# Report of the statutory actuary
*for the year ended 31 December 2009*

## Liberty Group

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

| Published reporting basis at 31 December | 2009 Rm | 2008 Rm |
|---|---|---|
| **Assets** | | |
| Total assets as per balance sheet | **172 819** | 166 044 |
| **Less liabilities** | **161 749** | 153 422 |
| Liabilities under insurance contracts | **98 056** | 93 253 |
| Liabilities under investment contracts with DPF | **2 692** | 2 648 |
| Liabilities under investment contracts | **51 845** | 46 732 |
| Other liabilities | **9 156** | 10 789 |
| **Excess of assets over liabilities** | **11 070** | 12 622 |

| Statutory basis at 31 December | 2009 Rm | 2008 Rm |
|---|---|---|
| **Assets** | | |
| Total assets | **156 813** | 151 200 |
| **Less liabilities** | **149 669** | 143 173 |
| Policyholder liabilities | **145 410** | 137 181 |
| Other liabilities | **4 259** | 5 992 |
| **Excess of assets over liabilities** | **7 144** | 8 027 |
| **Represented by:** | | |
| Shareholders' funds | **7 144** | 8 027 |
| **Capital adequacy requirement** | **2 542** | 3 020 |
| Capital adequacy requirement: times covered | **2,81** | 2,66 |

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 2009. 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.

**PA Lancaster** BSc, FIA, FASSA
*Statutory actuary*

**Johannesburg**
24 February 2010

## Report of the statutory actuary *(continued)*

*for the year ended 31 December 2009*

### Liberty Group (continued)

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

| Reconciliation of excess assets between published reporting basis and statutory basis | 2009 Rm | 2008 Rm |
|---|---|---|
| Excess of assets over liabilities – statutory basis | **7 144** | 8 027 |
| Excess of assets over liabilities – published reporting basis | **11 070** | 12 622 |
| **Difference** | **(3 926)** | (4 595) |
| Items of difference | **(3 926)** | (4 595) |
| CAR requirements of subsidiaries | **(1 482)** | (1 507) |
| Write-up of subsidiaries from cost to NAV | **(1 588)** | (2 158) |
| Debt instruments | **2 000** | 2 000 |
| Differences between statutory and published valuation methodology | **(2 633)** | (2 695) |
| Inadmissible assets | **(223)** | (235) |

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 amount of R2 633 million (2008: R2 695 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 | 2009 Rm | 2008 Rm |
|---|---|---|
| Excess assets at the end of the year | **11 070** | 12 622 |
| Excess assets as at the beginning of the year | **12 622** | 11 967 |
| **Change in excess assets over the year** | **(1 552)** | 655 |
| **This change in excess assets is due to the following items:** | | |
| **Investment return generated by shareholders' funds** | | |
| Investment income | **378** | 332 |
| Capital appreciation | **15** | 140 |
| **Total investment return** | **393** | 472 |
| Operating profit | **(36)** | 1 628 |
| Changes in valuation bases/methods/assumptions | **(515)** | (349) |
| Fee revenue | **16** | 26 |
| Shareholders' tax | **(42)** | 59 |
| Management expenses | **(312)** | (126) |
| Employer pension fund surplus | **13** | |
| **Total earnings** | **(483)** | 1 710 |
| Capital reduction | | (768) |
| BEE preference dividends | **101** | 113 |
| Subscription for shares | | |
| Dividends paid | **(1 175)** | (474) |
| Share-based payments | **(11)** | 54 |
| Owner-occupied properties | **16** | 20 |
| **Total change in excess assets** | **(1 552)** | 655 |

## Report of the statutory actuary *(continued)*
*for the year ended 31 December 2009*

### Liberty Group (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 2009 and reflect the experience of policies up to 30 September 2009. 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 6,3% p.a. (2008: 4,5% p.a.) or 6,93% 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 11,43% p.a. (2008: 9,55% 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 545,9 million as at 31 December 2009 (R1 512,5 million as at 31 December 2008). All bonus stabilisation reserves had positive values at the valuation date.

## Report of the statutory actuary *(continued)*
*for the year ended 31 December 2009*

### Liberty Group (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 | Strike | Underlying | Price % | Implied volatilities % |
|---|---|---|---|---|
| 1 | Spot | Equity Index | 6,99 | 23,53 |
| 1 | 0,8* Spot | Equity Index | 1,33 | 23,83 |
| 1 | Forward | Equity Index | 9,12 | 23,54 |
| 5 | Spot | Equity Index | 7,67 | 24,49 |
| 5 | $(1{,}04^{5})$* Spot | Equity Index | 14,33 | 24,47 |
| 5 | Forward | Equity Index | 18,77 | 24,46 |
| 20 | Spot | Equity Index | 4,31 | 27,39 |
| 20 | $(1{,}04^{20})$* Spot | Equity Index | 18,35 | 27,82 |
| 20 | Forward | Equity Index | 26,50 | 28,01 |

**"Other" options**

| Maturity | Strike | Underlying | Price % |
|---|---|---|---|
| 5 | $(1{,}04^{5})$* Spot | 60% Equity Index, 40% Bond Index with annual rebalancing | 5,94 |
| 20 | Forward | Simulated 5 year spot rate in 20 years time | 0,33 |

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

**Yield curve**

| Maturity | Yield (NACA) % |
|---|---|
| 1 year | 7,36 |
| 2 years | 7,82 |
| 3 years | 8,36 |
| 4 years | 8,69 |
| 5 years | 8,92 |
| 10 years | 9,20 |
| 15 years | 8,80 |
| 20 years | 8,22 |
| 25 years | 7,68 |
| 30 years | 7,25 |
| 35 years | 6,92 |
| 40 years | 6,69 |
| 45 years | 6,51 |
| 50 years | 6,39 |

## Report of the statutory actuary *(continued)*
*for the year ended 31 December 2009*

### Liberty Group (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.

In calculating the capital adequacy requirement it has been assumed that, in the event that the bonus stabilisation reserve of the Prudential book of business falls below (7,5%) of the liabilities, terminal bonuses would be reduced.

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 Termination capital adequacy requirement (TCAR) amounted to R2 542 million and the ordinary capital adequacy requirement (OCAR) was calculated as R2 515 million, and thus the capital adequacy requirement has been based on the TCAR calculation.

I am satisfied that the excess of assets over liabilities is sufficient to meet the capital adequacy requirement which amounted to R2 542 million at 31 December 2009 (R3 020 million at 31 December 2008).

### 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 R24 million compared to a net increase of R1 580 million in 2008.

| Basis/assumption change | 2009<br>Rm |
|---|---|
| Changes to economic assumptions | 361 |
| Assumption changes in respect of PGN 110 reserves | (1 346) |
| Demographic assumption changes | 66 |
| Persistency assumption changes | 747 |
| Other modelling changes | 148 |
| | (24) |

# Report of the statutory actuary *(continued)*
*for the year ended 31 December 2009*

## Liberty Active

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

| Published reporting basis at 31 December | 2009 Rm | 2008 Rm |
|---|---|---|
| **Assets** | | |
| Total assets as per balance sheet | **18 826,7** | 17 514,2 |
| **Less liabilities** | **18 133,5** | 16 950,1 |
| Liabilities under insurance contracts | **15 134,8** | 13 415,4 |
| Liabilities under investment contracts | **1 996,4** | 2 251,3 |
| Other liabilities | **1 002,3** | 1 283,4 |
| **Excess of assets over liabilities** | **693,2** | 564,1 |

| Statutory basis at 31 December | 2009 Rm | 2008 Rm |
|---|---|---|
| **Assets** | | |
| Total assets | **16 367,5** | 15 803,1 |
| **Less liabilities** | **15 626,4** | 15 206,0 |
| Liabilities under insurance contracts | **14 626,8** | 13 922,6 |
| Other liabilities | **999,6** | 1 283,4 |
| **Excess of assets over liabilities** | **741,1** | 597,1 |
| **Represented by:** | | |
| Shareholders' funds | **741,1** | 597,1 |
| Less inadmissible assets | | |
| Assets available to cover capital adequacy requirement | **741,1** | 597,1 |
| Capital adequacy requirements | **424,5** | 404,5 |
| Capital adequacy requirement: times covered | **1,8** | 1,5 |

In regard to the financial position of Liberty Life Namibia Limited, a wholly owned long-term insurance subsidiary of Liberty Active Limited, reliance has been placed on the actuarial investigation performed by the statutory actuary of that company. The statutory actuary of Liberty Life Namibia Limited has certified that assets are sufficient to meet the liabilities that will emerge under existing policies, and to cover the capital adequacy requirement of that company.

I have conducted an investigation into the financial position of Liberty Active Limited at 31 December 2009. I certify that the actuarial valuation was carried out on the basis described below in accordance with the professional 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.

**Paul Lancaster** BSc, FIA, FASSA
*Statutory actuary*

**Johannesburg**
23 February 2010

## Report of the statutory actuary *(continued)*
*for the year ended 31 December 2009*

### Liberty Active (continued)

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

| | 2009 Rm | 2008 Rm |
|---|---|---|
| Excess of assets over liabilities – statutory basis | **741,1** | 597,1 |
| Excess of assets over liabilities – published reporting basis | **693,2** | 564,1 |
| **Difference** | **47,9** | 33,0 |
| **Items of difference** | **47,9** | 33,0 |
| Valuation of long-term insurance subsidiaries | **68,8** | 44,9 |
| Differences between statutory and published valuation methodology | **(1,0)** | 14,0 |
| Inadmissible assets | **(19,9)** | (25,9) |

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 valuation of liabilities in respect of investment contracts on the statutory basis results in a difference of -R1.0 million (2008: R14 million) from the published basis, which is calculated at fair value. The valuation methodology is described below.

Inadmissible assets consist largely of prepaid expenses.

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

| | 2009 Rm | 2008 Rm |
|---|---|---|
| Excess assets as at end of the year | **693,2** | 564,1 |
| Excess assets as at beginning of the year | **564,1** | 768,9 |
| **Change in excess assets over the year** | **129,1** | (204,8) |
| **This change in excess assets is due to the following items:** | | |
| **Investment return generated by shareholders' funds** | | |
| Investment income | **48,3** | 68,3 |
| Capital appreciation | **6,5** | (30,0) |
| **Total investment return** | **54,8** | 38,3 |
| Operating profit | **903,5** | 162,2 |
| Changes in valuation bases/methods/assumptions | **(406,1)** | (30,2) |
| Shareholders' tax | **(40,6)** | (21,0) |
| Management expenses | **(16,4)** | (46,6) |
| Preference dividend | **(366,1)** | (307,5) |
| **Total earnings** | **129,1** | (204,8) |
| Dividends paid | | – |
| **Total change in excess assets** | **129,1** | (204,8) |

## Report of the statutory actuary *(continued)*
*for the year ended 31 December 2009*

### Liberty Active (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 2009, and reflect the experience of the policies up to September 2009. Assumptions were then set in line with the group's assumption setting policy after consultation with the Liberty Active Internal Review Committee. 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 6,3% p.a. (2008: 4,5% p.a.) or 6,93% 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 11,5% p.a. (2008: 10,63% 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 share-owners' 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 share-owners' participation in the reversionary and terminal bonuses expected to be declared each year in respect of with-profit business;
- An allowance for the share-owners' 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 rate of 10,88% p.a. (2008: 9,53% p.a.), being 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.

# Report of the statutory actuary *(continued)*
*for the year ended 31 December 2009*

## Liberty Active (continued)

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

**Assets** *(continued)*

In respect of with-profit business where bonuses are smoothed, bonus stabilisation reserves are held arising from the past differences between the after-tax investment performance of the assets net of the relevant management fees and the rate of bonus declared. The total of the stabilisation reserves amounted to R42,9 million at 31 December 2009 (R5,3 million at 31 December 2008). No bonus stabilisation reserve for any class was negative.

**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.

### 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 fall 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 if policies 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 PGN 110 guidance. In addition, allowance has been made for credit risk and operational risk in accordance with the latest version of PGN 104. 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.

In calculating the capital adequacy requirement it has been assumed that, in the event that solvency is threatened, 88% of the discretionary margins held in respect of Decreasing Term Assurance and Funeral products would be released. This assumption reduced the Capital Adequacy Requirement by R62,7 million. The 88% level was chosen to minimise the CAR so that, as closely as possible, TCAR equals 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 R424,5 million equalled the terminal capital adequacy requirement (TCAR) of R424,5 million.

I am satisfied that the excess of assets over liabilities is sufficient to meet these capital adequacy requirements which amounted to R424,5 million at 31 December 2009 (R404,5 million at 31 December 2008).

## Report of the statutory actuary *(continued)*

*for the year ended 31 December 2009*

### Liberty Active (continued)

### 6. Material changes in statutory valuation basis since the previous report

Modelling and other changes were made to the valuation to re-align valuation assumptions with expected future experience. These changes resulted in a net increase in reserves of R168,0 million (see table below). The major item was the assumption changes in respect of PGN110 reserves which decreased reserves by R221,3 million.

| | Rm |
|---|---|
| Move to higher level of economic assumptions | 124,5 |
| Assumption changes in respect of PGN110 reserves | (221,3) |
| Other | (30,0) |
| Demographic assumption changes | 294,8 |
| **Modelling and other basis changes** | **168,0** |

### 7. Disclosure under PGN110

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:

| | 2009 Price % | 2009 Volatility % |
|---|---|---|
| A 1-year at-the-money spot put on the FTSE/JSE TOP 40 index | 6,99 | 23,53 |
| A 1-year put on the FTSE/JSE TOP 40 index, with a strike price equal to 80% of spot | 1,33 | 23,83 |
| A 1-year forward on the FTSE/JSE TOP 40 index | 9,12 | 23,54 |
| A 5-year at-the-money spot put on the FTSE/JSE TOP 40 index | 7,67 | 24,50 |
| A 5-year put with a strike price equal to 1,045 of spot on the FTSE/JSE TOP 40 index | 14,33 | 24,47 |
| A 5-year forward on the FTSE/JSE TOP 40 index | 18,77 | 24,46 |
| A 5-year put with a strike price equal to 1,045 of spot, on an underlying index constructed as 60% FTSE/JSE TOP 40 and 40% ALBI, with rebalancing of the underlying index back to these weights taking place annually | 5,94 | N/A |
| A 20-year at-the-money spot put on the FTSE/JSE TOP 40 index | 4,31 | 27,39 |
| A 20-year put with a strike price equal to 1,0420 of spot on the FTSE/JSE TOP 40 index | 18,35 | 27,82 |
| A 20-year forward on the FTSE/JSE TOP 40 index | 26,50 | 28,01 |
| A 20-year put option based on an interest rate with a strike equal to the present 5-year forward rate as at maturity of the put option, which pays out if the 5-year interest rate at the time of maturity (in 20 years) is lower than the strike. | 0,33 | N/A |

## Report of the statutory actuary *(continued)*
*for the year ended 31 December 2009*

### Liberty Active (continued)

### 7. Disclosure under PGN110 (continued)

The zero coupon yield curve used in the projection is as follows (rates expressed in NACC):

| Model output yield curve | 2009 % | 2008 % |
|---|---|---|
| 1 | **7,10** | 8,87 |
| 2 | **7,52** | 8,07 |
| 3 | **8,03** | 7,87 |
| 4 | **8,34** | 7,77 |
| 5 | **8,55** | 7,73 |
| 10 | **8,80** | 7,52 |
| 15 | **8,43** | 6,98 |
| 20 | **7,90** | 6,47 |
| 25 | **7,40** | 6,13 |
| 30 | **7,00** | 5,92 |
| 35 | **6,69** | 5,76 |
| 40 | **6,47** | 5,65 |
| 45 | **6,31** | 5,58 |
| 50 | **6,20** | 5,54 |

# Report of the statutory actuary *(continued)*
*for the year ended 31 December 2009*

## Liberty Growth Limited

### 1.1 Statement of excess assets, liabilities and capital requirements

| Published reporting basis at 31 December | 2009 R'000 | 2008 R'000 |
|---|---|---|
| **Assets** | | |
| Total assets as per statement of financial position | **2 168 326** | 922 334 |
| **Less liabilities** | **1 744 490** | 563 051 |
| Liabilities under insurance contracts | **1 435 591** | 269 543 |
| Liabilities under investment contracts | **264 844** | 262 012 |
| Current liabilities | **28 716** | 29 273 |
| Deferred taxation | **12 866** | – |
| Deferred revenue liability | **2 473** | 2 223 |
| Excess of assets over liabilities | **423 836** | 359 283 |

| Statutory reporting basis at 31 December | 2009 R'000 | 2008 R'000 |
|---|---|---|
| **Assets** | | |
| Total assets on the statutory basis | **2 154 754** | 879 958 |
| **Less liabilities** | **1 816 842** | 625 112 |
| Liabilities in respect of policies | **1 788 126** | 595 838 |
| Current liabilities | **28 716** | 29 274 |
| **Excess of assets over liabilities** | **337 912** | 254 846 |
| Capital adequacy requirements | **83 481** | 44 979 |
| **Ratio of excess assets to capital adequacy requirement** | **4,0** | 5,7 |

### 1.2 Certification of financial soundness

I hereby certify that:

- the valuation on the Statutory basis of Liberty Growth Limited as at 31 December 2009, 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.

**Anthony Jones** BSc(Hons) FFA FASSA
*Statutory actuary*

24 February 2010

## Report of the statutory actuary *(continued)*
*for the year ended 31 December 2009*

### Liberty Growth Limited (continued)

### 1.3 Reconciliation of statutory basis to published reporting basis

| **Reconciliation of excess assets between published reporting basis and statutory basis** | **2009 R'000** | 2008 R'000 |
|---|---|---|
| Excess of assets over liabilities – published reporting basis | **423 836** | 359 283 |
| Excess of assets over liabilities – statutory reporting basis | **337 912** | 254 846 |
| **Difference** | **(85 924)** | (104 437) |
| The reasons for this difference are as follows: | | |
| – Elimination of negative reserves | **(94 889)** | (96 856) |
| – Rand reserves on universal investment business | **7 199** | 7 132 |
| – Remove deferred tax asset/liability | **11 744** | (1 451) |
| – Remove deferred acquisition costs | **(2 744)** | (3 493) |
| – Remove deferred revenue liabilities | **2 473** | 2 223 |
| – Remove intangible asset | **(85 924)** | (104 436) |

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

| | | |
|---|---|---|
| The excess of the value of assets over the value of liabilities has changed as follows over the year: | | |
| Excess assets as at the end of the year | **423 836** | 359 283 |
| Excess assets as at the beginning of the year | **359 283** | 333 092 |
| **Change in excess assets over the period** | **64 553** | 26 191 |
| **This change in excess assets is due to the following items:** | | |
| Investment return generated by shareholder funds | | |
| Investment income | **36 458** | 1 509 |
| Capital appreciation | **–** | – |
| Investment profits | **8 451** | 14 421 |
| **Total investment return** | **44 909** | 15 930 |
| Deferred tax income | **(15 424)** | (12 665) |
| Operating profit | **32 901** | 12 788 |
| Changes in valuation bases/methods/assumptions | **2 168** | 10 136 |
| **Total earnings** | **19 645** | 10 260 |
| Capital raised/(returned) | **–** | – |
| Adjustments to non-distributable reserves | – | – |
| **Total change in excess assets** | **64 554** | 26 190 |

## Report of the statutory actuary *(continued)*
*for the year ended 31 December 2009*

**Liberty Growth Limited (continued)**

**3 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 R9,71 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 2009. Provision has been made for the expected increase in the occurrence of AIDS-related claims.

The best estimate assumption for maintenance expenses are determined at a Liberty Group level as Liberty Growth Limited is functionally integrated into Liberty. Future inflation is allowed for at 6,3% p.a. (December 2008: 4,0% 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.

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 10,8% p.a. (December 2008: 8,8% 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 shareholders' participation in profits emerges in the year that it is earned. These margins are:

- A limitation on fund charges on smoothed bonus business: R33,7 million (December 2008: R33,9 million)
- An allowance on funeral business relating to the uncertainty in mortality experience: R14,9 million (December 2008: R21,1 million).

In addition, a Treating Customers Fairly (TCF) reserve of R20,4 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 was set at 11,2% p.a. (December 2008: 9,2% 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 10,8% p.a. (December 2008: 8,8% p.a.) has been used. Bonus stabilisation reserves are held to equate the liabilities to the market values of the corresponding assets.

## Report of the statutory actuary *(continued)*
*for the year ended 31 December 2009*

### Liberty Growth Limited (continued)

**3 Description of published reporting valuation basis, notes and comments (continued)**

**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) we have estimated this liability 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; rates and supportable by future investment returns;
- For market related and smoothed bonus business, by assuming a bonus rate supportable by future investment returns;
- 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 may be used for the benefit of shareholders or policyholders, however I believe that more than sufficient steps towards meeting PRE have been taken in the last few years for this amount to potentially 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.

**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 15,2% 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 17% 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 R5,05 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 and 66,6% in fixed interest assets.

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 *(continued)*
*for the year ended 31 December 2009*

## Capital Alliance Life Limited

### 1. Statement of excess of assets over liabilities

| **Published reporting basis at 31 December** | Paragraph | **2009 R'000** | 2008 R'000 |
|---|---|---|---|
| Total assets per the statement of financial position | | **18 467 218** | 19 349 994 |
| **Liabilities** | | **(16 642 084)** | (17 576 151) |
| Policy liabilities | 5 | **(15 983 261)** | (16 639 312) |
| Derivative liabilities | | **(3 048)** | (2 640) |
| Current liabilities | | **(655 775)** | (934 199) |
| **Excess of assets over liabilities** | | **1 825 134** | 1 773 843 |

| **Statutory reporting basis at 31 December** | Paragraph | **2009 R'000** | 2008 R'000 |
|---|---|---|---|
| Total assets | 6 | **17 619 218** | 18 496 766 |
| Liabilities | | **(16 343 293)** | (17 241 555) |
| Policy liabilities | 5 | **(15 811 519)** | (16 291 632) |
| Current and other liabilities as per the statement of financial position | | **(531 774)** | (949 923) |
| **Excess of assets over liabilities** | | **1 275 925** | 1 255 211 |
| Capital adequacy requirements | 7 | **800 860** | 885 852 |
| Ratio of excess assets to capital adequacy requirements | | **1,59** | 1,42 |

I hereby certify that

- the valuation on the Statutory basis of Capital Alliance Life Limited as at 31 December 2009, 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 2010

# Report of the statutory actuary *(continued)*
*for the year ended 31 December 2009*

## Capital Alliance Life Limited (continued)

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

| Reconciliation of excess assets at 31 December | 2009 R'000 | 2008 R'000 |
|---|---|---|
| Excess of assets over liabilities – published basis | **1 825 134** | 1 773 843 |
| Excess of assets over liabilities – statutory basis | **1 275 925** | 1 255 211 |
| **Difference** | **549 209** | 518 632 |
| **Items of difference** | | |
| Adjustments to assets | **848 000** | 961 797 |
| Reinsurance assets and investment policies with intergroup insurers | **637 899** | 679 466 |
| Deferred acquisition cost asset | **–** | 21 892 |
| Revaluation of subsidiaries | **(27 096)** | 52 192 |
| Prepaid reassurance and expenses | **18 099** | 22 360 |
| Deferred tax assets | **219 098** | 185 887 |
| Adjustments to liabilities | **(298 791)** | (443 165) |
| Reinsurance liability | **(637 899)** | (679 680) |
| Increase in statutory life fund due to valuation methodologies | **453 748** | 319 127 |
| Remove prepaid commission | **12 409** | 12 873 |
| Deferred tax liabilities | **(127 049)** | (95 485) |
| **Total adjustments** | **549 209** | 518 632 |

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

| | 2009 R'000 | 2008 R'000 |
|---|---|---|
| Excess assets at the start of the period | **(1 773 843)** | (1 914 408) |
| Excess assets at the end of the period | **1 825 134** | 1 773 843 |
| **Change in excess assets over the period** | **51 291** | (140 565) |
| **The change in the excess assets over the period may be analysed as follows:** | | |
| Investment return generated by shareholder's funds | **115 926** | 49 176 |
| Capital appreciation | **44 334** | (362 390) |
| Investment income | **145 007** | 413 198 |
| Expenses and tax | **(73 415)** | (1 632) |
| Change in valuation methods or assumptions | **(260 370)** | (54 713) |
| New business strain | **(298 569)** | (190 123) |
| Other life fund operating surplus | **494 304** | 55 095 |
| **Total earnings** | **51 291** | (140 565) |
| Change in excess assets over the period | **51 291** | (140 565) |

## Report of the statutory actuary *(continued)*
*for the year ended 31 December 2009*

### Capital Alliance Life Limited (continued)

### 4. Changes in published reporting valuation methods or assumptions of assets or liabilities

A correction was made to the modeling of the ELM commission which increased reserves by R13 million and in the modelling of lapses on the CAL Burial product which released reserves in the amount of R27 million.

The main changes to the valuation basis was an allowance for improvements in the FNB funeral mortality which reduced reserves by R67 million, offset by an increase in mortality on ELM which increased reserves by R14 million. Poor persistency on the ELM book and worsening persistency on the Fedsure/Norwich books resulted in an increase in reserves of R28 million and R50 million of the Liberty short-term persistency provision was allocated to CAL.

A change was made to the valuation yield curve methodology for non-profit annuities. Annuities are now valued off an unadjusted bond curve compared with the past where the curve reflected credit risk inherent in the Eskom bonds held to back part of the liability. The impact of this change was to increase liabilities by R184 million and reduce earnings by R132 million.

### 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;
- 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 2009.

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, which was 9,3% as at 31 December 2009, 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 6,3% as at 31 December 2009.

Bonus declaration rates have been determined in accordance with the Principles and Practices of Financial Management for CAL (PPFM). Bonus stabilisation reserves (BSRs) are all positive owing to improved market conditions compared with 2008. Bonus rates have also been increased since 2008.

## Report of the statutory actuary *(continued)*
*for the year ended 31 December 2009*

### Capital Alliance Life Limited (continued)

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

**5.1. Insurance contracts and Investment contracts with discretionary participation features (continued)**

***Methodology***

For individual market-related contracts, including smoothed bonus contracts, the published reserve comprises a unit reserve plus a rand reserve, 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. We allow for future bonus rates on smoothed bonus policies 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 non-profit 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 an unadjusted BEASSA yield curve. With profit annuities are valued using a single point rate.

The published reserve for group risk active business is determined as an IBNR.

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

**5.2 Investment contracts**

Investment contracts are valued in terms of IAS39, 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.

## Report of the statutory actuary *(continued)*
*for the year ended 31 December 2009*

### Capital Alliance Life Limited (continued)

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

**5.3. A reserve is held for embedded derivatives, on a market-consistent basis in accordance with PGN110 of ASSA**

As required by PGN110 v2 (applicable for all year-ends on or after 31 December 2007), Capital Alliance Life Limited holds a reserve for minimum investment guarantees, including guaranteed annuity options and smoothed bonus funding shortfalls (if any), which are calculated using a market consistent Monte-Carlo simulation model. This model has been calibrated to market conditions as at 31 December 2009. Section 8 of the guidance note requires the disclosure of certain relevant information and the values of a range of instruments which have been priced using the simulated investment returns. These are presented below:

| Paragraph | Description | Price % | Implied volatility % |
|---|---|---|---|
| 8.1 | If the actuary used closed-form methods (as opposed to Monte Carlo simulation techniques) to quantify the liability in respect of embedded investment derivatives | **Monte Carlo** | |
| 8.2 | Prices and implied volatilities on the following put options on FTSE/JSE Top 40 Index: | | |
| | 1 yr : Strike = Spot | **6,99** | 1,33 |
| | 1 yr: Strike = 0.8* Spot | **9,12** | 7,67 |
| | 1 yr: Strike = Forward | **14,33** | 18,77 |
| | 5 yr : Strike = Spot | **4,31** | 18,35 |
| | 5 yr: Strike = (1.04^5)* Spot | **26,50** | 5,94 |
| | 5 yr: Strike = Forward | | 23,83 |
| | 20 yr : Strike = Spot | **23,52** | 0,33 |
| | 20 yr: Strike =(1.04^20)* Spot | **23,54** | 24,49 |
| | 20 yr: Strike = Forward | **24,4** | 24,46 |
| 8.3 | Price of a 5 yr put with strike price equal to (1.04)^5 of spot, on an underlying index constructed as 60% FTSE/JSE TOP40 and 40% ALBI, with rebalancing of the underlying index back to these weights to take place annually. | **27,38** | |
| 8.4 | Price of a 5 yr put with strike price equal to (1.04)^5 of spot, on an underlying index constructed as 60% FTSE/JSE TOP40 and 40% ALBI, with rebalancing of the underlying index back to these weights to take place annually. | **27,81** | |
| 8.5 | Price of a 20 yr put option based on an interest rate with a strike equal to the present 5 year forward rate as at maturity of the put option, which pays out if the 5 year interest rate at the time of maturity (20 years) is lower than this strike. | **See table below** | |
| 8.6 | The zero coupon yield curve used in the asset projection. | **Reporting date** | |
| 8.7 | Where the stochastic model used in the calculations was calibrated at a date other than the reporting | **Reporting date** | |

If the actuary opted to calculate the reserves at a different date, the effective date should be disclosed.

The TOP 40 index here is a capital returns index whereas the All Bond Index (ALBI) is a total returns index. Spot refers to the value of the index at market close on 31 December 2009. At-the-money means that the strike value of the option is equal to the spot.

# Report of the statutory actuary *(continued)*
*for the year ended 31 December 2009*

## Capital Alliance Life Limited (continued)

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

**5.3. A reserve is held for embedded derivatives, on a market-consistent basis in accordance with PGN110 of ASSA (continued)**

The zero coupon yield curve used in the asset projection is as follows:

| Maturity (years) | Yield (NACA) % |
|---|---|
| 1 | 7,36 |
| 2 | 7,81 |
| 3 | 8,35 |
| 4 | 8,69 |
| 5 | 8,92 |
| 10 | 9,19 |
| 15 | 8,79 |
| 20 | 8,21 |
| 25 | 7,68 |
| 30 | 7,24 |

The “input” and “output” curves differ due to statistical sampling error.

### 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 occuring implementation of hedging strategy on the annuity book to reduce mismatch risk;
– Offsetting of the TCAR with certain reserves which would no longer be utilised in the event of the run on the bank occurring; and
– The management action has been approved by the board and 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 25% in equities, 15% in bonds, 20% in preference shares, 10% in properties and 30% in cash.

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