momentum

APPENDIX 2

Abridged Financials for the year ended 30 June 2009

R million	2009	2008	% change
Insurance premium revenue	7 249	5 971	21
Insurance premium ceded to reinsurers	(694)	(579)	20
Net insurance premium revenue	6 555	5 392	22
Fee income	2 771	2 862	(3)
Investment income	12 262	9 499	29
Net realised gains on assets	7	28	(75)
Net fair value losses on assets at fair value through profit or loss	(16 731)	(4 240)	>100
Net income	4 864	13 541	(64)
Insurance benefits	(6 599)	(6 073)	9
Insurance benefits recovered from reinsurers	660	543	22
Transfer from policyholder liabilities under insurance contracts	2 870	3 255	(12)
Net insurance benefits and claims	(3 069)	(2 275)	35
Fair value adjustment to policyholder liabilities under investment contracts	3 939	(3 893)	>100
Fair value adjustment to financial liabilities	1 820	258	>100
Expenses for the acquisition of insurance and investment contracts	(1 557)	(1 509)	3
Expenses for marketing and administration	(3 399)	(2 843)	20
Expenses	(2 266)	(10 262)	(78)
Results of operating activities	2 598	3 279	(21)
Finance costs	(852)	(834)	2
Share of income from associate companies	22	20	10
Profit before tax	1 768	2 465	(28)
Taxation[1]	(179)	(469)	(62)
Profit for the year	1 589	1 996	(20)
Profit for the year attributable to:			
– Equityholders of the Group	1 594	2 002	(20)
– Minority shareholders' interest	(5)	(6)	(17)
	1 589	1 996	(20)

1 The reduction in the tax charge is mainly due to the reversal of a significant portion of the deferred Capital Gains Tax liability as a result of the reduction in fair value of investment assets backing policyholder liabilities during the year ended 30 June 2009.

BALANCE SHEET
as at 30 June

R million	2009	2008
ASSETS		
Cash and cash equivalents	**4 014**	4 919
Derivative financial instruments	**9 455**	10 892
Loans and receivables (including insurance receivables)	**43 338**	28 391
Investment securities		
– held-for-trading	**11**	15
– loans and receivables	**21**	–
– held-to-maturity	**56**	460
– available-for-sale	**2 766**	3 100
– designated fair value through profit or loss	**104 313**	123 386
Investments in associates		
– designated fair value through profit or loss	**7 914**	6 666
– at equity accounted value	**164**	275
Property and equipment	**105**	157
Owner occupied buildings	**427**	439
Deferred tax asset	**969**	825
Intangible assets	**2 866**	2 829
Goodwill	**236**	297
Investment properties	**2 156**	3 808
Policy loans	**604**	753
Reinsurance assets	**8 143**	550
Current income tax asset	**40**	24
Non current assets held for sale	**58**	–
Total assets	**187 656**	187 786
LIABILITIES AND EQUITY		
LIABILITIES		
Accounts payable (including insurance payables)	**12 810**	8 989
Derivative financial instruments	**1 853**	4 190
Provisions	**207**	108
Current income tax liabilities	**71**	434
Employee benefits liabilities	**166**	180
Deferred tax liability	**1 570**	1 840
Interest bearing borrowings	**–**	242
Other financial liabilities at fair value through profit or loss	**5 461**	3 801
Policyholder liabilities under insurance contracts	**39 069**	41 982
Policyholder liabilities under investment contracts		
– with discretionary participation features	**13 264**	14 494
– without discretionary participation features	**96 963**	97 182
Liabilities arising to third parties as a result of consolidating unit trusts	**8 114**	7 282
Deferred revenue liability	**322**	296
Total liabilities	**179 870**	181 020
EQUITY		
Share capital and share premium	**1 541**	1 541
Non-distributable reserves	**648**	708
Distributable reserves	**5 606**	4 521
Shareholders' funds	**7 795**	6 770
Minority interest	**(9)**	(4)
Total equity	**7 786**	6 766
Total liabilities and equity	**187 656**	187 786

NEW BUSINESS INFLOWS

R million (unaudited)	2009	2008	% change
Recurring premiums	2 257	2 079	9
Retail	1 239	1 308	(5)
Risk	587	520	13
Retirement annuities	274	286	(4)
Discretionary savings	378	502	(25)
Employee benefits	517	406	27
FNB Insurance	501	365	37
Lump sums	58 213	63 259	(8)
Retail	31 753	32 597	(3)
Guaranteed annuities	810	634	28
Living annuities	2 823	3 248	(13)
Endowments	1 311	2 844	(54)
Linked products – local	7 950	7 462	7
Linked products – offshore	1 256	2 614	(52)
Institutional policies	–	38	(100)
Unit trusts	17 603	15 757	12
Employee benefits	2 074	1 881	10
Asset management	24 386	28 781	(15)
On balance sheet	12 196	13 780	(11)
Off balance sheet	12 190	15 001	(19)
Total new business inflows	60 470	65 338	(7)
Retail	33 493	34 270	(2)
Employee benefits	2 591	2 287	13
Asset management	24 386	28 781	(15)
Annualised new business inflows[1]	8 078	8 405	(4)
Retail	4 915	4 933	–
Employee benefits	724	594	22
Asset management	2 439	2 878	(15)

1 Represents new recurring premiums plus 10% of lump sum inflows.

NET FLOW OF FUNDS

	Funds received from clients (A)		
R million (unaudited)	**2009**	2008	% change
Retail	**38 684**	39 054	(1)
Employee benefits	**5 016**	4 263	18
Asset management	**24 386**	28 781	(15)
Total	**68 086**	72 098	(6)

	Payments to clients (B)		
R million (unaudited)	**2009**	2008	% change
Retail	**34 909**	34 197	2
Employee benefits	**3 170**	2 764	15
Asset management	**64 037**	44 826	43
Total	**102 116**	81 787	25

	Net flow of funds (A – B)		
R million (unaudited)	**2009**	2008	% change
Retail	**3 775**	4 857	(22)
Employee benefits	**1 846**	1 499	23
Asset management	**(39 651)**	(16 045)	>(100)
Total	**(34 030)**	(9 689)	>(100)

DIRECTORS' VALUES OF STRATEGIC SUBSIDIARY INVESTMENTS

	Directors' values at 30 June			
R million	**2009**	2008	% change	Valuation method
RMB Asset Management[1]	**1 891**	2 437	(22)	A
Momentum International MultiManagers (including 85% of Advantage)	**244**	359	(32)	B
Momentum Medical Scheme Administrators[2]	**444**	442	–	C
Momentum Africa (including Swabou Life)	**223**	239	(7)	B
FirstRand Alternative Investment Management	**56**	53	6	D
Momentum Short Term Insurance	**40**	29	38	D
Directors' values of strategic subsidiary investments	**2 898**	3 559	(19)	

Valuation methods:

A – Price/earnings multiple using sustainable forward earnings

B – Discounted cash flow valuation

C – Value per principal member

D – Net asset value

1 *RMB Asset Management's institutional business was valued using a PE multiple of 8 (2008: 8 PE) and sustainable forward earnings of R139 million, whilst the retail business of RMB Unit Trusts was valued using a PE multiple of 9 (2008: 9 PE) and sustainable forward earnings of R86 million.*

2 *Momentum Medical Scheme Administrators was valued using an amount of R1 700 per principal member (2008: R2 000).*

EMBEDDED VALUE OF MOMENTUM GROUP LIMITED

The embedded value of Momentum Group Limited ("Momentum") and the value of new business are set out in this section.

Definition of embedded value

The embedded value has been determined as the total of the embedded values of the covered business and non-covered business. It excludes any value attributable to future new business.

The embedded value of the non-covered business includes the directors' values for the investment management, health administration, short term insurance and African operations of the company.

The embedded value of the covered business relates to all the long term insurance and related administration operations of the company. This includes linked and market related business, reversionary and smoothed bonus business, annuities and non-participating business written by the company and its life insurance subsidiaries.

The embedded value of covered business consists of:

- the adjusted net worth attributed to the covered business
- plus the present value of in-force covered business
- less the opportunity cost of required capital

The adjusted net worth is the excess of assets over liabilities on the statutory valuation method, but where deductions for inadmissible assets and impairments are added back.

The present value of in-force covered business represents the discounted value of the projected stream of future after tax earnings in respect of covered business in force at the calculation date.

The opportunity cost of required capital reflects the extent to which the expected long term after tax investment return on the assets backing the required capital is less than the return required by shareholders, as reflected in the risk discount rate. The required capital is set as 1.5 times the statutory capital adequacy requirement ("CAR") which is the midpoint of Momentum's targeted capital range of 1.4 to 1.6 times CAR. Momentum's targeted capital range is the internally assessed level of capital required to cover statutory CAR over the next five years with a 95% level of confidence.

The Actuarial Society of South Africa revised Professional Guidance Note 107 (version 4) ("PGN 107") that provides best practice for the calculation of embedded values for reporting dates of 31 December 2008 and later. The key differences in the way the embedded value should be calculated compared to the previous guidance are:

- A distinction should be made between covered and non-covered business.
- The risk discount rate should be reviewed at each reporting date, making specific allowance for the inherent risks associated with shareholder cash flows valued in the embedded value.
- The economic basis should be actively reviewed and set consistent with observable market data.
- The opportunity cost of capital should be based on the internally assessed level of capital required to support the covered business as opposed to the statutory level of capital that was used in the past.

The embedded value as at 30 June 2008 has been restated to reflect the required changes.

Embedded value results

The embedded value attributable to ordinary shareholders as at 30 June 2009 compares as follows with the embedded value as at 30 June 2008 and the restated value at the same date. The embedded value is also split to show the relative contribution of the covered and non-covered business.

R million	30 June 2009	30 June 2008 (restated)[1]	30 June 2008
Embedded value of covered business	**13 188**	12 480	12 449
Adjusted net worth of covered business[2]	**5 666**	4 142	4 142
Present value of in-force covered business[3]	**9 243**	9 931	9 271
Cost of required capital[4]	**(1 721)**	(1 593)	(964)
Embedded value of non-covered business	**2 898**	3 559	3 559
Embedded value attributable to ordinary shareholders[5]	**16 086**	16 039	16 008
% Change	**0.3**		3.6
% Return on embedded value per annum[6]	**3.3**		15.2

1 *The 30 June 2008 embedded value has been restated on principles consistent with those set out under the revised PGN107.*
2 *The total value of the ordinary shareholders' net worth of R8 564 million (30 June 2008: R7 701 million) consists of the directors' value of non-covered business of R2 898 million (30 June 2008: R3 559 million) and the adjusted net worth of covered business of R5 666 million (30 June 2008: R4 142 million).*
3 *The present value of in-force covered business of R9 243 million as at 30 June 2009 includes an amount of R219 million in respect of linked business written off balance sheet (30 June 2008 restated: R220 million).*
4 *The required capital amounted to R5 765 million (30 June 2008 restated: R5 089 million) and is supported by the statutory surplus of R7 108 million (30 June 2008 restated: R6 114 million).*
5 *The embedded value excludes the value attributable to preference shareholders.*
6 *The return on embedded value is the increase in embedded value, excluding the impact of dividends paid to ordinary shareholders of R476 million (2008: R1 800 million), expressed as a percentage of the restated embedded value at 30 June 2008.*

Value of new business

The value of new business is a measure of the value added to Momentum as a result of writing new business. The value of new business is calculated as the present value (at point of sale) of the projected stream of future after tax earnings generated by new business sold during the year, discounted at the risk discount rate. The value of new business is net of acquisition expenses and is also appropriately reduced by the cost of required capital for new business.

Value of new business

R million	Year ended 30 June 2009	 2008 (restated)[1]	 2008
Value of new business (before cost of required capital)	**637**	687	640
Cost of required capital	**(93)**	(91)	(50)
Value of new business[2] (net of cost of required capital)	**544**	596	590
Present value of premiums[3,4]	**27 864**	28 577	28 222
Margin %	**2.0**	2.1	2.1

1 The 30 June 2008 value of new business has been restated on principles consistent with those set out under the revised PGN107.
2 The value of new business shown above excludes RMB Asset Management's future investment management fees on Wealth new business. If this is included, the value of new business would increase from R544 million to R626 million (30 June 2008 restated: R639 million). Momentum's overall new business margin would then increase to 2.2% (30 June 2008 restated: 2.2%).
3 The present value of premiums is calculated on the same assumptions as that used to calculate the value of new business. It includes new single premiums, once off premium increases as well as the present value of expected future premiums on new recurring premium business, discounted at the risk discount rate.
4 The present value of premiums is shown gross of reinsurance premiums. The present value of premiums net of reinsurance premiums for the year end 30 June 2009 is R27 037 million with a corresponding margin of 2.0% (30 June 2008 restated: R27 620 million with a corresponding margin of 2.2%).

Value of new business for different lines of business

The value of new business (after cost of required capital), present value of premiums and margins of new business written during the year ended 30 June 2009 compare as follows with the new business written during the previous reporting period for different lines of business:

R million	Year ended 30 June 2009	 2008 (restated)	% change
Wealth and Retail[1]			
Value of new business[2]	**267**	388	(31.2)
Present value of premiums	**21 415**	23 734	(9.8)
Margin %[3]	**1.2**	1.6	
Employee benefits[4]			
Value of new business	**86**	54	59.3
Present value of premiums	**5 497**	3 994	37.6
Margin %	**1.6**	1.4	
FNB Insurance[1]			
Value of new business	**191**	154	24.0
Present value of premiums	**952**	849	12.1
Margin %	**20.1**	18.1	

1 New business within Wealth, Retail and FNB Insurance has been defined as all new contracts issued during the reporting period for which contractual obligations have been recognised in the financial statements as well as once off premium increases on existing contracts not previously expected in the present value of in-force covered business.
2 The Wealth and Retail value of new business of R267 million includes an amount of negative R24 million in respect of new linked business written off balance sheet (30 June 2008 restated: R30 million).
3 The value of new business shown above excludes RMB Asset Management's future investment management fees on Wealth new business. If this is included, the value of new business would increase from R267 million to R349 million (30 June 2008 restated: R431 million). The Wealth and Retail new business margin would then increase to 1.7% (30 June 2008 restated: 1.8%).
4 For Employee benefits, business from new schemes as well as new benefits and significant increases in members on existing schemes are included in the definition of new business.

Reconciliation of new business inflows

The following table provides a reconciliation of the total new business as reported in the review of Momentum's results, to the new business inflows used in the calculation of the value of new business:

R million	Annualised recurring premiums	Single premium inflows
Total new business inflows as reported	**2 257**	**58 213**
Wealth and Retail	1 239	31 753
Employee benefits	517	2 074
FNB Insurance	501	–
Asset Management	–	24 386
Inflows not included in value of new business	**–**	**(42 374)**
Wealth and Retail		
• Policy alterations and other retail items	–	(44)
• Linked products – local	–	(184)
• Unit trusts	–	(17 603)
• Linked products – offshore	–	(82)
Employee benefits[1]	–	(75)
Asset Management		
• On balance sheet	–	(12 196)
• Off balance sheet	–	(12 190)
Term extensions on maturing policies[2]	**9**	**706**
New business inflows included in value of new business	**2 266**	**16 545**
Consisting of:		
Wealth and Retail	1 248	14 546
Employee benefits	517	1 999
FNB Insurance	501	–

1 For Employee benefits business, increases in business from new schemes or new benefits on existing schemes are excluded from value of new business to the extent that these do not represent a significant increase in the original scheme size.

2 Only client-initiated term extensions (R9 million recurring premiums and R706 million single premiums) were included in the value of new business calculation (30 June 2008: R9 million recurring premiums and R885 million single premiums). Automatic term extensions (R1 685 million single premiums) were excluded from the calculation (30 June 2008: R2 330 million single premiums).

Composition of ordinary shareholders' net worth

The ordinary shareholders' net worth consists of the directors' value of the non-covered business and the adjusted net worth of covered business.

The embedded value of the non-covered business based on the directors' values at 30 June 2009 was as follows:

R million	30 June 2009	30 June 2008 (restated)
RMB Asset Management (including collective investment scheme subsidiaries)	1 891	2 437
FirstRand Alternative Investment Management	56	53
Momentum International Multi-Managers (including Advantage) (85%)	244	360
Momentum Medical Scheme Administrators	444	442
Momentum Africa (including Swabou)	223	239
Momentum Short Term Insurance	40	28
Embedded value of non-covered business	**2 898**	3 559

The composition of the adjusted net worth of covered business at 30 June 2009 is shown below:

R million	30 June 2009	30 June 2008 (restated)
Shareholders' portfolio investments	**7 357**	5 785
Share trust loan	**245**	372
Preference shares	**1 681**	1 688
Cash and near cash	**4 341**	3 281
Properties	**434**	–
Subsidiaries included in covered business[1]	**656**	444
Unsecured subordinated debt	**(1 006)**	(1 079)
Fair value of debt	**(926)**	(849)
Accrued interest and interest rate swap	**(80)**	(230)
Adjustment to move from published to statutory valuation method for calculating liabilities	**(225)**	(129)
Attributable to preference shareholders[2]	**(460)**	(435)
Adjusted net worth of covered business	**5 666**	4 142

1 *Subsidiaries including Momentum Administration Services and the life insurance subsidiaries (Momentum Ability and FirstLife) are included at net asset value.*
2 *The value of R460 million (30 June 2008: R435 million) attributable to preference shareholders reflects the market value of the preference share issue of R500 million.*

Reconciliation of ordinary shareholders' net worth for embedded value purposes to statutory surplus

R million	30 June 2009	30 June 2008 (restated)
Ordinary shareholders' net worth	**8 564**	7 701
Impairment of subsidiaries' and associates' values for statutory purposes	**(2 397)**	(2 807)
Other impairments and inadmissible assets	**(127)**	(64)
Fair value of preference shares allowed as statutory capital	**460**	435
Fair value of subordinated debt allowed as statutory capital	**926**	849
Excess of fair value of owner occupied properties above book value[1]	**(318)**	–
Statutory surplus	**7 108**	6 114

1 *The fair value of owner occupied properties above book value equals R369 million. This value has been reduced to R318 million for deferred Capital Gains Tax for purposes of the embedded value.*

Reconciliation of ordinary shareholders' net worth for embedded value purposes to total shareholders' funds in the financial statements

R million	30 June 2009	30 June 2008 (restated)
Ordinary shareholders' net worth for embedded value purposes	8 564	7 701
Difference between statutory and published valuation methods	225	129
Difference in investment contract liabilities	(2 251)	(2 108)
Difference in insurance contract liabilities	1 189	962
Deferred acquisition costs and deferred revenue liabilities	1 374	1 325
Deferred tax on the items above	(87)	(50)
Intangible asset relating to Sage	686	704
Adjustment in respect of Swabou embedded value[1]	(61)	(40)
Value of preference shares issued	460	435
Excess of fair value of owner occupied properties above book value	(318)	–
Total shareholders' funds (net of minority shareholders' interest) in financial statements	9 556	8 929

1 *The adjustment in respect of Momentum's share of Swabou Life reflects the difference between the directors' value of R184 million (included in ordinary shareholders' net worth) and the equity accounted value of R123 million included in the total shareholders' funds.*

Analysis of embedded value earnings

Embedded value earnings represent the change in embedded value, adjusted for any capital raised and ordinary dividends paid. The embedded value earnings attributable to ordinary shareholders for the year ended 30 June 2009 are set out below:

R million	Ordinary shareholders' net worth	Present value of in-force covered business	Cost of required capital	Embedded value
Embedded value as at 30 June 2009	**8 564**	**9 243**	**(1 721)**	**16 086**
Less new capital raised	–	–	–	–
Add back dividends paid	476	–	–	476
Less: Embedded value as at 30 June 2008 (restated)	7 701	9 931	(1 593)	16 039
Embedded value earnings for the period	**1 339**	**(688)**	**(128)**	**523**

The embedded value of covered and non-covered business has changed as follows over the reporting period:

R million	Ordinary shareholders' net worth	Present value of in-force covered business	Cost of required capital	Embedded value
Embedded value of covered business at 30 June 2008 (restated)	**4 142**	**9 931**	**(1 593)**	**12 480**
Embedded value earnings from covered business	1 773	(688)	(128)	957
Capital transferred from non-covered business	227	–	–	227
Ordinary dividends paid	(476)	–	–	(476)
Embedded value of covered business at 30 June 2009	**5 666**	**9 243**	**(1 721)**	**13 188**
Embedded value of non-covered business at 30 June 2008	**3 559**	**–**	**–**	**3 559**
Embedded value earnings from non-covered business	(434)	–	–	(434)
Capital transferred to covered business	(227)	–	–	(227)
Embedded value of non-covered business at 30 June 2009	**2 898**	**–**	**–**	**2 898**

The components of the embedded value earnings can be analysed as follows:

R million		Ordinary shareholders' net worth	Present value of in-force covered business	Cost of required capital	Embedded value
Embedded value earnings from covered business		**1 773**	**(688)**	**(128)**	**957**
Factors relating to operations		1 237	841	(33)	2 045
Value of new business	a	(893)	1 530	(93)	544
Expected return	b	–	1 367	(205)	1 162
Release from cost of required capital	c	–	–	268	268
Expected profit transfer to adjusted net worth	d	1 833	(1 833)	–	–
Operating experience variances	e	353	(200)	–	153
Operating assumptions and model changes	f	(56)	(23)	(3)	(82)
Factors relating to market conditions		536	(1 529)	(95)	(1 088)
Investment return on adjusted net worth	g	628	–	–	628
Investment variations	h	(92)	(1 645)	(45)	(1 782)
Economic assumption changes	i	–	116	(50)	66
Embedded value earnings from non-covered business		**(434)**	**–**	**–**	**(434)**
Embedded value earnings for the period		**1 339**	**(688)**	**(128)**	**523**

The embedded value earnings attributable to ordinary shareholders of R523 million represents a return of positive 3.3% on the restated embedded value of R16 039 million at 30 June 2008 compared to a return on embedded value of 15.2% for the year to 30 June 2008.

The items in the table above can be explained as follows:

a. The value of new business is an estimate of the economic value of the new business written during the year, determined at point of sale. The negative contribution to the adjusted net worth represents the new business strain on the statutory valuation method, which allows for the elimination of negative liabilities on whole life contracts.

b. The expected return is determined by applying the risk discount rate applicable at 30 June 2008 to the present value of in-force covered business at the start of the reporting period, and adding the expected return on new business, which is determined by applying the current risk discount rate to the value of new business from the point of sale to 30 June 2009.

c. The release from the cost of required capital represents the difference between the risk discount rate and the expected after tax investment return on the assets backing the required capital over the year.

d. The expected profit transfer from the present value of in-force covered business to the adjusted net worth is calculated on the statutory valuation method.

e. The operating experience variances represent the impact of differences between the actual experience and the assumptions used in the embedded value calculations. The operating experience variances of R153 million include the following:

Source of variation	R million
Mortality and morbidity experience on individual business	168
Early terminations, premium cessations and other policy alterations on individual business	(305)
Working capital portfolio profits	35
FNB Insurance	154
Employee benefits	(38)
Maintenance expenses	(46)
Secondary Tax on Companies expected but not paid	66
Tax	104
Other items	15
Total	**153**

f. The impact of the experience assumption changes of negative R82 million consists of the following:

Operating assumption and model changes	R million
Mortality (including AIDS) and morbidity	77
Maintenance expenses	(128)
Early policy terminations	(153)
Extension of the projection period for credit life business (FNB Insurance)	82
Employee benefits	(24)
Change in STC rate	124
Modelling and miscellaneous changes	(60)
Total	**(82)**

g. Investment returns on adjusted net worth of covered business of R628 million comprise the following:

	Year ended	
R million	**30 June 2009**	30 June 2008 (restated)
Investment income (excluding dividends from strategic subsidiaries)	**429**	305
Capital appreciation (excluding revaluation of strategic subsidiaries)	**(42)**	142
Preference share dividends paid and the change in fair value of the preference shares issued	**(77)**	6
Change in fair value of properties	**318**	–
Total	**628**	453

h. The investment variance of negative R1 782 million represents the impact of the lower than assumed investment returns on current and expected future earnings from in-force covered business.

i. The economic assumption changes of R66 million include the effect of the reduction in the assumed rate of investment return, expense inflation rate and risk discount rate in respect of local and offshore business.

Assumptions

The embedded value calculations comply with PGN107. The same best-estimate assumptions were used for the embedded value calculations and the statutory valuation.

The value of new business has been calculated using the revised assumptions as at 30 June 2009. Exceptions relate to contracts where premium rates were set according to investment yields at the point of sale (for example annuity and guaranteed endowment contracts) for which the investment yields at the point of sale were used for the value of new business.

The main assumptions used in the embedded value calculations are described below:

Economic assumptions

Following the revision of PGN107, the approach to the calculation of equity and property risk premiums and the risk discount rate was changed.

Equity and property risk premiums were calculated using both historical relationships between different asset classes and management's view of future risk premiums.

The risk discount rate has been determined based on the weighted average cost of capital of the company. This has taken into account the sources of capital used to fund the covered business – ie shareholder equity, subordinate debt finance and preference shares issued. The required return on equity has been derived through application of the capital asset pricing model where the parameters of this model were derived from analysis of historical market data. The cost of preference share and debt financing has been based on the current financing cost.

The economic basis at 30 June 2009 as well as the restated and original basis at 30 June 2008 are shown below:

Percentages	**30 June 2009**	30 June 2008 (restated)	30 June 2008
Risk discount rate	**11.6**	12.9	13.5
Investment returns (before tax)	**11.4**	13.0	12.0
Implied differential	**0.2**	(0.1)	1.5
Expense inflation rate	**7.2**	9.5	9.5
Implied real return	**4.2**	3.5	2.5

The investment return assumption of 11.4% per annum was derived from the yields on South African Government bonds at 30 June 2009 taking into account the expected outstanding term of the in-force policy book.

A notional long term asset distribution was used to calculate a weighted expected investment return by adding the following premiums/(discounts) to the risk-free yield of 9.28% per annum.

Percentages	30 June 2009	30 June 2008 (restated)	30 June 2008
Equities	**3.5**	3.5	2.0
Properties	**1.0**	1.0	1.0
Government stocks	**0.0**	0.0	0.0
Other fixed interest stocks	**0.5**	0.5	0.5
Cash	**(1.0)**	(1.0)	(2.0)

The future expense inflation assumption of 7.20% per annum was determined as the difference between the yields on conventional and inflation-linked Government bonds, plus an addition of 0.75% per annum to make allowance for the expected gradual shrinking of Momentum's existing book.

For offshore business there was a reduction in the investment return, expense and inflation rate assumptions, relative to the previous financial year.

In the calculation of the cost of required capital, it was assumed that the required capital will be backed by surplus assets consisting of two thirds cash or near-cash instruments and one third preference shares.

Mortality, morbidity and claim termination

The assumptions regarding future mortality, morbidity and claim termination rates are based on the results of recent internal experience investigations. The mortality assumptions allow for an expected deterioration in mortality as a result of AIDS in line with Professional Guidance Note 105 (July 2007), as well as expected improvements in mortality at older ages in respect of annuities in payment.

Mortality rates (excluding AIDS) have been reduced for individual life products. Morbidity rates in respect of future claims were left unchanged from 30 June 2008.

Termination rates for Group income disability claims in payment were increased by 5% in response to consistently observing more terminations than expected.

Expenses

The maintenance expense assumptions are based on the budgeted maintenance expenses for the financial year to 30 June 2010, are differentiated by main product group, and are sufficient to support the existing business on a going concern basis.

It was assumed that, for Employee benefits investment business, the expense-to-income ratio will improve by 37% over six years as a result of restructuring of the business and improved efficiencies.

Premium growth take-up rates

The present value of in-force covered business includes the expected value of future premium increases resulting from voluntary premium growth arrangements on in-force insurance business, by using an expected take-up rate based on the results of recent experience investigations. The value of new business includes the expected value of future premium increases resulting from premium growth arrangements.

Termination rates

The policy and premium discontinuation rates were strengthened taking recent past experience into account.

Bonus rates

Bonus rates for smoothed bonus and reversionary bonus products have been projected based on the affordable rates given the underlying investment return assumptions.

Reserving bases

It was assumed that the current bases of calculating the policyholder liabilities would continue unchanged in future.

Policy and premium discontinuation bases

It was assumed that the current policy and premium discontinuation bases and practices would be maintained in future.

Financial options and guarantees

Some of Momentum's savings products guarantee investors a minimum return on maturity, death or surrender. The liability for these guarantees is calculated in accordance with Professional Guidance Note 110 issued by the Actuarial Society of South Africa. The minimum return guarantees have been valued using Barry and Hibbert's risk-neutral market consistent asset model.

Tax

Allowance was made for future income tax based on the four-fund tax dispensation, and for Capital Gains Tax at face value in the policyholders' portfolios. No allowance was made for Capital Gains Tax on the shareholders' strategic subsidiary investments, as these are not held with the intention of ultimate disposal. The fair value of owner occupied properties above book value have been reduced for deferred Capital Gains Tax for purposes of the embedded value.

The cost of required capital was based on projected after tax returns on the assets backing the required capital.

Allowance was made for Secondary Tax on Companies ("STC") on future dividends ultimately payable to shareholders at a rate of 4.0% (30 June 2008: 5.6%) of net expected future earnings. The STC assumption is based on the expected future cash dividends expected future STC credits arising from dividends received. This allowance does not anticipate any changes in STC and the projections allow for STC over the entire projection term. The impact on the embedded value of allowing for STC is equal to negative R385 million (June 2008 restated: negative R589 million).

Sensitivities

This section illustrates the effect of different assumptions on the embedded value of covered in-force and new business respectively.

For each sensitivity illustrated, all other assumptions have been left unchanged, except for the sensitivity to a 1% reduction in investment returns, where it was assumed that the inflation rate and the risk discount rate would also reduce by 1%.

For the investment return sensitivity, the value of assets supporting products with guaranteed investment returns have also been adjusted according to the sensitivity. The net impact of the change in the liability and the asset values is captured within the present value of future profits.

In the calculation of the new business sensitivity to a reduction in investment returns, it was assumed that new business premium rates for products with guaranteed investment returns (annuities and guaranteed endowments) would be adjusted. This assumption is in line with the current practice of weekly review of new business premium rates.

Allowance was made for compensating management actions. It was assumed that bonus rates would be reduced consistent with the reduction in investment returns. In the case of Employee benefits risk business, it was assumed that the improvement in mortality experience would be countered by a corresponding decrease in premiums after a delay of one year.

The risk discount rate appropriate to an investor depends on the investor's own requirements, tax position and perception of the risks associated with the realisation of the future insurance earnings of Momentum. The sensitivities to changes in the risk discount rate are included in the tables below:

Sensitivity of the value of in-force covered business

R million	Present value of in-force business	Cost of required capital	Value of in-force business	Change from base %
Base value	9 243	(1 721)	7 522	
Risk discount rate increases from 11.6% to 12.6%	8 778	(1 951)	6 827	(9.2%)
Risk discount rate decreases from 11.6% to 10.6%	9 761	(1 462)	8 299	10.3%
Renewal expenses decrease by 10%	9 638	(1 721)	7 917	5.3%
Expense inflation decreases from 7.2% to 6.2%	9 363	(1 721)	7 642	1.6%
Policy discontinuance rates decrease by 10%	9 477	(1 801)	7 676	2.0%
5% reduction in mortality and morbidity rates (excluding the impact from annuity business)	9 757	(1 721)	8 036	6.8%
5% reduction in mortality rates (impact from annuity business only)	9 089	(1 721)	7 368	(2.0%)
Premium growth take-up reduces by 10%	9 111	(1 721)	7 390	(1.8%)
Investment returns reduce from 11.4% to 10.4%	9 158	(1 822)	7 336	(2.5%)
Equity values decrease by 10%	8 776	(1 757)	7 019	(6.7%)
Equity risk premium increases by 1%	9 434	(1 721)	7 713	2.5%

Sensitivity of the value of business

R million	Present value of new business	Cost of required capital	Value of new business	Change from base %
Base value	637	(93)	544	
Risk discount rate increases from 11.6% to 12.6%	564	(105)	459	(15.6)
Risk discount rate decreases from 11.6% to 10.6%	723	(80)	643	18.2
Renewal expenses decrease by 10%	687	(93)	594	9.2
Expense inflation decreases from 7.2% to 6.2%	657	(93)	564	3.7
Policy discontinuance rates decrease by 10%	744	(99)	645	18.6
5% reduction in mortality and morbidity rates (excluding the impact from annuity business)	740	(93)	647	18.9
5% reduction in mortality rates (impact from annuity business only)	631	(93)	538	(1.1)
Premium growth take-up reduces by 10%	614	(93)	521	(4.2)
Investment returns reduce from 11.4% to 10.4%	693	(96)	597	9.7
Equity risk premium increases by 1%	645	(93)	552	1.5
New business acquisition expenses decrease by 10%	686	(93)	593	9.0
New business volumes decrease by 20%	402	(74)	328	(39.7)

Review by the independent actuaries

Deloitte & Touche reviewed the methodology and the assumptions underlying the calculation of the embedded value and the value of new business. They are satisfied that, based on the information supplied to them by Momentum, the methodology and assumptions are appropriate for the purpose of the embedded value disclosure, that these have been determined in accordance with generally accepted actuarial principles and in accordance with PGN107, that the approach has been applied consistently across the different business units and that the methodology and assumptions have been applied consistently over the year.

NOTES