

# Report of the statutory actuary for the year ended 31 December 2010

## Liberty Group Limited

### 1. Statement of excess assets, liabilities and capital adequacy requirement

Published reporting basis at 31 December	2010 Rm	Restated 2009 Rm
<b>Assets</b>		
Total assets per statement of financial position	186 274	172 819
<b>Less liabilities</b>	176 671	161 749
Liabilities under insurance contracts	104 592	98 567
Liabilities under investment contracts with DPF	2 634	2 692
Liabilities under investment contracts	57 928	52 090
Other liabilities	11 517	8 400
<b>Excess of assets over liabilities</b>	<b>9 603</b>	11 070
Statutory basis at 31 December	2010 Rm	Restated <sup>(1)</sup> 2009 Rm
<b>Assets</b>		
Total assets	168 329	156 667
<b>Less liabilities</b>	161 157	149 523
Policyholder liabilities	154 037	145 264
Other liabilities	7 120	4 259
<b>Excess of assets over liabilities</b>	<b>7 172</b>	7 144
<b>Represented by:</b>		
Shareholders' funds	7 172	7 144
<b>Capital adequacy requirement</b>	<b>2 688</b>	2 542
Capital adequacy requirement: times covered	2,67	2,81

<sup>(1)</sup> Restated to reflect final numbers submitted to the Financial Services Board.

In regard to the financial position of the Long Term Insurance subsidiaries of Liberty Group Limited, reliance has been placed on the actuarial investigations performed by the statutory actuaries of those companies. They have certified that assets are sufficient to meet the liabilities that will emerge under existing policies and to cover the capital adequacy requirement of those companies.

I have conducted an investigation into the financial position of Liberty Group Limited at 31 December 2010. I certify that the actuarial valuation was carried out on the basis described below in accordance with the guidance notes issued by the Actuarial Society of South Africa (including PGN 103, PGN 104 and PGN 110). In my opinion, the Company was financially sound on the statutory basis at the valuation date and is likely to remain financially sound for the foreseeable future.



**P A Lancaster BSc, FASSA, FIA**

Statutory actuary

Johannesburg

23 February 2011

## Liberty Group Limited (continued)

## 2. Reconciliation of statutory basis to published reporting basis

Reconciliation of excess assets between published reporting basis and statutory basis	2010 Rm	2009 Rm
Excess of assets over liabilities – statutory basis	7 172	7 144
Excess of assets over liabilities – published reporting basis	9 603	11 070
<b>Difference</b>	<b>(2 431)</b>	<b>(3 926)</b>
Items of difference	(2 431)	(3 926)
CAR requirements of subsidiaries	(1 362)	(1 482)
Write-up of subsidiaries from cost to NAV	440	(1 588)
Debt instruments	2 000	2 000
Differences between statutory and published valuation methodology	(3 223)	(2 633)
Inadmissible assets	(286)	(223)

For purposes of the published accounts, long term insurance subsidiaries are held at cost. For purposes of the statutory basis, long term insurance subsidiaries are held at net asset value, less capital requirements of the subsidiary. Following the restructure of the group effective 1 January 2010, the long-term insurance subsidiaries Stanlib Multi Manager Limited and Liberty Life Namibia Limited are no longer subsidiaries of Liberty Group Limited. They are now subsidiaries of Liberty Holdings Limited.

The amount of R3 223 million (2009: R2 633 million) relates mainly to the elimination of negative rand reserves on Lifestyle Protector business on the statutory valuation basis.

Inadmissible assets consist of prepaid commissions, the employers' share of the pension fund surplus and intangible assets.

## 3. Analysis of change in excess assets (published reporting basis)

Analysis of change in excess assets Published reporting basis	2010 Rm	2009 Rm
Excess assets at the end of the year	9 603	11 070
Excess assets as at the beginning of the year	11 070	12 622
<b>Change in excess assets over the year</b>	<b>(1 467)</b>	<b>(1 552)</b>
<b>This change in excess assets is due to the following items:</b>		
Investment return generated by shareholders' funds		
Investment income	287	378
Capital appreciation	261	15
<b>Total investment return</b>	<b>548</b>	<b>393</b>
Operating profit	1 358	(36)
Changes in valuation bases/methods/assumptions	(53)	(515)
Fee revenue	15	16
Shareholders' tax	(2)	(42)
Management expenses	(286)	(312)
Employer pension fund surplus	11	13
<b>Total earnings</b>	<b>1 591</b>	<b>(483)</b>
Capital reduction	(1 022)	
BEE preference dividends	117	101
Dividends paid	(2 078)	(1 175)
Share-based payments	(7)	(11)
Owner-occupied properties	(68)	16
<b>Total change in excess assets</b>	<b>(1 467)</b>	<b>(1 552)</b>

# Report of the statutory actuary for the year ended 31 December 2010

## Liberty Group Limited (continued)

### 4. Description of published reporting valuation basis

#### Assets

Investments have been valued as set out in the accounting policies.

#### Insurance contracts and investment contracts with discretionary participation features

Provision has been made for the best estimate of future experience, plus compulsory margins as required in terms of guidance note PGN104 issued by the Actuarial Society of South Africa. In addition, selected discretionary margins are held.

The best estimate assumptions relating to future mortality, morbidity, withdrawals and maintenance expenses were derived from and are consistent with recent experience. Detailed experience investigations were carried out during 2010 and reflect the experience of policies up to 30 September 2010. Allowance was made in the assumptions for persistency losses in excess of the long term best estimate assumptions in the short term. Future maintenance expenses have been set according to the Liberty Group cost per policy basis. In setting the assumptions, provision was made for the expected increase in AIDS-related claims and for the effect of future inflation in maintenance expenses at 5,27% p.a. (2009: 6,3% p.a.) or 5,80% p.a. after the addition of the prescribed margin.

Future investment returns were related to the medium-term government stock interest rate prevailing at the valuation date and were set at 10,55% p.a. (2009: 11,43% p.a.) taking into account the asset mix of the fund. The before-tax discount rates were set at the same rates. Future tax and tax relief were allowed for at rates and on bases applicable to Section 29A of the Income Tax Act and full allowance has been made for capital gains tax. Provision was made for capital gains tax on unrealised gains at the valuation date at the full undiscounted value.

The best estimate assumptions were strengthened by the addition of compulsory margins. Further discretionary margins were added so that the shareholders' participation in profits emerges in the year in which it is earned, and so that profit emerges in line with product design. These discretionary margins include:

- An allowance for the shareholders' participation in the reversionary and terminal bonus expected to be declared each year in respect of with profits business;
- An allowance for the shareholders' participation in the bonus expected to be declared and a portion of the management fees levied under certain classes of market related business;
- For certain classes of business where limited experience is available for the purpose of setting best estimate assumptions, prudent assumptions have been set for mortality and withdrawal rates.

Individual market related policies are policies where benefits are dependent on the performance of underlying investment portfolios (including business with smoothed bonuses). Liabilities for such policies were calculated as the aggregate value of the policies' investment in the investment portfolio at the valuation date (the 'unit reserve'), less a 'rand reserve' which is calculated on a policy by policy cash flow basis. The 'rand reserve' is the excess of the present value of the expected future risk and expense charges over the present value of the expected future risk benefits and expenses.

Reversionary bonus and the major non-profit classes of policies were valued by discounting the expected future cash flows at a market related rate of interest reduced by an allowance for investment expenses and the relevant compulsory margin.

Policyholder reasonable benefit expectations have been allowed for as follows:

- In respect of reversionary bonus business by allowing for future bonus at the latest declared rates;
- In respect of market related business by assuming a bonus rate supported by the investment returns assumed in the valuation; and
- Taking into account expectations created by legislation, marketing literature, actual past practice and industry norms.

In respect of with-profit business where bonuses are smoothed, bonus stabilisation reserves are held arising from the past difference between the after-tax investment performance of the assets net of the relevant management fees and the quantum of bonuses declared. The total of the stabilisation reserves amounted to R3 743,6 million as at 31 December 2010 (R4 063,6 million as at 31 December 2009). No fund had a negative bonus stabilisation reserve at the valuation date.

**Liberty Group Limited (continued)****4. Description of published reporting valuation basis (continued)****Investment contracts without discretionary participation features**

All financial liabilities included in investment contract liabilities without discretionary participation features were held at fair value in accordance with IAS 39.

**Minimum investment return guarantees**

A reserve for minimum investment return guarantees is held, calculated on a stochastic basis using Monte Carlo simulation techniques in accordance with PGN 110.

Using the simulated investment returns, the prices and implied volatilities of the following instruments are as follows:

**Vanilla options**

Maturity (years)	Strike	Underlying	Price %	Implied volatilities %
1	Spot	Equity Index	7,60	23,13
1	0,8* Spot	Equity Index	1,46	23,41
1	Forward	Equity Index	8,95	23,13
5	Spot	Equity Index	10,70	26,26
5	(1,04 <sup>5</sup> )* Spot	Equity Index	18,78	26,23
5	Forward	Equity Index	20,13	26,23
20	Spot	Equity Index	4,30	26,89
20	(1,04 <sup>20</sup> )* Spot	Equity Index	18,80	27,54
20	Forward	Equity Index	26,61	27,74

**“Other” options**

Maturity (years)	Strike	Underlying	Price %
5	(1,04 <sup>5</sup> )* Spot	60% Equity Index, 40% Bond Index with annual rebalancing	9,28
20	Forward	Simulated 5 year spot rate in 20 years time	0,40

The zero coupon yield curve used in the asset projections was as follows:

**Yield curve**

Maturity	Yield (NACA)
1 year	5,63
2 years	6,06
3 years	6,56
4 years	7,05
5 years	7,43
10 years	8,25
15 years	8,21
20 years	8,08
25 years	7,83
30 years	7,52
35 years	7,41
40 years	7,31
45 years	7,24
50 years	7,16

**Liberty Group Limited (continued)****5. Capital adequacy**

Investigations were carried out to determine the amount of the capital adequacy requirement (CAR), which provides for adverse variations in experience, including an allowance for deterioration in mortality experience arising from the AIDS pandemic. These investigations were carried out in terms of the guidance notes issued by the Actuarial Society of South Africa.

In the calculation of the investment resilience element of the capital adequacy requirement, it was assumed that equity asset values would decline by 30%, property values by 15% and fixed interest asset values would fall by an amount consistent with an increase in yields of 25% of the yield at the valuation date.

In calculating the TCAR, allowance has been made for the investment guarantee reserve to be released when policies surrender. In addition, it is assumed that only 50% of commission is recovered from intermediaries on surrender.

In calculating the OCAR, the resilience requirement includes the effect of the asset shocks described above on the investment guarantee reserve held in accordance with the latest PGN110 guidance. In addition, allowance has been made for credit risk and operational risk in accordance with the latest version of PGN104. In calculating the credit CAR, concentration risk has been allowed for by reducing the credit rating of all instruments issued by Standard Bank and Investec Bank. This increases the amount of credit CAR.

No management actions were assumed in the calculation of the capital adequacy requirement.

In the calculation of CAR, the Termination capital adequacy requirement (TCAR) amounted to R2 532 million and the ordinary capital adequacy requirement (OCAR) was calculated as R2 688 million, and thus the capital adequacy requirement has been based on the OCAR calculation.

I am satisfied that the excess of assets over liabilities is sufficient to meet the capital adequacy requirement which amounted to R2 688 million at 31 December 2010 (R2 542 million at 31 December 2009).

**6. Material changes in valuation basis since the previous valuation**

Modelling and other changes were made to the valuation to re-align valuation assumptions with expected future experience. These changes resulted in a net decrease in reserves of R105 million.

Basis/assumption change	2010 Rm
Changes to economic assumptions	(159)
Assumption changes in respect of PGN 110 reserves	(49)
Demographic assumption changes	152
Persistency assumption changes	(74)
Other modelling changes	25
	(105)

# Report of the statutory actuary for the year ended 31 December 2010

## Liberty Active Limited

### 1. Statement of excess assets, liabilities and capital adequacy requirement

<b>Published reporting basis at 31 December</b>	<b>2010 Rm</b>	<b>2009 Rm</b>
<b>Assets</b>		
Total assets as per statement of financial position	<b>21 589</b>	18 826
<b>Less liabilities</b>	<b>20 712</b>	18 133
Liabilities under insurance contracts	<b>17 408</b>	15 135
Liabilities under investment contracts	<b>1 945</b>	1 996
Other liabilities	<b>1 359</b>	1 002
<b>Excess of assets over liabilities</b>	<b>877</b>	693
<b>Statutory basis at 31 December</b>	<b>2010 Rm</b>	<b>2009 Rm</b>
<b>Assets</b>		
Total assets	<b>17 757</b>	16 367
<b>Less liabilities</b>	<b>16 908</b>	15 626
Policyholder liabilities	<b>15 551</b>	14 627
Other liabilities	<b>1 357</b>	999
<b>Excess of assets over liabilities</b>	<b>849</b>	741
<b>Represented by:</b>		
Shareholders' funds	<b>849</b>	741
Less Inadmissible assets		
<b>Capital adequacy requirement</b>	<b>482</b>	424
Capital adequacy requirement: times covered	<b>1,76</b>	1,75

I hereby certify that

- The valuation on the statutory basis of Liberty Active Limited as at 31 December 2010, the results of which are summarised above, has been conducted in accordance with, and
- This statutory actuary's report has been produced in accordance with, applicable Actuarial Society of South Africa Professional Guidance notes; and
- The company was financially sound on the statutory basis at the valuation date, and in my opinion is likely to remain financially sound for the foreseeable future.



**P A Lancaster BSc, FASSA, FIA**

*Statutory actuary*

Johannesburg  
23 February 2011

## Report of the statutory actuary for the year ended 31 December 2010

### Liberty Active Limited (continued)

#### 2. Reconciliation of excess assets between published reporting basis and statutory basis

	2010 Rm	2009 Rm
Excess of assets over liabilities – statutory basis	849	741
Excess of assets over liabilities – published reporting basis	877	693
<b>Difference</b>	<b>(28)</b>	48
<b>Items of difference</b>	<b>(28)</b>	48
Valuation of long-term insurance subsidiaries	–	69
Differences between statutory and published valuation methodology	2	(1)
Inadmissible assets	(30)	(20)

For purposes of the published accounts, long-term insurance subsidiaries are held at cost. For purposes of the statutory basis, long-term insurance subsidiaries are held at net asset value, less capital requirements of the subsidiary. The adjustment of R68,8 million in 2009 revalued the Liberty Life Namibia Limited subsidiary from cost to net asset value less capital adequacy requirement. With effect from 1 January 2010, Liberty Life Namibia Limited is a subsidiary of Liberty Holdings Namibia (Proprietary) Limited which in turn is a subsidiary of Liberty Holdings Limited.

The valuation of liabilities in respect of investment contracts on the statutory basis results in a difference of R1,6 million (2009: (R1 million)) from the published basis, which is calculated at fair value. The valuation methodology is described below.

Inadmissible assets consist of prepaid commissions of (R27,6 million) and deferred acquisition costs of (R2,2 million).

#### 3. Analysis of change in excess assets (published reporting basis)

	2010 Rm	2009 Rm
Excess assets as at end of the year	877	693
Excess assets as at beginning of the year	693	564
<b>Change in excess assets over the year</b>	<b>184</b>	129
<b>This change in excess assets is due to the following items:</b>		
<b>Investment return generated by shareholders' funds</b>		
Investment income	52	48
Capital appreciation	8	6
Profit on sale of subsidiary	148	–
<b>Total investment return</b>	<b>208</b>	54
Operating profit	657	903
Changes in valuation bases/methods/assumptions	(7)	(406)
Shareholders' tax	(43)	(40)
Management expenses	(35)	(16)
Preference dividend	(444)	(366)
<b>Total earnings</b>	<b>336</b>	129
Dividends paid	(152)	–
<b>Total change in excess assets</b>	<b>184</b>	129

# Report of the statutory actuary

## for the year ended 31 December 2010

### Liberty Active Limited (continued)

#### 4. Description of published reporting valuation basis

##### Assets

Investments have been valued as set out in the accounting policies.

##### Insurance contracts and investment contracts with discretionary participation features

Provision has been made for the best estimate of future experience, plus compulsory margins as required in terms of guidance note PGN 104 issued by the Actuarial Society of South Africa. In addition, selected discretionary margins are held.

The best estimate assumptions relating to future mortality, morbidity, withdrawals and maintenance expenses were derived from and are consistent with recent experience. Detailed experience investigations were carried out during 2010 and reflect the experience of policies up to 30 September 2010. Future maintenance expenses have been set according to the Liberty Group cost per policy basis. In setting the assumptions, provision was made for the expected increase in AIDS-related claims and for the effect of future inflation in maintenance expenses at 5,27% p.a. (31 December 2009: 6,3% p.a.) or 5,80% p.a. after the addition of the prescribed margin.

Future investment returns were related to the medium-term government stock interest rate prevailing at the valuation date and were set at 10,56% p.a. (31 December 2009: 11,50% p.a.) taking into account the asset mix of the fund. The before-tax discount rates were set at the same rates. Future tax and tax relief were allowed for at rates and on bases applicable to Section 29A of the Income Tax Act and full allowance has been made for capital gains tax. Provision was made for capital gains tax on unrealised gains at the valuation date at the full undiscounted value.

The best estimate assumptions were strengthened by the addition of compulsory margins. Further discretionary margins were added so that the shareholders' participation in profits emerges in the year in which it is earned, and that profit emerges in line with product design. These discretionary margins include:

- An allowance for the shareholders' participation in the reversionary and terminal bonuses expected to be declared each year in respect of with-profit business;
- An allowance for the shareholders' participation in the bonuses expected to be declared and a portion of the management fees levied under certain classes of market related business;
- For certain classes of business, where limited experience is available for the purpose of setting best estimate assumptions, prudent assumptions have been set for mortality rates and withdrawal rates.

Individual market related policies are policies where benefits are dependent on the performance of underlying investment portfolios (including business with smoothed bonuses). Liabilities for such policies were calculated as the aggregate value of the policies' investment in the investment portfolio at the valuation date (the 'unit reserve'), less a 'Rand reserve' which is calculated on a policy by policy cash flow basis. The 'Rand reserve' is the excess of the present value of the expected future risk and expense charges over the present value of the expected future risk benefits and expenses.

Reversionary bonus and the major non-profit classes of policies were valued by discounting the expected future cash flows at a market related rate of interest reduced by an allowance for investment expenses and the relevant compulsory margin.

Policyholder reasonable benefit expectations have been allowed for as follows:

- In respect of reversionary bonus business by allowing for future bonuses at the latest declared rates;
- In respect of market related business by assuming a bonus rate supported by the investment returns assumed in the valuation; and
- Taking into account expectations created by legislation, marketing literature, actual past practice and industry norms.

In respect of with-profit business where bonuses are smoothed, bonus stabilisation reserves are held arising from the past difference between the after-tax investment performance of the assets net of the relevant management fees and the quantum of bonuses declared. The total of the stabilisation reserves amounted to R36,6 million as at 31 December 2010 (R33,8 million as at 31 December 2009).



# Report of the statutory actuary

## for the year ended 31 December 2010

### Liberty Active Limited (continued)

#### 4. Description of published reporting valuation basis (continued)

##### Investment contracts without discretionary participation features

All financial liabilities included in investment contract liabilities without discretionary participation features were held at fair value in accordance with IAS 39.

##### Minimum investment return guarantees

A reserve for minimum investment return guarantees is held, calculated on a stochastic basis using Monte Carlo simulation techniques in accordance with PGN110.

Using the simulated investment returns, the prices and implied volatilities of the following instruments are as follows:

Vanilla Options				
Maturity	Strike	Underlying	Price %	Implied volatilities %
1	Spot	Equity Index	7,60	23,13
1	0,8*Spot	Equity Index	1,46	23,41
1	Forward	Equity Index	8,95	23,13
5	Spot	Equity Index	10,70	26,26
5	(1,04 <sup>5</sup> )*Spot	Equity Index	18,78	26,23
5	Forward	Equity Index	20,13	26,23
20	Spot	Equity Index	4,30	26,89
20	(1,04 <sup>20</sup> )*Spot	Equity Index	18,80	27,54
20	Forward	Equity Index	26,61	27,74

##### "Other" options

Maturity	Strike	Underlying	Price %
5	(1,04 <sup>5</sup> )*Spot	60% Equity Index, 40% Bond Index with annual rebalancing	9,28
20	Forward	Simulated 5 year spot rate in 20 years time	0,40

The zero coupon yield curve used in the asset projections was as follows:

Yield curve	
Maturity	Yield (NACA) %
1	5,63
2	6,06
3	6,56
4	7,05
5	7,43
10	8,25
15	8,21
20	8,08
25	7,83
30	7,52
35	7,41
40	7,31
45	7,24
50	7,16

## Report of the statutory actuary for the year ended 31 December 2010

### Liberty Active Limited (continued)

#### 5. Capital adequacy

Investigations were carried out to determine the amount of the capital adequacy requirement (CAR), which provides for adverse variations in experience, including an allowance for deterioration in mortality experience arising from the AIDS pandemic. These investigations were carried out in terms of the guidance notes issued by the Actuarial Society of South Africa.

In the calculation of the investment resilience element of the capital adequacy requirement, it was assumed that equity asset values would decline by 30%, property values by 15% and fixed interest asset values would rise by an amount consistent with a reduction in yields of 25% of the yield at the valuation date.

In calculating the Termination capital adequacy requirement (TCAR), allowance has been made for the investment guarantee reserve to be released when policies surrender. In addition, it is assumed that only 50% of commission is recovered from intermediaries on surrender.

In calculating the ordinary capital adequacy requirement (OCAR), the resilience requirement includes the effect of the asset shocks described above on the investment guarantee reserve held in accordance with the latest PGN110 guidance. In addition, allowance has been made for credit risk and operational risk in accordance with the latest version of PGN104. In calculating the credit CAR, concentration risk has been allowed for by reducing the credit rating of all instruments issued by Standard Bank and Investec Bank. This increases the amount of credit CAR.

In calculating the allowance for operational risk, the assumptions have been changed to be the same as those proposed under QIS5, the latest Quantitative Impact Study carried out amongst European Insurers to assist in setting Solvency II assumptions. This has had the effect of increasing the allowance for operational risk by R24 million.

In calculating the capital adequacy requirement it has been assumed that, in the event that solvency is threatened, 85,7% of the discretionary margins held in respect of Decreasing Term Assurance and Funeral products would be released. This assumption reduced the Ordinary Capital Adequacy Requirement by R48,7million. The 85,7% level was chosen to minimise the CAR so that, as closely as possible,  $TCAR = OCAR$ .

I certify that the management action assumed above has been approved by specific resolution by the board of directors and that I am satisfied that this action would be taken if solvency were to be threatened.

In the calculation of CAR, the ordinary capital adequacy requirement (OCAR) of R482,4 million equalled the termination capital adequacy requirement (TCAR) of R482,4 million.

I am satisfied that the excess of assets over liabilities is sufficient to meet the capital adequacy requirement which amounted to R482,4 million at 31 December 2010 (R424,5 million at 31 December 2009).

# Report of the statutory actuary for the year ended 31 December 2010

## Liberty Growth Limited

### 1. Statement of excess assets, liabilities and capital requirements

Published reporting basis at 31 December	2010 Rm	2009 Rm
<b>Assets</b>		
Total assets as per statement of financial position	2 169	2 168
<b>Less liabilities</b>	1 677	1 744
Liabilities under insurance contracts	1 586	1 435
Liabilities under investment contracts	33	265
Other liabilities	58	44
<b>Excess of assets over liabilities</b>	<b>492</b>	<b>424</b>
Statutory reporting basis at 31 December	2010 Rm	2009 Rm
<b>Assets</b>		
Total assets on the statutory basis	2 160	2 154
<b>Less liabilities</b>	1 739	1 817
Liabilities in respect of policies	1 706	1 788
Other liabilities	33	29
<b>Excess of assets over liabilities</b>	<b>421</b>	<b>337</b>
<b>Capital adequacy requirements</b>	<b>73</b>	<b>83</b>
<b>Ratio of excess assets to capital adequacy requirement</b>	<b>5,71</b>	<b>4,05</b>

I hereby certify that:

- The valuation on the statutory basis of Liberty Growth Limited as at 31 December 2010, the results of which are summarised above, has been conducted in accordance with, and this statutory actuary's report has been produced in accordance with, the applicable Actuarial Society of South Africa Professional Guidance Notes; and
- The company was financially sound on the statutory basis as at the valuation date, and in my opinion is likely to remain financially sound for the foreseeable future.

**Mark Drutman FIA, FASSA**

*Statutory actuary*

14 February 2011

# Report of the statutory actuary

## for the year ended 31 December 2010

### Liberty Growth Limited (continued)

#### 2. Reconciliation of statutory basis to published reporting basis

	2010 R'000	2009 R'000
Excess of assets over liabilities – statutory reporting basis	420 997	337 912
Excess of assets over liabilities – published reporting basis	492 572	423 836
<b>Difference</b>	<b>(71 576)</b>	<b>(85 924)</b>
Items of difference	(71 576)	(85 924)
Differences between statutory and published valuation methodology	(62 461)	(63 408)
Inadmissible assets	(9 115)	(22 516)

#### 3. Analysis of change in excess assets (published reporting basis)

	2010 R'000	2009 R'000
<b>Analysis of change in excess assets – published reporting basis</b>		
Excess assets as at the end of the year	492 572	423 836
Excess assets as at the beginning of the year	423 836	359 283
<b>Change in excess assets over the period</b>	<b>68 736</b>	<b>64 553</b>
<b>This change in excess assets is due to the following items:</b>		
Investment return generated by shareholder funds		
Investment income	35 579	36 458
Capital appreciation	7 036	8 451
<b>Total investment return</b>	<b>42 615</b>	<b>44 909</b>
Shareholders' tax and expenses	(16 314)	(15 424)
Operating profit	59 107	32 900
Changes in valuation bases/methods/assumptions	(16 671)	2 167
<b>Total earnings</b>	<b>26 122</b>	<b>19 644</b>
Capital raised/(returned)	–	–
Adjustments to non-distributable reserves	–	–
<b>Total change in excess assets</b>	<b>68 737</b>	<b>64 553</b>

#### 4. Description of published reporting valuation basis, notes and comments

##### Valuation basis for actuarial value of assets

All assets have been valued at fair value as set out in the accounting policies. The assets include an asset of R7,42 million being the amortised carrying value of business recaptured from Swiss Re. and represent the present value of future margins on these recaptured policies.

##### Valuation basis for actuarial liabilities

Insurance contracts have been valued using the Statutory Valuation Method (SVM). Investment contracts have been valued in terms of IAS39.

##### Insurance contracts

In general, provision was made for the best estimate of future experience, plus prescribed margins as required in terms of PGN104 issued by the Actuarial Society of South Africa, plus discretionary margins.

The best estimate assumptions relating to future mortality, morbidity, withdrawals and maintenance expenses were derived from and consistent with recent experience observed from detailed investigations conducted during 2010. Provision has been made for the expected increase in the occurrence of AIDS-related claims.

The best estimate assumption for maintenance expenses is determined at a Liberty Group level as Liberty Growth Limited is functionally integrated into Liberty. Future inflation is allowed for at 5,27% p.a. (December 2009: 6,30% p.a.).

For non-profit annuities, liabilities have been calculated by discounting expected future annuity payments and expenses at interest rates based on the zero-coupon bond yield curve at the valuation date.

# Report of the statutory actuary

## for the year ended 31 December 2010

### Liberty Growth Limited (continued)

#### 4. Description of published reporting valuation basis, notes and comments (continued)

For guaranteed capital bond policies, liabilities have been calculated by discounting expected benefit payments and expenses at interest rates based on the zero-coupon swap yield curve at the valuation date.

A discount rate, before allowance for prescribed and second-tier margins and tax, of 9,5% p.a. (December 2009: 10,8% p.a.) has been used for other non-profit business taking into account the asset mix and asset management fees levied.

The best estimate assumptions are strengthened by the addition of compulsory margins. Further discretionary margins are added so that shareholder's participation in profits emerges in the year that it is earned. These margins are:

- A limitation on fund charges on smoothed bonus business: R32,8 million (December 2009: R33,7 million)
- An allowance on funeral business relating to the uncertainty in mortality experience: R14,6 million (December 2009: R14,9 million).

In addition, a Treating Customers Fairly (TCF) reserve of R18,9 million represents a second tier margin.

For market related and smoothed bonus contracts, reserves were taken as the aggregate of the policies' investment value (smoothed bonus contracts comprised both vesting and non-vesting accounts) and Rand reserves. Rand reserves are equal to the excess of the present value of future risk benefits and expenses over the present value of the expected future charges. For these contracts, future investment returns were related to the medium-term government bond yield prevailing at the valuation date and set at 9,9% p.a. (December 2009: 11,2% p.a.) taking into account the asset mix. It was assumed that the company's policyholder fund is in a tax loss position for the foreseeable future. The same rate was used to place a value on the present value of future cash flows.

It was assumed that future bonuses on smoothed bonus contracts will be consistent with future investment returns. Bonus stabilisation reserves are held to equate the liabilities to the market values of the corresponding assets.

For conventional with-profit policies that participate in reversionary and terminal bonuses, reserves were calculated by discounting future cash flows allowing for future bonuses at the latest declared rates and terminal bonuses supported by assumed investment returns. A discount rate, before allowance for prescribed and second-tier margins and tax, of 9,5% p.a. (December 2009: 10,8% p.a.) has been used. Bonus stabilisation reserves are held to equate the liabilities to the market values of the corresponding assets.

#### Embedded investment derivatives

Liberty Growth Limited has very limited exposure to embedded investment derivatives. In view of the immaterial amount of this liability (<R2 million) it has been estimated using approximate methods.

#### Policyholder reasonable expectations

Policyholder reasonable expectations have been allowed for as follows:

- For with-profit business, bonus rates have been allowed for at the latest declared rates and supportable by future investment returns;
- For market related and smoothed bonus business, by assuming a bonus rate supportable by future investment returns; and
- Taking into account expectations created by legislation, marketing literature and industry norms.

Bonus stabilisation reserves for smoothed bonus policies are calculated as the difference between the earned asset share and the investment value (including both vesting and non-vesting accounts). For with-profit business, the bonus stabilisation reserve is the difference between the earned asset share and the discounted cash flow reserve. The earned asset share is accumulated at the net investment return earned on the portfolios of assets supporting each of these categories of business.

The Treating Customers Fairly reserve described above has been allocated to meet the potential cost from certain projects improving policyholder benefits and any remaining amounts can be released to shareholders.

#### Investment contracts

In the calculation of liabilities for investment contracts, the account balances have been held as the value of the liability. No Rand reserves have thus been held for these contracts.

## Report of the statutory actuary for the year ended 31 December 2010

### 5. Statutory capital adequacy requirements (CAR)

The statutory CAR has been calculated in accordance with section 6 of PGN104 v7.

The following main assumptions have been used to calculate the investment resilience capital adequacy requirement:

1. That a decline of 30% in equity asset values, 15% in property values, and 16,11% increase in fixed interest asset values (as a result of an decrease of 25% in fixed-interest yields) will occur, in accordance with PGN 104.
  2. That 51% of accumulated non-vested bonuses would be removed should asset values decline to this extent and not subsequently recover within a few months. This assumption reduced the capital adequacy requirements by R11,6 million (after grossing up).
- For the purpose of grossing up the intermediate ordinary CAR (IOCAR) to determine the ordinary CAR (OCAR), it has been assumed that the assets backing the CAR are invested 33,3% in money market instruments, 33,3% in fixed interest assets and 33,4% in preference shares.

I certify that the off-setting management actions assumed above have been approved by specific resolution by the Board of Directors, and that I am satisfied that these actions would be taken if the corresponding risks were to materialise.

The OCAR exceeded the termination CAR (TCAR), and thus the CAR has been based on the OCAR.

# Report of the statutory actuary for the year ended 31 December 2010

## Capital Alliance Life Limited

### 1. Statement of excess assets, liabilities and capital adequacy requirement

<b>Published reporting basis at 31 December</b>	<b>2010 Rm</b>	2009 Rm
Total assets per the statement of financial position	19 530	18 467
Less Liabilities	(17 374)	(16 642)
Liabilities under insurance contracts	15 239	14 560
Liabilities under investment contracts	1 329	1 423
Other liabilities	806	659
Excess of assets over liabilities	2 156	1 825
<b>Statutory reporting basis at 31 December</b>	<b>2010 Rm</b>	Restated <sup>(1)</sup> 2009 Rm
Assets		
Total assets	19 068	17 943
Less Liabilities	(17 399)	(16 667)
Policy liabilities	(16 576)	(15 812)
Other liabilities	(823)	(855)
Excess of assets over liabilities	1 669	1 276
Capital adequacy requirements	782	801
<b>Ratio of excess assets to capital adequacy requirements</b>	<b>2,13</b>	1,59

<sup>(1)</sup> Restated to reflect final numbers submitted to the Financial Services Board.

I hereby certify that

- The valuation on the Statutory basis of Capital Alliance Life Limited as at 31 December 2010, the results of which are summarised above, has been conducted in accordance with, and this statutory actuary's report has been produced in accordance with, applicable Actuarial Society of South Africa Professional Guidance notes; and
- The company was financially sound on the statutory basis at the valuation date, and in my opinion is likely to remain financially sound for the foreseeable future.

**M Drutman BSc, FASSA, FIA**

Statutory actuary

23 February 2011

# Report of the statutory actuary

## for the year ended 31 December 2010

### Capital Alliance Life Limited (continued)

#### 2. Reconciliation of statutory basis to published reporting basis

	2010 Rm	2009 Rm
Excess of assets over liabilities – statutory basis	1 669	1 276
Excess of assets over liabilities – published basis	2 156	1 825
Difference	(487)	(549)
Items of difference	(487)	(549)
Differences between statutory and published valuation methodology	(349)	(327)
Write-up of subsidiaries from cost to NAV	124	27
Inadmissible assets	(261)	(250)

#### 3. Analysis of change in excess assets (published reporting basis)

	2010 Rm	2009 Rm
Excess assets at the end of the year	2 155	1 825
Excess assets at the beginning of the year	1 825	1 774
Change in excess assets over the period	330	51
The change in the excess assets over the period may be analysed as follows:		
Investment return generated by shareholder's funds	104	116
Capital appreciation	68	44
Investment Income	149	145
Expenses and tax	(113)	(73)
Change in valuation methods or assumptions	(85)	(260)
New business strain	(160)	(299)
Other life fund operating surplus	471	494
Total earnings	330	51
Change in excess assets over the period	330	51

#### 4. Changes in published reporting valuation methods or assumptions

These were:

- moving to a standard base mortality table and AIDS table for all funeral products which reduced reserves by R5 million;
- a reduction in mortality on other products which reduced reserves by a further R40 million;
- claims termination rates on PHI claims were increased and reduced reserves by R20 million;
- persistency assumptions improved on some classes of business which reduced reserves by R20 million;
- a R50 million short-term persistency provision for the entry level market (ELM) products was released;
- a R20 million provision was set up in respect of the ELM business to provide for persistency issues related to the closure of broker call centres;
- a change was made to the mortality methodology for non-profit and with-profit annuities. Allowance for mortality improvements and projection terms were made consistent across the Group. The impact of this change was to increase liabilities by R156 million; and
- new expense assumptions increased reserves by R45 million.



# Report of the statutory actuary

## for the year ended 31 December 2010

### Capital Alliance Life Limited (continued)

#### 5. Published reporting liability valuation methods

##### 5.1. Insurance contracts and Investment contracts with discretionary participation features

The liabilities in respect of insurance contracts and investment contracts with discretionary participation features were valued in accordance with Professional Guidance Note (PGN) 104 of the Actuarial Society of South Africa, using best estimates of future experience, with an allowance for compulsory margins as specified in the guidance plus the addition of discretionary margins.

Discretionary margins are held in respect of:

- A reduction in the fund charge on a portion of the unitised individual business;
- A reduction in the premiums in respect of individual funeral business; and
- Uncertainty on claims and lapse experience for ELM business.

##### Assumptions

The best estimate assumptions relating to mortality, morbidity, withdrawal rates and maintenance expenses were derived from and are consistent with recent experience. These assumptions were derived from detailed investigations conducted in 2010.

Expenses are determined on a per policy basis at a Liberty Group wide level as Capital Alliance is functionally integrated within Liberty.

Provision is made for deteriorating AIDS mortality using the AIDS models produced by the Actuarial Society of South Africa (ASSA).

For non-annuity business, future investment returns were set related to the 10 year government bond rate, which was 8,27% as at 31 December 2010, and adjustments were made for the various asset classes, namely:

Equities: plus 3,5%

Property: plus 1,0%

Cash: less 1,5%

These future investment returns are then adjusted for management fees and taxation. These returns (before tax and charges) are also used to discount the future cashflows.

Expense inflation is set at the bond rate less 3,0%, which equated to 5,27% as at 31 December 2010.

Bonus declaration rates have been determined in accordance with the Principles and Practices of Financial Management. Bonus stabilisation reserves (BSR's) are all positive owing to improved market conditions compared with 2009. Bonus rates have also been increased since 2009, except on the Norwich book of business. The Norwich book has an advance bonus declaration.

##### Methodology

For individual market-related contracts, including smoothed bonus contracts, the published reserve comprises a unit reserve plus a rand reserve. The rand reserve is determined as the discounted value of expected future risk and expense charges over the present value of expected future risk benefits and expenses. Voluntary premium increases are not allowed for.

In addition, for contracts with discretionary participation features (DPF), we hold a bonus stabilisation reserve (BSR) as part of the actuarial liability, being the undistributed surplus on these contracts. For smoothed bonus policies we allow for future bonus rates on a basis consistent with future investment return assumptions. For conventional reversionary bonus business, future bonus rates are allowed for on a sustainable bonus rate basis.

The published reserve for conventional reversionary bonus and non-profit contracts is determined as the discounted value of future benefits and expenses less future premiums.

The published reserve for annuity and PHI in payment contracts is determined as the discounted value of future benefits and expenses. The yields used to discount the cash flows are determined from a yield curve underlying the assets held to back the liabilities.

The published reserve for group risk active business is determined as a reserve for claims incurred but not reported (IBNR).

The published reserve for group pension business is determined as the value of investment accounts. The published reserve for business with discretionary participation features also includes a BSR.

# Report of the statutory actuary

## for the year ended 31 December 2010

### Capital Alliance Life Limited (continued)

#### 5. Published reporting liability valuation methods (continued)

##### 5.2 Investment contracts

Investment contracts are valued in terms of IAS 39, which broadly involves holding contract values at unit values without allowance for rand reserves. Unamortised costs are allowed for by setting up a deferred acquisition cost (DAC) asset, which is then amortised over a number of years.

##### Minimum investment return guarantees

A reserve for minimum investment return guarantees is held, calculated on a stochastic basis using Monte Carlo simulation techniques in accordance with PGN 110.

Using the simulated investment returns, the prices and implied volatilities of the following instruments are as follows:

##### Vanilla options

Maturity (years)	Strike	Underlying	Price %	Implied volatilities %
1	Spot	Equity Index	7,60	23,13
1	0,8* Spot	Equity Index	1,46	23,41
1	Forward	Equity Index	8,95	23,13
5	Spot	Equity Index	10,70	26,26
5	(1,04 <sup>5</sup> )* Spot	Equity Index	18,78	26,23
5	Forward	Equity Index	20,13	26,23
20	Spot	Equity Index	4,30	26,89
20	(1,04 <sup>20</sup> )* Spot	Equity Index	18,80	27,54
20	Forward	Equity Index	26,61	27,74

##### "Other" options

Maturity (years)	Strike	Underlying	Price %
5	(1,04 <sup>5</sup> )* Spot	60% Equity Index, 40% Bond Index with annual rebalancing	9,28
20	Forward	Simulated 5 year spot rate in 20 years time	0,40

The zero coupon yield curve used in the asset projections was as follows:

##### Yield curve

Maturity	Yield (NACA)
1 year	5,63
2 years	6,06
3 years	6,56
4 years	7,05
5 years	7,43
10 years	8,25
15 years	8,21
20 years	8,08
25 years	7,83
30 years	7,52
35 years	7,41
40 years	7,31
45 years	7,24
50 years	7,16

# Report of the statutory actuary for the year ended 31 December 2010

## Capital Alliance Life Limited (continued)

### 6. Published reporting asset valuation methods and assumptions

Assets were valued at fair value in accordance with the accounting policies of the company.

### 7. Statutory capital adequacy requirements

The statutory capital adequacy requirements have been calculated in accordance with PGN104 of the Actuarial Society of South Africa.

A number of management actions have been allowed for, which have been approved by the Capital Alliance Life Board, namely:

- removal of non-vested bonus in the event of the resilience scenario occurring;
- implementation of a hedging strategy on the annuity book to reduce mismatch risk; and
- offsetting of the TCAR with certain reserves which would no longer be utilised in the event of the run on the bank occurring.

As these management actions have been approved by the board, I am satisfied that these actions would be taken if the corresponding risks were to materialise.

For the purpose of grossing up the intermediate ordinary capital adequacy requirements (IOCAR) to determine the ordinary capital adequacy requirements (OCAR), it has been assumed that the assets backing the CAR are invested 45% in equities and preference shares, 15% in bonds, 10% in property and 30% in cash.

The TCAR exceeded the OCAR and the capital requirement is based on TCAR.