.10	120
7	14.70	16.20	150
10	14.10	15.10	100
15	14.60	13.80	(80)
20	14.40	12.70	(170)
25	14.00	11.90	(210)
30	13.00	11.30	(170)

Equities and Property

Excess returns over risk free on UK equities, overseas equities and property are modelled using separate (but correlated) lognormal models. The equity model uses a local volatility surface calibrated to market implied volatilities for a range of strikes and maturities. Volatilities are assumed to be constant beyond quoted strikes and maturities.

The split between UK and overseas equities was 69%/31%. The asset model was calibrated by reference to the implied volatility of FTSE100 options for a range of strikes (from 0.8 to 1.2) and maturities of up to 10 years. All strikes are expressed as a proportion of at-the-money.

Implied volatility data (%) at the valuation date is shown below:

Market

Term	Strike									
	0.8	0.9	1	1.1	1.2					
1	29.10	25.88	22.89	20.29	18.28					
3	28.75	26.78	24.92	23.17	21.59					
5	28.43	26.74	25.26	24.04	23.11					
10	28.67	27.57	26.57	25.65	24.83					

Model

	Strike									
Term	0.8	0.9	-1	1.1	1.2					
1	24.43	24.33	24.35	24.40	24.47					
3	28.15	27.10	26.22	25.42	24.73					
5	28.04	27.16	26.32	25.53	24.82					
10	28.00	27.36	26.79	26.29	25.83					

Beyond 10 years the estimated volatility implied by the model calibration rises as follows:

		990000000000000000000000000000000000000	Strike	2000000000	44 (1800)
Term	0.8	0.9	-1	1.1	1.2
15	28.36	27.87	27.41	27.00	26.66
20	28.69	28.29	27.93	27.61	27.33

Difference (Model – Market) %

Term	Strike									
	0.8	0.9	1	1.1	1.2					
1	(4.67)	(1.54)	1.46	4.11	6.19					
3	(0.60)	0.31	1.30	2.25	3.14					
5	(0.40)	0.42	1.06	1.49	1.71					
10	(0.67)	(0.22)	0.23	0.63	1.00					

There are no tests against market traded instruments for properties since there are no such instruments. A best estimate has therefore been used of 15% constant volatility.

Corporate bond

Corporate bond returns are modelled using the extended Jarrow-Lando-Turnbull model. This describes bond prices in terms of a real-world transition matrix, which gives the probability of a transition to each credit rating over one year. Risk neutral transition probabilities are assumed to vary stochastically. The transition matrix is consistent with best estimates based on historic data of long term transition probabilities and spread volatilities and corporate bond prices. The model was fitted to a sample of predominantly investment grade sterling corporate bonds.

The asset model uses a credit transition matrix. The fit of the model is targeted to the market spread on a 7 year A rated bond only. Credit derivatives are not used to derive market implied transition probabilities.

The following are examples of observed correlations of year 10 returns from the scenarios used (ZCB = zero coupon bond):

Phoenix With-Profits Fund

		Output Correlations @ Year 10								
	Cash	Equities	Property	Overseas	5yr Govt	15yr	5yr Corp		5yr Index	15yr
	1	e de la companya de		Equities	ZCB	Govt	ZCB	Corp		Index
		ı		2000		ZCB		ZCB	ZCB	Linked
										ZCB
Cash	1	0.09	0.18	(0.03)	0.64	(0.59)	0.38	(0.52)	0.74	0.34
Equities		1	0.11	0.30	0.16	0.01	0.53	0.22	0.12	0.14
Property		-	1	0.10	0.11	(0.11)	0.11	(0.07)	0.19	0.11
Overseas equities			•	1	0.13	0.13	0.21	0.18	0.09	0.20
5yr Govt ZCB				R	1	0.07	0.65	0.09	0.56	0.33
15yr Govt ZCB					•	1	0.08	0.90	(0.40)	(0.06)
5yr Corp ZCB						•	1	0.38	0.35	0.25
15yr Corp ZCB							En	1	(0.34)	(0.01)
5yr Index Linked ZCB								1	1	0.78
15yr Index Linked ZCB									L	1

Phoenix With-Profits Fund

(iii) The table below is based on 3,000 scenarios:

	Asset type (all UK assets)	K=0.75				K=1				K=1.5			
٤		5	15	25	35	5	15	25	35	5	15	25	35
<u>-</u>	Annualised compound equivalent of the risk	3.12%	4.80%	4.79%	4.60% ×	×	×	×	×	×	×	×	×
	free rate assumed for the period. (to two							-	•				
	decimal places)												
-	Risk-free zero coupon bond	857,399	494,768	310,751	207,350	×	×	×	X	×	×	×	×
2	FTSE All Share Index (p=1)	115,997	259,896	347,501	422,101	234,578	409,371	518,289	605,674	584,382	769,047	902,447	1,010,199
3	FTSE All Share Index (p=0.8)	107,303	208,407	251,894	285,068	218,356	329,488	376,874	410,892	547,474	621,748	980,099	684,055
4	Property (p=1)	78,503	192,718	282,566	357,298	201,406	348,062	456,484	545,100	229,695	726,640	852,858	957,419
വ	Property (p=0.8)	70,130	141,832	188,306	222,458	184,057	264,329	312,197	345,996	531,973	571,834	603,009	625,311
9	15 year risk free zero coupon bond (p=1)	20,328	17,887	16,387	28,812	93,975	80,166	96,544	143,197	900'009	499,255	511,222	544,553
7	15 year risk free zero coupon bond (p=0.8)	17,026	8,950	4,621	4,339	80,719	38,884	23,302	25,086	455,293	308,599	232,868	212,906
8	15 year risk free bonds (p=1)	23,446	28,510	34,326	52,716	103,426	107,029	125,459	165,530	498,503	495,382	513,725	553,152
6	15 year risk free bonds (p=0.8)	19,722	14,697	10,761	13,565	89,777	57,326	45,046	48,064	424,674	314,701	249,990	230,767
0	Portfolio of 65% FTSE All Share and 35%	67,613	182,410	261,092	332,769	177,675	323,243	423,197	509,105	544,263	680,247	799,968	902,519
	property (p=1)												
11	Portfolio of 65% FTSE All Share and 35%	60,595	136,353	174,966	207,327	161,614	247,079	288,520	322,234	505,299	531,735	561,133	585,029
	property (p=0.8)			ohuu en									
2	Portfolio of 65% equity and 35% 15 year risk free zero coupon bonds (b=1)	58,183	157,745	224,492	289,783	162,075	287,174	372,137	452,502	531,079	633,396	734,452	826,744
13	Portfolio of 65% equity and 35% 15 year	51.559	115.620	147.693	174.809	146.675	216.401	249,044	280,099	491,021	486,564	502,620	523,342
	risk free zero coupon bonds (p=0.8)	•											
14	Portfolio of 40% equity, 15% property,	27,538	. 88,790	140,627	195,222	119,120	206,053	275,212	344,938	510,704	561,725	637,195	718,222
	22.5% 15 year risk free zero coupon bonds						<u> </u>	, , , , , , , , , , , , , , , , , , , 					
	and 22.5% 15 year corporate bonds (p=1)												
5	Portfolio of 40% equity, 15% property,	22,982	56,267	78,332	99,378	104,218	139,989	161,738	186,844	468,350	407,286	402,741	413,652
	22.5% 15 year risk free zero coupon bonds			*									-
	and 22.5% 15 year corporate bonds			å ty poo									
	(p=0.8)			eserciano.									
												1	
			L=15	5			L=20	02			ן כ	L=25	
16	Receiver sw aptions	4.95%	6.42%	5.47%	3.96%	6.39%	7.89%	6.53%	4.66%	7.70%	9.04%	7.32%	5.13%

(iv) UK initial equity yield: 3.44% UK initial property rental yield: 4.30%

- (v) Not applicable there are no significant territories other than the UK.
- (vi) The following table shows the outstanding guarantees analysed by term. In addition, the guarantees in column B have a guaranteed annuity rate at vesting at various strike rates as shown below.

Term to maturity (years)	Guaranteed Benefit (Policies with no GAR) £m	Guaranteed Benefit (Policies with GAR) £m	No MVA Guarantee £m
	Α	В	C
1-5	1191	154	336
6-10	458	149	0
11-15	403	113	0
16-20	287	52	0
21-25	237	27	.0
26-30	89	6	0

Specimen cash option rates per £100 p.a. pension for annuities guaranteed five years and payable monthly in advance:

		Cash (Option £
	Retirement Age	Male	Female
Retirement Plan	60	1,000	1,100
	65	900	1,000
	70	800	900

Specimen minimum rates per £1,000 cash for annuities with no guarantee period and payable yearly in arrears:

		Annuity £ p.a.		
	Retirement Age	Male	Female	
Personal	60	77.24	67.77	
Retirement Plan	65	89.98	76.79	
	70	108.28	89.64	
	75	128.88	104.03	

Calibration of the asset model to market data is shown, where available, in paragraph 6 (4) (a) (ii) above.

(vii) Comprehensive tests are carried out on the output produced by the Barrie & Hibbert asset model as follows:

For UK and Overseas equities and for UK property the average (over the simulated scenarios) of the discounted present values of projected asset values (with income reinvested) have been verified to be acceptably close to unity – the martingale property.

The same test has been undertaken for 15-year zero-coupon gilts and for 4 classes of zero-coupon corporate bonds with terms of 1, 5, 10, 15, 20, 25 and 30 years. Departures from unity in the average discounted present values have not had a significant impact on the valuation result.

Zero coupon bond yields calculated from the model cash output have been verified to match yields calculated from input Government spot rates and initial spot rates output from the model at time zero within an acceptable error margin.

For UK equity options verification has been made, within acceptable limits, that the option prices calculated from the model output and converted into implied volatilities using the Black-Scholes formula reproduce the expected volatility surface.

Verification has also been made, within acceptable limits, that implied volatilities calculated from the simulation model output reproduce the market volatility term structure for 20 year at the money swaptions.

(viii) The assets and liabilities have been computed using 3,000 (1,500 antithetic pairs of) simulated scenarios. This results in standard errors in the calculated yield curve of less than 1 basis point for terms 1- 30 years.

For a 10-year at the money (based on the forward price) UK equity put option at a strike of 1.0, the standard error of the estimated option price represents 3.6% of its calculated value.

Similarly, for a range of swaptions with maturities between 5 and 25 years on underlying 20 year swaps the standard errors in the calculated prices represent, typically, 1.3% of these prices.

- (b) Not applicable
- (c) Not applicable

(5) Management Actions

- (a) No scenario specific management actions are assumed to take place in the stochastic model. However the model allows for the investment strategy as follows:
 - Sales of property and equity during the next valuation year to bring the actual asset mix into balance with the strategic target.
 - b) Close matching by outstanding term of fixed interest assets to liabilities by means of a swap overlay.
 - c) An internal delta-hedge for equities and property which has an effect in the stress scenario.
 - d) Reduction in equity/property backing ratios as policies near their guarantee date for all products except the weak guarantee Unitised With-Profits Bonds.
 - e) Policy classes are assumed not to move from the guarantee-related asset mix band to which they are allocated at the valuation date, although in practice some changes will occur in more extreme stochastic scenarios.

Existing market value adjustment policy will continue to be applied, i.e. market value adjustments are allowed for on surrender of unitised with-profits business, but with a "floor" based on a discounted value of the no market value adjustment guarantee.

Reversionary bonus rates will remain at current levels in future years.

Future miscellaneous surplus will be nil.

Charges made to asset shares for guarantees will continue in the future at the levels for the next valuation year.

- (b) The following table shows the equity backing ratio at the valuation date and best estimate equity backing ratio in 5 years and 10 years time for the following scenarios, together with the reversionary bonus rates for the accumulating with-profits business:
 - (i) The investment return on all assets over the relevant period is based on the forward rates derived from the risk-free interest rate curve as calibrated to at the valuation date:
 - (ii) As for (i) but with the risk-free interest rate curve increased across the period by 17.5% of the long-term gilt yield;
 - (iii) As for (i) but with the risk-free interest rate curve decreased across the period by 17.5% of the long-term gilt yield;

		Current	Current	Current
		Valuation Date		
		valuation Date	1	Valuation Date
			Plus 5 years	Plus 10 years
% UK & Overseas Equities	i	32%	36%	35%
	ii	Unchanged	Unchanged	Unchanged
. 77	iii	Unchanged	Unchanged	Unchanged
Reversionary bonus rates on ac	cumulat	ting with-profits	, (, , , , , , , , , , , , , , , , , ,	
Unitised With-Profits Bond	i	Strong	Strong	Strong
		Guarantee .	Guarantee	Guarantee
		0.5%	0.5%	0.5%
		Weak	Weak	Weak
		Guarantee	Guarantee	Guarantee
		1%	1%	1%
	ii	Nil	Nil	Nil
	iii	Nil	Nil	Nil
Unitised With-Profits Pensions	ı	1%	1%	1%
	ii	Nii	Nil	Nil
	iii	Nil	Nil	Nil
PPF	i	0.1%	0.1%	0.1%
	ii	Nil	Nil	Nil
	iii	Nil	Nil	Nil

Derivative contracts do not have any significant impact on the figures shown.

(6) Persistency Assumptions

The surrender and paid-up rates are:

Product		Average surrender / paid-up rate for the policy years			
		1-5	6-10	11-15	16-20
CWP savings endowment	Surrender	10.40%	11.80%	5.00%	5.00%
CWP target cash endowment	Surrender	10.40%	11.80%	5.00%	5.00%
UWP bond	Surrender	3.60%	10.40%	10.00%	10.00%
UWP bond	Automatic	see	see	see	see
	withdrawals	below	below	below	below
CWP pension regular premium	PUP	3.00%	3.00%	3.00%	3.00%
CWP pension regular premium	Surrender	4.00%	4.00%	4.00%	4.00%
CWP pension single premium	Surrender	7.00%	7.00%	7.00%	7.00%
UWP individual pension regular premium	PUP	5.00%	5.00%	5.00%	5.00%
UWP individual pension regular premium	Surrender	5.00%	6.60%	9.00%	9.00%
UWP individual pension single premium	Surrender	2.00%	2.00%	2.00%	2.00%

For Personal Retirement Plans the assumption is that there will be no surrenders after age 50 on the grounds that they would then be able to take their retirement benefits.

Policies that are taking automatic withdrawals are assumed to continue to do so at the current rates.

Current and future paid-up policies are assumed to lapse at the same rate as premium paying policies.

For Personal Retirement Plans lives under age 65 at the valuation date are assumed to retire at age 65; otherwise they are assumed to retire at 75 (or the maximum retirement age under the contract, if earlier).

There is no other allowance for early retirements.

Take up Rates of Guaranteed Annuity Options

The assumed proportion of cash in each scenario is dynamic according to the following formula:

$$Cash = Min(L, (Max(10\%, (CxF)))x(1-Min(t,T)/SxT))$$

where

$$F = R^{k(j)x100} x R^{(i-j-k(j))x100x(ABS(i-j))>semirange)}$$

and

$$k(j) = i - Min(Max(j,i-semirange),i+semirange)$$

where

L	Overall limit on cash proportion - set it to 1.25 x C
C	Current experience assumption
F	Overall reduction factor comprising R and R' components (see below) to reflect decline in cash as interest rates decline and guaranteed annuity rates become more valuable.
R	Reduction factor that applies outside of central "plateau" range (R=2/3)
R'	Reduction factor that applies within central "plateau" range (R'=0.9)
k(j)	Interim calculation variable depending on i,j, and semirange
semirange	Central "plateau" assumed to apply over a range from (i-semirange) to (i + semirange). Set at 1%.
t	Time in years from the valuation date
T	Period over which a decline in cash is recognised due to longevity making guaranteed annuity rates more valuable (T=30)
S	Amount of longevity decline (S=3 so that cash declines by 1/3 over T years)
i	Average 20 year interest rate over the period used to set the current experience assumption. This is 4.52% at the valuation date
j	20 year gilt rate at maturity for the particular scenario

Annuitant Mortality

Deferred pension contracts (post vesting) include guaranteed annuity options.

The mortality assumption for annuities in possession arising from the exercising of guaranteed annuity options is 5% higher than that described in Appendix 9.4, paragraph 4 (4).

(7) Policyholders' Actions

Modelled policyholder behaviour is static, i.e. it does not vary between the different stochastic simulations apart from guaranteed annuity rate take up rates, which vary according to the formula in paragraph 6 (6) above.

7. FINANCING COSTS

The fund has no financing costs as at the valuation date.

8. OTHER LONG-TERM INSURANCE LIABILITIES

No amounts have been included in Line 46 of Form 19. The amount shown in Line 47 of Form 19 is made up as follows:

	£m
Mortgage Endowment Compensation Reserve	4.6
Additional Guaranteed Annuity Option Reserve	1.0
Future projects and issues	22.7
GAO Project - Correcting errors in payments	7.9
Other *	15.1
Total	51.2

^{*} Consisting of: UISL VAT reserve, a reserve for the costs falling outside the Management Services Agreement, a redundancy reserve, TCF reserve, a Solvency II

provisions, a provision for Project Oscar manual controls, a reserve for the Strachan product review project and a reserve for other special costs.

9. REALISTIC CURRENT LIABILITIES

The reconciliation of the realistic current liabilities to the regulatory current liabilities is:

	£m
Regulatory current liabilities	386.4
+ Future tax adjustment	(16.6)
+ Additional tax on shareholder transfers	5.7
Realistic current liabilities	375.6

(a) Future Tax Adjustment

The realistic balance sheet calculations assume that tax will be payable in relation to the realistic proportion of life business. In reality the tax is calculated by reference to statutory liabilities. An approximate adjustment is made to allow for the fact that future tax will be based on the statutory life proportion rather than the realistic life proportion.

This adjustment as at the valuation date amounted to an asset of £16.6m.

(b) Additional Tax on Shareholder Transfers

An allowance is made for the additional tax arising on transfers to shareholders in respect of life business. This is calculated as a percentage of the present value of future transfers to shareholders in respect of life business.

The liability as at the valuation date amounted to £5.7m.

10. RISK CAPITAL MARGIN

- (a) The risk capital margin is nil.
 - (i) The market risk scenario assumes that equities fall by 20% and real estate falls by 12.5%. The equity fall and the property fall were the more onerous scenarios.
 - (ii) The nominal change in yields for fixed interest securities for the purpose of the market risk scenario is 0.78%. This is consistent with a rise or fall of 17.5% in the long term gilt yield. A rise in yields is the more onerous scenario.
 - (iii) The average change in spread is 2.03%. Changes in market values are:
 - (a) (7.27)% for bonds
 - (b) Not applicable
 - (c) Not applicable
 - (d) Not applicable
 - (e) 7% for swaps.

- (iv) The average change in persistency experience is a 32.5% reduction in future lapse and paid-up rates. The overall percentage change in the realistic value of liabilities from applying the persistency stress is 0.07%.
- (v) The change in asset value in (iii) is materially independent of the change in liability values in (iv).
- (b) (i) In the stress scenarios the following additional assumptions are made:

Reversionary bonus rates will be reduced to nil

The future projects and issues reserve will be increased from £22.7m to £29.2m.

The impact of the combined stress will be partially offset by increasing guarantee charges. An introduction of an exit charge of 1% of asset share on terminations is assumed.

Furthermore, it is assumed that the planned benefit enhancements will be reduced by £124.0m, resulting in £nil working capital under the stressed conditions.

These actions are consistent with the PPFM and investment strategy.

- (ii) The effect on the risk capital margin of assuming reduced reversionary bonuses is a reduction of £35.0m and of introducing a 1% exit charge is a reduction of £16.5m.
- (iii) No changes would apply to the table in paragraph 6 (5) (b) if the management actions were taken
- (iv) The requirements of INSPRU 1.3.188(R) would be met if the actions described in paragraph 10 (b) (i) were integrated into the projection of assets and liabilities.

(c)

(i) The risk capital margin is covered by the assets of the long-term fund and the value of future profits on non-profit business.

(ii) The scheme for the funds merger as at 31 December 2008 includes a provision that in the event that the value of the assets of any withprofits fund falls below the regulatory minimum support will be provided to that fund by way of a loan arrangement from the Non-Profit Fund or the Shareholders Fund to the extent that the Board determines there are assets in those funds available to make such a loan.

11. TAX

Tax on assets backing the with-profits benefits reserve for BLAGAB business is charged to those asset shares approximately and allowance is made for relief on expenses.

Tax on any future policy related liabilities for BLAGAB business is allowed for in determining those liabilities.

An approximate adjustment is made to allow for any differences between the tax calculated as described and the tax expected on a corporate basis. The adjustment is calculated within the stochastic model.

12. DERIVATIVES

At the valuation date the fund had a number of significant positions in interest rate swaps, swaptions and spreadlocks.

The interest rate swaps are held in connection with the fixed interest portfolio and are used to improve the matching between the assets and the liabilities against changes in the yield curve for the long-term fund as a whole.

The interest rate swaptions are held in respect of the guaranteed annuity rate liabilities. Receiver swaptions are held to cover part of the guaranteed annuity rate liability where the with-profits benefits reserve is invested in equities or property. Payer swaptions are held where the with-profits benefits reserve is invested in fixed interest assets and the expected annuity benefit arising is matched by fixed interest investments. The quantum of swaptions held is based on a prudent assessment of future guaranteed annuity rate liabilities taking account of expected future lapse rates and take up rates. The duration and tenor of the swaptions corresponds broadly with the liabilities. The strike rates for the receiver swaptions are 5%. The strike rates for the payer swaptions vary according to the rate at which it is expected the cash option will become more valuable than the guaranteed annuity rate allowing for future improvements in mortality.

The spreadlocks are held in order to hedge against market risk.

The swaps, swaptions and spreadlocks are wholly sterling denominated. As at the valuation date, the swaps had a value of $\mathfrak{L}(54.3)$ m, the swaptions had a value of $\mathfrak{L}(54.3)$ m and the spreadlocks had a value of $\mathfrak{L}(54.3)$ m.

The counterparties to the swaps, swaptions and spreadlocks are approved credit institutions. Variation margin (collateral) arrangements are in place under both the swaps and swaptions. In addition the swaps provide for initial margins by both parties.

13. ANALYSIS OF WORKING CAPITAL

The movement in working capital over the twelve months to the valuation date is shown in the following table.

	£m
Opening working capital	0.0
Write back planned benefit enhancements to zeroise working capital	130.4
Revised opening working capital	130.4
Opening adjustments	34.0
Restated opening working capital	164.4
Investment return on working capital	6.3
Mismatch profits and losses	217.1
Assumption changes	
- Non-economic	12.5
- Economic	(11.0)
- Policyholder actions	3.0
Impact of new business	0.0
Other Variances	<u> </u>
- Non-economic	36.3
- New provisions	6.6
- Unexplained	8.8
Closing working capital before zeroisation	443.8
Planned benefit enhancements to zeroise working capital	(443.8)
Closing working capital	0.0

The following table shows a breakdown of the liabilities shown on line 47 Form 19 at the start and end of the year:

£m	Current Valuation	Previous Valuation
Mortgage Endowment Compensation Reserve	4.6	5.0
Additional Guaranteed Annuity Option Reserve	1.0	2.6
Future projects and issues	22.7	26.2
GAO Project - Correcting errors in payments	7.9	15.0
Other	15.1	7.9
Total	51.2	56.7

The following table shows a breakdown of the liabilities shown on line 51 Form 19 at the start and end of the year:

£m	Current Valuation	Previous Valuation
Accounting Liabilities	386.4	546.6
Future Tax Profit	(16.6)	(19.2)
Additional Tax on Shareholders' Transfers	5.7	5.0
Total	375.6	532.4

14. OPTIONAL DISCLOSURE

None made.

90% WITH-PROFITS FUND

2. ASSETS

(1) Economic Assumptions For Valuing Non-Profit Business

The economic assumptions used to calculate the value of future profits on non-profit business are as follows:

	Current Valuation	Previous Valuation	
Fixed Interest Investment return	4.55%	3.84%	
Risk discount rate	4.55%	3.84%	
RPI Inflation	3.58%	2.54%	
Expense inflation	5.98 (Swiss) /5.58%(Bula)	3.94%	

(2) Amount Determined Under INSPRU 1.3.33(2)(R)

Not applicable

(3) Valuation Of Contracts Written Outside The Fund

Not applicable

(4) Different Sets Of Assumptions

Not applicable

(5) De Minimis Limit

Not applicable – the assumptions in (1) relate to all non-profit business within the With-Profits Fund.

3. WITH-PROFITS BENEFITS RESERVE LIABILITIES

(1) Calculation Of With-Profits Benefits Reserve

Product Type	Method	With-profits benefits reserve	Future policy related liabilities
		£m	£m
SLUK Industrial Branch business conventional WL and EA	Prospective	21.2	2.6
SLUK Ordinary Branch business conventional WL and EA	Retrospective	56.7	5.4
SLUK Ordinary Branch business unitised pensions	Retrospective	40.6	5.1
BULA conventional life business	Retrospective	41.3	4.7
BULA pension contracts with guaranteed annuity rate option	Retrospective	1.4	1.8
Total		140.1	17.1
Form 19 Line 31		140.1	
Form 19 Line 49			17.1

(2) Correspondence With Form 19

The above totals reconcile to lines 31 and 49 of Form 19.

(3) With-Profits Benefits Reserves Below De Minimis Limit

Not applicable as all products have been disclosed.

(4) Types Of Products

The level of disclosure in the table above corresponds to material groupings of contracts offering significant variances in policyholder benefits. For example, contracts with and without guaranteed annuity options are identified separately.

4. WITH-PROFITS BENEFITS RESERVE – RETROSPECTIVE METHOD

(1) Retrospective Methods

- (a) All contracts have been calculated on an individual policy basis.
- (b) No contracts have been valued on a grouped basis.
- (c) Not applicable as no contracts have been valued on a grouped basis.

(2) Significant Changes To Valuation Method

(a) There have been no significant changes in the method of calculating the withprofits benefits reserve. (b) No policies were valued using approaches more approximate than used for the previous valuation.

(3) Expense Allocation

For each with-profits fund, the basis of allocating expenses to that fund during the financial year in question is described in note 4006 to Form 40.

The expenses charged to the with-profits fund are fixed amounts per policy inforce, inflating each year and / or an amount per premium received plus investment expenses. Additional expenses may be charged for any additional project or enhanced services provided to the with-profits fund.

- (a) The previous expense investigation was carried out in respect of the financial year ended 31 December 2008.
- (b) Expense investigations are carried out in respect of each financial year. Interim investigations are carried out during financial years for use in interim valuations.
- (c) The expenses charged to the with-profits benefits reserve are the amounts per policy and / or per premium and for some business the investment expenses.

The expenses charged to with-profits fund in addition to those allocated to the with-profits benefits reserve comprise:

- additional project and one-off costs not charged to asset shares;
- expenses in respect of with-profits policies that were in force at the previous financial year end and no longer in force at the current financial year end;
- expenses in respect of non-profit policies;
- investment expenses not charged to asset shares:
- prior year adjustments; and
- balance between aggregation of the amounts charged to assets shares and the items identified above and the aggregate amount allocated to the fund.

The expenses allocated to the with-profits benefits reserve and the residual balance charged to the with-profits fund during the financial year were:

	Item		£'000
(i)	expenses charge reserve	d to with-profits benefits	379
(ii)	other expenses	other project costs	232
	charged to the fund	exiting with-profits policies	39
		non-profit policies	183
		other investment expenses	91
		prior year adjustment	0
		balance	29
(iii)	Total expenses		953

(4) Significant Charges

Charges for cost of guarantees, cost of capital are not charged to with-profits benefit reserves.

(5) Charges For Non-Insurance Risk

No charges were deducted from the with-profits funds for non-insurance risk.

(6) Ratio Of Claims To Reserves

The average percentage of the ratio of total claims paid on with-profits insurance contracts compared to the sum of the with-profits benefits reserve for those claims plus any past miscellaneous surplus attributed to the with-profits benefits reserve less any miscellaneous deficit attributed to the with profits benefits reserves in respect of those claims, for the three preceding financial years is:

Former Bula (ex ACI) business

	Average total with-profits claims ratio for financial year						
-	2009	2008	2007	Overall			
	101%	104%	101%	102%			

(7) Allocated Return

The investment return before tax and expenses allocated to the with- profits benefit reserve in respect of the financial year in question is:

for former Bula (ex ACI) business: 11.97%

5. WITH-PROFITS BENEFITS RESERVE - PROSPECTIVE METHOD

(1) Key Assumptions

A prospective method has been used for ex SLUK Industrial branch with-profits whole life business.

Bonus rates on with-profits whole life business are the same as the bonus rates on endowments for the same term. A bonus reserve valuation is used to determine the with-profits benefits reserve, where:

- The bonus rates are the supportable bonus rates determined from the relevant product, and
- The economic assumptions are consistent with the supportable bonus rates

The assumptions underlying this method are as follows:

	Ex SLUK IB excl Pioneer Mutual and Stamford	Pioneer Mutual with cash bonuses	Stamford with cash bonuses
Discount Rate p.a.	6.15%	6.15%	6.15%
Investment Return p.a.			
Fixed Interest	2.46%	2.46%	2.46%
Equities	2.46%	2.46%	2.46%
Expense Assumptions			20140
Investment Expense p.a.	0.10%	0.10%	0.10%
Per policy Expenses		Accessed to the second	
Per Annum	£0.41	£0.41	£0.41
Per Premium	30.00%	30.00%	30.00%
Expense Inflation p.a.	5.98 (Swiss)	5.98 (Swiss)	5.98 (Swiss)
	/5.58%(Bula)	/5.58%(Bula)	/5.58%(Bula)
Bonus Assumptions			State of the state
Reversionary Bonuses			
On Basic Sum Assured	4.50%	9.00%	2.25%

Future terminal bonus rates vary by duration in force (at time of payment) and the actual year of payment.

There are no lapses.

(2) Different Sets Of Assumptions

Not applicable

6. COSTS OF GUARANTEES, OPTIONS AND SMOOTHING

(1) De Minimis Limit

Not applicable

(2) Valuation Method For Guarantees etc.

	Cost of Guarantees & Options	Smoothing Cost	Extent of Grouping	No of Individual policies	No of model points
SLUK UWP	Variation of Black-Scholes formula	See below	All business in this group	8,274	8,274
All other business	Stochastic model	See below	All business in this group	129,856	5,811

(a) Cost of Guarantees & Options

The costs of guarantees are determined using two models. The ex-SLUK UWP pension business is uses Black-Scholes formulae. All other business uses a stochastic model. The asset returns being generated by a proprietary model. The following items were calculated stochastically:

- (iii) The reserves required in addition to asset share to meet guaranteed benefits;
- (iv) Future profits where amounts payable upon surrender are less than asset share.

The calculations were carried out using a risk neutral approach.

Cost of Smoothing

There is no significant cost of smoothing and this has been taken to be zero. All business has been modelled assuming future payouts of 100% of asset share.

- (b) (i) In the stochastic model, no projections are carried out on individual policy data.
 - (ii) The model uses grouped policy data. However, the values for the withprofits benefits reserve are calculated on an individual basis and added to the data file before the data is grouped.
 - (iii) For each product type we split the data initially by bonus series. We then create separate model points for each combination of year of commencement and year of maturity

This grouping is aligned with the way in which we declare bonus rates on our business (our actual terminal bonus rate calculation are based on specimen policies split out in the same way i.e. product type, year of commencement and year of maturity although at quinquennial rather than annual intervals).

No significant attributes of the contracts should be lost with this low level of grouping.

Grouping Validations

It is impractical to attempt to validate, using the stochastic model, projections that use grouped data against projections that use individual data. Instead, comparisons are carried out using deterministic projections.

Comparison is made of the present value of key variables as well as progression of these variables over a period of up to 40 years. The comparison includes items such as asset shares, mathematical reserves, claims outgo and premium income, split by product type as necessary. Where material discrepancies arise, these may result in grouping being revisited.

(c) Guaranteed annuity option liabilities for the ex-BULA pension contracts were calculated on a prudent deterministic basis, given the low volume of these. In addition, when calculating the cost of guarantees stochastically, the initial guaranteed sum assured has been increased to reflect the presence of the guaranteed annuity option.

The stochastic model assumes compound bonus only. The majority of the ex SLUK business participates in simple bonus only so the guarantee cost is overstated. This is not significant given the small guarantee cost overall.

(3) Significant Changes

There have been no significant changes since the previous valuation.

(4) Further Information On Stochastic Approach

(a) (i) The guarantees and options being valued using a full stochastic approach are described in 6(2)(a) above.

The following table gives an indication of the extent to which the guarantees are in or out of the money at the valuation date. For the various product types the with profits benefit reserve is shown along with the guaranteed sum assured plus bonuses payable on death/maturity and the sum of the difference where the guarantees are higher.

Product type	With-profits benefit reserve (A) £m	Sum assured plus bonuses (B) £m	Sum of positive B-A	
SLUK IB	21.2	6.5	=	
SLUK OB CWP	56.7	45.9	0.3	
BULA Life	41.3	38.6	1.5	
BULA Pensions	1.4	2.6	1.3	

(ii) The asset returns in the stochastic model were generated by a proprietary model purchased from Barrie & Hibbert. The asset classes modelled are UK equities, overseas equities, UK property, UK corporate bonds and UK gilts.

Interest Rate

UK gilt returns are modelled using gilts + 10bps calibration in an Annual LIBOR Market Model. The Government Nominal Bond yield curve is a direct input into the model.

The calibration at the valuation date was as follows:

Term	Govt. + 10bp	Model	Difference (Model - Market bp)
1	0.97%	0.97%	0
2	1.60%	1.60%	0
3	2.19%	2.19%	0
4	2.70%	2.70%	0
5	3.13%	3.13%	0
7	3.75%	3.75%	0
10	4.35%	4.35%	0
15	4.80%	4.80%	0
20	4.86%	4.86%	0
25	4.79%	4.79%	0

The volatility within the model is calibrated to the market implied volatility for at the money swaptions (for 20 year swaps). The calibration at the valuation date is as follows:

Term	Market Implied Volatility	Model	Difference (Model - Market bp)
1	20.70	23.20	2500
2	19.30	20.30	1000
3	17.90	18.70	800
4	16.70	17.70	1000
5	15.90	17.10	1200
7	14.70	16.20	1500
10	14.10	15.10	1000
15	14.60	13.80	-800
20	14.40	12.70	-1700
25	14.00	11.90	-2100
30	13.00	11.30	-1700

Equities and Property

Excess returns over risk free on UK equities, overseas equities and property are modelled using separate (but correlated) lognormal models. The equity model uses a local volatility surface calibrated to market implied volatilities for a range of strikes and maturities. Volatilities are assumed to be constant beyond quoted strikes and maturities.

The split between UK and overseas equities was 67%/33%. The asset model was calibrated by reference to the implied volatility of FTSE100 options for a range of strikes (from 0.8 to 1.2) and maturities of up to 10 years. All strikes are expressed as a proportion of at-the-money.

Implied volatility data (%) at the valuation date is shown below:

Market

Term		No. 10.			
	0.8	0.9	1	1.1	1.2
1	29.10	25.88	22.89	20.29	18.28
3	28.75	26.78	24.92	23.17	21.59
5	28.43	26.74	25.26	24.04	23.11
10	28.67	27.57	26.57	25.65	24.83

Model

Term		20 4(BXXXX			
	0.8	0.9	1	1.1	1.2
1	24.43	24.33	24.35	24.40	24.47
3	28.15	27.10	26.22	25.42	24.73
5	28.04	27.16	26.32	25.43	24.82
10	28.00	27.36	26.79	27.00	25.83

Beyond 10 years the estimated volatility implied by the model calibration rises as follows:

Term			Strike		
	0.8	0.9	-1	1.1	1.2
15	28.36	27.87	27.41	27.00	26.66
20	28.69	28.29	27.93	27.61	27.07
25	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	0.00

Difference (Model - Market) %

		Strike								
Term	0.8	0.9	1	1.1	1.2					
1	-4.67	-1.54	1.46	4.11	6.19					
3	-0.60	0.31	1.30	2.25	3.14					
5	-0.40	0.42	1.06	1.49	1.71					
10	-0.67	-0.22	0.23	0.63	1.00					

There are no tests against market traded instruments for properties since there are no such instruments. A best estimate has therefore been used of 15% constant volatility.

Corporate bond

Corporate bond returns are modelled using the extended Jarrow-Lando-Turnbull model. This describes bond prices in terms of a real-world transition matrix, which gives the probability of a transition to each credit rating over one year. Risk neutral transition probabilities are assumed to vary stochastically. The transition matrix is consistent with best estimates based on historic data of long term transition probabilities and spread volatilities and corporate bond prices. The model was fitted to a sample of predominantly investment grade sterling corporate bonds.

90% With-Profits Fund

The following are examples of observed correlations of year 10 returns from the scenarios used (ZCB = zero coupon bond):

		- Harrison minorantes minori	24. 14. 124	Output Co.	rrelations	@ Year	10			
	Cash	Equities	Property	Overseas Equities	5yr Govt ZCB	15yr Govt ZCB	5yr Corp ZCB	15yr Corp ZCB	5yr Index Linked ZCB	15yr Index Linked ZCB
Cash	1	0.09	0.15	-0.03	0.64	-0.59	0.38	-0.52	0.74	0.34
Equities	•	. 1	0.09	0.30	0.16	0.01	0.53	0.22	0.12	0.14
Property			1	0.09	0.08	-0.09	0.08	-0.06	0.15	0.09
Overseas equities				1	0.13	0.13	0.21	0.18	0.09	0.20
5yr Govt ZCB				_	1	0.07	0.65	0.09	0.56	0.33
15yr Govt ZCB					-	1	0.08	0.90	-0.40	-0.06
5yr Corp ZCB						•	1	0.38	0.35	0.25
15yr Corp ZCB							So	1	-0.34	-0.01
5yr Index Linked ZCB								•	1	0.78
15yr Index Linked ZCB										1

(iii) The table below is based on 1,000 scenarios:

		Asset type (all UK assets)	K=0.75				7				K=1.5			
	2		5	15	25	35	2	15	25	35	5	15	25	35
	<u>.</u>	Annualised compound equivalent of the risk free rate assumed for the period. (to two decimal places)	3.12%	4.80%	4.79%	4.60%	×	×	×	×	×	×	×	×
-		Risk-free zero coupon bond	857,399	494,768	310,751	207,350	×	×	×	×	×	×	×	×
0		FTSE All Share Index (p=1)	115,997	259,896	347,501	422,101	234,578	409,371	518,289	605,674	584,382	769,047	902,447	1,010,199
က		FTSE All Share Index (p=0.8)	107,303	208,407	251,894	285,068	218,356	329,488	376,874	410,892	547,474	621,748	660,085	684,055
4		Property (p=1)	110,824	247,278	345,788	423,120	242,720	412,075	530,273	619,997	608,213	797,508	936,383	1,044,713
က		Property (p=0.8)	101,119	190,469	242,036	276,287	224,890	323,959	377,708	411,089	571,334	641,322	681,919	702,811
9		15 year risk free zero coupon bond (p=1)	20,328	17,887	16,387	28,812	93,975	80,166	96,544	143,197	200,006	499,255	511,222	544,553
7		15 year risk free zero coupon bond (p=0.8)	17,026	8,950	4,621	4,339	80,719	38,884	23,302	25,086	455,293	308,599	232,868	212,906
ω		15 year risk free bonds (p=1)	23,446	28,510	34,326	52,716	103,426	107,029	125,459	165,530	498,503	495,382	513,725	553,152
စ		15 year risk free bonds (p=0.8)	19,722	14,697	10,761	13,565	89,777	57,326	45,046	48,064	454,674	314,701	249,990	230,767
5		Portfolio of 65% FTSE All Share and 35% property (p=1)	71,857	189,400	270,616	342,145	184,008	332,718	434,912	521,471	549,831	692,242	814,025	918,316
Ε		Portfolio of 65% FTSE All Share and 35% property (p=0.8)	64,493	142,109	182,553	214,589	167,858	255,242	298,557	331,399	511,356	543,091	574,279	598,514
12		Portfolio of 65% equity and 35% 15 year risk free zero coupon bonds (p=1)	58,183	157,745	224,492	289,783	162,075	287,174	372,137	452,502	531,079	962'396	734,452	826,744
13		Portfolio of 65% equity and 35% 15 year risk free zero coupon bonds (p=0.8)	51,559	115,620	147,693	174,809	146,675	216,401	249,044	280,099	491,021	486,564	502,620	523,342
14		Portfolio of 40% equity, 15% property, 22.5% 15 year risk free zero coupon bonds and 22.5% 15 year corporate bonds (p=1)	28,560	90,341	143,166	198,150	120,664	208,720	279,006	348,550	511,418	564,775	641,168	722,774
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)	23,931	57,491	80,035	101,707	105,735	142,069	164,566	189,677	469,185	410,413	406,632	417,867
				-								-		
				L=15				L=20				ָרָ	L=25	
16		Receiver swaptions	4.95%	6.42%	5.47%	3.96%	6:39%	7.89%	6.53%	4.66%	%02'2	9.04%	7.32%	5.13%

- (iv) UK initial equity yield: 3.44% UK initial property rental yield: 4.30%
- (v) Not applicable there are no significant territories other than the UK. 0.46% of the guaranteed benefit is in relation to Eire policies
- (vi) The following table shows the outstanding guarantees analysed by outstanding term. The SLUK IB business is nearly all whole life and the term has been taken as the term to age 110.

Outstanding term	SLUK IB	SLUK OB CWP	BULA Life	BULA Pensions
(years)	£m	£m	£m	£m
1-5	0.0	40.2	32.8	1.5
6-10	0.2	3.8	1.2	0.5
11-15	0.4	0.1	1.1	0.5
15+	5.9	1.7	3.5	3.5

Calibration of the asset model to market data is shown, where available, in paragraph 6 (4) (a) (ii) above.

(vii) Comprehensive tests are carried out on the output produced by the Barrie & Hibbert asset model as follows:

For UK and Overseas equities and for UK property the average (over the simulated scenarios) of the discounted present values of projected asset values (with income reinvested) have been verified to be acceptably close to unity – the martingale property.

The same test has been undertaken for 15-year zero-coupon gilts and for 4 classes of zero-coupon corporate bonds with terms of 1, 5, 10, 15, 20, 25 and 30 years. Departures from unity in the average discounted present values have not had a significant impact on the valuation result.

Zero coupon bond yields calculated from the model cash output have been verified to match yields calculated from input Government spot rates and initial spot rates output from the model at time zero within an acceptable error margin.

For UK equity options verification has been made, within acceptable limits, that the option prices calculated from the model output and converted into implied volatilities using the Black-Scholes formula reproduce the expected volatility surface.

Verification has also been made, within acceptable limits, that implied volatilities calculated from the simulation model output reproduce the market volatility term structure for 20 year at the money swaptions.

(viii) The assets and liabilities have been computed using 3,000 (1,500 antithetic pairs of) simulated scenarios. This results in standard errors in the calculated yield curve of less than 1 basis point for terms 1- 30 years.

For a 10-year at the money (based on the forward price) UK equity put option at a strike of 1.0, the standard error of the estimated option price represents 2.3% of its calculated value.

Similarly, for a range of swaptions with maturities between 5 and 25 years on underlying 20 year swaps the standard errors in the calculated prices represent, typically, 1.3% of these prices.

- (b) Not applicable
- (c) Not applicable

(5) Management Actions

(a) No scenario specific management actions are assumed to take place in the stochastic model.

(6) Persistency Assumptions

The surrender and paid-up rates are:

Product			Average surrender / paid-up rate for the policy years				
	1-5	6-10	11-15	16-20			
CWP savings endowment	Surrender	7.0%	7.0%	7.0%	7.0%		
CWP target cash endowment	Surrender	4.0%	4.0%	4.0%	4.0%		
CWP pension regular premium PUP		0.0%	0.0%	0.0%	0.0%		
CWP pension regular premium	Surrender	0.0%	0.0%	0.0%	0.0%		
UWP individual pension regular premium	PUP	5.0%	5.0%	5.0%	5.0%		
UWP individual pension regular premium	Surrender	5.0%	5.0%	5.0%	5.0%		
UWP individual pension single premium	Surrender	5.0%	5.0%	5.0%	5.0%		

(7) Policyholders' Actions

No such assumptions were made.

7. FINANCING COSTS

The fund has no financing costs as at the valuation date.

8. OTHER LONG-TERM INSURANCE LIABILITIES

No amounts have been included in Line 46 of Form 19. The amount shown in Line 47 of Form 19 is made up as follows:

	£m
Future shareholder transfers not deducted from asset share	3.2
Provision for underpayment of SLUK ordinary branch terminal bonus	1.5
Future shareholder transfers from planned enhancements to with-profits benefit reserve	1.1
Additional provision for tax on shareholder transfers	0.3
Future investment expenses not deducted from asset share	0.4
Future tax adjustment	-1.6
Total	4.8

9. REALISTIC CURRENT LIABILITIES

The realistic current liabilities are taken to be the same as the regulatory current liabilities.

10. RISK CAPITAL MARGIN

- (a) The risk capital margin is nil.
 - (i) The market risk scenario assumes that equities fall by 20% and real estate falls by 12.5%. The equity fall and the property fall were the more onerous scenarios.
 - (ii) The nominal change in yields for fixed interest securities for the purpose of the market risk scenario is 0.72%. This is consistent with a rise or fall of 17.5% in the long term gilt yield. A rise in yields is the more onerous scenario.
 - (iii) The average change in spread is 1.46%. Changes in market values are:
 - (a) (7.56)% for bonds
 - (b) Not applicable
 - (c) Not applicable
 - (d) Not applicable
 - (e) Not applicable.
 - (iv) The average change in persistency experience is a 32.5% reduction in future lapse and paid-up rates. The overall percentage change in the realistic value of liabilities from applying the persistency stress is 0.04%.
 - (v) The change in asset value in (iii) is materially independent of the change in liability values in (iv).

- (b) (i) In the stress scenarios the following additional assumption is made:
 Reversionary bonus rates will be reduced to nil in stages over the next two years.
 - (ii) Since there is no risk capital margin, the effect of assuming reduced reversionary bonuses is zero. Working capital is reduced by £0.8m
 - (iii) No changes would apply to the table in paragraph 6 (5) (b) if the management actions were taken
 - (iv) The requirements of INSPRU 1.3.188(R) would be met if the actions described in paragraph 10 (b) (i) were integrated into the projection of assets and liabilities.
- (c)

 (i) The risk capital margin is covered by the assets of the long-term fund and the value of future profits on non-profit business.
 - (ii) The scheme for the funds merger as at 31 December 2008 includes a provision that in the event that the value of the assets of any withprofits fund falls below the regulatory minimum support will be provided to that fund by way of a loan arrangement from the Non-Profit Fund or the Shareholders Fund to the extent that the Board determines there are assets in those funds available to make such a loan.

11. TAX

Tax on assets backing the with-profits benefits reserve for BLAGAB business is charged to those asset shares approximately and allowance is made for relief on expenses.

Tax on any future policy related liabilities for BLAGAB business is allowed for in determining those liabilities.

An approximate adjustment is made to allow for any differences between the tax calculated as described and the tax expected on a corporate basis. The adjustment is calculated within the stochastic model.

12. DERIVATIVES

There are no major positions of derivative contracts held in the Fund.

13. ANALYSIS OF WORKING CAPITAL

The movement in working capital over the twelve months to the valuation date is shown in the following table.

	£m
Opening working capital	0.0
Write back planned benefit enhancements to zeroise working capital	3.3
Revised opening working capital	3.3
Opening adjustments	0.1
Restated opening working capital	3.4
Investment return on working capital	0.9
Mismatch profits and losses	6.9
Assumption changes	
- Non-economic	0.6
- Economic	
- Policyholder actions	
Impact of new business	
Other Variances	300000000000000000000000000000000000000
- Non-economic	0.2
- New Provisions	(0.7)
- Unexplained	0.6
Closing working capital before zeroisation	11.8
Planned benefit enhancements to zeroise working capital	(11.8)
Closing working capital	0.0

The following table shows a breakdown of the liabilities shown on line 47 Form 19 at the start and end of the year:

£m	Current valuation	Previous valuation
Future shareholder transfers not deducted from asset	3.2	2.8
share		
Future shareholder transfers from planned	1.1	1.5
enhancements to with-profits benefit reserve	1	
Additional provision for tax on shareholder transfers	0.3	0.3
Future investment expenses not deducted from asset	0.4	0.4
share		
Future tax adjustment	(1.6)	(0.1)
Total	4.8	5.1

The following table shows a breakdown of the liabilities shown on line 51 Form 19 at the start and end of the year:

	Current	Previous
£m	valuation	valuation
Provisions Taxation	0.0	0.0
Creditors Taxation	0.5	1.0
Creditors Other	17.9	5.4
Accruals and Deferred income	0.05	0.0
Total	18.5	6.5

14. OPTIONAL DISCLOSURE

None made

100% WITH-PROFITS FUND

On 1 January 2009 the ex-SLUK Life Unitised With-Profits business that was in the fund was transferred to the 90% With-Profits Fund. The amount of assets transferred was set equal to the value of realistic liabilities at that date.

2. ASSETS

(1) Economic Assumptions For Valuing Non-Profit Business

Not applicable as there is no non-profit business valued in the 100% With-Profits Fund.

(2) Amount Determined Under INSPRU 1.3.33(2)(R)

Not applicable

(3) Valuation Of Contracts Written Outside The Fund

Not applicable

(4) Different Sets Of Assumptions

Not applicable

(5) De Minimis Limit

Not applicable

3. WITH-PROFITS BENEFITS RESERVE LIABILITIES

(1) Calculation Of With-Profits Benefits Reserve

Product Type	Method ·	With-profits benefits reserve	Future policy related liabilities
		£m	£m
Premium Paying Endowments (PAL)	Retrospective	11.4	60.9
Paid Up Endowment (PAL)	Retrospective	0.7	3.2
Whole Life Premium Paying (PAL)	Prospective	6.4	29.4
Whole Life - Paid Up (PAL)	Prospective	1.2	5.6
Other		3.7	3.7
Total		23.5	102.8
Form 19 Line 31		23.5	
Form 19 Line 49			102.8

(2) Correspondence With Form 19

The above reconciles to lines 31 and 49 of Form 19.

(3) With-Profits Benefits Reserves Below De Minimis Limit

The amount categorised as "Other" above falls within the de minimis limit.

(4) Division Of Portfolio

In the above table, the following classes have similar bonus declaration characteristics:

- Premium Paying Endowments (PAL)
- Paid Up Endowment (PAL)
- Whole Life Premium Paying (PAL)
- Whole Life Paid Up (PAL)

Other business is distinct from these classes.

4. WITH-PROFITS BENEFITS RESERVE – RETROSPECTIVE METHOD

(1) Retrospective Methods

- (a) All contracts have been calculated on an individual policy basis.
- (b) No contracts have been valued on a grouped basis.
- (c) Not applicable as no contracts have been valued on a grouped basis.

(2) Significant Changes to Valuation Method

- (a) There have been no significant changes in the method of calculating the withprofits benefits reserve.
- (b) Not applicable.

(3) Expense Allocation

- (a) The previous expense investigation was carried out in respect of the current financial year.
- (b) Expense investigations are carried out annually.

(c)

	Item	2m
(i)	Initial Expenses	Nil
(ii)	Maintenance Expenses	0.23
(iii)	Method	Average expense charge deducted
(iv)	Expenses charged other than to with- profits benefits reserve	Nil

Since the company is closed to new business (apart from contractual increments etc.), there are no material initial expenses.

Investment expenses are allowed for by deducting the fees payable to the company's investment manager for managing the assets from the investment return credited to asset shares.

(4) Significant Charges

There are currently no guarantee charges taken from asset shares for these funds.

(5) Charges For Non-Insurance Risk

Not applicable

(6) Ratio Of Claims To Reserves

Average ratio of total claims to asset shares:

Year	Ratio of claims to asset shares (ex-PAL)	Ratio of claims to asset shares (ex_SLUK)
Previous year -1	735%	100%
Previous year	763%	100%
Current year	679%	100%

(7) Allocated Return

The average rates of investment return (before tax) added for the year to the valuation date are:

Type of business	Investment	
Premium Paying Endowments (PAL)	Return 16.68%	
Paid Up Endowment (PAL)	16.68%	

5. WITH-PROFITS BENEFITS RESERVE - PROSPECTIVE METHOD

(1) Key Assumptions

The discount rate used is consistent with the investment return used in determining supportable bonus rates. Hence, the risk free rates are not directly relevant to the calculation of the prospective with-profits benefits reserves.

The rates are shown in the table below:

	Premium Paying	Paid Up
Discount Rate p.a.	3.00%	3.00%
Investment Return p.a.	3.00%	3.00%
Expense Assumptions		
Investment Expense p.a.	0.10%	0.10%
Per Policy Expenses p.a.	£56.01	£56.01
Expense Inflation p.a.	7.38%	7.38%
Bonus Assumptions		
Reversionary Bonuses		
On Basic Sum Assured	5.00%	5.00%
On Accrued Bonuses	8.00%	8.00%

Future terminal bonus rates vary by duration in force at time of payment. Sample terminal bonus rates are as follows:

Elapsed Term in Years	Terminal Bonus Rate	
10	526%	
15	618%	
20	805%	
25 30	1056%	
30	1496%	
35	2630%	
40	4333%	

There are no assumed lapse rates.

(2) Different Sets Of Assumptions

Not applicable

6. COSTS OF GUARANTEES, OPTIONS AND SMOOTHING

(1) De Minimis Limit

Not applicable

(2) Valuation Method Used To Calculate The Costs Of Guarantees

(a) Cost of Guarantees & Options

Since the transfer of ex-SLUK Life Unitised With-Profits pensions business the costs of guarantees are no longer calculated within this Fund.

Cost of Smoothing

There is no significant cost of smoothing and this has been taken to be zero. All business has been modelled assuming future payouts of 100% of asset share.

(3) Significant Changes

There are no changes in methods or assumptions since the previous valuation.

(4) Further Information On The Approach Used To Calculate The Cost Of Guarantees

Following the transfer of ex-SLUK Life Unitised With-Profits pensions business, information from this section is now presented in the corresponding section of Appendix 9.4A of the 90% With-Profits Fund.

(5) Management Actions

We do not assume any specific management actions take place during the projection of assets and liabilities.

(6) Persistency Assumptions

Following the transfer of ex-SLUK Life Unitised With-Profits pensions business, surrender and paid-up assumptions are no longer required.

(7) Policyholders' Actions

No such assumptions were made.

7. FINANCING COSTS

There are no financing arrangements.

8. OTHER LONG-TERM INSURANCE LIABILITIES

The amount shown in Line 47 of Form 19 is made up as follows:

	£m
Potential future tax liabilities	3.7
Total	3.7

This total of these additional reserves is the value in line 47 of Form 19. Line 46 is zero.

9. REALISTIC CURRENT LIABILITIES

The realistic current liabilities are set equal to the regulatory current liabilities.

10. RISK CAPITAL MARGIN

- (a) The risk capital margin is nil.
 - (i) The market risk scenario assumes that equities fall by 20% and real estate falls by 12.5%. The equity fall and the property fall were the more onerous scenarios.
 - (ii) The nominal change in yields for fixed interest securities for the purpose of the market risk scenario is 0.78%. This is consistent with a rise or fall of 17.5% in the long term gilt yield. An increase in yields is the more onerous scenario.
 - (iii) The average change in spread is 1.50%. Changes in market values are:
 - (a) (8.52)% for bonds
 - (b) not applicable
 - (c) not applicable
 - (d) not applicable
 - (e) not applicable
 - (iv) Not applicable.
 - (v) The change in asset value in (iii) is materially independent of the change in liability values in (iv).
- (b) (i) In the stress scenarios an assumption is made that:

Terminal bonus rates are changed such that the revised estate is extinguished.

- (ii) Under the most onerous stress, the risk capital margin is reduced by £6.2m by changing the terminal bonus rates.
- (iii) Not applicable.
- (iv) The requirements of INSPRU 1.3.188(R) would be met if the actions described in paragraph 10 (b) (i) were integrated into the projection of assets and liabilities.
- (c) (i) The risk capital margin is covered by the assets of the long-term fund.
 - (ii) The scheme for the funds merger as at 31 December 2006 includes a provision that in the event that the value of the assets of any withprofits fund falls below the regulatory minimum, support will be provided to that fund by way of a loan arrangement from the Non Profit Fund or the Shareholders' Fund to the extent that the Board determines there are assets in those funds available to make such a loan.

11. TAX

Tax on assets backing the with-profits benefits reserve for BLAGAB business is charged to those asset shares approximately and allowance is made for relief on expenses.

Tax on any future policy related liabilities for BLAGAB business is allowed for in determining those liabilities.

12. DERIVATIVES

There are no major positions of derivative contracts held in the Fund.

13. ANALYSIS OF WORKING CAPITAL

The movement in working capital over the twelve months to the valuation date is shown in the following table.

	£m
Opening working capital	0.0
Write back planned benefit enhancements to zeroise working capital	111.4
Revised opening working capital	111.4
Opening adjustments	0.0
Restated opening working capital	111.4
Investment return on surplus	4.2
Mismatch profits and losses	15.0
Assumption changes	
- Non-economic	0.0
- Economic	0.0
- Policyholder actions	0.0
Impact of new business	0.0
Other Variances	
- Claim payouts above asset share	(17.5)
- Change in provisions	(1.9)
- Other traced	(11.3)
- Unexplained	(0.9)
Closing working capital before zeroisation	99.1
Planned benefit enhancements to zeroise working capital	99.1
Closing working capital	0.0

The following table shows a breakdown of the liabilities shown on line 47 of Form 19 at the start and end of the year:

£m	Current Valuation	Previous Valuation
Potential future tax charges	3.7	4.8
Total	3.7	4.8

The following table shows a breakdown of the liabilities shown on line 51 of Form 19 at the start and end of the year:

£m .	Current Valuation	Previous Valuation
Claims outstanding	4.8	6.1
Deferred tax provision	0.0	0.0
Provisions - Other risk and charges	0.1	0.1
Creditors - Direct insurance business	0.0	0.1
Creditors taxation	3.6	1.7
Creditors other	10.3	11.3
Total	18.7	19.4

14. OPTIONAL DISCLOSURE

None made.

SCOTTISH MUTUAL WITH-PROFITS FUND

2. ASSETS

- (1) Economic Assumptions For Valuing Non-Profit Business

 There is no material amount of non-profit business.
- (2) Amount Determined Under INSPRU 1.3.33(2)(R) Not applicable.
- (3) Valuation Of Contracts Written Outside The Fund Not applicable.
- (4) Different Sets Of Assumptions
 Not applicable.
- (5) De Minimis Limit
 Not applicable.

3. WITH-PROFITS BENEFITS RESERVE LIABILITIES

(1) Calculation Of With-Profits Benefits Reserve

The with-profits benefits reserve and the future policy related liabilities for the different classes of business are shown in the following table:

Product Type	Method	With-profits benefits reserve	Future policy related liabilities
CWP- Life	Retrospective	£m 235	£m 55
toward necessaries and the second sec			
CWP- Life	Prospective	26	5
UWP- Life	Retrospective	490	88
Life Total		752	148
CWP Pensions with GAO	Retrospective	316	155
CWP Pensions with GAO	Prospective	24	13
CWP Pensions with GCO	Retrospective	222	215
Group Full Profit	Prospective	141	20
Other DA	Prospective	127	30
UWP Pensions, 0%	Retrospective	248	40
UWP Pensions, 4%	Retrospective	387	89
Pensions Total		1,464	560
Total		2,216	708

(2) Correspondence With Form 19

The above reconciles to lines 31 and 49 of Form 19.

(3) With-Profits Benefits Reserves Below De Minimis Limit

Not applicable: the table in (1) covers all products in the Fund.

(4) Types Of Products

The level of disclosure in the table above corresponds to material groupings of contracts offering significant variances in policyholder benefits. For example, contracts with and without guaranteed cash options and guaranteed annuity options are identified separately and unitised with-profits business is separated from conventional with-profits business. Unitised with-profits pensions business is split between that with a guaranteed minimum bonus and that without.

4. WITH-PROFITS BENEFITS RESERVE – RETROSPECTIVE METHOD

(1) Retrospective Methods

(a) All contracts have been calculated on an individual policy basis.

- (b) No contracts have been valued on a grouped basis.
- (c) Not applicable as no contracts have been valued on a grouped basis.

(2) Significant Changes To Valuation Method

- (a) There have been no significant changes in the method of calculating the withprofits benefits reserve.
- (b) No policies were valued using approaches more approximate than used for the previous valuation.

(3) Expense Allocation

- (a) Expenses are equal to the fixed policy fee charged by Pearl Group Management Services for the provision of administration services, as set out in the management services agreement.
- (b) Expense investigations (reviews of the management services agreement) are carried out annually.
- (c) The expenses for the business for the year to the valuation date were:

	Item	£m
(i)	Initial Expenses 1	0.104
(ii)	Maintenance Expenses	3.595
	Investment Expenses	0.622
(iii)	Method	Average expense charge deducted
(iv)	Expenses charged other than to with- profits benefits reserve ²	0.000

¹ Since the company is closed to new business (apart from contractual increments etc.) the initial expenses are negligible.

Investment expenses were deducted from the with-profits benefits reserve at a rate of 0.135% p.a.

² No amounts were charged to the fund in relation to one-off and project costs.

(4) Significant Charges

There is a hedge asset in place to cover a substantial part of the guarantees within the fund. The costs of rebalancing this hedge are charged to the with-profits benefits reserve. Asset share enhancements together with these charges are combined with the resulting percentage reduction in the with-profits benefits reserve shown in the following tables.

Asset Share Group	Current valuation	Previous Valuation	
CWP Life	(0.49)%	(0.30)%	
CWP Pensions	(0.48)%	(0.30)%	
UWP Life	1.13%	(0.16)%	
UWP Pensions	1.13%	(0.16)%	

Asset Share Group	Current valuation	Previous Valuation	
UWP GBP SMI Bond	1.13%	(0.16)%	
UWP USD SMI Bond	1.21%	0.00%	
UWP EUR SMI Bond	0.94%	(0.07)%	

(5) Charges For Non-Insurance Risk

Annual management charges deducted from the fund in respect of unitised with-profits business amounted to £17.65m over the period.

(6) Ratio Of Claims To Reserve

The average ratio of total claims to asset shares for the current (and two previous) years was:

Year	Ratio of claims to asset shares		
Previous year -1	98.2%		
Previous year	98.1%		
Current year	110.7%		

(7) Allocated Return

The same gross investment return is allocated to the with-profits benefits reserve for all UK contracts in the fund. Similarly, the same gross investment return is allocated to all EU contracts in the fund. Investment returns for the full year (gross of tax) are:

Product Type	Investment Return
UK business	12.19%
EU business	9.71%

5. WITH-PROFITS BENEFITS RESERVE - PROSPECTIVE METHOD

(1) Key Assumptions

Prospective methods have been used for with-profits whole life business and for some conventional pensions, as shown in paragraph 3 (1).

With-Profits Whole Life Business

The with-profits benefits reserve is determined using a bonus reserve valuation with the following assumptions:

Economic Assumptions	
Discount Rate p.a. (net of investment expense)	3.92%
Investment Return p.a. (net of investment expense)	3.92%
Expense Assumptions	
Investment Expense p.a.	0.135%
Per Policy Expenses p.a. (premium-paying)	£40.53
Per Policy Expenses p.a. (paid-up)	£28.37
Expense Inflation p.a. 4.58%	
Bonus Assumptions	
Reversionary Bonus Rate	0.00%
Terminal Bonus Rate	See below
Decrements	
Mortality	73% AM92
Persistency	Nil

Future terminal bonus rates vary by duration in force at time of payment. Sample terminal bonus rates are as follows:

Term	Rate
5	8%
10	8% .
15	12%
20	29%
25	30%
30	45%
35	81%
40+	143%

Conventional Pensions Business

The with-profits benefits reserve is determined using a gross premium valuation with the following assumptions:

	Group Full Profit	Other Deferred Annuity	With-Profit Annuity	Other Annuity
Economic Assumptions	The state of the s	Control Control		
Discount Rate p.a. (net)	3.75%	3.75%	3.80%	3.80%
Investment Return p.a. (net)	3.75%	3.75%	3.80%	3.80%
Expense Assumptions				
Investment Expense p.a.	0.14%	0.14%	0.14%	0.14%
Per policy - premium-paying	52.85	52.85	26.78	52.85
Per policy - paid up	0.00	37.00	0.00	0.00
Expense Inflation p.a.	5.58%	5.58%	5.58%	5.58%
Bonus Assumptions		CANCADOR DE COMPANION DE CONTRACTOR DE CONTRACTOR DE CONTRACTOR DE CONTRACTOR DE CONTRACTOR DE CONTRACTOR DE C		
Reversionary Bonus	0.00%	0.00%	1.80%	0.00%

No terminal bonus is assumed and there is no allowance for lapses or mortality.

(2) Different Sets Of Assumptions

Not applicable.

6. COST OF GUARANTEES, OPTIONS AND SMOOTHING

(1) De Minimis Limit

The cost of smoothing is nil as all benefits are based on unsmoothed asset shares.

(2) Valuation Methods For Guarantees etc.

Summary details of the business with guarantees are given in the following table:

	Cost of	Extent of	No of Individual	No of model
	Guarantees &	Grouping	policies	points
	Options			
All business	Stochastic model	All business	334,150	3,481

a) Cost of Guarantees & Options

The costs of guarantees are determined using a stochastic model, with the asset returns being generated by a proprietary model. The following items were calculated stochastically:

- (i) Guaranteed annuity option reserves;
- (ii) Guaranteed cash option reserves:
- (iii) The reserves required in addition to asset share to meet guaranteed benefits.

Guaranteed annuity options allow policyholders to convert a funded cash sum into an annuity on guaranteed terms. Guaranteed cash options allow policyholders to convert a funded annuity benefit into a lump sum on guaranteed terms.

The calculations were carried out using a risk neutral approach.

- (b) (i) In the stochastic model, no projections are carried out on individual policy data.
 - (ii) All of the contracts are valued on a grouped basis. However, the values for the with-profits benefits reserve are calculated on an individual basis and added to the data file before the data is grouped.
 - (iii) Policies are grouped according to product code, annuity factor, terminal bonus series, reversionary bonus series, early retirement option indicator, pension code and product class. They are also split into bands by policy term and according to the degree by which the guarantees are in or out of the money.

The values of guarantees are estimated using closed form approximations before and after grouping. These are compared to ensure that the model points are a good representation of the individual policy data

(c) The cost of options and guarantees for a small number of residual policies is approximated using a proxy contract which has been modelled accurately. The model points for the proxy contract are scaled such that in aggregate the policy count, asset share and guaranteed benefits are equal to the total values for these approximately modelled policies.

(3) Significant Changes

There have been no significant changes to the process since the previous valuation.

(4) Further Information on Stochastic Approach

- (a) (i) The stochastic model is used to value the following guarantees and options:
 - No negative terminal bonus guarantees at maturity and death within conventional with-profits contracts.
 - Market value reduction-free spot maturity guarantees within unitised with-profits contracts.
 - Guaranteed annuity options on conventional with-profits contracts.
 - Guaranteed cash options on conventional with-profits contracts.

Of these, the guaranteed annuity options and market value reduction-free guarantees are "in the money" at the valuation date. For the other guarantees, the extent to which they are "in the money" depends on duration and policy size.

(ii) The asset returns in the stochastic model were generated by a proprietary model licensed from Barrie & Hibbert. The asset classes modelled are UK equities, UK property, UK corporate bonds, UK gilts, EU equities, EU corporate bonds and EU gilts.

Interest Rate

UK gilt returns are modelled using a gilts + 10bps calibration in a monthly LIBOR Market Model. The Government Nominal Bond yield curve is a direct input into the model. Euro gilt returns are modelled in a similar fashion based on the closest equivalent to the Government Nominal bond yield curve.

The calibration at the valuation date was as follows:

LIBOR

		GBP		EUR			
Term	Govt. + 10bp	Model	Difference (bps)	Govt. + 10bp (equivalent)	Model	Difference (bps)	
1	0.97%	0.97%	0	0.97%	0.97%	-0	
2	1.60%	1.60%	0	1.44%	1.43%	0	
3	2.19%	2.19%	0	1.95%	1.96%	-1	
4	2.70%	2.70%	0	2.40%	2.40%	-0	
5	3.13%	3.13%	0	2.73%	2.73%	0	
7	3.75%	3.75%	0	3.25%	3.25%	0	
10	4.35%	4.34%	1	3.81%	3.81%	0	
15	4.80%	4.80%	0	4.33%	4.35%	-1	
20	4.86%	4.86%	0	4.50%	4.52%	-1	
25	4.79%	4.79%	0	4.56%	4.57%	-1	

The volatility within the model is calibrated to the market implied volatility based on the time-inhomogeneous version of the Libor Market Model. The calibration at the valuation date is as follows:

Swaption Implied Volatility

		GBP			EUR	
Term	Market (%)	Model (%)	Difference	Market (%)	Model (%)	Difference
			(bps)			(bps)
1	20.70	20.52	-18	21.00	21.94	94
2	19.30	18.40	-90	20.50	19.58	-92
3	17.90	17.70	-20	19.00	18.66	-34
4	16.70	17.01	31	18.20	17.88	-32
5	15.90	16.42	52	17.40	17.53	13
7	14.70	15.50	80	16.30	16.94	64
10	14.10	14.64	54	15.60	16.10	50
15	14.60	13.72	-88	16.20	14.91	-129
20	14.40	12.90	-150	17.40	14.15	-325
25	14.00	12.08	-192	17.50	13.07	-443
30	13.00	11.46	-154	16.50	12.38	-412

Inflation is modelled as the difference between the nominal and real yield curves. Real interest rates are modelled using a two-factor Vasicek model, which is calibrated to be consistent with GBP and EUR index linked government bond prices as at 31 December 2009.

Equities and Property

Excess returns over risk free rates on UK equities, overseas equities and property are modelled using separate (but correlated) lognormal models. Separate equity models are used for UK and Euro equities and each model uses a local volatility surface calibrated to market implied volatilities for a range of strikes and maturities. Volatilities are assumed to be constant beyond quoted strikes and maturities.

The UK asset model was calibrated by reference to the implied volatility of FTSE 100 options for a range of strikes (from 0.8 to 1.2) and maturities of up to 10 years. All strikes are expressed as a proportion of at-the-money.

Implied volatility data (%) at the valuation date is shown below:

Market (%)

		Strike	25 CONTRACTOR OF THE CONTRACTO			
Term	0.8	0.8 1 1 1.2				
1	29.10	22.89	18.28			
2	28.65	24.25	20.75			
3	28.75	24.92	21.59			
5	28.43	28.43 25.26 23				
10	28.67	26.57	24.83			

Model (%)

•		Strike	
Term	0.8	1	1.2
1	29.79	24.81	20.88
2	29.26	25.68	22.56
3	29.46	26.47	23.66
5	28.73	26.50	24.60
10	28.08	26.63	25.41

Difference (Model - Market) bps

		Strike	
Term	0.8	1	1.2
1	69	192	260
2	61	143	181
3	71	155	207
5	30	124	149
10	-59	6	58

The Euro asset model was calibrated by reference to the implied volatility of Eurostoxx 50 options for a range of strikes (from 0.8 to 1.2) and maturities of up to 20 years. All strikes are expressed as a proportion of at-the-money.

Implied volatility data (%) at the valuation date is shown below:

Market (%)

		Strike	and the second s
Term	0.8	1	1.2
1	30.96	24.91	20.99
2	30.42	26.03	22.63
3	30.32	26.76	23.91
5	30.61	27.44	24.70
10	30.83	28.59	26.68

Model (%)

a transfer of transfer state (as a second		Strike	
Term	0.8	1	1.2
1	30.54	26.36	23.21
2	29.99	27.01	24.28
3	30.13	27.69	25.43
5	29.96	28.25	26.69
10	30.48	29.30	28.41

Difference (Model - Market) bps

SAN Contract to the Contract of the Contract o		Strike	
Term	0.8	1	1.2
1	-42	145	222
2	-43	98	165
3	-19	93	152
5	-65	81	199
10	-35	71	173

There is no investment in property within the fund and so property volatilities are not relevant.

Corporate bond

Corporate bond returns are modelled using the extended Jarrow-Lando-Turnbull model. This describes bond prices in terms of a real-world transition matrix, which gives the probability of a transition to each credit rating over one year. Risk neutral transition probabilities are assumed to vary stochastically. The transition matrix is consistent with best estimates based on historic data of long term transition probabilities and spread volatilities and corporate bond prices. The model was fitted to a sample of predominantly investment grade sterling corporate bonds.

The asset model uses a credit transition matrix. The fit of the model is targeted to the market spread on a 7 year A rated bond only. Credit derivatives are not used to derive market implied transition probabilities.

Scottish Mutual With-Profits Fund

The following are examples of observed correlations of year 10 returns from the scenarios used (ZCB = zero coupon bond):

		C	utput Correl	ations @	Year 10		
	Cash	Equities	Overseas	5yr	15yr	5yr	15yr
			Equities	Govt	Govt	Corp	Corp
polity polythological polity and a second polity and a second polity and a second polity and a second polity a				ZCB	ZCB	ZCB	ZCB
Cash		-0.14	-0.18	-0.83	-0.80	-0.76	-0.76
Equities	•	1	0.13	0.16	0.14	0.30	0.26
Overseas equities			1	0.17	0.17	0.18	0.17
5yr Govt ZCB			•	1	0.97	0.90	0.91
15yr Govt ZCB				,	. 1	0.87	0.93
5yr Corp ZCB					:	1	0.96
15yr Corp ZCB						Orominkonna	1

Nominal foreign exchange rates are modelled as the combination of real exchange rates and inflation rates where real exchange rates follow a mean-reverting process and are calibrated to the long-term best estimates derived by Barrie & Hibbert.

Scottish Mutual With-Profits Fund

(iii) The table below gives further information on the stochastic approach used based on 3000 scenarios:

		Asset type (all UK assets)		K=0.	.75			X				K=	K=1.5	
L	u		r.	15	25	35	5	15	25	35	5	15	25	35
	J	Annualised compound equivalent of the risk free rate assumed for the period. (to two decimal places)	3.13%	4.80%	4.79%	4.61%	×	×	×	×	×	×	×	×
<u> -</u>		Risk-free zero coupon bond	857,346	495,102	310,697	206,795	1		•	•	1			
Ø		FTSE All Share Index (p=1)	119,931	250,905	345,348	425,020	232,959	399,207	516,518	616,350	573,055	759,708	900,478	1,029,053
က		FTSE All Share Index (p=0.8)	111,499	199,784	249,361	283,813	217,542	319,941	375,021	413,128	537,004	611,277	658,612	696,705
4		Property (p=1)	32,194	110,446	184,671	251,156	134,238	245,884	341,206	423,936	522,159	618,024	720,183	821,451
5		Property (p=0.8)	27,030	72,147	106,605	136,166	117,805	169,953	210,263	240,929	481,517	462,902	478,488	499,384
9		15 year risk free zero coupon bond (p=1)	20,362	22,057	19,357	32,403	94,726	88,650	92,636	140,918	499,739	498,888	506,593	541,721
7		15 year risk free zero coupon bond (p=0.8)	17,100	12,170	6,957	6,508	81,209	45,279	25,703	28,672	455,121	309,587	228,084	208,779
ω_		15 year risk free bonds (p=1)	23,167	27,800	29,628	47,270	101,263	104,526	114,654	158,363	499,159	496,020	506,650	545,256
<u>ග</u>		15 year risk free bonds (p=0.8)	19,570	15,381	10,577	11,416	87,283	55,043	39,045	42,765	455,138	314,587	239,173	222,058
10		Portfolio of 65% FTSE All Share and 35% property (p=1)	66,133	163,116	242,871	317,563	168,289	296,896	399,411	494,460	528,759	653,591	777,463	893,067
 633		Portfolio of 65% FTSE All Share and 35% property (p=0.8)	59,326	120,269	160,907	193,949	153,225	223,862	268,982	306,938	489,499	503,789	536,910	570,761
42	-	Portfollo of 65% equity and 35% 15 year risk free zero coupon bonds (p=1)	61,421	146,647	218,407	284,596	160,526	273,813	365,297	449,096	522,689	620,544	726,589	833,437
13		Portfolio of 65% equity and 35% 15 year risk free zero coupon bonds (p=0.8)	54,947	106,266	142,916	170,181	146,111	204,299	242,624	274,612	482,727	472,014	495,201	520,947
4		Portfolio of 40% equity, 15% property, 22.5% 15 year risk free zero coupon bonds and 22.5% 15 year corporate bonds (p=1)	27,217	77,165	127,914	182,407	115,056	189,134	258,078	331,385	505,058	545,571	620,429	710,948
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)	22,731	47,210	69,803	90,544	100,460	125,325	148,177	173,839	462,312	388,747	384,434	400,094
				-	 			-				-	-	
				[=]	15			L=20	50	Harion.			L=25	
16		Receiver swaptions	2.10%	6.56%	2.60%	3.98%	6.61%	8.07%	%89.9	4.67%	7.98%	9.25%	7.48%	5.13%

(iv) The equity dividend yields used for the UK and Euro business are: UK initial equity yield: 3.44%; EU initial equity yield: 3.90%.

(v) The following table shows (for K=1 only) for the risk free rate and lines 1 and 2 for the Eurozone, the only economy outside the UK to which the fund has significant asset exposure. They are denominated in euros and based on 3000 scenarios.

	Asset Type (EU Assets)		K=1	ina Bilipin (Balicosko pose Británicoski Investo (Británicoski Investo) (Stano	
n	Duration	5	15	25	35
	Strike price per €1m	1,144,151	1,893,462	3,055,489	4,828,926
	Annualised compound				
ľ	equivalent of the risk free rate	2.73%	4.35%	4.57%	4.60%
1	Risk-Free Coupon Bond	874,011	528,133	327,280	207,085
2	ESTOXX (p=1)	247,907	432,523	526,366	620,719

(vi) The fund has significant hedge instruments that form a close match, in aggregate, to the liabilities of the fund. The hedge instruments include equity put options and swaptions. The following table compares the market prices (on a mid basis) for these instruments to the values obtained using the asset model.

Outstanding Term	Option	s (£)	(£) Swaptions (£)		
(Years)	Market	Model	Market	Model	
1-5	33,641,012	35,742,284	5,640,541	8,031,302	
6-10	24,920,604	26,407,451	18,514,117	26,369,396	
11-15	24,111,166	25,009,902	18,730,201	25,545,425	
16-20	16,169,051	16,458,335	18,902,720	23,856,889	

Note that the modelled results in the above table are produced using a gilts+10 based calibration for consistency with the approach to valuing the liabilities. If a swaps-based calibration is used (which would be consistent with how the market would price these contracts) the discrepancy between the market and modelled values is significantly smaller.

(vii) The asset models of each main asset class have been validated by comparing the net present value of a 40-year projection of the future cashflows under the asset, including capital gains and losses, with the current value of the asset.

This was done for each of the dominant economies in which the fund has assets invested, namely the UK and the EU. At 3000 scenarios and significant durations (short to medium terms), the difference between the average net present value of each asset class of each economy and the current asset value was close (i.e. not statistically significant). This confirms that the total return for relevant assets is a martingale and risk neutral.

- (viii) The assets and liabilities have been computed using 3000 (1500 antithetic pairs of) simulated scenarios. At 1000 scenarios, the cost of options and guarantees converges to $\pm £4.6m$ at a 95% confidence interval. When the number of scenarios is increased to 3000, the cost of options and guarantees converges to $\pm £2.6m$.
- (b) Not applicable.

(c) Not applicable.

(5) Management Actions

- (a) No management actions were assumed in calculating the working capital.
- (b) Not applicable.

(6) Persistency Assumptions

The surrender and paid-up rates are:

Product		Average Surrender/Paid-up rate for the policy years 1-5 6-10 11-15 16-20			
					16-20
CWP Savings Endowment	Surrender	4.00%	4.00%	4.00%	4.00%
CWP Target Cash Endowment	Surrender	4.00%	4.00%	4.00%	4.00%
UWP Bond	Surrender	26.00%	30.80%	15.00%	15.00%
CWP Pension Regular Premium	Surrender	5.00%	5.00%	5.00%	5.00%
CWP Pension Single Premium	Surrender	2.00%	2.00%	2.00%	2.00%
UWP Indiv Pension Regular Premium	Surrender	5.20%	7.80%	9.00%	9.00%
UWP Indiv Pension Single Premium	Surrender	14.00%	20.00%	16.00%	16.00%

Take-up Rates of Guaranteed Annuity Options

The assumed take-up rate varies with the degree of "money-ness" of the option, where this is defined as (market annuity rate / guaranteed annuity rate) at the retirement date.

Moneyness Upper Limit (%)	Take-up Rate (%)
100	0
140	67
160	85
9999	95

Take-up Rates of Guaranteed Cash Options

The assumed take-up rate varies with the degree of "money-ness" of the option, where this is defined as (GCO factor / market annuity factor) at the retirement date.

Moneyness Upper Limit (%)	Take-up Rate (%) IP Pensions	Take-up Rate (%) MP Pensions
60	5	5
90	10	30
100	25	30
9999	100	100

Annuitant Mortality

Deferred pension contracts (post vesting) include guaranteed annuity options.

The mortality assumption for annuities in possession arising from the exercising of guaranteed annuity options is 5% higher than that described in Appendix 9.4, paragraph 4 (4).

(7) Policyholders' Actions

Exercise of MVR-free options

The rate at which these options are exercised varies with the degree of "money-ness" of the option, where this is defined as (asset share / face value of units) at the MVR-free date. For the UK business (excluding the SMI Euro Bond) the rates are:

Moneyness Upper Limit (%)	Take-up Rate (%)
75	100
90	75
100	25
9999	0

For the SMI Euro bond the rates are:

Moneyness Upper Limit (%)	Take-up Rate (%)
75	100
90	85
100	25
9999	0

7. FINANCING COSTS

The fund has no financing costs as at the valuation date.

8. OTHER LONG-TERM INSURANCE LIABILITIES

No amounts have been included in Line 46 of Form 19.

The amount shown in Line 47 of Form 19 is composed of the present value of future transfers to shareholders and technical provisions.

Technical provisions of £14.8m were held in the Fund at the valuation date. No such provisions were held in the Fund at the previous valuation.

The provisions held at the valuation date are shown in the table below:

Data Provision	3.8
Future Litigation Costs	4.5
Project and Other Costs	4.9
VAT provision for potential charges from external outsourcers	0.6
Costs falling outside MSAs	0.3
Solvency II	0.7
Strachan Policy Review	0.0
Total Additional Reserves	14.8

9. REALISTIC CURRENT LIABILITIES

The realistic current liabilities are obtained from the regulatory value by adjusting to allow for recoverable deferred tax assets. The reconciliation of the realistic current liabilities to the regulatory current liabilities is:

	£m
Regulatory current liabilities	382.5
- Recoverable deferred tax asset	-0.6
- Recoverable tax on excess E	-0.1
Realistic current liabilities	381.8

10. RISK CAPITAL MARGIN

- (a) The risk capital margin is nil.
 - (i) The market risk scenario assumes that equities fall (rise) by an amount which depends on the territory in question:

% Change in Equity Markets	%
UK and "Non-significant" Overseas Holdings	20.00
Europe	20.00
USA	20.00

The equity fall is the more onerous scenario.

Note that the fund holds no real estate and so the stress of property values was not applicable.

(ii) The nominal change in yields for fixed interest securities for the purpose of the market risk scenario again depends on the territory in question:

Nominal change in yields on fixed interest securities	Nominal Change in Yields	% change in long term gilt yield
UK and "Non-significant" Overseas Holdings	0.78%	17.50%
Europe	0.69%	17.50%
USA	0.71%	17.50%

A rise in yields is the more onerous scenario.

- (iii) The average change in spread is 0.68%. Changes in market values are:
- (a) (4.13)% for bonds;
- (b) Not applicable:
- (c) Not applicable:
- (d) Not applicable;
- (e) Not applicable.
- (iv) The average change in persistency experience is a 32.5% reduction in future lapse and paid-up rates. The overall percentage change in the realistic value of liabilities from applying the persistency stress is 2.13%.
- (v) The change in asset value in (iii) is materially independent of the change in liability values in (iv).

- (b) There is a collateral promise on the unitised with-profits business under which the cost of conventional with-profits guarantees must not be borne by unitised with-profits policyholders. However, planned enhancements arising on either unitised with-profits or conventional with-profits business may be used to reduce any deficit arising in the other category having first covered their own deficit.
 - (i) In the stress scenarios the following additional assumption is made:

The planned benefit enhancements will be reduced by £74.1m, resulting in £nil working capital under the stressed conditions.

- (ii) The effect on the risk capital margin of reducing the planned benefit enhancements is a reduction of £74.1m.
- (iii) No changes would be made to equity backing ratios or bonus rates if the management actions were taken.
- (iv) The requirements of INSPRU 1.3.188(R) would be met if the actions described in paragraph 10 (b) (i) were integrated into the projection of assets and liabilities.
- (c)

 (i) The risk capital margin is covered by the assets of the Scottish Mutual With-Profits Fund.
 - (ii) The scheme for the funds merger as at 1 January 2009 includes a provision that in the event that the value of the assets of the fund falls below the regulatory minimum, support will be provided to the fund by way of a loan arrangement from the Non Profit Fund or the Shareholders' Fund to the extent that the Board determines there are assets in those funds available to make such a loan.

11. TAX

Tax on assets backing the with-profits benefits reserve for BLAGAB business is charged to those asset shares approximately and allowance is made for relief on expenses.

Tax on any future policy related liabilities for BLAGAB business is allowed for in determining those liabilities.

An amount in respect of deferred tax on anticipated recoverable investment losses has been used to reduce current liabilities.

12. DERIVATIVES

A number of structured derivative contracts are held within the fund at the valuation date to enable the fund to withstand the impact of adverse conditions. They are constructed from at-the-money vanilla over-the-counter derivatives – equity put options, equity futures, interest rate swaps, interest rate swaptions and spreadlocks – with outstanding terms ranging from 1 to 20 years.

As at the valuation date the total market price of these derivatives, on a bid basis, is £225m. This is split as follows:

Туре	GBP (£m)	EUR (£m)	Total (£m)
Swaps	44.05	0.00	44.05
Swaptions	53.72	0.00	53.72
Options	82.83	3.83	86.66
Spreadlocks	42.93	0.00	42.93
Futures	-2.02	-0.25	-2.27
Total	221.52	3.58	225.10

13. ANALYSIS OF WORKING CAPITAL

The movement in working capital over the twelve months to the valuation date is shown in the following table.

	£m
Opening working capital	0.0
Write back planned benefit enhancements to zeroise working capital	293.0
Revised opening working capital	293.0
Opening adjustments	(3.8)
Restated opening working capital	289.2
Investment return on working capital	4.0
Mismatch profits and losses	44.2
Assumption changes	
- Non-economic	(11.7)
- Economic	(0.6)
- Policyholder actions	0.4
Impact of new business	0.0
Other variances	and the second of the second o
- Non-economic	44.4
- Economic	207.3
- Changes in provisions	(261.3)
- Unexplained	0.0
Closing working capital before zeroisation	316.0
Planned benefit enhancements to zeroise working capital	(316.0)
Closing working capital	0.0

The following table shows a breakdown of the liabilities shown on line 47 of Form 19 at the start and end of the year:

£m ·	Current Valuation	Previous Valuation
Present value of future CWP transfers	12.5	8.9
Technical Provisions	14.8	0.0
Any other long term insurance liabilities	27.3	8.9

The following table shows a breakdown of the liabilities shown on line 51 of Form 19 at the start and end of the year:

£m	Current Valuation	Previous Valuation	
Regulatory current liabilities	382.5	141.1	
- Recoverable deferred tax asset	-0.6	0.0	
- Recoverable tax on excess E	(0.1)	(2.2)	
Realistic current liabilities	381.8	138.9	

14. OPTIONAL DISCLOSURE

None made

SPI WITH-PROFITS FUND

2. ASSETS

(1) Economic Assumptions For Valuing Non-Profit Business

There is no material amount of non-profit business.

(2) Amount Determined Under INSPRU 1.3.33(2)(R)

Not applicable

(3) Valuation Of Contracts Written Outside The Fund

Not applicable

(4) Different Sets Of Assumptions

Not applicable

(5) De Minimis Limit

Not applicable

3. WITH-PROFITS BENEFITS RESERVE LIABILITIES

(1) Calculation Of With-Profits Benefits Reserve

Product Type	Method	With-profits benefits reserve	Future policy related liabilities	
		2	£m	
Whole life assurance	Prospective	. 79	15	
Endowment	Retrospective	1,332	220	
Unitised with-profits Life	Retrospective	120	19	
Other	Retrospective	50	9	
Life Total		1,581	263	
Deferred annuity- with GCO	Retrospective	158	105	
Deferred annuity- without GCO	Retrospective	235	106	
Pure Endowment- with GCO	Retrospective	9	9	
Unitised with-profits Pensions	Retrospective	457	92	
SPI Funding	Retrospective	78	40	
Pensions Total		937	353	
Total	- Andrew Control of the Control of t	2,518	615	
Form 19 Line 31		2,518		
Form 19 Line 49			615	

[&]quot;Other" business in this table covers smaller conventional with-profits life products for which the costs of guarantees and options are calculated approximately.

(2) Correspondence With Form 19

The above reconciles to lines 31 and 49 of Form 19.

(3) With-Profits Benefits Reserves Below De Minimis Limit

Not applicable as all products have been disclosed.

(4) Types Of Products

The level of disclosure in the table above corresponds to material groupings of contracts offering significant variances in policyholder benefits. For example, contracts with and without guaranteed cash options are identified separately and unitised with-profits business is separated from conventional with-profits business.

4. WITH-PROFITS BENEFITS RESERVE – RETROSPECTIVE METHOD

(1) Retrospective Methods

- (a) All contracts have been calculated on an individual policy basis.
- (b) No contracts have been valued on a grouped basis.
- (c) Not applicable as no contracts have been valued on a grouped basis.

(2) Significant Changes To Valuation Method

- (a) There have been no significant changes in the method of calculating the withprofits benefits reserve.
- (b) No policies were valued using approaches more approximate than used for the previous valuation.

(3) Expense Allocation

- (a) The 2009 Court Scheme sets out the charges for the SPI With-Profits Fund. The scheme also specifies that in any financial year, these charges (calculated on a per policy basis) shall not be less than 85% or more than 115% of the costs actually incurred by Phoenix in respect of the business in the SPI With-Profits Fund. These charges are reviewed by the With-Profits Committee with a view to ensuring that they comply with these terms.
- (b) Expense investigations (reviews of the management services agreement) are carried out annually.
- (c) The expenses for the business for the year to the valuation date were:

	Item	£m
(i)	Initial Expenses ¹	0.0
(ii)	Maintenance Expenses	16.9
	Investment Expenses	2.2
(iii)	Method	Average expense charge deducted
(iv)	Expenses charged other than to with- profits benefits reserve.	0.1

¹ Since the company is closed to new business (apart from contractual increments etc.), the initial expenses are negligible.

Investment expenses were deducted from the with-profits benefits reserve at a rate of 0.140% p.a.

(4) Significant Charges

There is a hedge asset in place to cover a substantial part of the guarantees within the fund. The costs of rebalancing this hedge were previously charged to the with-profits benefits reserve but are now charged to the estate. The resulting percentage reduction in the with-profits benefits reserve is shown in the following table.

Asset Share Group	Current Valuation	Previous Valuation
CWP Life and Pensions	0.00%	(0.06)%
UWP Life and Pensions	0.00%	(0.06)%

(5) Charges For Non-Insurance Risk

Charges in respect of accumulating with-profits business are as determined by the policy terms and conditions. In particular, an annual management charge is deducted from asset shares. This is 0.6% for life business and 0.85% for pensions business.

(6) Ratio Of Claims To Reserve

Average ratio of total claims to asset shares:

Year	Ratio of claims to asset
	shares
Previous year -1	103.5%
Previous year	104.4%
Current year	104.8%

(7) Allocated Return

The same gross investment return is allocated to the with-profits benefits reserve for all UK contracts in the fund. Similarly, the same gross investment return is allocated to all Irish contracts in the fund. Investment returns for the full year (gross of tax) are:

Product Type	Investment Return		
UK business	13.25%		
Irish business	15.65%		

5. WITH-PROFITS BENEFITS RESERVE - PROSPECTIVE METHOD

(1) Key Assumptions

A prospective method has been used for with-profits whole life business. The with-profits benefits reserve for this business is determined using a bonus reserve valuation with the following assumptions:

Economic Assumptions			
Discount Rate p.a. (net of investment expense)	4.00%		
Investment Return p.a. (net of investment expense)	4.0	00%	
Expense Assumptions	UK Ireland		
Investment Expense p.a.	0.140%	0.140%	
Per Policy Expenses p.a. (premium-paying)	£28.18	€ 99.49	
Per Policy Expenses p.a. (paid-up)	£19.72	€ 99.49	
Expense Inflation p.a.	4.58%	0.00%	
€ / £ Exchange rate	1.1255		
Bonus Assumptions		**************************************	
Reversionary Bonus Rate	0%		
Terminal Bonus Rate	See below		

Future terminal bonus rates vary by duration in force at time of payment. Different rates apply for UK and Ireland business. Sample terminal bonus rates are as follows:

Term	UK	ireland
5	10%	7%
10	20%	14%
15	19%	18%
20	11%	25%
25	17%	22%
30	37%	51%
35	64%	78%
40	103%	118%
50+	184%	209%

There is no allowance for lapses. The mortality assumptions are based on the TM92 / TF92 tables, with a distinction between smokers and non-smokers:

Mortality	
Male non-smoker	90% TM92_MNS
Male smoker	95% TM92_MS
Female non-smoker	90% TF92_FNS
Female smoker	80% TF92_FS

(2) Different Sets Of Assumptions

Not applicable

6. COST OF GUARANTEES, OPTIONS AND SMOOTHING

(1) De Minimis Limit

The cost of smoothing is nil as all benefits are based on unsmoothed asset shares.

(2) Valuation Methods For Guarantees etc.

	Cost of	Extent of	No of Individual	No of model
	Guarantees &	Grouping	policies	points
	Options			
All business	Stochastic model	All business	494,647	3,621

(a) Cost of Guarantees & Options

The costs of guarantees are determined using a stochastic model, with the asset returns being generated by a proprietary model. The following items were calculated stochastically:

- (i) Guaranteed annuity option reserves
- (ii) The reserves required in addition to asset share to meet guaranteed benefits

The calculations were carried out using a risk neutral approach.

- (b) (i) In the stochastic model, no projections are carried out on individual policy data.
 - (ii) All of the contracts are valued on a grouped basis. However, the values for the with-profits benefits reserve are calculated on an individual basis and added to the data file before the data is grouped.
 - (iii) Policies are grouped according to product code, annuity factor, terminal bonus series, reversionary bonus series, early retirement option indicator, pension code and product class. They are also split into bands by policy term and according to the degree by which the guarantees are in or out of the money.

The values of guarantees are estimated using closed form approximations before and after grouping. These are compared to ensure that the model points are a good representation of the individual policy data

(3) Significant Changes

There have been no significant changes since the previous valuation.

(4) Further Information on Stochastic Approach

- (a) (i) The stochastic model is used to value the following guarantees and options:
 - No negative terminal bonus guarantees at maturity and death within conventional with-profits contracts.
 - Market value reduction-free spot maturity guarantees within unitised withprofits contracts.
 - Guaranteed annuity options on conventional with-profits contracts.

Of these, the guaranteed annuity options and market value reduction-free guarantees are strongly "in the money" at the valuation date. For the guarantee of no negative terminal bonus, the extent to which it is "in the money" depends on duration and policy size.

(ii) The asset returns in the stochastic model were generated by a proprietary model licensed from Barrie & Hibbert. The asset classes modelled are UK equities, UK property, UK corporate bonds, UK gilts, EU equities, EU corporate bonds and EU gilts.

Interest Rate

UK gilt returns are modelled using a gilts + 10bps calibration in a monthly LIBOR Market Model. The Government Nominal Bond yield curve is a direct input into the model. Euro gilt returns are modelled in a similar fashion based on the closest equivalent to the Government Nominal bond yield curve.

The calibration at the valuation date was as follows:

		GBP			EUR	
Term	Govt. + 10bp	Model	Difference (bps)	Govt. + 10bp (equivalent)	Model	Difference (bps)
1	0.97%	0.97%	0	0.97%	0.97%	-0
2	1.60%	1.60%	0	1.44%	1.43%	0
3	2.19%	2.19%	0	1.95%	1.96%	-1
4	2.70%	2.70%	0	2.40%	2.40%	-0
5	3.13%	3.13%	0	2.73%	2.73%	0
7	3.75%	3.75%	0	3.25%	3.25%	0
10	4.35%	4.34%	1	3.81%	3.81%	0
15	4.80%	4.80%	0	4.33%	4.35%	-1
20	4.86%	4.86%	0	4.50%	4.52%	-1
25	4.79%	4.79%	0	4.56%	4.57%	-1

The volatility within the model is calibrated to the market implied volatility for at the money swaptions (for 20 year swaps). The calibration at the valuation date is as follows:

		GBP			EUR	****
Term	Market (%) Model (%)	Model (%)	Difference	Market (%)	Model (%)	Difference
			(bps)	<u> </u>		(bps)
1	20.70	20.52	-18	21.00	21.94	94
2	19.30	18.40	-90	20.50	19.58	-92
3	17.90	17.70	-20	19.00	18.66	-34
4	16.70	17.01	31	18.20	17.88	-32
5	15.90	16.42	52	17.40	17.53	13
7	14.70	15.50	80	16.30	16.94	64
10	14.10	14.64	54	15.60	16.10	50
15	14.60	13.72	-88	16.20	14.91	-129
20	14.40	12.90	-150	17.40	14.15	-325
25	14.00	12.08	-192	17.50	13.07	-443
30	13.00	11.46	-154	16.50	12.38	-412

Inflation is modelled as the difference between the nominal and real yield curves. Real interest rates are modelled using a two-factor Vasicek model, which is calibrated to be consistent with GBP and EUR index linked government bond prices as at 31 December 2009.

Equities and Property

Excess returns over risk free on UK equities, overseas equities and property are modelled using separate (but correlated) lognormal models. Separate

equity models are used for UK and Euro equities and each model uses a local volatility surface calibrated to market implied volatilities for a range of strikes and maturities. Volatilities are assumed to be constant beyond quoted strikes and maturities.

The UK asset model was calibrated by reference to the implied volatility of FTSE100 options for a range of strikes (from 0.8 to 1.2) and maturities of up to 10 years. All strikes are expressed as a proportion of at-the-money. Implied volatility data (%) at the valuation date is shown below:

Market (%)

Term	0.8	1	1.2
1	29.10	22.89	18.28
2	28.65	24.25	20.75
3	28.75	24.92	21.59
5	28.43	25.26	23.11
10	28.67	26.57	24.83

Model (%)

The second secon		Strike					
Term	0.8	1	1.2				
1	29.79	24.81	20.88				
2	29.26	25.68	22.56				
3	29.46	26.47	23.66				
5	28.73	26.50	24.60				
10	28.08	26.63	25.41				

Difference (Model - Market) (bps)

		Strike	
Term	0.8	1	1.2
1	69	192	260
2	61	143	181
3	71	155	207
5	30	124	149
10	-59	6	58

The Euro asset model was calibrated by reference to the implied volatility of Eurostoxx 50 options for a range of strikes (from 0.8 to 1.2) and maturities of up to 10 years. All strikes are expressed as a proportion of at-the-money.

Implied volatility data (%) at the valuation date is shown below:

Market (%)

	Strike					
Term	0.8	1	1.2			
1	30.96	24.91	20.99			
2	30.42	26.03	22.63			
3	30.32	26.76	23.91			
5	30.61	27.44	24.70			
10	30.83	28.59	26.68			

Model (%)

	Strike					
Term	0.8	1	1.2			
1	30.54	26.36	23.21			
2	29.99	27.01	24.28			
3	30.13	27.69	25.43			
5	29.96	28.25	26.69			
10	30.48	29.30	28.41			

Difference (Model - Market) (bps)

		Strike	
Term	0.8	1	1.2
1	-42	145	222
2	-43	98	165
3	-19	93	152
5	-65	81	199
10	-35	71	173

There is no investment in property within the fund and so property volatilities are not relevant.

Corporate bond

Corporate bond returns are modelled using the extended Jarrow-Lando-Turnbull model. This describes bond prices in terms of a real-world transition matrix, which gives the probability of a transition to each credit rating over one year. Risk neutral transition probabilities are assumed to vary stochastically. The transition matrix is consistent with best estimates based on historic data of long term transition probabilities and spread volatilities and corporate bond prices. The model was fitted to a sample of predominantly investment grade sterling corporate bonds.

The asset model uses a credit transition matrix. The fit of the model is targeted to the market spread on a 7 year A rated bond only. Credit derivatives are not used to derive market implied transition probabilities.

The following are examples of observed correlations of year 10 returns from the scenarios used (ZCB = zero coupon bond):

		Output Correlations @ Year 10					
	Cash	Equities	Overseas	5yr	15yr	5yr	15yr
			Equities	1 1	Govt	Corp	Corp
				ZCB	ZCB	ZCB	ZCB
Cash	1	-0.14	-0.18	-0.83	-0.80	-0.76	-0.76
Equities	ė	1	0.13	0.16	0.14	0.30	0.26
Overseas equities			1	0.17	0.17	0.18	0.17
5yr Govt ZCB			•	1	0.97	0.90	0.91
15yr Govt ZCB				•	1	0.87	0.93
5yr Corp ZCB					•	1	0.96
15yr Corp ZCB		085500					1

Nominal foreign exchange rates are modelled as the combination of real exchange rates and inflation rates where real exchange rates follow a mean-reverting process and are calibrated to the long-term best estimates derived by Barrie & Hibbert.

SPI With-Profits Fund

(iii) The table below is based on 3,000 scenarios:

	Asset type (all UK assets)	K=0.75				K=1				K=1.5			
	u	5	15	25	35	5	15	25	35	5	15	25	35
	r Annualised compound equivalent of the risk	3.13%	4.80%	4.79%	4.61%	×	×	×	×	×	×	×	×
	free rate assumed for the period. (to two decimal places)						AND STATE OF THE S			Market energy			inchili di mpi n manggal
<u> -</u>	Risk-free zero coupon bond	857,346	495,102	310,697	206,795	,			ı	J	'	ı	
2	FTSE All Share Index (p=1)	119,931	250,905	345,348	425,020	232,959	399,207	516,518	616,350	573,055	759,708	900,478	1,029,053
က	FTSE All Share Index (p=0.8)	111,499	199,784	249,361	283,813	217,542	319,941	375,021	413,128	537,004	611,277	658,612	696,705
4	Property (p=1)	32,194	110,446	184,671	251,156	134,238	245,884	341,206	423,936	522,159	618,024	720,183	821,451
ς.	Property (p=0.8)	27,030	72,147	106,605	136,166	117,805	169,953	210,263	240,929	481,517	462,902	478,488	499,384
9	15 year risk free zero coupon bond (p=1)	20,362	22,057	19,357	32,403	94,726	88,650	95,636	140,918	499,739	498,888	506,593	541,721
C	15 year risk free zero coupon bond (p=0.8)	17,100	12,170	6,957	6,508	81,209	45,279	25,703	28,672	455,121	309,587	228,084	208,779
8	15 year risk free bonds (p=1)	23,167	27,800	29,628	47,270	101,263	104,526	114,654	158,363	499,159	496,020	506,650	545,256
6	15 year risk free bonds (p=0.8)	19,570	15,381	10,577	11,416	87,283	55,043	39,045	42,765	455,138	314,587	239,173	222,058
<u></u>	Portfolio of 65% FTSE All Share and 35% property (p=1)	66,133	163,116	242,871	317,563	168,289	296,896	399,411	494,460	528,759	653,591	777,463	893,067
11	Portfolio of 65% FTSE All Share and 35% property (p=0.8)	59,326	120,269	160,907	193,949	153,225	223,862	268,982	306,938	489,499	503,789	536,910	570,761
12	Portfolio of 65% equity and 35% 15 year risk free zero coupon bonds (p=1)	61,421	146,647	218,407	284,596	160,526	273,813	365,297	449,096	522,689	620,544	726,589	833,437
13	Portfolio of 65% equity and 35% 15 year risk free zero coupon bonds (p=0.8)	54,947	106,266	142,916	170,181	146,111	204,299	242,624	274,612	482,727	472,014	495,201	520,947
4+	Portfolio of 40% equity, 15% property, 22.5% 15 year risk free zero coupon bonds and 22.5% 15 year corporate bonds (p=1)	27,217	77,165	127,914	182,407	115,056	189,134	258,078	331,385	505,058	545,571	620,429	710,948
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)	22,731	47,210	69,803	90,544	100,460	125,325	148,177	173,839	462,312	388,747	384,434	400,094
			L=15	15			L=20	30				L=25	
16	Receiver swaptions	5.10%	6.56%	2.60%	3.98%	6.61%	8.07%	%89.9	4.67%	7.98%	9.25%	7.48%	5.13%

(iv) UK initial equity yield: 3.44% Overseas initial equity yield: 3.90%

(v) The following table shows entries (K=1 only) for the risk free rate and lines 1 and 2 for the Eurozone, the only economy outside the UK to which the fund has significant asset exposure. They are denominated in euros and based on 3,000 scenarios.

	Asset Type (EU Assets)	K=1					
n	Duration	5	15	25	35		
	Strike price per €1m	1,144,151	1,893,462	3,055,489	4,828,926		
	Annualised compound						
r	equivalent of the risk free rate	2.73%	4.35%	4.57%	4.60%		
1	Risk-Free Coupon Bond	874,011	528,133	327,280	207,085		
2	ESTOXX (p=1)	247,907	432,523	526,366	620,719		

(vi) The fund has significant hedge instruments that form a close match, in aggregate, to the liabilities of the fund. The hedge instruments include equity put options and swaptions. The following table compares the market prices (on a mid basis) for these instruments to the values obtained using the asset model.

Outstanding Term	Option	ns (£)	Swaptions (£)		
(Years)	Market	Model	Market	Model	
1-5	41,961,420	43,378,279	5,922,772	8,935,713	
6-10	28,386,132	31,932,915	6,266,324	9,701,842	
11-15	8,606,498	11,924,380	2,844,191	4,342,859	
16-20	11,950,515	8,035,973	4,360,551	6,330,085	
Total	90,904,565	95,271,547	19,393,839	29,310,499	

Note that the modelled results in the above table are produced using a gilts+10 based calibration for consistency with the approach to valuing the liabilities. If a swaps-based calibration is used (which would be more consistent with how the market would price these contracts) the discrepancy between the market and modelled values is significantly smaller.

(vii) The asset models of each main asset class have been validated by comparing the net present value of a forty year projection of the future cashflows under the asset, including capital gains and losses, with the current value of the asset.

This was done for each of the dominant economies in which the fund has assets invested, namely the UK and the EU. At 3000 scenarios, the difference between the average net present value of each asset class of each economy and the current asset value was close (i.e. not statistically significant). This confirms that the total return is a martingale and risk neutral.

(viii) The assets and liabilities have been computed using 3,000 (1,500 antithetic pairs of) simulated scenarios. At 1,000 scenarios, the cost of options and guarantees converges to $\pm £3.6$ m at a 95% confidence interval. When the number of scenarios is increased to 3,000, the cost of options and guarantees converges to $\pm £2.0$ m.

(b) Not applicable

- (c) Not applicable
- (5) Management Actions
- (a) No management actions were assumed in calculating the working capital.
- (b) Not applicable

(6) Persistency Assumptions

The surrender and paid-up rates are:

Product		Average		er/Paid-up cy years	rate for
		1-5	6-10	11-15	16-20
CWP Savings Endowment	Surrender	6.40%	6.80%	8.70%	4.50%
CWP Target Cash Endowment	Surrender	6.40%	6.80%	8.70%	4.50%
UWP Savings Endowment	Surrender	6.00%	10.00%	10.00%	10.00%
UWP Target Cash Endowment	Surrender	6.00%	10.00%	10.00%	10.00%
UWP Bond	Surrender	13.00%	11.40%	11.00%	11.00%
CWP Pension Regular Premium	PUP	2.25%	3.85%	4.25%	4.25%
CWP Pension Regular Premium	Surrender	2.00%	5.00%	5.00%	5.00%
CWP Pension Single Premium	Surrender	2.00%	5.00%	5.00%	5.00%
UWP Indiv Pension Regular Premium	PUP	4.50%	3.30%	3.00%	3.00%
UWP Indiv Pension Regular Premium	Surrender	5.50%	6.30%	6.50%	6.50%
UWP Indiv Pension Single Premium	Surrender	5.50%	6.30%	6.50%	6.50%

Take-up Rates of Guaranteed Annuity Options

The assumed take-up rate varies with the degree of "money-ness" of the option, where this is defined as (market annuity rate / guaranteed annuity rate) at the retirement date.

Moneyness Upper Limit (%)	Take-up Rate (%)
100	0
140	75
160	85
9999	95

Annuitant Mortality

Deferred pension contracts (post vesting) include guaranteed annuity options.

The mortality assumption for annuities in possession arising from the exercising of guaranteed annuity options is 5% higher than that described in Appendix 9.4, paragraph 4 (4).

(7) Policyholders' Actions

Exercise of MVR-free options

The rate at which these options are exercised varies with the degree of "money-ness" of the option, where this is defined as (asset share / face value of units) on the MVR-free date.

Moneyness Upper Limit (%)	Take-up Rate (%)
75	100
90	75
100	25
9999	0

7. FINANCING COSTS

The fund has no financing costs as at the valuation date.

8. OTHER LONG-TERM INSURANCE LIABILITIES

No amounts have been included in Line 46 of Form 19. The amount shown in Line 47 of Form 19 is made up as follows:

Description	£m
Discounted value of future transfer to shareholders	45.8
Excess charges on UWP fund	8.6
Mathematical reserves in respect of non-profit GAOs	14.8
Data provision	3.8
Future Litigation costs	4.5
Project and other costs	4.8
VAT provision for potential charges from external outsourcers	0.6
Costs falling outside MSAs	0.2
Solvency II	0.7
Strachan Policy Review	0.1
Percana Expense provision for PLIre	6.7
Total	90.5

9. REALISTIC CURRENT LIABILITIES

The realistic current liabilities are obtained from the regulatory value by deducting an amount for the partial release of the demutualisation compensation fund. The reconciliation of the realistic current liabilities to the regulatory current liabilities is:

Description	£m
Regulatory current liabilities	490.3
Partial release of de-mutualisation compensation fund	-56.6
Recoverable deferred tax asset	-0.7
Recoverable tax on excess E	0.0
Total	433.0

10. RISK CAPITAL MARGIN

- (a) The risk capital margin is nil.
 - (i) The market risk scenario assumes that equities fall by an amount which depends on the territory in question:

% Change in Equity and Real Estate Markets	%
UK and "Non-significant" Overseas Holdings	20.00
Europe	20.00
USA	20.00

The equity fall is the more onerous scenario.

Note that the fund holds no real estate and so this stress was not applicable.

(ii) The nominal change in yields for fixed interest securities for the purpose of the market risk scenario again depends on the territory in question:

Nominal change in yields on fixed interest securities	Nominal Change in Yields	% change in long term gilt yield
UK and "Non-significant" Overseas Holdings	0.78%	17.50%
Europe	0.69%	17.50%
USA	0.71%	17.50%

In each case this is consistent with a rise or fall of 17.5% in the appropriate long term gilt yield. A rise in yields is the more onerous scenario.

- (iii) The average change in spread is 0.47%. Changes in market values are:
- (a) (2.75)% for bonds
- (b) Not applicable
- (c) Not applicable
- (d) Not applicable
- (e) Not applicable
- (iv) The average change in persistency experience is a 32.5% reduction in future lapse and paid-up rates. The overall percentage change in the realistic value of liabilities from applying the persistency stress is 0.91%.
- (v) The change in asset value in (iii) is materially independent of the change in liability values in (iv).
- (b) (i) In the stress scenarios the following additional assumption is made:

The planned benefit enhancements will be reduced by £99.3m, resulting in £nil working capital under the stressed conditions.

(ii) The effect on the risk capital margin of reducing the planned benefit enhancements is a reduction of £99.3m.

- (iii) No changes would be made to equity backing ratios or bonus rates if the management actions were taken
- (iv) The requirements of INSPRU 1.3.188(R) would be met if the actions described in paragraph 10 (b) (i) were integrated into the projection of assets and liabilities.
- (c) Assets covering risk capital margin
 - (i) The risk capital margin is covered by the assets of the long-term fund.
 - (ii) The scheme for the funds merger as at 1 January 2009 includes a provision that in the event that the value of the assets of the fund falls below the regulatory minimum, support will be provided to the fund by way of a loan arrangement from the Non-Profit Fund or the Shareholders Fund to the extent that the Board determines there are assets in those funds available to make such a loan.

11. TAX

Tax on assets backing the with-profits benefits reserve for BLAGAB business is charged to those asset shares approximately and allowance is made for relief on expenses.

Tax on any future policy related liabilities for BLAGAB business is allowed for in determining those liabilities.

An amount in respect of deferred tax on anticipated recoverable investment losses has been used to reduce current liabilities.

12. DERIVATIVES

A number of structured derivative contracts are held within the fund at the valuation date to enable the fund to withstand the impact of adverse conditions. They are constructed from at-the-money vanilla over-the-counter derivatives — equity put options, equity futures, interest rate swaps, interest rate swaptions and spreadlocks — with outstanding terms ranging from 1 to 20 years.

As at the valuation date the total market price of these derivatives, on a bid basis, is £125.67m. This is split as follows:

Туре	GBP (£m)	EUR (£m)	Total (£m)
Swaps	-0.27	20.77	20.51
Swaptions	8.61	8.40	17.01
Options	62.40	20.06	82.46
Futures	-2.68	-0.92	-3.60
Spreadlocks	9.29	0.00	9.29
Total	77.35	48.32	125.67

13. ANALYSIS OF WORKING CAPITAL

The movement in working capital over the twelve months to the valuation date is shown in the following table.

	£m
Opening working capital	0.0
Write back planned benefit enhancements to zeroise working capital	177.0
Revised opening working capital	177.0
Opening adjustments	1.2
Restated opening working capital	178.3
Investment return on working capital	11.5
Mismatch profits and losses	(63.2)
Assumption changes	
- Non-economic	6.7
- Economic	(0.5)
- Policyholder actions	0.0
Impact of new business	0.0
Other variances	
- Non-economic	(5.9)
- Economic	163.0
- Changes in provisions	(83.6)
- Asset share enhancements	0.0
- Unexplained	0.0
Closing working capital before zeroisation	206.2
Planned benefit enhancements to zeroise working capital	(206.2)
Closing working capital	0.0

The following table shows a breakdown of the liabilities shown on line 47 Form 19 at the start and end of the year:

£m	Current Valuation	Previous Valuation
Discounted value of future transfer to shareholders	45.8	34.6
Excess charges on UWP fund	8.6	8.8
Mathematical reserves in respect of non-profit GAOs	14.8	13.9
Provisions	21.3	0.0
Total	90.5	57.4

The following table shows a breakdown of the liabilities shown on line 51 Form 19 at the start and end of the year:

£m	Current Valuation	Previous Valuation
Regulatory current liabilities	490.3	165.9
Partial release of de-mutualisation compensation fund	-56.6	-49.9
Recoverable deferred tax asset	-0.7	0.0
Recoverable tax on excess E	0.0	-0.6
Realistic current liabilities	433.0	115.4

14. OPTIONAL DISCLOSURE

None made.

Statement of information on the Actuary appointed to perform the With-Profits Actuary function required by rule 9.36

Phoenix Life Limited

Global business

Financial year ended 31 December 2009

Throughout the year, the actuary who was appointed to perform the with-profits actuary function for the 90% With-Profits Fund, 100% With-Profits Fund and Phoenix With-Profits Fund was Mr A E Burke.

From 1 April 2009, Mr A E Burke was also the actuary appointed to perform the with-profits actuary function for the Scottish Mutual With-Profits Fund and the SPI With-Profits Fund.

- 1 (a) During the year Mr Burke had no interest in the shares of the insurer.
 - (b) Mr Burke held an insurance policy issued by the insurer in the normal course of business, the transactions being of a minor nature.
 - (c) The aggregate of the remuneration and value of other benefits receivable by Mr Burke from the insurer in respect of 2009 was £172,866.
 - (d) Mr Burke was throughout the year a member of the PGL Pension Scheme, and was entitled to the standard benefits under the rules of the scheme.
- The insurer has made a request of Mr Burke to furnish to it the particulars specified in rule 9.36(1) of IPRU(INS). The above particulars were obtained from the insurer's Human Resources records with the permission of Mr Burke.

Note 1

Under rule 9.36(4) of IPRU(INS), reference to the insurer includes reference to any body corporate which is the insurer's subsidiary undertaking or parent undertaking and to any other subsidiary undertakings of its parent undertaking.

Statement of information on the Actuary appointed to perform the With-Profits Actuary function required by rule 9.36

Phoenix Life Limited

Global business

Financial year ended 31 December 2009

Throughout the year, the actuary who was appointed to perform the with-profits actuary function for the Britannic Industrial Branch Fund and Britannic With-Profits Fund was Mr A Rendell.

- 1 (a) During the year Mr Rendell had no interest in the shares of the insurer.
 - (b) Mr Rendell had no other pecuniary interest with the insurer during the year.
 - (c) The aggregate of the remuneration and value of other benefits receivable by Mr Rendell from the insurer in respect of 2009 was £277,275.
 - (d) Mr Rendell was throughout the year a member of the Final Salary section if the PGL Pension Scheme, and was entitled to the standard benefits under the rules of the scheme.
- The insurer has made a request of Mr Rendell to furnish to it the particulars specified in rule 9.36(1) of IPRU(INS). The above particulars were obtained from the insurer's Human Resources records with the permission of Mr Rendell.

Note 1

Under rule 9.36(4) of IPRU(INS), reference to the insurer includes reference to any body corporate which is the insurer's subsidiary undertaking or parent undertaking and to any other subsidiary undertakings of its parent undertaking.

Statement of information on the Actuary appointed to perform the With-Profits Actuary function required by rule 9.36

Phoenix Life Limited

Global business

Financial year ended 31 December 2009

Throughout the year, the actuary who was appointed to perform the with-profits actuary function for the Alba With-Profits Fund was Mr G M Ross.

From 1 January to 31 March 2009, Mr G M Ross was also the actuary appointed to perform the with-profits function for the Scottish Mutual With-Profits Fund and the SPI With-Profits Fund.

- 1 (a) During the year Mr Ross had no interest in the shares of the insurer.
 - (b) Mr Ross had no other pecuniary interest with the insurer during the year.
 - (c) The aggregate of the remuneration and value of other benefits receivable under a contract for services by Mr Ross from the insurer in respect of 2009 was £197,669 inclusive of VAT and disbursements.
 - (d) Throughout the year, Mr Ross received a pension from the PGL Pension Scheme.
- The insurer has made a request of Mr Ross to furnish to it the particulars specified in rule 9.36(1) of IPRU(INS). The above particulars were obtained from the insurer's Human Resources records with the permission of Mr Ross.

Note 1

Under rule 9.36(4) of IPRU(INS), reference to the insurer includes reference to any body corporate which is the insurer's subsidiary undertaking or parent undertaking and to any other subsidiary undertakings of its parent undertaking.

Certificate required by rule 9.34(1)

Phoenix Life Limited

Global business

Financial year ended 31 December 2009

We certify that:

- (1) (a) the return has been properly prepared in accordance with the requirements in IPRU(INS), GENPRU and INSPRU; and
 - (b) we are satisfied, save as disclosed in note 1 within the attached note to the certificate, that:
 - throughout the financial year, the insurer has complied in all material respects with the requirements in 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) in our opinion, premiums for contracts of long-term insurance business 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) 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 for the long-term insurance business 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; and
 - (d) the directors, have in preparing the return, taken and paid due regard to:
 - (i) advice 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 with-profits actuary function in accordance with SUP 4.3.16AR.

M J Merrick

Chief Executive

Date: 25 March 2010

J S B Smith

Director

Director

J P Evans

Returns under the Accounts and Statements Rules
Certificate required by rule 9.34(1)
Phoenix Life Limited
Global business
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Note to the Directors' Certificate

1 Compliance with the provisions of SYSC

Paragraph (1)(b) requires that the insurer has complied in all material respects with the requirements in SYSC. There have been process and system issues in one of Pearl's outsourcers, UiSL Limited, which have generated higher than expected premium and claim suspense account balances when reconciling ledger balances to underlying policy administration systems.

During 2009 significant progress has been made in clearance of backlogs and putting in place enhanced procedures to prevent recurrence. This process will continue during 2010.

2 Principles and Practices of Financial Management

Paragraph 2(c) which relates to the management of the with profits funds in accordance with the Principles and Practices of Financial Management ("PPFM"), has been omitted from the Return due to certain minor instances where the management of the fund differed from the published PPFM but these have not resulted in the unfair treatment of policyholders.

Independent auditors' report to the directors pursuant to rule 9.35 of the Interim Prudential Sourcebook for Insurers

Phoenix Life Limited

Global business

Financial year ended 31 December 2009

We have examined the following documents prepared by the insurer pursuant to the Accounts and Statements Rules set out in Chapter 9 of IPRU(INS) the Interim Prudential Sourcebook for Insurers, GENPRU the General Prudential Sourcebook and INSPRU the Prudential Sourcebook for Insurers ("the Rules") made by the Financial Services Authority under section 138 of the Financial Services and Markets Act 2000

- Forms 2, 3, 11 to 19, 40 to 45, 48, 49, 56, 58 and 60 (including the supplementary notes) ("the Forms");
- the statement required by IPRU(INS) rule 9.29 ("the statement"); and
- the reports required by IPRU(INS) rule 9.31 ("the valuation reports").

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

- Forms 46, 47, 50 to 55, 57, 59A and 59B (including the supplementary notes);
- the statements required by IPRU(INS) rules 9.30 and 9.36; and
- the certificate signed in accordance with IPRU(INS) rule 9.34(1).

This report is made solely to the insurer's directors, in accordance with IPRU(INS) rule 9.35. Our examination has been undertaken so that we might state to the insurer's directors those matters we are required by the Rules to state to them in an auditors' report 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 for our examination, for this report, or for the opinions we have formed.

Respective responsibilities of the insurer and its auditors

The insurer is responsible for the preparation of an annual return (including the Forms, the statement and the valuation reports) under the provisions of the Rules. The requirements of the Rules have been modified by the directions issued under section 148 of the Act referred to in supplementary note 0201. Under IPRU(INS) rule 9.11 the Forms, the statement 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 prepared in accordance with IPRU(INS) rule 9.31 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 statement and the valuation reports meet these requirements, and to report our opinion to you. We also report to you if, in our opinion, the insurer has not kept adequate accounting records or if we have not received all the information we require for our examination.

Independent auditors' report to the directors pursuant to rule 9.35 of the Interim Prudential Sourcebook for Insurers

Phoenix Life Limited

Global business

Financial year ended 31 December 2009

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 statement 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 on which we reported on 29 March 2010. It also included an assessment of the significant estimates and judgments 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 statement 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:

(a) the Forms, the statement 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

(b) 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.

Ernst & Young LLP

Registered Auditor

London

Date: 29 March 2010