

## APPENDIX 9.4

### PHOENIX LIFE LIMITED

#### Abstract of Valuation Report

## 1. INTRODUCTION

### (1) Valuation Date

The valuation relates to 31 December 2010.

### (2) Previous Valuation

The previous valuation under Rule 9.4 related to 31 December 2009.

### (3) Interim Valuations

No interim valuations (for the purposes of Rule 9.4) have been carried out since 31 December 2009.

## 2. PRODUCT RANGE

In the remainder of this Appendix and Appendix 9.4A, the products are identified by their current fund and / or their originating fund as defined above or, in respect of products that were already in PLL, by their originating company prior to **either**:

- the 2005 fund merger (see the Company's 2005 FSA Returns):
  - "PAL"Phoenix Assurance Limited
  - "SLUK"Swiss Life (UK) Plc
  - "Bradford"Bradford Insurance Company Limited
  
- or the 2006 fund merger (see the Company's 2006 FSA Returns):
  - "Alba"Alba Life Limited
  - "BA"Britannic Assurance plc
  - "BRS"Britannic Retirement Solutions Limited
  - "BULA"Britannic Unit Linked Assurance Limited
  - "Century"Century Life plc
  - "PLP"Phoenix Life & Pensions Limited
  
- or the 2009 fund merger (see the Company's 2009 FSA Returns):
  - "SMA"Scottish Mutual Assurance Limited
  - "SPL" Scottish Provident Limited

For other products transferred into PLL that had been transferred previously, the descriptions previously used in the transferor's returns are still used.

The 100% With-Profits Fund previously accepted reinsurance of unitised with-profits group pensions business from Phoenix & London Assurance Limited. This reinsurance has been recaptured as at 31 December 2008 and so this business no longer appears in the Company's returns. The 100% With-Profits Fund also previously accepted reinsurance of the with-profits units of ex-SLUK unitised pensions from the Non Profit Fund. Under the 2008 funds merger, reinsurance of these units has transferred from the 100% With-Profits Fund to the 90% With-Profits Fund.

The new business status of each of the with-profits subfunds during the year was:

FUND	STATUS
Alba With-Profits Fund	(d) closed to new business except by increment
Britannic Industrial Branch Fund	(d) closed to new business except by increment
Britannic With-Profits Fund	(d) closed to new business except by increment
Phoenix With-Profits Fund	(d) closed to new business except by increment
90% With-Profits Fund	(d) closed to new business except by increment
100% With-Profits Fund	(d) closed to new business except by increment
Scottish Mutual With-Profits Fund	(d) closed to new business except by increment
SPI With-Profits Fund	(d) closed to new business except by increment

The remaining questions are answered in respect of each fund in turn.

## Alba With-Profits Fund

**3. DISCRETIONARY CHARGES AND BENEFITS****(1) Application of Market Value Reduction**

During the year, market value reductions were applied to accumulating with-profits business as described below.

**(a) Unitised with-profits business**

Terminal bonus and market value reductions as a percentage of unit allocations by calendar year of purchase are shown in the tables below. Market value reductions (negative terminal bonuses) do not apply on maturity or death; the overall terminal bonus is subject to an overall minimum of nil and the minimum payout is the face value of the units. For all other claims, the overall terminal bonus can be negative and a market value reduction of that amount will have been applied to the face value of the units.

Applicable 1 January 2010 to 30 June 2010

Calendar year of purchase of units	Old BLAS business (Life System Company 2)		New BL business (Life System Company 4)	
	Life	Pension	Life Fund	Pension
<=1992		-4.00%		
1993	6.00%	-2.50%	22.00%	35.00%
1994	10.00%	38.00%	26.00%	40.00%
1995	17.00%	24.00%	33.50%	48.50%
1996	13.50%	19.00%	28.50%	41.00%
1997	10.00%	14.00%	24.00%	34.50%
1998	4.50%	5.00%	17.00%	24.50%
1999	-0.50%	-3.00%	9.50%	14.50%
2000	-2.50%	-2.00%	8.00%	12.50%
2001	1.50%	14.50%	12.50%	18.50%
2002	12.00%	17.00%	19.00%	27.00%
2003	17.50%	23.00%	21.00%	29.50%
2004	14.50%	19.00%	16.00%	22.50%
2005	11.50%	13.50%	9.00%	13.00%
2006	6.50%	10.50%	4.50%	7.00%
2007	5.50%	7.00%	3.00%	5.50%
2008	5.50%	7.00%	3.50%	5.50%
2009	2.00%	3.00%	2.00%	3.50%
2010	0.00%	0.00%	0.00%	0.00%

Applicable 1 July 2010 to 31 December 2010:

Calendar year of purchase of units	Old BLAS business (Life System Company 2)		New BL business (Life System Company 4)	
	Life	Pension	Life Fund	Pension
<=1992		-6.50%		
1993	4.50%	-0.50%	24.00%	37.50%
1994	8.00%	30.50%	28.00%	42.50%
1995	15.50%	23.50%	35.50%	51.50%
1996	11.50%	18.50%	30.50%	44.00%
1997	8.50%	13.00%	26.00%	37.00%
1998	3.00%	3.00%	18.50%	27.00%
1999	-2.50%	-3.50%	11.00%	17.00%
2000	-4.00%	-3.00%	9.50%	14.50%
2001	0.00%	7.00%	14.50%	21.00%
2002	10.50%	18.00%	21.00%	29.50%
2003	15.50%	21.00%	22.50%	32.00%
2004	13.00%	19.00%	17.50%	25.00%
2005	9.50%	12.50%	10.50%	15.50%
2006	4.50%	6.50%	6.00%	9.00%
2007	4.00%	4.50%	4.50%	7.50%
2008	3.50%	6.00%	5.00%	7.50%
2009	2.00%	4.00%	3.50%	5.50%
2010	0.50%	1.00%	0.50%	1.00%

(b) Other with-profits business

For the Unitised Capital Guaranteed Fund business, from 1 January 2010 to 9 March 2010 a market value reduction of 5% was applied and from 10 March 2010 to 31 December 2010 a market value reduction of 2% was applied.

For the Nestegg (post 1988) business, from 1 January 2010 to 31 December 2010 a market value reduction of 4% was applied.

For the ex BLA / Crusader With Profits Performance Fund business, from 1 January 2010 to 9 March 2010 a market value reduction of 5% was applied and from 10 March 2010 to 31 December 2010 no market value reduction was applied.

For the ex BLA / Crusader With Profits Pension Fund business, from 1 January 2010 to 31 December 2010 no market value reduction was applied.

For the Assured Growth Scheme business, individual scheme specific market value reductions were applied, where applicable, throughout 2010.

**(2) Premiums on Reviewable Protection Policies**

There are no reviewable protection policies.

**(3) Non-profit Deposit Administration**

No non-profit deposit administration business is transacted.

**(4) Service Charges on Linked Policies**

There are no linked policies.

**(5) Benefit Charges on Linked Policies**

There are no linked policies.

**(6) Accumulating With-Profits Charges**

There were no changes to unit management charges or notional charges to accumulating with-profits policies since the last valuation.

**(7) Unit Pricing of Internal Linked Funds**

Not applicable

**(8) Tax Deductions From Internal Linked Funds**

Not applicable

**(9) Tax Provisions for Internal Linked Funds**

Not applicable

**(10) Discounts on Unit Purchases**

Not applicable

**4. VALUATION BASIS**

**(1) Valuation Methods**

Subject to the exceptions specified below, liabilities have been valued using the gross premium valuation method. The mathematical reserves were calculated as the value of future benefits and expenses less the value of future expected office premiums. No allowance for future lapses is made except implicitly in setting the per policy expenses.

The mathematical reserve for all accumulating with-profits policies has been calculated as the face value of units, which is the number of units including attaching bonus units allocated up to the valuation date, less a market value adjustment where applicable.

Exceptions:

- (a) No negative reserves have been included and no contract of insurance has been treated as an asset.
- (b) As a result of realised losses brought forward, no provision for the prospective liability with respect to tax on unrealised capital gains on non-linked assets was considered necessary for the purpose of this valuation.
- (c) No specific reserve has been made for investment performance guarantees for property linked and deposit administration contracts, apart from ex-BLAS pension policies in the With Profit Pension Fund, where the 4% guaranteed growth rate has been allowed for.

The With-Profits Fund guarantee on policies arising from BLA is provided for by valuing units at the higher of the underlying asset price or the quoted bid price.

- (d) A prospective method of valuation has not been used for the following contracts.

**Policies previously written in BLA**

Economic Mortgage and Low Start Economic Mortgage policies were valued as endowment contracts but with a death benefit equal to the greater of the guaranteed minimum death benefit and the sum assured and declared bonuses.

For group life assurances, the reserve held was the proportion of premium due in respect of the period from the valuation date to the date when the next premium falls due. For schemes where a premium rebate is given on account of favourable experience, an additional reserve was held in respect of the estimated rebate accrued to the valuation date. A reserve was held to provide for claims incurred but not reported.

Inward reassurances of term assurance benefits were valued with the reserve being a proportion of current annual premium, the proportion being not less than one half.

Where extra premiums are payable for assurances, one half of the current extra annual premiums was reserved.

Where the office premium charged was for an age higher than the actual age at entry, in respect of an under average life, the assurance was dealt with according to the rated up age. Any debts imposed on account of extra risks were ignored in the valuation.

In respect of permanent disability benefits attaching to life policies, the whole of the premium received was reserved.

Claims payable by instalments were valued on an interest only basis by discounting the future repayments.

For deposit administration contracts, the valuation liability was taken as the amounts held to the credit of policyholders before adding the current year's bonus interest.

The liabilities of Growth Pension business were obtained by valuing the paid up pensions and annuities in payment secured by each policy at the valuation date.

The reserve in respect of fatal accident benefits was not less than one half of the current annual premium.

In respect of long term permanent health policies, other than those valued on the gross premium method, the reserve held was the proportion of premium due in respect of the period from the valuation date to the date when the next premium falls due, together with additional reserves in respect of the estimated amount of rebate accrued to the valuation date where appropriate.

A reserve was held for claims in course of payment and to provide for claims incurred but not reported.

**Policies previously written in BLL**

- (i) Group life assurances costed on a unit rate risk premium basis: a reserve equal to the proportion of the premium relating to the unexpired risk subject to a minimum of one quarter of the annual premium is held.
- (ii) Group life assurances associated with pension schemes and costed on a risk premium basis: a reserve equal to 75% of the risk premium is held.

No specific tests of adequacy were considered necessary for the bases used in (i) and (ii) as the underlying premium rates are tested annually for adequacy and the chargeable premium rate is guaranteed for not more than two years in either case.

**Policies previously written in BLAS**

Liabilities for group term assurance are calculated on the basis of a year's risk cost, the provision being 75% of the office annual premium or the recurrent single premium.

For deferred annuities under the Long Term Accumulation System the liabilities are the aggregate amounts of the deposit accounts, for the schemes concerned as at the valuation date after crediting interest to the daily balances, at the valuation rate.

For deferred retirals the liabilities are the cash options at normal retirement ages accumulated with interest.

In the light of these provisions tests for adequacy were not considered appropriate.

- (e) Other specific reserves have been set up for the following contracts:
  - (i) Growth equity contracts have been valued as non-linked with-profits, plus, on Type A policies only, the full undiscounted value of capital appreciation to the valuation date including the reserve for capital gains tax.
  - (ii) Genesis pension contracts have been valued by a cash flow method for linked benefits and by a gross premium method for non-linked benefits.

The assumptions used in the cash flow method are as stated at the start of this section.

**(2) Valuation Interest Rates**

The following table shows the valuation interest rates.

	Current Valuation	Previous Valuation
<b>Life Assurance Fund</b>		
With Profit	2.30%	2.60%
Non Profit	2.50%	1.40%
<b>General Annuity Fund</b>		
With profit Deferred Annuities	4.75%	5.35%
Non profit Deferred Annuities	2.80%	4.00%
Immediate Annuities	3.70%	4.20%
<b>Pension Business Fund</b>		
New With Profit AP Deferred Annuities	3.60%	4.65%
New With Profit SP Deferred Annuities	3.60%	4.65%
Old With Profit AP Deferred Annuities	4.75%	5.35%
Old With Profit SP Deferred Annuities	4.00%	4.70%
Non Profit AP Deferred Annuities	2.80%	4.00%
Non Profit SP Deferred Annuities	4.60%	5.35%
Immediate Annuities	3.70%	4.20%
Laserplan	4.00%	4.70%
Group Pension Plan	1.80%	1.60%
<b>PHI Fund</b>		
Non-claims	4.00%	4.00%
Claims in Payment	3.70%	4.20%

For deferred annuities, the stated valuation interest rate applies before and after vesting.

**(3) Risk Adjustments**

The yields on assets were reduced for risk as follows:

**Fixed Interest****(a) Approved Securities:**

No reduction

**(b) Other Securities**

A deduction was applied to the yield on an individual stock by stock basis to allow for the risk of default. The individual stock risk margins were calculated as a long term average default rate plus an additional allowance for short-term factors and expected deviations from the historic average.

The long term average default rates (in basis points) were:



Credit Rating	Term		
	5	10	20
AAA	4.3	12.3	15.2
AA	19.0	32.1	48.2
A	33.2	47.7	65.3
BBB	82.8	104.1	122.4
BB	261.3	277.3	287.3
B	591.7	524.7	442.5

A number of different techniques were then employed to arrive at an additional haircut, namely:

- A higher risk was recognised for bank subordinated debt by removing the credit for recoveries included within the above default rates. For banks that were in receipt of state aid, there was an additional deduction depending on whether the coupons could be missed or deferred without interest.
- Subordinated debt attracted hair cuts based on the senior rating of the issuer rather than the rating of the bond itself.
- Stocks were 'notched' downwards where the credit rating was considered to be inappropriate (after analysis of the current market spread and other factors).
- An additional reserve of £2.1m was established to allow for higher levels of default in the medium term. This is not reflected in the default rates in the table above.

#### Variable Interest

The yield on variable interest rate stocks was capped at the real yield on the over 5 years, 5% inflation FTSE Index linked gilt index. This cap applied to both approved and non-approved variable interest stocks.

#### Property

The yield on property was capped at the greater of 10% p.a. or twice the annualised 15 year gilt yield.

For the property unit trust a deduction of 50 basis points is made to allow for the risk of default. This deduction is based on the property portfolio underlying the unit trust and is based on the difference between the risk adjusted yield as calculated above and the yield with no adjustment for risk.

## (4) Mortality Basis

Product Type	Current Valuation Table	Previous Valuation Table
Life Fund Permanent Assurances	94% AM92	94% AM92
	94% AF92	94% AF92
Term Assurances	94% TM92	94% TM92
	94% TF92	94% TF92
GAF Annuities	95% Modified IMA92	95% Modified IMA92
	95% Modified IFA92	95% Modified IFA92
PBF Annuities	95% Modified PMA92	95% Modified PMA92
	95% Modified PFA92	95% Modified PFA92
PBF Deferred Annuities (In deferment)	64% AM92	64% AM92
	64% AF92	64% AF92
GAF Deferred Annuities (In deferment)	64% AM92	64% AM92
	64% AF92	64% AF92
PBF Deferred Annuities (In Payment)	95% Modified PMA92	95% Modified PMA92
	95% Modified PFA92	95% Modified PFA92
GAF Deferred Annuities (In Payment)	95% Modified IMA92	95% Modified IMA92
	95% Modified IFA92	95% Modified IFA92
	<b>Percent of Premium</b>	<b>Percent of Premium</b>
Group Pensions % of premium	0.15%	0.15%
Group Life % of premium	70%	70%

Annuities in payment use the following improvement factors:

Male	2011	2021	2031	2041	2051	2061
40	1.83%					
50	1.88%	2.65%				
60	1.35%	2.51%	2.97%			
70	2.46%	1.73%	2.41%	2.67%		
80	3.78%	2.03%	1.70%	2.13%	2.17%	
90	1.55%	2.06%	1.55%	1.56%	1.63%	1.63%
100	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%
Female	2011	2021	2031	2041	2051	2061
40	2.06%					
50	2.70%	3.03%				
60	1.80%	3.32%	3.15%			
70	2.61%	2.52%	2.85%	2.69%		
80	3.42%	2.42%	2.11%	2.19%	2.17%	
90	1.46%	2.02%	1.69%	1.62%	1.63%	1.63%
100	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%

Expectation of life resulting from these improvement factors:

	Current Age	Expectation of life from Age	Current Valuation		Previous Valuation	
			Males	Females	Males	Females
Immediate annuities	65	65	24.28	26.05	24.06	25.90
	75	75	14.86	15.85	14.67	15.71
Deferred annuities	45	65	26.72	28.80	26.53	28.66
	55	65	25.20	27.32	24.99	27.16

**(5) Morbidity Basis**

Not required as below de minimis level.

**(6) Expense Basis**

The following table shows the gross attributable expenses per policy.

Product Group		Per Policy Expense	
		Current Valuation	Previous Valuation
		£	£
CWP savings endowment (product code 120)	RP	86.32	74.14
	PUP	43.16	37.07
CWP target cash endowment (125)	RP	86.32	74.14
	PUP	43.16	37.07
CWP pensions (155/165)	RP	143.87	123.56
	SP/PUP	43.16	37.07
Term assurance (325 / 330)		51.79	44.48
Income protection (360 / 365)		83.45	71.67
Income protection claims in payment (385)		0.00	0.00
Annuity (400)		51.79	44.48
UWP savings endowment (510)	RP	86.32	74.14
	PUP	43.16	37.07
UWP target cash endowment (515)	RP	86.32	74.14
	PUP	43.16	37.07
UWP regular premium pension (525/545)	RP	143.87	123.56
	PUP	43.16	37.07
UWP single premium pension (525/545)		43.16	37.07
UWP group regular premium pension (525/545)		76.29	75.09
UWP group single premium pension (525/545)		76.29	75.09

where:

- RP Regular premium policies
- SP Single premium policies
- PUP Paid up policies

The expenses on life business are netted down for tax at 20%.

There are no zillmer adjustments for the policies to which the above expenses apply.

For the current valuation the investment expense assumptions have been updated to allow for the impact of a new investment fee scale agreed with the asset manager. The base fees are as follows:

Investment expense (gross of tax)	Current valuation	Previous valuation
LASER, BL/BLA Controlled Funding, High g'tee WP Pens & LAS Cash Bonus	0.08%	0.08%
Ex-BLA Deposit Admin & ex-LAS Deposit Admin	0.09%	0.08%
Ex-BL Deposit Admin & UCGF	0.10%	0.15%
Other WP	0.11%	0.15%

The investment expenses for life fund business should be netted down for policyholder tax at 20%.

In addition to the base fees, there is an explicit additional services fee which is allowed for as a new provision of £3.1m. At the previous valuation these additional services had been allowed for implicitly within the investment expense assumption. There is also a performance fee payable to the asset manager. This is not allowed for in the valuation basis because no over or under investment performance is assumed in the valuation interest basis.

#### **(7) Unit Growth Rates And Inflation Assumptions**

There are no unit growth rate assumptions as there is no linked business.

Future expenses are assumed to increase at 2.61% p.a. for contracts administered by Capita. In addition, expenses are assumed to increase by 8.4% followed by RPI+1% p.a. after the end of the agreement with Capita in 2013.

The following rates are used for conventional contracts (excluding immediate annuities) administered by Pearl Group Management Services (PGMS):

	Current Valuation	Previous Valuation
2010	0.0%	5.3%
2011	4.9%	5.0%
2012	0.7%	0.8%
2013	(0.3)%	(0.2)%
2014	0.0%	0.1%
2015	12.5%	17.6%

and at RPI+1% p.a. thereafter.

The following rates are used for immediate annuities administered by PGMS:

	Current Valuation	Previous Valuation
2010	RPI + 6.0%	RPI + 6.0%
2011	RPI + 6.0%	RPI + 6.0%
2012	RPI + 1.0%	RPI + 1.0%
2013	RPI + 1.0%	RPI + 1.0%
2014	RPI + 1.0%	RPI + 1.0%
2015	(0.3)%	(2.6)%

and at RPI+1% p.a. thereafter.

#### **(8) Future Bonus Rates**

The company is a realistic basis life firm and as such, in accordance with INSPRU 1.2.9(R), no allowance has generally been made for future reversionary bonuses.

#### **(9) Persistency Assumptions**

It is assumed that there are no lapses or surrenders and no policies are made paid-up after the valuation date (but see paragraph 4 (10) below).

#### **(10) Other Material Assumptions**

Expense assumptions do make an implicit allowance for the effect of expected future lapses. The inflation assumptions set out in paragraph 4 (7) have been adjusted to allow implicitly for lapses.

Provision has been made in the value of liabilities held for guaranteed benefits included in the terms of contracts in force at the valuation date.

For with-profits contracts, unitised with-profits contracts and with-profits deposit administration contracts the excess of the annual premium over the net premium not required to meet expenses is available to provide future bonuses.

For accumulating with-profits contracts, the published reserve basis applies a market value adjustment where one applies in practice.

**(11) Allowance for Derivatives**

No contracts have liabilities that have been calculated by reference to derivative assets. We have a holding of swaptions to hedge against the risk of interest rate falls affecting the guaranteed annuity option reserves.

**(12) Effect of Basis Changes**

There have been no changes in valuation methodology arising from changes in INSPRU valuation rules effective from 31 December 2006.

**5. OPTIONS AND GUARANTEES**

**(1) Guaranteed Annuity Rate Options**

For contracts with benefits expressed as cash but which have a guaranteed minimum annuity rate the reserve was calculated assuming that the benefit at maturity was the higher of:

- (i) the cash amount, and
- (ii) the value of the guaranteed annuity, using mortality rates appropriate for deferred annuities and the valuation interest rate as shown for that contract (but subject to a maximum of the re-investment rate).

It is assumed that 95% of policyholders exercise the guaranteed annuity option and that 20% of policyholders exercising the option take the maximum tax free cash.

## Alba With-Profits Fund

Product Name	GAO Reserve £m	Min Duration years	Max Duration years	Guaranteed Annuity Rate % cash sum	Type of annuity	Retirement Age
Indiv Arr 1st and 2nd Series	1.5	0.0	27.0	6.0	Joint Life 50%	65.0
Indiv Arr 1st and 2nd Series	1.4	0.0	25.0	4.9	Joint Life 50%	65.0
Indiv Arr 1st and 2nd Series	1.4	0.0	20.0	3.9	Joint Life 50%	60.0
Indiv Arr 1st and 2nd Series	1.2	0.0	27.0	8.0	Joint Life 50%	65.0
Indiv Arr 1st and 2nd Series	1.2	0.0	25.0	5.3	Joint Life 50%	62.0
Indiv Arr 1st and 2nd Series	0.9	0.0	25.0	6.4	Joint Life 50%	64.0
Indiv Arr 1st and 2nd Series	0.8	0.0	26.0	7.6	Joint Life 50%	65.0
Indiv Arr 1st and 2nd Series	0.5	0.0	17.0	9.5	Joint Life 50%	65.0
Indiv Arr 1st and 2nd Series	0.5	0.0	24.0	4.5	Joint Life 50%	62.0
Indiv Arr 1st and 2nd Series	0.4	0.0	24.0	9.5	Single Life	65.0
Indiv Arr 1st and 2nd Series	0.3	0.0	24.0	8.8	Single Life	62.0
Indiv Arr 1st and 2nd Series	0.1	0.0	16.0	11.1	Single Life	65.0
Indiv Arr 1st and 2nd Series	0.2	0.0	23.0	7.3	Single Life	60.0
Indiv Arr 1st and 2nd Series	0.1	0.0	19.0	7.3	Joint Life 50%	61.0
Indiv Arr 1st and 2nd Series	0.1	0.0	20.0	7.0	Joint Life 50%	60.0
Seda Series 3 - Individual	13.7	0.1	33.4	5.3	Single Life	75.0
Seda Series 3 - Individual	1.5	0.6	33.4	6.5	Single Life	75.0

A portfolio of Swaptions is held to hedge against the risk of falling interest rates.

### (2) Guaranteed Surrender and Unit-linked Maturity Values

Guaranteed surrender values – the reserves for these do not exceed the materiality limits.

### (3) Guaranteed Insurability Options

Guaranteed insurability options - the reserves for these do not exceed the materiality limits.

### (4) Other Guarantees and Options

(a) Provision was made for any guarantees and options (other than investment performance guarantees) on the following basis.

Flexible endowment policies were valued at the higher of the net liabilities assuming maturity at:

- (i) the next early maturity option with the relevant guarantees, or
- (ii) the maximum term.

Conversion and guaranteed insurability options under convertible term policies have been provided for by increasing reserves over those that would have been required for term policies.

**Policies previously written in BLAS**

Mortality reserves in respect of guaranteed and other death benefits were set up as follows:

Pre 1982 series. Assuming a 25% fall in unit values very few contracts would have a sum assured at risk. A nominal reserve is held.

Post 1981 series and pension business. With the exception specified below, the reserve is twice the monthly risk charge for the relevant benefits, adjusted for extra premiums.

The reserve set up for waiver of premium benefits under the Personal Pension Plan is the accumulation of premiums paid subject to a maximum of three years' premium, adjusted for extra premiums.

For permanent health insurance benefits the reserve set up is the accumulation of premiums paid subject to a maximum of three months' premiums, adjusted for extra premiums.

- (b) For contracts with benefits expressed as an annuity but which have an option to secure a cash fund the reserve was calculated assuming that the benefit at maturity was the higher of:
  - (i) the annuity applied to the guaranteed cash option, and
  - (ii) the value of the annuity using mortality rates appropriate for deferred annuities and the valuation interest as shown for that contract (but subject to a maximum of the reinvestment rate).

It is assumed that 95% of policyholders exercise the guaranteed annuity option and that 20% of policyholders exercising the option take the maximum tax free cash.

**6. EXPENSE RESERVES**

**(1) Aggregate Expense Loadings**

The aggregate amount of expense loadings, grossed up for taxation where appropriate, expected to arise during the 12 months after the valuation date from implicit and explicit reserves made in the valuation to meet expenses in fulfilling contracts in force at the valuation date is £17.0m. This is composed of the following elements.

	£m
Explicit allowances for investment expenses	3.1
Explicit allowances for other maintenance expenses	12.5
Implicit allowances	1.3

## (2) Implicit Allowances

Implicit allowances cover investment expenses and are allowed for by a reduction in the valuation interest rate based on the rates actually charged by Ignis Asset Management.

Asset Type	Current valuation	Previous valuation
	%	%
UK Gilts	0.08	0.08
UK Corporate Bonds	0.08	0.08
UK Index Linked Bonds	0.075	0.08
EU Gilts	0.1	0.08
EU Corporate Bonds	0.11	0.08
Property	0.2	0.35
Cash	0.085	0.03

## (3) Form 43 Comparison

The maintenance expenses in paragraph 6 (1) differ from line 14 of Form 43 mainly due to:

- £6.5m in respect of pension scheme valuation, the cost of which was covered by the release of a provision.
- £0.9m of performance related investment fees which are not included in table 6(1).

## (4) New Business Expense Overrun

As the office is closed to new business the expense incurred is not a material amount and, as a result, it was not deemed necessary to hold a further specific reserve.

## (5) Maintenance Expense Overrun

Specific expense reserves have not been calculated for LASPEN Managed Fund contracts.

As the basis of charging for both administrative and investment management services can be varied outside the period of guarantee, which covers only the first three years following the commencement of a policy, no explicit provision for future expenses was deemed necessary.

An additional reserve of £3.3m has been set up in respect of the Capita contract to allow for the potential cost of renegotiating the contract at the renewal date. No such reserve is considered necessary in respect of the Pearl Group Management Services contract since the contract allows for Alba IT costs to fall to Britannic With-Profits business unit cost levels, which has not been allowed for in the expense assumptions.

No additional allowance has been made for redundancy costs or management service agreement termination costs.



**(6) Non-attributable expenses**

Not applicable – all expenses are treated as attributable.

**7. MISMATCHING RESERVES****(1) Analysis of Reserves by Currency**

	Matching Assets			
	Liabilities *	Same Currency	Other Currency	Mismatching Percentage
Currency	£m	£m	£m	
Sterling (£)	1,552.2	1,463.8	20.0	1.3%
Euro (€)	61.1	49.3	0.0	19.3%
US (\$)	2.1	2.1	0.0	2.0%

\* Includes liabilities in respect of the deposits received from reinsurers as shown in Form 14.

The Alba With-Profits Fund has, in total, UK sterling denominated assets to the value of 100.06% of its UK sterling liabilities. The company has US Dollar assets to the value of 189.12% of its US Dollar liabilities and Euros assets to the value of 110.31% of its Euro liabilities.

The returns provided to Euro and US dollar with-profits policyholders are determined by reference to the same assets as are used for its sterling with-profits policies.

**(2) Other Currency Exposures**

“Other currency” grouping was not required in paragraph 7 (1).

**(3) Currency Mismatching Reserve**

No explicit currency mismatching reserve is held.

**(4) Most Onerous Scenario Under INSPRU 3.1.16(R)**

Not applicable

**(5) Most Onerous Scenario Under INSPRU 3.1.23(R)**

Not applicable

**(6) Resilience Capital Requirement**

Not applicable

**(7) Additional Reserves Arising From INSPRU 1.1.34(2)(R)**

No reserve is required for mismatching. Liabilities are analysed by duration and currency and the investment strategy is chosen appropriately so that there is no significant mismatch between assets and liabilities.

**8. OTHER SPECIAL RESERVES**

There are no special reserves exceeding the lesser of £10m and 0.1% of total mathematical reserves.

A reserve has been set up for extra increases in annuities being paid as a result of the changes in HM Revenue and Customs Limit rules.

## **9. REINSURANCE**

### **(1) Facultative Treaties**

- (a) No premiums were payable on a facultative basis to a reinsurer that was unauthorised to carry on insurance business in the UK.
- (b) No such premiums were payable to a connected company reinsurer that was unauthorised to carry on insurance business in the UK.

### **(2) Reinsurance Treaties**

#### **Immediate Annuities (Treaty 1)**

- (d) **XL Re Ltd (UK Branch).**
- (e) The treaty reassures 100% of the liability under the closed book of immediate annuity business covered by the agreement. The assets matching this liability are held in a collateral account over which Alba With-Profits Fund has a charge.
- (f) No premiums were paid by the company under this treaty during the year.
- (g) There is no deposit back arrangement.
- (h) The treaty is closed to new business.
- (i) There are no undischarged obligations.
- (j) Total mathematical reserves ceded under the treaty amount to £425.8m as at the valuation date.
- (k) There is no retention under the treaty.
- (l) The reinsurer is authorised to transact business in the UK.
- (m) The reinsurer is not connected to the company.
- (n) Loss mitigation techniques have been used to effectively eliminate credit risk through the ring-fencing of reinsurance assets.
- (o) No commission is payable on the reinsurance premium.
- (p) This is not a financing reinsurance treaty.

Immediate Annuities (Treaty 2)

- (d) **XL Re Ltd (UK Branch).**
- (e) The treaty reassures 100% of the liability under the closed book of immediate annuity business covered by the agreement. The assets matching this liability are held in a collateral account over which Alba With-Profits Fund has a charge.
- (f) No premiums were paid by the company under this treaty during the year.
- (g) There is no deposit back arrangement.
- (h) The treaty is closed to new business.
- (i) There are no undischarged obligations.
- (j) Total mathematical reserves ceded under the treaty amount to £183.3m as at the valuation date.
- (k) There is no retention under the treaty.
- (l) The reinsurer is authorised to transact business in the UK.
- (m) The reinsurer is not connected to the company.
- (n) Loss mitigation techniques have been used to effectively eliminate credit risk through the ring-fencing of reinsurance assets.
- (o) No commission is payable on the reinsurance premium.
- (p) This is not a financing reinsurance treaty.

Non Profit Deferred Annuities

- (d) **American International Reinsurance Company Ltd (AIRCO)**
- (e) The treaty reassures 100% of the liability under the closed book of non profit deferred annuity business covered by the agreement. The assets matching this liability are held in a collateral account over which Alba With-Profits Fund has a charge.
- (f) No premiums were paid by the company under this treaty during the year.
- (g) There is no deposit back arrangement.
- (h) The treaty is closed to new business.
- (i) There are no undischarged obligations.
- (j) Total mathematical reserves ceded under the treaty amount to £545.8m as at the valuation date.
- (k) There is no retention under the treaty.
- (l) The reinsurer is not authorised to transact business in the UK.
- (m) The reinsurer is not connected to the company.
- (n) Loss mitigation techniques have been used to effectively eliminate credit risk through the ring-fencing of reinsurance assets.
- (o) No commission is payable on the reinsurance premium.
- (p) This is not a financing reinsurance treaty.

Guaranteed Annuity Options**(d) Britannic With-Profits Fund**

- (e) The agreement reinsures the cost of meeting guaranteed annuity options not yet vested at the valuation date exercised under with and non profit policies written with a cash benefit and guaranteed annuity option in the Ordinary Long Term fund in return for a premium of 75% of the cost of meeting any such option on the assumption that the option is exercised to the maximum extent and assuming all such options are exercised. The treaty reassures the company's liability in respect of guaranteed annuity options such that Alba With-Profits Fund's liability is restricted to a maximum of 75% of the option.
- (f) The premiums payable by the company under the treaty during the year were £4.3m.
- (g) There is no deposit back arrangement.
- (h) The treaty is open to new business.
- (i) There are no undischarged obligations.
- (j) Total mathematical reserves ceded under the treaty amount to £17.0m as at the valuation date.
- (k) There is no retention under the treaty.
- (l) The reinsurer is authorised to transact business in the UK.
- (m) The reinsurer is a subfund of PLL.
- (n) There are no material contingencies, such as credit risk or legal risk to which the treaties are subject.
- (o) No commission is payable on the reinsurance premium.
- (p) This is not a financing reinsurance treaty.

**10. REVERSIONARY (OR ANNUAL) BONUS**

Bonus was allocated at the rates set out below at the date of this investigation.

**Policies previously written in BLA**

	Math reserves	Reversionary Bonus rates for current year		Reversionary Bonus rates for previous year		Total g'tee bonus for current year
		Sum Assured	Bonus	Sum Assured	Bonus	
<b>Assurances</b>	<b>£m</b>					
UK and overseas sterling life series A,B,H,D,K	120.5	0.00%	0.00%	0.00%	0.00%	0.00%
<b>Deferred Annuities</b>						
Annual Premium Self Employed Deferred Annuities Series 2 & 3	65.7	0.00%	0.00%	0.00%	0.00%	0.00%
Single Premium Self Employed Deferred Annuities Series 2 & 3	14.0	0.00%	0.00%	0.00%	0.00%	0.00%

Group Deposit Administration Contracts

The following rates were applied to these contracts for the valuation year.

	Nestegg	Nestegg 32
	£m	£m
Mathematical reserve	69.9	11.2
Compounded annual rate for previous year	0.50%	0.50%
Compounded annual rate for current year	1.00%	1.00%
Total guarantee bonus for current year	0.00%	0.00%

Growth Pensions

A total of £0.0m was distributed to policyholders. The mathematical reserves totalled £14.7m.

Growth Pension surplus is normally distributed annually by reference to an allocated share of assets to each group policy. The allocation of assets is adjusted each year according to the amount of new investment made in respect of each policy, and gives effect to changes in market value. Any bonus declared would be distributed to the policyholder as an amount of premium to be re-applied to the policy on "controlled funding" principles.

Bonuses, if payable, would be allocated in each case in respect of each annual premium due since the previous declaration subject, in the case of deferred life annuities (pension business) only, to payment of any premium outstanding at 31 December required to complete payment of a full year's premium.

Policies previously written in BLL

	Math reserve	Basic Sum Assured	Bonus	Basic Sum Assured	Bonus	Total g'tee bonus for current year
		Current Valuation		Previous Valuation		
<b>Life assurance</b>	<b>£m</b>					
All classes	74.0	0.00%	0.00%	0.00%	0.00%	0.00%
Non Genesis Annual Premium pension Contracts	9.5	0.00%	0.00%	0.00%	0.00%	0.00%
Genesis Premium Rate Annual Premium Contracts	27.2	0.00%	0.00%	0.00%	0.00%	0.00%
Buyouts and Genesis premium rate business Single Premium Contracts.	242.9	0.00%	0.00%	0.00%	0.00%	0.00%

## Policies previously written in BLAS

	Math reserve	Current Valuation		Previous Valuation		Total g'tee bonus for current year
		Basic Sum Assured	Bonus	Basic Sum Assured	Bonus	
	£m					
UK Life Assurance Contracts	62.6					
UK Life Assurance Contracts – LAS low cost endowments	41.6	0.00%	0.00%	0.00%	0.00%	0.00%
UK Annual Premium Pension and Annuity Contracts	73.1	0.00%	0.00%	0.00%	0.00%	0.00%
UK Single Premium Pension and Annuity Contracts	38.6	0.00%	0.00%	0.00%	0.00%	0.00%
Republic of Ireland Annual Premium & Annuity Contracts	7.9	0.00%	0.00%	0.00%	0.00%	0.00%
Republic of Ireland Single Premium & Annuity Contracts	6.7	0.00%	0.00%	0.00%	0.00%	0.00%

Unitised with-profits contracts – bonus allocated to fund balances in addition to any guaranteed rate.

Bonus Series	Math reserves	Reversionary Bonus Rate for Current Year	Reversionary Bonus Rate for Previous year	Total g'tee bonus for current year
	£m			
Life Fund (0% guarantee)	6.5	0.00%	0.00%	0.00%
Pension Fund (4% guarantee)	17.2	0.00%	0.00%	4.00%
Pension Fund (0% guarantee)	34.9	0.00%	0.00%	0.00%

Unitised Capital Guarantee Fund – bonus allocated to fund balances.

	Math reserves	Reversionary Rate for Current Year	Reversionary Bonus Rate for Previous year	Total g'tee bonus for current year
	£m			
Unitised Capital Guarantee Fund	20.2	4.11%	2.12%	0.00%

## Britannic Industrial Branch Fund

### 3. DISCRETIONARY CHARGES AND BENEFITS

**(1) Application of Market Value Reduction**

There are no policies to which market value reductions can be applied.

**(2) Premiums on Reviewable Protection Policies**

There are no policies with reviewable premiums.

**(3) Non-profit Deposit Administration**

There are no deposit administration contracts.

**(4) Service Charges on Linked Policies**

There are no linked policies.

**(5) Benefit Charges on Linked Policies**

There are no linked policies.

**(6) Accumulating With-Profits Charges**

There are no accumulating with-profits policies.

**(7) Unit Pricing of Internal Linked Fund**

Not applicable

**(8) Tax Deductions From Internal Linked Funds**

Not applicable

**(9) Tax Provisions for Internal Linked Funds**

Not applicable

**(10) Discounts on Unit Purchases**

Not applicable

### 4. VALUATION BASIS

**(1) Valuation Methods**

All policies are valued using a gross premium method. The mathematical reserves are calculated as the value of future benefits and expenses less the value of future expected office premiums. No allowance for future lapses is made.

The valuation data is grouped for certain policies where premiums ceased some years ago and individual policy data is not available. The data is grouped by age at entry, term and year of entry.

For additional benefits granted under the Industrial Assurance (Life Assurance Premium Relief) Regulations 1977, 95% of the premium relief due for the remainder of the tax year has been deducted from the value of the increased sum assured.

The reserves allow for the maturity guarantee of a return of premiums on certain endowment policies.

**(2) Valuation Interest Rates**

The valuation interest rates used are:

Product Group	Current Valuation	Previous Valuation
With-profit	2.48%	2.47%
Non profit	2.08%	2.85%

### (3) Risk Adjustments

The yields on assets were reduced for risk as follows:

#### Fixed Interest

(a) Approved Securities:

No reduction

(b) Other Securities

A deduction was applied to the yield on an individual stock by stock basis to allow for the risk of default. The individual stock risk margins were calculated as a long term average default rate plus an additional allowance for short-term factors and expected deviations from the historic average.

The long term average default rates (in basis points) were:

Credit Rating	Term		
	5	10	20
AAA	4.3	12.3	15.2
AA	19.0	32.1	48.2
A	33.2	47.7	65.3
BBB	82.8	104.1	122.4
BB	261.3	277.3	287.2
B	591.7	524.7	442.5

A number of different techniques were then employed to arrive at an additional haircut, namely:

- A higher risk was recognised for bank subordinated debt by removing the credit for recoveries included within the above default rates. For banks that were in receipt of state aid, there was an additional deduction depending on whether the coupons could be missed or deferred without interest.
- Subordinated debt attracted hair cuts based on the senior rating of the issuer rather than the rating of the bond itself.
- Stocks were 'notched' downwards where the credit rating was considered to be inappropriate (after analysis of the current market spread and other factors).
- An additional reserve of £0.3m was established to allow for higher levels of default in the medium term. This is not reflected in the default rates in the table above.



Variable Interest

The yield on variable interest rate stocks was capped at the real yield on the over 5 years, 5% inflation FTSE Index linked gilt index. This cap applied to both approved and non-approved variable interest stocks.

Equities

The yield on equity shares was capped at the lower of 25% p.a. or twice the annualised 15 year gilt yield.

Additional adjustments were also made to the dividend yield of Lloyds TSB and Royal Bank of Scotland shares where the dividend yield was set to zero to reflect the current expectations of those shares.

Property

The yield on property was capped at the greater of 10% p.a. or twice the annualised 15 year gilt yield.

**(4) Mortality Basis**

The mortality bases are:

Product Group	Current Valuation	Previous Valuation
With-profit	110% AMC00 ult	110% AMC00 ult
	110% AFC00 ult	110% AFC00 ult
Non profit	110% AMC00 ult	110% AMC00 ult
	110% AFC00 ult	110% AFC00 ult

**(5) Morbidity Basis**

Not applicable

**(6) Expense Basis**

As a result of the closure of the Home Services collection mechanism the expense charge in respect of this group of policies reduced at the previous valuation. Further reductions to expenses emanating from the closure have been allowed for in the current valuation as the full impact on expense savings from the closure had not been determined as at the date of the previous valuation.

Product Group	Per Policy Expense Current Valuation		Per Policy Expense Previous Valuation	
	Premium paying	Non premium paying	Premium paying	Non premium paying
	£	£	£	£
With-profits (105 / 130)	16.26	8.24	23.51	7.69
Non profit (310)	n/a	8.24	n/a	7.69

For the current valuation the investment expense assumptions have been updated to allow for the impact of a new investment fee scale agreed with the asset manager. The base fees are as follows:

## Britannic Industrial Branch Fund

Type of Asset	Current valuation		Previous valuation	
	%		%	
	Growth	Matched	Growth	Matched
Equities	0.150	0.15	0.125	0.100
Overseas equities	0.208	0.212	0.200	0.250
Property	0.200	0.200	0.350	0.350
Gilts	0.079	0.079	0.075	0.080
Other fixed interest	0.080	0.080	0.105	0.080
Cash	0.085	0.085	0.030	0.030

The investment expenses for life fund business are netted down for policyholder tax at 20%.

In addition to the base fees, there is an explicit additional services fee which is allowed for as a new provision of £1.2m. At the previous valuation these additional services had been allowed for implicitly within the investment expense assumption. There is also a performance fee payable to the asset manager. This is not allowed for in the valuation basis because no over or under investment performance is assumed in the valuation interest basis

### (7) Unit Growth Rates And Expense Inflation

There are no unit growth rate assumptions as there is no linked business.

The allowance made for expense inflation is:

Product Group	Current Valuation	Previous Valuation
With-profits policies	5.00%	5.08%
Non profit policies	4.50%	4.58%

### (8) Future Bonus Rates

No future bonuses are assumed in the mathematical reserves.

### (9) Persistency Assumptions

It is assumed that there are no lapses or surrenders and no policies are made paid-up after the valuation date.

### (10) Other Material Assumptions

All policies subject to a contingent debt have been valued using true ages and the actual sums assured.

The mathematical reserve is not less than the surrender value or transfer value which a policyholder might reasonably expect to receive, but excluding any element relating to final bonus.

### (11) Allowance For Derivatives

The assets described in Form 13 contain derivative contracts. These derivative contracts are to manage asset exposure and reduce risk and are appropriately matched. The derivatives do not directly impact the long term insurance liabilities. In addition there are a few assets having the effect of a derivative contract and these do not impact the long term business insurance liabilities.

**(12) Effect Of Basis Changes**

There have been no changes in valuation methodology arising from changes in INSPRU valuation rules effective from 31 December 2006.

**5. OPTIONS AND GUARANTEES**

**(1) Guaranteed Annuity Rate Options**

There are no guaranteed annuity rate options.

**(2) Guaranteed Surrender and Unit-linked Maturity Values**

Minimum surrender values are applied to both whole of life and endowment policies in accordance with the Industrial Assurance Act 1923. The mathematical reserves allow for policy surrender values as described in paragraph 4 (8) above. These surrender values exceed the 1923 Act minimum amounts. The amount of the additional reserve included in Form 51 to ensure the mathematical reserve is no less than the current surrender value is shown in the table below.

Product Name	Mathematical Reserve Excluding Guarantee	Guarantee Reserve	In force premium per annum
	£m	£m	£m
IB policies	333.2	0.3	17.1

**(3) Guaranteed Insurability Options**

Not applicable

**(4) Other Guarantees and Options**

The maturity value of endowments issued from 6 April 1999 is guaranteed to be at least equal to the premiums paid. The method and basis of valuation is described in paragraph 4 above and the guarantee is valued on all relevant policies.

These endowments are conventional with-profits products therefore a market value reduction does not apply. Policyholders may not make increments to these policies

Product Name	Basic Reserve	Spread of outstanding durations	Guarantee Reserve	Guarantee Amount	In force premiums
	£m	years	£m	£m	£m
Industrial Branch	32.0	1 to 15	8.1	58.7	4.2

## 6. EXPENSE RESERVES

### (1) Aggregate Expense Loadings

The aggregate amount of expense loadings, grossed up for taxation where appropriate, expected to arise during the 12 months after the valuation date from implicit and explicit reserves made in the valuation to meet expenses in fulfilling contracts in force at the valuation date is £7.4m. This is composed of the following elements.

	£m
Explicit allowances for investment expenses	1.2
Explicit allowances for other maintenance expenses	5.8
Implicit allowances	0.4

### (2) Implicit Allowances

The implicit allowances represent the allowance for base future investment expenses. These are calculated as the expected investment management charges based on the current asset mix and yields applied to the mathematical reserves.

### (3) Form 43 Comparison

The aggregate expense loading arising in the next 12 months is not significantly different from the maintenance expense in Form 43 line 14 and is shown in the table below.

	F43.14	table 6(1)	ratio
Homogeneous risk group	(a) £m	(b) £m	(a)/(b)
Endowment & whole life	7.2	7.4	97%
Total	7.2	7.4	97%

### (4) New Business Expense Overrun

Since the company is not actively seeking new business, there is no new business strain and no additional reserve is required.

### (5) Maintenance Expense Overrun

The mathematical reserves include explicit allowance for future expenses inflating in line with the current management services agreements. These expenses exclude future redundancy costs. An additional reserve of £2.5m is established to cover the risk that there is a one-off 20% increase in per policy expenses when the current management services agreement is reviewed.

### (6) Non-attributable expenses

Not applicable – all expenses are treated as attributable.

## 7. MISMATCHING RESERVES

### (1) Analysis of Reserves by Currency

All liabilities are denominated in sterling and are backed by sterling denominated assets

Currency	Math Reserves	Matching assets
	£m	£m
Sterling (£)	334.5	334.5
Euro (€)	0.0	0.0
Total	334.5	334.5

### (2) Other Currency Exposures

All liabilities are denominated in sterling.

### (3) Currency Mismatching Reserve

There is no significant mismatching of assets and liabilities by currency and so no reserve is made to cover this risk.

### (4) Most Onerous Scenario Under INSPRU 3.1.16(R)

PLL is a realistic basis reporting company and as such there is no resilience capital requirement.

### (5) Most Onerous Scenario Under INSPRU 3.1.23(R)

Not applicable

### (6) Resilience Capital Requirement

Not applicable

### (7) Additional Reserves Arising From INSPRU 1.1.34(2)(R)

No reserve is required for mismatching. Liabilities are analysed by duration and currency and the investment strategy is chosen appropriately so that there is no significant mismatch between assets and liabilities.

## 8. OTHER SPECIAL RESERVES

There are no special reserves exceeding the lesser of £10m and 0.1% of total mathematical reserves.

## 9. REINSURANCE

### (1) Facultative Reinsurance

#### Reinsurance

- (a) No premiums were payable on a facultative basis to a reinsurer that was unauthorised to carry on insurance business in the UK.
- (b) No such premiums were payable to a connected company reinsurer that was unauthorised to carry on insurance business in the UK.

**(2) Reinsurance Treaties**

There are no reinsurance treaties in force.

**10. REVERSIONARY (OR ANNUAL) BONUS**

Bonus series	Math reserves	Reversionary bonus rate for current year	Reversionary bonus rate for previous year	Total guaranteed bonus rate for current year
	£m			
Industrial Branch	281.0	0.50%	0.45%	0.50%

## Britannic With-Profits Fund

### 3. DISCRETIONARY CHARGES AND BENEFITS

#### (1) Application of Market Value Reduction

Market value reductions may be applied to unitised with-profits and smoothed return business for non-protected exits such as surrenders, transfers and early or late retirements. Market value reductions may not be applied for protected exits which generally include death, maturity, surrender at a guarantee date and retirement at the selected retirement date. The times at which a market value reduction may be applied have previously been fully described in the product range information provided in previous annual returns.

Market value reductions are applied and calculated on an individual policy basis, based on that particular policy's individual circumstances, including the policy's premium history and investment conditions over the duration of the policy and those prevailing at the time of non-protected exit. Consequently a statement of the period for which market value reductions were applied and a summary of the policy years of entry to which it was applied is not available.

During 2010, market value reductions were applied to claims to some degree for all types unitised with-profits and smoothed return business.

#### (2) Premiums on Reviewable Protection Policies

There are no policies with reviewable premiums.

#### (3) Non-profit Deposit Administration

There are no deposit administration policies in force.

#### (4) Service Charges on Linked Policies

There have been no changes to service charges on linked policies.

#### (5) Benefit Charges on Linked Policies

There have been no changes to benefit charges on linked policies.

#### (6) Accumulating With-Profits Charges

There were no changes to benefit charges on accumulating with-profits policies in the period.

#### (7) Unit Pricing of Internal Linked Funds

The internal linked funds are held within the Non Profit Fund.

#### (8) Tax Deductions from Internal Linked Funds

The tax deductions are described in the Non Profit Fund Section.

#### (9) Tax Provisions for Internal Linked Funds

The tax provisions are described in the Non Profit Fund Section.

#### (10) Discounts on Unit Purchases

Not applicable

## 4. VALUATION BASIS

### (1) Valuation Methods

#### **Policies previously written in BA**

The valuation methods used to calculate the mathematical reserves for each significant product group are described below. Unless otherwise stated, a prospective valuation method has been used and all policies are valued individually.

#### Conventional Business

All main classes of conventional business are valued using a gross premium method. The mathematical reserves were calculated as the value of future benefits and expenses less the value of future expected office premiums. No allowance for future lapses is made.

The mathematical reserve for guaranteed annuity option business reinsured from the Alba With-Profits Fund is based on the excess of the value of the deferred annuity compared to the cash amount. The underlying assumption is that 95% of policyholders exercise the option and that 20% of the policyholders exercising the option take the maximum tax-free cash. These assumptions are at least as prudent as the requirement in INSPRU 1.2.66(G).

The mathematical reserve includes reserves for lapsed policies which may be reinstated under the company's non-forfeiture regulations by payment of arrears. The mathematical reserves are reduced by the premium in arrears.

The reserves for contracts providing terminal illness benefit allow for the payment of death benefit a year early and for the loss of a year's premiums.

The reserves allow for the maximum estimated future cost of the concession granted to policies at the time of withdrawal of life assurance premium relief.

The mathematical reserves for the with-profits annuity is the value of projected future cashflows allowing for future annuity payments, future expenses, shareholder profit and loss transfers and tax on future declared investment return distributions. The future annuity payments allow for the smoothing of annuity payments down to the level supported by the valuation interest rate.

#### Unitised Business

The mathematical reserve for all unitised contracts linked to units in the unitised with-profits fund has been calculated as the higher of (i) and (ii) below:

- (i) The minimum of (a) and (b) below:
  - a. The face value of units, which is the number of units including attaching bonus units allocated up to the valuation date valued at £1.00 each. This is the full value guaranteed at maturity, guarantee date, death, selected retirement age or on withdrawals under the regular withdrawal scheme; and
  - b. The shadow fund value, which is the value of accumulated premiums less policy charges at the earned investment rate.
- (ii) A prospective value calculated by discounting projected future cashflows and allowing for future expenses. In the projection there is no allowance for future reversionary bonuses. For regular premium paying policies, the reserves are based on:



- a. 50% of the higher of the reserve calculated assuming that regular premiums continue to be paid at the current level and the reserve if premiums increase automatically in line with policy conditions; and
- b. 50% of the reserve calculated assuming that premiums cease and the policy becomes paid up at the valuation date.

The non-unit reserve for mortality cover for regular premium policies is equal to at least eighteen times the current monthly charge for these benefits.

The mathematical reserve for the overseas with profit bond (series I) makes no allowance for future bonus.

For the smoothed return with-profits bond invested in series B2 units, the mathematical reserves allow for future reversionary bonus supported by the valuation interest rate after allowing for the management charges. Allowance is made for the period during which the reversionary bonus rates are reduced to supportable levels after allowing for the smoothed policy value and guaranteed policy value as appropriate and smoothed investment returns.

Mortality charges are not guaranteed and can be varied at short notice. Policyholders would reasonably expect any increases in charges to be justified by significant adverse actual experience. The reserves make no allowance for changes in future mortality charges.

Ex- Britannic Hybrid Policies

Policies investing in unitised with-profits units may also invest in unit linked units in the Non Profit Fund. All unit linked liabilities are fully maintained in the Non Profit Fund. This includes both the unit reserve and sterling reserves (in respect of unit linked liabilities) covering future expenses and mortality costs.

**Policies previously written in Century**

For with-profits whole life and endowment assurance contracts, the reserve was calculated using the net premium method of valuation with a Zillmer adjustment. The net premiums were limited to a maximum percentage of the office premium as follows:

Ex-NEL With Profit Assurances	95%
Ex-Prosperity Whole Life Assurances	85%
Ex-Prosperity Endowment Assurances	95%
Ex-Sentinel With-Profit Assurances	65%

Policies have been issued subject to a lien and under certain endowment assurance policies the sum payable on death may be less than the sum payable at maturity. In the valuation an amount equal to the sum payable on maturity has been assumed to be the sum payable at death.

The reserves calculated were tested against the guaranteed surrender value and if the latter was the greater then this amount was held as the valuation reserve.

Any negative reserves arising were individually eliminated by reducing the value of the valuation premiums so as to make the mathematical reserves zero.

For policies where the extended term non-forfeiture provision was in operation on the valuation date, a reserve was held to cover the liability during the remaining period of non-forfeiture and, for endowment assurances, any maturity payment at the end of the period.

For lives accepted at non-standard rates, the additional reserve held was an amount equal to 150% of the annual office extra premium.

Non-linked Deferred Annuities

For ex-Sentinel with-profits deferred annuity contracts the reserve was calculated using the net premium method of valuation. The net premiums were limited to a maximum of 90% of the office premium.

For ex-NEL with-profits 'untied' and 'tied' deferred annuities, the mathematical reserve has been ascertained for each policy by deducting from the present value of the cash option and annuity respectively and the present value of an amount not less than the return on death, if any, the present value of the net premiums receivable. The net premium method of valuation was used; the net premium so calculated being restricted to a maximum of 95% of the annualised office premium. No Zillmer adjustment was made.

For all policies, the premium payment term is an integral number of years and the vesting date is usually the insured's birthday following the end of that period.

The reserve for paid up or single premium policies was increased by 6.25% to provide for future expenses relating to those policies.

**(2) Valuation Interest Rates**

The valuation interest rates used for the main groups of policy are:

Product Group		Current Valuation	Previous Valuation
<b>Policies previously written in BA</b>			
<b>Conventional Life Business</b>			
With-profits and non profit assurances	discount rate	3.89%	4.07%
With-profits deferred annuity	in deferment	4.66%	4.75%
	in payment	3.78%	4.26%
<b>Conventional Pensions Business</b>			
With-profits deferred annuity	in deferment	4.66%	4.75%
	in payment	3.78%	4.26%
Non profit deferred annuity	in deferment	3.46%	3.79%
	in payment	3.78%	4.26%
With-profits annuity	discount rate	3.74%	4.20%
Guaranteed annuity options	in deferment	3.46%	3.79%
	in payment	3.78%	4.26%
<b>Unitised Life Business</b>			
Single premium whole life (portfolio)	unit growth	3.28%	3.63%
	discount rate	3.28%	3.63%
Single premium whole life (series B2, FWL)	unit growth	3.28%	3.63%
	discount rate	3.28%	3.63%
Regular premium endowment - savings	unit growth	3.28%	3.63%
	discount rate	3.28%	3.63%
Regular premium ISA	unit growth	4.43%	4.75%
	discount rate	4.43%	4.75%
<b>Unitised Pensions Business</b>			
Individual pensions	unit growth	3.74%	4.20%
	discount rate	3.74%	4.20%
<b>Overseas Business</b>			
Single premium series I (Irish life)	unit growth	3.74%	4.20%
	discount rate	3.74%	4.20%
<b>Unit linked pensions</b>			
Stakeholder	unit growth	4.45%	4.92%
	discount rate	4.46%	4.75%
Product Group		Current Year	Previous Year
<b>Policies previously written in Century</b>			
With-profits whole life and endowments	discount rate	3.89%	4.07%
Non linked deferred annuity with profits	in deferment	4.66%	4.75%
	in payment	3.78%	4.26%

**(3) Risk Adjustments**

The yields on assets were reduced for risk as follows:

Fixed Interest

(c) Approved Securities:

No reduction

(d) **Other Securities**

A deduction was applied to the yield on an individual stock by stock basis to allow for the risk of default. The individual stock risk margins were calculated as a long term average default rate plus an additional allowance for short-term factors and expected deviations from the historic average.

The long term average default rates (in basis points) were:

Credit Rating	Term		
	5	10	20
AAA	4.3	12.3	15.2
AA	19.0	32.1	48.2
A	33.2	47.7	65.3
BBB	82.8	104.1	122.4
BB	261.3	277.3	287.2
B	591.7	524.7	442.5

A number of different techniques were then employed to arrive at an additional haircut, namely:

- A higher risk was recognised for bank subordinated debt by removing the credit for recoveries included within the above default rates. For banks that were in receipt of state aid, there was an additional deduction depending on whether the coupons could be missed or deferred without interest.
- Subordinated debt attracted hair cuts based on the senior rating of the issuer rather than the rating of the bond itself.
- Stocks were 'notched' downwards where the credit rating was considered to be inappropriate (after analysis of the current market spread and other factors).
- An additional reserve of £4.5m was established to allow for higher levels of default in the medium term. This is not reflected in the default rates in the table above.

Variable Interest

The yield on variables interest rate stocks was capped at the real yield on the over 5 years, 5% inflation FTSE Index linked gilt index. This cap applied to both approved and non-approved variable interest stocks.

Equities

The yield on equity shares was capped at the lower of 25% p.a. or twice the annualised 15 year gilt yield.

Additional adjustments were also made to the dividend yield of Lloyds TSB and Royal Bank of Scotland shares where the dividend yield was set to zero to reflect the current expectations of those shares.

Property

The yield on property was capped at the greater of 10% p.a. or twice the annualised 15 year gilt yield.

(4) Mortality Basis

Policies previously written in BA

The mortality bases for the main classes of business are:

Policies previously written in BA

Product Group	Current Valuation	Previous Valuation
<b>Conventional Life Business</b>		
	110% AMC00 ult	110% AMC00 ult
With-profits and non profit assurances	110% AFC00 ult	110% AFC00 ult
With-profits deferred annuity		
in deferment	85% AMC00 ult	85% AMC00 ult
	85% AFC00 ult	85% AFC00 ult
in payment	63% RMV00	56% PCMA00
	64% RFV00	62% PMFA00
<b>Conventional Pensions Business</b>		
With-profits deferred annuity		
in deferment	85% AMC00 ult	85% AMC00 ult
	85% AFC00 ult	85% AFC00 ult
in payment	63% RMV00	56% PCMA00
	64% RFV00	62% PMFA00
Non profit deferred annuity		
in deferment	85% AMC00 ult	85% AMC00 ult
	85% AFC00 ult	85% AFC00 ult
in payment	63% RMV00	56% PCMA00
	64% RFV00	62% PMFA00
<b>With-Profits Annuity</b>		
	Modified PMA 92	Modified PMA 92
	Modified PFA 92	Modified PFA 92
<b>Guaranteed annuity options</b>		
	90% PMA92 MedCoh	90% PMA92 MedCoh
	90% PFA92 MedCoh	90% PFA92 MedCoh
<b>Unitised Life Business</b>		
	110% AMC00 ult	110% AMC00 ult
Single premium whole life	110% AFC00 ult	110% AFC00 ult
	110% AMC00 ult	110% AMC00 ult
Single premium whole life series B2	110% AFC00 ult	110% AFC00 ult
	110% AMC00 ult	110% AMC00 ult
Regular premium endowment savings	110% AFC00 ult	110% AFC00 ult
<b>Unitised Pensions Business</b>		
	165% AMC00 ult	165% AMC00 ult
Individual pensions	154% AFC00 ult	154% AFC00 ult
<b>Overseas Business</b>		
	110% AMC00 ult	110% AMC00 ult
Single premium series I	110% AFC00 ult	110% AFC00 ult
<b>Unit Linked Pensions</b>		
	165% AMC00 ult	165% AMC00 ult
Stakeholder	154% AFC00 ult	154% AFC00 ult

**Britannic With-Profits Fund**

The expectation of life and longevity improvement factors for the with-profits annuity for the current year are:

Representative description of underwriting category	Standard	Light smoker	Diabetic	Smoker	Medium	High	Seriously ill
					Impairment		
Male aged 65	26.79	24.26	25.94	22.03	21.55	17.42	14.60
Male aged 75	17.20	15.04	16.99	13.21	14.47	10.18	8.25
Female aged 65	29.48	27.15	24.97	20.84	18.98	15.98	18.77
Female aged 75	19.25	17.14	15.33	11.79	10.59	8.91	10.70

The expectation of life and longevity improvement factors for the with-profits annuity for the previous year were:

Representative description of underwriting category	Standard	Light smoker	Diabetic	Smoker	Medium	High	Seriously ill
					Impairment		
Male aged 65	25.99	25.93	25.80	21.24	19.09	17.06	14.21
Male aged 75	16.63	16.58	16.48	12.66	11.26	9.82	7.83
Female aged 65	29.30	29.26	29.19	24.73	23.91	22.40	19.96
Female aged 75	19.20	19.17	19.11	15.13	14.80	13.72	11.99

The longevity improvement factors used for post vesting mortality assumptions for the current year are:

<b>Males</b>	<b>2011</b>	<b>2021</b>	<b>2031</b>	<b>2041</b>	<b>2051</b>	<b>2061</b>
40	1.83%					
50	1.88%	2.65%				
60	1.35%	2.51%	2.97%			
70	2.46%	1.73%	2.41%	2.67%		
80	3.78%	2.03%	1.70%	2.13%	2.17%	
90	1.55%	2.06%	1.55%	1.56%	1.63%	1.63%
100	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%

<b>Females</b>	<b>2011</b>	<b>2021</b>	<b>2031</b>	<b>2041</b>	<b>2051</b>	<b>2061</b>
40	2.06%					
50	2.70%	3.03%				
60	1.80%	3.32%	3.15%			
70	2.61%	2.52%	2.85%	2.69%		
80	3.42%	2.42%	2.11%	2.19%	2.17%	
90	1.46%	2.02%	1.69%	1.62%	1.63%	1.63%
100	1.08%	0.00%	1.08%	1.08%	1.08%	1.08%

The expectations of life for with-profits deferred annuity for the current and previous year are:

Expectation of life from age 65 for current age	<b>Current Valuation</b>	<b>Previous Valuation</b>
Male aged 45	41.9	43.2
Male aged 55	31.9	33.2
Female aged 45	45.5	44.7
Female aged 55	35.5	34.7

The mortality tables used for with-profits deferred annuity for the current year are RFV00/RMV00.

**Policies previously written in Century**

The mortality bases used in the valuation of the significant groups of business are as follows:

<b>Product Group</b>	<b>Current Valuation</b>	<b>Previous Valuation</b>
<b>With-Profits Whole Life and Endowment Assurance</b>		
Base Table	81% A67/70 Ult	81% A67/70 Ult
R6A (peak) AIDS allowance	33%	33%
Age deduction for females	3 years	3 years
<b>With-Profits Deferred Annuity - in deferment</b>		
Base Table	45% A67/70 Ult	45% A67/70 Ult
R6A (peak) AIDS allowance	33%	33%
Age deduction for females	3 years	3 years

The AIDS projection basis R6A is as reported by the Institute of Actuaries AIDS Working Party. No credit was taken for the margins in the mortality bases used in the scheduled valuation against the levels currently being experienced.

No other reserves for possible detrimental changes in mortality or morbidity rates have been made.

**(5) Morbidity Basis**

There is not a significant amount of business with critical illness cover.

**(6) Expenses**

The following tables show the gross attributable expenses per policy.

Product Group	Per Policy Expense	
	Current Valuation	Previous Valuation
	(£)	(£)
<b>CWP savings endowment (120)</b>		
Premium paying	44.48	42.79
Single premium/paid up	22.25	21.40
<b>CWP target cash endowment (125)</b>		
Premium paying	44.48	42.79
Single premium/paid up	22.25	21.40
<b>CWP pensions (155/165)</b>		
Premium paying	74.13	71.32
Single premium/paid up	22.25	21.40
<b>UL pension (725)</b>		
Regular premium	56.34	54.41
Single premium/paid up	56.34	54.21
<b>UWP Bond (500) - Series B</b>		
Regular premium	44.48	42.79
Single premium/paid up	22.25	21.40

Product Group	Current Valuation	Previous Valuation
	% Basic Units	% Fund Expense
	<b>UWP Bond (500)</b>	
Premium paying	0.53	0.50
Single premium/paid up	0.53	0.50
<b>UWP savings endowment (510)</b>		
Premium paying	0.53	0.50
Single premium/paid up	0.53	0.50
<b>UWP pension (525 / 545)</b>		
Regular premium	0.53	0.50
Single premium/paid up	0.53	0.50

The expenses on life business are netted down for tax at 20%.

There are no zillmer adjustments for the policies to which the above expenses apply.

The following table shows the zillmer adjustments for other premium paying policies where the reserve was calculated using the net premium method of valuation:

Product Group	Current Valuation	Previous Valuation
CWP savings endowment (120)	3.00%	3.00%

The zillmer adjustments on life business are netted down for tax at 20%.



The expense assumptions for deferred annuities and non-premium paying assurances where the net premium method was used were as follows:

Product Group	Current Valuation	Previous Valuation
	% of reserve	% of reserve
CWP savings endowment (120)	2.25%	2.25%
Deferred annuities (390)	6.25%	6.25%

The expenses on life business are netted down for tax at 20%.

For the current valuation the investment expense assumptions have been updated to allow for the impact of a new investment fee scale agreed with the asset manager. The base fees are as follows:

Type of Asset	Current valuation		Previous valuation	
	%		%	
	Growth	Matched	Growth	Matched
Equities	0.150	0.150	0.125	0.100
Overseas equities	0.208	0.212	0.200	0.250
Property	0.200	0.200	0.350	0.350
Gilts	0.08	0.079	0.075	0.080
Other fixed interest	0.08	0.080	0.105	0.080
Cash	0.085	0.085	0.030	0.030

The investment expenses for life fund business are netted down for policyholder tax at 20%.

In addition to the base fees, there is an explicit additional services fee which is allowed for as a new provision of £8.8m. At the previous valuation these additional services had been allowed for implicitly within the investment expense assumption. There is also a performance fee payable to the asset manager. This is not allowed for in the valuation basis because no over or under investment performance is assumed in the valuation interest basis.

## **(7) Unit Growth Rates And Expense Inflation**

### **Policies previously written in BA**

Product Group	Current Valuation	Previous Valuation
<b>Unit growth rates</b>		
Pensions business	4.45%	4.92%
<b>Expense inflation</b>		
With profit policies	5.00%	5.08%
Stakeholder Pension policies	4.50%	4.58%

## **(8) Future Bonus Rates**

No future bonuses are assumed in the mathematical reserves for conventional and unitised with-profits business other than for minor specific reserves in respect of Century Ex-Prosperity contracts and the Britannic smoothed return with-profits bond invested in series B2 units.

For the Britannic with-profits bond the average smoothed return applicable at 1 January 2011 was 3.77%.

**(9) Persistency Assumptions**

It is assumed that there are no lapses or surrenders and no policies are made paid-up after the valuation date.

**(10) Other Material Assumptions**

All policies subject to a contingent debt have been valued at true ages and the actual sums assured.

Policies issued subject to an extra premium have been valued at true ages and for policies previously written in BA an additional reserve of one year's extra premium and for policies previously written in Century an additional reserve of 150% of one year's extra premium have been established.

The mathematical reserve is not less than the surrender value or transfer value that a policyholder might reasonably expect to receive, but excluding any element relating to terminal bonus.

**(11) Allowance for Derivatives**

The assets described in Form 13 contain derivative contracts. These derivative contracts are to manage asset exposure and reduce risk and are appropriately matched. The derivatives do not directly impact the long term insurance liabilities except as described in paragraph 5 (1) below.

**(12) Effect of Basis Changes**

There have been no changes in valuation methodology arising from changes in INSPRU valuation rules effective from 31 December 2006.

**5. OPTIONS AND GUARANTEES**

**(1) Guaranteed Annuity Rate Options**

**Policies previously written in BA**

The reinsurance accepted in respect of guaranteed annuity options referred to in paragraph 4 (1) and shown on Form 51 relates to the liability arising when the annuities vest in the Alba With-Profits Fund in the future.

**Policies previously written in Century**

The liabilities for guaranteed annuity rate options were calculated at policy level using a deterministic valuation interest rate. All the policies were significantly in the money at the valuation date and are likely to remain so in the future unless interest rates increase substantially. The value of the guaranteed annuity options is therefore virtually all intrinsic value, and if a stochastic method had been used, the reserves thus calculated would not be materially different from the values reported.

The main assumptions used to value guaranteed annuity options were:

## Britannic With-Profits Fund

Valuation interest rate p.a.	Pre-vesting	4.66%
	Post-vesting	3.78%
GAO take-up rate*		95%
Mortality		As in 4 (4)
Payment expense allowance		4%

\*The GAO take-up rate is calculated using the assumption that 20% of policies take 25% of their fund as cash at retirement for all outstanding durations.

Details of guaranteed annuity options that were in force at the valuation date are shown in the table below:

Product	Basic Reserve	O/S Durn Spread	Gtee Reserve	GAO Rate	Incrs Yes/No	Ann. Form	Ret. Ages
	£m	years	£m	%cash sum			
Ex-Sentinel Dfd. Ann	1.89	1-30	1.0	10.25%	No	*	60-75

\*The guaranteed annuity option rates shown are for a male age 65, monthly level annuity, payable in advance with 5 year guarantee period – other options are available.

In general, where policyholders may make increments to the policy, the guaranteed annuity option does not apply to the regular premium increases or additional single premiums.

### (2) Guaranteed Surrender and Unit-linked Maturity Values

There are no policies with a unit linked maturity guarantee in force. Details of policies with guaranteed surrender values are described below.

Product	Basic Reserve	Guarantee Reserve	Guaranteed amount	In force premium per annum
	£m	£m	£m	£m
Portfolio Investment Bond	123.9	0.0	123.9	0.0
With Profit Bond (series B2)	9.3	0.0	9.3	0.0
With Profit Bond (series I)	26.9	0.0	26.9	0.0

#### Portfolio Investment Bond

- (a) The general method and basis of valuation are described in paragraph 4. The policies are valued assuming the benefits are paid as death benefits at age 100 as this is more onerous than allowing for surrender on a guarantee date. No additional surrender guarantee reserve is required.
- (b) (i) product name, (ii) basic reserve, (iv) guarantee reserve, (v) guaranteed amount and (vii) in force premiums are shown in the table above.
- (iii) and (vi)

On surrender at a guarantee date, with-profits units and bonus units have a guaranteed value of £1.00. In addition, for policies issued from 28 May 1997, the surrender value at the guarantee date in respect of the with-profits benefits will not be less than the premium applied to purchase those benefits. The guarantee date varies by date of issue of the policy:

<b>Date of issue</b>	<b>Guarantee dates</b>
Prior to 12 July 1994	Fifth and subsequent policy anniversaries
12 July 1994 to 6 April 1999	Fifth and subsequent quinquennial policy anniversaries
From 6 April 1999	Tenth and subsequent policy anniversaries

(viii) No increments can be made to the policy.

**With Profits Bond (series B2)**

- (a) The general method and basis of valuation are described in paragraph 4.
- (b) (i) product name, (ii) basic reserve, (iv) guarantee reserve, (v) guaranteed amount and (vii) in force premiums are shown in the table above.  
(iii) and (vi)

This policy invests in the With-Profits Fund and participates in surplus in the With-Profits Fund by the allocation of smoothed investment returns. Each contribution has two separate values, the smoothed value and the guaranteed value, together with an underlying unsmoothed value. The smoothed value is the contribution increased or decreased by the smoothed investment return net of the initial charge and annual management charge. The guaranteed value is initially 75% of the smoothed value and will be increased such that it is equal to 75% of the previous highest smoothed value.

The full or partial withdrawal value at a guarantee date is the higher of the smoothed value and the guaranteed value.

The guarantee dates are the 5<sup>th</sup> and subsequent quinquennial policy anniversaries.

(viii) No increments can be made to the policy.

**With Profits Bond (Series I)**

- (a) The general method and basis of valuation are described in paragraph 4.
- (b) (i) product name, (ii) basic reserve, (iv) guarantee reserve, (v) guaranteed amount and (vii) in force premiums are shown in the table above.  
(iii) and (vi)

This policy invests in the With-Profits Fund and reversionary bonus vests on a daily basis at a rate declared at the previous valuation date in anticipation of surplus that would otherwise emerge following the previous valuation.

The full withdrawal value at a guarantee date is the full value of the units including reversionary bonus added to date.

The guarantee dates are the 7<sup>th</sup> and subsequent policy anniversaries.

(viii) No increments can be made to the policy.

**(3) Guaranteed Insurability Options**

(a) For policies previously written in BA a reserve of £0.44m is established to cover the cost of guaranteed insurability options. This is calculated as 5% of the office premiums plus 0.1% of the sum at risk for these policies.

No business that was previously written in Century contains any guaranteed insurability, continuation or conversion options.

(b) The total sum assured for policies with guaranteed insurability, continuation and conversion options is less than £1bn.

**(4) Other Guarantees and Options**

For BA endowments issued from 6 April 2000, the maturity value is guaranteed to be at least equal to the premiums paid. The method and basis of valuation is described in paragraph 4 above and the guarantee is valued on all relevant policies.

Product	Basic Reserve	Spread of outstanding durations	Guarantee Reserve	Guarantee Amount	In force premiums
	£m		£m	£m	£m
Ordinary Branch Endowment	18.6	1-23	4.6	37.0	2.7

Policyholders may not make increments to these policies.

**6. EXPENSE RESERVES**

**(1) Aggregate Expense Loadings**

The aggregate amount of expense loadings, grossed up for taxation where appropriate, expected to arise during the 12 months after the valuation date from implicit and explicit reserves made in the valuation to meet expenses in fulfilling contracts in force at the valuation date is £25.5m. This is composed of the following elements.

	£m
Explicit allowances for investment expenses	8.8
Explicit allowances for other maintenance expenses	3.3
Implicit allowances	13.4

**(2) Implicit Allowances**

The basis for calculating the implicit allowances within 6 (1) is outlined in section 4, the main elements of the calculation being:

- (a) the margin between the office premium and the net premium for prospectively valued contracts where the net premium method has been employed;
- (b) margins expressed as a percentage of certain non-linked reserves e.g. certain single premium and paid up assurances where a net premium valuation method has been employed;
- (c) allowance for investment management charges which is calculated as the expected investment management charge for the next financial year applied to the mathematical reserves in Form 50;

- (d) The expenses for UWP business as set out in the new MSA with PGMS.

**(3) Form 43 Comparison**

The aggregate expense loading arising in the next 12 months is significantly different from the maintenance expense in Form 43 line 14 as shown in the table below:

	F43.14	table 6(1)	ratio
Homogeneous risk group	(a) £m	(b) £m	(a)/(b)
Policies previously written in BA	53.2	25.0	213%
Policies previously written in Century Life		0.5	0%
Total	53.2	25.5	208%

The key difference is that Form 43 line 14 includes a pension scheme expense which was funded by the release of a provision,

**(4) New Business Expense Overrun**

Since the company is not actively seeking new business, except for contractual increments, it does not expect to incur any material strain in writing new business so no additional reserve is required.

**(5) Maintenance Expense Overrun**

The mathematical reserves include explicit allowance for future expenses inflating in line with the current management services agreements. These expenses exclude future redundancy costs. An additional reserve of £3.2m is established to cover the risk that there is a one-off increase in per policy charges when the current management services agreement is reviewed in 2014.

The equivalent reserve held at the previous valuation was £3.1m.

**(6) Non-attributable expenses**

Not applicable – all expenses are treated as attributable.

**7. MISMATCHING RESERVES**

**(1) Analysis of Reserves by Currency**

The mathematical reserves are mostly in sterling and are mostly matched by assets in sterling realisable in the United Kingdom.

The table shows the results.

Currency	Mathematical Reserves	Backed by assets
	£m	£m
Sterling (£)	3,387.0	3,387.0
Other currencies	26.9	26.9
Total	3,413.9	3,413.9

**(2) Other Currency Exposures**

See paragraph 7 (1).

**(3) Currency Mismatching Reserve**

A subfund of euro-denominated assets is maintained in respect of euro-denominated liabilities. There is no significant mismatching of assets and liabilities by currency and so no reserve is made to cover this risk.

**(4) Most Onerous Scenario Under INSPRU 3.1.16(R)**

PLL is a realistic basis company and therefore the resilience capital requirement does not apply.

**(5) Most Onerous Scenario Under INSPRU 3.1.23(R)**

No applicable

**(6) Resilience Capital Requirement**

Not applicable

**(7) Additional Reserves Arising From INSPRU 1.1.34(2)(R)**

No reserve is required for mismatching. Liabilities are analysed by duration and currency and the investment strategy is chosen appropriately so that there is no significant mismatch between assets and liabilities.

**8. OTHER SPECIAL RESERVES**

The special reserves exceeding £10m are:

Description	Reserve
	£m
Data	10.6
Pensions Review	16.9

Data

The data contingency reserve covers additional liabilities which may arise in connection with data errors affecting the long-term business and is calculated having regard to past experience.

Pension Review Reserve

This £16.9m contingency reserve covers the expected additional benefits or compensation payable to certain personal pension policyholders where best advice rules may not have been adhered to.

The valuation basis for calculating the liability relating to the expected cost of guarantees where the value of the personal pension is promised to match the value of the associated occupational pension scheme is consistent with that set out in paragraph 4.

The reserve for other compensation payments is based on prudent assumptions about the expected number of payments and the average compensation amount per case. The assumptions take into account current experience. No discounting to the date of settlement is applied.

## 9. REINSURANCE

The treaty now only includes unit linked stakeholder pensions business. The remaining property linked liabilities under life and pensions contracts have been transferred to the Non Profit Fund since the previous valuation.

### (1) Facultative Reinsurance

- (a) No premiums were payable on a facultative basis to a reinsurer that was unauthorised to carry on insurance business in the UK.
- (b) No such premiums were payable to a connected company reinsurer that was unauthorised to carry on insurance business in the UK.

### (2) Reinsurance Treaties

The relevant reinsurance treaties in force at the valuation date are described below.

#### (d) Non Profit Fund of Phoenix Life Limited

- (e) The treaty covers property linked benefits under Stakeholder pension contracts on a 100% quota share basis.  
The treaty is subject to an experience adjustment in respect of pensions business whereby the reinsurance premium to be paid is reduced by the product charges (i.e. management fee and difference between the policy premiums and the bid value of the units allocated) and increased by the policy related, investment management and other expenses the reinsurer incurs in respect of these policies.
- (f) The premiums payable by the insurer during the year are £1.42m.
- (g) There are no deposit back arrangements.
- (h) The treaty is open to new business.
- (i) There are no undischarged obligations
- (j) The amount of mathematical reserves ceded under the treaty at the valuation date was £36.5m.
- (k) 0% of the property linked benefits relating to new policies being reinsured are retained by the insurer.
- (l) The reinsurer is authorised to carry on insurance business in the UK.
- (m) The reinsurer is not a connected company of the insurer, but is a subfund of PLL.
- (n) There are no material contingencies, such as credit risk or legal risk to which the treaties are subject.
- (o) There is no reinsurance commission payable under the contract.
- (p) The treaty is not a financing arrangement.



**10. REVERSIONARY (OR ANNUAL) BONUS**

Bonus Series	Math reserves  £m	Reversionary Bonus Rate for Current Year  %	Reversionary Bonus Rate for Previous year  %	Total g'tee bonus for current year  %
<b>Policies previously written in BA</b>				
Conventional				
Assurances	326.7	0.449%	0.416%	0.449%
Life Deferred Annuities	14.1	0.731%	0.659%	0.731%
Pensions Deferred Annuities	97.8	0.941%	0.879%	0.941%
Unitised With-Profits				
Life Regular Premium	11.2	0.000%	0.000%	0.000%
Life Single Premium	124.1	0.000%	0.000%	0.000%
Pensions	2,505.9	1.000%	1.000%	1.000%
Irish life - Euro denominated	0.0	2.200%	1.760%	2.200%
New WP bond (smoothed returns)				
New WP bond (smoothed returns)	10.1	4.440%	3.490%	4.440%
WP annuity	13.5	4.140%	3.070%	4.140%
<b>Policies previously written in Century</b>				
Ex - Sentinel				
Simple Bonus	6.9	4.75%	4.75%	4.75%
Compound - assurances	1.8	3.80%/3.80%	3.80%/3.80%	3.80%/3.80%
Compound - deferred annuities	1.9	3.80%/3.80%	3.80%/3.80%	3.80%/3.80%
Ex-NEL				
Simple Bonus	22.2	6.00%	6.00%	6.00%
Compound Bonus	19.5	6.00%	6.00%	6.00%
Ex-Prosperity				
All contracts	5.5	3.35%/4.00%	3.35%/4.00%	3.35%/4.00%

**Notes**

- (a) The unitised with-profits bonus is the percentage addition per annum to basic and bonus units in force as at 31 December and allows for the period the units had been in force during that year.
- (b) The reversionary bonus for conventional business previously written in BA is a simple bonus scale where the addition for the year depends on the duration in force.
- (c) The smoothed return allocated to the Britannic With-Profits Bond is declared quarterly and varies by unit series which is based on policy date of commencement and rate shown is the weighted average applied.

The average declared return applied for the with-profits annuity was 4.14% and average guaranteed uplift applied for 2010 was 2.64%.

## Phoenix With-Profits Fund

### 3. DISCRETIONARY CHARGES AND BENEFITS

#### (1) Application of Market Value Reduction

##### Unitised With-Profits Bond

Market value reductions have been applied throughout the year.

These policies were sold between June 1996 and September 2001 and all policy years of entry have been subject to market value reductions.

##### Lifestyle Bond

Market value reductions have been applied throughout the year.

These policies were sold between February 2001 and December 2001 and have been subject to market value reductions.

##### UK With-Profits Bond (Pre 1997)

Market value reductions have been applied throughout the year.

These policies were sold between January 1992 and December 1996 and all policy years of entry have been subject to market value reductions.

##### Isle of Man With-Profits Bond (Pre 1999)

Market value reductions have been applied throughout the year.

These policies were sold between December 1992 and December 1998 and all policy years of entry have been subject to market value reductions.

##### Living Pensions

The following products within the Living Pensions range have a unitised with-profits option:

- Living Pensions Personal Pension
- Living Pensions Personal Option Policy
- Living Pensions Top Up Pension

Market value reductions have been applied throughout the year.

These policies were sold between April 1996 and December 1996 although remained open to increments until April 2001.

##### Unitised With-Profits Pensions

The following products within the unitised with-profits pensions range have a unitised with-profits option:

- Executive Pension Plan
- Company Pension Scheme
- Company Additional Pension Scheme
- Individual Personal Pension Plan
- Group Personal Pension Plan
- Personal Additional Pension Plan

Market value reductions have been applied throughout the year.

These policies were sold between January 1995 and April 2001 although remain open to increments.

Pensions Solutions

The following products within the Pensions Solutions range have a unitised with-profits option:

- Individual Personal Pension Plan
- Group Personal Pension Plan
- Contracted-in Money Purchase Plan
- Executive Pension Plan
- Trustee Investment Plan

Market value reductions have been applied throughout the year.

These policies were sold between April 2001 and December 2002 although remain open to increments.

**(2) Premiums on Reviewable Protection Policies**

There were no changes to premiums on non-linked reviewable protection policies since the previous valuation date. The amount of the mathematical reserves at the valuation date was £0.6m.

**(3) Non-profit Deposit Administration**

There are no non-profit deposit administration policies.

**(4) Service Charges on Linked Policies**

The linked policies that were previously in the Fund are now in the Non Profit Fund and the changes in charges are disclosed in that section of the abstract.

**(5) Benefit Charges on Linked Policies**

There were no changes to benefit charges on linked policies in the current year.

**(6) Accumulating With-Profits Charges**

The following expenses, which are notionally charged to specimen policy asset shares when determining terminal bonus or market value reductions for accumulating with-profits policies, have changed:

Annual maintenance expenses (net of policy fee where applicable), which changed from £36.94 to £55.07.

Charges apply to all accumulating with-profits business, except Lifestyle Bond. The mathematical reserves at the valuation date amount to £912m.

**(7) Unit Pricing of Internal Linked Funds**

Not applicable

**(8) Tax Deductions From Internal Linked Funds**

Not applicable

**(9) Tax Provisions for Internal Linked Funds**

Not applicable

**(10) Discounts on Unit Purchases**

M & G Securities Limited - Authorised Unit Trust

The Company receives a 1% discount on the cost of purchasing units in excess of £1,000. Policyholders do not benefit from this discount. There is no discount to the Company on the sale of units. The company does not receive any rebate of the annual management charge on its holdings in the unit trust.

**4. VALUATION BASIS**

**(1) Valuation Methods**

The valuation methods used are as follows:

Gross Premium Method

Reserves for policies other than for those products included in the section "Accumulating With-Profits Policies" or where the gross mathematical reserves and gross annual premium do not exceed the lesser of £10m or 1% of the total gross mathematical reserves have been established using a prospective gross premium method applied to each policy.

Accumulating With-Profits Policies

Reserves for accumulating with-profits policies on Form 52 have been calculated for each policy as the greater of:

- (i) the discounted value of:
  - (a) the guaranteed benefits at the maturity date or guarantee point allowing for future reversionary bonus rates in accordance with the table in paragraph 4 (7) (which is consistent with treating customers fairly); and
  - (b) assumed future expenses per paragraph 4 (6).
- (ii) the lower of:
  - (aa) the amount that would reasonably be expected to be paid if the policyholder exercised his option to take a cash sum on the valuation date, having regard to the representations of the company; and
  - (bb) the amount in (aa) disregarding all discretionary adjustments.

Calculation Notes

Where annuity benefits are payable to any spouse that may exist at the date of death of the annuitant, we assume that 90% are married with the female 3 years younger than the male life.

**(2) Valuation Interest Rates**

The valuation interest rates used are as follows:

Product Group	Current Valuation	Previous Valuation
Valuation Interest Rates – Life		
With-Profits – Endowments	3.28%	3.86%
With-Profits – Other	2.85%	2.84%
With-Profits Bond	2.85%	2.84%
With-Profits Deferred Annuity		
- Regular Premium	3.46%	3.51%
- Single Premium/ Paid-Up Initial Rate	4.35%	4.44%
- Single Premium/ Paid-Up Reinvestment Rate	3.57%	3.87%
Non Profit – Endowments	3.43%	3.82%
Non Profit – Other	2.40%	2.49%
Non Profit Deferred Annuity	3.57%	3.87%
Annuities in Payment (new GAF)	3.88%	4.30%
Annuities in Payment (old GAF)	4.32%	4.77%

Valuation Interest Rates – Pension		
With-Profits Deferred Annuity		
- Regular	3.46%	3.51%
- Single Premium/ Paid-Up Initial Rate	4.35%	4.44%
- Single Premium/ Paid-Up Reinvestment Rate	3.57%	3.87%
Profit Plus Fund - accumulating units	3.46%	3.53%
- initial units	3.21%	3.28%
With-Profits Group Endowments	3.46%	3.51%
Other Assurances	3.46%	3.51%
Annuities in Payment	4.32%	4.77%
Non Profit Assurances	3.04%	3.51%
Non Profit Deferred Annuities	3.04%	3.51%
RPI Linked Deferred Annuities	0.23%	0.44%
RPI Linked Annuities in Payment	0.23%	0.44%

**(3) Risk Adjustments**

The yields on assets were reduced for risk as follows:

Fixed Interest

## (e) Approved Securities:

No reduction

## (f) Other Securities

A deduction was applied to the yield on an individual stock by stock basis to allow for the risk of default. The individual stock risk margins were calculated as a long term average default rate plus an additional allowance for short-term factors and expected deviations from the historic average.

The long term average default rates (in basis points) were:

Rating	5yr	10yr	20yr
AAA	4.3	12.3	15.2
AA	19.0	32.1	48.2
A	33.2	47.7	65.3
BBB	82.8	104.1	122.4
BB	261.3	277.3	287.2
B	591.7	524.7	442.5

A number of different techniques were then employed to arrive at an additional haircut, namely:

- A higher risk was recognised for bank subordinated debt by removing the credit for recoveries included within the above default rates. For banks that were in receipt of state aid, there was an additional deduction depending on whether the coupons could be missed or deferred without interest.
- Subordinated debt attracted hair cuts based on the senior rating of the issuer rather than the rating of the bond itself.
- Stocks were 'notched' downwards where the credit rating was considered to be inappropriate (after analysis of the current market spread and other factors).
- An additional reserve of £6.6m was established to allow for higher levels of default in the medium term. This is not reflected in the default rates in the table above.

#### Variable Interest

The yield on variables interest rate stocks was capped at the real yield on the over 5 years, 5% inflation FTSE Index linked gilt index. This cap applied to both approved and non-approved variable interest stocks.

#### Equities

The yield on equity shares was capped at the lower of 25% p.a. or twice the annualised 15 year gilt yield.

Additional adjustments were also made to the dividend yield of Lloyds TSB and Royal Bank of Scotland shares where the dividend yield was set to zero to reflect the current expectations of those shares.

#### Property

The yield on property was capped at the greater of 10% p.a. or twice the annualised 15 year gilt yield.

**(4) Mortality Basis**

The mortality bases used for the valuation were:

Product Group	Current Valuation	Previous Valuation
Endowment and Whole of Life	80.6% AM92	80.6% AM92
	83.8% AF92	83.8% AF92
Term Assurances - aggregate	71.5% TM92	71.5% TM92
	93.2% TF92	93.2% TF92
Term Assurances – non-smoker	66.0% TM92	66.0% TM92
	77.4% TF92	77.4% TF92
Term Assurances – smoker	132.0% TM92	132.0% TM92
	148.7% TF92	148.7% TF92
Pensions pre-vesting and pension term assurances	48.3% AM92	48.3% AM92
	54.5% AF92	54.5% AF92
Life Annuities currently in Payment	Modified IM80 c2010	Modified IM80 c2010
	Modified IF80 c2010	Modified IF80 c2010
Pension Deferred Annuities post vesting	Modified PMA92 c2020	Modified PMA92 c2020
	Modified PFA92 c2020	Modified PFA92 c2020
Pension Immediate Annuities	Modified PMA92 c2020	Modified PMA92 c2020
	Modified PFA92 c2020	Modified PFA92 c2020

Life annuities currently in payment

The expectation of life under the current (and previous year) valuation assumptions for sample ages are:

Age	Current Year		Previous Year	
	Males	Females	Males	Females
65	22.75	25.46	22.60	25.34
75	14.47	16.32	14.35	16.22

Pension annuities currently in payment

Specimen percentages of the base tables used for the current year (and previous year) valuation are:

	Current Year		Previous Year	
	Male	Female	Male	Female
At age 65	123.3%	120.4%	127.7%	123.5%
At age 75	73.4%	87.4%	76.1%	90.2%
At age 85	74.1%	76.1%	76.1%	94.3%
At age 95	78.9%	79.7%	79.7%	97.4%

Specimen annual improvement rates, dependent on calendar year, are:

Males	2011	2021	2031	2041	2051	2061
65	3.41%	2.95%	2.59%	2.98%	2.98%	2.98%
75	3.44%	2.97%	2.44%	2.38%	2.44%	2.44%
85	2.81%	2.23%	2.11%	1.90%	1.90%	1.90%
95	1.64%	1.43%	1.40%	1.38%	1.35%	1.35%

**Phoenix With-Profits Fund**

<b>Females</b>	<b>2011</b>	<b>2021</b>	<b>2031</b>	<b>2041</b>	<b>2051</b>	<b>2061</b>
65	2.52%	2.94%	2.90%	2.98%	2.98%	2.98%
75	2.84%	2.75%	2.50%	2.43%	2.44%	2.44%
85	2.10%	2.11%	2.04%	1.90%	1.90%	1.90%
95	1.41%	1.34%	1.39%	1.37%	1.35%	1.35%

The expectation of life under the current (and previous year) valuation assumptions for sample ages are:

<b>Age</b>	<b>Current Year</b>		<b>Previous Year</b>	
	<b>Males</b>	<b>Females</b>	<b>Males</b>	<b>Females</b>
65	25.21	26.72	25.02	26.55
75	15.74	16.32	15.57	16.80

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

Sample percentages of the base tables used for the current year (and previous year) valuation are:

	<b>Current Year</b>		<b>Previous Year</b>	
	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>
At age 55	478.2%	446.9%	488.9%	455.0%
At age 65	123.3%	120.4%	127.7%	123.5%
At age 75	73.4%	87.4%	76.1%	90.2%
At age 85	74.1%	92.5%	76.1%	94.3%
At age 95	78.9%	96.6%	79.7%	97.4%

Specimen annual improvement rates, dependent on calendar year, are:

<b>Males</b>	<b>2011</b>	<b>2021</b>	<b>2031</b>	<b>2041</b>	<b>2051</b>	<b>2061</b>
55	2.63%	2.41%	3.24%	3.25%	3.25%	3.25%
65	3.41%	2.95%	2.59%	2.98%	2.98%	2.98%
75	3.44%	2.97%	2.44%	2.38%	2.44%	2.44%
85	2.81%	2.23%	2.11%	1.90%	1.90%	1.90%
95	1.64%	1.43%	1.40%	1.38%	1.35%	1.35%

<b>Females</b>	<b>2011</b>	<b>2021</b>	<b>2031</b>	<b>2041</b>	<b>2051</b>	<b>2061</b>
55	2.14%	3.08%	3.25%	3.25%	3.25%	3.25%
65	2.52%	2.94%	2.90%	2.98%	2.98%	2.98%
75	2.84%	2.75%	2.50%	2.43%	2.44%	2.44%
85	2.10%	2.11%	2.04%	1.90%	1.90%	1.90%
95	1.41%	1.34%	1.39%	1.37%	1.35%	1.35%

The expectation of life at age 65 for current ages 45 and 55 under the current (and previous year) valuation assumptions are:

<b>Age</b>	<b>Current Year</b>		<b>Previous Year</b>	
	<b>Males</b>	<b>Females</b>	<b>Males</b>	<b>Females</b>
45	28.47	30.01	28.32	29.87
55	26.81	28.40	26.65	28.25

**(5) Morbidity Basis**

Not applicable



**(6) Expense Basis**

The following table shows the gross attributable expenses per policy.

Product Group	Per Policy Expense	
	Current Valuation	Previous Valuation
	£	£
Annuity (400)	23.85	17.73
All other policies	50.58	37.59

The expenses on life business are netted down for tax at 20%.

There are no zillmer adjustments for the policies to which the above expenses apply.

The life company entered into a new MSA with Pearl Group Management Services (PGMS) with effect from 1 September 2010. Compared to the MSA at the previous valuation the new service fees are higher but will increase at a lower rate in the future.

For the current valuation the investment expense assumptions have been updated to allow for the impact of a new investment fee scale agreed with the asset manager. The base fees are as follows:

Investment expenses (Gross)	Current valuation	Previous valuation
UWP Bond 4 & Lifestyle Bond	0.159%	0.125%
Other Conventional With-Profits and UWP Business	0.146%	0.125%
Non Profit business	0.08%	0.125%

The investment expenses for life fund business should be netted down for policyholder tax at 20%.

In addition to the base fees, there is an explicit additional services fee which is allowed for as a new provision of £10.6m. At the previous valuation these additional services had been allowed for implicitly within the investment expense assumption. There is also a performance fee payable to the asset manager. This is not allowed for in the valuation basis because no over or under investment performance is assumed in the valuation interest basis.

**(7) Unit Growth Rates And Expense Inflation**

There are no unit growth rate assumptions as there is no linked business.

Future expenses are assumed to increase at 4.50% p.a.

**(8) Future Bonus Rates**

For conventional with-profits business there is no allowance for future bonuses.

For accumulating with-profits business the assumed reversionary bonus rates are:

Product	Current year	Current year +1	Current year +2
UWP Bond (pre August 2000)	0.50%	0.08%	0.00%
UWP Bond (post August 2000)	1.00%	0.17%	0.00%
Lifestyle Bond	1.00%	0.17%	0.00%
Profit Plus Fund	0.10%	0.00%	0.00%
UWP Pensions	1.00%	0.17%	0.00%

and for the UK With Profits Bonds (pre 1997) the rates are:

Tranche	Current year	Current year +1	Current year +2	Current year +3
1	3.75%	1.75%	0.00%	0.00%
2a	2.00%	0.00%	0.00%	0.00%
2b	2.00%	0.00%	0.00%	0.00%
3a	2.00%	0.00%	0.00%	0.00%
3b	2.50%	0.50%	0.00%	0.00%
4	2.50%	0.50%	0.00%	0.00%
5	1.50%	0.00%	0.00%	0.00%
6	0.50%	0.00%	0.00%	0.00%
6a	2.00%	0.00%	0.00%	0.00%
7	2.00%	0.00%	0.00%	0.00%
8	2.50%	0.50%	0.00%	0.00%
8a	3.00%	1.00%	0.00%	0.00%
8b	2.00%	0.00%	0.00%	0.00%
9	2.50%	0.50%	0.00%	0.00%
10	1.50%	0.00%	0.00%	0.00%

**(9) Persistency Assumptions**

It is assumed that there are no lapses or surrenders and no policies are made paid-up after the valuation date.

**(10) Other Material Assumptions**

Not applicable

**(11) Allowance for Derivatives**

The fund holds a number of swaps in connection with its fixed interest assets. The effect of the swaps has been taken into account by adding the value of the fixed interest assets to the value of the swaps and adjusting the yield on the fixed interest assets to take account of the effect of the swaps. The effect of the swaps has been determined by assuming that the future yields are in accordance with the yields implied by the forward swap curve.

A provision has been established equal to the time value of the swaptions, which are held in connection with guaranteed annuity options.

**(12) Effect on Reserves of Changes in INSPRU Valuation Rules**

There have been no changes in valuation methodology arising from changes in INSPRU valuation rules effective from 31 December 2006.

**5. OPTIONS AND GUARANTEES**

**(1) Guaranteed Annuity Rate Options**

(a) An additional reserve is calculated, where the value of the annuity is greater than the cash sum, using the assumptions set out in section 4 and, additionally, assuming:

- All policyholders will exercise the option.
- The percentage of the cash which will be used to purchase the annuity on guaranteed terms will be:

30% for Convent Scheme contracts

95% for Retirement Plans and Personal Retirement Policies (post 1978)

- The expenses of payment are 2.45% of the value of the annuity.

For Personal Retirement Policies issued between 1971 and 1978, where the policy only provides for a proportion of the benefit to be taken on guaranteed terms, the assumed proportion is in accordance with the policy conditions.

The liability is then increased, if necessary, so that it is not less than the economic value of the options determined from swaption prices assuming the same demographic assumptions. At the valuation date no increase was required.

Phoenix With-Profits Fund

Product Name	Basic Reserve £m	Spread of outstanding durations Years	Guarantee Reserve £m	Guaranteed Annuity Rate (Male at 65)	Increments	Form of annuity	Retirement Ages
Personal Retirement Plan (Pre 1978)	16.2	0 to 16	8.0	10.74%	No	Level – Single Life Twice annually in arrears No guarantee period	60 to 75
Personal Retirement Plan (Post 1978)	147.2	0 to 37	79.4	9.00%	No	Level – Single Life Annually in arrears No guarantee period	60 to 75
Personal Retirement Plan (Post 1988)	67.8	0 to 43	33.0	9.00%	No	Level – Single Life Annually in arrears No guarantee period	50 (*) to 75
Personal Retirement Plan (Eire)	23.5	0 to 30	13.5	9.25%	No	Level – Single Life Monthly in advance Five year guarantee period	50 to 75
Retirement Plan	111.6	0 to 31	72.0	11.11%	No	Level – Single Life Monthly in advance Five year guarantee period	50 (*) to 75
Convent Schemes	8.7	0 to 21	1.5	10.04%	Yes (**)	Level – Single Life Monthly in advance No guarantee period	60 to 70
Phillips Scheme	7.0	0 to 30	4.1	10.00%	Yes (**)	Level – Single Life Monthly in advance Five year guarantee period	60 to 65

(b)

(\*)From age 55 for retirements from 2010.

(\*\*)There is no guaranteed annuity rate for increments.

**(2) Guaranteed Surrender and Unit-linked Maturity Values****Uniflex**

- (a) For Uniflex policies (endowment-type policies maturing at age 65, included in endowment assurance in Form 51) the basis for calculating surrender values on the 10th or any subsequent anniversary of the commencement of the policy is guaranteed.

The guaranteed surrender value available at the 10th or any subsequent policy anniversary is

$$[ \text{Basic Sum Assured} + \text{Reversionary Bonus} ] \times t / n$$

where t = duration at the policy anniversary (in years)

n = original policy term (in years)

- (b)

<b>(i) Product Name</b>	<b>Uniflex Endowment</b>
(ii) Basic Reserve	£21.9m
(iii) Spread of Outstanding Durations	0 to 29
(iv) Guarantee Reserve	£2.0m
(v) Guaranteed Amount	£23.9m
(vi) MVR Free Conditions	MVRs do not apply
(vii) In Force Premiums	£0.5m
(viii) Increments	No

**UWP Bond**

- (a) There is a “money back” guarantee on full surrender on the 10<sup>th</sup> policy anniversary for bonds commencing from August 2000 onwards.

The policy reserve is not less than the value of the benefits at the 10th policy anniversary calculated on the assumptions in Paragraph 4.

(b)

(i) Product Name	UWP Bond Version 4	Lifestyle Bond
(ii) Basic Reserve	£68.9m	£63.5m
(iii) Spread of Outstanding Durations	0 to 4 years for guarantee	0 to 2 years for guarantee
(iv) Guarantee Reserve	£0.0m	£0.0m
(v) Guaranteed Amount	£69.5m	£63.5m
(vi) MVR Free Conditions	On full surrender on the 10th policy anniversary the surrender value will be at least the original amount invested less any partial or regular withdrawals. There is no MVR on death or on regular withdrawals within certain limits	On full surrender on the 10th policy anniversary the surrender value will be at least the original amount invested less any partial or regular withdrawals. There is no MVR on death or on regular withdrawals within certain limits
(vii) In Force Premiums	N/A	N/A
(viii) Increments	Yes	Yes

#### Personal Retirement Policy / Personal Retirement Plan

(a) Policyholders may elect to retire at ages other than the retirement age selected at outset, on a guaranteed cash option basis, which varies with the actual retirement age. The ages that can be selected depends on the product.

(b)

(i) Product Name	Personal Retirement Policy (Pre 1978)	Personal Retirement Policy (Post 1978)	Personal Retirement Plan (Post 1988)
(ii) Basic Reserve (*)	£24.1m	£226.6m	£100.9m
(iii) Spread of Outstanding Durations	0 to 16 years	0 to 37 years	0 to 43 years
(iv) Guarantee Reserve (**)	£0.0m	£0.0m	£0.0m
(v) Guaranteed Amount	N/A	N/A	N/A
(vi) MVR Free Conditions	N/A	N/A	N/A
(vii) In Force Premiums	£0.1m	£1.2m	£0.9m
(viii) Increments	No	No	No

(\*) The basic reserve above includes the guaranteed annuity reserve.

(\*\*) The reserves established exceed the value of the liabilities if an alternative retirement date is selected.

#### Unitised With-Profits Pensions

The following products within the unitised with-profits pensions range have a unitised with-profits option:

- Executive Pension Plan
- Company Pension Scheme
- Company Additional Pension Scheme
- Individual Personal Pension Plan
- Group Personal Pension Plan
- Personal Additional Pension Plan

- (a) Provided certain conditions apply, the policyholder can elect to take early retirement before the selected retirement age without penalty.
- (b)

(i) Product Name	UWP Pensions
(ii) Basic Reserve	£77.8m
(iii) Spread of Outstanding Durations	0 to 39 years
(iv) Guarantee Reserve	£0.8m
(v) Guaranteed Amount	£76.6m
(vi) MVR Free Conditions	MVRs do not apply on retirement within 3 years of the selected retirement date, provided there has been a regular investment in the UWP Fund for at least 5 years, on death and ill health early
(vii) In Force Premiums	£1.4m
(viii) Increments	Yes – existing policies and new members to existing plans in the case of group schemes

### (3) Guaranteed Insurability Options

Various endowments purchased in connection with a mortgage include options to effect additional cover in certain circumstances without requiring additional evidence of health. Take-up of this option has been extremely low and no additional reserve is held.

Some of the term assurance policies include options to convert to other policies without requiring further evidence of health. Take-up of this option has been extremely low and no additional reserve is held. The sum assured under the policies is less than £1bn.

### 4) Other Guarantees and Options

None.

## 6. EXPENSE RESERVES

### (1) Aggregate Expense Loadings

The aggregate amount of expense loadings, grossed up for taxation where appropriate, expected to arise during the 12 months following the valuation date from explicit and implicit reserves made in the valuation to meet expenses in fulfilling contracts in force at the valuation date is £24.3m. This is composed of the following elements:

	£m
Explicit allowances for investment expenses	1.3
Explicit allowances for other maintenance expenses	15.5
Implicit allowances	5.1
Non-attributable expenses	2.3

**(2) Implicit Allowances**

The implicit allowance has been calculated by applying the rate of the investment manager's fees to the reserves. This is funded by the margin between the risk-adjusted yield on the assets and the valuation rate of interest.

**(3) Form 43 Comparison**

The table below shows the difference between the amount in paragraph 6 (1) and that reported on line 14 of Form 43.

	<b>F43.14</b>	<b>table 6(1)</b>	<b>Difference</b>
<b>Homogeneous risk group</b>	<b>(a)</b>	<b>(b)</b>	<b>(a)-(b)</b>
	<b>£m</b>	<b>£m</b>	
All products	28.3	24.3	4.0
Total	28.3	24.3	4.0

The amount reported on line 14 of Form 43 is £28.3m. Form 43 includes £3.6m of performance related investment fees which is not included in table 6(1). Allowing for this difference, the actual and expected is not significantly different.

**(4) New Business Expense Overrun**

Since the company is closed to new business, except for contractual increments, it does not expect to incur any material strain in writing new business so no additional reserve is required.

**(5) Maintenance Expense Overrun**

Expense reserves in accordance with paragraph 6 (1) are considered to be sufficient to meet the expenses likely to be incurred in the future in fulfilling the existing contracts.

The expense assumptions allow for the standard fees payable under a management services agreement plus a prudent allowance for costs that are not covered by these fees.

An allowance has been made for redundancy costs in respect of redundancies following compensation review exercises. The company is not liable for redundancy costs in general due to its outsourcing arrangement with Pearl Group Management Services.

**(6) Non-attributable Expense Reserves**

The non-attributable expense reserve is the cost of certain planned projects of a non-recurring nature that are not covered by the standard fee under the management services agreement.

**7. MISMATCHING RESERVES****(1) Analysis of Reserves by Currency**

The mathematical reserves (other than liabilities for property linked benefits) after distribution of surplus comprise:



Currency	Mathematical Reserves	Backed by assets
	£m	£m
Sterling (£)	4,081.9	4,081.9
Other currencies	104.3	104.3
Total	4,186.2	4,186.2

**(2) Other Currency Exposures**

See table in paragraph 7 (1).

**(3) Currency Mismatching Reserve**

The liabilities in currencies other than sterling are matched by assets in the same currency. The currency mismatching reserve is therefore nil.

**(4) Most Onerous Scenario Under INSPRU 3.1.16(R)**

Not applicable

**(5) Most Onerous Scenario Under INSPRU 3.1.23(R)**

Not applicable

**(6) Resilience Capital Requirement**

Not applicable

**(7) Additional Reserves Arising From INSPRU 1.1.34(2)(R)**

No further reserve is required for mismatching as investments are closely matched to the liabilities.

**8. OTHER SPECIAL RESERVES**

The special reserves exceeding the lesser of £10m and 0.1% of total mathematical reserves are:

Description	Reserve
	£m
Data contingency reserve	13.0
Litigation reserve	7.8
Future projects reserve	7.3
Claims Reserves for certain pensions policies	4.2
Solvency II	8.3
Actuarial Systems Transformation	8.5
Reassurance Default	6.0
UISL	8.5
Investment Services Fees	10.6
Credit default margin	6.6
Mortgage Endowment Review reserve	5.1

Details of the other special reserves are set out below.

**Data contingency reserve**

Data contingency reserves for additional liabilities which may arise in connection with data errors affecting the long-term business and is calculated having regard to past experience.

Litigation reserve

Reserves for future litigation settlements and other similar costs, which is calculated with regard to past experience.

Future projects reserve

Reserve for future projects, which is calculated with regard to past experience.

Claims Reserves for certain pension policies

Reserves for the cost of making additional payments on certain pension policies where the claim amounts previously paid were incorrect.

Solvency II

Reserve to cover the expected costs of the Solvency II project apportioned to this fund.

Actuarial Systems Transformation

Reserve to cover the cost in relation to this project apportioned to this fund

Reassurance Default

Provision to cover the risk that a reinsurer will default on its obligations.

UISL

A combined reserve to capture the following:

- (a) Potential increase in expenses should VAT become payable on the administrator's service fees
- (b) Provision held to offset an accounting prepayment asset held to cover a transfer of risk payment made to Diligenta and
- (c) A negative provision to allow for existing (lower) MSA fees that apply up to August 2012 which have not been allowed for in the expense assumptions used in the long-term projections.

Investment Services Fees

Reserve to capture the capitalised value of the additional investment services fees payable to Ignis under the re-negotiated investment services contract.

Credit Default margin

A new provision to allow for the impact of a 10% margin in the Peak 1 default assumption as opposed to 25% at December 2009.

Mortgage Endowment Review reserve

Reserve that covers redress and project costs for the Mortgage Endowment Review.

## 9. REINSURANCE

### (1) Facultative Reinsurance

- (a) No premiums were payable on a facultative basis to a reinsurer that was unauthorised to carry on insurance business in the UK.
- (b) No such premiums were payable to a connected company reinsurer that was unauthorised to carry on insurance business in the UK.

### (2) Reinsurance Treaties

The required details of reinsurance treaties in force at the valuation date are set out below.

#### (d) Munich Re

- (e) Certain term assurances are 100% reinsured on original terms.
- (f) The premiums payable by the insurer during the year are £17.3m.
- (g) There are no deposit back arrangements.
- (h) The treaty is closed to new business.
- (i) There are no undischarged obligations.
- (j) The amount of mathematical reserves ceded under the treaty at the valuation date was £120.7m.
- (k) New business only arises from incremental policies or the exercising of options under existing contracts. Where such business is unit-linked then all of the business is reinsured and the Company's retention is nil.
- (l) The reinsurer is authorised to carry on insurance business in the UK.
- (m) The reinsurer is not a connected company of the insurer.
- (n) No provision has been established for credit risk for any reassurances with other companies in The Phoenix group.
- (o) No provision has been made under any of the treaties for any liability of the company to refund any amount of reinsurance commission in the event of the lapse or surrender of the contracts. Where such a liability exists, then the refund of commission will be more than offset by the return of the premium from the reinsurer.
- (p) The treaty is not a financing arrangement.

## 10. REVERSIONARY (OR ANNUAL) BONUS

For policies entitled to participate, reversionary bonuses (except when otherwise specified) were allotted at the following rates.

(i) Conventional With-Profits Policies

The mathematical reserves and reversionary bonus rates are as follows:

Bonus Series	Math reserves	Reversionary Bonus Rate for Current Year	Reversionary Bonus Rate for Previous Year	Total g'tee bonus for current year
	£m	%	%	%
UK Life (excluding Uniflex)	1,115.7	0.25 / 0.25	0.25 / 0.25	0.00
Uniflex Endowment Assurances	24.0	0.20 / 0.20	0.20 / 0.20	0.00
Convent Schemes	10.2	0.20 / 0.20	0.20 / 0.20	0.00
Eire Life	6.6	0.25 / 0.25	0.25 / 0.25	0.00
UK Pensions	520.9	0.20 / 0.20	0.20 / 0.20	0.00
Eire Pensions	37.0	0.20 / 0.20	0.20 / 0.20	0.00

(\*) The first rate applies to the sum assured and the second rate to the attaching bonus.

(ii) Accumulating With-Profits Policies (except With Profit Bonds)

The mathematical reserves and reversionary bonus rates are as follows:

Bonus Series	Math reserves	Reversionary Bonus Rate for Current Year	Reversionary Bonus Rate for Previous Year	Total g'tee bonus for current year
	£m	%	%	%
UWP Pensions	77.2	1.00	1.00	0.00
Profit Plus Fund	426.7	0.10	0.10	0.00
PlusPlan	157.9	0.10	0.10	0.00

(iii) UK With-Profits Bond (pre 1997)

The mathematical reserves and reversionary bonus rates are as follows:

Bonus Series	Math reserves	Reversionary Bonus Rate for Current Year	Reversionary Bonus Rate for Previous Year	Total g'tee bonus for current year
	£m	%	%	%
1	4.5	3.75	1.75	3.75
2a	3.5	4.00	2.00	4.00
2b	0.6	3.75	1.75	3.75
3a	12.9	3.00	1.50	3.00
3b	1.0	3.50	1.50	3.50
4	9.1	2.50	0.50	2.50
5	3.9	3.00	1.00	3.00
6	1.4	0.50	1.00	0.50
6a	3.1	2.50	0.50	2.50
7	1.3	3.50	1.50	3.50
8	4.6	3.50	1.50	3.50
8a	4.5	3.00	1.00	3.00
8b	1.7	3.00	1.00	3.00
9	10.1	2.50	0.50	2.50
10	18.9	2.25	1.00	2.25
TOTAL	81.0			

**(iv) Unitised With-Profits Bonds**

The mathematical reserves and reversionary bonus rates are as follows:

Bonus Series	Math reserves	Reversionary Bonus Rate for Current Year	Reversionary Bonus Rate for Previous Year	Total g'tee bonus for current year
	£m			
2	28.7	0.50	0.50	0.50
3	84.6	0.50	0.50	0.50
4	68.4	1.00	1.00	1.00
Lifestyle	63.0	1.00	1.00	1.00
TOTAL	244.8			

For unitised with-profits life policies, the reversionary bonus is added daily in the form of growth of the unit price. Within a bonus series, bonus rates do not vary.

## 90% With-Profits Fund

### 3. DISCRETIONARY CHARGES AND BENEFITS

#### (1) Application of Market Value Reduction

During the year, market value reductions were applied to the ex-SLUK unitised with-profits pension policies as described below:

Applies from	Market Value Reduction
01-Jan	0.0%
01-Feb	0.0%
01-Mar	0.0%
01-Apr	0.0%
01-May	0.0%
01-Jun	0.0%
01-July	0.0%
01-Aug	2.0%
01-Sept	0.0%
01-Oct	0.0%
01-Nov	0.0%
01-Dec	0.0%

The market value reduction is a percentage of units applied in addition to any final bonus.

#### (2) Premiums on Reviewable Protection Policies

Not applicable

#### (3) Non-profit Deposit Administration

Not applicable

#### (4) Service Charges on Linked Policies

Not applicable

#### (5) Benefit Charges on Linked Policies

Not applicable

#### (6) Accumulating With-Profits Charges

Not applicable

#### (7) Unit Pricing of Internal Linked Funds

Not applicable

#### (8) Tax Deductions From Internal Linked Funds

Not applicable

#### (9) Tax Provisions for Internal Linked Funds

Not applicable

**(10) Discounts on Unit Purchases**

Not applicable

**4. VALUATION BASIS**

**(1) Valuation Methods**

Conventional with-profits

A net premium valuation has been used to value the business in the fund.

**2) Valuation Interest rates**

The interest rates used for life business in the fund were as follows:

Product Group	Current Valuation	Previous Valuation
Life	3.00%	3.00%
Pension	3.75%	3.75%

The Life rates are netted down by 20% for tax.

**(3) Risk Adjustments**

The yields on assets were reduced for risk as follows:

Fixed Interest

(g) Approved Securities:

No reduction

(h) Other Securities

A deduction was applied to the yield on an individual stock by stock basis to allow for the risk of default. The individual stock risk margins were calculated as a long term average default rate plus an additional allowance for short-term factors and expected deviations from the historic average.

The long term average default rates (in basis points) were:

Credit Rating	5yr	10yr	20yr
AAA	4.3	12.3	15.2
AA	19.0	32.1	48.2
A	33.2	47.7	65.3
BBB	82.8	104.1	122.4
BB	261.3	277.3	287.2
B	591.7	524.7	442.5

A number of different techniques were then employed to arrive at an additional haircut, namely:

- A higher risk was recognised for bank subordinated debt by removing the credit for recoveries included within the above default rates. For banks that were in receipt of state aid, there was an additional deduction depending on whether the coupons could be missed or deferred without interest.
- Subordinated debt attracted hair cuts based on the senior rating of the issuer rather than the rating of the bond itself.
- Stocks were 'notched' downwards where the credit rating was considered to be inappropriate (after analysis of the current market spread and other factors).

Variable Interest

The yield on variables interest rate stocks was capped at the real yield on the over 5 years, 5% inflation FTSE Index linked gilt index. This cap applied to both approved and non-approved variable interest stocks.

Equities

The yield on equity shares was capped at the lower of 25% p.a. or twice the annualised 15 year gilt yield.

Additional adjustments were also made to the dividend yield of Lloyds TSB and Royal Bank of Scotland shares where the dividend yield was set to zero to reflect the current expectations of those shares.

Property

The yield on property was capped at the greater of 10% p.a. or twice the annualised 15 year gilt yield.

**(4) Mortality Basis**

The mortality tables used for each product group are shown in the following table:

<b>Product Group</b>	<b>Current Valuation</b>	<b>Previous Valuation</b>
Ex-SLUK OB	71.5% AM92 ult Females as above -3yrs	71.5% AM92 ult Females as above -3yrs
Ex-SLUK UWP	82.5% AM92 ult Females as above -3yrs	82.5% AM92 ult Females as above -3yrs
Ex-SLUK IB	28% ELT15(M) Females as above	28% ELT15(M) Females as above
Ex-BULA	99% AM92 ult 121% AF92 ult	99% AM92 ult 121% AF92 ult

Note that for all the above business, no additional mortality has been incorporated within the valuation and no separate reserve has been determined in respect of AIDS.

No other reserves for possible detrimental changes in mortality or morbidity rates have been made.



**(5) Morbidity Basis**

There are no significant groups of products where morbidity assumptions are used.

**(6) Expense Basis**

**Policies previously written in SLUK**

For premium-paying policies, where a net premium valuation is performed, the net premium is restricted to 90% of the office premium.

For unitised with-profits business, policies are written in the Non Profit Fund with the liability for the unitised with-profits investment element transferred to the 90% With-Profits Fund. All expenses are met by the Non Profit Fund.

**Policies previously written in BULA (now ACI)**

The following table shows the zillmer adjustments for premium paying policies where the reserve was calculated using the net premium method of valuation:

Product Group	Current Valuation	Previous Valuation
	%	%
CWP savings endowment (120)	1.65%	1.65%

The zillmer adjustments on life business are netted down for tax at 20%.

For the current valuation the investment expense assumptions have been updated to allow for the impact of a new investment fee scale agreed with the asset manager. The base fees are as follows:

Investment expense (gross of tax)	Current valuation	Previous valuation
Life	0.08%	0.08%
Pensions	0.10%	0.10%

The investment expenses for life fund business should be netted down for policyholder tax at 20%.

The life company entered into a new MSA with Pearl Group Management Services (PGMS) with effect from 1 September 2010. Compared to the MSA at the previous valuation the new service fees are higher but will increase at a lower rate in the future.

**(7) Unit Growth Rates and Expense Inflation**

There are no unit growth rate assumptions as there is no linked business.

All conventional business is valued on a net premium basis and expenses on unitised business are met by the Non Profit Fund so there are no expense inflation assumptions.

**(8) Future Bonus Rates**

No future bonuses are assumed in the mathematical reserves for conventional life business.

**(9) Persistency Assumptions**

It is assumed that there are no lapses or surrenders and no policies are made paid-up after the valuation date.

**(10) Other Material Assumptions**

There are no other material basis assumptions.

**(11) Allowance for Derivatives**

Not applicable

**(12) Effects of Basis Changes**

There have been no changes in valuation methodology arising from changes in INSPRU valuation rules effective from 31 December 2006.

**5. OPTIONS AND GUARANTEES**

**(1) Guaranteed Annuity Rate Options**

There are no significant groups of business with guaranteed annuity rate options.

**(2) Guaranteed Surrender and Unit-linked Maturity Values**

Not applicable

**(3) Guaranteed Insurability Options**

Not applicable

**(4) Other Guarantees and Options**

For ex-SLUK unitised with-profits pension policies, there is a guarantee that the unit price will increase at not less than 4%p.a. An additional reserve of £2.981m has been established to meet the expected future cost of this guarantee. This has been calculated as the additional reserve required to fund the amount by which the guaranteed unit growth rate, together with the management charge, exceeds the valuation interest rate.

**6. EXPENSE RESERVES**

**(1) Aggregate Expense Loadings**

The aggregate amount of expense loadings, grossed up for taxation where appropriate, expected to arise during the 12 months after the valuation date from implicit and explicit reserves made in the valuation to meet expenses in fulfilling contracts in force at the valuation date is £0.8m. This is composed of the following elements.

	£m
Explicit allowances for investment expenses	0.0
Explicit allowances for other maintenance expenses	0.0
Implicit allowances	0.8

**(2) Implicit Allowances**

Implicit allowances for expenses include the difference between office and net premiums for regular premium policies which are valued on a net premium basis.

The implicit allowance for investment expenses has been calculated by applying the rate of the investment manager’s fees to the reserves. This is funded by the margin between the risk-adjusted yield on the assets and the valuation rate of interest.

**(3) Form 43 Comparison**

Form 43 includes £1.1m of performance related investment fees which are not included in table 6(1)

**(4) New Business Expense Overrun**

Since the company is closed to new business, except for contractual increments, it does not expect to incur any material strain in writing new business so no additional reserve is required.

**(5) Maintenance Expense Overrun**

Expense reserves in accordance with paragraph 6 (1) are considered to be sufficient to meet the expenses likely to be incurred in the future in fulfilling the existing contracts.

The expense assumptions allow for the fees payable under a management services agreement plus a prudent allowance for costs that are not covered by standard fees payable under the agreement.

No allowance has been made for redundancy costs (as these will be met by the service provider), or for any costs of terminating the management services agreement (as the service provider does not have the option to terminate the contract).

**(6) Non-attributable expenses**

Not applicable – all expenses are treated as attributable.

**7. MISMATCHING RESERVES**

**(1) Analysis of Reserves by Currency**

Currency	Mathematical Reserves	Backed by assets
	£m	£m
Sterling (£)	119.1	119.1
Other currencies	0.6	0.6
Total	119.6	119.6

**(2) Other Currency Exposures**

Liabilities totalling £0.583m have not been analysed. The proportion of these liabilities which are matched by assets in the same currency is 0%.

**(3) Currency Mismatching Reserve**

No currency mismatching reserve is necessary.

**(4) Most Onerous Scenario Under INSPRU 3.1.16(R)**

Not applicable

**(5) Most Onerous Scenario Under INSPRU 3.1.23(R)**

There are no significant territories outside the United Kingdom.

**(6) Resilience Capital Requirement**

Not applicable

**(7) Additional Reserves Arising From INSPRU 1.1.34(2)(R)**

No reserve is required for mismatching as investments are closely matched to the liabilities.

**8. OTHER SPECIAL RESERVES**

No further additional reserves exceed the lesser of £10m and 0.1% of total mathematical reserves.

**9. REINSURANCE****(1) Facultative Reinsurance**

(a) No premiums were payable on a facultative basis to a reinsurer that was unauthorised to carry on insurance business in the UK.

(b) No premiums were payable to a connected company reinsurer that was unauthorised to carry on insurance business in the UK.

**(2) Reinsurance Treaties**

Not applicable

**10. REVERSIONARY (OR ANNUAL) BONUS**

The reversionary bonus rates have been as follows:

Bonus Series	Math reserves  £m	Reversionary Bonus Rate for Current Year %	Reversionary Bonus Rate for Previous year %	Total g'tee bonus for current year %
<b>Ex-SLUK OB (conventional)</b>				
Series A	1.0	1.70%/0%	1.70%/0%	0.00%
Series B	81.5	1.30%/1.30%	1.30%/1.30%	0.00%
Series C	2.7	1.30%/1.30%	1.30%/1.30%	0.00%
<b>Ex-SLUK IB</b>				
Pioneer Mutual	0.4	9.00%/0%	9.00%/0%	0.00%
Stamford cash bonus	0.6	2.25%/0%	2.25%/0%	0.00%
Other	4.7	4.50%/0%	4.50%/0%	0.00%
<b>Ex-BULA</b>				
Life	25.8	2.50/3.50%	2.50/3.50%	0.00%
Pensions	1.6	3.25%/3.25%	3.25%/3.25%	0.00%

## **90% With-Profits Fund**

For all bonus series, the first rate applies to the basic sum assured or annuity and the second rate to the attaching bonus.

For unitised with-profits policies, the reversionary bonus is added daily in the form of growth of the unit price.

**100% With-Profits Fund**

**3. DISCRETIONARY CHARGES AND BENEFITS**

- (1) Application of Market Value Reduction**  
Not applicable as there is no unitised with-profits business in the With-Profits Fund.
- (2) Premiums on Reviewable Protection Policies**  
Not applicable
- (3) Non-profit Deposit Administration**  
Not applicable
- (4) Service Charges on Linked Policies**  
Not applicable
- (5) Benefit Charges on Linked Policies**  
Not applicable
- (6) Accumulating With-Profits Charges**  
Not applicable
- (7) Unit Pricing of Internal Linked Funds**  
Not applicable
- (8) Tax Deductions From Internal Linked Funds**  
Not applicable
- (9) Tax Provisions for Internal Linked Funds**  
Not applicable
- (10) Discounts on Unit Purchases**  
Not applicable

**4. VALUATION BASIS**

**(1) Valuation Methods**  
Conventional with-profits  
A net premium valuation has been used to value the business in the Fund.

**(2) Valuation Interest rates**  
The interest rates used for life business in the fund were as follows:

Product Group	Current Valuation	Previous Valuation
Life	3.00%	3.00%

There is no pensions business in the fund.

**(3) Risk Adjustments**

The yields on assets were reduced for risk as follows:

Fixed Interest

## (a) Approved Securities:

No reduction

## (b) Other Securities

AA deduction was applied to the yield on an individual stock by stock basis to allow for the risk of default. The individual stock risk margins were calculated as a long term average default rate plus an additional allowance for short-term factors and expected deviations from the historic average.

The long term average default rates (in basis points) were:

Rating	5 Yr	10 Yr	20 Yr
AAA	4.3	12.3	15.2
AA	19	32.1	50.6
A	33.2	47.7	65.3
BBB	82.8	104.1	122.4
BB	261.3	277.3	287.2
B	591.7	524.7	442.5

A number of different techniques were then employed to arrive at an additional haircut, namely:

- A higher risk was recognised for bank subordinated debt by removing the credit for recoveries included within the above default rates. For banks that were in receipt of state aid, there was an additional deduction depending on whether the coupons could be missed or deferred without interest.
- Subordinated debt attracted hair cuts based on the senior rating of the issuer rather than the rating of the bond itself.
- Stocks were 'notched' downwards where the credit rating was considered to be inappropriate (after analysis of the current market spread and other factors).

Variable Interest

The yield on variables interest rate stocks was capped at the real yield on the over 5 years, 5% inflation FTSE Index linked gilt index. This cap applied to both approved and non-approved variable interest stocks.

Equities

The yield on equity shares was capped at the lower of 25% p.a. or twice the annualised 15 year gilt yield.

Additional adjustments were also made to the dividend yield of Lloyds TSB and Royal Bank of Scotland shares where the dividend yield was set to zero to reflect the current expectations of those shares.

Property

The yield on property was capped at the greater of 10% p.a. or twice the annualised 15 year gilt yield.

**(4) Mortality Basis**  
Policies originally written in PAL

The mortality tables used for each product group are shown in the following table:

Product Group	Current Valuation	Previous Valuation
Whole Life and Endowment	85% AM92	85% AM92
	116% AF92	116% AF92

**Policies originally written in SLUK**

Product Group	Current Valuation	Previous Valuation
Whole Life and Endowment	77% AM92 ult	77% AM92 ult
	Females as above -3yrs	Females as above -3yrs
Deferred Annuities	82.5% IMA92	82.5% IMA92
	Females as above -3yrs	Females as above -3yrs

Allowance for Disease

No allowance has been made for any possible detrimental impact of significant changes in the incidence of disease or developments in medical science on the mortality or morbidity experience of the SLUK business in the Fund.

No explicit allowance is made for AIDS.

**(5) Morbidity Basis**  
Not applicable

**(6) Expense Basis**  
The following table shows the gross attributable expenses per policy.

Product Group	Per Policy Expense	
	Current Valuation	Previous Valuation
	£	£
Ex-PAL	67.26	56.01
Ex-Swiss Life UK	50.68	44.22

The expenses on life business are netted down for tax at 20%.

There are no zillmer adjustments for the policies to which the above expenses apply.

For the current valuation the investment expense assumptions have been updated to allow for the impact of a new investment fee scale agreed with the asset manager. The base fees are as follows:



Investment expense (gross of tax)	Current Valuation	Previous valuation
Life	0.10%	0.10%
Pensions	0.12%	0.13%

The investment expenses for life fund business should be netted down for policyholder tax at 20%.

In addition to the base fees, there is an explicit additional services fee which is allowed for as a new provision. At the previous valuation these additional services had been allowed for implicitly within the investment expense assumption. There is also a performance fee payable to the asset manager. This is not allowed for in the valuation basis because no over or under investment performance is assumed in the valuation interest basis.

The life company entered into a new MSA with Pearl Group Management Services (PGMS) with effect from 1 September 2010. Compared to the MSA at the previous valuation the new service fees are higher but will increase at a lower rate in the future.

**(7) Unit Growth Rates And Expense Inflation**

There are no unit growth rate assumptions as there is no linked business.

The expense inflation assumptions are as follows:

Product Group	Expense Inflation per annum	
	Current Valuation	Previous Valuation
	%	%
Ex-PAL	5.50	8.38
Ex-Swiss Life UK	5.50	7.08

**(8) Future Bonus Rates**

No future bonuses are assumed in the mathematical reserves for conventional life business.

**(9) Persistency Assumptions**

It is assumed that there are no lapses or surrenders and no policies are made paid-up after the valuation date.

**(10) Other Material Assumptions**

There are no other material basis assumptions.

**(11) Allowance for Derivatives**

Not applicable

**(12) Effects of Basis Changes**

There have been no changes in valuation methodology arising from changes in INSPRU valuation rules effective from 31 December 2006.

## 5. OPTIONS AND GUARANTEES

### (1) Guaranteed Annuity Rate Options

Not applicable

### (2) Guaranteed Surrender and Unit-linked Maturity Values

Not applicable

### (3) Guaranteed Insurability Options

Not applicable

### (4) Other Guarantees and Options

Not applicable

## 6. EXPENSE RESERVES

### (1) Aggregate Expense Loadings

The aggregate amount of expense loadings, grossed up for taxation where appropriate, expected to arise during the 12 months after the valuation date from implicit and explicit reserves made in the valuation to meet expenses in fulfilling contracts in force at the valuation date is £0.3m. This is composed of the following elements.

	£m
Explicit allowances for investment expenses	0.0
Explicit allowances for other maintenance expenses	0.1
Implicit allowances	0.2

### (2) Implicit Allowances

Implicit allowances for expenses include the difference between office and net premiums for regular premium policies which are valued on a net premium basis.

The implicit allowance for investment expenses has been calculated by applying the rate of the investment manager's fees to the reserves. This is funded by the margin between the risk-adjusted yield on the assets and the valuation rate of interest.

### (3) Form 43 Comparison

The total amount of maintenance expenses shown in paragraph 6 (1) is not significantly different from the total shown in line 14 of Form 43.

### (4) New Business Expense Overrun

Since the company is closed to new business, except for contractual increments, it does not expect to incur any material strain in writing new business so no additional reserve is required.

**(5) Maintenance Expense Overrun**

Expense reserves in accordance with paragraph 6 (1) are considered to be sufficient to meet the expenses likely to be incurred in the future in fulfilling the existing contracts.

The expense assumptions allow for the fees payable under a management services agreement plus a prudent allowance for costs that are not covered by standard fees payable under the agreement.

No allowance has been made for redundancy costs (as these will be met by the service provider), or for any costs of terminating the management services agreement (as the service provider does not have the option to terminate the contract).

**6) Non-attributable expenses**

Not applicable – all expenses are treated as attributable.

**7. MISMATCHING RESERVES****(1) Analysis of Reserves by Currency**

Currency	Mathematical Reserves	Backed by assets
	£m	£m
Sterling (£)	31.0	31.0
Other currencies	0.0	0.0
Total	31.0	31.0

**(2) Other Currency Exposures**

There are no liabilities in other currencies.

**(3) Currency Mismatching Reserve**

No currency mismatching reserve is necessary.

**(4) Most Onerous Scenario Under INSPRU 3.1.16(R)**

Not applicable

**(5) Most Onerous Scenario Under INSPRU 3.1.23(R)**

There are no significant territories outside the United Kingdom.

**(6) Resilience Capital Requirement**

Not applicable

**(7) Additional Reserves Arising From INSPRU 1.1.34(2)(R)**

No reserve is required for mismatching as investments are closely matched to the liabilities.

**8. OTHER SPECIAL RESERVES**

No further additional reserves exceed the lesser of £10m and 0.1% of total mathematical reserves.

**9. REINSURANCE**

**(1) Facultative Reinsurance**

- (c) No premiums were payable on a facultative basis to a reinsurer that was unauthorised to carry on insurance business in the UK.
- (d) No premiums were payable to a connected company reinsurer that was unauthorised to carry on insurance business in the UK.

**(2) Reinsurance Treaties**

Not applicable

**10. REVERSIONARY (OR ANNUAL) BONUS**

The reversionary bonus rates have been as follows:

Bonus Series	Math reserves	Reversionary Bonus Rate for Current Year	Reversionary Bonus Rate for Previous year	Total g'tee bonus for current year
	£m	%	%	%
Life Assurance* (SLUK)	1.8	3.0	3.0	0.0
Deferred Annuity* (SLUK)	0.1	4.5	4.5	0.0
Whole life & Endowment** (PAL)	20.2	5.0 / 8.0	5.0 / 8.0	0.0

The above bonus rates, where marked (\*), apply to both the sum assured and the attaching bonus. For bonus series marked (\*\*) the first rate applies to the sum assured and the second rate applies to the attaching bonus.

**Scottish Mutual With-Profits Fund**

**3. DISCRETIONARY CHARGES AND BENEFITS**

**(1) Application of Market Value Reduction**

The firm has the right to apply Smoothing Reductions to its Smoothed Investment Funds and market value reductions to the various series of with-profits units.

Market value reductions may be applied to unitised with-profits and smoothed return business for non-protected exits such as surrenders, transfers and early or late retirements. Market value reductions may not be applied for protected exits which generally include death, maturity, surrender at a guarantee date and retirement at the selected retirement date.

During 2010 market value reductions were applied. A summary for the main business types follows.

**Regular Premiums**

<b>Date</b>	<b>UK Life With-Profits Funds</b>	<b>UK Pensions With-Profits Funds</b>
January 2010	Business written in 1987 to 2009	Business written in 1985 to 2009
February 2010	Business written in 1987 to 2009	Business written in 1985 to 2009
April 2010	Business written in 1987 to 2009	Business written in 1985 to 2009
May 2010	Business written in 1987 to 2009	Business written in 1985 to 2009
June 2010	Business written in 1987 to 2010	Business written in 1985 to 2010
July 2010	Business written in 1987 to 2010	Business written in 1985 to 2009
August 2010	Business written in 1987 to 2009	Business written in 1985 to 2009
September 2010	Business written in 1987 to 2009	Business written in 1985 to 2009
October 2010	Business written in 1987 to 2009	Business written in 1985 to 2009
November 2010	Business written in 1987 to 2009	Business written in 1985 to 2009
December 2010	Business written in 1987 to 2010	Business written in 1985 to 2010

Single Premium

Date	UK Life With-Profits Funds	UK Pensions With-Profits Funds
January 2010	Business written in 1994 to 2009	Business written in 1985 to 2009
February 2010	Business written in 1994 to 2009	Business written in 1985 to 2009
April 2010	Business written in 1994 to 2009	Business written in 1991 to 2009
May 2010	Business written in 1995 to 2009	Business written in 1990 to 2009
June 2010	Business written in 1994 to 2010	Business written in 1985 to 2010
July 2010	Business written in 1994 to 2010	Business written in 1985 to 2010
August 2010	Business written in 1994 to 2009	Business written in 1985 to 2010
September 2010	Business written in 1994 to 2009	Business written in 1985 to 2009
October 2010	Business written in 1994 to 2009	Business written in 1985 to 2009
November 2010	Business written in 1994 to 2009	Business written in 1985 to 2010
December 2010	Business written in 1994 to 2010	Business written in 1985 to 2010

**(2) Premiums on Reviewable Protection Policies**

There are no reviewable protection policies.

**(3) Non-profit Deposit Administration**

No non-profit deposit administration business is transacted.

**(4) Service Charges on Linked Policies**

Policy fees on unit linked contracts were increased between 0.00% and 2.33% during 2010. Policy fees for majority of these contracts were increased by over 1%.

**(5) Benefit Charges on Linked Policies**

There have been no changes to benefit charges on linked policies since the previous valuation.

**(6) Accumulating With-Profits Charges**

There have been no changes to charges applied to accumulating with-profits policies since the previous valuation.

**(7) Unit Pricing of Internal Linked Funds**

Not applicable.

**(8) Tax Deductions From Internal Linked Funds**

Not applicable.

**(9) Tax Provisions for Internal Linked Funds**

Not applicable.

**(10) Discounts on Unit Purchases**

Not applicable

## 4. VALUATION BASIS

### (1) Valuation Methods

It is assumed that annuities in payment occur at the end of the month in which they are due and that increments under increasing annuities take place at the end of the month in which they escalate. For certain annuities there is a capital guarantee that if the annuitant dies before the annuity payments made equal or exceed the purchase price, the shortfall becomes payable immediately. Provision for those extra guarantees is included with the reserves shown.

The benefits valued for group schemes are the amounts secured by premiums paid prior to the valuation date, except for contracts where benefits in force are secured by premiums fixed until retirement.

For unitised with-profits business the funded value of the units has been compared to the surrender value taking into account policyholders' reasonable expectations, and the lower of these two items has been valued. The result of this calculation is then compared with a valuation using the bonus reserve method and the larger of the two items is then taken as the reserve. For units with a guaranteed rate of bonus this guaranteed rate is allowed for in the bonus reserve valuation.

For the Smoothed Funds the reserve held is the sum of the sterling reserve and the valuation smoothed prices multiplied by the number of units. All non-linked with-profits contracts have been valued using the gross premium method. Certain assurances accepted at an increased rate of premium are valued at correspondingly increased ages. A proportion of all other current extra premiums receivable is reserved.

### (2) Valuation Interest rates

The valuation interest rates used were as follows:

Product Group		Current Valuation	Previous Valuation
<b>Conventional Business</b>			
Conventional with-profits life assurances (Single Premium)		1.65%	3.20%
Conventional with-profits life assurances (Regular Premium)		1.70%	3.25%
Conventional with-profits deferred annuities (single premium)	in deferment	3.60%	3.75%
	in payment	3.50%	3.60%
Conventional with-profits deferred annuities (regular premium)	in deferment	3.60%	3.75%
	in payment	3.50%	3.60%
Conventional with-profits immediate annuities	group	3.65%	3.80%
	individual	3.65%	3.80%
<b>Unitised Business</b>			
Unitised with-profits life assurances	non-unit reserves	1.70%	3.25%
	unit reserves	1.70%	3.25%
Unitised with-profits life pensions	non-unit reserves	3.05%	3.75%
	unit reserves	3.05%	3.75%

**(3) Risk Adjustments**

The yields on assets were reduced for risk as follows:

Fixed Interest

(a) Approved Securities:

No reduction.

(b) Other Securities:

AA deduction was applied to the yield on an individual stock by stock basis to allow for the risk of default. The individual stock risk margins were calculated as a long term average default rate plus an additional allowance for short-term factors and expected deviations from the historic average.

The long term average default rates (in basis points) were:

Credit Rating	Term		
	5	10	15
AAA	4.3	12.3	15.2
AA	19.0	32.1	48.2
A	33.2	47.7	65.3
BBB	82.8	104.1	122.4
BB	261.3	277.3	287.2
B	591.7	524.7	442.5

A number of different techniques were then employed to arrive at an additional haircut, namely:

- A higher risk was recognised for bank subordinated debt by removing the credit for recoveries included within the above default rates. For banks that were in receipt of state aid, there was an additional deduction depending on whether the coupons could be missed or deferred without interest.
- Subordinated debt attracted hair cuts based on the senior rating of the issuer rather than the rating of the bond itself.
- Stocks were 'notched' downwards where the credit rating was considered to be inappropriate (after analysis of the current market spread and other factors).
- An additional reserve of £2.0m was established to allow for higher levels of default in the medium term. This is not reflected in the default rates in the table above.

Variable Interest

The yield on variables interest rate stocks was capped at the real yield on the over 5 years, 5% inflation, FTSE Index-linked gilt index. This cap applied both to approved and non-approved variable interest stocks.



Equities

The yield on equity shares was capped at the lower of 25% p.a. or twice the annualised 15 year gilt yield.

Additional adjustments were also made to the dividend yield of Lloyds TSB and Royal Bank of Scotland shares where the dividend yield was set to zero to reflect the current expectations of those shares.

**(4) Mortality Basis**

The mortality assumptions for the current (and previous) valuation are:

Product Group		Current Valuation	Previous Valuation
CWP life assurances	non- smoker	61% AM92 ult1 72% AF92 ult	61% AM92 ult1 72% AF92 ult
	smoker	105% AM92 ult1 116% AF92 ult	105% AM92 ult1 116% AF92 ult
CWP pensions assurances (individual and group)		72% AM92 ult 66% AF92 ult	72% AM92 ult 66% AF92 ult
Deferred annuities (in deferment) (individual and group)		72% AM92 ult 66% AF92 ult	72% AM92 ult 66% AF92 ult
Immediate and deferred pensions annuities in payment		Modified PMA00mc Modified PFA00mc	Modified PMA00mc Modified PFA00mc
Unitised life business		77% AM80 ult1 77% AF80 ult	77% AM80 ult1 77% AF80 ult
Unitised pensions business		77% AM80 ult 77% AF80 ult	77% AM80 ult 77% AF80 ult

Pension annuities currently in payment.

Percentages of the life tables used under the current (and previous year) valuation assumptions at sample ages are:

	Current Year		Previous Year	
	Male	Female	Male	Female
At age 65	98.2%	100.9%	98.2%	100.9%
At age 75	98.2%	100.9%	98.2%	100.9%

**Scottish Mutual With-Profits Fund**

Improvement factors for future calendar years assumed in the current valuation at sample ages are:

<b>Males</b>	<b>2011</b>	<b>2021</b>	<b>2031</b>	<b>2041</b>	<b>2051</b>	<b>2061</b>
60	1.35%	2.51%	2.97%	2.97%	2.97%	2.97%
70	2.46%	1.73%	2.41%	2.67%	2.67%	2.67%
80	3.78%	2.03%	1.70%	2.13%	2.17%	2.17%
90	1.55%	2.06%	1.55%	1.56%	1.63%	1.63%
100	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%

<b>Females</b>	<b>2011</b>	<b>2021</b>	<b>2031</b>	<b>2041</b>	<b>2051</b>	<b>2061</b>
60	1.80%	3.32%	3.15%	3.15%	3.15%	3.15%
70	2.61%	2.52%	2.85%	2.69%	2.69%	2.69%
80	3.42%	2.42%	2.11%	2.19%	2.17%	2.17%
90	1.46%	2.02%	1.69%	1.62%	1.63%	1.63%
100	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%

The expectation of life under the current (and previous year) valuation assumptions for sample ages are:

<b>Age</b>	<b>Current Year</b>		<b>Previous Year</b>	
	<b>Males</b>	<b>Females</b>	<b>Males</b>	<b>Females</b>
65	23.9	25.4	23.7	25.3
75	14.5	15.7	14.4	15.6

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

Percentages of the life tables used under the current (and previous year) valuation assumptions for deferred annuities at a sample age are:

	<b>Current Year</b>		<b>Previous Year</b>	
	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>
At age 45	98.2%	100.9%	98.2%	100.9%
At age 55	98.2%	100.9%	98.2%	100.9%

Improvement factors for future calendar years assumed in the current valuation at sample ages are:

<b>Males</b>	<b>2011</b>	<b>2021</b>	<b>2031</b>	<b>2041</b>	<b>2051</b>	<b>2061</b>
40	1.83%	1.83%	1.83%	1.83%	1.83%	1.83%
50	1.88%	2.65%	2.65%	2.65%	2.65%	2.65%
60	1.35%	2.51%	2.97%	2.97%	2.97%	2.97%
70	2.46%	1.73%	2.41%	2.67%	2.67%	2.67%
80	3.78%	2.03%	1.70%	2.13%	2.17%	2.17%

<b>Females</b>	<b>2011</b>	<b>2021</b>	<b>2031</b>	<b>2041</b>	<b>2051</b>	<b>2061</b>
40	2.06%	2.06%	2.06%	2.06%	2.06%	2.06%
50	2.70%	3.03%	3.03%	3.03%	3.03%	3.03%
60	1.80%	3.32%	3.15%	3.15%	3.15%	3.15%
70	2.61%	2.52%	2.85%	2.69%	2.69%	2.69%
80	3.42%	2.42%	2.11%	2.19%	2.17%	2.17%

## Scottish Mutual With-Profits Fund

The expectation of life at age 65 for current ages 45 and 55 under the current (and previous year) valuation assumptions are:

Age	Current Year		Previous Year	
	Males	Females	Males	Females
45	27.1	28.5	27.0	28.4
55	25.4	27.0	25.3	26.9

### (5) Morbidity Basis

Not applicable.

### (6) Expense Basis

The following table shows the gross attributable expenses per policy:

Product Group		Per Policy Expense	
		Current Valuation £ p.a.	Previous Valuation £ p.a.
<b>Conventional business</b>			
CWP savings endowment (120/125)	Premium-paying	45.53	40.97
	Paid-up	31.87	28.68
CWP pensions (155/165)	Premium-paying	58.73	52.85
	Paid-up	41.11	37.00
<b>Unitised business</b>			
UWP bond (500)		34.96	31.46
UWP savings endowment (510)	Premium-paying	39.82	37.81
	Paid-up	27.88	26.47
UWP regular premium pension (525/545)	Premium-paying	47.18	44.79
	Paid-up	33.03	31.36
UWP group regular premium pension (535)	Premium-paying	46.41	44.06
	Paid-up	32.49	30.85
UWP single premium pension (525/545)		33.03	31.36
UWP group single premium pension (535)		32.49	30.85

The expenses on life business are netted down for tax at 20%.

The renewal commission rate payable is 2.50% for applicable business.

For the current valuation the investment expense assumptions have been updated to allow for the impact of a new investment fee scale agreed with the asset manager. The base fees are as follows:

Investment expense (gross of tax)	Current valuation	Previous valuation
CWP Life	0.132%	0.135%
CWP Pension	0.111%	0.135%

The investment expenses for life fund business should be netted down for policyholder tax at 20%.

In addition to the base fees, there is an explicit additional services fee which is allowed for as a new provision of £6.1m. At the previous valuation these additional services had been allowed for implicitly within the investment expense assumption. There is also a performance fee payable to the asset manager. This is not allowed for in the valuation basis because no over or under investment performance is assumed in the valuation interest basis.

**(7) Unit Growth Rates and Expense Inflation**

There are no unit growth rate assumptions as there is no linked business.

Future expenses are assumed to increase at 5.50% p.a.

**(8) Future Bonus Rates**

Assumed future bonus rates are 0% for all business, with the exception of unitised with-profits policies invested in the unit series where there is a guaranteed minimum bonus rate of 3% (life business) or 4% (pensions business). In these cases, the guaranteed bonus rates are used in the valuation.

These assumptions have not changed since the previous valuation.

**(9) Persistency Assumptions**

No allowance is made for lapses, except in the Bonus Reserve Valuation calculations for the With Profits Bonds as shown:

Product		Average lapse / surrender rate for the policy years			
		1 - 5	6 - 10	11 - 15	16 - 20
UWP With Profit Investment Bond	Surrender	10.0%	10.0%	10.0%	10.0%
UWP Select With Profits Bond	Surrender	20.0%	20.0%	20.0%	20.0%
UWP With Profit Investment Bonds	Partial withdrawals	2.5%	2.5%	2.5%	2.5%
UWP Select With Profits Bond	Partial withdrawals	3.0%	3.0%	3.0%	3.0%
UWP With Profits Bond	Partial withdrawals	5.0%	5.0%	5.0%	5.0%

**(10) Other Material Assumptions**

There are no changes in methods and assumptions since the previous valuation other than those already discussed.

**(11) Allowance for Derivatives**

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

**(12) Effects of Basis Changes**

Not applicable.

## 5. OPTIONS AND GUARANTEES

### (1) Guaranteed annuity rate options

Where a contract funding for cash has a guaranteed annuity option, the value of the guaranteed annuity at the vesting date (or maturity date) according to the mortality and interest tables in use is compared with the cash option. The reserve is calculated as a weighted average of the reserves for the guaranteed annuity option and the cash option, assuming a take-up rate of the guaranteed annuity option which may be less than 100%.

For Self Employed (S226) Personal Pensions, the take-up rate is:

80% for plans maturing immediately at the valuation date,  
95% for plans maturing 20 years after the valuation date,  
interpolated linearly between these limits for intermediate maturity dates.

A distribution of retirement ages has been assumed for these contracts, as shown in the table below :

Product	Basic Reserve	O/S Duration	Gtee Reserve	GAO Rate (male age 65)	Incrs Yes/No	Annuity Form	Ret. Ages
	£m	years	£m				
Self Employed (S226)	318.6	29.0	193.1	11.00%	Yes	Rate shown corresponds to annually in arrears. Annuity can be paid monthly, quarterly, half yearly, with/out escalation, single or joint life; if single life a 5 or 10 year guarantee can be added.	50-75 (with few exceptions)

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

The Flexible Endowment contract is written as a with profit endowment assurance maturing on the policy anniversary prior to the sixty-fifth birthday. There are guaranteed early maturity values available from the tenth policy anniversary. The contracts are valued both as endowment assurances to age 65 and as endowment assurances for the appropriate guaranteed sum assured at the earliest guaranteed option date. The greater of the two values is held.

Product	Basic Reserve	O/S Duration	Gtee Reserve	Gtee Amount	MVA- conditi	In-force premiums	Incrs Yes/No
	£m	years	£m	£m		£m	
Flexible Endowment	4.77	35.9	6.2	14.5	n/a	0.3	No

### (3) Guaranteed insurability options

There are no guaranteed insurability options.

**(4) Other guarantees and options**

Some classes of deferred annuity have a cash option. The reserve for these policies is calculated in the same way as for cash contracts with guaranteed annuity options, as described in paragraph 5.(1). The value of the annuity at the vesting date (or maturity date) according to the mortality and interest tables in use is compared with the cash option. The reserve is calculated as a weighted average of the reserves for the guaranteed annuity option and the cash option, assuming a take-up rate for the cash option as shown below,

For Self Employed (S226) Personal Pensions and Masterpolicy plans, the take-up rate assumed for the cash option is:

- 20% for plans maturing immediately at the valuation date
- 5% for plans maturing 20 years after the valuation date
- Interpolated linearly between these limits for intermediate maturity dates

For Individual Pension Arrangements, the take-up rate assumed for the cash option is 5% for all maturities. The vesting date is taken to be Normal Retirement Age for Individual Pension Arrangements and Masterpolicy plans; for Self Employed (S226) Personal Pensions the distribution of retirements with age is the same as that shown in paragraph 5.(1).

The total reserves on these contracts, after allowing for the cash option which reduces the reserve from that which would be required if only the deferred annuity was valued, are:

Deferred annuity contract	Total mathematical reserves	Mathematical reserves if no option	Reduction to mathematical reserves in respect of option
	£m	£m	£m
Self Employed (S226) Personal Pensions	7.1	7.6	0.5
Individual Pension Arrangements	167.7	171.7	4.0
Masterpolicy plans	187.3	200.8	13.4

**6. EXPENSE RESERVES**

**(1) Aggregate Expense Loadings**

The aggregate gross of taxation amount available in the next 12 months, arising from margins in the valuation basis, to meet ongoing expenses from existing business is £12.9m. This is composed of explicit allowances of £12.1m for non-investment maintenance expenses and £0.8m for investment expenses

**(2) Implicit Allowances**

There is an implicit allowance in the valuation basis for investment expenses. For conventional with-profits life business the allowance is 0.132% and for conventional with-profits pensions business the allowance is 0.111%.

**(3) Form 43 Comparison**

The maintenance expenses shown at line 14 of Form 43 are £16.1m. This includes £2.8m investment management expenses and £13.4m in administrative expenses.

Form 43 includes £0.6m of performance related investment fees which are not included in paragraph 6.1.

**(4) New Business Expense Overrun**

The company is no longer writing new business and so there is no requirement for a new business expense overrun reserve

**(5) Maintenance Expense Overrun**

The company has already closed to new business and the expense assumptions set out in paragraph 4.6 take account of this fact. There is thus no requirement for an additional expense overrun reserve allowing for future closure to new business.

**(6) Non-attributable Expenses**

Not applicable.

**7. MISMATCHING RESERVES**

**(1) Analysis of Reserves by Currency**

The reserves held by currency and the assets backing them are as follows:

Currency	Mathematical Reserves	Backed by assets
	£m	£m
Sterling (£)	2,376.0	2,376.0
Euro (€)	26.3	26.3
US (\$)	1.9	1.9
Other currencies	0.0	0.0
Total	2,404.2	2,404.2

**(2) Other Currency Exposures**

No information required.

**(3) Currency Mismatching Reserve**

No reserve is held for currency mismatching. Any non-sterling-denominated assets are held within the fund as part of the diversified portfolio of investments. The discretionary nature of the payouts on with profit policies is such that they can vary with the returns on the assets and so there is no need to hold an additional reserve for currency mismatching.

**(4) Most Onerous Scenario Under INSPRU 3.1.16(R)**

Not applicable.

**(5) Most Onerous Scenario Under INSPRU 3.1.23(R)**

Not applicable.

**(6) Resilience Capital Requirement**

Not applicable.

**(7) Additional Reserves Arising From INSPRU 1.1.34(2)(R)**

No further reserve arises from the test on assets in INSPRU 1.1.34(2)(R). The liabilities are analysed by duration and the investment strategy is chosen appropriately so that there is no significant mismatch between assets and liabilities.

**8. OTHER SPECIAL RESERVES**

No further additional reserves exceed the lesser of £10m and 0.1% of total mathematical reserves.

**9. REINSURANCE**

**(1) Facultative Reinsurance**

No reinsurance is ceded on a facultative basis to a reinsurer who is not authorised to carry on business in the UK.

**(2) Reinsurance Treaties**

There are no reinsurance treaties with reinsurance premiums and ceded reserves above the de minimis limits.

**10. REVERSIONARY (OR ANNUAL) BONUS**

The following table shows the gross reserves, excluding provisions and non-policy related reserves, for the with profit business along with the reversionary bonus for the current (and previous) years:

Bonus series	Gross Mathematical reserves £m	Reversionary bonus rate (current year)	Reversionary bonus rate (previous year)	Total guaranteed bonus rate (for current year)
<b>Conventional business</b>				
Conventional life assurance and general annuity business	172.9	0%	0%	0%
Conventional pension business	1121.1	0%	0%	0%
<b>Unitised Business</b>				
Unitised Life Series III	261.8	0%	0%	0%
Unitised Pensions Series I & II	206.0	4.00%	4.00%	4.00%
Other Unitised Pensions Series	427.4	0%	0%	0%
Unitised International Series I – £	1.8	0%	0%	0%
Unitised International Series I – \$	28.2	0%	0%	0%
With Profit Annuity	122.1	3.00%	3.00%	3.00%



**SPI With-Profits Fund**

**3. DISCRETIONARY CHARGES AND BENEFITS**

**(1) Application of Market Value Reduction**

For the UK with-profits funds, market value reductions applied to business written were as follows:

<b>Date</b>	<b>UK Life With-Profits Funds</b>	<b>UK Pensions With-Profits Funds</b>
From 1 January 2010 to 2 February 2010	Business written from 1 January 1995 to 31 October 1995, and during calendar years 1999, 2000, and 2006-2009.	Business written during calendar years 1986, 1989, 1990, 1994, 1996-2000, and 2006-2009.
From 3 February 2010 to 28 February 2010	Business written from 1 January 1995 to 31 October 1995, and during calendar years 1999, 2000, and 2006-2009.	Business written during calendar years 1986, 1989, 1990, 1994, 1996-2000, and 2006-2009.
From 1 March 2010 to 31 March 2010	Business written from 1 January 1995 to 31 October 1995, and during calendar years 1999, 2000, and 2006-2009.	Business written during calendar years 1986, 1989, 1990, 1994, 1996-2000, and 2006-2009.
From 1 April 2010 to 30 April 2010	Business written from 1 January 1995 to 31 October 1995, and during calendar years 2000, and 2006-2009.	Business written during calendar years 1989, 1990, 2000, and 2006-2009.
From 1 May 2010 to 3 June 2010	No MVA applied to this business.	Business written in 1998, from 1 January 1999 to June 1999, and during calendar year 2006.
From 4 June 2010 to 30 June 2010	Business written from 1 January 1995 to 31 October 1995, and during calendar years 1999, 2000, and 2006-2009.	Business written during calendar years 1986, 1989, 1990, 1994, 1996-2000, and 2006-2009.
From 1 July 2010 to 1 August 2010	Business written during calendar years 1992 to 2009	Business written during calendar years 1986 to 2009
From 2 August 2010 to 31 August 2010	Business written during calendar years 1992 to 2009	Business written during calendar years 1986 to 2009
From 1 September 2010 to 30 September 2010	Business written during calendar years 1992 to 2009	Business written during calendar years 1986 to 2009
From 1 October 2010 to 31 October 2010	Business written during calendar years 1992 to 2009	Business written during calendar years 1986 to 2009
From 1 November 2010 to 30 November 2010	Business written during calendar years 1992 to 2009	Business written during calendar years 1986 to 2009 and during calendar years 2006 to 2009
From 1 December 2010 to 31 December 2010	Business written during calendar years 1992 to 2009	Business written during calendar years 1986 to 2009

For the Irish pensions with-profits funds, market value reductions applied to business written were as follows:

## SPI With-Profits Fund

Date	Irish Life With-Profits Funds	Irish Pensions With-Profits Funds
From 1 January 2010 to 2 February 2010	Business written during calendar years 2001, and 2005-2009.	Business written in 1998, from 1 January 1999 to 30 September 1999, and during calendar years : 2001, and 2005-2009.
From 3 February 2010 to 28 February 2010	Business written during calendar years 2005-2009.	Business written in 1998, from 1 January 1999 to 30 September 1999, and during calendar years : 2005-2009.
From 1 March 2010 to 31 March 2010	Business written during calendar years 2001, and 2005-2009.	Business written in 1998, from 1 January 1999 to 30 September 1999, and during calendar years : 2001, and 2005-2009.
From 1 April 2010 to 30 April 2010	Business written during calendar years 2005-2009.	Business written in 1998, from 1 January 1999 to 30 September 1999, and during calendar years : 2009.
From 1 May 2010 to 3 June 2010	Business written during calendar years 2005, 2007, and 2008.	Business written in 1998, from 1 January 1999 to 30 September 1999, and during calendar years : 2007, and 2008.
From 4 June 2010 to 30 June 2010	Business written during calendar years 2001, and 2005-2009.	Business written in 1998, from 1 January 1999 to 30 September 1999, and during calendar years : 2001, and 2005-2009.
From 1 July 2010 to 1 August 2010	Business written during calendar years 2001 to 2009	Business written during calendar years 1996 to 2009
From 2 August 2010 to 31 August 2010	Business written during calendar years 2001 to 2009	Business written during calendar years 1996 to 2009
From 1 September 2010 to 30 September 2010	Business written during calendar years 2001 to 2009	Business written during calendar years 1996 to 2009
From 1 October 2010 to 31 October 2010	Business written during calendar years 2001 to 2009	Business written during calendar years 1996 to 2009
From 1 November 2010 to 30 November 2010	Business written during calendar years 2001 to 2009	Business written during calendar years 1996 to 2009
From 1 December 2010 to 31 December 2010	Business written during calendar years 2001 to 2009	Business written during calendar years 1996 to 2009

**(2) Premiums on Reviewable Protection Policies**

Not applicable.

**(3) Non-profit Deposit Administration**

Not applicable.

**(4) Service Charges on Linked Policies**

Not applicable.

**(5) Benefit Charges on Linked Policies**

Not applicable.

**(6) Accumulating With-Profits Charges**

There were no changes to charges applied to accumulating with-profits policies.

**(7) Unit Pricing of Internal Linked Funds**

Not applicable.

**(8) Tax Deductions From Internal Linked Funds**

Not applicable.

**(9) Tax Provisions for Internal Linked Funds**  
Not applicable.

**(10) Discounts on Unit Purchases**  
Not applicable.

**4. VALUATION BASIS**

**(1) Valuation Methods**

All conventional policies have been valued using a gross premium method. Policies granted a one-off increase in the sum assured as at the valuation date have been valued allowing for this increase. Where appropriate, allowance has been made for payments in accordance with reinsurance treaties.

For unitised with-profits policies, the reserves have been calculated as the greater of:

- (i) the discounted value of the guaranteed benefits, including any future reversionary bonuses where a guaranteed rate of bonus applies; and
- (ii) the lower of:
  - (a) the amount that would reasonably be expected to be paid if the policyholder exercised his option to take a cash sum on the valuation date having regard to the representation of the Company, and;
  - (b) the amount in (a) disregarding all discretionary adjustments.

Additional non-unit reserves are held for unitised with-profits policies, based on cash flow calculations for individual policies, which ensure that there are no future negative cash flows.

**(2) Valuation Interest rates**

The valuation interest rates used were as follows:

Product Group	Current Valuation		Previous Valuation		
	UK	Republic of Ireland	UK	Republic of Ireland	
<b>Conventional Business</b>					
Conventional with-profits life assurances	2.85%	2.40%	3.10%	2.45%	
Conventional with-profits pensions assurances	3.35%	3.20%	3.75%	3.30%	
Conventional non-profit life term assurances	2.95%	1.15%	2.95%	1.15%	
Conventional non-profits pensions assurances	4.07%	n/a	4.07%	n/a	
<b>Unitised Business</b>					
Unitised with-profits life assurances	non-unit	2.45%	1.75%	3.05%	1.25%
	unit	2.85%	2.40%	3.10%	2.45%
Unitised with-profits pensions	non-unit	3.10%	2.20%	3.85%	1.60%
	unit	3.35%	3.20%	3.75%	3.30%

Note: the valuation interest rates are shown net of tax for with-profits life business and non-profit life term assurance business but gross of tax for all other business.

**(3) Risk Adjustments**

The yields on assets were reduced for risk as follows:

At the previous valuation there was a 25% margin added to the Peak 1 default assumption. However, a new provision was created at the current valuation equal to the impact of a 10% margin in the Peak 1 default assumption.

The yields on assets were reduced for risk as follows:

**Fixed Interest**

(i) Approved Securities:  
No reduction

(j) Other Securities

AA deduction was applied to the yield on an individual stock by stock basis to allow for the risk of default. The individual stock risk margins were calculated as a long term average default rate plus an additional allowance for short-term factors and expected deviations from the historic average.

The long term average default rates (in basis points) were:

Credit Rating	5yr	10yr	15yr
AAA	4.3	12.3	15.2
AA	19.0	32.1	48.2
A	33.2	47.7	65.3
BBB	82.8	104.1	122.4
BBB	261.3	277.3	287.2
BBB	591.7	524.7	442.5

A number of different techniques were then employed to arrive at an additional haircut, namely:

- A higher risk was recognised for bank subordinated debt by removing the credit for recoveries included within the above default rates. For banks that were in receipt of state aid, there was an additional deduction depending on whether the coupons could be missed or deferred without interest.
- Subordinated debt attracted hair cuts based on the senior rating of the issuer rather than the rating of the bond itself.
- Stocks were 'notched' downwards where the credit rating was considered to be inappropriate (after analysis of the current market spread and other factors).
- An additional reserve of £1.2m was established to allow for higher levels of default in the medium term. This is not reflected in the default rates in the table above.

Variable Interest

The yield on variables interest rate stocks was capped at the real yield on the over 5 years, 5% inflation FTSE Index linked gilt index. This cap applied to both approved and non-approved variable interest stocks.

Equities

The yield on equity shares was capped at the lower of 25% p.a. or twice the annualised 15 year gilt yield.

Additional adjustments were also made to the dividend yield of Lloyds TSB and Royal Bank of Scotland shares where the dividend yield was set to zero to reflect the current expectations of those shares.

**(4) Mortality Basis**

The mortality tables used for each product group are shown in the following table:

Product Group		Current Valuation	Previous Valuation
Conventional endowment assurance (UK and overseas)	non-smoker	70% AM92 ult <sup>1</sup> 88% AF92 ult	70% AM92 ult <sup>1</sup> 88% AF92 ult
	smoker	141% AM92 ult <sup>1</sup> 176% AF92 ult	141% AM92 ult <sup>1</sup> 176% AF92 ult
	smoker status unknown	88% AM92 ult <sup>1</sup> 110% AF92 ult	88% AM92 ult <sup>1</sup> 110% AF92 ult
Conventional whole life assurances other than Bonus Mortgage Plan (UK and overseas)		Modified TM92 ult <sup>1</sup> Modified TF92 ult	Modified TM92 ult <sup>1</sup> Modified TF92 ult
Bonus Mortgage Plan		88% AM92 ult <sup>1</sup> 110% AF92 ult	88% AM92 ult <sup>1</sup> 110% AF92 ult
Conventional Capital Options and With-Profit Bond (overseas)		Nil Mortality	Nil Mortality
Conventional term assurance (UK and overseas)		Modified TM92 sel <sup>1</sup> Modified TF92 sel	Modified TM92 sel <sup>1</sup> Modified TF92 sel
Unitised assurances other than Flexible Mortgage Plan (UK and overseas)	non-smoker	70% AM92 ult <sup>1</sup> 88% AF92 ult	70% AM92 ult <sup>1</sup> 88% AF92 ult
	smoker	141% AM92 ult <sup>1</sup> 176% AF92 ult	141% AM92 ult <sup>1</sup> 176% AF92 ult
Flexible Mortgage Plan (UK)		Modified TM92 ult <sup>1</sup> Modified TF92 ult	Modified TM92 ult <sup>1</sup> Modified TF92 ult
Conventional deferred annuities (in deferment)	Overseas (group & individual)	Nil Mortality	Nil Mortality
	UK (individual)	Nil Mortality	Nil Mortality
	UK (group)	88% AM92 ult 110% AF92 ult	88% AM92 ult 110% AF92 ult
Simplified Pensions Investment Plan (in deferment)		UK and overseas	Nil Mortality
Linked deferred annuities (in deferment) and group pensions		Overseas	Nil Mortality
Deferred annuities in payment		UK and overseas, group and individual	Modified PMA00 Modified PFA00

<sup>1</sup> AIDS 33% R6A (peak) for males only

Assurance contracts using modified tables

Where the mortality assumptions are based on the TM92/TF92 tables, age-related percentages are used. Select rates are used for conventional term assurance and ultimate rates for conventional whole life assurance and the Flexible Mortgage Plan. Sample mortality rates per 1000 lives are as follows:

Conventional term assurance – current year

Age	Male non-smoker	Male smoker	Female non-smoker	Female smoker
25	0.408	0.729	0.185	0.280
35	0.438	0.719	0.287	0.486
45	0.990	1.720	0.715	1.343
55	2.549	6.481	1.873	3.864

Conventional term assurance – previous year

Age	Male non-smoker	Male smoker	Female non-smoker	Female smoker
25	0.408	0.729	0.185	0.280
35	0.438	0.719	0.287	0.486
45	0.990	1.720	0.715	1.343
55	2.549	6.481	1.873	3.864

Conventional whole life assurance other than Bonus Mortgage Plan – current year

Age	Male non-smoker	Male smoker	Female non-smoker	Female smoker
25	0.421	0.421	0.218	0.218
35	0.444	0.444	0.348	0.348
45	1.025	1.025	0.892	0.892
55	2.917	2.917	2.406	2.406

Conventional whole life assurance other than Bonus Mortgage Plan – previous year

Age	Male non-smoker	Male smoker	Female non-smoker	Female smoker
25	0.421	0.421	0.218	0.218
35	0.444	0.444	0.348	0.348
45	1.042	1.042	0.892	0.892
55	2.917	2.917	2.406	2.406

Unitised Flexible Mortgage Plan – current year

Age	Male non-smoker	Male smoker	Female non-smoker	Female smoker
25	0.503	0.500	0.244	0.391
35	0.539	0.495	0.378	0.680
45	1.190	1.221	0.942	1.877
55	3.116	4.485	2.468	5.401

Unitised Flexible Mortgage Plan – previous year

Age	Male non-smoker	Male smoker	Female non-smoker	Female smoker
25	0.503	0.500	0.244	0.391
35	0.539	0.495	0.378	0.680
45	1.190	1.221	0.942	1.877
55	3.116	4.485	2.468	5.401

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

Sample percentages of the base tables used for the current year (and previous year) valuation are:

	Current Year		Previous Year	
	Male	Female	Male	Female
At age 55	98.2%	100.9%	98.2%	100.9%
At age 65	98.2%	100.9%	98.2%	100.9%
At age 75	98.2%	100.9%	98.2%	100.9%
At age 85	98.2%	100.9%	98.2%	100.9%
At age 95	98.2%	100.9%	98.2%	100.9%

Specimen annual improvement rates, dependent on calendar year, are:

Males	2011	2021	2031	2041	2051	2061
55	2.63%	2.41%	3.24%	3.25%	3.25%	3.25%
65	3.41%	2.95%	2.59%	2.98%	2.98%	2.98%
75	3.44%	2.97%	2.44%	2.38%	2.44%	2.44%
85	2.81%	2.23%	2.11%	1.90%	1.90%	1.90%
95	1.64%	1.43%	1.40%	1.38%	1.35%	1.35%
Females	2011	2021	2031	2041	2051	2061
55	2.14%	3.08%	3.25%	3.25%	3.25%	3.25%
65	2.52%	2.94%	2.90%	2.98%	2.98%	2.98%
75	2.84%	2.75%	2.50%	2.43%	2.44%	2.44%
85	2.10%	2.11%	2.04%	1.90%	1.90%	1.90%
95	1.41%	1.34%	1.39%	1.37%	1.35%	1.35%

The expectation of life at age 65 for current ages 45 and 55 under the current (and previous year) valuation assumptions are:

Age	Current Year		Previous Year	
	Males	Females	Males	Females
45	27.1	28.5	27.0	28.4
55	25.4	27.0	25.3	26.9

No other reserves for possible detrimental changes in mortality rates have been made.

**(5) Morbidity Basis**

All morbidity assumptions are based on the reinsurer's rates for the relevant contract. Sample morbidity rates per 1000 lives are as follows.

Conventional endowment assurance (combined mortality and critical illness benefits) – current year:

Age	Male non-smoker	Male smoker	Female non-smoker	Female smoker
25	1.030	1.209	0.863	0.774
35	1.078	1.737	1.316	1.623
45	2.429	5.315	2.726	4.697
55	7.840	14.896	7.645	11.184

Conventional endowment assurance (combined mortality and critical illness benefits) – previous year:

**SPI With-Profits Fund**

<b>Age</b>	<b>Male non-smoker</b>	<b>Male smoker</b>	<b>Female non-smoker</b>	<b>Female smoker</b>
25	1.030	1.209	0.863	0.774
35	1.078	1.737	1.316	1.623
45	2.429	5.315	2.726	4.697
55	7.840	14.896	7.645	11.184

An allowance was made for a future deterioration of 0.375% p.a. for each of mortality, critical illness and TPD.

Flexible Mortgage Plan (combined mortality and critical illness benefits) – current year:

<b>Age</b>	<b>Male non-smoker</b>	<b>Male smoker</b>	<b>Female non-smoker</b>	<b>Female smoker</b>
25	1.062	1.251	0.766	0.947
35	1.122	1.815	1.211	2.061
45	2.440	5.358	2.489	5.915
55	7.764	14.799	6.766	13.646

Flexible Mortgage Plan (combined mortality and critical illness benefits) – previous year:

<b>Age</b>	<b>Male non-smoker</b>	<b>Male smoker</b>	<b>Female non-smoker</b>	<b>Female smoker</b>
25	1.062	1.251	0.766	0.947
35	1.122	1.815	1.211	2.061
45	2.446	5.378	2.489	5.915
55	7.764	14.799	6.766	13.646

Flexible Mortgage Plan (critical illness benefits only) – current year:

<b>Age</b>	<b>Male non-smoker</b>	<b>Male smoker</b>	<b>Female non-smoker</b>	<b>Female smoker</b>
25	0.633	0.721	0.493	0.610
35	0.889	1.389	1.188	2.020
45	2.021	4.262	2.476	5.882
55	7.055	12.986	6.505	13.120

Flexible Mortgage Plan (critical illness benefits only) – previous year:

<b>Age</b>	<b>Male non-smoker</b>	<b>Male smoker</b>	<b>Female non-smoker</b>	<b>Female smoker</b>
25	0.633	0.721	0.493	0.610
35	0.889	1.389	1.188	2.020
45	2.021	4.262	2.476	5.882
55	7.055	12.986	6.505	13.120

No allowance was made for future deterioration in mortality, critical illness or TPD.



**(6) Expense Basis**

The following table shows the gross attributable expenses per policy:

Product Group	Per Policy Expense			
	Current Valuation		Previous Valuation	
	UK (£)	Ireland (€)	UK (£)	Ireland (€)
<b>Conventional business</b>				
CWP savings endowment (120)				
- premium-paying	33.51	95.42	28.64	100.40
- single premium / paid-up	23.46	95.42	20.05	100.40
CWP pensions (165)				
- premium-paying	170.26	95.42	145.53	100.40
- single premium / paid-up	119.19	95.42	101.88	100.40
<b>Unitised business</b>				
UWP bond (500)			14.96	42.63
UWP savings endowment (510)				
- premium-paying	29.18	N/A	25.06	N/A
- single premium / paid-up	20.44	N/A	17.55	N/A
UWP pension (525)				
- premium-paying	200.89	95.42	200.89	100.40
- single premium / paid-up	140.62	95.42	140.62	100.40

The expenses on life business are netted down for tax at 20%.

Investment expense (gross of tax)	Current valuation	Previous valuation
UK UWP Life	0.140%	0.140%
UK UWP Pens	0.120%	0.140%
UK Conv Life	0.135%	0.140%
UK Conv Pens	0.113%	0.140%
UK NP	0.080%	0.140%
Irish UWP Life	0.140%	0.140%
Irish UWP Pens	0.128%	0.140%
Irish Conv Life	0.140%	0.140%
Irish Conv Pens	0.133%	0.140%
Irish NP	0.105%	0.140%

The investment expenses for life fund business should be netted down for policyholder tax at 20%.

In addition to the base fees, there is an explicit additional services fee which is allowed for as a new provision of £6.6m. At the previous valuation these additional services had been allowed for implicitly within the investment expense assumption. There is also a performance fee payable to the asset manager. This is not allowed for in the valuation basis because no over or under investment performance is assumed in the valuation interest basis.

There are no zillmer adjustments for the policies to which the above expenses apply.

**(7) Unit Growth Rates And Expense Inflation**

There are no unit growth rate assumptions as there is no linked business.

Future expenses are assumed to increase at 5.50% p.a.

**(8) Future Bonus Rates**

Assumed future bonus rates are 0% for all business, with the exception of unitised with-profits policies invested in the unit series where there is a guaranteed minimum bonus rate of 3% (life business) or 4% (pensions business). In these cases, the guaranteed bonus rates are used in the valuation.

**(9) Persistency Assumptions**

It is assumed that there are no lapses or surrenders and no policies are made paid-up after the valuation date.

**(10) Other Material Assumptions**

There are no other material basis assumptions.

**(11) Allowance for Derivatives**

Not applicable

**(12) Effects of Basis Changes**

There have been no changes in valuation methodology arising from changes in INSPRU valuation rules effective from 31 December 2006.

**5. OPTIONS AND GUARANTEES**

**(1) Guaranteed Annuity Rate Options**

Guaranteed annuity rate options are included on the following contracts:

- Conventional pension pure endowments
- Simplified Pension Investment Funding Plan
- Select Executive and Personal Retirement Plans written in the Republic of Ireland prior to October 1998

For conventional pensions and the Simplified Pension Investment Funding Plan, the value of the guaranteed annuity at the vesting date is calculated based on the valuation mortality tables and interest rates set out in paragraphs 4 (4) and 4 (2) and is compared with the cash option (basic reserve). The total reserve is calculated as a weighted average of the reserves for the guaranteed annuity option and the cash option, based on the annuity take-up rate assumptions set out below. These assumptions take account of the guaranteed terms for escalating annuities, which are more onerous than those for level annuities.

Take-up rate assumptions:

Contract	Cash option	Level annuity	Escalating annuity
Conventional pure endowments	20%	40%	40%
Simplified Pension Investment Funding	0%	0%	100%

The reserves based on these assumptions are subject to a minimum of 95% of the reserves that would be held based on assumptions of 100% level annuities for conventional pure endowments and 100% escalating annuities for Simplified Pension Investment Funding Plan.

For the Select Executive and Personal Retirement Plans, the non-unit liabilities were explicitly calculated allowing for the increased cost of projected benefits at the selected normal retirement date arising from the guaranteed annuity options. This increased cost was based on the ratio of the cost of £1 per annum pension on the valuation basis to that on the basis underlying the guaranteed annuity rates. The projections took account of growth on units already purchased as well as that on units due to be allocated in respect of future premiums both at the current level and resulting from any selected premium indexation. No allowance was made for either lapses or the cessation of premium indexation prior to retirement.

Product	Basic Reserve	O/S Duration	Gtee Reserve	GAO Rate (male aged 65)	Incrs Yes/No	Ann. Form	Ret. Ages
	£m	years	£m				
Conventional Pension Pure Endowments	138.3	0 - 32	95.2	11.1% / 4.6% (UK) 11.1% / 9.1% / 4.6% (Ireland)	Yes	*	50-75
Simplified Pension Investment Funding Plan	71.9	0 - 14	27.0	10.0% / 4.5%	Yes	*	50-75
Select Executive & Personal Retirement Plan	24.1	0 - 41	8.7	9.1%	Yes, but guaranteed annuity rates do not apply.	*	60-70

\* Sample guaranteed annuity rates are provided based on single life, level annuities paid monthly in advance and guaranteed for 5 years. Other options are available. For the Simplified Pension Investment Funding Plan, the basis of the annuity is decided at scheme level; for the other plans, policyholders may choose a different basis, e.g. with spouse's annuity, escalating payments or different payment frequency.

For Conventional Pensions, the guaranteed annuity rates were reduced in July 1999 in the UK and in both March and October 1998 in the Republic of Ireland. For the Simplified Pension Investment Funding plan, the guaranteed annuity rates were reduced in June 1999. The sample rates shown above are those applicable before and after these reductions.

**(2) Guaranteed Surrender and Unit-linked Maturity Values**

Additional reserves are held for the following guarantees. The additional reserves are deemed sufficient to cover the additional liability arising under the most onerous of the guarantee option dates in each case.

- Certain conventional endowment assurances (Selected Period Investment and Step-up Investment Plan) are written to mature on the policy anniversary before the 65<sup>th</sup> birthday but offer guaranteed early maturity values on each policy anniversary from the tenth onwards.
- UK Early Option Mortgage plans (with-profit endowment assurances) offer guaranteed early maturity options on any of the last five policy anniversaries.
- Irish Options Plus Endowment Plans (with-profit endowment assurances) offer guaranteed early maturity options on each policy anniversary from years 5 or 10 onwards.
- Irish Capital Options plans (with-profit endowment assurances) were available for terms of between 10 and 30 years (subject to a maximum age at expiry of 85) but with guaranteed early maturity options available on each policy anniversary from the fifth anniversary onwards.
- Irish Bonus Mortgage Plans offer guaranteed early maturity options on each policy anniversary from year 10 onwards.
- Certain conventional deferred annuities were written to retirement ages of 70 or 75 but with guaranteed early retirement factors from age 60.

No additional reserve is required for the following guarantees:

- UK Capital Investment Bonds investing in the Series I With-Profits Life Fund guarantee that no MVA will be applied on quinquennial policy anniversaries. There has been no new business since 1997 and so this business falls outside the commencement period for which MVAs apply.
- Irish With-Profits Bonds sold after March 1999 have a surrender value guarantee of a return of premium on the fifth policy anniversary. The amount of basic reserve held is greater than total premium in force, and so no additional reserve is required.

## SPI With-Profits Fund

Product	Basic Reserve	O/S Duration	Gtee Reserve	Gtee Amount	MVA-free conditions	In-force premiums	Incrs Yes/No
	£m	years	£m	£m		£m	
Selected Period Investment	122.6	0 - 34	4.5	73.1	n/a	3.2	No
Step-up Investment Plan	74.0	0 - 34	5.8	91.3	n/a	4.5	No
UK Early Option Mortgage Plans	37.3	0 - 23	1.3	64.1	n/a	3.9	No
Irish Options Plus Endowment Plan	15.3	0 - 35	0.4	11.0	n/a	0.4	No
Irish Capital Options	23.3	0 - 20	1.6	35.9	n/a	2.2	No
Irish Bonus Mortgage Plan	11.9	0 - 23	0.2	13.1	n/a	0.8	No
Deferred annuities (SEDA)	343.4	0 - 47	0.4	23.0	n/a	3.7	No
UK Capital Investment Bonds	58.8	0 - 74	0.0	50.7	On quinquennial anniversaries	0.0	No
Irish With-Profits Bonds	3.9	0 - 79	0.0	3.9	n/a	0.0	No

### (3) Guaranteed Insurability Options

Not applicable

### (4) Other Guarantees and Options

Not applicable.

## 6. EXPENSE RESERVES

### (1) Aggregate Expense Loadings

The aggregate amount of expense loadings, grossed up for taxation where appropriate, expected to arise during the twelve months after the valuation date from implicit and explicit reserves made in the valuation to meet expenses in fulfilling contracts in force at the valuation date is £8.20m. This is composed of the following elements:

	£m
Explicit allowances for investment expenses	0.00
Explicit allowances for other maintenance expenses	5.83
Implicit allowances	2.37

**(2) Implicit Allowances**

The implicit allowance for investment expenses has been calculated as a reduction in the valuation interest rate, which is the rate of the investment manager's fees. The expense by class of business are as follows:

<b>Class of business</b>	<b>Current valuation</b>	<b>Pervious valuation</b>
UK UWP Life	0.140%	0.140%
UK UWP Pens	0.120%	0.140%
UK Conv Life	0.135%	0.140%
UK Conv Pens	0.113%	0.140%
UK NP	0.080%	0.140%
Irish UWP Life	0.140%	0.140%
Irish UWP Pens	0.128%	0.140%
Irish Conv Life	0.140%	0.140%
Irish Conv Pens	0.133%	0.140%
Irish NP	0.105%	0.140%

**(3) Form 43 Comparison**

The total amount of maintenance expenses shown in paragraph 6 (1) is not significantly different from the total shown in line 14 of Form 43.

Form 43 includes £0.30m of performance related investment fees which are not included in paragraph 6.1.

**(4) New Business Expense Overrun**

Since the company is closed to new business, except for contractual increments, it does not expect to incur any material strain in writing new business so no additional reserve is required.

**(5) Maintenance Expense Overrun**

Expense reserves in accordance with paragraph 6 (1) are considered to be sufficient to meet the expenses likely to be incurred in the future in fulfilling the existing contracts.

The expense assumptions allow for the fees payable under a management services agreement plus a prudent allowance for costs that are not covered by standard fees payable under the agreement.

No allowance has been made for redundancy costs (as these will be met by the service provider), or for any costs of terminating the management services agreement (as the service provider does not have the option to terminate the contract).

**(6) Non-attributable expenses**

Not applicable – all expenses are treated as attributable.

## 7. MISMATCHING RESERVES

### (1) Analysis of Reserves by Currency

	Matching Assets			Mismatching Percentage
	Mathematical Reserves	Same Currency	Other Currency	
Currency	£m	£m	£m	
Sterling (£)	1,789.4	1,702.1	87.3	5%
Euro (€)	464.2	397.7	66.4	14%

### (2) Other Currency Exposures

Not applicable

### (3) Currency Mismatching Reserve

No currency mismatching reserve is necessary.

### (4) Most Onerous Scenario Under INSPRU 3.1.16(R)

Not applicable

### (5) Most Onerous Scenario Under INSPRU 3.1.23(R)

Not applicable

### (6) Resilience Capital Requirement

Not applicable

### (7) Additional Reserves Arising From INSPRU 1.1.34(2)(R)

No reserve is required for mismatching. Liabilities are analysed by duration and the investment strategy is chosen appropriately so that there is no significant mismatch between assets and liabilities.

## 8. OTHER SPECIAL RESERVES

No further additional reserves exceed the lesser of £10m and 0.1% of total mathematical reserves.

## 9. REINSURANCE

### (1) Facultative Reinsurance

(a) No premiums were payable on a facultative basis to a reinsurer that was unauthorised to carry on insurance business in the UK.

(b) No premiums were payable to a connected company reinsurer that was unauthorised to carry on insurance business in the UK.

### (2) Reinsurance Treaties

Not applicable

## 10. REVERSIONARY (OR ANNUAL) BONUS

The reversionary bonus rates have been as follows:

Bonus series	Gross mathematical reserves £m	Reversionary bonus rate (current year)	Reversionary bonus rate (previous year)	Total guaranteed bonus rate (current year)
<b>Conventional business</b>				
Conventional assurances (life and pensions)	990.4	0%	0%	0%
Conventional individual deferred annuities and pure endowments (pensions)	606.2	0%	0%	0%
<b>Unitised Business</b>				
Unitised Life Series I	58.8	3%	3%	3%
Unitised Life Series II	36.3	0%	0%	0%
Irish Unitised Life Fund	4.6	0%	0%	0%
Unitised Pensions Series I	320.1	4%	4%	4%
Unitised Pensions Series II	106.4	0%	0%	0%
Irish Unitised Pensions Series I	14.2	4%	4%	4%
Irish Unitised Pensions Series II & III	17.7	0%	0%	0%
Simplified Pension Investment Funding Plan Tranche 5	24.8	5.25%	5.25%	5.25%
Simplified Pension Investment Funding Plan Tranche 6	32.6	4.5%	4.5%	4.5%
Simplified Pension Investment Funding Plan Tranche 7	32.6	0%	0%	0%

For unitised with-profits policies, the reversionary bonus is added daily in the form of growth of the unit price.



## Non Profit Fund

### 3. DISCRETIONARY CHARGES AND BENEFITS

#### (1) Application of Market Value Reduction

Not applicable

#### (2) Premiums on Reviewable Protection Policies

The following table shows the changes to premiums on non-linked reviewable protection policies since the previous valuation date.

Previous Company	Product	No of Policies	Annual Premium (£000s)	Range of increase	
				From (%)	To (%)
BULA	Mortgage Cover Plan	655	236	-3%	0%
BULA	Life Cover Plan	245	75	-6%	0%
BULA	Total Cover Plan	557	209	-31%	0%

The following table shows the reviewable protection policies where there were no changes to premiums since the previous valuation.

Previous Company	Product	No of policies	Annual premium in force (£000s)
Century	Ex-NAL Critical Illness Plan	8,956	2,207
BA	Decreasing term assurance	552	153
BA	Level Term assurance with critical illness	382	68
BA	Critical illness	1,263	269
BA	Pensions term assurance	4,822	780

The following table shows the yearly renewable term assurance policies where there were no changes to underlying premium rates since the previous valuation.

Previous Company	Product	No of policies	Annual premium in force (£000s)
PLL	Progressive Protection Plan	6,848	22,944
PLL	Flexible Mortgage Plan	1,703	544

#### (3) Non-profit deposit administration contracts

##### Policies previously written in PAL

The Pension Plan for the Self-Employed (PPSE) is a deferred annuity contract approved under section 226 of the Income and Corporation Taxes Act 1970.

The Executive Pension Plan (EPP) is designed for treatment as an exempt approved scheme as defined in the Finance Act 1970.

The Voluntary Pension Plan (VPP) provides additional benefits at retirement for members of approved company pension schemes through voluntary contributions of the member.

Under these contracts premiums for retirement benefits are paid into a Pension Account, interest being declared monthly in advance and compounded annually.

The interest rates applied during the valuation year were as follows:

<b>Month</b>	<b>Interest Rate %p.a.</b>
January	3.56%
February	3.57%
March	3.59%
April	3.67%
May	3.67%
June	3.66%
July	3.67%
August	3.66%
September	3.65%
October	3.63%
November	3.55%
December	3.53%

**Policies previously written in SLUK**

The interest rates applied during the valuation year were as follows:

<b>Product</b>	<b>Interest Rate %p.a.</b>
Deposit Administration – Standard	3.60%
Deposit Administration – Dollar Policies Series 1	2.88%
Deposit Administration – Dollar Policies Series 2	2.88%

**Policies previously written in Century**

Non profit Deposit Administration

This is a group deposit administration policy approved under Chapter I, Part XIV of the Income and Corporation Taxes Act 1988.

For premium paying schemes the account accumulates with credited interest additions which are the greater of:

- a) A guaranteed minimum rate of interest of 4% per annum throughout the term of the policy increased by 1.5%; and
- b) A basic credited rate increased by 1.5%.

For paid-up policies, the credited rate is reduced by 2% and the addition and guaranteed minimum cease to apply.

The basic rates declared depend on the month in which the end of the policy year falls. The rates declared in the period covered by this return are 0.00% p.a. for each month.

The Pensions 2000 Range (First Series)

This range consists of four varieties of one underlying group contract capable of exempt approval under Chapter I, Part XIV of the Income and Corporation Taxes Act 1988.

For premium paying schemes the interest additions made to the accounts are the greater of:

- (a) A guaranteed minimum rate of interest of 4% per annum throughout the term of the policy. The guaranteed rate is increased for schemes where the level of annual premium exceeds certain thresholds. These thresholds vary according to the year in which the policy was effected, and are increased from year to year in line with the increase in the Retail Price Index over the period between commencement and renewal dates; and
- (b) A credited rate. This rate is increased as described above.

For paid-up policies the credited rate is reduced by 2% and the threshold increases and guaranteed minimum cease to apply.

The basic rates declared depend on the month in which the end of the policy year falls. The rates declared in the period covered by this return are 0.00% p.a. for each month.

For pooled funded arrangements the base thresholds (i.e. before increasing in line with the Retail Price Index) are generally as follows:

<b>Annual premium</b>	<b>Additional Interest</b>
£4,999 or less	Nil
£5,000 to £9,999	0.50%
£10,000 to £49,999	1.00%
£50,000 or over	1.50%

For the money purchase arrangements additional interest is credited at the following rates:

<b>Annual premium</b>	<b>Additional Interest</b>
£9,999 or less	Nil
£10,000 to £49,999	0.50%
£50,000 or over	1.00%

This scale of thresholds applies to each of the first five policy years of a scheme. In subsequent years the threshold levels are indexed in line with the Retail Price Index.

Century Group Deposit Administration

These are group pension contracts designed to secure approval under Finance Act 1970 as exempt approved arrangements. Benefits are based on the accumulated premiums after provision for administration charges and with the addition of annual dividends, which are linked to the yield on the Unit Linked Century/OMLA Money Pension Fund. There are also guaranteed deferred and immediate annuity rates for the conversion of funds into annuities. Separate life assurance and widows reversionary annuities may be included on a non-profit basis.

Century Personal Pension Plans - pre April 1980

These are deferred annuity contracts approved under Section 226 of the Income and Corporation Taxes Act 1970. Benefits are based on the accumulated premiums after deduction of an annual administration charge and with the addition of annual dividends, which are linked to the yield on the Unit Linked Century/OMLA Money Pension Fund. Separate life assurance may be included on a non-profit basis. There are also guaranteed immediate annuity rates for the conversion of funds into annuities at retirement.

Century Personal Pension Plans - post April 1980

These are deferred annuity contracts approved under Section 226 of the Income and Corporation Taxes Act 1970. Benefits are based on the accumulated premiums after deduction of an annual administration charge and with the addition of annual dividends, which are linked to the yield on the Unit Linked Century/OMLA Money Pension Fund. Regular premiums paid during the first two years of the contract ("Initial Premiums") receive dividends at a lower rate than other premiums. Separate life assurance may be included on a non-profit basis. Dividends are guaranteed to be not less than 4% per annum (1% per annum on Initial Premiums). There are also guaranteed immediate annuity rates for the conversion of funds into annuities at retirement.

Century Capital Pension Plans

These are individual pension contracts designed to secure approval under the Finance Act 1970 as exempt approved arrangements. Benefits are based on the accumulated premiums after deduction of an annual administration charge and with the addition of annual dividends, which are linked to the yield on the Unit Linked Century/OMLA Money Pension Fund. Regular premiums paid during the first year of the contract ("Initial Premiums") receive dividends at a lower rate than other premiums. Life Assurance and widows reversionary annuities may be included on a non-profit basis. There remains an absolute guarantee that bonuses will average at least 4.5% and 1.5% per annum. There are also guaranteed immediate annuity rates for the conversion of funds into annuities at retirement.

Century Executive Pension Plans

These are individual pension contracts designed to secure approval under the Finance Act 1970 as exempt approved arrangements. Benefits are based on the accumulated premiums after deduction of an annual administration charge and with the addition of annual dividends, which are linked to the yield on the Unit Linked Century/OMLA Money Pension Fund. Regular premiums paid during the first two years' of the contract ("Initial Premiums") receive dividends at a lower rate than other premiums. Life Assurance and widows reversionary annuities may be included on a non-profit basis. There are also guaranteed immediate annuity rates for the conversion of funds into annuities at retirement.

**Policies previously written in Alba, BULA, BRS, BA, SMA and SPL**

There are no deposit administration policies in force.

**(4) Service Charges on Linked Policies**

**Policies previously written in PLL, Alba, Century, BULA, SMA and SPL**

The following table shows the range of changes to policy fees on unit-linked contracts during 2010:

<b>Ex-Company</b>	<b>Minimum % increase</b>	<b>Maximum % increase</b>
PLL	-1.43%	4.65%
Alba	0.24%	2.04%
Century	-1.23%	1.36%
BULA	1.96%	5.41%
SMA	0.00%	1.38%
SPL	-3.57%	0.00%

**Policies previously written in BRS**

There are no linked policies with service charges.

**Policies previously written in BA**

There are no linked policies in force.

**(5) Benefit Charges on Linked Policies**

There were no changes to benefit charges on linked policies in the period.

**(6) Accumulating With Profits Charges**

There were no changes to the unit management charges or notional charges on accumulating with profit policies during the year.

**(7) Unit Pricing of Internal Linked Funds**

**Policies previously written in PLL**

(a) Method used for cancellation and creation of units

All units are allocated to policies at the offer price calculated at the first valuation subsequent to the decision to allocate units. For non-Group units the fund is credited with an amount equal to the number of units allocated multiplied by the creation price or cancellation price (depending on whether the assets of the fund are being valued on a creation basis or cancellation basis respectively).

For Group units the fund is credited with an amount equal to the number of units allocated multiplied by the offer price.

All units are de-allocated from policies at the bid price calculated at the first valuation subsequent to the decision to de-allocate units. For non-Group units the fund is debited with an amount equal to the number of units so de-allocated multiplied by the creation price or cancellation price (depending on whether the assets of the fund are being valued on a creation basis or cancellation basis respectively). For Group units the fund is debited with an amount equal to the number of units de-allocated multiplied by the bid price.

Method used to determine prices of non-Group units in internal linked funds (except units in the Old Building Society Fund)

Prices of non-Group units in internal linked funds are calculated periodically thus:

- (i) The assets of the fund are valued at 8 a.m. on the valuation day using, where applicable, the latest available prices supplied by a recognised supplier. Income from the assets of the fund less any appropriate tax charge is credited to the fund. Allowance is made for accrued income less deductions for any tax charges, both actual and prospective, and any other appropriate deductions permitted by policy conditions which includes investment management expenses for certain products.

The assets of the fund are valued on a cancellation basis (i.e. the price at which assets would be sold) or a creation basis (i.e. the price at which the assets would be purchased) depending on the current and recent trend and magnitude of unit transactions in the fund.

- (ii) The value determined in (i) is adjusted by an allowance for dealing costs representing dealing costs incurred in purchasing an identical portfolio if valued on a creation basis or dealing costs incurred in realising the portfolio if valued on a cancellation basis.
- (iii) Except for the Lifestyle Bond fund series and the Pensions Solutions fund series (for the range of pension products launched on 6 April 2001), a fund management charge is deducted from the fund at the applicable rate. The fund value for charging purposes may or may not include dealing costs adjustments and certain tax adjustments depending on policy conditions.
- (iv) The value of the fund thus determined divided by the number of units in issue represents the creation price (if assets are valued on a creation basis) or cancellation price (if assets are valued on a cancellation basis).

- (v) The offer price is calculated as the creation price or cancellation price, if the assets of the fund are valued on a creation basis and cancellation basis respectively, multiplied by A/B and rounded. The bid price is calculated as B% of the offer price and rounded, where:

A = 101 for all ULA and ULPF fund series except Money and Shield fund series

= 100 for other fund series

B = varies between 94 and 100. 100 less B represents the bid/offer spread

- (vi) Prices in the Deposit and Money funds are guaranteed not to fall.

Method used to determine prices in the Old Building Society fund

The unit price of accumulation units on any occasion on which it is determined exceeds the previously determined unit price by at least such percentage as would, if applied successively to the unit price at time intervals equal to the time interval between the two aforementioned determinations, equate over a period of twelve months to the lowest rate of interest used on such occasions or most recently used by Santander (previously Abbey National plc) for new repayment mortgages granted on owner-occupied private domestic premises. In the event that no such rate or more than one rate is used, the Company may use a rate that is in the opinion of the Actuary fair and reasonable. In the case of capital units only, this rate is reduced by three and one-half percentage points (or such other number of percentage points as shall equate to the annual rate of management charge for the time being applicable).

Method used to determine prices of Group units in internal linked funds

Prices of Group units in internal linked funds are calculated periodically thus:

- (i) The assets of the fund are valued on the last working day of the month at 8 a.m. using, where applicable, the latest available prices supplied by a recognised supplier. Income from the assets of the fund is credited to the fund. Allowance is made for accrued income, both actual and prospective, and any appropriate deductions permitted by policy conditions. Certain costs incurred are met by the fund, e.g. custodian's fees, stamp duty and other dealing costs. Investment management expenses are met by the Company.

The assets of the fund are valued on a cancellation basis (i.e. the price at which assets would be sold) or a creation basis (i.e. the price at which the assets would be purchased) depending on whether there is a net cancellation or creation of units at the valuation date.

- (ii) The value determined in (i) is adjusted by an allowance for dealing costs representing dealing costs incurred in purchasing an identical portfolio if valued on a creation basis or dealing costs incurred in realising the portfolio if valued on a cancellation basis.
- (iii) A fund management charge is deducted from the fund at the applicable rate.
- (iv) The value of the fund thus determined divided by the number of units in issue represents the creation price (if assets are valued on a creation basis) or cancellation price (if assets are valued on a cancellation basis).

There is no bid/offer spread. If the fund is valued on a cancellation basis the bid and offer prices are calculated as the rounded cancellation price. If the fund is valued on a creation basis the bid and offer prices are calculated as the rounded creation price.

Method used to determine prices of units in internal linked funds (SLUK, ex-OB Fund)

In pricing units in internal linked funds, investments are valued at the lowest available offer price or the highest available bid price with appropriate allowance for the expenses of purchase or sale. The decision to value on a bid or offer basis is based on whether the trend of the size of the fund is downwards or upwards. The valuation is used to determine the bid price, the offer price being determined by adding the bid/offer spread to the bid price. Units are created and cancelled at the bid price; they are allocated to policies at the offer price and redeemed at the bid price. The prices used are those in effect on the day following a decision to carry out a transaction, or on the day a transaction is effected. Pricing is normally carried out daily for those funds which are invested in equities. For other funds, pricing is normally carried out weekly, the prices applying to the following seven days.

(b) Different Pricing Bases

Other than the differences mentioned in (a), different pricing bases do not apply to different policies.

(c) Units in Collective Investment Schemes

Funds buy units in certain collective investment schemes managed by Ignis Asset Management at the creation price and sell units at the cancellation price. The price used in the fund valuation is in the main from midnight the day before the valuation date, but may be adjusted to reflect market and currency movements from then until the valuation point of the linked fund.

For externally managed funds, purchases are normally made at the offer price and sales at the bid price.

In addition, for fund series formerly in ULA and ULPF, Series 8, 9 and 10 units for funds formerly in SAPL and the Lifestyle Bond and Pensions Solutions fund series, any remaining unit trust or Open Ended Investment Company fund management charge net of any rebate is reimbursed by the Company to the internal linked fund.

**Policies previously written in Alba**

(a) Method used for cancellation and creation of units

For all contracts described in this section, unless otherwise stated, the following features apply:

- All unit purchases are subject to a charge (representing the bid-offer spread) of typically 5%.
  - There is currently no charge for one switch between funds every year (though the company reserves the right to introduce such a charge at any time). Charges are normally made for each switch after the first.
- (i) The price at which the company creates and liquidates units is on the bid price on the day in question.



- (ii) Assets are valued at market values where they exist. The following rules apply:

<b>Asset</b>	<b>Bid price</b>	<b>Offer Price</b>
Cash	Face value	Face value
Internal linked Fund	Bid	Bid
Fixed interest	Bid minus dealing	Offer plus dealing
Internal unit trust	Cancellation	Creation
External unit trust	Bid	Offer
Equity	Bid minus dealing	Offer plus dealing
Property	Market value minus sale costs	Market value plus purchase costs

Most of the "Main Funds", i.e. the Internally Managed BLAS Life and Pensions Funds, are invested directly in Ignis Asset Management Unit Trusts which are mainly valued at noon daily.

Calculating bid and offer values of the units

The asset values used in the calculation of unit prices include an allowance for dealing costs of buying or selling the assets.

The initial charge incorporated into the calculation of maximum offer prices is fixed at 5/95 of the value of the Fund.

- (iii) Basis of valuation of assets

Net sales expected into the medium term - Offer basis

Net repurchases expected into the medium term - Bid basis

Funds' cash flows over the rolling previous four months are reviewed on a regular basis. When the flow looks as if it could be changing direction, the pricing basis may be changed.

- (iv) Timing of asset valuation

The values of the above Funds are generally based on previous day's closing values. Funds which are cross invested in other BLAS Funds are valued after pricing the principal Funds and therefore receive same day price.

The Externally Managed Funds are priced on previous day's closing values, the one Branded Fund being valued daily and the others routinely on the first business day of every month and as required by clients or for claims etc.

(b) Different Pricing Bases

There are no differences applying to different policies.

(c) Collective Investment Schemes

This is covered in (a) above.

## Policies previously written in Century

### (a) Method used for cancellation and creation of units

The valuation price of a unit is calculated by dividing the market value of the relevant assets, including accruals for income and charges and after adjustment for accrued liability for tax on income and on realised and unrealised capital gains and losses, by the number of units in existence for the fund / type.

The creation price of a unit is obtained in the same way as the valuation price, having regard to the offer value of the investments plus the costs of acquisition. The cancellation price is similarly obtained having regard to the bid value of the investments less the costs of disposal.

If a fund has a net cash inflow and this is expected to remain so then the creation price will be used to allocate units to and, within limits, to de-allocate units from funds. Where a fund has a net cash outflow and is expected to remain so then the cancellation price will be used to de-allocate units from and, within limits, to allocate units to funds.

The current method by which the basis of the valuation of assets is selected is as follows.

For each fund a reference level of units is determined, called the tidemark level. Following the creation or cancellation of units, the current number of units is compared to the tidemark. If the fund is on a bid basis and the current number of units is lower than the tidemark then the tidemark is lowered. If the fund is on an offer basis and the current number of units is higher than the tidemark it is raised. If the fund is on an offer basis and the current number of units is less than 95% of the tidemark level then the fund will be moved to a bid basis and the tidemark reset. If the fund is on a bid basis and the current number of units is greater than 105% of the tidemark level then the fund will be moved to an offer basis and the tidemark reset.

In order to avoid going too far past the 5% trigger, before carrying out any large (greater than 3% of the fund) creation / cancellation which is against the existing basis, the unit position against the tidemark is examined in order to determine whether the transaction would trigger a change of basis. If so, the change of basis may be made in advance of the creation / cancellation rather than after.

For funds on a bid basis, the published bid price is determined from the above and, where the policy conditions permit, it may be rounded down by up to 1%. However, most prices are rounded to the nearest tenth of a penny. The offer price is then obtained by multiplying by  $100/(100-\text{bid offer spread } \%)$ .

For funds on an offer basis, the published offer price is determined from the above multiplied by  $100/(100-\text{bid offer spread } \%)$  and, where the policy conditions permit, may be rounded up by up to 1%. However, most prices are rounded to the nearest tenth of a penny. The published bid price is then  $(100-\text{bid offer spread } \%)$  of the offer price.

Valuations are carried out daily based on the investments held as at 9am and using the previous night's closing market values of the investments. Some prices may be adjusted to reflect market and currency movements from the previous close until the valuation point of the linked fund. Unit movements are allocated using the price calculated on the same day as the movements are processed. If a policyholder request to deal is received by post, then it is processed using the price on the day of receipt of the notification. If the notification is received by fax, then the following day's price is used in order to avoid selection against the fund.

**(b) Different Pricing Bases**

Except in very rare situations where a policyholder unit reduction is so large as to attract a dilution levy, at any one time the same pricing bases apply to different policies investing in the same internal linked funds.

**(c) Collective Investment Schemes**

Funds buy units in certain collective investment schemes managed by Ignis Asset Management at the creation price and sell units at the cancellation price. The price used in the fund valuation is in the main from midnight the day before the valuation date, but may be adjusted to reflect market and currency movements from then until the valuation point of the linked fund.

Where externally-managed collective investments are held, either the published offer price or the published bid price of the underlying unit trust is used, as appropriate. The price used in the fund valuation is in the main from midnight the day before the valuation date, but may be adjusted to reflect market and currency movements from then until the valuation point of the linked fund.

**Policies previously written in BULA**

**(a) Method used for cancellation and creation of units**

*Ex-Unit Linked Fund: Other than Pensions Managed Fund business*

Units are allocated to policies at the published offer price on the valuation date immediately following the date of receipt of the premium. On maturity, units are cancelled at the bid price on the valuation date immediately preceding the maturity date. On retirement, units are cancelled at the bid price on the last valuation date in the month of the selected retirement date. On death, critical illness, surrender, transfer, withdrawal, early retirement or other early termination, units are cancelled at the bid price on the valuation date following date of notification. Charges for mortality and terminal and critical illness cover, where applicable, are made by cancelling units at the bid price.

Units are only created in any linked fund if assets equivalent to such units are added simultaneously to the fund. Except for the purposes of meeting all expenses, charges and any tax liabilities or for reinvestment, assets are only withdrawn from any linked fund if units equivalent to such assets are simultaneously cancelled.

The fund is reduced by the weekly management charge based on the number of units multiplied by the published offer price.

Currently unit prices are determined by valuing the assets of the linked funds weekly, normally on a Wednesday, the valuation date. The day and frequency of such valuations may be amended after giving prior notice. The valuation takes account of all assets including uninvested cash. Stock exchange securities are valued using quoted prices. The value of land and buildings, if any, is based on valuations prepared by independent valuers with due allowance for variations since such valuations. The values of other assets are determined after taking any advice from independent experts or valuers where appropriate.

The offer value of a linked fund is the value of the investments at the prices at which they might be purchased on the valuation date, increased by amounts to cover acquisition costs of these investments and for accrued investment income and reduced by amounts to cover provisions for capital gains tax where applicable, other taxes and levies and by the management charge. The offer price of a unit is the offer value divided by the number of units, multiplied by 100/95 and the result rounded to the nearest tenth of a penny. The published offer price may vary below this offer price.

The bid value of the linked fund is the value of the investments at prices at which they might be sold on the valuation date, increased by amounts for accrued investment income and reduced by amounts to cover realisation costs, provisions for capital gains tax where applicable, other taxes and levies and by the management charge. The bid price of a unit is the bid value of the fund divided by the number of units, rounded to the nearest tenth of a penny. The published bid price may vary above this bid price.

When the published prices are based on an offer basis, then the published offer price is the rounded offer price and the published bid price is 95% of the published offer price. When the published prices are based on a bid basis, then the published bid price is the rounded bid price and the published offer price is 100/95 times the published bid price. The offer basis is generally used for periods of net creation of units and a bid basis is generally used for periods of net cancellation of units. All funds are currently on a bid basis.

### *Ex-Unit Linked Fund: Stakeholder Pension*

These funds are priced daily, on an offer basis if there are net creations that day or on a bid basis if there are net cancellations that day. They are single priced and there is no bid/offer spread.

The offer basis price is the value of the assets of the fund, based on the prices at which the underlying assets could be bought, increased by amounts to cover dealing costs and stamp duty, where applicable, divided by the number of units, then reduced by the equivalent of one day's management charge and then rounded to two decimal places.

The bid basis price is the value of the assets of the fund, based on the prices at which the underlying assets could be sold, decreased by amounts to cover dealing costs, divided by the number of units, then reduced by the equivalent of one day's management charge and then rounded to two decimal places.

*Ex-Unit Linked Fund: Pensions Managed Fund Business*

Up to and including 30 November 2003 these funds were priced in a similar way as described above for Stakeholder Pension business.

From 1 December 2003, unit prices are calculated gross of management charges. Management charges are taken by unit encashment.

*Ex-Non-Profit Fund: Other than the Capital and Super Plan*

Unit prices are determined weekly. Unit prices may be determined more frequently at the company's discretion.

Policyholders buy units at the next available published offer price following the day that premiums are paid. Units are bought from policyholders at the next bid price following an instruction to switch units and at the current bid price at the time of maturity or death. Unit charges are deducted at the latest bid price at the time the charge is made. On surrender, units are valued at the latest bid price following receipt of all necessary documentation.

Units in the internal linked funds are created or cancelled at the unrounded offer price to match the number of units allocated or deallocated from policies. When there is expected to be a net purchase of underlying assets over the medium term, the internal linked funds are valued on an offer basis. A bid basis is used when net sales are expected.

When the funds are valued on an offer basis, unrounded offer prices are equal to the net asset value per internal unit for each unit fund. For a particular fund the asset value is:

- the lowest offer value of assets as at the close of the previous working day
- plus an estimate of the buying expenses incurred in purchasing an identical portfolio of assets
- plus investment income (net of tax for life funds)
- minus, for life funds, a provision for accrued realised and unrealised capital gains tax
- minus an amount in respect of accrued annual management charge.

The latter item is deducted weekly.

When the funds are valued on a bid basis, unit allocations and deallocations again take place using an unrounded offer price. This again is equal to the net asset value per internal unit for each unit fund. In this case for a particular fund the asset value is

- the highest bid value of assets at the close of the previous working day
- less an estimate of the cost of realising the portfolio of assets
- plus investment income (net of tax for life funds)
- minus, for life funds, a provision for accrued realised and unrealised capital gains tax
- minus an amount in respect of accrued annual management charge.

The latter is deducted weekly.

On both bases, the published offer price is the unrounded offer price rounded up to the nearest 0.5 pence. The published bid price is calculated as 95% of the published offer price rounded down to the nearer 0.5 pence.

Within each fund, all policyholder units are valued using the same basis.

*Ex-Non-Profit Fund: Capital and Super Plan*

Unit prices are calculated on the 16th of each month based on closing prices on the 15th. Premiums are paid on the 15th of each month and policyholders purchase units at the offer price calculated on the 16th. On maturity or death, units are cancelled at the latest bid price. On surrender, units are cancelled at the latest bid price following receipt of all documentation. Super Plan units may be surrendered only on the 16th of each month. At the company's discretion Capital Plan units could be surrendered at the next available bid price.

Bid/offer spreads and the pricing basis is laid down in the policy documents. The published Capital Offer price is the unrounded price multiplied by 1.0125 rounded to the nearest half pence. The published Capital Bid price is calculated as 0.9875 times the unrounded price rounded in the same way as the Offer price. The published Super Plan Offer price is the unrounded price multiplied by 1.0175 rounded in the same way as the Capital prices. The published Super Plan Bid price is calculated as 0.9825 times the unrounded price rounded in the same way as the Capital prices.

Unrounded prices are equal to the net asset value per internal unit for each unit fund. For each fund the asset value is the mid market value of assets as at the close on the 15th of the month minus a provision for accrued realised and unrealised capital gains tax.

(b) Different Pricing Bases

The same pricing bases apply to different policies investing in the same internal linked funds.

(c) Collective Investment Schemes

Funds buy units in certain collective investment schemes managed by Ignis Asset Management at the creation price and sell units at the cancellation price. The price used in the fund valuation is in the main from midnight the day before the valuation date, but may be adjusted to reflect market and currency movements from then until the valuation point of the linked fund.

Where externally-managed collective investments are held, either the published offer price or the published bid price of the underlying unit trust is used, as appropriate. The price used in the fund valuation is in the main from midnight the day before the valuation date, but may be adjusted to reflect market and currency movements from then until the valuation point of the linked fund.

**Policies previously written in BRS**

(a) Method used for cancellation and creation of units

For the Equity Release Plan there is a single unit in each individual internal linked fund. For the purpose of determining unit prices, properties in the funds are held at vacant possession open market value. Properties are independently valued at acquisition and at least once every three years thereafter. The internal linked funds are valued at least once in each calendar year on the basis of the most recent valuation of the property adjusted using statistics for movements in house prices since the date of the last valuation.

(b) Different Pricing Bases

The same pricing basis is used for all policies at all times.

(c) Collective Investment Schemes

The units are not in collective investment schemes.

**Policies previously written in BA**

The unit liabilities for unit linked policies were reinsured to BULA. See "*Ex-Unit Linked Fund: Other than Pensions Managed Fund business.*"

**Policies previously written in SMA and SPL**

(a) Method used for cancellation and creation of units

The pricing basis depends on whether the unit-linked fund is expanding or contracting.

The company reviews the pricing basis regularly. Most funds are priced on a contracting basis and in general each fund will be considered to be contracting unless there is evidence of material new money being paid into the fund and a likelihood that will continue over the medium term.

The Bare Price of the fund is the creation Price or cancellation Price, depending on which pricing basis is being used (see below for details).

Method used for allocation and de-allocation of units

The quoted offer price for a particular day is the Bare Price divided by (1 minus the initial charge) and rounded up by no more than 0.1p. The initial charge is typically 5 or 6%.

The quoted Bid Price equals the quoted Offer Price adjusted for the Bid-Offer Spread (usually equal to the Initial Charge) and rounded to the lower 0.1p.

The prices used for transactions on a particular day are determined based on the asset position of the fund at 12pm on the previous working day (except Broker Managed Funds which are priced at close of business). The timing of the transaction relative to the time at which the policyholder requested the trade varies by product and is defined in the policy conditions.

Exceptional circumstances

Special bid and offer prices may be quoted for a material transaction or series of bid and offer prices may be quoted for a material transaction or series of transactions. "Material" means any one transaction or series of transactions which are of such a size that the company considers the basis of the pricing should change from creation to cancellation or vice versa to maintain equity between the transacting policyholders and remaining policyholders in the fund.

(b) Different Pricing Bases

Not applicable.

(c) Collective Investment Schemes

The internal linked funds managed by Ignis invest predominantly in unit trusts and OEICs. These collective investment schemes are in the main priced daily at 12pm, using either the creation or cancellation price for the collective investment scheme as appropriate for the net expansion or contraction of the linked fund. The price calculated for the collective investment scheme on a particular day is used in the valuation of the linked fund on the same day and is the price at which policyholder transactions in the linked fund on that working day are based.

Where funds are invested in externally-managed collective investment schemes, they are valued using either offer or bid prices as appropriate for the next expansion or contraction of the fund.

In all cases prices of collective investment schemes may be adjusted to reflect market and currency movements from their valuation point until the valuation point of the linked fund.

**(8) Tax Deductions From Internal Linked Funds**

This section is applicable to taxable life funds only. Pension funds may suffer tax to the extent that deductions cannot be reclaimed on underlying assets, although there would be no direct deductions in unit pricing.

**Policies previously written in Alba**

Tax on income

Tax on income is calculated at the full policyholder tax rates on all investment income.

Tax on loan relationships

For loan relationships both income and capital gains are taxed under the provisions for income. Accordingly, tax is calculated on the full policyholder tax rates on both elements. Full credit is given for actual and anticipated tax losses.

Capital Gains Tax (CGT) on other assets

Tax is applied to each internal linked fund as if it were a separate fund for tax purposes.



## Non Profit Fund

For ordinary disposals each taxable gain is charged at the rate in force at the time of disposal. Details of tax liabilities in respect of investment income and realised capital gains are incorporated into unit pricing from the investment ledger on a daily basis.

In the case of deemed disposals, this is carried out at the end of each financial year and the tax deducted from the funds. Where a gain occurs subsequent to previous losses, those losses are used to offset the gain. Where a loss occurs subsequent to gains in the previous 2 years an amount of tax is credited back to the fund. Tax expected to be payable in current and future years as a result of a deemed disposal is removed from the fund in full but at a discounted rate, during the deemed disposal process. The rate at 31 December 2010 was 18%

Current liabilities are maintained in the fund which reflect the Fund's accrual of unrealised capital gains but this may be discounted to the extent that tax on them can be deferred. While a fund is valued on a bid basis in response to net outflow of policyholder money, the full rate of tax is applied to unrealised gains.

An appropriate allowance is made for indexation in the calculation of gains subject to taxation.

The above can be summarised as shown in the following table.

	<b>Bid basis</b>		<b>Offer basis</b>	
	<b>Gains</b>	<b>Losses</b>	<b>Gains</b>	<b>Losses</b>
<b>Investment income</b>	Provided at full rate -20%	N/A	Provided at full rate -20%	N/A
<b>Loan relationships</b>	Provided at full rate – 20%	Provided at full rate – 20%	Provided at full rate – 20%	Provided at full rate – 20%
<b>Realised gains and losses</b>	Provided at full rate – 20%	Provided at nil	Provided at full rate – 20%	Provided at nil
<b>Unrealised gains and losses</b>				
<b>Main Life Funds</b>	Provided at 18%	Provided at nil	Provided at 18%	Provided at nil
<b>Personal Bonds</b>	Provided at 20%	Provided at nil	Provided at 20%	Provided at nil
<b>Deemed disposals</b>	Provided at discounted rate – 18%	Credit to the extent that prior deemed gains exist in the previous 2 years.	Provided at discounted rate – 18%	Credit to the extent that prior deemed gains exist in the previous 2 years.

### **Policies previously written in Century and BULA**

This includes policies transferred from Allianz Cornhill and the unit liabilities of BA policies which were reinsured to BULA.

Tax on income

Tax on income is calculated at the full policyholder tax rate of 20%.

Tax on loan relationships

For loan relationships both income and capital gains are taxed under the provisions for income. Accordingly, tax is calculated on the full policyholder tax rates on both elements. Full credit is given for actual and anticipated tax losses.

Capital Gains Tax (CGT) on other assets

Tax is applied to each internal linked fund as if it were a separate fund for tax purposes. Realised tax is removed from the funds on a quarterly basis for Century and at least annually for BULA.

In the case of unit trusts, a deemed disposal is carried out at the end of each financial year and the tax deducted from the funds. Where a gain occurs subsequent to previous losses, those losses are used to offset the gain. Where a loss occurs subsequent to gains in the previous 2 years an amount of tax is credited back to the fund. Tax expected to be payable in current and future years as a result of a deemed disposal is removed from the fund in full but at a discounted rate, during the deemed disposal process. The rate at 31 December 2010 was 18%

Realised and unrealised capital gains are calculated as the difference between the sale proceeds and indexed pooled book cost or, in the case of unit trusts, the indexed pooled market value at the date of the latest deemed disposal with adjustments for any subsequent transactions. The unrealised provision is calculated at a rate of 18% where funds are primarily invested in assets subject to deemed disposal, and 20% otherwise. Tax on realised gains is deducted at 20%.

All funds are currently priced on a bid basis except for the Capital and Super Plan Funds, which are priced on a mid basis. The tax on unrealised gains for these funds was provided for at 18% in 2010.

**Policies previously written in BRS**

No deductions are made for capital gains tax in the Equity Release Plan internal linked funds.

**Policies previously written in SMA and SPL**

Each individual linked fund is treated as a separate entity for the purpose of tax.

Tax on income

Tax on income is calculated at the full policyholder tax rate of 20%.

Tax on loan relationships

For loan relationships both income and capital gains are taxed under the provisions for income. Accordingly, tax is calculated on the full policyholder tax rates on both elements. Full credit is given for actual and anticipated tax losses.

Capital Gains Tax (CGT) on other assets

If there are net overall realised and unrealised gains, the calculation of the unit price will include a charge for the tax expected to be payable on these gains. Gains are reduced for the benefit of indexation relief, where available. If there are net overall realised and unrealised capital losses, the unit price may include a credit for the expected tax relief that the company can obtain on these losses. If this credit is not given for these losses, they are carried forward in a memorandum account to be offset against future gains.

At the end of each year the charge for the tax on accrued realised gains is cash settled with the non profit fund. The fund may be paid a cash credit for tax relief on accrued realised losses. Unrealised gains and losses are carried forward to the next accounting period.

The rate of tax charge on gains is the policyholder tax rate, which may be discounted to reflect timing until the tax is paid, including allowance for spreading of gains under the deemed disposal rules where the underlying holding is a collective investment vehicle. The rate of tax relief on losses is the policyholder tax rate discounted to reflect timing until it is expected that the loss can be used by the company to be offset against future gains.

For UK and Eire funds, as at 31 December 2010 the rate applying to net realised gains was 20%. Net unrealised gains were taxed at 18% where funds were primarily invested in assets subject to deemed disposal, and 20% otherwise. No tax relief was being given where there were net losses. Deemed disposals were taxed at the rate of 18% and income was taxed at 20%.

**Other Policies**

Tax on income

Tax on income is calculated at the full policyholder tax rate of 20%.

Tax on loan relationships

For loan relationships both income and capital gains are taxed under the provisions for income. Accordingly, tax is calculated on the full policyholder tax rates on both elements. Full credit is given for actual and anticipated tax losses.

Tax on Realised Capital Gains

The provision for tax on realised capital gains on chargeable assets within internal funds is calculated at each valuation by applying a tax rate to the realised capital gain calculated as the excess of the proceeds on disposal of the asset less the book cost of the asset with appropriate allowance for indexation relief.

Any brought forward realised capital losses are applied to offset any realised capital gains within the same fund.

The tax rate applied to realised capital gains does not exceed that which would apply if the fund comprised the whole of the Company's life assurance fund with no allowance being made for expenses. For chargeable assets excluding gilts and bonds, the rate of tax applied during the report period has been 20%. Throughout the report period the rate of tax for gilts and bonds, where a tax rate has applied, was 20%. The provision for tax on realised capital gains is deducted from the fund annually at the end of each year.

For realised capital gains arising from Sections 212 to 214a of the Taxation of Chargeable Gains Act 1992 (deemed disposals), one seventh of the gain is provided for as above. The balance of the instalments is taxed at an appropriate rate (18%) and the provision is held within the fund. When the capital gains tax charge on a subsequent instalment falls due, the instalment is removed from this provision and treated as other realised tax charges described above.

Where policy benefits are linked to directly held assets, namely authorised unit trusts or other collective investment schemes, a deduction is made from the policy benefits when units are de-allocated representing tax on the realised capital gains as permitted by policy conditions. During the report period the rate of tax applied has been 18% throughout.

Tax on Unrealised Capital Gains

The provision for tax on unrealised capital gains on chargeable assets within internal funds is calculated at each valuation by applying a tax rate to the unrealised capital gain calculated on the excess of the market value of the asset less the book cost of the asset with appropriate allowance for indexation relief.

Any brought forward realised capital losses remaining after offsetting against the provision for realised capital gains are applied to offset any unrealised capital gains within the same fund.

During the report period the rates of tax applied have been:

Assets within internal fund	Offer basis	Bid basis
Equities and other company securities	17%	20%
Unit trusts etc. *	17%	20%
Property	17%	20%
Gilts and Bonds	20%	20%

\* i.e. assets within the scope of the deemed disposal provisions.

**(9) Tax Provisions for Internal Linked Funds**

An additional reserve has been held at previous valuations due to a mismatch between the capital gains position of individual life linked funds and the overall position of the company. This mismatch no longer exists and the reserve has been released.

**Policies previously written in PLL**

For assets of internal linked funds, provision for tax on unrealised capital gains has been implicitly included in the unit liability, the latter being equal to the value of the corresponding linked funds which has been adjusted to allow for future tax on capital gains.

Tax rates used in the determination of the provision are described above in 3(8).

This method applies to all types of units.

**Policies previously written in Alba**

These are covered in paragraph 3 (8) above.

**Policies previously written in Century**

During the year, realised and unrealised gains and losses are notionally credited in the pricing process. Tax is deducted and credited at the current rate used to calculate the unrealised provision.

Realised and unrealised capital gains are calculated as the difference between the sale proceeds and indexed pooled book cost or in the case of unit trusts, the indexed pooled market value at the date of the latest deemed disposal with adjustments for any subsequent transactions. Tax rates used in the determination of the provision are described above in 3(8).

Income, realised gains and unrealised gains in respect of loan relationships were, at the valuation date, taxed at 20% having regard to the pooled market value at the date of the latest mark to market.

**Policies previously written in BULA**

In determining unit prices, realised and unrealised gains have been allowed for as follows:

The value of the assets of the linked funds is reduced by any tax due on realised gains (after taking account of unrelieved tax losses). For realised losses, no allowance has been made for any tax credit since July 2001.

For unrealised gains, (net of unrelieved tax losses) a provision for the tax charge has been made. For unrealised losses, no allowance has been made for any tax credit. Capital losses on each fund are treated individually.

Deemed disposals on unit trusts have been treated as realised gains.

Tax rates used in the determination of the provision are described above in 3(8).

The rate of tax levied on unrealised fixed interest gains was 20% of the unrealised amounts.

**Policies previously written in BRS**

A deferred tax provision is held to cover chargeable capital gains made up to the valuation date. The current tax rate applicable to capital gains is currently 20% and the provision covers 100% of this.

**Policies previously written in BA**

There are no internal linked funds.

**Policies previously written in SMA and SPL**

Each internal fund is treated as an independent entity for the purposes of assessing capital gains tax. A rate of tax is levied on the gain net of any indexation relief and capital losses, as appropriate.

The maximum rate of tax for realised capital gains is the policyholder rate of tax for the period in question. Where appropriate, this may be reduced to reflect the period between the realisation of the gain and the date when the tax is actually due to be paid.

The maximum rate of tax for unrealised capital gains is the rate for realised capital gains. This is normally reduced to reflect the extra expected period until the gain is finally crystallised.

Tax rates used in the determination of the provision are described above in 3(8).

In respect of the Long Term Care Fund (SPL), only one third of the above UK tax rates apply. This is based on the average mix of taxable and gross business in that fund.

**(10) Discounts on Unit Purchases**

**Unit Trust Life and Unit Trust Pension Policies previously written in PLL**

The internal linked funds purchase units in collective investment funds managed by certain companies with no connection with the Company where discounts are received on the Initial Charges.

These are detailed below:

<b>Investment Management Company</b>	<b>Initial Charge Discount</b>	<b>Fund buys at:</b>
Framlington	4.00%	-
Henderson	-	Creation price + 0.5%
Barings	4.50%	-
Gartmore	4.50%	-
Invesco	3.00%	-
Perpetual	4.50%	-

**Personal Bond Funds, Broker Bond Funds, Executive Pension Plans, Broker Funds and Broker Direct Investment previously written in PLL**

Funds buy units in unit trusts and other collective investment schemes managed by Foreign & Colonial Asset Management at the creation price.

All the benefits are passed on to the internal linked fund and therefore reflected in the unit price.

**Direct holdings of assets in PLL**

The Company holds authorised unit trusts and investments in other collective investment schemes which are direct holdings of assets matching liabilities in respect of property linked benefits.

The Company receives a discount of 5% on the Initial Charge when buying units in respect of unit trusts managed by the JP Morgan Fleming. The benefit of this discount is retained by the Company.

The Company receives a discount of 4.5% on the Initial Charge when buying units in respect of unit trusts managed by Gartmore Fund Managers. The benefit of this discount is retained by the Company.

**External Fund links for the Lifestyle Bond previously written in PLL**

Certain funds available to the Lifestyle Bond buy or sell units in funds operated by external companies with no connection with the Company at the creation or liquidation price.

The company receives a rebate of management charge in respect of holdings in such External funds as set out in the following table:

<b>External Fund Link</b>	<b>Rebate p.a.</b>
Framlington Health	0.55%
Framlington Absolute Growth	0.75%
Framlington UK Growth	0.65%
Gartmore American	0.75%
Gartmore Euro Select	0.75%
Gartmore UK & Irish Companies	0.75%
Aberdeen Technology	0.75%
Aberdeen Ethical	0.95%
Newton Life Managed	1.00%
Newton Life Balanced	1.00%
Newton Life Continental	1.00%

The rebates received are reimbursed (net of tax at 20%) by the Company to the internal linked fund.

**External Fund links for Pensions Solutions Products previously written in PLL**

Certain funds available to Pensions Solutions products buy or sell units in funds operated by external companies with no connection with the Company at the creation or liquidation price.

The company receives a rebate of management charge in respect of holdings in such funds External funds as set out in the following table:

<b>External Fund Link</b>	<b>Rebate p.a.</b>
Baillie Gifford Managed	0.00%
Framlington Health	0.55%
Framlington Absolute Growth	0.75%
Framlington UK Growth	0.65%
Gartmore American	0.75%
Gartmore Euro Select	0.75%
Gartmore UK & Irish Companies	0.75%
Aberdeen Technology	0.75%
Aberdeen Ethical	0.95%
Newton Life Managed	1.00%
Newton Life Balanced	1.00%
Newton Life Continental	1.00%

The rebates received are reimbursed by the Company to the internal linked fund.

**Policies previously written in Alba, BULA, BRS and BA**

No units are held that need to be reported.

**Policies previously written in Century**

The assets of the internal linked funds of the Company include unit trusts and other collective investment schemes, e.g. OEICs, ICVCs and UCITS, available from a range of fund managers.

In general, discounts are available to the Company on the purchase of units and these are passed on to the policyholder. The majority of the assets in what were formerly Century's unit linked funds are managed by Ignis Asset Management Limited and Invesco Fund Managers Limited. Both fully rebate their initial charge.

Both Ignis Asset Management Limited and Invesco Fund Managers Limited rebate to the Company a part of the annual management charge levied by them with the exception of Invesco assets held by the Perpetual Managed Funds. For the majority of the internal funds, the amount rebated to the Company is credited to the relevant fund, less tax where appropriate. Specifically:

- (i) The following linked funds are rebated some or all of the amount received by Century Life in respect of those funds, subject to the deduction of tax in the case of life funds. This applies to:

- Certain Ex-NBA Performance Bond fund links to IAM
- Ex-NBA Multichoice life funds
- Ex-NEL Pensions Multichoice funds
- Ex-CCL funds
- Ex-Crown funds
- Ex-Prosperity funds
- Ex-Hiscox funds
- Ex-City of Edinburgh funds
- Ex-UK Life funds
- Ex-OMLA funds



- (ii) Certain funds are rebated the whole of the unit trust annual management charge, subject to tax. This applies to:

Ex-NBA Performance Bond fund links to Invesco and certain links to IAM  
Ex-NBA Pensions  
Ex-NEL Pensions NELEX fund links to Invesco and IAM except Invesco  
Exempt Trust fund  
Ex-NAL Funds

- (iii) Certain funds receive no rebate at all. The funds are:

Ex-NEL Pensions NELEX Invesco Exempt Trust fund  
Ex-Sentinel funds  
Broker funds\*

\*In respect of unit trust investments held within broker funds neither Ignis nor Invesco rebate their annual management charges to the Company.

**Policies previously written in SMA**

Where internal linked funds invest in units in collective investment schemes, any discount or other allowance negotiated with the fund manager of the units is fully passed on to the appropriate policyholders.

**Policies previously written in SPL**

Where internal linked funds invest in units in collective investment schemes, the policyholder benefits to the full from any discount achieved on the purchase of such units and the valuation of such units reflects the discounts achieved. For investments in an Ignis Asset Management (IAM) collective investment fund, units are purchased at the creation price and sold at the cancellation price, i.e. IAM fully rebates the initial charge. A rebate is only payable if the underlying IAM collective investment scheme has an annual management charge that exceeds the annual management charge payable on the insurer's fund. No renewal commission is payable by IAM.

## **4. VALUATION BASIS**

### **(1) Valuation Methods**

**Policies previously written in PLL**

A gross premium method has been used except for a small number of ex-SLUK non-profit policies which have been valued using the net premium method.

In respect of fixed immediate, reversionary and index linked annuities, the liability has been taken as the present value of all future annuity payments, valued according to the contractual mode of payment, together with the relevant expenses. Allowance has been made where annuity payments are guaranteed for a minimum number of years.

For guaranteed rate individual PHI policies the gross premium method was used in the valuation. Gross premiums were reduced by the greater of the amount of renewal commission and 2.5%. In addition there is an annual per policy loading for all contracts. Any waiver of premium benefits are brought into the calculation of the reserves as an addition to the sum assured. The reserves thus calculated were then increased to provide, inter alia, for:

- (i) extra premium payable on account of health or occupation. Policies carrying an extra premium have an additional reserve of 2 years' extra premium (PAL only);
- (ii) an additional reserve making full provision for claims in payment on the valuation date; and
- (iii) the inclusion of additional reserves for claims incurred but not yet reported and claims notified but not yet accepted.

For group risk contracts the reserve is made up as follows:

- (i) a reserve in respect of the risk exposure relating to the period from the valuation date to the next premium due date,
- (ii) 10% of premiums in force on the valuation date,
- (iii) the discounted value of PHI claims in course of payment, and
- (iv) a reserve in respect of claims which have not yet been reported, whether as a result of the deferred period (for PHI claims) or for other reasons.

The liability in respect of Progressive Protection contracts is taken as one year's office premium in respect of life cover, and one and a half years' premium in respect of critical illness cover.

The liability for Flexible Mortgage Protection contracts is taken as three and a half years' office premium in respect of life cover, and four years' premium in respect of critical illness cover.

In respect of policies issued on sub-standard lives, where an extra premium was imposed, a reserve of not less than 100% of one year's extra premium was established.

#### Deposit administration contracts (PAL)

The liability for Pension Plans was calculated as:

- (i) the total Pension Accounts; plus
- (ii) an allowance for any death in service benefits provided under the Executive Pension Plan; plus
- (iii) an allowance to provide for investment guarantees; plus
- (iv) an annual per policy expense.

#### Deposit administration contracts (SLUK)

For Deposit Administration contracts and Deferred Annuities by Cash Accumulation, the reserve is the discounted value of expected future transfers from the accounts, including bonuses at the current rate. The discounted value of the payments due on surrender of the contract has been used where this produces a higher reserve.

Linked Contracts

In respect of all other unit linked contracts the liability is determined on the following basis:

Unit liability – for all contracts, the unit liabilities were taken as the number of units deemed allocated in accordance with the funding plan where applicable and allowing for future cancellation of cancellable units multiplied by the unit price in the relevant fund or unit trust/OEIC at the valuation date. For this purpose unit prices in the internal linked funds have been calculated using the bid value at the valuation date of the assets of the relevant fund.

Non-unit liability – for all contracts, except those listed below, the liability is calculated using cash flow projection methods. Allowance is made within the cash flow projection for mortality and expenses. For ex-RSALI business negative sterling reserves are allowable as long as total unit and sterling reserves are at least equal to surrender values.

The total liability is the sum of the unit and non-unit liabilities.

For Protection Plan, a proportion of each premium, less a charge for life cover, is invested in units and placed in the “Reserve Account”. On each policy anniversary the value of the units in the “Reserve Account” is compared with a guaranteed value (calculated using a net premium formula with interest at 2.5% and mortality assuming A49/52) and the number of units is reduced so that the value of units in the “Reserve Account” is equal to the guaranteed value. The balance of units (if any) is transferred to the “Bonus Account”.

The claim value is the sum assured plus the value of units in the “Bonus Account”. The surrender value, after two years’ premiums have been paid, is the guaranteed value at each policy anniversary plus the value of units in the “Bonus Account”.

The total liability is the sum of the unit and non-unit liabilities (including the value of units in the “Bonus Account”), subject to a minimum of the surrender value.

The approach adopted to calculate the non-unit liability for policies not valued using a discounted cash flow basis is set out below.

Isle of Man Substitute Plans (Series I and II)	5% of annual premium
Group Pension Scheme	1% of unit liability plus one month's premium
International Mortgage Plan	5% of annual premium
Flexibonds	5% of unit liability
Isle of Man Substitute Plans (Series III)	5% of unit liability
Universal Protection Plan	3 months' servicing expense charges
Vested Pensions Policy	Value of future expenses
Annuity in Payment	Value of future expenses

For Partners Pension Plan, Pension Fund Investment Policy, Pension Fund Trustee Investment Policy, Private Companies Pension Fund Investment Policy, Retirement Annuity Policy, Group Schemes, Shield, Lloyds Bank, Individual Bonds (inc. CTT Plan), no cash flow projections were made. This is because such ongoing expenses are currently less than the ongoing monthly management charge on the units and anticipated to be so in the future.

The liability in respect of benefits on contracts reassured from Phoenix and London Assurance Limited (PALAL) on a risk premium basis is taken as three months' risk premiums in respect of these benefits, as charged to policyholders by PALAL. (PALAL pays Phoenix Life Limited 87.5% of these risk premiums in respect of life cover reassurances, and 91% of these risk premiums in respect of reassurances of the Living Benefit and Medical Expenses Benefit on Universal Protection Plan).

For products where the valuation method does not allow for future lapses as outlined in paragraph 4 (9), negative reserves have been eliminated.

**PAL Reassured Contracts**

Business is accepted under reinsurance treaties with companies overseas under which the Company receives a share of the whole business. The liabilities have been calculated on the valuation basis adopted by each ceding company. The liabilities are the amounts which have been deposited with each ceding company as security for the Company's obligation; each reinsurance treaty contains a clause that the mathematical reserve must be deposited with the ceding company.

**Policies previously written in Alba**

The mathematical reserve for all unitised contracts linked to units in the unit linked fund has been calculated as the sum of (i) and (ii) below:

- (i) The face value of units, which is based on the number of units at the valuation date.

- (ii) A sterling reserve calculated by discounting projected future cashflows and allowing for future expenses. For regular premium paying policies, the reserves are based on the higher of:
- (a) the reserve calculated assuming that regular premiums continue to be paid at the current level and
  - (b) the reserve calculated assuming that premiums cease and the policy becomes paid up at the valuation date.

**Exceptions:**

- (a) No negative reserves have been included and no contract of insurance has been treated as an asset.
- (b) For property linked business an amount equal to the provision in the pricing of the internal linked funds at the valuation date has been reserved for the prospective liability to tax on unrealised capital gains.
- (c) No specific reserve has been made for investment performance guarantees for property linked contracts.

For the Capital Investment Bond and Mortgage Minder arising from BLA, no specific reserve has been considered necessary for the Cash Fund guarantee because the backing assets are deposits or short term securities.

**Policies Arising From BLAS**

Mortality reserves in respect of guaranteed and other death benefits were set up as follows:

Pre 1982 series. Assuming a 25% fall in unit values, very few contracts would have a sum assured at risk. A nominal reserve is held.

Post 1981 series and pension business. With the exception specified below, the reserve is twice the monthly risk charge for the relevant benefits, adjusted for extra premiums.

The reserve set up for waiver of premium benefits under the Personal Pension Plan is the accumulation of premiums paid subject to a maximum of three years' premium, adjusted for extra premiums.

For permanent health insurance benefits the reserve set up is the accumulation of premiums paid subject to a maximum of three months' premiums, adjusted for extra premiums.

- (d) Other specific reserves have been set up for the following contracts:
  - (i) On Growth Property Bonds Series 1 and 2, Capital Investment Bonds and single premium pension plans, the unit liability was the value of units allocated plus loyalty bonus units accrued to the valuation date.

(ii) For Mortgage Minder and regular premium unit linked pension policies the unit reserve was equal to the value of the units allocated to date. A mortality reserve was held equal to one third of the current month's mortality charge.

(iii) Genesis pension contracts have been valued by a cash flow method for linked benefits.

(iv) LASPEN Managed Fund

The valuation net liability comprises the unit liabilities at the valuation date and the amount of premiums received by the valuation date to be allocated to the purchase of units at the next allocation date.

(v) Post 1 January 1995 Contracts

A reserve for future mortality and expenses was generated by calculating a present value of future charges, expenses and costs of risk benefits. The charges assumed are those actually deducted from the contract and the bases for expenses and mortality are shown in sections 4(4) and 4(6).

(vi) Segregated Pension Funds

Certain Segregated Pension funds have outstanding loans matched against property assets. No additional reserve was required regarding the recovery of these loans.

### **Policies previously written in Century**

The total liability, net of reinsurance, for all classes of business where a prospective method of valuation has not been used is not significant in comparison with the total mathematical reserves for the Company.

The valuation methods used in the valuation of the significant groups of business were as follows.

#### **Non-linked Whole Life and Endowment Assurance**

For all non-linked whole life and endowment assurance contracts, the reserve was calculated using a gross premium method of valuation.

Policies have been issued subject to a lien and under certain Endowment Assurance policies the sum payable on death may be less than the sum payable at maturity. In the valuation an amount equal to the sum payable on maturity has been assumed to be the sum payable at death.

The reserves calculated were tested against the guaranteed surrender value and if the latter was the greater then this amount was held as the valuation reserve. Any negative reserves arising were individually eliminated by reducing the value of the valuation premiums so as to make the mathematical reserves zero.

Policies which have been granted guaranteed bonus additions have been valued as non-profit policies with a sum assured increasing at the guaranteed rate. Additional reserves have been included for the guaranteed terminal bonus on ex-Hiscox ex-with profit policies.

For waiver of premium benefits the liability has been taken as 75% of the accumulated annualised premium plus a reserve for claims in payment at the valuation date.

Guaranteed Security Bonds were valued using a cashflow method.

### Term Assurances

For all term assurance contracts a gross premium method of valuation was used.

For Ex-Prosperity Decreasing Term Assurances and Pension Term Assurances costed by recurrent single premiums, 100% of either the annual or single premium was reserved, as appropriate.

A distinction has been made for policyholders of certain ex-NEL Term Assurances and reducing Term Assurances between those who do and those who do not smoke.

For ex-CCL Convertible Term Assurances an additional reserve of 10% of premiums paid for policies issued up to 1979 and 15% of premiums paid for policies issued after 1979 was held. For all other Convertible Term Assurances an additional reserve of 10% of all premiums paid accumulated with compound interest at the valuation rate has been made.

For ex-FMI contingent assurances a reserve equal to the single premium was made.

A 13% Mortgage Repayment Table was assumed to apply to all ex-NEL and ex-Sentinel Mortgage Protection policies. A 6.75% Mortgage Repayment Table was assumed to apply to all ex-Consumers Mortgage Protection policies. A 12% Mortgage Repayment Table was assumed to apply to all policies originally issued by CCL and a 15% table to all policies originally issued by Shield. For ex-NAL Mortgage Protection Plans a mortgage rate of 8% was assumed in determining future sums assured.

For policies where the extended term non-forfeiture provision was in operation on the valuation date, a reserve was held to cover the liability during the remaining period of non-forfeiture and, for endowment assurances, any maturity payment at the end of the period.

For accidental death benefits, the reserve held was an amount equal to the unexpired portion of the premium plus two months' premiums plus a reserve for claims in payment on the valuation date. For ex-Prosperity Accident Income Plans the reserves were calculated as one half of the annual premiums in force. An additional reserve was held for claims in payment.

For lives accepted at non-standard rates, the additional reserve held was an amount equal to 150% of the annual office extra premium.

In the case of reassurances accepted or ceded by the Company on a risk premium basis, a reserve equal to 50% of the current premium has been set up where premiums are paid annually, and equal to one month's premium where premiums are paid monthly.

No credit has been taken for risk premium reinsurance ceded on ex-CFS policies as this is costed on a quarterly census method.

Ex-Prosperity Group life assurances were valued by reserving either 60% of the annual premium or the unearned proportion of the single premium, as appropriate. The liability in respect of other Group Life schemes has been calculated as  $(12-n)/12$  multiplied by one year's office premium, where n is equivalent to the number of complete months of cover since the last renewal date. In the case of schemes paying premiums on a monthly basis one month's premium has been reserved.

For annual premium Group Death in Service contracts providing Spouses' Pensions benefits, the wives have been assumed to be 3 years younger than their husband. For ex-Crown policies, a reserve has been made for Group Death in Service Benefits by recurrent single premium of a proportion of the office premium corresponding to the unexpired period of risk calculated to the higher month.

The liability for Payment Protection Benefits on ex-NAL Pensions Life Assurance Plans was taken as one annual premium. The liability for Payment Protection claims in payment was taken as five times the annual premium for the main contract.

A reserve has been held for death claims which have not been reported equal to two months' expected death cost net of reinsurance. A similar reserve has been held for critical illness claims equal to three months' expected claim cost net of reinsurance.

For Creditor schemes, the liability was taken as the total amount of unearned premiums (net of commission) as at the valuation date assuming that all risks commenced at the end of the premium payment month. The single premiums are taken to be earned in proportion to the cost of risk assuming that loan repayments are uniform over the term of each loan and that the claims rate remains constant. The valuation methods make implicit allowance for claims incurred but not reported as at the valuation date. The liabilities were increased by the amount of any experience profit share accrued to the valuation date.

Any negative reserves arising were individually eliminated by reducing the value of the valuation premiums so as to make the mathematical reserves zero.

#### Non-linked Deferred Annuities

For all policies, the premium payment term is an integral number of years and the vesting date is usually the insured's birthday following the end of that period.

For all deferred annuity contracts the reserve was calculated using a gross premium method of valuation.

Personal Retirement Plans were valued using a cashflow method.

Any negative reserves arising were individually eliminated by reducing the value of the valuation premiums so as to make the mathematical reserves zero.



*Ex-NELPEN Self Employed Pension Plans, Personal Pension Policies, EPPs, AVCs, Transfer Plan and Group Pension Schemes (including Pensions Management Contracts)*

Under "Guaranteed Growth" contracts, for the "Second Account" or "Main Account" the full accumulated balance is taken and for "First Account" or "Initial Account" the accumulated balance is discounted with mortality and interest. On all "Guaranteed Growth" contracts the accumulated balance at the valuation date is increased by interest at the relevant rate at the valuation date to allow for interest accruing since the previous policy anniversary.

For Guaranteed Growth Plans, the valuation method was to take the accumulated balance of the "Second Account/Main Account" plus the discounted balance of the "First Account/Initial Account" plus a reserve for future expenses and mortality. The basic reserves allow for the guaranteed unit growth rates.

Immediate Annuities

The reserve held in respect of annuities in payment was the present value of future benefits together with an additional reserve of the present value of future expenses.

Non-linked Permanent Health Insurance

The reserves for non group PHI business are calculated as the sum of:

- (i) 1 x premium for future risk including IBNR;
- (ii) Reserve for all future expenses assuming no contribution from the premium; and
- (iii) a reserve for claims in payment based on annuity factors with a maximum of 7 or actual factors from reinsurers (where available). No expenses are included in this reserve.

The first and last of these are calculated on a gross and net basis with the difference used to calculate the reinsurance offset. There is no reinsurance offset for the expense component.

The reserves for Group PHI business are calculated as the sum of Unearned Premium and Incurred but not Reported Reserves and a reserve for claims in payment based on annuity factors with a maximum of 7 or actual factors from reinsurers (where available). No expenses are included in this reserve.

These are calculated on a gross and reinsured basis in order to determine the net liability.

For Ex-NAL Critical Illness Plans and Tailored Mortgage Protection contracts including an element of critical illness cover, it was assumed that the current premiums would remain unaltered for the full contract terms, even though it is likely that these will increase.

•

Deposit Administration Contracts

The base reserve for ex-Crown contracts has been taken as the aggregate of the surrender value for each scheme at the valuation date including an allowance for interest from the previous scheme anniversary date to the valuation date. The interest rate used varied by month of scheme renewal and was derived from the average rate of interest earned in the period to the valuation date, including an additional amount to allow for enhancements allowed for certain schemes.

For the guaranteed minimum rate of interest on ex-Crown Deposit Administration business the expected cost of the guarantee for the remaining term of the policy was calculated assuming that interest rates fell by 20% at the valuation date.

For ex-OMLA Personal Pension Plans, Capital Pension Plans and Executive Pension plans, the main fund was taken as the full accumulated balance and for the Initial Premium fund the accumulated balance was discounted with mortality and interest. For all contracts the accumulated balance at the valuation date was increased by interest at the relevant rate at the valuation date to allow for interest accruing since the previous policy anniversary. An additional sterling reserve was calculated using a cashflow method. The basic reserves allow for the guaranteed unit growth rates.

Linked Business

All unit-linked business with the exception of ex-Crown group business was valued on a sterling reserve basis. Ex-Crown group policies were allocated expenses equal to their margins.

Unit liabilities were calculated as the value of capital and accumulation units discounted, where applicable, using the following funding rates

Portfolio	Capital Units	Accumulation Units
Ex- Sentinel	6.00%	-
Ex-Crown	4.35%	-
Ex-NELPEN	5% /6%	-
Ex-OMLA	3.5% /4.5% 4.75% /5.25%	0.75% /1.0%

For ex-NELPEN and ex-OMLA the rate used varies according to contract type. In addition, for ex-NBA life and pension policies and certain other ex-OMLA policies, surrender penalties are deducted from the unit values to calculate the unit reserve held.

The value of the units is based on bid prices at 31 December calculated in accordance with the asset valuation regulations. Where appropriate, provisions have been made within each of the funds to meet any potential liability to tax on unrealised capital gains including outstanding amounts payable in respect of unit trust deemed disposals.

In respect of all life business internal linked and broker funds the valuation bid price of units makes an allowance for a potential tax liability on unrealised gains after credit for any unrealised or realised losses.

A sterling reserve for mortality and expenses is calculated on a cash flow basis. For linked contracts, the reasonable expectations of policyholders are taken into account in establishing the sterling reserves. No allowance for increasing the annual management charge or other charges is made, other than inflationary increases in plan fees, even though in some circumstances the Company has the right to increase such charges.

The mortality charges used are an assumed rate based on the average mortality charges for the linked contracts. The morbidity rates are those used in practice.

For Ex-NAL Pension Policies, there is an option to increase the policy fees on these policies each year in line with NAE. Current practice is to increase the fees each year by 75% of the increase in NAE and the valuation assumption is in line with this practice.

Any negative unit reserves and any negative sterling reserves were individually eliminated by increasing the respective reserve to zero except as described below. Where there are unit-linked benefits in addition to conventional benefits, any negative values on the conventional part of the policy were eliminated without regard to any positive value on the unit-linked part.

An additional reserve has been established in respect of amounts yet to be allocated to units. Reserves in respect of the uninvested balance have been established equal to the full amount of the uninvested balance in respect of the AVSP (Whole Life), Pan Plan (Whole life), PIP (Whole Life) and WISP (Series 1 and Series 2) contracts. For WISP Series 3 the reserve is that for an endowment assurance (sum assured equal to the uninvested balance) maturing at age 60 and under which no further premiums are payable.

For WISP policies there is a further reserve of 0.2% of the guaranteed sum assured in respect of the Waiver of Premium benefit. For Super WISP 25 policies there is a further reserve of 2% of one annualised office premium in respect of the Waiver of Premium benefit.

For A-plan policies additional reserves were held as follows:

- (i) A reserve in respect of the maturity guarantee.
- (ii) An amount equal to 2% of the office annual premium for the Waiver of Premium Benefit.
- (iii) An amount equal to 0.1% of the sum at risk in respect of the Accidental Death Benefit cover.
- (iv) An amount equal to 3% of the sum assured discounted to the maturity date at 4.5% in respect of the guaranteed insurability option.

For Unit Trust Whole Life and Endowment policies the valuation liability was taken as the market value of attaching units together with the value of the endowment or whole life benefit valued in accordance with the general principles detailed for non-linked policies in this section.

For policies linked to unit trusts which were ex-dividend at the valuation date an adjustment to the mathematical reserves was made, being the respective anticipated total net distribution receivable by the policyholders.

For the Pension Investment Plan and ex-NELPEN Pensions Management contracts a reserve of 2% of the unit liability was made to provide for future expenses.

For policyholders deemed invested in the Income Fund who have elected to receive distributed income in the form of cash rather than units, an additional reserve has been set up being the cash accrued and awaiting distribution. Where a Plan comprises a cluster of policies taken out simultaneously the per plan expenses are divided equally between each policy.

For ex-NBA Life policies, where an extra premium has been charged for the provision of premium waiver during incapacity a reserve of 75% of the total annualised extra premiums paid has been set up.

For ex-NBA Pension policies, where the policy carries a provision for waiver of premium, dependent on the deferred period (either 13 weeks or 26 weeks), the mathematical reserve was taken as being equivalent to either four months' or seven months' current cost charge based on the age nearest birthday at the valuation date, allowing for extra morbidity if applicable.

The liability for Payment Protection Benefits on ex-NAL Pension Plans was taken as one annual premium. The liability for Payment Protection claims in payment was taken as five times the annual premium for the main contract.

For ex-Crown Pensions 2000 Phase 2 final salary arrangements the discount period for initial units is the outstanding period to 20 years for each block of Initial Units and the discount is based on interest only. For money purchase arrangements the discount period for Initial Units is the outstanding term to the Normal Retirement Date or, in the case of AVCs, the Normal Retirement Date less 5 years.

For ex-Crown Retirement Savings Plan & Contracted Out Money Purchase policies the discount period for Initial Units is the outstanding term to the Normal Retirement Date and for Accumulation Units is the outstanding term to 11 years from the commencement date of the individual account.

A reserve has been held for claims which have not been reported equal to two months' expected mortality cost for death claims, three months' expected critical illness cost for critical illness claims and seven months' PHI cost, all net of reinsurance.

Policies have been issued subject to a lien, but no modification has been made to the valuation method.

In the Non Profit Fund additional reserves have been established in Form 53 in respect of ex-OMLA, ex-CCL and ex-Prosperity personal pension policies for the expected liability in respect of policies which were "mis-sold".

### **Policies previously written in BULA**

For non-linked non profit insurance, the gross premium method of valuation has been adopted. For products where the valuation method does not allow for future lapses as outlined in paragraph 4 (9), negative reserves have been eliminated.

The mathematical reserve for linked contracts is the value of the units allocated together with reserves in respect of additional life cover.

The unit liability is the number of units allocated up to the valuation date, multiplied by the valuation unit price without any discounting. The valuation unit prices are determined from the value of each internal linked fund, calculated in accordance with the note to Form 44, without any adjustments for dealing costs or tax on unrealised capital gains or losses, by dividing by the number of units in issue.

For regular premium paying business formerly in the BULA Unit Linked Fund, the aggregate expense reserves were based on the sum of:

- 50% of the higher of the reserve calculated assuming that regular premiums continued to be paid at the current level and the reserve calculated assuming that regular premiums increased automatically in line with the policy conditions
- plus 50% of the reserve calculated assuming that regular premiums ceased and the policy became paid up at the valuation date.

In respect of contracts which consist of two or more separate types of insurance, each type has for valuation purposes been treated separately. In certain cases where two or more contracts have been issued contemporaneously in respect of the same lives, whether in connection with assurances or annuities, such contracts have been treated as a single contract.

Whole life assurances involving more than one life with sums assured payable on the first death have been valued using independent mortality rates. Joint whole life assurances with sums assured payable on the second death have been valued so as to have regard to the likelihood, on the valuation basis, that one or other life has died, or that neither life has died.

An additional reserve has been made of 50% of the amount of all yearly extra premiums payable. This is included in the reserves shown on Forms 51 to 54.

For the following categories of non-linked contracts the net liability has been determined in the manner indicated.

#### Group Life Assurances & Group Permanent Health

The liability has been taken as the amount of unearned premiums plus a reserve for unpaid amounts relating to profit sharing arrangements, plus a reserve for claims which were incurred but not reported by the valuation date plus a claims in payment reserve.

Where premiums are payable monthly the unearned premium has been taken as one month's premium. For single premiums the unearned premium has been taken as the same proportion of the premium (after allowance for expenses, incurred immediately on payment of the premium) as the unexpired term bears to the original term of the assurance.

The incurred but not reported reserve was calculated as an estimated one and a half months' claims costs.

The reserve for claims in payment paid as an income stream is set up using a chain ladder approach to estimate the ultimate cost of claims from the pattern of past experience.

The reserve for unpaid amounts relating to profit sharing arrangements was calculated as the profit share proportion of the underwriting profit on each contract less any payments already made under the arrangement. The underwriting profit is calculated as premiums earned less claims incurred; this includes the deduction of the company's fee from premiums earned and estimates of outstanding and incurred but not reported claims.

**Policies previously written in BRS**

A prospective method of valuation has been used for all mathematical reserves other than for those special reserves described below.

The significant classes of business are pension annuities in payment shown in forms 51 and 54. These liabilities are calculated as the present value of the future annuity payments plus the present value of future expenses. The values of both expenses and index linked annuity payments allow for increases in the level of RPI in the future.

**Policies previously written in BA**

A prospective valuation method is used to value all policies.

Traditional life contracts are valued using a net premium valuation method, the reserve generally being subject to a minimum of one year's office premium. The net premium is restricted to 90% of the office premium and an explicit expense reserve established where the value of the margin between the net premium and the office premium is insufficient to cover future expected expenses.

Policies issued subject to an extra premium have been valued at true ages and an additional reserve of one year's extra premium has been established.

For certain decreasing term assurance with critical illness business which is reinsured, the mathematical reserves net of reinsurance allow for the level and incidence of reinsurance premium payments.

The mathematical reserves for annuities in payment are calculated as the present value of the future annuity payments plus the present value of future expenses. The value of expenses allows for increases in the level of RPI in the future.

**Policies previously written in SMA**

In general, non-linked non profit contracts have been valued using the gross premium method. Negative mathematical reserves are held on those contracts where the calculation yields a negative result. For the Smoothed Funds the reserve held is the sum of the sterling reserve and the valuation smoothed prices multiplied by the number of units. Certain assurances accepted at an increased rate of premium are valued at correspondingly increased ages. An additional reserve has been made of 50% of the amount of all yearly extra premiums payable. This is included in the reserves shown on Forms 51 to 54.

It is assumed that annuity payments occur at the end of the month in which they are due and that increments under increasing annuities take place at the end of the month in which they escalate. For certain annuities there is a capital guarantee that if the annuitant dies before the aggregate annuity payments made equal or exceed the purchase price, the shortfall becomes payable immediately. Provision for those extra guarantees is included with the reserves shown.

The benefits valued for group schemes are the amounts secured by premiums paid prior to the valuation date, except for contracts where benefits in force are secured by premiums fixed until retirement.

Linked contracts are valued individually with the number of units allocated to the contract being multiplied by the valuation price for the corresponding internal linked fund. Cash flow calculations have been made individually for each linked contract. The bases used are described below. For some contracts, the unit reserve has been reduced to allow for actuarial funding. The overall unit and sterling reserve for each contract is always at least equal to the surrender or transfer value, subject to a minimum of zero.

The Non Profit Fund also holds sterling reserves on unitised with-profits contracts in the Scottish Mutual With-Profits Fund. These reserves are calculated using cash flow calculations as for linked contracts. The bases used are described below.

### **Policies previously written in SPL**

A gross premium valuation method has been used for all business shown on Forms 51 and 54. Negative reserves are held for those contracts where the gross premium method yields a negative result. Explicit allowance has been made in the valuation for renewal expenses as detailed in paragraph 4 (6). Where appropriate, allowance has also been made for payments in accordance with reinsurance treaties.

For accumulating with-profits business, non-unit reserves have been calculated to cover any mortality or expense strain within the valuation in a manner consistent with that used for property-linked benefits as described below.

For property-linked contracts, the unit reserve in respect of accumulation (or ordinary) units is taken as the value at the prices specified in Form 55 of the units allocated to policies in force at the valuation date. The unit reserve in respect of capital (or initial) units of the pension funds in which Accolade and New Style Pensions invest has been taken as the face value of those units. The unit reserve in respect of capital (or initial) units of all other funds has been taken as the value of the accumulation units equivalent to the allocated capital units allowing for the additional charges for those funds where the value of the linked assets held equals the funded value of the units.

Some property-linked contracts (Personal Retirement Account, Pension Investment Account, Executive Retirement Account, Self Assurance (overseas version) and some miscellaneous classes) offer bonus units that either accrue over time up to vesting or death or are awarded on certain dates. The unit liability under these contracts includes units held in respect of the maximum prospective bonus which would be payable.

A non-unit reserve is held for certain property-linked contracts in respect of future expenses, mortality and morbidity. Investigations have shown that this reserve, in conjunction with ongoing management charges at the current rates and the uninvested portion of future premiums under continuing contracts, is sufficient to cover future outgoings on the valuation basis, with the exception of the guarantee on the Self Assurance Long-Term Care Contract which is valued separately.

**(2) Valuation Interest Rates**

**All policies excluding Republic of Ireland policies previously written in SPL**

The interest rates used for each product group are shown in the following table:

<b>Product Group</b>	<b>Current Valuation</b>	<b>Previous Valuation</b>
<u>Sterling reserve discount rates</u>		
Life (unrestricted)	2.40%	3.00%
Life (restricted) (except SMA and SPL)	2.40%	3.00%
Life (restricted) (SMA and SPL)	2.40%	2.95%
Pensions (unrestricted)	3.00%	3.75%
Pensions (restricted) (except SMA and SPL)	3.00%	3.75%
Pensions (restricted) (SMA and SPL)	3.00%	3.70%
<u>Annuities</u>		
Pension Annuities in Payment	4.40%	5.03%
Pensions Deferred Annuities pre vesting	3.83%	4.09%
Pensions Deferred Annuities post vesting	3.83%	4.09%
Life Annuities In Payment (except companies below)	2.40%	3.00%
RSALI & Phoenix Life Annuities in Payment	4.40%	5.03%
SMA Life Annuities in Payment	2.40%	3.70%
SPL Life Annuities in Payment	2.40%	5.03%
Life Deferred Annuities	2.40%	3.00%
Index-linked Annuities in Payment	0.44%	0.73%
<u>Other</u>		
Assurances (Life) (except SMA and SPL)	2.40%	3.00%
Assurances (Life) (SMA and SPL)	2.40%	2.95%
Assurances (Pensions) (except SPL)	3.00%	3.75%
Assurances (Pensions) (SPL)	3.00%	3.70%
Index-linked Assurances (Life)	-0.20%	0.60%
PHI and Critical Illness (except SMA)	3.00%	3.75%
PHI Assurances (SMA)	3.00%	3.70%
PHI Claims in Payment	3.00%	3.75%
Deposit Administration	3.00%	3.75%



**Republic of Ireland policies previously written in SPL**

The interest rates used for each product group are shown in the following table:

Product Group	Current Valuation	Previous Valuation
Whole Life and Endowment Assurances (Life and Pensions)	2.10%	1.45%
Term Assurances (Life)	1.70%	1.15%
Term Assurances (Pensions)	2.10%	1.45%
Immediate Annuities (Conventional and Index-	1.70%	3.49%
Deferred Annuities in deferment	3.20%	3.49%
Deferred Annuities in payment	3.20%	3.49%
Linked Life non-unit reserves	1.70%	1.15%
Linked Pension non-unit reserves	2.10%	1.45%

Note: the valuation interest rates are shown net of tax for life business and gross of tax for all other business.

**(3) Risk Adjustments**

The yields on assets were reduced for risk as follows:

Fixed Interest

(a) Approved Securities:

No reduction

(b) Other Securities

A deduction was applied to the yield on an individual stock by stock basis to allow for the risk of default. The individual stock risk margins were calculated as a long term average default rate plus an additional allowance for short-term factors and expected deviations from the historic average.

The long term average default rates (in basis points) were:

Rating	5yr	10yr	20yr
AAA	4.3	12.3	15.2
AA	19.0	32.1	48.2
A	33.2	47.7	65.3
BBB	82.8	104.1	122.4
BB	261.3	277.3	287.2
B	591.7	524.7	442.5

A number of different techniques were then employed to arrive at an additional haircut, namely:

- A higher risk was recognised for bank subordinated debt by removing the credit for recoveries included within the above default rates. For banks that were in receipt of state aid, there was an additional deduction depending on whether the coupons could be missed or deferred without interest.

- Subordinated debt attracted hair cuts based on the senior rating of the issuer rather than the rating of the bond itself.
- Stocks were ‘notched’ downwards where the credit rating was considered to be inappropriate (after analysis of the current market spread and other factors).
- An additional reserve of £1.0m was established to allow for higher levels of default in the medium term. This is not reflected in the default rates in the table above.

The adjustments described in this section are in addition to the 2.5% required by the regulations.

**(4) Mortality Basis**

**Longevity improvement factors**

For immediate annuities in payment and deferred annuities, post vesting where appropriate, a common set of improvement factors has been adopted for all annuities. The improvement factors are:

<b>Males</b>	<b>2011</b>	<b>2021</b>	<b>2031</b>	<b>2041</b>	<b>2051</b>	<b>2061</b>
40	1.83%					
50	1.88%	2.65%				
60	1.35%	2.51%	2.97%			
70	2.46%	1.73%	2.41%	2.67%		
80	3.78%	2.03%	1.70%	2.13%	2.17%	
90	1.55%	2.06%	1.55%	1.56%	1.63%	1.63%
100	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%

<b>Females</b>	<b>2011</b>	<b>2021</b>	<b>2031</b>	<b>2041</b>	<b>2051</b>	<b>2061</b>
40	2.06%					
50	2.70%	3.03%				
60	1.80%	3.32%	3.15%			
70	2.61%	2.52%	2.85%	2.69%		
80	3.42%	2.42%	2.11%	2.19%	2.17%	
90	1.46%	2.02%	1.69%	1.62%	1.63%	1.63%
100	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%

Improvement rates for a cohort are read down the diagonal, i.e. a 60 year old male will experience an improvement rate of 1.35% in 2011 and 1.73% in 2021, when he would be 70.

In the tables that follow all mortality tables are ultimate.

**Policies previously written in PLL but not previously written in PAL or SLUK**

The mortality tables used for each product group are shown in the following table:

Product Group	Current Valuation	Previous Valuation
	M/F bases	M/F bases
Linked Life - aggregate	81% AM92	81% AM92
	105% AF92	105% AF92
Linked Life - non-smoker	73% AM92	73% AM92
	80% AF92	80% AF92
Linked Life - smoker	145% AM92	145% AM92
	162% AF92	162% AF92
Seniorplan	138% AM80	138% AM80
	138% AF80	138% AF80
Non linked Whole Life	75% AM92	75% AM92
	81% AF92	81% AF92
Non linked TA - aggregate	80% TM92	80% TM92
	84% TF92	84% TF92
Non linked TA - non-smoker	66% TM92	66% TM92
	66% TF92	66% TF92
Non linked TA - smoker	156% TM92	156% TM92
	182% TF92	182% TF92
Life Fund Annuities in Payment	74.1% IM80 C=2010	75.3% IM80 C=2010
	improving 1.5% pa	improving 1.5% pa
	75.4% IF80 C=2010	76.4% IF80 C=2010
Pension Annuities in Payment	Modified PCMA00	Modified PCMA00
	Modified PCFA00	Modified PCFA00
Linked Pensions	50% AM92	50% AM92
	57% AF92	57% AF92
Annuities in Deferment	50% AM92	50% AM92
	57% AF92	57% AF92

No allowance has been made for any possible detrimental impact of significant changes in the incidence of disease or developments in medical science on the mortality or morbidity experience of the Company.

For life annuities in payment the expectations of life under the current (and previous year) valuation assumptions for sample ages are:

Age	Current Valuation		Previous Valuation	
	Males	Females	Males	Females
65	22.40	25.16	22.29	25.07
75	14.19	16.08	14.10	16.00

For pension annuities in payment, the expectations of life under the current (and previous year) valuation assumptions for sample ages are shown in the table below. For pension deferred annuities, the expectations of life at age 65 for current ages 45 and 55 under the current (and previous year) valuation assumptions are shown in the table below:

	Current	Expectation of life from Age	Current Valuation		Previous Valuation	
	Age		Males	Females	Males	Females
Immediate annuities	65	65	23.73	25.48	23.68	26.16
	75	75	14.39	15.74	14.35	16.33
Deferred annuities	45	65	26.90	28.55	26.90	29.24
	55	65	25.29	27.04	25.28	27.74

**Policies previously written in PAL**

The mortality tables used for each product group are shown in the following table:

Product Group	Current Valuation M/F bases	Previous Valuation M/F bases
Term Assurances	105.6% TMC00	105.6% TMC00
	108.9% TFC00	108.9% TFC00
Whole Life & Endowment	86% AM92	86% AM92
	112% AF92	112% AF92
Pensions pre-vesting	50% AM92	50% AM92
	57% AF92	57% AF92
Pensions post vesting (including GAOs)	Modified PCMA00	Modified PCMA00
	Modified PCFA00	Modified PCFA00
Pension Annuities currently in payment	Modified PCMA00	Modified PCMA00
	Modified PCFA00	Modified PCFA00
Life Fund Annuities in Payment	74.1% IM80 C=2010	75.3% IM80 C=2010
	75.4% IF80 C=2010	76.4% IF80 C=2010
Life Annuities in deferment	50% AM92	50% AM92
	57% AF92	57% AF92
Permanent Health Insurance	76% TM92	76% TM92
	76% TF92	76% TF92
Linked Life (aggregate)	81% AM92	81% AM92
	105% AF92	105% AF92
Linked Life (non-smoker)	73% AM92	73% AM92
	80% AF92	80% AF92
Linked Life (smoker)	145% AM92	145% AM92
	162% AF92	162% AF92

For life annuities in payment the expectations of life under the current (and previous year) valuation assumptions for sample ages are:

	Current	Expectation of life from Age	Current Valuation		Previous Valuation	
	Age		Males	Females	Males	Females
Immediate annuities	65	65	22.40	25.16	22.29	25.07
	75	75	14.19	16.08	14.10	16.00
Deferred annuities	45	65	25.59	27.64	25.47	27.54
	55	65	23.97	26.38	23.85	26.29

For pension annuities in payment, the basis is the same as for policies previously written in PLL.

**Policies previously written in SLUK**

The mortality tables used for each product group are shown in the following table:

Product Group	Current Valuation M/F bases	Previous Valuation M/F bases
Group Spouses' Annuities	N/A Modified PCFA00	N/A Modified PCFA00
Life Annuities in payment	89.8% IMA92 C=2010 improving 1.5% pa 90.8% IFA92 C=2010 improving 1.25% pa	91.2% IMA92 C=2010 improving 1.5% pa 91.9% IFA92 C=2010 improving 1.25% pa
Pension Annuities in payment	Modified PCMA00 Modified PCFA00	Modified PCMA00 Modified PCFA00
Life Deferred Annuities	89.8% IMA92 C=2010 improving 1.5% pa 90.8% IFA92 C=2010 improving 1.25% pa	94.0% IMA92 C=2010 improving 1.5% pa 91.9% IFA92 C=2010 improving 1.25% pa
Pension Deferred Annuities	Modified PCMA00 Modified PCFA00	Modified PCMA00 Modified PCFA00
Whole Life and Endowment	72% AM92 72% AM92 -3 yrs	72% AM92 72% AM92 -3 yrs
RICTA	98% TMC00 98% TMC00 -3 yrs	98% TMC00 98% TMC00 -3 yrs
Group Term Assurance	88.6% TMC00 92.9% TFC00	88.6% TMC00 92.9% TFC00
Individual Life & Pension Term (aggregate)	88.6% TMC00 92.9% TFC00	88.6% TMC00 92.9% TFC00
Individual Life & Pension Term (non-smoker)	84.3% TMN00 90.7% TFN00	84.3% TMN00 90.7% TFN00
Individual Life & Pension Term (smoker)	86.5% TMS00 93.9% TFS00	86.5% TMS00 93.9% TFS00
Life Unit Linked policies	94% AM92 94% AM92 -3 yrs	94% AM92 94% AM92 -3 yrs
Pensions Unit Linked policies	83% AM92 83% AM92 -3 yrs	83% AM92 83% AM92 -3 yrs
Income Protection (pre-claim)	45% TM80 45% AF80	45% TM80 45% AF80
Income Protection (post-claim)	81% TM80 81% AF80	81% TM80 81% AF80

The mortality/morbidity tables used to value individual policies which include total & permanent disability benefits have not been published. Specimen rates from the tables applicable to non-smokers are given below for the current valuation, per 1000 lives:

Age	TPD		Term & TPD	
	Males	Females	Males	Females
25	0.237500	0.237500	0.460000	0.315000
35	0.292500	0.292500	0.543750	0.436250
45	0.900000	0.900000	1.571250	1.256250
55	3.361250	3.361250	5.026250	4.047500

Rates for the previous valuation were:

Age	TPD		Term & TPD	
	Males	Females	Males	Females
25	0.237500	0.237500	0.460000	0.315000
35	0.292500	0.292500	0.543750	0.436250
45	0.900000	0.900000	1.571250	1.256250
55	3.361250	3.361250	5.026250	4.047500

All the above rates are increased by 2% p.a. after 5 years from the valuation date.

Annuitant mortality – Expectation of life at the valuation date

Age	Male Modified PCMA00	Female Modified PCFA00	Male Modified IMA92	Female Modified IFA92
65	26.14	24.72	24.08	26.23
75	16.45	15.09	14.85	16.28

Annuitant mortality – Expectation of life at the previous valuation date

Age	Male Modified PCMA00	Female Modified PCFA00	Male Modified IMA92	Female Modified IFA92
65	25.22	25.89	23.94	26.13
75	15.06	16.19	14.74	16.19

**Policies previously written in Alba**

Percentage of mortality table together with the age adjustments are shown in the table below:

Product Type	Current Valuation		Previous Valuation	
	A67/70 %	Female Age Adj	A67/70 %	Female Age Adj
LAS Homeplan Series 1	70%	-4	70%	-4
LAS Homeplan Series 2/3	61%	-4	61%	-4
LAS Investment Plan	83%	-4	83%	-4
LAS Savings Plan	83%	-4	83%	-4
LAS Five Plus Account	83%	-4	83%	-4
LAS SP Bonds	83%	-4	83%	-4
LAS Blueprint	70%	-4	70%	-4
LAS EPP/FPA	77%	-4	77%	-4
LAS Healthcheque	60%	-4	60%	-4
LAS Vitality	100%	n/a	100%	n/a
BL Genesis RP Pensions	88%	none	88%	none
CAPSIL Bonds	94%	-4	94%	-4
CAPSIL Whole of Life	94%	-4	94%	-4
CAPSIL Mortgage Minder	94%	-4	94%	-4
CAPSIL RP Pensions	88%	-4	88%	-4
CAPSIL SP Pensions	94%	-4	94%	-4
COMPASS Bulk Buyouts & GPS	99%	none	99%	none

Ex-BLAS Contracts

For Blueprint Security and Vitality contracts, only the terms to the first review dates were taken into account, with the current sums at risk remaining constant over such terms. For level term assurance rider benefits the current sums at risk were taken as constant to expiry. For other annual premium contracts an estimate was made of the terms over which the sums at risk would reduce to nil and it was assumed that the current sums at risk would reduce over such terms in line with the sums at risk for non-profit endowment assurances. For waiver of premium benefits and permanent health benefits the additional AIDS provision was taken as 1% of the annual benefit.

**Policies previously written in Century**

The mortality bases used in the valuation of the significant groups of business were as follows:

Product Group	Current Valuation M/F bases	Previous Valuation M/F bases
Whole Life and Endowment Assurances	77% A67/70 <sup>1</sup>	77% A67/70 <sup>1</sup>
Term Assurance (excluding Ex-NAL)		
Aggregate	61% A67/70 <sup>1</sup>	61% A67/70 <sup>1</sup>
Non Smoker	51% A67/70 <sup>1</sup>	51% A67/70 <sup>1</sup>
Smoker	90% A67/70 <sup>1</sup>	90% A67/70 <sup>1</sup>
Term Assurance (Ex-NAL) – Life Assurance, Mortgage Protection & Pensions Life		
Gross Liabilities		
Non Smoker	46% AM80 <sup>2</sup>	46% AM80 <sup>2</sup>
	51% AF80 <sup>3</sup>	51% AF80 <sup>3</sup>
Smoker	81% AM80 <sup>2</sup>	81% AM80 <sup>2</sup>
	89% AF80 <sup>3</sup>	89% AF80 <sup>3</sup>
Net liabilities (pre 30/6/00 business)		
Non Smoker	55% AM80 <sup>2</sup>	55% AM80 <sup>2</sup>
	58% AF80 <sup>3</sup>	58% AF80 <sup>3</sup>
Smoker	93% AM80 <sup>2</sup>	93% AM80 <sup>2</sup>
	100% AF80 <sup>3</sup>	100% AF80 <sup>3</sup>
Net liabilities (post 1/7/00 business)		
Non Smoker	51% AM80 <sup>2</sup>	51% AM80 <sup>2</sup>
	56% AF80 <sup>3</sup>	56% AF80 <sup>3</sup>
Smoker	93% AM80 <sup>2</sup>	93% AM80 <sup>2</sup>
	102% AF80 <sup>3</sup>	102% AF80 <sup>3</sup>

<sup>1</sup> AIDS 36.3% R6A (peak) Female age deduction 3 years

<sup>2</sup> AIDS 27.5% R6A (peak)

<sup>3</sup> AIDS 9.2% R6A (peak)

## Non Profit Fund

Product Group	Current Valuation M/F bases	Previous Valuation M/F bases
Term Assurance (Ex-NAL) – Tailored Mortgage Protection, Life Cover only		
Gross liabilities	Table 1 <sup>2,3</sup>	Table 1 <sup>2,3</sup>
Net liabilities (pre 19/3/01 business)	Table 2 <sup>2,3</sup>	Table 2 <sup>2,3</sup>
Net liabilities (post 20/3/01 business)	Table 3 <sup>2,3</sup>	Table 3 <sup>2,3</sup>
Non Linked Deferred Annuity – in deferment		
Ex With Profit Fund business	45% A67/70 <sup>4</sup>	45% A67/70 <sup>4</sup>
Ex Non Profit Fund business	50% A67/70 <sup>4</sup>	50% A67/70 <sup>4</sup>
Ex-NELPEN policies	61% A67/70 <sup>1</sup> plus 100% funding of units	61% A67/70 <sup>1</sup> plus 100% funding of units
Immediate annuities (& deferred annuities - in payment)	Modified PCMA00 Modified PCFA00	Modified PCMA00 Modified PCFA00

<sup>1</sup> AIDS 36.3% R6A (peak) Female age deduction 3 years

<sup>2</sup> AIDS 27.5% R6A (peak)

<sup>3</sup> AIDS 9.2% R6A (peak)

<sup>4</sup> Female age reduction 3 years

Product Group	Current Valuation	Previous Valuation
Non Linked PHI	61% A67/70 <sup>1</sup>	61% A67/70 <sup>1</sup>
Linked business		
Sterling Reserves with mortality deductions		
Ex-OMLA	94% A67/70 <sup>5</sup>	94% A67/70 <sup>5</sup>
Ex-Sentinel & Ex-UK Life –	61% A67/70 <sup>4</sup>	61% A67/70 <sup>4</sup>
Non Smokers		
Ex-Sentinel & Ex-UK Life –	91% A67/70 <sup>4</sup>	91% A67/70 <sup>4</sup>
Smokers		
Others	70% A67/70 <sup>4</sup>	70% A67/70 <sup>4</sup>
Sterling Reserves without mortality deductions	61% A67/70 <sup>1</sup>	61% A67/70 <sup>1</sup>

<sup>1</sup> AIDS 36.3% R6A (peak) Female age deduction 3 years

<sup>4</sup> Female age reduction 3 years

<sup>5</sup> Female age reduction 4 years

The AIDS projection basis R6A is as reported by the Institute of Actuaries AIDS Working Party. No credit was taken for the margins in the mortality bases used in the scheduled valuation against the levels currently being experienced. No additional AIDS reserve was deemed necessary for Group Death in Service benefits by recurrent single premium in view of the limited periods for which the premium rates are guaranteed. No specific provision was made for the minor risk associated with ex-NBA linked 'Bond' business. Ex-NBA pensions death in service benefits are all provided for by monthly current cost deduction from an associated linked fund; as the Company is freely able to review the premium rates charged, no provision for AIDS is considered necessary.

No other reserves for possible detrimental changes in mortality or morbidity rates have been made.



For annuity bases shown above, the expectations of life at age 65 and 75 are shown in the following tables:

For internally reassured business:

	Current Age	Expectation of life from Age	Current Valuation		Previous Valuation	
			Males	Females	Males	Females
Immediate annuities	65	65	23.73	25.48	24.14	24.84
	75	75	14.39	15.74	14.78	15.28
Deferred annuities	45	65	26.90	28.55	27.22	27.99
	55	65	25.29	27.04	25.67	26.45

For externally reassured business:

Age	Current Valuation		Previous Valuation	
	Males	Females	Males	Females
65	24.15	25.09	24.14	24.84
75	14.75	15.40	14.78	15.28

For assurances listed above where 'modified table' has been used, sample mortality rates per 1000 lives are shown in the tables below

Table 1 current valuation

Age	Male smoker	Male Non-smoker	Female smoker	Female Non-smoker
25	0.64	0.38	0.28	0.16
35	0.68	0.38	0.52	0.30
45	1.75	0.77	1.56	0.77
55	5.64	2.41	4.20	2.06

Table 1 previous valuation

Age	Male smoker	Male Non-smoker	Female smoker	Female Non-smoker
25	0.64	0.38	0.28	0.16
35	0.68	0.38	0.52	0.30
45	1.75	0.77	1.56	0.77
55	5.64	2.41	4.20	2.06

Table 2 current valuation

Age	Male smoker	Male Non-smoker	Female smoker	Female Non-smoker
25	0.68	0.41	0.29	0.17
35	0.73	0.42	0.54	0.32
45	1.86	0.85	1.63	0.83
55	5.98	2.67	4.37	2.23

Table 2 previous valuation

Age	Male smoker	Male Non-smoker	Female smoker	Female Non-smoker
25	0.68	0.41	0.29	0.17
35	0.73	0.42	0.54	0.32
45	1.86	0.85	1.63	0.83
55	5.98	2.67	4.37	2.23

Table 3 current valuation

Age	Male smoker	Male Non-smoker	Female smoker	Female Non-smoker
25	0.66	0.38	0.26	0.17
35	0.71	0.38	0.49	0.32
45	1.82	0.77	1.47	0.83
55	5.84	2.44	3.95	2.22

Table 3 previous valuation

Age	Male smoker	Male Non-smoker	Female smoker	Female Non-smoker
25	0.66	0.38	0.26	0.17
35	0.71	0.38	0.49	0.32
45	1.82	0.77	1.47	0.83
55	5.84	2.44	3.95	2.22

The morbidity bases (combined morbidity and mortality rates where both benefits are covered) used in the valuation of the significant groups of business were as follows:

Product Group	Current Valuation Modified Table	Previous Valuation Modified Table
<b>Term Assurance (Ex-NAL) – Tailored Mortgage Protection, Combined Life &amp; Critical Illness Cover</b>		
Gross liabilities	Table 4 <sup>2,3</sup>	Table 4 <sup>2,3</sup>
Net liabilities (pre 19/3/01 business)	Table 5 <sup>2,3</sup>	Table 5 <sup>2,3</sup>
Net liabilities (post 20/3/01 business)	Table 6 <sup>2,3</sup>	Table 6 <sup>2,3</sup>
<b>Non Linked PHI (Ex-NAL) – Critical Illness</b>		
Gross liabilities	Table 7	Table 7
Net liabilities	Table 8	Table 8
<b>Non Linked PHI (Ex-NAL)–Tailored Mortgage Protection, Critical Illness Cover only</b>		
Gross liabilities	Table 7	Table 7
Net liabilities (pre 19/3/01 business)	Table 9	Table 9
Net liabilities (post 20/3/01 business)	Table 10	Table 10

<sup>2</sup> AIDS 27.5% R6A (peak)

<sup>3</sup> AIDS 9.2% R6A (peak)

For products listed above where 'modified table' has been used, sample rates (combined mortality and morbidity) per 1000 lives are shown in the tables below:

Table 4 current valuation

Age	Male smoker		Male Non-smoker		Female smoker		Female Non-smoker	
	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD
25	1.24	1.30	0.74	0.79	1.12	1.13	0.70	0.71
35	2.48	2.53	1.33	1.37	3.11	3.14	1.73	1.75
45	7.80	8.05	3.53	3.73	8.19	8.32	3.68	3.79
55	20.12	21.13	8.79	9.66	17.09	17.64	7.17	7.64

Table 4 previous valuation

Age	Male smoker		Male Non-smoker		Female smoker		Female Non-smoker	
	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD
25	1.24	1.30	0.74	0.79	1.12	1.13	0.70	0.71
35	2.48	2.53	1.33	1.37	3.11	3.14	1.73	1.75
45	7.80	8.05	3.53	3.73	8.19	8.32	3.68	3.79
55	20.12	21.13	8.79	9.66	17.09	17.64	7.17	7.64

Table 5 current valuation

Age	Male smoker		Male Non-smoker		Female smoker		Female Non-smoker	
	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD
25	1.22	1.28	0.74	0.78	1.04	1.05	0.66	0.66
35	2.35	2.40	1.28	1.31	2.87	2.89	1.61	1.62
45	7.31	7.53	3.34	3.52	7.60	7.72	3.45	3.55
55	19.02	19.92	8.41	9.20	15.97	16.47	6.83	7.25

Table 5 previous valuation

Age	Male smoker		Male Non-smoker		Female smoker		Female Non-smoker	
	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD
25	1.22	1.28	0.74	0.78	1.04	1.05	0.66	0.66
35	2.35	2.40	1.28	1.31	2.87	2.89	1.61	1.62
45	7.31	7.53	3.34	3.52	7.60	7.72	3.45	3.55
55	19.02	19.92	8.41	9.20	15.97	16.47	6.83	7.25

Table 6 current valuation

Age	Male smoker		Male Non-smoker		Female smoker		Female Non-smoker	
	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD
25	1.00	1.04	0.59	0.61	0.74	0.74	0.48	0.48
35	1.73	1.76	0.92	0.94	1.96	1.97	1.13	1.14
45	5.26	5.39	2.34	2.45	5.23	5.31	2.48	2.54
55	14.06	14.63	6.06	6.56	11.27	11.58	5.12	5.39

Table 6 previous valuation

Age	Male smoker		Male Non-smoker		Female smoker		Female Non-smoker	
	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD
25	1.00	1.04	0.59	0.61	0.74	0.74	0.48	0.48
35	1.73	1.76	0.92	0.94	1.96	1.97	1.13	1.14
45	5.26	5.39	2.34	2.45	5.23	5.31	2.48	2.54
55	14.06	14.63	6.06	6.56	11.27	11.58	5.12	5.39

Table 7 current valuation

Age	Male smoker		Male Non-smoker		Female smoker		Female Non-smoker	
	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD
25	0.56	0.64	0.33	0.39	0.83	0.85	0.52	0.53
35	1.70	1.81	0.89	0.96	2.54	2.66	1.39	1.46
45	5.84	6.25	2.64	2.90	6.34	6.68	2.79	2.98
55	15.01	16.36	6.53	7.49	13.09	13.99	5.21	5.79

Table 7 previous valuation

Age	Male smoker		Male Non-smoker		Female smoker		Female Non-smoker	
	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD
25	0.56	0.64	0.33	0.39	0.83	0.85	0.52	0.53
35	1.70	1.81	0.89	0.96	2.54	2.66	1.39	1.46
45	5.84	6.25	2.64	2.90	6.34	6.68	2.79	2.98
55	15.01	16.36	6.53	7.49	13.09	13.99	5.21	5.79

Table 8 current valuation

Age	Male smoker		Male Non-smoker		Female smoker		Female Non-smoker	
	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD
25	0.51	0.58	0.30	0.35	0.74	0.76	0.47	0.47
35	1.55	1.65	0.81	0.87	2.27	2.37	1.24	1.30
45	5.31	5.69	2.40	2.64	5.66	5.96	2.49	2.66
55	13.67	14.90	5.95	6.82	11.68	12.48	4.65	5.17

Table 8 previous valuation

Age	Male smoker		Male Non-smoker		Female smoker		Female Non-smoker	
	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD
25	0.51	0.58	0.30	0.35	0.74	0.76	0.47	0.47
35	1.55	1.65	0.81	0.87	2.27	2.37	1.24	1.30
45	5.31	5.69	2.40	2.64	5.66	5.96	2.49	2.66
55	13.67	14.90	5.95	6.82	11.68	12.48	4.65	5.17

Table 9 current valuation

Age	Male smoker		Male Non-smoker		Female smoker		Female Non-smoker	
	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD
25	0.50	0.57	0.30	0.35	0.74	0.77	0.47	0.48
35	1.53	1.63	0.80	0.86	2.29	2.40	1.25	1.31
45	5.25	5.63	2.37	2.61	5.71	6.02	2.51	2.68
55	13.51	14.73	5.88	6.74	11.78	12.60	4.69	5.21

Table 9 previous valuation

Age	Male smoker		Male Non-smoker		Female smoker		Female Non-smoker	
	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD
25	0.50	0.57	0.30	0.35	0.74	0.77	0.47	0.48
35	1.53	1.63	0.80	0.86	2.29	2.40	1.25	1.31
45	5.25	5.63	2.37	2.61	5.71	6.02	2.51	2.68
55	13.51	14.73	5.88	6.74	11.78	12.60	4.69	5.21

Table 10 current valuation

Age	Male smoker		Male Non-smoker		Female smoker		Female Non-smoker	
	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD
25	0.38	0.44	0.23	0.27	0.57	0.58	0.36	0.36
35	1.17	1.24	0.61	0.65	1.74	1.82	0.95	1.00
45	3.99	4.28	1.80	1.99	4.34	4.57	1.91	2.04
55	10.27	11.20	4.47	5.13	8.96	9.58	3.57	3.96

Table 10 previous rates

Age	Male smoker		Male Non-smoker		Female smoker		Female Non-smoker	
	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD	Without TPD	With TPD
25	0.38	0.44	0.23	0.27	0.57	0.58	0.36	0.36
35	1.17	1.24	0.61	0.65	1.74	1.82	0.95	1.00
45	3.99	4.28	1.80	1.99	4.34	4.57	1.91	2.04
55	10.27	11.20	4.47	5.13	8.96	9.58	3.57	3.96

**Policies previously written in BULA**

The mortality bases used in the valuation of the significant groups of business were as follows:

<b>Product Group</b>	<b>Current Valuation M/F bases</b>	<b>Previous Valuation M/F bases</b>
<b>Business formerly in the Unit Linked Fund</b>		
Unit-linked Business (excluding the below)	110% AMC00 110% AFC00	110% AMC00 110% AFC00
Unit-linked endowments with critical illness	125% Gerling SI morbidity and: 110% AMC00 110% AFC00	125% Gerling SI morbidity and: 110% AMC00 110% AFC00
Unit-linked deferred annuity (pre-vesting)	58% AMC00 58% AFC00	58% AMC00 58% AFC00
Unit-linked Personal pension, FSAVCs and Stakeholder pension	165% AMC00 154% AFC00	165% AMC00 154% AFC00
<b>Business formerly in the Non-Profit Fund</b>		
Pension Annuities in Payment	Modified PCMA00 Modified PCFA00	Modified PCMA00 Modified PCFA00
Life Fund Annuities in Payment	74.1% IM80 C=2010 improving 1.5% pa 75.4% IF80 C=2010 improving 1.25% pa	75.3% IM80 C=2010 improving 1.5% pa 76.4% IF80 C=2010 improving 1.25% pa
Unit Linked Business with aggregate smoker status	88% AM92 88% AF92	88% AM92 88% AF92
Unit Linked Business with smoker split		
Aggregate	88% AM92 88% AF92	88% AM92 88% AF92
Non Smoker	77% AM92 66% AF92	77% AM92 66% AF92
Smoker	176% AM92 132% AF92	176% AM92 132% AF92
Aggregate Term Assurance	128.1% TMC00 119.5% TFC00	128.1% TMC00 119.5% TFC00
Term Assurance (codes GITN & GITF)		
Non Smoker	349.0% TMN00 186.8% TFN00	349.0% TMN00 186.8% TFN00
Smoker	224.2% TMS00 189.9% TFS00	224.2% TMS00 189.9% TFS00
Other Term Assurances		
Non Smoker	148.3% TMN00 141.9% TFN00	148.3% TMN00 141.9% TFN00
Smoker	130.2% TMS00 121.7% TFS00	130.2% TMS00 121.7% TFS00
Whole of Life (with medical selection)	105% AM92 119% AF92	105% AM92 119% AF92
Senior Security Plan	Modified AM92/AF92	Modified AM92/AF92
Other Permanent Assurances	99% AM92 121% AF92	99% AM92 121% AF92
AIDS loading where relevant	Nil	Nil

For pension annuities in payment, the expectations of life at age 65 and 75 are shown in the following table:

Age	Current Valuation		Previous Valuation	
	Males	Females	Males	Females
65	23.73	25.48	24.14	24.84
75	14.39	15.74	14.78	15.28

For life annuities in payment, the expectations of life at age 65 and 75 are shown in the following table:

Age	Current Valuation		Previous Valuation	
	Males	Females	Males	Females
65	22.40	25.16	22.25	25.04
75	14.19	16.08	14.07	15.98

For the Senior Security Plan where a 'modified table' has been used, sample percentages of the mortality table are shown in the table below for the current valuation:

Age	Male non-TV sales	Male TV sales	Female non-TV sales	Female TV sales
25	384.901%	398.610%	332.998%	529.191%
35	384.901%	398.610%	332.998%	529.191%
45	354.244%	373.165%	310.897%	483.265%
55	227.063%	262.155%	219.914%	300.167%

For the Senior Security Plan where a 'modified table' has been used, sample percentages of the mortality table are shown in the table below for the previous valuation:

Age	Male non-TV sales	Male TV sales	Female non-TV sales	Female TV sales
25	393.113%	407.114%	339.142%	538.955%
35	393.113%	407.114%	339.142%	538.955%
45	362.148%	381.491%	316.905%	492.604%
55	233.985%	270.147%	225.644%	307.988%

### Policies previously written in BRS

The mortality tables used are modified RMV00/RFV00 mortality factors plus longevity improvement factors. The improvements are in line with those shown at the start of section 4(4) above.

## Non Profit Fund

The table below shows the expectation of life for each class of impaired life for the current valuation:

Representative description of underwriting category	Standard	Light smoker	Diabetic	Smoker	Medium impairment	High impairment	Seriously ill
Male aged 65	26.79	24.26	25.94	22.03	21.55	17.42	14.60
Male aged 75	17.20	15.04	16.99	13.21	14.47	10.18	8.25
Female aged 65	29.48	27.15	24.97	20.84	18.98	15.98	18.77
Female aged 75	19.25	17.14	15.33	11.79	10.59	8.91	10.70

The table below shows the expectation of life for each class of impaired life for the previous valuation:

Representative description of underwriting category	Standard	Light smoker	Diabetic	Smoker	Medium impairment	High impairment	Seriously ill
Male aged 65	25.99	25.93	25.80	21.24	19.09	17.06	14.21
Male aged 75	16.63	16.58	16.48	12.66	11.26	9.82	7.83
Female aged 65	29.30	29.26	29.19	24.73	23.91	22.40	19.96
Female aged 75	19.20	19.17	19.11	15.13	14.80	13.72	11.99

### Policies previously written in BA

Product Group	Current Valuation M/F bases	Previous Valuation M/F bases
Decreasing term assurance with critical illness cover	125% Gerling Re morbidity and: 105% TMC00 110% TFC00	125% Gerling Re morbidity and: 105% TMC00 110% TFC00
Non linked immediate annuity	Modified PCMA00 Modified PCFA00	Modified PCMA00 Modified PCFA00
Aggregate Term Assurance	105% TMC00 110% TFC00	105% TMC00 110% TFC00
Term Assurance (codes T1 & T2)		
Aggregate	166% TMC00 163% TFC00	166% TMC00 163% TFC00
Non Smoker	106% TMC00 105% TFC00	106% TMC00 105% TFC00
Smoker	226% TMC00 222% TFC00	226% TMC00 222% TFC00
Term Assurance with serious illness (codes ST1 & ST2)	125% Gerling SI morbidity and:	125% Gerling SI morbidity and:
Aggregate	199% TMC00 139% TFC00	199% TMC00 139% TFC00
Non Smoker	119% TMC00 88% TFC00	119% TMC00 88% TFC00
Smoker	278% TMC00 189% TFC00	278% TMC00 189% TFC00
Endowment and Whole of Life	110% AMC00 110% AFC00	110% AMC00 110% AFC00
Pension deferred annuities (pre-vesting)	90% AMC00 90% AFC00	90% AMC00 90% AFC00



Note that the mortality basis for the assurances is combined with the allowance for morbidity described in section 4(5).

For pension annuities in payment the expectations of life under the current (and previous year) valuation assumptions for sample ages are:

Age	Current Valuation		Previous Valuation	
	Males	Females	Males	Females
65	22.31	25.36	23.55	24.53
75	13.43	15.57	14.92	14.92

### Policies previously written in SMA

The mortality bases used in the valuation of the significant groups of business were as follows:

Product Group	Current Valuation M/F bases	Previous Valuation M/F bases
Life Assurances (excluding term assurance)		
Smoker	69% AM92 <sup>1</sup> 72% AF92	69% AM92 <sup>1</sup> 72% AF92
Non-smoker	55% AM92 <sup>1</sup> 77% AF92	55% AM92 <sup>1</sup> 77% AF92
Pension Assurances (individual and group)	72% AM92 66% AF92	72% AM92 66% AF92
Term Assurances (Life)		
Smoker	117% TM92 <sup>1</sup> 112% TF92	117% TM92 <sup>1</sup> 112% TF92
Non-smoker	59% TM92 <sup>1</sup> 78% TF92	59% TM92 <sup>1</sup> 78% TF92
Term Assurances (Pension)	79% TM92 <sup>1</sup> 105% TF92	79% TM92 <sup>1</sup> 105% TF92
Unit-linked and unitised with-profits life	77% AM80 <sup>1</sup> 77% AF80	77% AM80 <sup>1</sup> 77% AF80
Unit-linked and unitised with-profits pensions	77% AM80 77% AF80	77% AM80 77% AF80
Deferred annuities (in deferment) (individual and group)	72% AM92 66% AF92	72% AM92 66% AF92
Deferred annuities (in payment) - life (individual and group)	94% IMA92 mc 102% IFA92 mc	94% IMA92 mc 102% IFA92 mc
Immediate annuities in payment - life	100% IMA92 mc 109% IFA92 mc	100% IMA92 mc 109% IFA92 mc
Immediate and deferred annuities in payment - pensions	Modified PCMA00 Modified PCFA00	Modified PCMA00 Modified PCFA00

<sup>1</sup> AIDS 33% R6A (peak) for males only

For life annuities in payment and deferred annuities the expectations of life under the current (and previous year) valuation assumptions for sample ages are:

	Current Age	Expectation of life from age	Current Valuation		Previous Valuation	
			Males	Females	Males	Females
Immediate annuities	65	65	22.73	24.72	22.74	24.74
	75	75	14.19	15.33	14.21	15.35
Deferred annuities	45	65	24.20	25.88	24.17	25.85
	55	65	23.77	25.57	23.72	25.53

For pensions annuities in payment and deferred annuities the expectations of life under the current (and previous year) valuation assumptions for sample ages are:

	Current Age	Expectation of life from age	Current Valuation		Previous Valuation	
			Males	Females	Males	Females
Immediate annuities	65	65	23.89	25.41	23.75	25.33
	75	75	14.52	15.68	14.40	15.60
Deferred annuities	45	65	27.06	28.48	26.96	28.43
	55	65	25.44	26.97	25.34	26.91

**Policies previously written in SPL**

The mortality bases used in the valuation of the significant groups of business were as follows:

Product Group	Current Valuation M/F bases	Previous Valuation M/F bases
Endowment Assurance and Linked Assurances other than Flexible Mortgage Plan and Self Assurance Lifetime		
Aggregate	88% AM92 <sup>1</sup> 110% AF92	88% AM92 <sup>1</sup> 110% AF92
Non-smoker	70% AM92 <sup>1</sup> 88% AF92	70% AM92 <sup>1</sup> 88% AF92
Smoker	141% AM92 <sup>1</sup> 176% AF92	141% AM92 <sup>1</sup> 176% AF92
Flexible Mortgage Plan and Self Assurance Lifetime (mortality only), Whole Life Assurance and Term Assurance	Modified TM92 <sup>1</sup> Modified TF92	Modified TM92 <sup>1</sup> Modified TF92
Deferred annuities (in deferment)		
Overseas (group and individual)	Nil Mortality	Nil Mortality
UK (individual)	Nil Mortality	Nil Mortality
UK (group)	88% AM92 110% AF92	88% AM92 110% AF92
Linked Deferred Annuities (in deferment) and Group Pensions (overseas)	Nil mortality	Nil mortality
Immediate and deferred annuities in payment	Modified PCMA00 Modified PCFA00	Modified PCMA00 Modified PCFA00

<sup>1</sup> AIDS 33% R6A (peak) for males only

Where the mortality assumptions are based on the TM92/TF92 tables, age-related percentages are used. Select rates are used for conventional term assurance and ultimate rates for conventional whole life assurance and the Flexible Mortgage Plan. Sample mortality rate per 1000 lives are as follows:

Conventional term assurance – current year

Age	Male non-smoker	Male smoker	Female non-smoker	Female smoker
25	0.408	0.729	0.185	0.280
35	0.438	0.719	0.287	0.486
45	0.954	1.684	0.715	1.343
55	2.529	6.461	1.873	3.864

Conventional term assurance – previous year

Age	Male non-smoker	Male smoker	Female non-smoker	Female smoker
25	0.408	0.729	0.185	0.280
35	0.438	0.719	0.287	0.486
45	0.972	1.702	0.715	1.343
55	2.539	6.471	1.873	3.864

Conventional whole life assurance – current year

Age	Male non-smoker	Male smoker	Female non-smoker	Female smoker
25	0.421	0.421	0.218	0.218
35	0.444	0.444	0.348	0.348
45	0.989	0.989	0.892	0.892
55	2.898	2.898	2.406	2.406

Conventional whole life assurance – previous year

Age	Male non-smoker	Male smoker	Female non-smoker	Female smoker
25	0.421	0.421	0.218	0.218
35	0.444	0.444	0.348	0.348
45	1.007	1.007	0.892	0.892
55	2.908	2.908	2.406	2.406

Unitised Flexible Mortgage Plan – current year

Age	Male non-smoker	Male smoker	Female non-smoker	Female smoker
25	0.503	0.500	0.244	0.391
35	0.539	0.495	0.378	0.680
45	1.155	1.185	0.942	1.877
55	3.096	4.465	2.468	5.401

Unitised Flexible Mortgage Plan – previous year

Age	Male non-smoker	Male smoker	Female non-smoker	Female smoker
25	0.503	0.500	0.244	0.391
35	0.539	0.495	0.378	0.680
45	1.173	1.203	0.942	1.877
55	3.106	4.475	2.468	5.401

For pensions annuities in payment and deferred annuities the expectations of life under the current (and previous year) valuation assumptions for sample ages are:

	Current Age	Expectation of life from age	Current Valuation		Previous Valuation	
			Males	Females	Males	Females
Immediate annuities	65	65	23.89	25.41	23.75	25.33
	75	75	14.52	15.68	14.40	15.60
Deferred annuities	45	65	27.06	28.48	26.96	28.43
	55	65	25.44	26.97	25.34	26.91

**(5) Morbidity Basis**

**Policies previously written in PLL but not in PAL or SLUK**

For PHI policies previously written in PLL but not in PAL or SLUK, the reserve has been calculated as a proportion of the annual premium in force. No morbidity tables are used for this business.

**Policies previously written in PAL**

For PHI benefits previously written in PAL, the assumed inception & recovery rates are expressed as varying percentages of CMIR12. Sample inception & recovery rates for occupational class 1 lives, based on a 12 month deferred period, are as follows:

Inception rates expressed as a percentage of CMIR12

Age	Table	Current Valuation		Previous Valuation	
		Male	Female	Male	Female
25	CMIR12	67.00%	116.00%	83.00%	145.00%
35	CMIR12	67.00%	116.00%	83.00%	145.00%
45	CMIR12	67.00%	116.00%	83.00%	145.00%
55	CMIR12	59.00%	104.00%	74.00%	129.00%

Recovery rates expressed as a percentage of CMIR12 for 2 years duration and 5 years duration

Age	Table	Current Valuation		Previous Valuation	
		Male	Female	Male	Female
25	CMIR12	29.00%	29.00%	29.00%	29.00%
35	CMIR12	29.00%	29.00%	29.00%	29.00%
45	CMIR12	29.00%	29.00%	29.00%	29.00%
55	CMIR12	29.00%	29.00%	29.00%	29.00%

**For policies previously written in SLUK**

For PHI and critical illness policies previously written in SLUK, the following morbidity assumptions are used (for male non-smoker lives, occupational class 1):

Inception rates expressed as a percentage of the table:

Age	Table	Current Valuation		Previous Valuation	
		Male	Female	Male	Female
Individual/Group PHI					
25	CMIR12	26.00%	45.50%	43.00%	75.25%
35	CMIR12	26.00%	45.50%	43.00%	75.25%
45	CMIR12	26.00%	45.50%	43.00%	75.25%
55	CMIR12	26.00%	45.50%	43.00%	75.25%
Critical Illness (non-smoker)					
25	CIBT93M	45.00%	63.00%	45.00%	63.00%
35	CIBT93M	45.00%	63.00%	45.00%	63.00%
45	CIBT93M	45.00%	63.00%	45.00%	63.00%
55	CIBT93M	45.00%	63.00%	45.00%	63.00%
Critical Illness (smoker and aggregate)					
25	CIBT93M	95.00%	100.00%	95.00%	100.00%
35	CIBT93M	95.00%	100.00%	95.00%	100.00%
45	CIBT93M	95.00%	100.00%	95.00%	100.00%
55	CIBT93M	95.00%	100.00%	95.00%	100.00%
Accelerated Critical Illness (non-smoker) : Term assurance mortality plus:					
25	CIBT93M	46.00%	64.00%	46.00%	64.00%
35	CIBT93M	46.00%	64.00%	46.00%	64.00%
45	CIBT93M	46.00%	64.00%	46.00%	64.00%
55	CIBT93M	46.00%	64.00%	46.00%	64.00%
Accelerated Critical Illness (smoker and aggregate) : Term assurance mortality plus:					
25	CIBT93M	98.00%	103.00%	98.00%	103.00%
35	CIBT93M	98.00%	103.00%	98.00%	103.00%
45	CIBT93M	98.00%	103.00%	98.00%	103.00%
55	CIBT93M	98.00%	103.00%	98.00%	103.00%

Recovery rates expressed as a percentage of CMIR12 for 2 years duration and 5 years duration

Age	Table	Current Valuation		Previous Valuation	
		Male	Female	Male	Female
Individual and Group PHI claims					
25	CMIR12	76.00%	76.00%	63.00%	63.00%
35	CMIR12	76.00%	76.00%	63.00%	63.00%
45	CMIR12	76.00%	76.00%	63.00%	63.00%
55	CMIR12	76.00%	76.00%	63.00%	63.00%

**Policies previously written in Alba**

The reserves for products covering morbidity risk do not exceed the materiality limits.

**Policies previously written in BRS**

No products cover morbidity risk.

**Policies previously written in BA**

The morbidity rates are based on those charged by the reinsurer and reflect the fact that the business relates to the United Kingdom.

Tables for aggregate (i.e. combined smoker/non smoker) rates are shown below:

<b>Male Aggregate</b>	<b>Current Valuation</b>	<b>Previous Valuation</b>
<b>Age</b>		
25	0.051%	0.051%
35	0.085%	0.085%
45	0.260%	0.260%
55	0.654%	0.654%
<b>Female Aggregate</b>	<b>Current Valuation</b>	<b>Previous Valuation</b>
<b>Age</b>		
25	0.070%	0.070%
35	0.156%	0.156%
45	0.325%	0.325%
55	0.640%	0.640%

Tables for non smoker rates:

<b>Male Non Smoker</b>	<b>Current Valuation</b>	<b>Previous Valuation</b>
<b>Age</b>		
25	0.045%	0.045%
35	0.062%	0.062%
45	0.166%	0.166%
55	0.436%	0.436%
<b>Female Non Smoker</b>	<b>Current Valuation</b>	<b>Previous Valuation</b>
<b>Age</b>		
25	0.050%	0.050%
35	0.109%	0.109%
45	0.227%	0.227%
55	0.456%	0.456%

Tables for smoker rates:

<b>Male Smoker</b>	<b>Current Valuation</b>	<b>Previous Valuation</b>
<b>Age</b>		
25	0.056%	0.056%
35	0.108%	0.108%
45	0.355%	0.355%
55	0.872%	0.872%
<b>Female Smoker</b>	<b>Current Valuation</b>	<b>Previous Valuation</b>
<b>Age</b>		
25	0.089%	0.089%
35	0.204%	0.204%
45	0.423%	0.423%
55	0.824%	0.824%

**Policies previously written in SMA**

For conventional PHI policies, the following morbidity bases are used:

Inception rates expressed as a percentage of the table:

Age	Table	Current Valuation		Previous Valuation	
		Male	Female	Male	Female
25	CMIR12	160.00%	160.00%	160.00%	160.00%
35	CMIR12	160.00%	160.00%	160.00%	160.00%
45	CMIR12	160.00%	160.00%	160.00%	160.00%
55	CMIR12	160.00%	160.00%	160.00%	160.00%

Recovery rates expressed as a percentage of the table:

Age	Table	Current Valuation		Previous Valuation	
		Male	Female	Male	Female
25	CMIR12	70.00%	70.00%	70.00%	70.00%
35	CMIR12	70.00%	70.00%	70.00%	70.00%
45	CMIR12	70.00%	70.00%	70.00%	70.00%
55	CMIR12	70.00%	70.00%	70.00%	70.00%

For Homeowner, morbidity rates are based on those charged by the reinsurer and are as follows, per 1000 lives:

**Critical illness**

Age	Male non-smoker	Male smoker	Female non-smoker	Female smoker
25	0.517	0.923	0.491	0.875
35	0.747	1.430	1.263	2.337
45	2.070	3.780	3.119	5.756
55	6.793	12.292	6.519	11.779

**Residual mortality**

Age	Male non-smoker	Male smoker	Female non-smoker	Female smoker
25	0.313	0.313	0.054	0.085
35	0.182	0.182	0.006	0.008
45	0.245	0.245	0.006	0.008
55	0.037	0.037	0.006	0.008

**Policies previously written in SPL**

The morbidity rates used in the valuation all relate to critical illness benefits and are all based on the rates charged by the reinsurers.

Sample valuation rates for conventional term assurance and conventional endowment assurance, both for combined mortality and critical illness benefits, are as follows:

Age	Male non-smoker	Male smoker	Female non-smoker	Female smoker
25	0.001030	0.001209	0.000863	0.000774
35	0.001078	0.001737	0.001316	0.001623
45	0.002394	0.005280	0.002726	0.004697
55	0.007820	0.014876	0.007645	0.011184

## Non Profit Fund

An allowance was made for a future deterioration of 0.375% p.a. for each of mortality, critical illness and TPD.

Sample valuation rates for conventional term assurance with critical illness benefits only are as follows. This option is not available for conventional endowment assurance.

Age	Male non-smoker	Male smoker	Female non-smoker	Female smoker
25	0.000656	0.000700	0.000634	0.000460
35	0.000880	0.001292	0.001371	0.001369
45	0.001980	0.004057	0.002886	0.004025
55	0.007251	0.012616	0.007841	0.009283

An allowance was made for a future deterioration of 0.75% p.a. for each of critical illness and TPD.

Sample valuation rates for Flexible Mortgage Plan and Self Assurance Lifetime are as follows:

Combined mortality and critical illness:

Age	Male non-smoker	Male smoker	Female non-smoker	Female smoker
25	0.001062	0.001251	0.000766	0.000947
35	0.001122	0.001815	0.001211	0.002061
45	0.002404	0.005322	0.002489	0.005915
55	0.007744	0.014779	0.006766	0.013646

Critical illness benefits only:

Age	Male non-smoker	Male smoker	Female non-smoker	Female smoker
25	0.000633	0.000721	0.000493	0.000610
35	0.000889	0.001389	0.001188	0.002020
45	0.001985	0.004227	0.002476	0.005882
55	0.007035	0.012966	0.006505	0.013120

No allowance was made for future deterioration in mortality, critical illness or TPD.



**(6) Expenses**

The following table shows the gross attributable expenses per policy (excluding renewal commission).

Product Group	Per Policy Expense	
	Current Valuation	Previous Valuation
	£	£
Term assurance (325 / 330)	25.33	24.06
Critical illness (340 / 345 / 350 / 355)	98.75	60.12
Income protection (360 / 365)	58.48	33.98
Income protection claims in payment (385)	0.00	0.00
Annuity (400)	26.92	25.56
UWP bond (500)	N/A	N/A
UWP savings endowment (510)	N/A	N/A
UWP regular premium pension (525)	63.05	55.38
UWP single premium pension (525)	44.14	38.77
UWP group regular premium pension (535)	N/A	N/A
UWP group single premium pension (535)	N/A	N/A
UL bond (700)	14.67	13.93
UL savings endowment (715)	40.71	38.66
UL target cash endowment (720)	50.53	59.10
UL regular premium pension (725)	48.23	45.80
UL single premium pension (725)	33.76	32.07
UL group regular premium pension (735)	47.44	45.06
UL group single premium pension (735)	33.22	31.55

The expenses on life business are netted down for tax at 20%.

There are no zillmer adjustments for the policies to which the above expenses apply.

**(7) Unit Growth Rates**

Previous Company	Product Group	Unit growth rate before management charge	Expense inflation rate assumed	Policy charge increase rate assumed
		(% p.a.)	(% p.a.)	(% p.a.)
PLL but not SLUK	Life business except for Home Ownership Plan	4.00%	4.50%	4.50%
	Home Ownership Plan	0.79%	4.50%	3.50%
	Pensions business	4.20%	4.50%	4.50%
SLUK	Life business	4.00%	4.50%	0.00%
	Pensions business	4.20%	4.50%	0.00%
Alba	Life business	4.00%	4.50%	0.00%
	Pensions business	4.20%	4.50%	0.00%
Century	Life Funds	3.85%	1.50%	4.50%
	Pension Funds	4.05%	1.50%	4.50%
BULA	Life business	4.00%	4.50%	3.50%
	Pensions business	4.20%	4.50%	3.50%
BRS	Pension Annuities	7.25%	3.50%	n/a
BA	Pension Annuities	n/a	4.50%	n/a
SMA	Life business	3.60%	4.50%	4.50%
	Pensions business	3.90%	4.50%	4.50%
SPL				
UK	Life business	4.05%	4.50%	3.50%
	Pensions business	4.25%	4.50%	3.50%
Republic of Ireland	Life business	4.05%	0.00%	3.50%
	Pensions business	4.25%	0.00%	3.50%

In the case of linked contracts previously written in Alba, where there is discretion in the level at which charges are set, provision has been made for policy fees to increase according to the increases in either the Retail Price Index or the National Average Earnings Index according to the terms of the policy. No other increases to policy charges have been assumed.

**(8) Future Bonus Rates**

Not applicable

**(9) Persistency Assumptions**

For products where the valuation method has not been changed following the changes to the INSPRU valuation rules at 31 December 2006, no credit has been taken for future lapses.

**Policies previously written in PLL**

Product		Average lapse / surrender / paid-up rate for the policy years			
		1-5	6-10	11-15	16-20
Level term	Lapse (if margin positive)	3.60%	3.60%	3.60%	3.60%
Level term	Lapse (if margin negative)	2.40%	2.40%	2.40%	2.40%
Decreasing term	Lapse (if margin positive)	8.40%	8.40%	8.40%	8.40%
Decreasing term	Lapse (if margin negative)	5.60%	5.60%	5.60%	5.60%
Accelerated critical illness	Lapse (if margin positive)	10.80%	10.80%	10.80%	10.80%
Accelerated critical illness	Lapse (if margin negative)	7.20%	7.20%	7.20%	7.20%

The reserve for an individual policy is equal to the most onerous calculation from assuming:

- A positive margin at all durations
- A negative margin at all durations
- A positive margin when the reserves are negative and a negative margin when the reserves are positive.

**Policies previously written in Alba**

The valuation makes no allowance for lapses.

**Policies previously written in BULA**

Product		Average lapse / surrender / paid-up rate for the policy years			
		1-5	6-10	11-15	16-20
Level term	Lapse (if margin positive)	11.00%	9.60%	9.60%	9.60%
Level term	Lapse (if margin negative)	7.40%	6.40%	6.40%	6.40%
Decreasing term	Lapse (if margin positive)	21.60%	21.40%	21.40%	21.40%
Decreasing term	Lapse (if margin negative)	14.40%	14.30%	14.30%	14.30%

The reserve for an individual policy is equal to the most onerous calculation from assuming:

- A positive margin at all durations
- A negative margin at all durations
- A positive margin when the reserves are negative and a negative margin when the reserves are positive.

**Policies previously written in BRS**

The valuation makes no allowance for lapses as all of the policies are immediate annuities.

**Policies previously written in BA**

No allowance for lapses is made in the valuation.

**Policies previously written in SMA**

Product		Average lapse / surrender / paid-up rate for the policy years			
		1-5	6-10	11-15	16-20
UWP bond	Surrender	10.0%	10.0%	10.0%	10.0%
UWP bond	Automatic withdrawals	5.0%	5.0%	5.0%	5.0%
UL bond	Automatic withdrawals	2.5%	2.5%	2.5%	2.5%

**Policies previously written in SPL**

Product		Average lapse / surrender / paid-up rate for the policy years			
		1-5	6-10	11-15	16-20
Level term	Lapse	9.5%	6.7%	6.0%	6.0%
Decreasing term	Lapse	11.9%	11.2%	11.0%	11.0%
Accelerated critical illness	Lapse	11.0%	9.5%	9.1%	9.1%
UL bond	Automatic withdrawals	2.0%	2.0%	2.0%	2.0%

Reserves for protection business are calculated using the lapse rates shown in the table and with lapse rates both increased and decreased by 40%. The highest reserve for each policy is taken, i.e. aggregate reserves may use a mixture of the three lapse scenarios.

**(10) Other Material Assumptions**

Not applicable.

**(11) Allowance for Derivatives**

The fund holds a number of swap contracts. The swap contracts (both assets and liabilities) are incorporated within the fixed interest portfolio for the purposes of determining a valuation rate of interest. Specifically for interest rate swaps we:

- (i) Calculate the cashflows that the swaps will produce if future interest rates are in accordance with the LIBOR forward yield curve at the valuation date.
- (ii) Calculate the cashflows arising from the fixed interest portfolio (excluding swaps) if held to redemption.
- (iii) Find the overall yield on the fixed interest portfolio (excluding swaps) by equating the cashflows in (ii) to the market value of the fixed interest assets (excluding swaps).
- (iv) Find the overall yield on the combined fixed interest and swap portfolio by equating the cashflows in (i) and (ii) to the market value of the swaps plus the fixed interest assets.

- (v) The difference between the yields in (iii) and (iv) shows the impact on yield of folding the swaps in with the fixed interest portfolio.

In addition to the swaps, the assets described in form 13 contain derivative contracts. These derivative contracts are to manage asset exposure and reduce risk and are appropriately matched. The derivatives do not directly impact the long term insurance liabilities.

**(12) Effect of Basis Changes**

Not applicable. The changes in INSPRU valuation rules effective from 31 December 2006 were implemented at that time.

**5. OPTIONS AND GUARANTEES**

**(1) Guaranteed Annuity Rate Options**

**Policies previously written in PLL**

**(a) Methods**

A reserve to cover possible liabilities under the guaranteed annuity option is calculated using scenarios from the Barrie & Hibbert investment model to estimate the additional liability at the normal retirement date, assuming that 5% of the maturity value will be taken as cash. The following mortality basis is used:

Mortality		
	Before vesting	53.4% AM92
		60.1% AF92
	After vesting	61.5% PMA80 C=2010
		75.2% PFA80 C=2010
Allowance for future improvements		
	Before vesting	1.5% p.a. males
		1.5% p.a. females
	After vesting	1.5% p.a. males
		1.5% p.a. females

(b)

<b>Product Name</b>	<b>Personal Pension Investment Plan contracts issued in 1982 and 1983, Directors' and Executives Pension Plan</b>	<b>Personal Pension Plan and Retirement Annuity Policy</b>
<b>Basic reserve</b>	£10.4m	£3.1m
<b>Spread of outstanding durations</b>	As a percentage of guarantee 65.4% < 5 years 23.8% between 5 and 10 years 10.5% between 10 and 20 years 0.3% over 20 years	As a percentage of guarantee 69.8% < 5 years 27.1% between 5 and 10 years 3.1% between 10 and 20 years Nil over 20 years
<b>Guarantee reserve</b>	£2.4m	£1.8m
<b>Guarantee annuity rate (age 65 male)</b>	£109.30 p.a. for £1000 cash sum for Personal Pension Investment Plan £111.37 p.a. for £1000 cash sum for Directors' and Executives Pension Plan (PGP&A)	£106.67 p.a. for £1000 cash sum.
<b>Increments</b>	Increments are not allowed	Increments are not allowed
<b>Frequency</b>	Annually in arrears, no guarantee period	Annually in arrears, no guarantee period
<b>Retirement ages</b>	Between 60 and 75	Between 60 and 75

**Policies previously written in SLUK**

**(a) Methods**

An additional reserve is calculated for options on the FT30 index-linked life policies. The following basis is used:

<b>Age</b>	<b>Surrender rate</b>
	<b>p.a.</b>
Prior to age 50	0%
At exact age 50	10%
55	20%
60	40%
65	100%

The main assumptions used to value GAOs were:

Valuation interest rate p.a.	2.50%
GAO take-up rate*	80%
Mortality	IMA92/IFA92
Payment expense allowance	2%
The uncertainty of future interest rates has been allowed for by valuing the annuity using the alternative assumptions that interest rates will be 30% lower or 30% higher than those underlying the central rate. The reserve is taken as the average of the three results.	

(b)

Product Name	Protection Plan	Escalator Plan
Basic reserve	£18.0m	£48.7m
Spread of outstanding	0-25 years	0-25 years
Guarantee reserve	£4.2m	£9.4m
Guarantee annuity rate (age 65 male)	£102.88 p.a. for £1000 cash sum for policies commencing before 1979 £79.88 p.a. for £1000 cash sum for policies commencing in 1979 or 1980	£102.88 p.a. for £1000 cash sum for policies commencing before 1979 £79.88 p.a. for £1000 cash sum for policies commencing in 1979 or 1980
Increments	Increments are not allowed	Increments are not allowed
Frequency	Half-yearly in arrears, 5 years guarantee period	Half-yearly in arrears, 5 years guarantee period
Retirement ages	Available on surrender at 50, 55, 60 or 65	Available on surrender at 50, 55, 60 or 65

**Policies previously written in Alba**

Not applicable

**Policies previously written in Century**

**(a) Methods**

The liabilities for Guaranteed Annuity rate Options (GAOs) were calculated at policy level using a deterministic valuation interest rate. All the policies were significantly in the money at the valuation date and are likely to remain so in the future unless interest rates increase substantially. The value of the GAOs is therefore virtually all intrinsic value, and if a stochastic method had been used, the reserves thus calculated would not be materially different from the values reported. Other than for the unit linked ex-NEL business, these options are fully reassured.

The main assumptions used to value GAOs were:

Valuation interest rate p.a.	Pre-vesting	3.83%
	Post-vesting	3.83%
GAO take-up rate*		95%
Mortality		As in 4 (4)
Payment expense allowance		4%
* This assumes 20% of policies take 25% of their fund as cash at retirement for all outstanding durations		

(b)

Product	Basic Reserve £m	O/S Durn Spread years	Gtee Reserve £m	GAO Rate	Incrs Yes/No	Ann. Form	Ret. Ages
Ex-NEL Gteed Growth	15.8	0-23	11.6	11.11%	Yes	*	60-75
Ex-NEL Linked	8.6	0-19	5.9	11.11%	Yes	*	60-75
Ex-Crown Dep Admin	2.5	0-21	0.1	10.25%	Yes	*	60-65
Ex-OMLA Ex-WP	6.6	0-15	2.7	8.90%	Yes	*	55-75

\*The GAO rates shown are for a male age 65, monthly level annuity, payable in advance with 5 year guarantee period – other options are available. For the Ex-Crown policies, the rate shown is for policies retiring during policy years 11 to 20.

In general, where policyholders may make increments to the policy, the GAO does not apply to the regular premium increases or additional single premiums.

**Policies previously written by BULA, BRS, BA and SMA**

There are no guaranteed annuity rate options.

**Policies previously written in SPL**

Guaranteed annuity rate options are included on Select Executive and Personal Retirement Plans written in the Republic of Ireland prior to October 1998. For these contracts, the non-unit liabilities were explicitly calculated allowing for the increased cost of projected benefits at the selected normal retirement date arising from the guaranteed annuity options. This increased cost was based on the ratio of the cost of £1 per annum pension on the valuation basis to that on the basis underlying the guaranteed annuity rates. The projections took account of growth on units already purchased as well as that on units due to be allocated in respect of future premiums both at the current level and resulting from any selected premium indexation. No allowance was made for either lapses or the cessation of premium indexation prior to retirement.

Product	Basic Reserve £m	O/S Durn Spread years	Gtee Reserve £m	GAO Rate	Incrs Yes/No	Ann. Form	Ret. Ages
Select Executive & Personal Retirement Plan	21.7	0-37	5.2	9.1%	Yes	*	60-70

\* The sample guaranteed annuity rates are provided for a male aged 65 based on single life, level annuities paid monthly in advance and guaranteed for 5 years. Policyholders may choose a different basis, e.g. with spouse's annuity, escalating payments or different payment frequency.



Where policyholders may make increments to the policy, the GAO does not apply to the regular premium increases or additional single premiums.

## **(2) Guaranteed Surrender and Unit-linked Maturity Values**

### **Policies previously written in PLL**

#### **a) Methods**

##### Surrender Guarantees

**Multiple Growth Bonds:** Some policies have a special minimum value on surrender (only payable in certain extreme circumstances) of 100% of premiums paid to date. It was not considered necessary to incorporate an additional reserve.

**Property Growth Plan and Executive Property Growth Plan:** From the fifteenth policy anniversary onwards there is the guarantee that the surrender value is not less than the sum of premiums paid. The current value of units of each policy is such that it is not considered necessary to keep any reserve in respect of this guarantee.

**Flexible Savings Plan:** From the tenth policy anniversary onwards there is the guarantee that the surrender value is not less than five-sixths of premiums paid. The current value of units of each policy is such that it is not considered necessary to keep any reserve in respect of this guarantee.

**Protection Plan:** This contract provides a guaranteed surrender value and contains an in-built contingency margin as the value of the units in the reserve account at the previous policy anniversary will usually exceed this surrender value. A further contingency reserve of £10,000 is set up in respect of the guarantee. This reserve has not been included in the table below.

**All-Weather Bond:** From the fifteenth policy anniversary onwards there is the guarantee of a cash value of at least 150% of the single premium paid. The current value of units of each policy is such that it is not considered necessary to keep any reserve in respect of this guarantee.

For non-linked single premium contracts to which guaranteed surrender values currently apply, the reserve was, if necessary, increased so that it is not less than the current guaranteed surrender value.

##### Maturity Guarantees

The reserving bases for investment performance guarantees are summarised below.

**Lloyds Bank contracts issued between 1968 and 1973:** These have a minimum amount guaranteed on maturity. Some of these contracts have been endorsed at maturity to continue for a further period of ten years but the original guarantee only has been retained and not increased despite the payment of a further ten years' premiums. It is considered that no reserve is necessary to provide against these guarantees because of the current size of the unit liabilities compared with the guarantees given.

## Non Profit Fund

Fairshare Endowment Plans (Series I), Endowment Plans (Property and Managed Fund units): A reserve to cover possible liabilities under the maturity guarantee is calculated using the Barrie & Hibbert stochastic investment model to assess the market value of the guarantee.

Endowment Plans (Fixed Interest Fund units): A stochastic investment model was considered unnecessary and a reserve of £10,000 is included for the maturity guarantee reserve on this small group of policies. This reserve has not been included in the table below.

Home Ownership Plan (including Low Start variant): Any projected shortfall at maturity has been allowed for in the cash flow projections and no further reserve is necessary. The deterministic cash flow reserve exceeds the market value of the guarantee as estimated using a Barrie & Hibbert market consistent stochastic asset model.

Acorn Plan, Flexible Savings Plan, Endowment Policy and Whole Life Policy: No reserve is considered necessary.

b)

Product Name	Fairshare Endowment Plans (Series I)	Endowment Plans (Property and Managed Fund units):
<b>Basic reserve</b>	£5.2m	£0.4m
<b>Spread of outstanding durations</b>	As a percentage of unit fund: 26.0% < 5 years 31.3% between 5 and 10 years 24.9% between 10 and 15 years 9.4% between 15 and 20 years 8.3% over 20 years	As a percentage of unit fund: 80.0% < 5 years 19.3% between 5 and 10 years 0.7% between 10 and 15 years nil between 15 and 20 years nil over 20 years
<b>Guarantee reserve</b>	£0.2m	£0.0m
<b>Guaranteed amount</b>	Guaranteed sum assured at maturity specified at outset of the policy	Guaranteed sum assured at maturity specified at outset of the policy
<b>MVA free conditions</b>	No MVAs are allowed	No MVAs are allowed
<b>In force premiums</b>	£0.1m	£0.0m
<b>Increments</b>	Increments are not allowed	Increments are not allowed

<b>Product Name</b>	<b>Wealth Assured Endowments</b>
<b>Basic reserve</b>	£28.3m
<b>Spread of outstanding</b>	Up to 39 years outstanding duration.
<b>Guarantee reserve</b>	£0.8m (aggregate reserve for all Wealth Assured Contracts)
<b>Guaranteed amount</b>	For contracts issued before April 1979 there is a guarantee that at the end of ten years and throughout the eleventh year the sum payable will not be less than 100% of the total premiums paid (excluding the policy fee). This proportion will increase by 1% at each policy anniversary until final maturity.  For later contracts the minimum sum assured payable at the end of ten years for each £10 per month premium (excluding policy fee) is £1000 and this amount increases by £125 for males and £140 for females at the end of each complete year thereafter until final maturity.
<b>MVA free conditions</b>	No MVAs are allowed
<b>In force premiums</b>	£0.3m
<b>Increments</b>	Increments are not allowed

<b>Product Name</b>	<b>Wealth Assured Ten + Ten contracts</b>
<b>Basic reserve</b>	£0.2m
<b>Spread of outstanding</b>	Up to 7 years outstanding duration
<b>Guarantee reserve</b>	£0.8m (aggregate reserve for all Wealth Assured Contracts)
<b>Guaranteed amount</b>	Minimum sum assured payable at end of ten years is the total premiums paid
<b>MVA free conditions</b>	No MVAs are allowed
<b>In force premiums</b>	£0.0m
<b>Increments</b>	Increments are not allowed

<b>Product Name</b>	<b>Wealth Assured Bonds</b>
<b>Basic reserve</b>	£6.6m
<b>Spread of outstanding</b>	Whole Life contract. The youngest current age is 36.
<b>Guarantee reserve</b>	£0.8m (aggregate reserve for all Wealth Assured Contracts)
<b>Guaranteed amount</b>	On surrender the cash value of the bond is the value of the units allocated at the last published bid price, subject to a provision that if the bond had been in force for ten years and no part of it had been cashed or withdrawn, the cash value is guaranteed to be not less than 125% of the original single premium; this guarantee increases to 200% after 20 years and 300% after 30 years. Reduced guarantees apply if part of the bond has been cashed.
<b>MVA free conditions</b>	No MVAs are allowed
<b>In force premiums</b>	N/A
<b>Increments</b>	Increments are not allowed

**Policies previously written in Alba, BRS, BA, SMA and SPL**

There are no guaranteed surrender and unit-linked maturity values.

**Policies previously written in Century**

The total basic reserve for guaranteed surrender and unit-linked maturity values, where an additional reserve is considered necessary, is below the lesser of £10m and 0.1% of total mathematical reserves.

**Policies previously written in BULA**

The Flexible Investment Plan (first series) contains a maturity guarantee. The contract is an endowment assurance maturing on the anniversary of the date of the contract preceding the sixty-fifth birthday of the life assured. The contract is closed to new business.

The amount payable on maturity of the contract or on earlier death of the life assured is the greater of the value of the relevant shares at the current bid price and the premiums payable over the entire term of the contract. There is an option on maturity for the contract to be continued for an indefinite period without the continued payment of premium. The amount payable at the end of the continuation is the value of the relevant shares at the current bid price. The amount payable on death during the continuation is the greater of the value of the relevant shares at the current bid price and the premiums payable over the entire term of the contract.

The unit reserves are calculated as described in section 4(1) above.

Expense reserves are determined by use of projected cashflows which allow for the guarantee and the reserves were set such that no policy would produce a future valuation strain.

b)

In respect of the guarantees described in 5(2) (a)

Product	Basic Reserve £m	O/S Durn Spread years	Gtee Reserve £m	Gtee Amount £m	MVA Free conditions	In Force Premiums £m	Incrs Yes/No
Flexible Investment Plan (first series)	16.3	0-19	0.0	6.0	N/A	0.2	No

**(3) Guaranteed Insurability Options**

**Policies previously written in PAL**

Some term assurance policies include options to extend the policy term or convert to other policies without requiring further evidence of health. Where there are options to convert or extend, an additional reserve is calculated as the larger of 10% of the normal term assurance reserve and 20% of the office premium except for Renewable Convertible Term Assurance. For Renewable Convertible Term Assurance this reserve is the larger of 20% of the normal reserve and 30% of the office premium. The total sum assured under the policies is less than £1bn.

The Progressive Protection Plan and Flexible Mortgage Plan include a Special Events option which allows the planholder to increase the sum assured without further underwriting on certain events such as marriage of the life assured or birth of each of the life assured's children. The cost of the options is implicitly allowed for in the normal reserve.

**Policies previously written in SLUK**

Some term assurance and critical illness policies contain conversion and renewal options. Some policies also contain guaranteed insurability options where a term assurance may be taken out at standard rates if the life survives for 12 months following a critical illness claim. Loadings are applied in the calculation of the reserve, usually as a percentage of premiums paid, to allow for the cost of these options. The total sum assured under these policies is less than £1bn.

**Policies previously written in Alba**

The reserves for guaranteed insurability options do not exceed the materiality limits.

**Policies previously written in Century**

Guaranteed insurability, continuation and conversion options are available on a number of conventional and linked products.

A revival reserve of £40,000 has been made with respect to ex-NEL policies.

The provision for the options under Convertible Term Assurances and Mortgage Protection - New Series contracts was determined by accumulating the proportion of the office premium reserved for options at the appropriate valuation rates of interest.

For ex-CCL convertible term assurances, an additional reserve was held equal to the proportion of the total office premiums in respect of the conversion option paid since the inception of the contract. The premium rates for convertible term assurances are equal to those for ordinary term assurances with a 15% loading for the conversion option (10% for policies issued before March 1979).

For ex-CCL Versatile Investment Plan policies, provision has been made for the guaranteed insurability option of 0.1% of the total office premiums paid since inception.

For A-plan policies additional reserves were held equal to 3% of the sum assured discounted from the maturity date at 4.5% in respect of the guaranteed insurability option.

No provision was deemed necessary in respect of the options under the Flexible Protection Plans, Serious Illness Plans and Flexible Mortgage Plans, on the grounds that (i) there are already margins in the existing rates of monthly mortality deductions, and (ii) these, and the rates of morbidity deductions, can be increased at the Company's discretion.

No specific provision has been made in the reserves for the option under the ex-NBA Mortgage Protection contract as it is not expected, under current conditions, that any option effected will result in a loss to the Company.

No explicit provision has been made for the option under the ex-NAL Mortgage Protection Plans or Tailored Mortgage Protection to increase the sum assured. The margins in the mortality assumptions are assumed to cover any cost of the option.

In respect of certain Retirement Annuities, where the pension date and the benefits payable may be altered within the limits imposed by statute, and in respect of cash options under certain deferred annuity bonds, no specific provision has been made for the options available. Deferred annuity bonds with cash options have been valued by discounting the amounts of the cash options. No significant liability would arise if the policyholders elected to exercise the annuity options.

**b)**

The total sum assured for policies with guaranteed insurability, continuation and conversion options is less than £1bn.

**Policies previously written in BULA**

A number of term assurance products have a renewability option on expiry. A reserve is held equal to 13% of the total office premium payable over the whole term of the policy.

There are no products with conversion or renewal options where the total sum assured exceeds £1bn.

**Policies previously written in BRS, BA and SMA**

There are no guaranteed insurability options.

**Policies previously written in SPL**

UK Self Assurance contracts may contain a renewal option giving policyholders the option to renew their policies at the end of the initial term. The reserve for this option is calculated as 70% of the option premiums received to date.

Product name	In-force premium £m	Sum assured £m	Description of option	Gtee reserve £m
Self Assurance	0.01	2	Renewal – renew policy on maturity.	0.01

**(4) Other Guarantees and Options**

**Policies previously written in PLL**

Investment Performance Guarantees

Price Guarantees

The prices of units in a number of deposit funds are guaranteed not to fall, for some of the products investing in those funds.

The assets backing these funds and the nature of the institutions with whom the investments are placed (mainly building societies and banks) are such that no reserve is considered necessary for these guarantees.

Units in the Old Building Society Linked Pension Fund are guaranteed to increase in value on a year to year basis in line with the lending rate of interest used by Abbey plc on residential mortgages. An additional provision of £1.9m has been made within the long-term insurance business liabilities in respect of this arrangement. This is calculated as 15% of the value of the fund, taking into account the outstanding term of the business and the expected difference between the rate guaranteed and the rate earned on the underlying assets.

Investment Guarantees on Deposit Administration Pension Contracts (PAL)

The Deposit Administration Pension contracts previously written by PAL have investment guarantees. The additional provision in respect of the guarantee is £2.9m. This is calculated as 15% of the base reserves for these contracts, taking into account the outstanding term of the business and the expected difference between the rate guaranteed and the rate earned on the underlying assets.

**Policies previously written in Alba**

There are no other significant guarantees or options.

**Policies previously written in Century**

Investment guarantees operate on ex-NELPEN Guaranteed Growth plans, ex-Crown plans investing in the Deposit Administration fund, and certain ex-OMLA and ex-Hiscox ex-With Profit plans. These are explicitly valued and form part of the basic reserves.

In view of the nature of the investments of the ex-NELPEN Nelex Deposit Fund, ex-NBA Building Society Fund (Life Assurance Business), the Crown Money Fund and the ex-Prosperity Deposit and Pension Deposit Funds, no provision has been made for the guarantee that unit prices will not fall.

On ex-Prosperity Accident Income plans, WISP and Super WISP 25 policies, there is an option to change the beneficiary at any time – no reserve is currently held for this option.

**Policies previously written in BULA**

Some term assurance products include an option to increase the sum assured on marriage or birth. This option is allowed for by holding a reserve equal to 10% of the office premiums which have become due by the valuation date.

**Policies previously written in BRS, BA and SPL**

There are no other guarantees or options.

**Policies previously written in SMA**

Some classes of deferred annuity have a cash option. The reserve for these policies is calculated in the same way as for cash contracts with guaranteed annuity options, as described in paragraph 5(1) for the Scottish Mutual With-Profits Fund. The value of the annuity at the vesting date (or maturity date) according to the mortality and interest tables in use is compared with the cash option. The reserve is calculated as a weighted average of the reserves for the guaranteed annuity option and the cash option, assuming a take-up rate for the cash option as shown below,

For Individual Pension Arrangements, the take-up rate assumed for the cash option is 5% for all maturities. The vesting date is taken to be Normal Retirement Age.

These contracts are 100% reinsured to Phoenix Pensions Limited. The total gross reserves on these contracts, after allowing for the cash option which reduces the reserve from that which would be required if only the deferred annuity was valued, are:

Deferred annuity contract	Total mathematical reserves	Mathematical reserves if no option	Reduction to mathematical reserves in respect of option
Individual Pension Arrangements	9.5	9.7	0.2

## 6. EXPENSE RESERVES

### (1) Aggregate Expense Loadings

The aggregate amount of expense loadings, grossed up for taxation where appropriate, expected to arise during the twelve months after the valuation date from implicit and explicit reserves made in the valuation to meet expenses in fulfilling contracts in force at the valuation date is shown in the following table:

Homogeneous risk group	Implicit allowances	Explicit allowances (investment)	Explicit allowances (other)	Non-attributable expenses	Total
	£m	£m	£m	£m	£m
All Products	1.1	21.7	37.0	41.0	100.8

### (2) Implicit Allowances

Implicit allowances for expenses include the margin between the office premium and the net premium for prospectively valued contracts where the net premium method has been employed.

### (3) Form 43 Comparison

The total amount of maintenance expenses shown in 6 (1) is different from the total shown in line 14 of Form 43:

Homogeneous risk group	F43.14	table 6(1)	Difference
	(a) £m	(b) £m	(b) - (a)
All Products	83.8	100.8	16.9
Total	83.8	100.8	16.9

Differences arise from the expected increase in investment expenses in 2011 due to the increase in fees payable to Ignis Asset Management Ltd. In addition there are extra costs expected from the Solvency II and Actuarial Systems Transformation projects.

The expense loadings also include an additional year's inflation compared to form 43, but are based on a smaller book of business due to the run off of the closed fund.



**(4) New Business Expense Overrun**

The company is closed to new business except for contractual increments which includes immediate annuities arising from vesting deferred pension policies. The agreement with the management services company specifies the expenses to be incurred and premium rates allow for the expenses to be charged. The company does not therefore expect to incur any material strain in writing new business so no additional reserve is required.

**(5) Maintenance Expense Overrun**

Expense reserves in accordance with 6(1) together with expense provisions described below are considered to be sufficient to meet the expenses likely to be incurred in the future. The agreement also includes a prudent allowance for costs that are not covered by standard fees payable under the agreement.

Costs falling outside the MSAs Provision - £6.4m

This provision is established as it is expected that the management service agreements will be reviewed in future to reflect changes in business practice. The provision is calculated as the capitalised value of 1% of current outsourcer fees.

UPAC Provision - £16.3m

This provision covers the expected expense associated with the unit pricing and control team for the ex-RSALI business. It is calculated as the expected 2010 expense capitalised over the average future remaining lifetime of this business from 31 December 2009, all reduced by the actual 2010 expenses.

**Policies previously written in PLL**

Other than a reserve of £0.1m, no allowance has been made for redundancy costs (as these will be met by the service provider), or for any costs of terminating the management services agreement (as the service provider does not have the option to terminate the contract).

**(6) Non-attributable expenses**

The non profit fund pays a fixed expense fee to PGMS in respect of all unit linked business other than (1) that originally written in Century, (2) Alba corporate business, (3) that originally written in SMA and (4) that originally written in SPL. The run-off of fees was projected as at 1 January 2009 and was based on the per policy fees agreed to be paid to PGMS allowing for future inflation. The present value of all future fees remains the same on a best estimate basis. The total fee is assumed to inflate at RPIX+1% per annum and from 1 January 2011 the amount paid each year will be adjusted for the movement in RPIX at each November. If for any year the percentage change in RPIX+1% is negative, the fee will not be inflated.

The sterling reserve for the business covered by this agreement is calculated in the following manner:

- Calculate the individual policy sterling reserves using the standard models with per policy expenses set to zero. These expenses are the fees payable to PGMS with a loading for direct costs and any Peak 1 margin.
- The total (unit plus sterling) reserve held in respect of each individual unit linked policy is increased if necessary to ensure it is at least equal to the current surrender value. This step is no different from the method used in previous valuations.

- Calculate the value of the expenses that have been removed from the standard models. The value is calculated using Peak 1 assumptions for discount rates, RPI inflation and tax applicable to this unit linked business.
- Calculate the value of the spare charges that arise within the models because of the criteria that individual policy reserves are at least equal to the current surrender value. This is the difference between sterling reserves on this basis and on the basis that there is no floor to the negative sterling reserves.
- Offset the value of the spare charges against the value of the expenses.
- The total reserve held in respect of unit linked business is the unit liability, plus the individual policy sterling reserves, plus any excess of the value of expenses over value of spare charges.

The total sterling reserve for this business is £25.0m. This also covers mortality and morbidity risk. The present value of the future expense payments to PGMS is £269.4m.

There has been a change in fees payable to Ignis Asset Management Ltd for the management of assets. This includes a change to investment expenses and an additional services fee. An expense reserve of £19.4m has been set up for the additional services fee which is non-attributable. This reserve has been calculated as the current level of additional services fee multiplied by a capitalisation factor.

Expense reserves have been reduced by £8.0m to allow for lower fees payable to PGMS than modelled over the period 1 January 2011 to 1 September 2012.

Other non-attributable expense reserves are for TCF (£6.8m), other costs falling outside MSAs (£6.4m), other direct costs and business retention activity (£2.8m) and allowance for extra unmodelled per policy expense payable to Percana from 2011-15 (£1.7m).

## **7. MISMATCHING RESERVES**

### **(1) Analysis of Reserves by Currency**

<b>Currency</b>	<b>Mathematical Reserves m</b>	<b>Backed by assets m</b>
Sterling (£)	878.5	878.5
Other currencies	13.1	13.1
<b>Total</b>	<b>891.6</b>	<b>891.6</b>

### **(2) Other Currency Exposures**

The proportion of the liabilities in “other currencies” which is matched by assets in the same currency is 100%.

### **(3) Currency Mismatching Reserve**

With the exception of the Republic of Ireland business previously written in SPL, all of the liabilities and the majority of the assets are denominated in sterling and are backed mainly by fixed interest assets and cash. The liabilities under Republic of Ireland business previously written in SPL are denominated in euros and are matched by assets in the same currency. This combined holding results in minimal currency risk and so no additional currency mismatching reserve is required.

**(4) Most Onerous Scenario Under INSPRU 3.1.16(R)**

Not applicable.

**(5) Most Onerous Scenario Under INSPRU 3.1.23(R)**

Not applicable.

**(6) Resilience Capital Requirement**

Not applicable

**(7) Additional Reserves Arising From INSPRU 1.1.34(2)(R)**

No further reserve is required in respect of INSPRU 1.1.34(2)(R).

The size, currency and term of assets in respect of the non profit fund are reviewed regularly. The liabilities are backed mainly by fixed interest assets and cash and projections are carried out on appropriate, realistic assumptions. The Investment Managers are given rules to control the duration of such assets.

In view of this, no additional reserves for cashflow mismatching are regarded as appropriate.

**8. OTHER SPECIAL RESERVES**

The special reserves exceeding the lesser of £10m or 0.1% of the total mathematical reserves are as follows:

Description	Gross Reserve	Reassurance	Net Reserve
	£m	£m	£m
PGMS Risk Transfer Payment Provision	26.9	0.0	26.9
Data Contingency Provision	33.0	11.1	21.9
Solvency II Provision	21.0	0.0	21.0
Future Projects Provision	18.7	0.0	18.7
VAT Provision	18.2	0.0	18.2
Litigation Provision	19.7	6.6	13.1
Reassurer Credit Default Provision	11.0	0.0	11.0

PGMS Risk Transfer Payment Provision

As a result of the transfer of outsourcer work from UISL to Diligenta there is a change in expenses payable from the Life companies to PGMS for the administration of business. This includes a change to administration expenses and a sum paid across to PGMS for the transfer of various risks and for various project implementation costs. A reserve has been set up to cover the costs of the payment for transfer of risks.

Data Contingency Provision

Data contingency reserves for additional expenses which may arise in connection with data errors affecting the long-term business.

Solvency II Provision

This provision covers the expected cost of the solvency II project.

Future Projects Provision

This provision is held to cover additional expenses which may arise in connection with unanticipated projects with no or little financial benefit and is calculated having regard to past experience.

VAT Provision

This provision covers the risk that VAT is applied to future charges made by external outsourcers. The provision is calculated as the present value of these potential future amounts.

Litigation Provision

Reserves are held for future litigation settlements and similar costs.

Reinsurer Credit Default Provision

This provision is based on the non-collateralised reserves ceded to any external reinsurer, a probability of default based on credit rating and a prudent allowance for recoveries in the event of default.

## **9. REINSURANCE**

### **(1) Facultative Reinsurance**

- (a) No premiums were payable on a facultative basis to a reinsurer that was unauthorised to carry on insurance business in the UK.
- (b) No such premiums were payable to a connected company reinsurer that was unauthorised to carry on insurance business in the UK.

### **(2) Reinsurance Treaties**

The required details of the reinsurance treaties in force at the valuation date are set out below.

#### **For Policies previously written in PLL**

- (d) **Swiss Life Insurance and Pension Company.**
- (e) A block of single premium compulsory purchase annuity contracts are reinsured on original terms.
- (f) No premiums were payable by the company under the treaty during the year.
- (g) There are no deposit back arrangements.
- (h) The treaty is closed to new business.
- (i) There are no undischarged obligations
- (j) The amount of mathematical reserves ceded under the treaty at the valuation date was £16.5m.
- (k) As (e)

- (d) **UNUM Provident.**
- (e) Claims resulting from Group PHI contracts are 100% reinsured
- (f) No premiums were payable by the company under the treaty during the year.
- (g) There are no deposit back arrangements.
- (h) The treaty is open to new business.
- (i) There are no undischarged obligations
- (j) The amount of mathematical reserves ceded under the treaty at the valuation date was £121.5m.
- (k) As (e)

- (d) **Swiss Re**
- (e) Group PHI, excluding schemes written under multinational pooling, is reinsured on a 50% quota share basis with a maximum retention on any one life of £75,000 p.a. All individual claim benefits greater than the maximum retention are 100% reinsured with Swiss Re.
- (f) The premiums payable by the company under the treaty during the year were £0.1m.
- (g) There are no deposit back arrangements.
- (h) The treaty is closed to new business.
- (i) There are no undischarged obligations
- (j) The amount of mathematical reserves ceded under the treaty at the valuation date was £30.6m.
- (k) As (e)

- (d) **Swiss Re**
- (e) PHI policies are reinsured on a 50% quota share basis with a maximum retention of £25,000p.a.
- (f) The premiums payable by the company under the treaty during the year were £1.2m.
- (g) There are no deposit back arrangements.
- (h) The treaty is closed to new business.
- (i) There are no undischarged obligations
- (j) See Note 1
- (k) As (e)

- (d) **Swiss Re.**
- (e) Term, Term & TPD and waiver of premium policies are reinsured on a 90% quota share basis with a maximum retention of £50,000 / £300 p.a. (or \$75,000 / \$450 p.a.). Advance commission is also provided.
- (f) The premiums payable by the company under the treaty during the year were £1.1m.
- (g) There are no deposit back arrangements.
- (h) The treaty is closed to new business.
- (i) There are no undischarged obligations
- (j) See Note 2
- (k) As (e)

- (d) **GE Frankona.**
- (e) Certain Critical illness, TPD and Term & CI policies are reinsured on an 85% quota share basis with a maximum retention of £50,000. The business covered is the same as the treaty with Gen Re and Kolnische Ruck described below. Certain other policies of the same types are reinsured on a 90% quota share basis with a maximum retention of £50,000, and for these policies. Advance commission is also provided.
- (f) The premiums payable by the company under the treaty during the year were £1.1m.
- (g) There are no deposit back arrangements.
- (h) The treaty is closed to new business.
- (i) There are no undischarged obligations
- (j) See Note 2
- (k) As (e)
  
- (d) **GE Frankona.**
- (e) The treaty covers PHI reinsurance business accepted by the company. Where the PHI reinsurance exceeds £25,000p.a. the excess is reinsured.
- (f) The premiums payable by the company under the treaty during the year were £0.7m.
- (g) There are no deposit back arrangements.
- (h) The treaty is closed to new business.
- (i) There are no undischarged obligations
- (j) See Note 1
- (k) As (e)
  
- (d) **Munich Re**
- (e) Term and Term & TPD policies are reinsured on a 90% quota share basis with a maximum retention of £50,000 (or \$75,000). Advance commission is also provided.
- (f) The premiums payable by the company under the treaty during the year were £9.5m.
- (g) There are no deposit back arrangements.
- (h) The treaty is closed to new business.
- (i) There are no undischarged obligations
- (j) See Note 2
- (k) As (e)

**(d) Gen Re. And Kolnische Ruck**

- (e) Critical Illness, TPD and Term CI policies are reinsured on a 75% quota share basis (90% prior to 7 July 2003) with a maximum retention of £100,000 (£50,000) prior to 7 July 2003). Advance commission was also provided until 26<sup>th</sup> January 2003. The treaty is a co-reinsurance arrangement, 5% of the reinsured business being underwritten by Gen Re and 95% by Kolnische Ruck.
- (f) The premiums payable by the company under the treaty during the year were £9.2m.
- (g) There are no deposit back arrangements.
- (h) The treaty is closed to new business.
- (i) There are no undischarged obligations
- (j) See Note 2
- (k) As (e)

**(d) GE Frankona**

- (e) PHI policies are reinsured on an 85% quota share basis with a maximum retention of £25,000pa. With effect from 1 January 2003, reinsurance is on a risk premium basis.
- (f) The premiums payable by the company under the treaty during the year were £10.8m.
- (g) There are no deposit back arrangements.
- (h) The treaty is closed to new business.
- (i) There are no undischarged obligations
- (j) See Note 1
- (k) As (e)

- (d) Legal and General**
- (e) A 50% quota share of Fair Share Whole Life business written between 1.9.74 and 30.9.80.
- (f) The premiums payable by the company under the treaty during the year were £0.1m.
- (g) £ nil
- (h) The treaty is closed to new business.
- (i) £ nil
- (j) The amount of mathematical reserves ceded under the treaty at the valuation date was £10.4m.
- (k) The treaty is a 50% quota share arrangement.
  
- (l) All reinsurers included are authorised to carry on insurance business in the UK.
- (m) None of the above reinsurers is a connected company of the insurer.
- (n) There are no material contingencies, such as credit risk or legal risk to which the treaties are subject.
- (o) Under each treaty consideration has been given to the overall position in the event of contracts lapsing. Where the commission refund due to the reinsurer is proportionate to the commission refund due to the company on the original contract, then taking into account the reserves released on the retained benefits, and the refunds of commission expected to be received by the company in respect of the original contracts, it has not been considered necessary to hold any additional reserve. Where the commission refund due to the reinsurer is more than an amount proportionate to the commission refund due to the company on the original contract, then a reserve has been set up to cover the expected shortfall.
- (p) There are no financing reinsurance treaties.

Note 1 The total reserves ceded in respect of treaties covering individual PHI business previously written by SLUK are £23.3m.

Note 2 The total reserves ceded in respect of treaties covering TA, CI and TPD business previously written by SLUK are £30.4m.

**For Policies previously written in Alba and BULA**

Not applicable



**For Policies previously written in Century**

- (d) XL Re**
- (e) 100% of the benefits under the company's ex-OMLA non linked immediate annuity business that was in force at the end of 16 December 1999.
- (f) No premiums were payable by the company under the treaty during the year.
- (g) There is no deposit back arrangement
- (h) The treaty is closed to new business.
- (i) There are no undischarged obligations
- (j) The amount of mathematical reserves ceded under the treaty at the valuation date was £323.3m.
- (k) As (e)
- (l) XL Re is not authorised to carry on insurance business in the United Kingdom
- (m) The reinsurer is not a connected company of the insurer.
- (n) The assets backing the reinsured liabilities are held in a custodian account with appropriate security arrangements in place.
- (o) No provision has been made for any liability of the insurer to refund any amounts of reinsurance commission in the event of lapses or surrender of the contract.
- (p) This is not a financing reinsurance treaty

**For policies previously written in BA**

- (d) SCOR Global Life Reinsurance UK Limited**
- (e) The treaty covers mortality and critical illness benefits on a quota share basis.
- (f) The premiums payable by the company under the treaty during the year were £1.4m.
- (g) There are no deposit back arrangements
- (h) The treaty is closed to new business.
- (i) There are no undischarged obligations
- (j) The amount of mathematical reserves ceded under the treaty at the valuation date was £1.3m.
- (k) The insurer retains 10% of the risk.
- (l) SCOR Global Life Reinsurance UK Limited is authorised to carry on insurance business in the United Kingdom
- (m) The reinsurer is not a connected company of the insurer.
- (n) There are no material contingencies, such as credit risk or legal risk, to which the treaty is subject.
- (o) There is no reinsurance commission payable under the contract.
- (p) This is not a financing reinsurance treaty

**For policies previously written in SMA**

- (d) Munich Re**
- (e) The treaty reassures 100% of the liability under the closed book of immediate annuity business covered by the agreement.
- (f) Premiums of £35.8m were paid by the company under this treaty during the year.
- (g) There are no deposit back arrangements.
- (h) The treaty is closed to new business.
- (i) There are no undischarged obligations.
- (j) The amount of mathematical reserves ceded under the treaty at the valuation date was £385.3m.
- (k) There is no retention under the treaty.
- (l) The reinsurer is authorised to transact business in the UK.
- (m) The reinsurer is not connected to the company.
- (n) Loss mitigation exists because this is a longevity swap arrangement under which the insurer has offsetting liabilities to pay reinsurance premiums valued at £414.3m
- (o) No commission is payable on the reinsurance premium.
- (p) This is not a financing reinsurance treaty.

**For policies previously written in SPL**

- (d) XL Re Ltd**
- (e) The treaty reassures 100% of the liability under the closed book of immediate annuity business covered by the agreement.
- (f) No premiums were paid by the company under this treaty during the year.
- (g) There are no deposit back arrangements.
- (h) The treaty is closed to new business.
- (i) There are no undischarged obligations.
- (j) The amount of mathematical reserves ceded under the treaty at the valuation date was £407.3m.
- (k) There is no retention under the treaty.
- (l) The reinsurer is authorised to transact business in the UK.
- (m) The reinsurer is not connected to the company.
- (n) There are no material contingencies, such as credit risk or legal risk, to which the treaty is subject.
- (o) No provision has been made for any liability of the insurer to refund any amounts of reinsurance commission in the event of lapses or surrender of the contract.
- (p) This is not a financing reinsurance treaty.

- (d) Swiss Re**
- (e) The treaty covers mortality, accelerated critical illness and stand-alone critical illness under Self Assurance contract on a quota share basis.
  - (f) Premiums of £14.4m were paid by the company under this treaty during the year.
  - (g) There are no deposit back arrangements.
  - (h) The treaty is closed to new business.
  - (i) There are no undischarged obligations.
  - (j) The amount of mathematical reserves ceded under the treaty at the valuation date was £46.6m.
  - (k) There is no retention under the treaty.
  - (l) The reinsurer is authorised to transact business in the UK.
  - (m) The reinsurer is not connected to the company.
  - (n) There are no material contingencies, such as credit risk or legal risk, to which the treaty is subject.
  - (o) No provision has been made for any liability of the insurer to refund any amounts of reinsurance commission in the event of lapses or surrender of the contract.
  - (p) This is not a financing reinsurance treaty.

- (d) Munich Re**
- (e) The treaty covers UK Self Assurance Lifetime and Long Term Care business, certain UK pensions term assurances and UK Flexible Mortgage Plan with attaching critical illness cover on a risk premium, individual surplus basis.
  - (f) Premiums of £4.3m were paid by the company under this treaty during the year.
  - (g) There are no deposit back arrangements.
  - (h) The treaty is closed to new business.
  - (i) There are no undischarged obligations.
  - (j) The amount of mathematical reserves ceded under the treaty at the valuation date was £0.1m.
  - (k) There is no retention under the treaty.
  - (l) The reinsurer is authorised to transact business in the UK.
  - (m) The reinsurer is not connected to the company.
  - (n) There are no material contingencies, such as credit risk or legal risk, to which the treaty is subject.
  - (o) No provision has been made for any liability of the insurer to refund any amounts of reinsurance commission in the event of lapses or surrender of the contract.
  - (p) This is not a financing reinsurance treaty.

**Non-profit immediate annuities, non-profit conventional deferred annuities and non-profit deposit administration deferred annuities not reinsured externally.**

- (d) Phoenix Pensions Limited**
- (e) The treaty covers non profit immediate annuities, non-profit conventional deferred annuities and non-profit deposit administration deferred annuities. The liabilities are 100% reinsured.
- (f) The premiums payable by the company under the treaty during the year were £225.9m.
- (g) There are no deposit back arrangements
- (h) The treaty is open to new business.
- (i) There are no undischarged obligations
- (j) The amount of mathematical reserves ceded under the treaty at the valuation date was £4,544.9m.
- (k) As (e)
- (l) Phoenix Pensions Limited is authorised to carry on insurance business in the United Kingdom
- (m) The reinsurer is a connected company of the insurer.
- (n) There are no material contingencies, such as credit risk or legal risk, to which the treaty is subject.
- (o) There is no reinsurance commission payable under the contract.
- (p) This is not a financing reinsurance treaty

## **10. REVERSIONARY (OR ANNUAL) BONUS**

Not applicable

## **APPENDIX 9.4A**

### **PHOENIX LIFE LIMITED**

#### **Abstract of Valuation Report for Realistic Valuation**

#### **1. INTRODUCTION**

##### **(1) Valuation Date**

The valuation date is 31 December 2010.

##### **(2) Previous Valuation**

The previous valuation date was 31 December 2009.

##### **(3) Interim Valuations**

An interim valuation was carried out on 30 June 2010.

## 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:

Economic Assumption	Current Valuation	Previous Valuation
	Base	Base
Fixed Interest Investment return	4.09%	4.55%
Risk discount rate	4.09%	4.55%
RPI Inflation	3.50%	3.58%
Expense inflation	5.90 (Swiss) /5.50%(Bula)	5.98 (Swiss) /5.58%(Bula)

#### (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	Prospective	21.0	3.9
SLUK Ordinary Branch	Retrospective	50.1	7.8
SLUK Ordinary Branch	Retrospective	41.5	5.9
BULA conventional life	Retrospective	32.1	4.2
BULA pension contracts	Retrospective	1.7	1.9
Total		146.4	23.7
Form 19 Line 31		146.4	
Form 19 Line 49			23.7

**(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 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.

The expenses charged to the with-profits fund are fixed amounts per policy in-force, 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 2009.
- (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
- the 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	£m
(i)	Initial Expenses	Nil <sup>1</sup>
(ii)	Maintenance Expenses	0.5
(iii)	Method	Average expense charge deducted
(iv)	Expenses charged other than to with-profits benefits reserve	0.1

#### **(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:

Year	SLUK CWP	SLUK UWP	BULA
Previous year -1	114%	114%	101%
Previous year	108%	108%	100%
Current year	108%	108%	100%



**(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:

Type of business	Investment Return
SLUK IB	10.35%
SLUK OB CWP	10.35%
SLUK OB UWP	10.35%
BULA	10.90%

**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	2.71%	2.71%	2.71%
Equities	2.21%	2.21%	2.21%
<b>Expense Assumptions</b>			
Investment Expense p.a.	0.10%	0.10%	0.10%
Per policy Expenses			
Per Annum	£0.40	£0.40	£0.40
Per Premium	£0.30	£0.30	£0.30
Expense Inflation p.a.	5.90 (Swiss) /5.50%(Bula)	5.90 (Swiss) /5.50%(Bula)	5.90 (Swiss) /5.50%(Bula)
<b>Bonus Assumptions</b>			
<b>Reversionary Bonuses</b>			
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.

Expenses

The life company entered into a new MSA with Pearl Group Management Services (PGMS) with effect from 1 September 2010. Compared to the MSA at the previous valuation the new service fees are higher and the new MSA uplift in the fee inflation is lower. In addition the new service fees incorporate the cost of several additional services that were previously paid to UISL on a fixed charge basis.

The new MSA specifies fee inflation to be RPIX +1.0% at 1 January each year. The MSA at the previous valuation allowed for fee inflation at RPIX +1.4%.

**(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.**

	<b>Cost of Guarantees &amp; Options</b>	<b>Smoothing Cost</b>	<b>Extent of Grouping</b>	<b>No of Individual policies</b>	<b>No of model points</b>
SLUK UWP	Variation of Black-Scholes formula	See below	All business in this group	7,774	7,774
All other business	Stochastic model	See below	All business in this group	122,112	5,573

**(a) Cost of Guarantees & Options**

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

- (i) The reserves required in addition to asset share to meet guaranteed benefits; and
- (ii) 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 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 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**

The Economic Scenario Generator (ESG) has been upgraded at the current valuation to improve the asset modelling and to remain in line with the latest Industry practice. This represents a change since the previous valuation, and involves moving from the Local Volatility equity model to the Stochastic Volatility Jump Diffusion (SVJD) equity model.

The allowance for asset correlations in the ESG has also been changed to follow a correlation matrix approach at the current valuation. In contrast the asset correlations were driven by factor loadings in the previous valuation.

The treatment of overseas equities within the ESG has changed for this valuation. Instead of using the constant volatility implied by the UK equity market for overseas equity we are now using that implied by the US equity market. The US equity market is considered more appropriate as it is where each of these funds now invest their largest holding in overseas equity.

**(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	Sum assured plus bonuses	Sum of positive B-A
	(A) £m	(B) £m	
SLUK IB	21.0	6.3	-
SLUK OB CWP	50.1	38.1	0.2
BULA Life	32.1	28.8	1.3
BULA Pensions	1.7	2.7	1.0

- (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	GBP		
	Govt. + 10bp	Model	Difference (bp)
1	0.73%	0.73%	0.00%
2	1.12%	1.12%	0.00%
3	1.64%	1.64%	0.00%
4	2.12%	2.12%	0.00%
5	2.51%	2.51%	0.00%
7	3.12%	3.12%	0.00%
10	3.79%	3.79%	0.00%
15	4.37%	4.37%	0.00%
20	4.58%	4.58%	0.00%
25	4.60%	4.60%	0.00%

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

Term	GBP		
	Market	Model	Difference (bp)
1	19.90	21.60	170.00
2	18.10	18.90	80.00
3	16.90	17.50	60.00
4	15.90	16.70	80.00
5	15.20	16.10	90.00
7	14.00	15.20	120.00
10	13.20	14.30	110.00
15	13.20	13.10	-10.00
20	13.00	12.10	-90.00
25	13.00	11.20	-180.00
30	12.60	10.50	-210.00

### Equities and Property

Excess returns over risk free on UK equities, overseas equities and property are modelled using separate (but correlated) lognormal models. The scenario generator uses a Stochastic Volatility Jump Diffusion model for UK equities and a constant volatility model for property and overseas equities.

The UK equity 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

Term	Strike				
	0.8	0.9	1	1.1	1.2
1	27.10	23.80	20.60	17.70	15.60
3	27.10	25.00	23.00	21.20	19.50
5	27.60	25.90	24.30	22.90	21.50
9	28.50	27.10	25.90	24.80	23.80

#### Model

Term	Strike				
	0.8	0.9	1	1.1	1.2
1	25.80	23.50	21.30	18.80	16.00
3	26.30	24.70	23.10	21.70	20.20
5	26.90	25.70	24.50	23.40	22.40
9	27.10	26.20	25.40	24.60	23.90

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	30.36	29.49	28.73	28.04	27.42
20	30.24	29.53	28.95	28.45	28.04
25	30.60	30.01	29.50	29.07	28.69
30	31.67	31.07	30.56	30.10	29.69

Difference (Model – Market) %

Term	Strike				
	0.8	0.9	1	1.1	1.2
1	-1.30	-0.30	0.70	1.10	0.40
3	-0.80	-0.30	0.10	0.50	0.70
5	-0.70	-0.20	0.20	0.50	0.90
10	-1.40	-0.90	-0.50	-0.20	0.10

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

	Output Correlations @ Year 10									
	Cash	Equities	Property	Overseas Equities	5yr Govt ZCB	15yr Govt ZCB	5yr Corp ZCB	15yr Corp ZCB	5yr Index Linked	15yr Index Linked ZCB
Cash	1	0.00	0.12	-0.04	0.57	-0.59	0.15	-0.48	0.70	0.29
Equities		1	0.28	0.53	0.12	0.07	0.63	0.36	0.04	0.12
Property			1	0.21	0.10	-0.04	0.22	0.08	0.13	0.10
Overseas equities				1	0.11	0.10	0.42	0.28	0.06	0.18
5yr Govt ZCB					1	0.15	0.41	0.13	0.50	0.29
15yr Govt ZCB						1	0.15	0.83	-0.37	-0.03
5yr Corp ZCB							1	0.60	0.16	0.19
15yr Corp ZCB								1	-0.29	0.04
5yr Index Linked ZCB									1	0.77
15yr Index Linked ZCB										1

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

n	Asset type (all UK assets)	K=0.75			K=1			K=1.5					
		5	15	25	35	5	15	25	35	5	15	25	35
r	Annualised compound equivalent of the risk free rate assumed for the period. (to two decimal places)	2.51%	4.37%	4.60%	4.45%	x	x	x	x	x	x	x	x
1	Risk-free zero coupon bond	883,590	526,148	325,011	218,203	x	x	x	x	x	x	x	x
2	FTSE All Share Index (p=1)	101,288	241,286	328,919	398,064	205,279	384,746	495,673	582,070	539,814	728,437	870,535	980,108
3	FTSE All Share Index (p=0.8)	95,965	195,690	238,836	265,842	193,208	313,863	362,151	391,982	510,536	598,272	641,896	668,720
4	Property (p=1)	73,381	184,070	269,870	339,686	195,141	336,806	441,590	524,204	567,484	712,839	833,317	930,747
5	Property (p=0.8)	66,860	138,087	179,850	210,317	180,988	260,442	303,672	333,681	536,753	571,172	594,834	611,522
6	15 year risk free zero coupon bond (p=1)	16,503	17,697	14,106	21,401	87,205	81,137	91,139	127,996	500,047	499,359	507,967	531,537
7	15 year risk free zero coupon bond (p=0.8)	14,113	9,223	3,679	2,731	76,450	41,560	21,760	19,700	463,773	323,733	235,857	204,722
8	15 year risk free bonds (p=1)	24,816	35,977	39,292	50,625	105,879	119,196	126,590	150,805	488,452	476,752	488,304	517,316
9	15 year risk free bonds (p=0.8)	21,577	20,211	14,323	14,110	94,712	71,870	52,324	48,295	453,910	323,263	247,656	216,258
10	Portfolio of 65% FTSE All Share and 35% property (p=1)	68,723	180,229	257,267	323,772	169,259	316,102	416,997	496,406	525,437	665,954	789,539	885,568
11	Portfolio of 65% FTSE All Share and 35% property (p=0.8)	63,589	139,420	175,533	203,810	157,074	247,902	288,395	318,159	494,312	532,271	561,309	579,429
12	Portfolio of 65% equity and 35% 15 year risk free zero coupon bonds (p=1)	53,283	141,309	201,517	255,696	142,735	264,158	344,046	412,881	503,781	599,794	698,267	783,421
13	Portfolio of 65% equity and 35% 15 year risk free zero coupon bonds (p=0.8)	48,980	106,384	132,155	153,477	131,437	201,971	228,901	250,753	470,806	468,324	478,618	490,568
14	Portfolio of 40% equity, 15% property, 22.5% 15 year risk free zero coupon bonds and 22.5% 15 year corporate bonds	32,544	90,289	134,103	179,492	116,515	201,668	263,763	324,439	496,722	547,173	619,338	689,101
15	Portfolio of 40% equity, 15% property, 22.5% 15 year risk free zero coupon bonds and 22.5% 15 year corporate bonds	29,059	61,910	77,272	93,742	105,202	143,144	157,556	175,112	462,305	407,756	395,690	398,821
				L=15			L=20				L=25		
16	Receiver sw options	5.64%	6.12%	5.79%	4.61%	6.90%	7.70%	7.10%	5.52%	8.16%	9.07%	8.14%	6.17%

- (iv) UK initial equity yield: 3.05%  
UK initial property rental yield: 4.30%
- (v) Not applicable – there are no significant territories other than the UK. 0.55% 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	32.6	23.1	1.6
6-10	0.1	3.7	1.2	0.5
11-15	0.3	0.1	1.1	0.5
15+	5.8	1.6	3.4	0.1

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 3.3% 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, 1.5% 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 assumptions 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 Indiv Pension Regular Premium	PUP	5.0%	5.0%	5.0%	5.0%
UWP Indiv Pension Regular Premium	Surrender	5.0%	5.0%	5.0%	5.0%
UWP Indiv 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	3.1
Provisions	1.2
Future investment expenses not deducted from asset share	0.4
Future tax adjustment	-0.1
Total	4.6

**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 0.70%. 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 0.17%. Changes in market values are:
    - (a) (7.11)% 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 5.05%.
  - (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 with-profits 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
<b>Opening working capital</b>	<b>0.0</b>
Write back planned benefit enhancements to zeroise working capital	11.8
<b>Revised opening working capital</b>	<b>11.8</b>
Opening adjustments and modelling changes	(2.8)
<b>Restated opening working capital</b>	<b>9.0</b>
Investment return on working capital	1.5
Mismatch profits and losses	0.7
Assumption changes	
- Non-economic	0.0
- Economic	
- Policyholder actions	
Impact of new business	
Other Variances	
- Non-economic	0.2
- New Provisions	1.1
- Unexplained	1.2
<b>Closing working capital before zeroisation</b>	<b>13.8</b>
Planned benefit enhancements to zeroise working capital	(13.8)
<b>Closing working capital</b>	<b>0.0</b>

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

**90% With-Profits Fund**

<b>£m</b>	<b>Current valuation</b>	<b>Previous valuation</b>
Future shareholder transfers not deducted from asset share	3.1	3.2
Provisions	1.2	0
Future shareholder transfers from planned enhancements to with-profits benefit reserve	0.0	1.1
Additional provision for tax on shareholder transfers	0.0	0.3
Future investment expenses not deducted from asset share	0.4	0.4
Future tax adjustment	(0.1)	(1.6)
<b>Total</b>	<b>4.6</b>	<b>4.8</b>

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

<b>£m</b>	<b>Current valuation</b>	<b>Previous valuation</b>
Regulatory current liabilities	12.5	18.5
<b>Total</b>	<b>12.5</b>	<b>18.5</b>

**14. OPTIONAL DISCLOSURE**

None made.

## 100% With-Profits Fund

### 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	Retrospective	11.2	64.3
Paid Up Endowment	Retrospective	0.5	2.7
Whole Life Premium	Prospective	4.7	23.6
Whole Life - Paid Up	Prospective	1.0	5.0
Other		3.5	1.2
Total		20.8	96.8
Form 19 Line 31		20.8	
Form 19 Line 49			96.8

#### (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 with-profits 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)

	<b>Item</b>	<b>£m</b>
(i)	Initial Expenses	Nil
(ii)	Maintenance Expenses	0.30
(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	763%	100%
Previous year	679%	100%
Current year	594%	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 Return
Premium Paying Endowments (PAL)	9.80%
Paid Up Endowment (PAL)	9.80%

**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	Paid Up
Discount Rate p.a.	3.00%	3.00%
Investment Return p.a.	3.00%	3.00%
<b>Expense Assumptions</b>		
Investment Expense p.a.	0.10%	0.10%
Per Policy Expenses p.a.	£67.26	£67.26
Expense Inflation p.a.	5.50%	5.50%
<b>Bonus Assumptions</b>		
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	570%
15	628%
20	791%
25	1027%
30	1510%
35	2390%
40	4245%

There are no assumed lapse rates.

#### Expenses

The life company entered into a new MSA with Pearl Group Management Services (PGMS) with effect from 1 September 2010. Compared to the MSA at the previous valuation the new service fees are higher and the new MSA uplift in the fee inflation is lower. In addition the new service fees incorporate the cost of several additional services that were previously paid to UISL on a fixed charge basis.

The new MSA specifies fee inflation to be RPIX +1.0% at 1 January each year. The MSA at the previous valuation allowed for fee inflation at RPIX +3.8% for Ex-Phoenix business and RPIX +1.4% for Swiss WP business.

#### **(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.**

##### **(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**

Not applicable.

**(5) Management Actions**

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

**(6) Persistency Assumptions**

Not applicable.

**(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:

**Line 47 Form 19**

	£m
Potential future tax liabilities	1.2
<b>Total</b>	<b>1.2</b>

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 0.70%. 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) (7.17)% 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 £4.96m 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 with-profits 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
<b>Opening working capital</b>	<b>0.0</b>
Write back planned benefit enhancements to zeroise working capital	99.1
<b>Revised opening working capital</b>	<b>99.1</b>
Opening adjustments and modelling changes	0.0
<b>Restated opening working capital</b>	<b>99.1</b>
Investment return on surplus	4.0
Mismatch profits and losses	6.9
Assumption changes	
- Non-economic	0.0
- Economic	0.0
- Policyholder actions	0.0
Impact of new business	0.0
Other Variances	
- Estate Distribution	(12.2)
- Change in provisions	(1.0)
- Other traced	(0.8)
- Unexplained	(0.5)
<b>Closing working capital before zeroisation</b>	<b>95.6</b>
Planned benefit enhancements to zeroise working capital	95.6
<b>Closing working capital</b>	<b>0.0</b>

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	1.2	3.7
Total	1.2	3.7

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

<b>£m</b>	<b>Current Valuation</b>	<b>Previous Valuation</b>
Claims outstanding	3.6	4.8
Deferred tax provision	0.0	0.0
Provisions - Other risk and charges	0.0	0.1
Creditors - Direct insurance business	0.0	0.0
Creditors taxation	4.3	3.6
Creditors other	15.4	10.3
<b>Total</b>	<b>23.3</b>	<b>18.7</b>

#### **14. OPTIONAL DISCLOSURE**

None made.

## Alba 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:

Economic Assumption	Current Valuation	Previous Valuation
Fixed Interest Investment return	4.09%	4.55%
Risk discount rate	4.09%	4.55%
RPI Inflation	3.50%	3.58%
Expense inflation	4.50%	4.58%

The inflation assumption for individual business is 9.5% until the end of 2011 to reflect the terms of the management services agreement.

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. A margin of 10% has been added to cover the risk of unexpected mismatch between the assets and liabilities.

#### (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
Unitised With-Profits 0% guarantee	On an individual policy basis the face value of units has been multiplied by a factor representing the ratio of units to asset shares calculated retrospectively for representative policies of similar duration and premium paying type (i.e. single or recurring).	43.8	0.0
Unitised With-Profits 4% guarantee		18.3	0.0
Deposit Administration		105.3	12.6
Unitised Capital Guarantee Fund		20.6	0.0
With Profits Performance Fund		9.1	1.8
Capsil Series H		1.1	0.2
Paid up policies without guaranteed annuity options for which premium history is insufficient to calculate retrospective asset shares.		The present value of future benefits less expenses. The mathematical reserve was calculated using the published statutory basis, with the exception of the valuation interest rates which are as set out in paragraph 5 (1) below.	54.4
As above but with guaranteed annuity options.	5.9		1.4
Other policies without guaranteed annuity options	Individual asset shares calculated using actual premiums received, fund	443.5	104.2
Other policies with guaranteed annuity options.		115.8	85.1
Adjustments		2.3	85.6
Total		820.2	292.7
Form 19 Line 31		820.2	
Form 19 Line 49			292.7

#### (2) Correspondence With Form 19

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

The adjustments consist of a £84.9m provision to repay part of the contingent loan (see paragraph 7), £0.5m of provision for guarantee costs for the £2.3m adjustment made in the With-profits benefit reserves, and £0.2m for future shareholder transfers on BL pre 1990 business.

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

Not applicable as all products have been disclosed.

#### (4) Types Of Products

The main class of guarantees is minimum annuity rate options and these have been separately identified in the table above. The only significant bonus guarantees are on unitised with-profits 4% guarantee policies.

#### 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

- (a) The previous expense investigation was carried out in respect of the current financial year.
- (b) Expense investigations are carried out annually.
- (c) A specific investigation was carried out for this valuation.
  - (i) Being closed to new business, all expenses were identified as maintenance expenses.
  - (ii) Maintenance expenses for the with-profits business for the year to the valuation date were:

	£m
Life - individual	5.6
Pensions - individual	0.4
Pensions - corporate	4.2
Total	10.2

- (iii) Expenses incurred in the year are allocated to specific classes of business, e.g. life / pensions and individual / corporate. The individual / corporate pensions split represents the business administered by Pearl Group Management Services and Capita respectively. These are then apportioned using the number of policies per category.
- (iv) The following expenses were charged to non-profit business for the year to the valuation date:

	£m
Life - individual	2.1
Pensions - individual	4.8
Pensions - corporate	5.2
Total	12.1

**(4) Significant Charges**

The PPFM sets out the rules for allocating charges to asset shares. This takes into account the requirement to treat policyholders fairly. In some years this will lead to overall charges to date being reduced in order to comply with the restrictions set out in the PPFM.

Overall a -3.4% charge was applied to asset shares in the valuation year. This consists of 0.6% in respect of guaranteed annuity option costs and -4.1% in respect of non-guaranteed annuity option costs. The total charge applied to asset shares to date is 3.2%. This compares to 6.7% in the previous year.

**(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
Previous year -1	102.3%
Previous year	102.9%
Current year	114.1%

**(7) Allocated Return**

Unsmoothed yields for the full year (gross of tax), applied to the with-profits benefits reserve:

Life policies (gross)	10.46%
Pensions policies (Low guarantee)	10.46%
Pensions policies (High guarantee)	8.80%

The asset allocation for life policies and pensions low guarantee was 26% property and 74% fixed interest. For pensions high guarantee it was 100% fixed interest.

**5. WITH-PROFITS BENEFITS RESERVE – PROSPECTIVE METHOD****(1) Key Assumptions**

- (a) As described in paragraph 3 (1), the prospective method uses the mathematical reserves calculated using the published statutory basis, with the exception of valuation interest rates which are changed from the rates detailed in Appendix 9.4 paragraph 4 (2) to those set out below. These comply with the regulatory rules and hence differ from the risk free rates required by paragraph 6 (4) (a) (iii):



## Alba With-Profits Fund

<b>Life Assurance Fund</b>	
With-Profits	1.80%
Non Profit	2.35%
<b>General Annuity Fund</b>	
With-profits Deferred Annuities	5.05%
Non profit Deferred Annuities	3.35%
Immediate Annuities	3.75%
<b>Pension Business Fund</b>	
New With-Profits AP Deferred Annuities	4.40%
New With-Profits SP Deferred Annuities	4.40%
Old With-Profits AP Deferred Annuities	5.10%
Old With-Profits SP Deferred Annuities	4.45%
Non Profit AP Deferred Annuities	3.40%
Non Profit SP Deferred Annuities	4.80%
Immediate Annuities	3.80%
Laserplan	4.45%
Group Pension Plan	1.70%
<b>PHI Fund</b>	
Non-claims	4.00%
Claims in Payment	3.75%

- (b) No assumptions about investment returns or risk adjustments were used in this prospective method;
- (c) Expense inflation of 4.5% was used, except for the term to the end of 2011 for the business administered by Pearl Group Management Services when the inflation assumption was 9.5% to reflect the terms of the administration agreement;
- (d) No future reversionary or terminal bonuses were assumed;
- (e) The following expenses were used:

Product Type	£
<b>Individual</b>	
Annuities	53.79
RP WP & Unitised WP Life	89.65
RP WP & Unitised WP Pensions	149.42
SP/PUP WP & Unitised WP	44.83
<b>Corporate</b>	
Buyouts	41.47
Group money purchase & Group personal plans	82.92
Group deferred annuity & Executive pension plan	124.39

- (f) No lapses were assumed in calculating the prospective reserves except that the expense assumptions do make an implicit allowance for the effect of expected future lapses.

### (2) Different Sets Of Assumptions

Not applicable

## 6. COSTS OF GUARANTEES, OPTIONS AND SMOOTHING

### (1) De Minimis Limit

The cost of smoothing is £0m as all benefits are based on unsmoothed asset shares.

### (2) Valuation Method For Guarantees etc.

	Cost of Guarantees & Options	Extent of Grouping	No of Individual policies	No of model points
All business	Stochastic model	All business	124,712	8,972

#### (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) The model uses grouped policy data. 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 type, premium status, year of maturity, year of entry, individual / corporate business and expense group (as per the management service agreement). For certain endowment assurance classes policies are also grouped by premium size (in bands of <£500, £500-1000, >£1000).

For some product types policies are grouped according to maturity date more frequently than yearly (e.g. quarterly for first 10 years and yearly thereafter). The year of entry grouping is carried out in 5 year bands.

Within each group simple averages are taken. Gender is assumed to be that of the majority within any particular group.

#### 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) No significant approximation methods were used for any residual types of products or classes.

**(3) Significant Changes**

Starting from the current valuation date, all future annuity vestings in the fund will be transferred to the PLL Non Profit Fund. Immediate annuities currently in the fund will not be transferred.

For vesting annuity contracts, the PLL Non Profit Fund annuity pricing basis includes a profit margin that the fund will have to cover as a result of the transfer. The long term profit margin assumption is 6%. No profit margin applies where a policy funds for cash only as it is the policyholder rather than the fund that has to cover the cost at vesting.

At the current valuation 100% of the cost of the profit margin is charged to the estate.

The Economic Scenario Generator (ESG) has been upgraded at the current valuation to improve the asset modelling and to remain in line with the latest Industry practice. This represents a change since the previous valuation and involves moving from the Local Volatility equity model to the Stochastic Volatility Jump Diffusion (SVJD) equity model.

The allowance for asset correlations in the ESG has also been changed to follow a correlation matrix approach at the current valuation. In contrast the asset correlations were driven by factor loadings in the previous valuation.

The ESG upgrade has immaterial impact on the Alba With-Profits Fund.

**(4) Further Information On Stochastic Approach**

- (a) (i) The stochastic model is used to value the following guarantees and options:
- Non negative terminal bonus guarantees at maturity and death within conventional with-profits contracts;
  - Market value reduction-free spot maturity guarantees within unitised with-profits and deposit administration contracts;
  - Guaranteed annuity options on conventional with-profits contracts;
  - Surrender guarantees on flexible endowments.

Of these, the guarantees and options which are strongly "in the money" at the valuation date are the guaranteed annuity options and maturity guarantees on conventional with-profits pensions policies.

An indication of the extent of these guarantees is given 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 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	GBP		
	Govt. + 10bp	Model	Difference (bp)
1	0.73%	0.73%	(0)
2	1.12%	1.12%	0
3	1.64%	1.64%	(0)
4	2.12%	2.12%	(0)
5	2.51%	2.51%	(0)
7	3.12%	3.13%	0
10	3.79%	3.80%	1
15	4.37%	4.39%	1
20	4.58%	4.58%	0
25	4.60%	4.60%	(0)
30	4.54%	4.54%	(0)
35	4.45%	4.45%	(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	GBP		
	Market	Model	Difference (bp)
1	19.90%	21.60%	170
2	18.10%	18.90%	80
3	16.90%	17.50%	60
4	15.90%	16.70%	80
5	15.20%	16.10%	90
7	14.00%	15.20%	120
10	13.20%	14.30%	110
15	13.20%	13.10%	(10)
20	13.00%	12.10%	(90)
25	13.00%	11.20%	(180)
30	12.60%	10.50%	(210)

Equities

Not applicable since the Alba With-Profits Fund has zero equity exposure.

Property

Excess returns over risk free on property are modelled using a separate (but correlated) lognormal model.

There are no tests against market traded instruments for properties since there are no such instruments. The Alba With-Profits Fund has 80% of the total property investment in the property unit trust. Such investments are classed as indirect property investment. Since indirect property investment is assumed to behave as equity, the property volatility parameter in the ESG model is calculated as a weighted average of equity and property volatilities.

A best estimate has therefore been used of 19.84% 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 following are examples of observed correlations of year 10 returns from the scenarios used (ZCB = zero coupon bond):

Output Correlations @ Year 10								
	Cash	Property	5yr Govt ZCB	15yr Govt ZCB	5yr Corp ZCB	15yr Corp ZCB	5yr Index Linked ZCB	15yr Index Linked ZCB
Cash	1.00	(0.11)	(0.76)	(0.81)	(0.58)	(0.76)	(0.23)	(0.27)
Property		1.00	0.12	0.07	0.18	0.11	0.15	0.10
5yr Govt ZCB			1.00	0.88	0.73	0.82	0.21	0.24
15yr Govt ZCB				1.00	0.65	0.92	0.19	0.27
5yr Corp ZCB					1.00	0.84	0.21	0.24
15yr Corp ZCB						1.00	0.20	0.27
5yr Index Linked ZCB							1.00	0.88
15yr Index Linked ZCB								1.00

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

n	Asset type (all UK assets)	K=0.75					K=1					K=1.5					
		5	15	25	35	5	15	25	35	5	15	25	35	5	15	25	35
r	Annualised compound equivalent of the risk free rate assumed for the period. (to two decimal places)	2.51%	4.39%	4.60%	4.45%	x	x	x	x	x	x	x	x	x	x	x	x
1	Risk-free zero coupon bond	883,518	525,213	324,875	217,837	x	x	x	x	x	x	x	x	x	x	x	x
2	FTSE All Share Index (p=1)	112,029	243,899	334,562	398,840	219,670	385,932	500,659	581,225	558,891	729,921	878,326	977,721				
3	FTSE All Share Index (p=0.8)	105,825	199,500	245,016	267,922	207,446	315,230	367,434	392,651	529,037	599,759	646,888	667,188				
4	Property (p=1)	84,923	197,488	295,551	354,772	211,925	357,795	474,068	544,159	587,383	748,352	872,950	959,552				
5	Property (p=0.8)	78,034	148,764	199,482	222,068	197,208	277,351	331,340	348,371	556,798	600,757	630,069	633,695				
6	15 year risk free zero coupon bond (p=1)	18,368	20,496	14,589	23,026	90,632	89,529	88,536	128,754	499,988	499,806	505,477	534,645				
7	15 year risk free zero coupon bond (p=0.8)	15,847	10,528	4,980	3,110	79,649	47,178	21,621	21,164	463,653	324,849	233,211	204,616				
8	15 year risk free bonds (p=1)	22,928	32,201	31,200	47,525	104,196	117,984	116,980	151,723	498,178	495,341	502,422	534,220				
9	15 year risk free bonds (p=0.8)	19,987	17,377	11,716	11,703	92,647	69,119	42,927	45,108	462,918	333,573	246,715	221,634				
10	Portfolio of 65% FTSE All Share and 35% property (p=1)	75,909	177,252	253,137	311,855	176,781	312,715	412,352	486,288	537,723	661,874	788,294	877,261				
11	Portfolio of 65% FTSE All Share and 35% property (p=0.8)	70,444	136,989	172,719	192,453	164,721	244,942	283,906	306,086	506,046	527,764	556,915	569,922				
12	Portfolio of 65% equity and 35% 15 year risk free zero coupon	60,012	146,957	207,200	256,916	152,313	267,990	349,724	414,458	517,507	601,791	705,398	785,287				
13	Portfolio of 65% equity and 35% 15 year risk free zero coupon	55,462	112,055	134,902	155,263	140,707	206,280	234,590	251,876	484,363	470,666	483,527	492,039				
14	Portfolio of 40% equity, 15% property, 22.5% 15 year risk free zero coupon bonds and 22.5% 15 year risk free zero coupon	34,820	87,104	127,402	167,325	119,864	198,868	255,348	308,970	507,328	545,119	614,418	681,346				
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)	31,263	60,041	71,456	84,101	108,448	138,936	150,980	163,003	472,724	405,299	386,305	383,824				
16	Receiver swaptions	6.08%	6.61%	5.86%	4.50%	7.44%	8.29%	7.18%	5.36%	8.81%	9.74%	8.22%	5.98%				

**Notes:**

1. The above option prices were produced by the economic scenario generator used to calibrate the Alba With-Profits Fund stochastic model. As the Alba With-Profits Fund has no exposure to equities, rows 2 and 3 are not relevant.
2. The prices in rows 10 – 15 show the impact of correlations between different asset classes – note that this is based on the defined asset allocations which differ from those of Alba With-Profits Fund which in particular has zero equity exposure.
3. For the purposes of this table, all bonds are zero coupon and property income is reinvested.

(iv) UK initial property rental yield: 4.30%

(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 table below shows the outstanding durations of significant guarantees and options within material types of product and classes of with-profits contracts. The table shows the proportion of the total present value of cost of guarantees and options split by term to maturity.

<b>Term to maturity (years)</b>	<b>WP endowments</b>	<b>WP mortgage endowments</b>	<b>WP pensions funding for cash (no GAO)</b>	<b>WP pensions funding for annuity</b>	<b>WP funding for cash (with GAO)</b>
1-5	0.17%	0.91%	1.51%	22.97%	11.30%
6-10	0.10%	0.36%	* 1.51%	13.99%	13.18%
11-15	0.11%	0.01%	0.96%	6.87%	11.37%
16-20	0.04%	0.00%	0.66%	2.33%	5.74%
21-25	0.11%	0.00%	0.37%	0.95%	2.28%
26-30	0.01%	0.00%	0.09%	0.16%	0.60%

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 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 1, 3, 5, 10, 15, 20, 30 and 40 years. Departures from unity in the average discounted present values have not been significant.

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.

Verification has also been made, within acceptable limits, that the 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.

Reasonable convergence of the model result was validated by analysing the valuation result in 50 scenario batches in order to determine the maximum sampling error.

- (b) Not applicable

- (c) Not applicable

**(5) Management Actions**

- (a) The management action this year is to increase the surrender payouts. The surrender payouts have changed from 80% to 95% of the asset share with effect from 1 July 2010.

- (b) No exposure to equities is assumed in the future and non guaranteed reversionary bonus rates are assumed to be zero throughout.

**(6) Persistency Assumptions**

The surrender and paid-up assumptions are:

Product		Average surrender / paid-up rate			
		1-5	6-10	11-15	16-20
CWP savings endowment	Surrender	4%	4%	4%	4%
CWP target cash endowment	Surrender	4%	4%	4%	4%
UWP savings endowment	Surrender	8%	8%	8%	8%
CWP pension regular premium	PUP	0%	0%	0%	0%
CWP pension regular premium	Surrender	2%	2%	2%	2%
CWP pension single premium	Surrender	2%	2%	2%	2%
UWP individual pension regular premium	PUP	0%	0%	0%	0%
UWP individual pension regular premium	Surrender	2%	2%	2%	2%
UWP individual pension single premium	Surrender	8%	8%	8%	8%

A take up rate of 75% for guaranteed annuity options is assumed. This is consistent with the terms of the agreement with the Britannic With-Profits Fund where any deviation from this assumption is met by that fund.

**(7) Policyholders' Actions**

No such assumptions were made.



## 7. FINANCING COSTS

A contingent loan has been provided by the Non Profit Fund investment reserve to the Alba With-Profits Fund (the borrower). The purpose is to maintain a regulatory surplus pursuant to both INSPRU 1.1.27(R) and INSPRU 1.1.28(R). The loan is subordinate to policyholders' interests insofar as repayment will not take place if treating policyholders fairly cannot be maintained.

The face value outstanding as at the valuation date was £99.3m. Interest payable is the interest received by the borrower on the Memorandum Account. Fees are payable by the borrower.

Any amount not required to maintain a surplus for the purposes of INSPRU 1.1.27(R) and INSPRU 1.1.28(R) can be repaid.

Following the conditions of the agreement, a provision for repayment of £84.9m of the contingent loan has been included in the realistic balance sheet as this is not required to maintain realistic solvency and would therefore ultimately be repaid.

## 8. OTHER LONG-TERM INSURANCE LIABILITIES

None

## 9. REALISTIC CURRENT LIABILITIES

The realistic current liabilities of £670.6m consist of regulatory current liabilities consistent with Form 14 Line 49.

## 10. RISK CAPITAL MARGIN

- (a) The risk capital margin amounted to nil.
- (i) No equities are held in the fund hence no equity stress was required. A fall in properties of 12.5% was assumed. A property fall was the more onerous.
  - (ii) A yield fall of 17.5% of the annualised 15 year gilt yield (of 3.99%), i.e. 0.70% was assumed for UK fixed interest stocks. For foreign stocks the yield fall was calculated as 17.5% of the yield on 10 year government bonds of the relevant country. On average, this was 0.70%. (The foreign investments were all European apart from a small holding, £4.7m, of US Treasury bonds.) The interest rate fall was the more onerous.
  - (iii) The average change in spread for bonds (weighted by value) was 0.31%, and the total change in asset value for bonds was -1.78%. Items (b) debts, (d) analogous non-reinsurance financing agreements and (e) other assets do not apply. Furthermore (c) does not apply as all of the reinsurance arrangements have preferential access to the reinsurer's assets in the event of default.

- (iv) The impact of the persistency risk scenario is that the realistic value of liabilities increases by £7.9m or 1.0% of basic asset shares prior to any management action being taken.
  - (v) These were assumed to be materially independent.
- (b) The effects of management actions are as follows.
- (i) The provision to repay £84.9m of the contingent loan already provided for in line 45 of Form 19 is excluded.  
  
An assumption is made that the future projects and issues contingency reserve will be increased from £7.0m to £9.0m.
  - (ii) No management actions are assumed under the stress scenarios.
  - (iii) No exposure to equities is assumed in the future and non guaranteed bonus rates are assumed to be zero throughout.
  - (iv) The requirements of INSPRU 1.3.188(R) would be met if the management action described in (i) had, in fact, taken place.
- (c)
- (i) The assets covering the risk capital margin are held in the Alba With-Profits Fund and the Non Profit Fund. They consist of approved and other fixed interest securities and other assets.
  - (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 with-profits 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.

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

- (ii) In calculating the value of future policy related liabilities, tax is allowed for as follows.

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

- (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

The fund has a portfolio of European-style receiver swaptions to mitigate the effect that falls in interest rates have on the value of contracts written with a guaranteed annuity option. As at the valuation date, the fund held swaptions valued at £18.7m with an aggregate nominal value of £160.1m.

The option dates for swaptions range from the current year until 2038, with swap tenors of between 16 and 25 years. The majority of contracts are for a strike rate of interest of 5%. In recognition of an agreement with the Britannic With-Profits Fund (referred to in paragraph 6 (6)), the relevant policies were modelled assuming a 75% take-up rate for the option.

## 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
<b>Opening working capital</b>	<b>0.0</b>
Write back provision to repay contingent loan	84.4
Write back planned benefit enhancements to zeroise working capital	0.0
<b>Revised opening working capital</b>	<b>84.4</b>
Opening adjustments and modelling changes	(3.3)
<b>Restated opening working capital</b>	<b>81.2</b>
Investment return on working capital	0.5
Assumption changes	
- Non-economic	(6.5)
- Economic	0.3
- Management actions	(7.4)
Impact of new business	0.0
Other variances	
- Non-economic	6.1
- Economic	(0.4)
- Changes in provisions	(8.9)
- Contingent loan increase	20.5
- Contingent loan interest	1.2
- Unexplained	(1.8)
<b>Closing working capital before zeroisation</b>	<b>84.9</b>
Provision to repay contingent loan	(84.9)
Planned benefit enhancements to zeroise working capital	0.0
<b>Closing working capital</b>	<b>0.0</b>

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

## Alba With-Profits Fund

<b>£m</b>	<b>Current Valuation</b>	<b>Previous Valuation</b>
Claims Outstanding – Gross	20.0	29.1
Claims Outstanding - Reinsurers' Share	(0.3)	0.2
Provision for Deferred Tax	0.0	0.0
Provisions - Other risks and charges	2.2	3.0
Creditors - Direct insurance business	5.3	5.0
Creditors - Reinsurance ceded	3.8	4.0
Taxation	0.5	0.0
Other creditors	637.9	13.7
Accruals and deferred income	1.0	1.3
<b>Total</b>	<b>670.6</b>	<b>56.3</b>

Line 47 of Form 19 remains as £0.2m over the year; this is for the present value of future shareholder transfers on BL pre 1990 business.

### 14. OPTIONAL DISCLOSURE

None made.

## 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.

Economic Assumption*	Current Valuation	Previous Valuation
Valuation interest rate p.a.	2.08%	2.85%
Experience interest rate p.a.	3.85%	4.28%
Risk discount rate p.a.	4.09%	4.55%
Expense inflation p.a.	4.50%	4.58%

\* Investment rates are shown before the deduction of investment expenses of 0.11% 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
		£m	£m
Endowment	Asset Share	179	77
Whole of Life	Prospective Method	131	25
Miscellaneous adjustments	Regulatory Reserve	2	
Claims Pending	Regulatory Reserve	6	
<b>Total</b>		<b>319</b>	<b>102</b>
Form 19 Line 31		<b>319</b>	
Form 19 Line 49			<b>102</b>

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 2009.
- (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 with-profits reserves and the estate;

- prior year adjustments; and
- the 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	4.1
(ii)	other expenses charged to fund	other project costs	0.8
		exiting with-profits policies	0.4
		non-profit policies	1.2
		investment expenses	0.5
		prior year adjustments	0.0
	balance	1.0	
(iii)	Total expenses		8.0

**(4) Significant Charges**

Charges for cost of guarantees and cost of capital are not charged to the 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 year
2008	105%
2009	99%
2010	100%
Overall	101%

**(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	8.69%



**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.

<b>Economic Assumptions*</b>		
Valuation interest rate p.a.		<b>2.48%</b>
Experience interest rate p.a.		<b>3.85%</b>
Discount rate p.a.**		<b>4.09%</b>
<b>Expense Assumptions</b>		
Investment Expense p.a.		<b>0.11%</b>
Per policy Expenses p.a.	Valuation	<b>£16.26</b>
	Experience	<b>£16.22</b>
Expense Inflation p.a.		<b>4.50%</b>

\* Investment rates are shown before deduction of the investment expenses of 0.11% gross per annum.

\*\* 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.

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

<b>Sample Terminal Bonus Rates - %</b>					
<b>Year of Maturity</b>	<b>Policy Term</b>				
	<b>5</b>	<b>10</b>	<b>15</b>	<b>20</b>	<b>25</b>
2010	0.0	390.0	290.0	280.0	780.0
2015	0.0	430.0	500.0	375.0	465.0
2020	0.0	440.0	490.0	565.0	680.0
2025	0.0	0.0	515.0	505.0	665.0
2030	0.0	0.0	0.0	535.0	580.0

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	Smoothing Cost	Extent of Grouping	No of Individual policies	No of model points
All Business	Stochastic model	Stochastic model	All business	245,932	410

**(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 with-profits 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 key variables in the data files. The comparison includes items such as number of policies, sum assured, asset shares. Where material discrepancies arise these may result in grouping being revisited.

### **(3) Significant Changes**

The Economic Scenario Generator (ESG) has been upgraded at the current valuation to improve the asset modelling and to remain in line with the latest industry practice. This represents a change since the previous valuation, and involves moving from the Local Volatility equity model to the Stochastic Volatility Jump Diffusion (SVJD) equity model.

The allowance for asset correlations in the ESG has also been changed to follow a correlation matrix approach at the current valuation. In contrast the asset correlations were driven by factor loadings in the previous valuation.

The treatment of overseas equities within the ESG has changed for this valuation. For the previous valuation a constant volatility implied by the UK equity market for overseas equity was used. The model used for the current valuation is that implied by the US equity market. The US equity market is considered more appropriate as it is where the fund invests its largest holding in overseas equity.

### **(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.

<b>Term to maturity (years)</b>	<b>Endowments</b>	<b>Whole Life</b>
1-5	<b>63%</b>	<b>17%</b>
6-10	<b>-1%</b>	<b>9%</b>
11-15	<b>0%</b>	<b>4%</b>
16-20	<b>0%</b>	<b>2%</b>
21-25	<b>0%</b>	<b>1%</b>
26-30	<b>0%</b>	<b>1%</b>

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 the 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 32% 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 4.09%, that yield increased by 17.5% of the long-term gilt yield, that is 4.79% and that yield decreased by 17.5% of the long-term gilt yield, that is 3.39% are shown in the following tables.

<b>Yield = 4.09%</b>	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%	32%	32%	n/a	n/a	n/a
<b>Yield = 4.79%</b>	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%	32%	32%	n/a	n/a	n/a
<b>Yield = 3.39%</b>	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%	32%	32%	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	0.9
Litigation	0.7
Future Projects	0.7
Capita Regulatory Buyout	0.8
VAT	0.4
Costs Falling Outside MSA	0.5
Strachan Policy Review	0.4
TCF Reserve	0.0
Solvency II	0.8
AST	0.4
Investment Services Fees	1.2
Additional provision for tax*	1.5
Investment Expense Rebate credited to future asset shares	2.0
<b>Total</b>	<b>10.3</b>

\* 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 £47.5m. 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 20.0%. 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 70 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 106 basis points for the fund. This change in yields resulted in a fall in the value of these bonds by an average of 5.94% 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 £0.85m to £1.7m.

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.

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. No removal of enhancements has been assumed for the fund 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 with-profits 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.



## Britannic Industrial Branch Fund

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 held indicates that a short position is held.

### Matched Fund

Index	Units	Price on the valuation date	Settlement Price	Unit Multiple for Settlement	Settlement Date
CME-S&P 500 MAR11	11	20,008	- 19,735	10	17/03/2011
EUREX-DJ EURO MAR11	(69)	2,394	- 2,450	10	18/03/2011
LIFFE FTSE100 MAR11	(95)	5,893	- 5,822	10	18/03/2011
TSE-TOPIX MAR11	(6)	7,048	- 6,929	10	10/03/2011
SFE-SPI 200 MAR11	(5)	7,742	- 7,809	10	17/03/2011
HKFE HANG SENG JAN11	(9)	9,457	- 9,417	10	28/01/2011

### Growth Fund

Index	Units	Price on the valuation date	Settlement Price	Unit Multiple for Settlement	Settlement Date
CME-S&P 500 MAR11	(1)	20,008	- 19,735	10	17/03/2011
EUREX-DJ EURO MAR11	(8)	2,394	- 2,450	10	18/03/2011
LIFFE FTSE100 MAR11	(14)	5,893	- 5,822	10	18/03/2011
TSE-TOPIX MAR11	(9)	7,048	- 6,929	10	10/03/2011
SFE-SPI 200 MAR11	(10)	7,742	- 7,809	10	17/03/2011
DAX INDEX MAR11	2	14,843	- 15,090	10	18/03/2011
IDEM-FTSE MIB MAR11	9	8,629	- 8,879	10	18/03/2011
ATX INDEX MAR11-OTOB	24	2,481	- 2,417	10	18/03/2011
EUREX-OMXH25 MAR11	20	2,245	- 2,181	10	18/03/2011
ME-S&P CANADA60 MAR11	(6)	9,862	- 9,699	10	17/03/2011
HKFE HANG SENG JAN11	(4)	9,457	- 9,417	10	28/01/2011
SIMEX-MSCI SGD JAN11	(11)	3,773	- 3,697	10	28/01/2011
CAC 40 INDEX JAN11	19	3,264	- 3,333	10	21/01/2011
MEFF-IBEX 35 JAN11	10	8,384	- 8,583	10	21/01/2011
LIFFE FTSE100 DIV DEC 11	754	191	- 195	10	15/12/2011
LIFFE-LONG GILT MAR11	13	11,949	- 11,852	10	29/03/2011

### 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
<b>Opening working capital</b>	<b>0.0</b>
Write back planned benefit enhancements to zeroise working capital	37.4
<b>Revised opening working capital</b>	<b>37.4</b>
Opening adjustments and modelling changes	(3.9)
<b>Restated opening working capital</b>	<b>33.5</b>
Investment return on working capital	9.7
Mismatch profits and losses	(1.5)
Assumption changes	
- Non-economic	3.8
- Economic	0.2
- Policyholder actions	(3.7)
Impact of new business	0.0
Other variances	
- Non-economic variance	(2.9)
- Unexplained	(2.0)
<b>Closing working capital before zeroisation</b>	<b>37.0</b>
Planned benefit enhancements to zeroise working capital	(37.0)
<b>Closing working capital</b>	<b>0.0</b>

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	0.9	1.0
Litigation	0.7	0.8
Future Projects	0.7	0.9
Capital Regulatory Buyout	0.8	
VAT	0.4	0.4
Costs Falling Outside MSA	0.5	0.6
Strachan Policy Review	0.4	0.2
TCF Reserve	0.0	0.0
Solvency II	0.8	
AST	0.4	
Investment Services Fees	1.2	
Additional provision for tax*	1.5	1.7
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	47.5	80.0
<b>Total</b>	<b>47.5</b>	<b>80.0</b>

### 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.

<b>Economic Assumption*</b>		<b>Current Valuation</b>	<b>Previous Valuation</b>
Valuation	Pensions		
	Pre vesting	4.66%	4.75%
	Post vesting	3.78%	4.26%
	Life	3.89%	4.07%
Experience interest rate p.a.	Pensions	4.08%	4.55%
	Life	3.59%	4.02%
Risk discount rate p.a.		4.09%	4.55%
Expense inflation p.a.		4.50%	4.58%

\* Investment rates are shown before deduction 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-Profits 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).

## Britannic With-Profits Fund

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
			£m	
Conventional	Premium-Paying Regular Premium Endowments	Asset Share	431	56
	Channel Islands Regular Premium Pensions (Premium	Asset Share	6	1
	Regular Premium, Premium Paying Pensions	Asset Share	43	41
	Whole of Life	Asset Share	12	1
	Whole of Life	Prospective Method	13	1
	Other Endowments	Prospective Method	4	0
	Other Channel Islands Pensions	Prospective Method	2	0
	Other Pensions	Prospective Method	6	5
	Miscellaneous pensions & With-profits annuity	Regulatory Reserve	20	0
	Provision	Regulatory Reserve	0	72
Unitised With-Profits	Insurance ISA	Regulatory Reserve	16	1
	Other UWP products	Shadow Funds	3,248	360
Additional				
Total			3,800	538
Form 19 Line 31			3,800	
Form 19 Line 49				538

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 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 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.

## Britannic With-Profits Fund

- For 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 with-profits 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
- The 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	Traditional WP business	3.1
		Unitised WP business	23.6
		Smoothed return business	0.6
(ii)	Other expenses	Other project costs	2.6
		Excess product charges	(12.5)
		Exiting with-profits contracts	0.7
		Non profit contracts	1.1
		Investment expenses	5.4
		Wythall Green Costs	3.8
		Pension Scheme Costs	27.7
		Prior year adjustments	0.0
		Balance	(0.1)
(iii)	<b>Total expenses</b>		<b>56.1</b>

**(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 written in	During financial year		Preceding financial year	
	cost of guarantees	cost of capital	cost of guarantees	cost of capital
	£m	£m	£m	£m
BA	0.1	0.2	0.1	0.3

**(5) Charges For Non-Insurance Risk**

No charges were deducted from the With-Profits Fund 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::

Average total with profits claims ratio for financial year	
2008	107%
2009	105%
2010	100%
Overall	104%

**(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
Former Britannic Assurance sterling denominated business	10.35%
Former Britannic Assurance euro denominated business	5.72%
Former Century Life business	8.51%

The assets backing the former Britannic Assurance sterling denominated business, the former Britannic Assurance euro denominated business and former Century Life 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		
<b>Economic Assumptions*</b>		
Valuation interest rate p.a.	Pensions	
	pre vesting	4.66%
	post vesting	3.78%
Experience interest rate p.a.	Life	3.89%
	Pensions	
	Life	4.08%
Discount rate p.a.**		3.59%
<b>Expense Assumptions</b>		
Investment Expense p.a.		4.09%
Per policy Expenses p.a.	Valuation	0.12%
	Experience	£44.48
Expense Inflation p.a.		£44.15
		4.50%

\* Investment rates are shown before deduction of the investment expenses of 0.12% gross per annum.

\*\* 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.

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

Sample Terminal Bonus Rates * - %					
Year of Maturity	Policy Term				
	5	10	15	20	25
2011	0.0	27.0	10.5	12.5	41.0
2016	0.0	27.0	42.0	37.5	36.0
2021	0.0	0.0	50.5	56.0	60.5
2026	0.0	0.0	0.0	56.5	79.0
2031	0.0	0.0	0.0	0.0	83.0

\* 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:

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
Endowment	4.0	4.0	4.0	4.0	4.0

No lapses were assumed in calculating the prospective reserves except that the expense assumptions do make an implicit allowance for the effect of expected future 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
All Business	Stochastic model	Stochastic model	Ex-BA	57,262	625
			Ex-BA unitised	426,392	539
			Ex-Century conventional	3,489	272

**(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 with-profits 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 key variables in the data files. The comparison includes items such as number of policies, sum assured, asset shares. Where material discrepancies arise, these may result in grouping being revisited

- (c) No significant approximation methods, other than those mentioned above, were used for any residual types of products or classes.

### **(3) Significant Changes**

All future annuity vestings in the fund are transferred to the PLL Non Profit Fund.

For vesting annuity contracts the PLL Non Profit Fund annuity pricing basis includes a profit margin that the fund will have to cover as a result of the transfer. The long term profit margin assumption is 6%. No profit margin applies where a policy funds for cash only as it is the policyholder rather than the fund that has to cover the cost at vesting.

At the current valuation all of the cost of the profit margin is charged to the estate.

The Economic Scenario Generator (ESG) has been upgraded at the current valuation to improve the asset modelling and to remain in line with the latest Industry practice. This represents a change since the previous valuation, and involves moving from the Local Volatility equity model to the Stochastic Volatility Jump Diffusion (SVJD) equity model.

The allowance for asset correlations in the ESG has also been changed to follow a correlation matrix approach at the current valuation. In contrast the asset correlations were driven by factor loadings in the previous valuation.

The treatment of overseas equities within the ESG has changed for this valuation. For the previous valuation a constant volatility implied by the UK equity market for overseas equity was used. The model used for the current valuation is that implied by the US equity market. The US equity market is considered more appropriate as it is where the fund invests its largest holding in overseas equity.

### **(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	GBP		
	Govt. + 10bp	Model	Difference (bp)
1	0.73	0.73	(0.06)
2	1.12	1.12	0.00
3	1.64	1.64	(0.01)
4	2.12	2.12	(0.01)
5	2.51	2.51	(0.04)
10	3.79	3.80	1.09
15	4.37	4.39	1.39
20	4.58	4.58	0.31
25	4.60	4.60	(0.08)

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	19.90	20.68	(78 )
2	18.10	18.76	(66 )
3	16.90	17.62	(72 )
4	15.90	16.88	(98)
5	15.20	15.92	(72)
7	14.00	15.58	(158)
10	13.20	14.18	(98)
15	13.20	13.17	3
20	13.00	12.06	94
25	13.00	10.46	254
30	12.60	9.95	265

Equities and Property

Excess returns over risk free on UK equities, overseas equities and property are modelled using separate (but correlated) lognormal models. The scenario generator uses a Stochastic Volatility Jump Diffusion model for UK equities and a constant volatility model for property and overseas equities.

The UK equity 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

Term	Strike				
	0.8	0.9	1	1.1	1.2
1	27.10	23.80	20.60	17.70	15.60
3	27.10	25.00	23.00	21.20	19.50
5	27.60	25.90	24.30	22.90	21.50
10	28.50	27.10	25.90	24.80	23.80

Model

Term	Strike				
	0.8	0.9	1	1.1	1.2
1	25.80	23.50	21.30	18.80	16.00
3	26.30	24.70	23.10	21.70	20.20
5	26.90	25.70	24.50	23.40	22.40
10	27.10	26.20	25.40	24.60	23.90

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	33.11	31.95	31.02	30.24	29.57
20	29.73	29.11	28.58	28.10	27.67
25	30.86	30.23	29.70	29.25	28.87
30	31.68	31.11	30.59	30.15	29.78
35	33.06	32.39	31.89	31.48	31.14
40	34.40	33.79	33.30	32.89	32.54

Difference (Model – Market) %

Term	Strike				
	0.8	0.9	1	1.1	1.2
1	(1.30)	(0.30)	0.70	1.10	0.40
3	(0.80)	(0.30)	0.10	0.50	0.70
5	(0.70)	(0.20)	0.20	0.50	0.90
10	(1.40)	(0.90)	(0.50)	(0.20)	0.10

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

**Britannic With-Profits Fund**

		<i>Output Correlations @ Year 10</i>									
		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		1.00	(0.19)	(0.13)	(0.26)	(0.76)	(0.81)	(0.58)	(0.76)	(0.23)	(0.27)
Equities			1.00	0.32	0.50	0.19	0.15	0.46	0.29	0.12	0.15
Property				1.00	0.18	0.14	0.09	0.23	0.15	0.12	0.10
Overseas equities					1.00	0.27	0.23	0.41	0.32	0.23	0.27
5yr Govt ZCB						1.00	0.88	0.73	0.82	0.21	0.24
15yr Govt ZCB							1.00	0.65	0.92	0.19	0.27
5yr Corp ZCB								1.00	0.84	0.21	0.24
15yr Corp ZCB									1.00	0.20	0.27
5yr Index Linked ZCB										1.00	0.88
15yr Index Linked ZCB											1.00



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

n	Asset type (all UK assets)	K=0.75			K=1			K=1.5					
		5	15	25	35	5	15	25	35	5	15	25	35
r	Annualised compound equivalent of the risk free rate assumed for the period. (to two decimal places)	2.51%	4.39%	4.60%	4.45%								
1	Risk-free zero coupon bond	883,518	525,213	324,875	217,837								
2	FTSE All Share Index (p=1)	112,029	243,899	334,562	398,840	219,670	385,932	500,659	581,225	558,891	729,921	878,326	977,721
3	FTSE All Share Index (p=0.8)	105,825	199,500	245,016	267,922	207,446	315,230	367,434	392,651	529,037	599,759	646,888	667,188
4	Property (p=1)	55,713	162,963	253,037	326,799	172,771	311,294	420,541	510,068	551,077	683,162	810,604	913,783
5	Property (p=0.8)	49,567	118,713	165,714	198,792	159,040	237,085	285,716	320,636	519,155	540,723	571,733	597,272
6	15 year risk free zero coupon bond (p=1)	18,368	20,496	14,589	23,026	90,632	89,529	88,536	128,754	499,988	499,806	505,477	534,645
7	15 year risk free zero coupon bond (p=0.8)	15,847	10,528	4,880	3,110	79,649	47,178	21,621	21,164	463,653	324,849	233,211	204,616
8	15 year risk free bonds (p=1)	22,928	32,201	31,200	47,525	104,196	117,984	116,980	151,723	498,178	495,341	502,422	534,220
9	15 year risk free bonds (p=0.8)	19,987	17,377	11,716	11,703	92,647	69,119	42,927	45,108	462,918	333,573	246,715	221,634
10	Portfolio of 65% FTSE All Share and 35% property (p=1)	71,647	180,318	261,990	321,911	172,860	316,793	419,947	494,015	538,234	664,162	793,320	875,684
11	Portfolio of 65% FTSE All Share and 35% property (p=0.8)	66,492	139,953	179,854	202,174	160,415	248,248	292,570	316,131	506,215	531,022	564,384	575,255
12	Portfolio of 65% equity and 35% 15 year risk free zero coupon	60,012	146,957	207,200	256,916	152,313	267,990	349,724	414,458	517,507	601,791	705,398	785,287
13	Portfolio of 65% equity and 35% 15 year risk free zero coupon	55,462	112,055	134,902	155,263	140,707	206,280	234,590	251,876	484,363	470,666	483,527	492,039
14	Portfolio of 40% equity, 15% property, 22.5% 15 year risk free zero coupon bonds and 22.5% 15 year risk free zero coupon	33,216	89,601	132,321	177,642	117,137	200,712	264,189	320,617	508,824	547,705	622,484	686,616
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)	29,908	61,934	73,730	93,447	105,513	141,811	156,556	173,294	474,003	407,999	396,369	395,239
16	Receiver sw options	6.08%	6.61%	5.86%	4.50%	7.44%	8.29%	7.18%	5.36%	8.81%	9.74%	8.22%	5.98%

Notes:

- (iv) In all investment scenarios the initial equity dividend yield is set to 3.05% 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.
- (iii) The table below shows the outstanding durations of significant guarantees and options within material types of product and classes of with-profits contracts. The table shows the proportion of the total present value of cost of guarantees and options split by term to maturity.

Term to maturity (years)	Conventional		Unitised With profits	
	Endowments	Whole Life	Endowments	Pensions
1-5	13.7%	0.8%	0.5%	15.8%
6-10	8.8%	0.2%	0.3%	15.5%
11-15	4.2%	0.1%	0.1%	12.6%
16-20	2.8%	0.0%	0.1%	12.6%
21-25	1.2%	0.0%	0.0%	8.6%
26-30	0.2%	0.0%	0.0%	1.8%
31-35	0.0%	0.0%	0.0%	0.0%
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 1, 3, 5, 10, 15, 20, 30 and 40 years. Departures from unity in the average discounted present values have not been significant.

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 115%. 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 0.11% per month from 47.5% 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 (2.42%) and on that yield both increased (3.12%) and decreased (1.72%) by 17.5% of the long term gilt yield.

Yield = 2.42%	Equity Proportion of assets backing with-profits benefits reserve			Future Reversionary Bonus Rate for accumulating with-profits 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	48%	41%	34%	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	48%	41%	34%	0%	0%	0%
Unitised with-profits life single premium business	48%	41%	34%	0%	0%	0%
Unitised with-profits pensions business	48%	41%	34%	3%	3%	3%
Unitised with-profits ISA business	48%	41%	34%	0%	0%	0%
With-profits euro business	58%	51%	44%	n/a	n/a	n/a

**Britannic With-Profits Fund**

Yield = 3.12%	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
Former Britannic Assurance traditional with-profits business	48%	41%	34%	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%	0%	0%
Unitised with-profits life single premium business	46%	39%	33%	0%	0%	0%
Unitised with-profits pensions business	46%	39%	33%	3%	3%	3%
Unitised with-profits ISA business	46%	39%	33%	0%	0%	0%
With-profits euro business	58%	51%	44%	n/a	n/a	n/a

Yield = 1.72%	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
Former Britannic Assurance traditional with-profits business	48%	41%	34%	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%	0%	0%
Unitised with-profits life single premium business	46%	39%	33%	0%	0%	0%
Unitised with-profits pensions business	46%	39%	33%	3%	3%	3%
Unitised with-profits ISA business	46%	39%	33%	0%	0%	0%
With-profits euro business	58%	51%	44%	n/a	n/a	n/a

**(6) Persistency Assumptions**

The surrender and paid-up assumptions are:

Product		Average surrender / paid-up rate			
		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%. When calculating the realistic estate, we assume that the current take up rate is 75%. There is no further stress for RCM.

**(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	4.6
Pensions Mis-Selling	16.5
Costs Falling Outside MSAs	1.0
TCF Reserves	0.6
Stakeholder Pension Expenses	0.1
Data	5.3
Litigation	6.4
Capita Regulatory Buyout	1.5
VAT	7.2
Solvency II	6.8
Strachan Policy Review	0.6
Investment Services Fees	8.8
AST	4.8
UWP Expenses less Charges Plus Shareholder Transfers	(19.6)
Additional provision for tax*	65.5
<b>Total</b>	<b>109.8</b>

\* 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 £1,054m. 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 20.0%. 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 70 basis points.

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 121 basis points for the fund. This change in yields resulted in a fall in the value of these bonds by an average of 7.00% 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 £5.3m to £10.6m.

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 £56m 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 with-profits 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.
- (d) The cost of the profit margin used in the annuity pricing basis for the base position is stressed to reflect the stressed market conditions. This is then applied to the estate as in the base case.

## **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 as follows.

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	(30)	20,008 GBP	19,735 GBP	10	17/03/2011
Dow Jones	5	2,394 GBP	2,445 GBP	10	18/03/2011
FTSE 100	32	5,893 GBP	5,822 GBP	10	18/03/2011
TOPIX	(146)	7,048 GBP	6,929 GBP	10	10/03/2011
SPI 200	(145)	7,742 GBP	7,809 GBP	10	17/03/2011
DAX	6	14,843 GBP	15,090 GBP	10	18/03/2011
FTSE MIB	136	8,629 GBP	8,879 GBP	10	18/03/2011
ATX	343	2,481 GBP	2,417 GBP	10	18/03/2011
OMXH25	324	2,245 GBP	2,181 GBP	10	18/03/2011
S&P CANADA60	(116)	9,862 GBP	9,699 GBP	10	17/03/2011
HANG SENG	(50)	9,457 GBP	9,417 GBP	10	28/01/2011
MSCI Singapore Index	(138)	3,773 GBP	3,697 GBP	10	28/01/2011
CAC 40	252	3,264 GBP	3,333 GBP	10	21/01/2011
IBEX 35	142	8,384 GBP	8,583 GBP	10	21/01/2011
FTSE 100 Dividend Yield	4,067	191 GBP	195 GBP	10	15/12/2011

### Euro Fund

Index	Units	Price on the valuation date	Settlement Price	Unit Multiple for Settlement	Settlement Date
Dow Jones	(6)	2,394 GBP	2,450 GBP	10	18/03/2011
FTSE 100	(1)	6,877 GBP	6,795 GBP	10	18/03/2011
SPI 200	(2)	5,915 GBP	5,966 GBP	10	17/03/2011
FTSE MIB	1	8,628 GBP	8,879 GBP	10	18/03/2011
ATX INDEX	4	2,481 GBP	2,417 GBP	10	18/03/2011
OMXH25	5	2,245 GBP	2,181 GBP	10	18/03/2011
S&P CANADA60	(2)	7,398 GBP	7,276 GBP	10	17/03/2011
MSCI Singapore Index	(2)	2,196 GBP	2,151 GBP	10	28/01/2011
CAC 40	3	3,264 GBP	3,333 GBP	10	21/01/2011
IBEX 35	2	8,384 GBP	8,583 GBP	10	21/01/2011

### Matched Fund

Index	Units	Price on the valuation date	Settlement Price	Unit Multiple for Settlement	Settlement Date
S&P 500	(18)	20,008 GBP	19,735 GBP	10	17/03/2011
Dow Jones	(173)	2,394 GBP	2,450 GBP	10	18/03/2011
FTSE 100	(725)	5,893 GBP	5,822 GBP	10	18/03/2011
TOPIX	(41)	7,048 GBP	6,929 GBP	10	10/03/2011
SPI 200	(15)	7,742 GBP	7,809 GBP	10	17/03/2011
HANG SENG	(6)	9,457 GBP	9,417 GBP	10	28/01/2011

### 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
	<b>0.0</b>
<b>Opening working capital</b>	
Write back planned benefit enhancements to zeroise working capital	213.6
<b>Revised opening working capital</b>	<b>213.6</b>
Opening adjustments and modelling changes	(15.0)
<b>Restated opening working capital</b>	<b>198.6</b>
Investment return on working capital	72.0
Mismatch profits and losses	(10.0)
Assumption changes	
- Non-economic	3.0
- Economic	2.4
- Policyholder actions	(6.4)
Impact of new business	0.0
Other variances	
- Retrospective changes to asset shares	0.0
- Changes In Provisions	(25.6)
- Unexplained	21.5
<b>Closing working capital before zeroisation</b>	<b>255.4</b>
Planned benefit enhancements to zeroise working capital	(255.4)
<b>Closing working capital</b>	<b>0.0</b>

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
Mortgage Endowment Review	4.6
Pensions Mis-Selling	16.5
Costs Falling Outside MSAs	1.0
TCF Reserves	0.6
Pension Scheme	0.0
Stakeholder Pension Expenses	0.1
Data	5.3
Litigation	6.4
Capita Regulatory Buyout	1.5
VAT	7.2
Solvency II	6.8
Strachan Policy Review	0.6
Investment Services Fee Provision	8.8
AST	4.8
UWP Expenses less Charges Plus Shareholder Transfers	(19.6)
Tax on Shareholder Transfers Plus Tax on Shareholders's Share of Estate	59.0
Century Shareholder Transfers	3.5
Investment Expense Provision	3.0
<b>Total</b>	<b>109.8</b>

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

<b>£m</b>	<b>Current Valuation</b>	<b>Previous Valuation</b>
Regulatory current liabilities	1,054.5	377.0
<b>Total</b>	<b>1,054.5</b>	<b>377.0</b>

**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	3.50%	3.58%
Expense inflation	4.50%	7.38%

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:

Term (years)	Risk Free Rate	
	Current Valuation	Previous Valuation
1	0.73%	0.97%
2	1.12%	1.60%
3	1.64%	2.19%
4	2.12%	2.70%
5	2.51%	3.13%
6	2.84%	3.47%
7	3.12%	3.75%
8	3.37%	3.99%
9	3.60%	4.18%
10	3.79%	4.35%
12	4.09%	4.60%
15	4.37%	4.80%
20	4.58%	4.86%
25	4.60%	4.79%

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	Future policy related liabilities
		£m	£m
With-profits – Whole Life	Prospective	121	11
With-profits – Other Life	Retrospective	1,655	148
With-profits – Pensions (Regular and Single Premium)	Retrospective	273	95
With-profits – Pensions (Paid-Up)	Prospective	253	88
UWP Life (including Whole Life With-Profits Bond)	Retrospective	345	32
UWP Pensions	Retrospective	669	104
Other		17	
<b>Total</b>		<b>3,334</b>	<b>478</b>
Form 19 Line 31		3,334	
Form 19 Line 49			478

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 with-profits 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	12.7
(iii)	Investment Expenses	5.0
(iv)	Method	Average expense charge deducted
(iv)	Expenses charged other than to with-profits benefits reserve	18.3

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 the following rates.

Product Group	Investment expenses (Gross)
UWP Bond 4 & Lifestyle Bond	0.159%
Conventional and UWP products	0.146%

The investment expenses for life fund business should be netted down for policyholder tax at 20%.

#### (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	1.7	4.0
Net losses on non-profit business	(0.4)	(0.7)
Proportion of up-front outsourcing costs attributable to the period	0.0	0.0
Write-off of initial spreads on derivative contracts	0.0	0.0

#### (5) Charges For Non-Insurance Risk

Not applicable

#### (6) Ratio Of Claims To Reserves

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:



**Phoenix With-Profits Fund**

	<b>Endowment Policies</b>	<b>Regular Premium Personal Retirement Plan</b>	<b>Single Premium Personal Retirement Plan</b>	<b>Regular Premium Retirement Plan</b>	<b>Single Premium Retirement Plan</b>
<b>1/1/2007 to 30/4/2007</b>					
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
<b>1/5/2007 to 31/8/2007</b>					
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
<b>1/9/2007 to 31/12/2007</b>					
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
<b>1/1/2008 to 30/6/2008</b>					
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
<b>1/7/2008 to 31/12/2008</b>					
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
<b>1/1/2009 to 30/6/2009</b>					
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
<b>30/6/2009 to 31/12/2009</b>					
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
<b>1/1/2010 to 30/06/2010</b>					
10 year term	100	100	128	100	151
15 year term	101	100	100	100	127
20 year term	100	100	93	100	100
25 year term	101	100	100	100	113
<b>1/7/2010 to 31/12/2010</b>					
10 year term	100	100	129	100	140
15 year term	100	100	107	100	120
20 year term	100	102	100	111	98
25 year term	100	102	116	110	114

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:

<b>Year</b>	<b>Ratio of claims to asset shares</b>
2006	100.00%
2007	100.00%
2008	100.00%
2009	100.00%
2010	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:

<b>Product Type</b>	<b>Gross Investment Return</b>
Conventional Life	7.8 %
Conventional Pensions	10.3 %
UWP Bonds	12.5 %
UWP Pensions	11.9 %
Profit Plus Fund	12.6 %

**5. WITH-PROFITS BENEFITS RESERVE – PROSPECTIVE METHOD**

A prospective method has been used for with-profits whole life business and for paid-up 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.

<b>Economic Assumptions</b>	
Discount Rate p.a. (net of investment expense)	5.13%
Investment Return p.a. (net of investment expense)	5.13%
<b>Expense Assumptions</b>	
Investment Expense p.a.	0.12%
Per Policy Expenses p.a.	£55.07
Expense Inflation p.a.	4.50%
<b>Bonus Assumptions</b>	
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									
	2011	2016	2021	2026	2031	2036	2041	2046	2051
5	10.0%	0.0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a
10	19.9%	0.0%	0.0%	n/a	n/a	n/a	n/a	n/a	n/a
15	15.7%	44.6%	18.7%	3.5%	n/a	n/a	n/a	n/a	n/a
20	18.7%	35.8%	69.0%	0.0%	0.0%	n/a	n/a	n/a	n/a
25	38.1%	40.4%	57.6%	50.9%	0.0%	0.0%	n/a	n/a	n/a
30	56.9%	69.7%	71.6%	72.3%	20.4%	0.0%	0.0%	n/a	n/a
35	98.1%	91.2%	107.3%	87.9%	99.1%	122.9%	0.0%	0.0%	n/a
40	177.8%	130.5%	119.7%	139.9%	120.5%	177.9%	0.0%	0.0%	0.0%

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.

## Phoenix With-Profits Fund

<b>Economic Assumptions</b>	
Discount Rate p.a. (net of investment expense)	5.85%
Investment Return p.a. (net of investment expense)	5.85%
<b>Expense Assumptions</b>	
Investment Expense p.a.	0.15%
Per Policy Expenses p.a.	£55.07
Expense Inflation p.a.	4.50%
<b>Bonus Assumptions</b>	
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									
	2011	2016	2021	2026	2031	2036	2041	2046	2051
5	20.6%	17.4%	n/a	n/a	n/a	n/a	n/a	n/a	n/a
10	23.9%	30.4%	23.7%	n/a	n/a	n/a	n/a	n/a	n/a
15	19.7%	37.1%	37.5%	30.9%	n/a	n/a	n/a	n/a	n/a
20	23.2%	35.6%	49.6%	48.7%	42.0%	n/a	n/a	n/a	n/a
25	34.2%	49.2%	51.5%	64.4%	64.3%	57.1%	n/a	n/a	n/a
30	57.5%	49.6%	71.0%	69.1%	85.7%	84.9%	74.8%	n/a	n/a
35	136.9%	82.5%	65.0%	96.3%	96.7%	116.3%	112.6%	109.1%	n/a
40	220.1%	149.8%	104.6%	76.9%	131.7%	131.1%	155.8%	159.5%	149.8%

### Retirement Plan

Elapsed Term in Years									
	2011	2016	2021	2026	2031	2036	2041	2046	2051
5	15.7%	9.0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a
10	17.7%	20.4%	13.5%	n/a	n/a	n/a	n/a	n/a	n/a
15	5.4%	21.0%	22.0%	15.8%	n/a	n/a	n/a	n/a	n/a
20	16.4%	16.6%	30.2%	27.7%	21.9%	n/a	n/a	n/a	n/a
25	28.8%	24.7%	27.5%	36.3%	40.1%	32.2%	n/a	n/a	n/a
30	71.5%	34.6%	49.0%	41.5%	57.3%	58.5%	54.2%	n/a	n/a
35	113.0%	89.5%	57.7%	60.9%	67.4%	82.7%	88.7%	83.2%	n/a
40	121.5%	119.6%	114.9%	55.4%	89.8%	98.4%	123.2%	128.7%	122.4%

There are no lapses.

### Expenses

The life company entered into a new MSA with Pearl Group Management Services (PGMS) with effect from 1 September 2010. Compared to the MSA at the previous valuation the new service fees are higher and the new MSA uplift in the fee inflation is lower. In addition the new service fees incorporate the cost of several additional services that were previously paid to UISL on a fixed charge basis.

The new MSA specifies fee inflation to be RPIX +1.0% at 1 January each year. The MSA at the previous valuation allowed for fee inflation at RPIX +3.8%.

**(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.**

	<b>Cost of Guarantees &amp; Options</b>	<b>Smoothing Cost</b>	<b>Extent of Grouping</b>	<b>No of Individual policies</b>	<b>No of model points</b>
All Business	Stochastic model	Deterministic calculation	All business	213,973	4,710

**(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 impact on the estate at year end was 1.47%.

One class of group unitised with-profits pensions business representing approximately 5% 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**

Starting from the current valuation date all future annuity vestings in the fund will be transferred to the PLL Non Profit Fund. Immediate annuities currently in the fund will not be transferred.

For vesting annuity contracts the PLL Non Profit Fund annuity pricing basis includes a profit margin that the fund will have to cover as a result of the transfer. The long term profit margin assumption is 6%. No profit margin applies where a policy funds for cash only as it is the policyholder rather than the fund that has to cover the cost at vesting.

At the current valuation, 42% of the cost of the profit margin is charged to asset shares and 58% is charged to the estate.

The Economic Scenario Generator (ESG) has been upgraded at the current valuation to improve the asset modelling and to remain in line with the latest Industry practice. This represents a change since the previous valuation, and involves moving from the Local Volatility equity model to the Stochastic Volatility Jump Diffusion (SVJD) equity model.

The allowance for asset correlations in the ESG has also been changed to follow a correlation matrix approach at the current valuation. In contrast the asset correlations were driven by factor loadings in the previous valuation.

The treatment of overseas equities within the ESG has changed for this valuation. For the previous valuation a constant volatility implied by the UK equity market for overseas equity was used. The model used for the current valuation is that implied by the US equity market. The US equity market is considered more appropriate as it is where the fund invests its largest holding in overseas equity.

**(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 with-profits benefits reserve (including miscellaneous profits and losses) for each product that falls within each band. The bands are defined below.

<b>% Asset Share</b>	<b>Band A</b>	<b>Band B</b>	<b>Band C</b>	<b>Band D</b>
Endowments & Whole Life	0.1%	0.0%	0.0%	99.8%
Direct Written Pre 1997 Bonds	0.0%	0.0%	0.0%	100.0%
Conventional Pensions	0.3%	0.1%	0.4%	99.1%
Unitised With Profit Pensions	0.0%	0.0%	0.6%	99.3%
UWPB – Strong Guarantee	0.0%	0.0%	0.0%	100.0%
– Weak Guarantee	0.0%	0.0%	0.0%	100.0%

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:

Where:

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	0.73%	0.73%	0
2	1.12%	1.12%	(0)
3	1.64%	1.64%	0
4	2.12%	2.12%	0
5	2.51%	2.51%	0
7	3.12%	3.12%	0
10	3.79%	3.79%	0
15	4.37%	4.37%	0
20	4.58%	4.58%	0
25	4.60%	4.60%	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	19.90	21.60	170
2	18.10	18.90	80
3	16.90	17.50	60
4	15.90	16.70	80
5	15.20	16.10	90
7	14.00	15.20	120
10	13.20	14.30	110
15	13.20	13.10	(10)
20	13.00	12.10	(90)
25	13.00	11.20	(180)
30	12.60	10.50	(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 scenario generator uses a Stochastic Volatility Jump Diffusion model for UK equities and a constant volatility model for property and overseas equities.

The UK equity 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				
Term	0.8	0.9	1	1.1	1.2
1	30.60	27.10	23.80	20.60	17.70
3	29.40	27.10	25.00	23.00	21.20
5	29.40	27.60	25.90	24.30	22.90
9	30.00	28.50	27.10	25.90	24.80

Model

	Strike				
Term	0.8	0.9	1	1.1	1.2
1	30.30	28.10	25.80	23.50	21.30
3	29.90	28.10	26.30	24.70	23.10
5	29.70	28.30	26.90	25.70	24.50
9	29.20	28.10	27.10	26.20	25.40

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

	Strike				
Term	0.8	0.9	1	1.1	1.2
15	30.36	29.49	28.73	28.04	27.42
20	30.24	29.53	28.95	28.45	28.04
25	30.60	30.01	29.50	29.07	28.69
30	31.67	31.07	30.56	30.10	29.69

Difference (Model – Market) %

	Strike				
Term	0.8	0.9	1	1.1	1.2
1	(0.30)	1.00	2.00	2.90	3.60
3	0.50	1.00	1.30	1.70	1.90
5	0.30	0.70	1.00	1.40	1.60
9	(0.80)	(0.40)	0.00	0.30	0.60

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.

## Phoenix With-Profits Fund

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

<i>Output Correlations @ Year 10</i>										
	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	(0.00)	0.12	(0.04)	0.57	(0.59)	0.15	(0.48)	0.70	0.29
Equities		1	0.28	0.53	0.12	0.07	0.63	0.36	0.04	0.12
Property			1	0.21	0.10	(0.04)	0.22	0.08	0.13	0.10
Overseas equities				1	0.11	0.10	0.42	0.28	0.06	0.18
5yr Govt ZCB					1	0.15	0.41	0.13	0.50	0.29
15yr Govt ZCB						1	0.15	0.83	(0.37)	(0.03)
5yr Corp ZCB							1	0.60	0.16	0.19
15yr Corp ZCB								1	(0.29)	0.04
5yr Index Linked ZCB									1	0.77
15yr Index Linked ZCB										1

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

n	Asset type (all UK assets)	K=0.75					K=1					K=1.5						
		5	15	25	35	5	15	25	35	5	15	25	35	5	15	25	35	
r	Annualised compound equivalent of the risk free rate assumed for the period. (to two decimal places)	2.51%	4.37%	4.60%	4.45%													
1	Risk-free zero coupon bond	883,590	526,148	325,011	218,203													
2	FTSE All Share Index (p=1)	101,288	241,286	328,919	398,064	205,279	384,746	495,673	582,070	539,814	728,437	870,535	980,108					
3	FTSE All Share Index (p=0.8)	95,365	195,690	238,836	265,842	193,208	313,863	362,151	391,982	510,536	598,272	641,896	668,720					
4	Property (p=1)	73,381	184,070	269,870	339,686	195,141	336,806	441,590	524,204	567,484	712,839	833,317	930,747					
5	Property (p=0.8)	66,860	138,087	179,850	210,317	180,988	260,442	303,672	333,681	536,753	571,172	594,834	611,522					
6	15 year risk free zero coupon bond (p=1)	16,503	17,697	14,106	21,401	87,205	81,137	91,139	127,996	500,047	499,359	507,967	531,537					
7	15 year risk free zero coupon bond (p=0.8)	14,113	9,223	3,679	2,731	76,450	41,560	21,760	19,700	463,773	323,733	235,857	204,722					
8	15 year risk free bonds (p=1)	24,816	35,977	39,292	50,625	105,879	119,196	126,590	150,805	488,452	476,752	488,304	517,316					
9	15 year risk free bonds (p=0.8)	21,577	20,211	14,323	14,110	94,712	71,870	52,324	48,295	453,910	323,263	247,656	216,258					
10	Portfolio of 65% FTSE All Share and 35% property (p=1)	68,723	180,229	257,267	323,772	169,259	316,102	416,997	496,406	525,437	665,954	789,539	885,538					
11	Portfolio of 65% FTSE All Share and 35% property (p=0.8)	63,589	139,420	175,533	203,810	157,074	247,902	288,395	318,159	494,312	532,271	561,309	579,429					
12	Portfolio of 65% equity and 35% 15 year risk free zero coupon bonds (p=1)	53,283	141,309	201,517	255,696	142,735	264,158	344,046	412,881	503,781	599,794	698,267	788,421					
13	Portfolio of 65% equity and 35% 15 year risk free zero coupon bonds (p=0.8)	48,980	106,384	132,155	153,477	131,437	201,971	228,901	250,753	470,806	468,324	478,618	490,568					
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)	32,544	90,289	134,103	179,492	116,515	201,668	263,763	324,439	496,722	547,173	619,338	689,101					
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)	29,059	61,910	77,272	93,742	105,202	143,144	157,556	175,112	462,305	407,756	395,690	398,821					
		Swap Duration = 15 years					Swap Duration = 20 years					Swap Duration = 25 years						
16	Receiver sw options	5.64%	6.12%	5.79%	4.61%	6.90%	7.70%	7.10%	5.52%	8.16%	9.07%	8.14%	6.17%					

- (iv) UK initial equity yield: 3.05%  
UK initial property rental yield: 4.30%
- (v) Not applicable – there are no significant territories other than the UK.
- (i) 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
	A	B	C
1-5	1023	139	71
6-10	425	137	0
11-15	376	97	0
16-20	284	44	0
21-25	214	23	0
26-30	69	3	0

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

Retirement Plan	Retirement Age	Cash Option £	
		Male	Female
	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:

Personal Retirement Plan	Retirement Age	Annuity £ p.a.	
		Male	Female
	60	77.24	67.77
	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 3.61% 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, 1.41% 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:

a) 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.

## Phoenix With-Profits Fund

- 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 Valuation Date	Current Valuation Date Plus 5 years	Current Valuation Date Plus 10 years
% UK & Overseas Equities	i	33%	37%	35%
	ii	Unchanged	Unchanged	Unchanged
	iii	Unchanged	Unchanged	Unchanged
<b>Reversionary bonus rates on accumulating with-profits</b>				
Unitised With-Profits Bond	i	Strong Guarantee 0.5%	Strong Guarantee 0.5%	Strong Guarantee 0.5%
		Weak Guarantee 1%	Weak Guarantee 1%	Weak Guarantee 1%
	ii	Nil	Nil	Nil
	iii	Nil	Nil	Nil
Unitised With-Profits Pensions	i	1%	1%	1%
	ii	Nil	Nil	Nil
	iii	Nil	Nil	Nil
PPF	i	0.1%	0.1%	0.1%
	ii	Nil	Nil	Nil
	iii	Nil	Nil	Nil

**(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	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 withdrawals	see below	see below	see below	see 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:

$$Cash = \text{Min}(L, (\text{Max}(10\%, (CxF))) \times (1 - \text{Min}(t, T) / SxT))$$

where

$$F = R^{k(j) \times 100} \times R^{(i-j-k(j)) \times 100 \times (\text{ABS}(i-j) > \text{semirange})}$$

and

$$k(j) = i - \text{Min}(\text{Max}(j, i - \text{semirange}), i + \text{semirange})$$

where

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

<b>£m</b>	<b>Current Valuation</b>
Future projects and issues	21.6
Solvency II	8.3
Actuarial Transformation Systems	7.5
UISL related provisions	8.3
Investment Services Fees	10.6
Other *	14.2
<b>Total</b>	<b>70.4</b>



\* Consisting of: Mortgage Endowment Review, GAO redress, PLP claims, costs falling outside MSAs, reviews redundancy, TCF, IBNR, overdue claims, Strachan, and Oscar manual controls .

## 9. REALISTIC CURRENT LIABILITIES

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

	£m
Regulatory current liabilities	1,483.6
+ Future tax adjustment	(12.2)
+ Additional tax on shareholder transfers	6.2
Realistic current liabilities	1,477.6

### (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 £12.2m.

### (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 £6.2m.

## 10. RISK CAPITAL MARGIN

(a) The risk capital margin is nil.

- (i) The market risk scenario assumes that equities rise by 20% and real estate rises by 12.5%. The equity up and the property up were the more onerous scenarios.
- (ii) The nominal change in yields for fixed interest securities for the purpose of the market risk scenario is 0.70%. 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 1.80%. Changes in market values are:
  - (a) (7.2)% for bonds
  - (b) Not applicable
  - (c) Not applicable

- (d) Not applicable
- (e) 12.3% 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 0.05%.
  
- (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 £21.6m to £28.1m.  
  
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 £147.4m, 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 £7.0m and of introducing a 1% exit charge is a reduction of £21.3m.
- (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 with-profits 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 £(39.4)m, the swaptions had a value of £22.8m and the spreadlocks had a value of £20m.

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
<b>Opening working capital</b>	<b>0.0</b>
Write back planned benefit enhancements to zeroise working capital	443.8
<b>Revised opening working capital</b>	<b>443.8</b>
Opening adjustments and modelling changes	(25.0)
<b>Restated opening working capital</b>	<b>418.8</b>
Investment return on working capital	3.0
Mismatch profits and losses	24.4
Assumption changes	
- Non-economic	2.1
- Economic	2.5
- Policyholder actions	0.0
Impact of new business	0.0
Other Variances	
- Non-economic	(149.0)
- New provisions	(39.1)
- Unexplained	(12.2)
<b>Closing working capital before zeroisation</b>	<b>250.5</b>
Planned benefit enhancements to zeroise working capital	(250.5)
<b>Closing working capital</b>	<b>0.0</b>

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 projects and issues	21.6	22.7
Solvency II	8.3	1.7
Actuarial Transformation Systems	7.5	0.0
UISL related provisions	8.3	3.8
Investment Services Fees	10.6	0.0
Other *	14.2	23.1
<b>Total</b>	<b>70.4</b>	<b>51.2</b>

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
Accounting Liabilities	1483.6	386.4
Future Tax Profit	(12.2)	(16.6)
Additional Tax on Shareholders' Transfers	6.2	5.7
<b>Total</b>	<b>1477.6</b>	<b>375.6</b>

### 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
		£m	£m
CWP- Life	Retrospective	206	43
CWP- Life	Prospective	29	4
UWP- Life	Retrospective	338	48
<b>Life Total</b>		<b>573</b>	<b>96</b>
CWP Pensions with GAO	Retrospective	314	149
CWP Pensions with GAO	Prospective	26	13
CWP Pensions with GCO	Retrospective	225	214
Group Full Profit	Prospective	151	18
Other DA	Prospective	124	28
UWP Pensions, 0%	Retrospective	268	38
UWP Pensions, 4%	Retrospective	385	75
<b>Pensions Total</b>		<b>1,492</b>	<b>535</b>
<b>Total</b>		<b>2,065</b>	<b>631</b>

#### (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 with-profits 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 <sup>1</sup>	0.00
(ii)	Maintenance Expenses	5.97
	Investment Expenses	2.76
(iii)	Method	Average expense charge deducted
(iv)	Expenses charged other than to with-profits benefits reserve	0.00

<sup>1</sup> 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 for with profits business.

#### (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, to give the percentage change in the with-profits benefits reserve shown in the following tables:

Asset Share Group	Current valuation	Previous Valuation
CWP Life	3.06%	(0.49)%
CWP Pensions	3.01%	(0.48)%
UWP Life	3.21%	1.13%
UWP Pensions	3.16%	1.13%

Asset Share Group	Current valuation	Previous Valuation
UWP GBP SMI Bond	3.21%	1.13%
UWP USD SMI Bond	3.20%	1.21%
UWP EUR SMI Bond	3.11%	0.94%

#### (5) Charges For Non-Insurance Risk

Annual management charges deducted from the fund in respect of unitised with-profits business amounted to £9.2m over the period.

#### (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	Ratio of claims to asset shares
Previous year -1	98.1%
Previous year	110.7%
Current year	104.3%

#### (7) Allocated Return

The average rates of return attributed to the with-profits benefits reserve of a policy depends on the asset mix for it. The average rates of investment return (net of tax) are:

	Investment returns
WP Conventional Life	10.36%
WP Conventional Pensions	7.94%
UWP Life (with minimum bonus)	6.79%
UWP Life (no minimum bonus)	12.16%
UWP Life (no minimum bonus) US	12.80%
UWP pensions (with minimum bonus)	7.94%
UWP pensions (no minimum bonus)	13.29%
WP Fund Euro	7.97%

## 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:

<b>Economic Assumptions</b>	
Discount Rate p.a. (net of investment expense)	3.49%
Investment Return p.a. (net of investment expense)	3.49%
<b>Expense Assumptions</b>	
Investment Expense p.a.	0.132%
Per Policy Expenses p.a. (premium-paying)	£44.94
Per Policy Expenses p.a. (paid-up)	£31.46
Expense Inflation p.a.	4.50%
<b>Bonus Assumptions</b>	
Reversionary Bonus Rate	0.00%
Terminal Bonus Rate	See below
<b>Decrements</b>	
Mortality	74% AM92
Persistency	Nil

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

#### TB rates for BRV

Term	Rate
5	12%
10	12%
15	9%
20	26%
25	35%
30	46%
35	82%
40+	158%



Conventional Pensions Business

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

**Gross Premium Valuation**

	<b>Group Full Profit</b>	<b>Other Deferred Annuity</b>	<b>With-Profit Annuity</b>	<b>Other Annuity</b>
<b>Economic Assumptions</b>				
Discount Rate p.a. (net)	3.60%	3.60%	3.65%	3.65%
Investment Return p.a. (net)	3.60%	3.60%	3.65%	3.65%
<b>Expense Assumptions</b>				
Investment Expense p.a.	0.11%	0.11%	0.11%	0.11%
Per policy - premium-paying	58.73	58.73	29.76	58.73
Per policy - paid up	0.00	41.11	0.00	0.00
Expense Inflation p.a.	5.50%	5.50%	5.50%	5.50%
<b>Bonus Assumptions</b>				
Reversionary Bonus	-	-	1.65%	-

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:

	<b>Cost of Guarantees &amp; Options</b>	<b>Extent of Grouping</b>	<b>No of Individual policies</b>	<b>No of model points</b>
All business	Stochastic model	All business	314,382	3,431

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**

All future annuity vestings in the fund are transferred to the PLL Non Profit Fund.

For vesting annuity contracts the PLL Non Profit Fund annuity pricing basis includes a profit margin that the fund will have to cover as a result of the transfer. The long term profit margin assumption is 6%. No profit margin applies where a policy funds for cash only as it is the policyholder rather than the fund that has to cover the cost at vesting.

At the current valuation all of the cost of the profit margin is charged to the estate.

The Economic Scenario Generator (ESG) has been upgraded at the current valuation to improve the asset modelling and to remain in line with the latest Industry practice. This represents a change since the previous valuation, and involves moving from the Local Volatility equity model to the Stochastic Volatility Jump Diffusion (SVJD) equity model.

The allowance for asset correlations in the ESG has also been changed to follow a correlation matrix approach at the current valuation. In contrast the asset correlations were driven by factor loadings in the previous valuation.

### **(4) Further Information on Stochastic Approach**

- (a) (i) The stochastic model is used to value the following guarantees and options:

## Scottish Mutual With-Profits Fund

- 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:

Term	GBP			EUR		
	Govt. + 10bp	Model	Difference (bp)	Govt. + 10bp (equivalent)	Model	Difference (bp)
1	0.73%	0.73%	0	0.79%	0.79%	-0
2	1.12%	1.12%	0	1.11%	1.11%	0
3	1.64%	1.64%	0	1.48%	1.49%	-1
4	2.12%	2.12%	0	1.85%	1.85%	-0
5	2.51%	2.51%	0	2.20%	2.20%	0
7	3.12%	3.12%	0	2.81%	2.81%	0
10	3.79%	3.78%	1	3.44%	3.43%	1
15	4.37%	4.37%	0	3.89%	3.91%	-1
20	4.58%	4.57%	0	3.97%	3.99%	-2
25	4.60%	4.60%	0	3.95%	3.97%	-1

## Scottish Mutual With-Profits Fund

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

Term	GBP			EUR		
	Market (%)	Model (%)	Difference (bps)	Market (%)	Model (%)	Difference (bps)
1	19.90	20.69	79	24.10	26.90	280
2	18.10	18.19	9	22.00	23.18	118
3	16.90	17.26	36	20.70	21.53	83
4	15.90	16.45	55	19.40	20.26	86
5	15.20	15.76	56	18.70	19.56	86
7	14.00	14.73	73	18.10	18.44	34
10	13.20	13.83	63	18.20	17.01	(119)
15	13.20	12.90	(30)	20.50	15.15	(535)
20	13.00	12.07	(93)	22.70	14.23	(847)
25	13.00	11.17	(183)	22.50	13.01	(949)
30	12.60	10.48	(212)	20.50	12.27	(823)

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 2010.

### Equities and Property

Excess returns over risk free on UK equities, overseas equities and property are modelled using separate (but correlated) lognormal models. The scenario generator uses a Stochastic Volatility Jump Diffusion model for both UK and EURO equities and a constant volatility model for property.

The UK equity 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 (%)**

Term	Strike		
	0.8	1	1.2
1	27.10	20.60	15.60
3	27.10	23.00	19.50
5	27.60	24.30	21.50
7	27.90	25.10	23.00
9	28.50	25.90	23.80

**Model (%)**

Term	Strike		
	0.8	1	1.2
1	27.00	22.20	17.17
3	27.53	24.42	21.71
5	27.52	25.34	23.46
7	27.55	25.88	24.55
9	27.46	26.09	24.93

**Difference (Model – Market) bps**

Term	Strike		
	0.8	1	1.2
1	(10)	160	157
3	43	142	221
5	(8)	104	196
7	(35)	78	155
9	(104)	19	113

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 (%)**

Term	Strike		
	0.8	1	1.2
1	31.60	25.00	19.80
3	30.50	26.30	22.60
5	29.80	26.40	23.70
7	29.80	26.90	24.50
9	29.70	27.20	25.00

**Model (%)**

Term	Strike		
	0.8	1	1.2
1	30.82	26.38	21.46
3	29.24	26.19	23.70
5	28.18	26.03	24.29
7	28.25	26.49	24.98
9	27.99	26.32	24.98

**Difference (Model – Market) bps**

Term	Strike		
	0.8	1	1.2
1	(78)	138	166
3	(126)	(11)	110
5	(162)	(37)	59
7	(155)	(41)	48
9	(171)	(88)	(2)

Property volatility has been adjusted to be a weighted average of equity and direct property due to the investment in the UKCPT.

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):

<i>Output Correlations @ Year 10</i>							
	Cash	Equities	Overseas Equities	5yr Govt ZCB	15yr Govt ZCB	5yr Corp ZCB	15yr Corp ZCB
Cash	1.00	(0.19)	(0.18)	(0.82)	(0.82)	(0.62)	(0.71)
Equities		1.00	0.60	0.23	0.20	0.45	0.38
Overseas equities			1.00	0.19	0.18	0.33	0.29
5yr Govt ZCB				1.00	0.95	0.73	0.82
15yr Govt ZCB					1.00	0.69	0.84
5yr Corp ZCB						1.00	0.92
15yr Corp ZCB							1.00

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.

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

n	r	Asset type (all UK assets)	K=0.75					K=1					K=1.5					
			5	15	25	35	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)	2.51%	4.37%	4.60%	4.45%	x	x	x	x	x	x	x	x	x	x	x	x
1		Risk-free zero coupon bond	883,560	526,557	325,014	217,725	x	x	x	x	x	x	x	x	x	x	x	x
2		FTSE All Share Index (p=1)	112,493	247,120	329,345	405,711	223,061	399,434	499,757	594,538	561,837	759,432	881,215	1,002,118	682,419	648,576	864,608	960,007
3		FTSE All Share Index (p=0.8)	106,074	199,410	237,617	270,941	210,461	324,257	363,433	399,245	532,648	624,427	735,946	864,608	621,849	637,315	594,278	499,639
4		Property (p=1)	86,657	201,225	289,524	361,205	198,167	279,455	324,093	354,833	551,320	621,849	637,315	594,278	499,639	503,635	527,012	527,012
5		Property (p=0.8)	79,612	153,752	197,283	229,401	198,167	279,455	324,093	354,833	551,320	621,849	637,315	594,278	499,639	503,635	527,012	527,012
6		15 year risk free zero coupon bond (p=1)	17,415	20,654	15,554	22,704	89,327	87,751	89,103	123,496	499,639	498,768	603,635	527,012	198,525	230,824	230,824	198,525
7		15 year risk free zero coupon bond (p=0.8)	14,951	11,614	5,023	3,240	78,366	46,569	22,487	20,944	463,424	324,240	230,824	198,525	527,821	501,602	501,602	527,821
8		15 year risk free bonds (p=1)	24,106	31,711	32,635	45,017	105,534	114,534	119,783	149,422	498,643	494,597	501,602	527,821	217,481	247,506	247,506	217,481
9		15 year risk free bonds (p=0.8)	21,085	18,115	11,597	10,697	93,956	65,874	44,365	42,632	463,564	333,030	247,506	217,481	907,364	800,349	800,349	907,364
10		Portfolio of 65% FTSE All Share and 35% property (p=1)	80,052	183,789	259,454	329,823	186,646	326,851	422,581	507,879	542,745	693,591	800,349	907,364	593,036	554,877	569,010	593,036
11		Portfolio of 65% FTSE All Share and 35% property (p=0.8)	74,295	141,639	176,051	205,734	174,068	254,619	291,260	323,794	512,013	554,877	569,010	593,036	792,113	699,372	699,372	792,113
12		Portfolio of 65% equity and 35% 15 year risk free zero coupon bonds (p=1)	58,211	140,424	197,001	256,028	152,997	268,415	339,569	414,298	518,445	618,965	699,372	792,113	492,794	481,856	475,493	492,794
13		Portfolio of 65% equity and 35% 15 year risk free zero coupon bonds (p=0.8)	53,516	104,619	128,356	150,959	141,131	202,952	223,946	250,839	485,489	481,856	475,493	492,794	692,237	561,358	618,149	692,237
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)	34,543	85,814	128,013	174,360	123,296	199,970	257,022	320,193	508,184	561,358	618,149	692,237	395,316	417,325	390,415	395,316
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)	30,749	58,434	73,194	88,514	111,423	139,127	151,090	169,855	474,020	417,325	390,415	395,316				
16		Receiver sw options	6.01%	6.25%	5.88%	4.59%	7.36%	7.86%	7.20%	5.49%	8.70%	9.26%	8.24%	6.12%				

(iv) The equity dividend yields used for the UK and Euro business are:

UK initial equity yield: 3.05%;  
EU initial equity yield: 3.89%.

(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			
n	Duration	5	15	25	35
	Strike price per €1m	1,114,902	1,777,280	2,644,879	3,875,571
		2.20%	3.91%	3.97%	3.95%
r	Annualised compound equivalent of the risk free rate				
1	Risk-Free Coupon Bond	896,940	562,658	378,089	258,026
2	ESTOXX (p=1)	228,877	405,075	507,499	605,597

(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 (Years)	Options (£)		Swaptions (£)	
	Market	Model	Market	Model
1-5	26,772,191	35,244,176	5,322,983	15,361,797
6-10	26,865,397	22,914,852	21,540,531	28,925,332
11-15	20,589,522	20,945,925	15,812,764	22,662,406
16-20	16,423,247	13,358,508	18,903,488	21,845,423
<b>Total</b>	<b>90,650,357</b>	<b>92,463,462</b>	<b>61,579,767</b>	<b>88,794,959</b>

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 ±£3.8m at a 95% confidence interval. When the number of scenarios is increased to 3000, the cost of options and guarantees converges to ±£2.2m.



(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
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.

Moneyiness 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.

Moneyiness Upper Limit (%)	Take-up Rate (%)	Take-up Rate (%)
	IP Pensions	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:

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

For the SMI Euro bond the rates are:

Moneyiness 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 £25.3m were held in the Fund at the valuation date.

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

Data Provision	3.4
Future Litigation Costs	4.1
Project and Other Costs	3.9
VAT provision for potential charges from external outsourcers	0.6
Costs falling outside MSAs	0.3
Solvency II	4.3
Actuarial System Transformation	2.1
Strachan Policy Review	0.1
Investment Services Fees	6.1
Capital Regulatory Buyout	0.4
<b>Total Additional Reserves</b>	<b>25.3</b>

## 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	564.7
- Recoverable deferred tax asset	(0.3)
- Recoverable tax on excess E	(0.1)
Realistic current liabilities	564.3

## 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

There was also a 12.5% fall in property stress applied.

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 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	0.70%	17.50%
Europe	0.75%	17.50%
USA	0.49%	17.50%

A fall in yields is the more onerous scenario.

(iii) The average change in spread is 1.46%. Changes in market values are:

- (a) (9.1%);
- (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 2.1%.
  - (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 £74.6m, 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 £74.6m.
  - (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 £212m. This is split as follows:

Type	GBP (£m)	EUR (£m)	USD (£m)	Total (£m)
Swaps	48.65	0.00	0.00	48.65
Swaptions	53.45	0.00	0.00	53.45
Options	75.43	2.05	0.00	77.48
Spreadlocks	32.38	0.00	0.00	32.38
Futures	0.00	0.08	(0.40)	(0.32)
<b>Total</b>	<b>209.91</b>	<b>2.13</b>	<b>(0.40)</b>	<b>211.64</b>

## 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
<b>Opening working capital</b>	<b>0.0</b>
Write back planned benefit enhancements to zeroise working capital	316.0
<b>Revised opening working capital</b>	<b>316.0</b>
Opening adjustments and modelling changes	(23.1)
<b>Restated opening working capital</b>	<b>292.9</b>
Investment return on working capital	7.5
Mismatch profits and losses	11.6
Assumption changes	
- Non-economic	(13.4)
- Economic	19.5
- Policyholder actions	0.0
Other variances	
- Estate Distribution	(35.6)
- Non Economic	(50.3)
- Economic	11.9
- Changes in long term insurance liabilities	(9.5)
- Unexplained	8.4
<b>Closing working capital before zeroisation</b>	<b>242.9</b>
Planned benefit enhancements to zeroise working capital	(242.9)
<b>Closing working capital</b>	<b>0.0</b>

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

## Scottish Mutual With-Profits Fund

£m	Current Valuation	Previous Valuation
CWP Moses Guarantees (GAO)	11.4	12.5
CWP Grabiner	25.3	14.8
<b>Any other long term insurance liabilities</b>	<b>36.8</b>	<b>27.3</b>

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	564.7	382.5
- Recoverable deferred tax asset	(0.3)	(0.6)
- Recoverable tax on excess E	(0.1)	(0.1)
<b>Realistic current liabilities</b>	<b>564.3</b>	<b>381.8</b>

### 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
		£m	£m
Whole life assurance	Prospective	81	19
Endowment	Retrospective	1,217	259
Unitised with-profits	Retrospective	120	23
Other	Retrospective	52	12
<b>Life Total</b>		<b>1,470</b>	<b>312</b>
Deferred annuity- with	Retrospective	129	109
Deferred annuity-	Retrospective	202	116
Pure Endowment-	Retrospective	8	7
Unitised with-profits	Retrospective	460	87
SPI Funding	Retrospective	70	38
<b>Pensions Total</b>		<b>868</b>	<b>357</b>
<b>Total</b>		<b>2,338</b>	<b>670</b>
Form 19 Line 31		2,338	
Form 19 Line 49			670

“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: 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 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 with-profits 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	0.0
(ii)	Maintenance Expenses	17.9
	Investment Expenses	4.5
(iii)	Method	Average expense charge deducted
(iv)	Expenses charged other than to with-profits benefits reserve	0.0

<sup>1</sup> 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 between 0.113% p.a. and 0.140% p.a. depending on the type of contract.

#### (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
CWP Life and Pensions	0.00%
UWP Life and Pensions	0.00%

#### (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	104.4%
Previous year	104.8%
Current year	99.9%

**(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	Gross Investment
UK business	9.83%
Irish business	4.34%

The asset allocation is specific to each product. The following table summaries the investment strategy for each product grouping within the fund:

	Fixed Interest	Total equities	Property
WP_Fund_conv_life	50.0	37.5	12.5
WP_Fund_conv_pens	70.0	22.5	7.5
WP_Fund_uwp_life	40.0	45.0	15.0
WP_Fund_uwp_pens_wmb	70.0	22.5	7.5
WP_Fund_uwp_pens_nmb	40.0	45.0	15.0
WP_Fund_Euro_conv_life	50.0	37.5	12.5
WP_Fund_Euro_conv_pens	70.0	22.5	7.5

**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:

<b>Economic Assumptions</b>		
Discount Rate p.a. (net of investment expense)	4.09%	
Investment Return p.a.	4.09%	
<b>Expense Assumptions</b>	<b>UK</b>	<b>Ireland</b>
Investment Expense p.a.	0.135%	0.140%
Per Policy Expenses p.a. (premium-paying)	£32.71	£95.02
Per Policy Expenses p.a. (paid-up)	£22.89	£95.02
Expense Inflation p.a.	4.50%	0.00%
<b>Bonus Assumptions</b>		
Reversionary Bonus Rate	0%	0%
Terminal Bonus Rate	See below	See below
<b>Decrements</b>		
Mortality		
Persistency		

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:

<b>Term</b>	<b>UK</b>	<b>Ireland (if applicable)</b>
5	20%	13%
10	39%	26%
15	28%	22%
20	16%	29%
25	26%	36%
30	42%	59%
35	71%	83%
40	117%	133%
50+	192%	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:

<b>Mortality</b>	
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.**

	<b>Cost of Guarantees &amp; Options</b>	<b>Extent of Grouping</b>	<b>No of Individual policies</b>	<b>No of model points</b>
All business	Stochastic model	All business	<b>440,811</b>	<b>3,560</b>

**(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**

All future annuity vestings in the fund are transferred to the PLL Non Profit Fund.

For vesting annuity contracts, the PLL Non Profit Fund annuity pricing basis includes a profit margin that the fund will have to cover as a result of the transfer. The long term profit margin assumption is 6%. No profit margin applies where a policy funds for cash only as it is the policyholder rather than the fund that has to cover the cost at vesting.

At the current valuation all of the cost of the profit margin is charged to the estate.

The Economic Scenario Generator (ESG) has been upgraded at the current valuation to improve the asset modelling and to remain in line with the latest Industry practice. This represents a change since the previous valuation, and involves moving from the Local Volatility equity model to the Stochastic Volatility Jump Diffusion (SVJD) equity model.

The allowance for asset correlations in the ESG has also been changed to follow a correlation matrix approach at the current valuation. In contrast the asset correlations were driven by factor loadings in 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.

## SPI With-Profits Fund

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:

Term	GBP			EUR		
	Govt. + 10bp	Model	Difference (bp)	Govt. + 10bp (equivalent)	Model	Difference (bp)
1	0.73%	0.73%	0	0.79%	0.79%	-0
2	1.12%	1.12%	0	1.11%	1.11%	0
3	1.64%	1.64%	0	1.48%	1.49%	-1
4	2.12%	2.12%	0	1.85%	1.85%	-0
5	2.51%	2.51%	0	2.20%	2.20%	0
7	3.12%	3.12%	0	2.81%	2.81%	0
10	3.79%	3.78%	1	3.44%	3.43%	1
15	4.37%	4.37%	0	3.89%	3.91%	-1
20	4.58%	4.57%	0	3.97%	3.99%	-2
25	4.60%	4.60%	0	3.95%	3.97%	-1

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

Term	GBP			EUR		
	Market	Model	Difference (bp)	Market	Model	Difference (bp)
1	19.90	20.69	79	24.10	26.90	280
2	18.10	18.19	9	22.00	23.18	118
3	16.90	17.26	36	20.70	21.53	83
4	15.90	16.45	55	19.40	20.26	86
5	15.20	15.76	56	18.70	19.56	86
7	14.00	14.73	73	18.10	18.44	34
10	13.20	13.83	63	18.20	17.01	-119
15	13.20	12.90	-30	20.50	15.15	-535
20	13.00	12.07	-93	22.70	14.23	-847
25	13.00	11.17	-183	22.50	13.01	-949
30	12.60	10.48	-212	20.50	12.27	-823

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 2010.

**Equities and Property**

Excess returns over risk free on UK equities, overseas equities and property are modelled using separate (but correlated) lognormal models. The scenario generator uses a Stochastic Volatility Jump Diffusion model for both UK and EURO equities and a constant volatility model for property.

The UK equity 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 (%)**

Term	Strike		
	0.8	1	1.2
1	27.10	20.60	15.60
3	27.10	23.00	19.50
5	27.60	24.30	21.50
7	27.90	25.10	23.00
9	28.50	25.90	23.80

**Model (%)**

Term	Strike		
	0.8	1	1.2
1	27.00	22.20	17.17
3	27.53	24.42	21.71
5	27.52	25.34	23.46
7	27.55	25.88	24.55
9	27.46	26.09	24.93

**Difference (Model – Market) %**

Term	Strike		
	0.8	1	1.2
1	-10	160	157
3	43	142	221
5	-8	104	196
7	-35	78	155
9	-104	19	113

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 (%)**

Term	Strike		
	0.8	1	1.2
1	31.60	25.00	19.80
2	30.50	26.30	22.60
3	29.80	26.40	23.70
5	29.80	26.90	24.50
10	29.70	27.20	25.00

**Model (%)**

Term	Strike		
	0.8	1	1.2
1	30.82	26.38	21.46
2	29.24	26.19	23.70
3	28.18	26.03	24.29
5	28.25	26.49	24.98
10	27.99	26.32	24.98

**Difference (Model – Market) %**

Term	Strike		
	0.8	1	1.2
1	-78	138	166
2	-126	-11	110
3	-162	-37	59
5	-155	-41	48
10	-171	-88	-2

Property volatility has been adjusted to be a weighted average of equity and direct property due to the investment in the UKCPT.

**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):

## SPI With-Profits Fund

		<i>Output Correlations @ Year 10</i>									
		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	-0.19	N/A	-0.18	-0.82	-0.82	-0.62	-0.71	N/A	N/A
Equities			1	N/A	0.60	0.23	0.20	0.45	0.38	N/A	N/A
Property				1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Overseas equities					1	0.19	0.18	0.33	0.29	N/A	N/A
5yr Govt ZCB						1	0.95	0.73	0.82	N/A	N/A
15yr Govt ZCB							1	0.69	0.84	N/A	N/A
5yr Corp ZCB								1	0.92	N/A	N/A
15yr Corp ZCB									1	N/A	N/A
5yr Index Linked ZCB										1	N/A
15yr Index Linked ZCB											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.



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

n	Asset type (all UK assets)	K=0.75					K=1					K=1.5					
		5	15	25	35	5	15	25	35	5	15	25	35	5	15	25	35
r	Annualised compound equivalent of the risk free rate assumed for the period. (to two decimal places)	2.51%	4.37%	4.60%	4.45%	x	x	x	x	x	x	x	x	x	x	x	x
1	Risk-free zero coupon bond	883,560	526,557	325,014	217,725	x	x	x	x	x	x	x	x	x	x	x	x
2	FTSE All Share Index (p=1)	112,493	247,120	329,345	405,711	223,061	399,434	499,757	594,538	561,837	759,432	881,215	1,002,118				
3	FTSE All Share Index (p=0.8)	106,074	199,410	237,617	270,541	210,461	324,257	363,433	399,245	532,648	624,427	648,576	682,419				
4	Property (p=1)	86,657	201,225	289,524	361,205	212,483	357,277	465,548	548,471	581,436	735,946	864,608	960,007				
5	Property (p=0.8)	79,612	153,752	197,283	229,401	198,167	279,455	324,093	354,833	551,320	594,276	621,849	637,315				
6	15 year risk free zero coupon bond (p=1)	17,415	20,654	15,554	22,704	89,327	87,751	89,103	123,496	499,639	498,768	503,635	527,012				
7	15 year risk free zero coupon bond (p=0.8)	14,951	11,614	5,023	3,240	78,366	46,569	22,487	20,944	463,424	324,240	230,824	198,525				
8	15 year risk free bonds (p=1)	24,106	31,711	32,635	45,017	105,534	114,534	119,783	149,422	498,643	494,597	501,602	527,821				
9	15 year risk free bonds (p=0.8)	21,085	18,115	11,597	10,697	93,956	65,874	44,365	42,632	463,554	333,030	247,506	217,481				
10	Portfolio of 65% FTSE All Share and 35% property (p=1)	80,052	183,789	259,454	329,823	186,646	326,831	422,581	507,879	542,745	693,591	800,349	907,364				
11	Portfolio of 65% FTSE All Share and 35% property (p=0.8)	74,295	141,639	176,051	205,734	174,068	254,619	291,260	323,794	512,013	554,877	569,010	593,036				
12	Portfolio of 65% equity and 35% 15 year risk free zero coupon	58,211	140,424	197,001	256,028	152,997	268,415	339,569	414,298	518,445	618,965	699,372	792,113				
13	Portfolio of 65% equity and 35% 15 year risk free zero coupon	53,516	104,619	128,356	150,959	141,131	202,952	223,946	250,839	485,489	481,856	475,493	492,794				
14	Portfolio of 40% equity, 15% property, 22.5% 15 year risk free zero coupon bonds and 22.5% 15 year risk free zero coupon	34,543	85,814	128,013	174,360	123,296	199,970	257,022	320,193	508,184	561,358	618,149	692,237				
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)	30,749	58,434	73,194	88,514	111,423	139,127	151,090	169,855	474,020	417,325	390,415	395,316				
16	Receiver swaptions	6.01%	6.25%	5.88%	4.59%	7.36%	7.86%	7.20%	5.49%	8.70%	9.26%	8.24%	6.12%				

- (iv) UK initial equity yield: 3.05%  
Overseas initial equity yield: 3.89%
- (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	1,114,902	1,777,280	2,644,879	3,875,571
	Annualised compound equivalent of the risk free rate	2.20%	3.91%	3.97%	3.95%
1	Risk-Free Coupon Bond	896,940	562,658	378,089	258,026
2	ESTOXX (p=1)	228,877	405,075	507,499	605,597

- (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 (Years)	Options (£)		Swaptions (£)	
	Market	Model	Market	Model
1-5	13,221,168	13,810,693	4,084,121	7,107,748
6-10	36,322,518	38,091,883	4,076,175	6,746,185
11-15	14,346,146	14,584,250	2,927,955	4,302,627
16-20	16,789,307	16,363,697	3,805,115	3,462,748
<b>Total</b>	<b>80,679,140</b>	<b>82,850,524</b>	<b>14,893,367</b>	<b>21,619,310</b>

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  $\pm\text{£}3.0\text{m}$  at a 95% confidence interval. When the number of scenarios is increased to 3,000, the cost of options and guarantees converges to  $\pm\text{£}1.8\text{m}$ .

(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 Surrender/Paid-up 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 Bond	Surrender	6.00%	10.00%	10.00%	10.00%
UWP Target Cash Endowment	Surrender	6.00%	10.00%	10.00%	10.00%
UWP Bond	Automatic withdrawals	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.

Moneyiness 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) at the MVR-free date. For the UK business the rates are:

<b>Moneyiness Upper Limit (%)</b>	<b>Take-up Rate (%) IP Pensions</b>	<b>Take-up Rate (%) MP Pensions</b>
<b>60</b>	N/A	N/A
<b>90</b>	N/A	N/A
<b>100</b>	N/A	N/A
<b>9999</b>	N/A	N/A

**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:

	<b>£m</b>
Present value of future transfers	45.5
Additional charges on UWP	9.4
Statutory Liabilities for NP GAOs	8.7
Future projects and issues	12.4
VAT	0.7
Costs falling outside MSAs	0.2
Solvency II	4.7
Strachan	0.2
Percana	4.9
AST	2.5
Capita Regulatory Buyout	0.3
Investment Services Fees	6.6
<b>Total</b>	<b>96.1</b>

## 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	
Regulatory current liabilities	795.7
Partial release of de-mutualisation compensation fund	-63.5
Recoverable deferred tax asset	-0.7
Recoverable tax on excess E	0.0
<b>Total</b>	<b>731.5</b>

## 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

A real estate stress was also carried out; due to the indirect/direct nature of the property investment the actual stress was a weighted average of the 20% equity stress and the 12.5% property stress. This resulted in a stress of 18.31% to the real estate within the fund.

The equity rise 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 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	0.70%	17.50%
Europe	0.75%	17.50%
USA	0.49%	17.50%

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

(iii) The average change in spread is 0.43%. Changes in market values are:

- (a) Not applicable
- (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 1.14%.
  
- (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 £80.13m, 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 £80.13m.
  
- (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.
  
- (d) A new stock lending arrangement has been put in place at the current valuation which created a liability and an asset of equal value from a balance sheet perspective. Under the terms of the agreement the stock lending introduced at the current valuation does not introduce material risk under the stress scenarios as stock lending assets are matched to stock lending liabilities on a daily mark to market basis. As such no allowance has been made for this in the RCM scenarios under Peak 2 reporting.

## **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 £128.23m. This is split as follows:

Type	GBP (£m)	EUR (£m)	Total (£m)
Swaps	5.76	29.12	34.87
Swaptions	7.53	6.00	13.53
Options	51.39	20.38	71.76
Futures	-0.60	0.00	-0.60
Spreadlocks	8.67	0.00	8.67
<b>Total</b>	<b>72.73</b>	<b>55.50</b>	<b>128.23</b>

### 13. ANALYSIS OF WORKING CAPITAL

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

	<b>Current Valuation</b>
<b>Opening working capital</b>	0.0
Write back planned benefit enhancements to zeroise working capital	206.2
	<b>206.2</b>
<b>Revised opening working capital</b>	
Opening adjustments and modelling changes	(5.8)
<b>Restated opening working capital</b>	<b>200.4</b>
Investment return on working capital	14.3
Mismatch profits and losses	(7.6)
Assumption changes	
- Non-economic	(0.6)
- Economic	33.6
- Policyholder actions	0.0
Impact of new business	0.0
Other variances	
- Non-economic	27.8
- Economic	12.9
- Changes in long term insurance liabilities	(5.7)
- Asset share enhancements	0.0
- Unexplained	0.0
<b>Closing working capital before zeroisation</b>	<b>275.2</b>
Planned benefit enhancements to zeroise working capital	(275.2)
<b>Closing working capital</b>	<b>0.0</b>

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

£m	<b>Current Valuation</b>	<b>Previous Valuation</b>
Discounted value of future transfer to shareholders	45.5	45.8
Excess charges on UWP fund	9.4	8.6
Mathematical reserves in respect of non-profit GAOs	8.7	14.8
Provisions	32.5	21.3
<b>Total</b>	<b>96.13</b>	<b>90.48</b>

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

£m	<b>Current Valuation</b>	<b>Previous Valuation</b>
Regulatory current liabilities	795.7	490.3
Partial release of de-mutualisation compensation fund	-63.5	(56.6)
Recoverable deferred tax asset	-0.7	(0.7)
Recoverable tax on excess E	0.0	0.0
<b>Realistic current liabilities</b>	<b>731.5</b>	<b>433.0</b>



The realistic current liabilities include £419.8m due to the new stock lending arrangement as explained in section 10.

#### **14. OPTIONAL DISCLOSURE**

None made.

## Returns under the Accounts and Statements Rules

### 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 2010

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, Phoenix With-Profits Fund, Scottish Mutual With-Profits Fund and the SPI With-Profits Fund was Mr A E Burke.

- 1 (a) During the year Mr Burke held options to subscribe for 11,255 shares in Phoenix Group Holdings, the ultimate holding company, granted under the Company's Long Term Incentive Plan and the Save As You earn Scheme (SAYE).
  - (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 2010 was £212,351.
  - (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.
- 2 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.

## Returns under the Accounts and Statements Rules

### 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 2010

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 held options to subscribe for 9,948 shares in Phoenix Group Holdings, the ultimate holding company, granted under the Company's Long Term Incentive Plan and the Save As You Earn Scheme (SAYE).
  - (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 2010 was £184,058.
  - (d) Mr Rendell was throughout the year a member of the Final Salary section of the PGL Pension Scheme, and was entitled to the standard benefits under the rules of the scheme.
- 2 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.

## Returns under the Accounts and Statements Rules

### 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 2010

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 held 731 shares in Phoenix Group Holdings, the ultimate holding company.
  - (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 2010 was £159,057 inclusive of VAT and disbursements.
  - (d) Throughout the year, Mr Ross received a pension from the PGL Pension Scheme.
- 2 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.

**Returns under the Accounts and Statements Rules**

**Certificate required by rule 9.34(1)**

**Phoenix Life Limited**

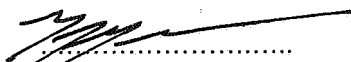
**Global business**

**Financial year ended 31 December 2010**

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 that:
    - (i) 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

A Moss

  
.....  
Director

JJ Yates

  
.....  
Director

Date: 22 March 2011

**Returns under the Accounts and Statements Rules**

**Certificate required by rule 9.34(1)**

**Phoenix Life Limited**

**Global business**

**Financial year ended 31 December 2010**

**Note to the Directors' Certificate**

**1 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.

## **Returns under the Accounts and Statement Rules**

### **Independent auditor's 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 2010**

We have audited the following documents prepared by the insurer pursuant to the Accounts and Statements Rules set out in Part I and Part IV of Chapter 9 to IPRU(INS) the Interim Prudential Sourcebook for Insurers, GENPRU the General Prudential Sourcebook and INSPRU the 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 valuation reports required by IPRU(INS) rule 9.31 ("the valuation reports").

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

- 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 required by 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 audit work 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 auditor's 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 audit work, 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 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:

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

### **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 23 March 2011. 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.

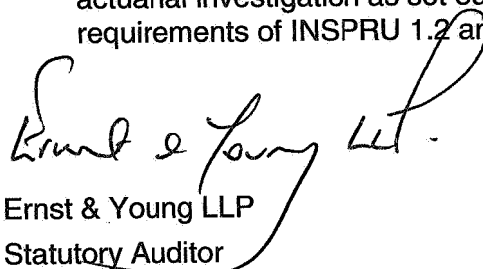
We planned and performed our work so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the Forms, the statement and the valuation reports are free from material misstatement, whether caused 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  
Statutory Auditor  
London

23 March 2011