MCEV disclosure for covered business in Emerging Markets

For the six months ended 30 June 2015

Contents

1.	Analysis of covered business MCEV	2
2.	New business results	7
3.	MCEV sensitivity information	9
4.	Reconciliation of IFRS net asset value to MCEV adjusted net worth for the covered business	10
5.	MCEV methodology	11
6.	MCEV assumptions	13
7.	Appendix – MCEV economic variances	16

MCEV disclosure for covered business in Emerging Markets

For the six months ended 30 June 2015

1. Analysis of covered business MCEV

The following section provides a summary of the components of the Market Consistent Embedded Value (MCEV) for the covered business in Emerging Markets.

Headline MCEV results

- MCEV operating profit of R3,455 million is 40% up on 30 June 2014 driven by a higher expected return on a higher opening MCEV; 11% higher value of new business (VNB) and an improved experience result partly driven by the assumption changes made at 31 December 2014.
- VNB growth of 11% on 30 June 2014 is as a result of a 4% increase in the present value of new business premiums (PVNBP) and an increase in the margin from 3.0% to 3.2%. This includes a 55% increase in VNB for Rest of Africa to R133 million (4.5% margin) at 30 June 2015 from R86 million (4.2% margin) at 30 June 2014.
- Overall annualised return on embedded value (RoEV) has increased to 12.3% from 10.2% at 30 June 2014.

Analysis of change for covered business for the six months ended 30 June 2015

Rm

	Six months ended 30 June 2015				
	Free surplus	Required capital	Adjusted net worth	Value of in-force	MCEV
Opening MCEV	**11,219**	**20,223**	**31,442**	**24,502**	**55,944**
New business value	**(1,541)**	**1,131**	**(410)**	**1,317**	**907**
Expected existing business contribution (reference rate)	**314**	**546**	**860**	**1,105**	**1,965**
Expected existing business contribution (in excess of reference rate)	**44**	**79**	**123**	**122**	**245**
Transfers from VIF and required capital to free surplus	**3,006**	**(1,111)**	**1,895**	**(1,895)**	**-**
Experience variances (excluding development costs)	**359**	**58**	**417**	**89**	**506**
Experience variances - development costs	**(203)**	**-**	**(203)**	**-**	**(203)**
Assumption changes	**-**	**-**	**-**	**-**	**-**
Other operating variance	**61**	**14**	**75**	**(40)**	**35**
Operating MCEV earnings	**2,040**	**717**	**2,757**	**698**	**3,455**
Economic variances[1]	**77**	**(18)**	**59**	**822**	**881**
Other non-operating variance	**11**	**137**	**148**	**43**	**191**
Total MCEV earnings	**2,128**	**836**	**2,964**	**1,563**	**4,527**
Closing adjustments	**(5,862)**	**60**	**(5,802)**	**49**	**(5,753)**
Capital and dividend flows	**(4,684)**	**-**	**(4,684)**	**-**	**(4,684)**
Foreign exchange variance	**(4)**	**60**	**56**	**49**	**105**
Other[2]	**(1,174)**	**-**	**(1,174)**	**-**	**(1,174)**
Closing MCEV	**7,485**	**21,119**	**28,604**	**26,114**	**54,718**
Return on MCEV (RoEV)% per annum[3]					**12.3%**

[1]Further disclosure on economic variances is shown in the appendix.

[2]Other closing movements includes the liability in respect of OMLAC(SA) subordinated debt issued in 2014 which is now reflected in the Emerging Markets adjusted net worth. The associated financing costs of the subordinated debt issued in 2014 and 2015 are also included.

[3]Return on MCEV is calculated as the annualised operating MCEV earnings after tax divided by opening MCEV. The operating assumption changes and other operating variances are not annualised.

Rm

	Six months ended 30 June 2015		
	Adjusted net worth	Value of in-force	MCEV
Experience variances (excluding development costs)	**417**	**89**	**506**
Persistency	**91**	**124**	**215**
Risk	**395**	**(2)**	**393**
Expenses	**(74)**	**(66)**	**(140)**
Other	**5**	**33**	**38**

Operating earnings: Operating earnings were higher compared to 30 June 2014 mainly as a result of improved persistency experience, an increased value of new business, positive other operating variances and a higher expected return from existing business, partly offset by higher development expenses.

New business: VNB increased by 11% compared to the first six months of 2014 mainly due to higher sales volumes and higher new business margins in certain segments. The higher margins were earned following positive operating assumption and taxation-related changes at 31 December 2014. The impact of sales mix on margins was positive due to a higher proportion of Mass Foundation Cluster risk sales, partly offset by a higher proportion of lower margin savings sales in Retail Affluent and a lower proportion of higher margin Group Assurance sales in Corporate Segment compared to the corresponding period last year. The overall net positive impacts were partly offset by a faster rise in new business costs due to the investments made to grow certain sales forces. In the Rest of Africa, the increase in VNB is driven by the higher sales volumes, particularly in Zimbabwe, and improved distribution efficiencies.

Experience variances: There were positive experience variances (excluding development costs) of R506 million due to strong positive mortality and morbidity experience variances and significantly improved persistency experience variance, partly offset by some negative expense variances. Risk profits are mainly arising on Retail Affluent protection business due to better morbidity experience. Mass Foundation Cluster continues to exhibit positive risk profits, although in the light of basis changes made at 31 December 2014 these are at a lower level than experienced previously. Persistency experience variance improved mainly due to very low pre-retirement smoothed bonus terminations in the Corporate Segment business and positive experience in Mass Foundation Cluster following lapse assumption changes made at 31 December 2014. The negative expense variances were mainly due to higher central operating costs related to supporting the Emerging Markets business.

Development cost variances: Development cost variances relate mainly to the establishment and growth of distribution capabilities in Africa and initiatives relating to new product offerings in South Africa.

Operating assumption changes: No operating assumption changes were made during the reporting period

Other operating variances: Other operating variances reflect a number of minor modelling improvements.

Economic variances: Positive economic variances were mainly due to a decision to change the risk free reference rate in South Africa from one based on the swap curve to one aligned to the anticipated Solvency Assessment and Management (SAM) rules which mainly use the government bond curve (positive impact of R543 million). Further details are set out in section 5. Positive investment variances resulted from favourable returns on policyholder funds. This was partly offset by the revaluation of state-owned enterprises and financial sector credit assets in South Africa, and negative investment variance on shareholder funds (largely due to lower than expected returns in South Africa and negative investment returns in Zimbabwe as a result of the economic decline). Further disclosure on economic variances is shown in the appendix.

Other non-operating variances: Other non-operating variances represent the impact of the minority interest in Zimbabwe reducing from 25% to 19%.

Closing adjustments: Significant net transfer items relate to the purchase of UAP, net dividends paid from South Africa, Namibia and Zimbabwe, the inclusion of the liability to repay the subordinated debt issued by OMLAC(SA) in 2014 in the Emerging Markets adjusted net worth and the cost of financing subordinated debt during the period.

MCEV disclosure for covered business in Emerging Markets

For the six months ended 30 June 2015

Analysis of change for covered business for the six months ended 30 June 2014

Rm

	Six months ended 30 June 2014				
	Free surplus	Required capital	Adjusted net worth	Value of in-force	MCEV
Opening MCEV	8,854	19,408	28,262	23,210	51,472
New business value	(1,392)	995	(397)	1,215	818
Expected existing business contribution (reference rate)	228	450	678	915	1,593
Expected existing business contribution (in excess of reference rate)	32	77	109	137	246
Transfers from VIF and required capital to free surplus	2,936	(1,227)	1,709	(1,709)	-
Experience variances (excluding development costs)	261	(28)	233	18	251
Experience variances - development costs	(106)	-	(106)	-	(106)
Assumption changes	-	-	-	-	-
Other operating variance	(116)	-	(116)	(215)	(331)
Operating MCEV earnings	1,843	267	2,110	361	2,471
Economic variances	573	14	587	543	1,130
Other non-operating variance	-	-	-	-	-
Total MCEV earnings	2,416	281	2,697	904	3,601
Closing adjustments	(2,501)	8	(2,493)	26	(2,467)
Capital and dividend flows	(2,518)	-	(2,518)	-	(2,518)
Foreign exchange variance	17	13	30	22	52
Other	-	(5)	(5)	4	(1)
Closing MCEV	8,769	19,697	28,466	24,140	52,606
Return on MCEV (RoEV)% per annum[1]					10.2%

[1]Return on MCEV is calculated as the annualised operating MCEV earnings after tax divided by opening MCEV. The operating assumption changes and other operating variances are not annualised.

Rm

	Six months ended 30 June 2014		
	Adjusted net worth	Value of in-force	MCEV
Experience variances (excluding development costs)	233	18	251
Persistency	9	21	30
Risk	448	34	482
Expenses	(43)	(10)	(53)
Other	(181)	(27)	(208)

Analysis of change for covered business for the year ended 31 December 2014

	Year ended 31 December 2014				Rm
	Free surplus	Required capital	Adjusted net worth	Value of in-force	MCEV
Opening MCEV	8,854	19,408	28,262	23,210	51,472
New business value	(2,116)	1,577	(539)	2,477	1,938
Expected existing business contribution (reference rate)	456	902	1,358	1,838	3,196
Expected existing business contribution (in excess of reference rate)	63	155	218	290	508
Transfers from VIF and required capital to free surplus	5,422	(2,149)	3,273	(3,273)	-
Experience variances (excluding development costs)	319	(130)	189	(359)	(170)
Experience variances - development costs	(412)	-	(412)	3	(409)
Assumption changes	912	138	1,050	(158)	892
Other operating variance	(845)	(1)	(846)	(9)	(855)
Operating MCEV earnings	3,799	492	4,291	809	5,100
Economic variances	(172)	211	39	459	498
Other non-operating variance	54	-	54	138	192
Total MCEV earnings	3,681	703	4,384	1,406	5,790
Closing adjustments	(1,316)	112	(1,204)	(114)	(1,318)
Capital and dividend flows	(1,393)	19	(1,374)	-	(1,374)
Foreign exchange variance	77	93	170	55	225
Other[1]	-	-	-	(169)	(169)
Closing MCEV	11,219	20,223	31,442	24,502	55,944
Return on MCEV (RoEV)% per annum[2]					9.9%

[1]Other relates to the migration of Emerging Markets Wealth business onto a new platform (shift from covered to non-covered business) and the first time inclusion of VIF for certain entities (Old Mutual Alternative Risk Transfer, Namibia Old Mutual Finance and Ghana).

[2]Return on MCEV is calculated as the operating MCEV earnings after tax divided by opening MCEV.

	Year ended 31 December 2014		Rm
	Adjusted net worth	Value of in-force	MCEV
Experience variances (excluding development costs)	189	(359)	(170)
Persistency	(12)	(186)	(198)
Risk	837	(76)	761
Expenses	(271)	(31)	(302)
Other	(365)	(66)	(431)
Assumption changes	1,050	(158)	892
Persistency	(520)	(73)	(593)
Risk	1,579	(90)	1,489
Expenses	(9)	5	(4)

MCEV disclosure for covered business in Emerging Markets

For the six months ended 30 June 2015

Components of MCEV for covered business

			Rm
	At	At	At
Emerging Markets	**30 June 2015**	30 June 2014	31 December 2014
Adjusted net worth[1]	**28,604**	28,466	31,442
Free surplus	**7,485**	8,769	11,219
Required capital	**21,119**	19,697	20,223
Value of in-force	**26,114**	24,140	24,502
Present value of future profits	**32,604**	30,193	30,736
Frictional costs	**(4,058)**	(3,679)	(3,749)
Cost of residual non-hedgeable risks	**(2,432)**	(2,374)	(2,485)
MCEV	**54,718**	52,606	55,944

[1]The subordinated debt liability in respect of debt raised in OMLAC(SA) in 2014 and 2015 is included in the Emerging Markets adjusted net worth as at 30 June 2015 (R3,026 million). The OMLAC(SA) subordinated debt issued in 2005 is not included in the Emerging Markets MCEV.

MCEV decreased by 2% compared to 31 December 2014 due to large capital transfers and net dividend payments which were partly offset by favourable operating earnings and economic variances. The large capital transfers included the purchase of a share in UAP which is now included in the non-covered portion of the balance sheet.

2. New business results

The following section provides a summary of the new business information for Emerging Markets.

Value of new business and new business profitability

The tables below set out an analysis of the value of new business after tax. New business profitability is measured by the ratio of the VNB to the present value of new business premiums, and shown under PVNBP margin below. Annual Premium Equivalent (APE) is calculated as recurring premiums plus 10% of single premiums.

Emerging Markets Rm

	Annualised recurring premiums	Single premiums	PVNBP	PVNBP capitalisation factors[1]	APE	VNB	PVNBP margin
Covered business							
30 June 2015	**3,114**	**14,632**	**28,785**	**4.5**	**4,577**	**907**	**3.2%**
30 June 2014	2,874	12,378	27,644	5.3	4,112	818	3.0%
31 December 2014	6,016	26,248	57,533	5.2	8,641	1,938	3.4%

[1] The PVNBP capitalisation factors are calculated as follows: (PVNBP - single premiums)/annualised recurring premiums.

The VNB and margins have all been calculated on start of period economic assumptions, where the risk free rate is defined as being based on the swap curve. Using the new risk free curve definition rather than the start of period risk free swap curve would have had a negligible impact on the PVNBP margin. The recurring premium capitalisation factor reduced due to a shift to recurring premium products with shorter expected durations, such as Mass Foundation Cluster's 2-IN-ONE savings product and Retail Affluent's Tax Free Savings Plan.

Rest of Africa life business premiums

The following amounts are included in respect of the life businesses in Namibia, Zimbabwe, Malawi, Kenya, Swaziland, Nigeria and Ghana in the information reported above.

Rest of Africa Rm

	Annualised recurring premiums	Single premiums	PVNBP	PVNBP capitalisation factors	APE	VNB	PVNBP margin
Covered business							
30 June 2015	**411**	**878**	**2,975**	**5.1**	**499**	**133**	**4.5%**
30 June 2014	284	615	2,065	5.1	346	86	4.2%
31 December 2014	628	1,452	4,463	4.8	773	246	5.5%

Additional new business written by Emerging Markets

New business single premiums of R702 million (30 June 2014: R1,629 million; 31 December 2014: R2,745 million), annualised recurring premiums of R643 million (30 June 2014: R258 million; 31 December 2014: R602 million), and APE of R713 million (30 June 2014: R421 million; 31 December 2014: R877 million) in respect of the life business in India and China for the six months ended 30 June 2015 have been excluded from the above tables, as these businesses are not modelled on an MCEV basis.

The value of new individual unit trust linked retirement annuities and pension fund asset management business written by the Emerging Markets long-term business of R6,595 million (30 June 2014: R7,289 million; 31 December 2014: R14,073 million) is excluded from VNB (as well as APE and PVNBP) above as the profits in this business arise outside of the covered business. In addition, annualised new business recurring premiums of R184 million (30 June 2014: R11 million; 31 December 2014: R189 million) in respect of the unit trust component of the new Mass Foundation Cluster 2-IN-ONE savings product is also excluded from the tables above, as this business is not modelled on an MCEV basis.

The new business figures presented in this section exclude premium increases arising from indexation arrangements in respect of existing business, as these are already included in the value of in-force business.

MCEV disclosure for covered business in Emerging Markets

For the six months ended 30 June 2015

Drivers of new business value for covered business (PVNBP margin)

			%
	30 June 2015	30 June 2014	31 December 2014
Margin at the end of comparative reporting period	**3.0**	3.9	4.0
Change in volume and new business expenses	**(0.3)**	(0.5)	(0.6)
Change in country and product mix	**0.1**	(0.3)	(0.4)
Change in operating assumptions	**0.1**	(0.2)	0.1
Change in economic assumptions	**-**	0.1	0.1
Change in tax/regulation	**0.3**	-	0.2
Margin at the end of the reporting period	**3.2**	3.0	3.4

An explanation of the drivers of new business margins is included in Section 1. The analysis describes the movement in new business margins from business sold in the first six months of 2014 to that sold in the first six months of 2015.

3. MCEV sensitivity information

The tables below show the movement of the MCEV, the value of in-force business and the value of new business to the following sensitivities:

- **Economic assumptions 100bps increase/decrease**: Increasing/decreasing all pre-tax investment and economic assumptions (projected investment returns and inflation) by 100bps, with credited rates and discount rates changing commensurately.
- **10bps increase of liquidity spreads**: Recognising the present value of an additional 10bps of liquidity spreads assumed on corporate bonds over the lifetime of the liabilities (annuities and Fixed Bonds only), with credited rates and discount rates changing commensurately.

For each sensitivity illustrated, all other assumptions have been left unchanged except where they are directly affected by the revised conditions. Sensitivity scenarios therefore include consistent changes in cash flows directly affected by the changed assumption(s), for example future bonus participation in changed economic scenarios.

			Rm
MCEV	**30 June 2015**	30 June 2014	31 December 2014
Central assumptions	**54,718**	52,606	55,944
Value given changes in:			
Economic assumptions 100bps increase	**54,183**	51,941	55,520
Economic assumptions 100bps decrease	**55,072**	53,189	56,279
10bps increase of liquidity spreads	**54,853**	52,714	56,092

			Rm
VIF	**30 June 2015**	30 June 2014	31 December 2014
Central assumptions	**26,114**	24,140	24,502
Value given changes in:			
Economic assumptions 100bps increase	**25,565**	23,475	24,065
Economic assumptions 100bps decrease	**26,468**	24,723	24,852
10bps increase of liquidity spreads	**26,249**	24,248	24,650

			Rm
VNB	**30 June 2015**	30 June 2014	31 December 2014
Central assumptions	**907**	818	1,938
Value given changes in:			
Economic assumptions 100bps increase	**863**	779	1,845
Economic assumptions 100bps decrease	**959**	855	2,014
10bps increase of liquidity spreads	**912**	822	1,947

MCEV disclosure for covered business in Emerging Markets

For the six months ended 30 June 2015

4. Reconciliation of IFRS net asset value to MCEV adjusted net worth for the covered business

The table below provides a reconciliation of the IFRS net asset value (NAV) to the MCEV adjusted net worth for the covered business.

			Rm
	At 30 June 2015	At 30 June 2014	At 31 December 2014
IFRS net asset value[1]	**21,998**	22,494	25,296
Adjustment to include long-term business on a statutory solvency basis	**2,631**	2,782	2,667
Inclusion of Group equity and debt instruments held in life funds	**4,474**	3,882	4,083
Goodwill	**(125)**	(134)	(129)
Other[2]	**(374)**	(558)	(475)
Adjusted net worth attributable to ordinary equity holders of the parent	**28,604**	28,466	31,442
Value of in-force business	**26,114**	24,140	24,502
MCEV	**54,718**	52,606	55,944

[1]The liability to repay the OMLAC(SA) subordinated debt issued in 2005 is not included the IFRS net asset value as it is not allocated to Emerging Markets MCEV covered business.

[2]Adjustment to allow for non-controlling interest in Zimbabwe.

5. MCEV methodology

The following section provides information on the methodology used to calculate MCEV results. The methodology used to calculate MCEV results at 30 June 2015 is consistent with 31 December 2014 unless explicitly noted in this disclosure.

Basis of preparation and coverage

MCEV is a measure of the consolidated value of shareholders' interests in the covered business and consists of the sum of the shareholders' adjusted net worth in respect of the covered business and the value of the in-force covered business.

The Market Consistent Embedded Value Principles (Copyright © Stichting CFO Forum Foundation 2008) issued in June 2008 and updated in October 2009 by the CFO Forum (the Principles or MCEV Principles) have been used as the basis for preparing the MCEV disclosure information for the covered business in Emerging Markets.

The CFO Forum announced changes to the MCEV Principles in October 2009 to reflect inter alia the inclusion of a liquidity premium. These changes affirm that the risk free reference rate to be applied under MCEV should include both the swap yield curve appropriate to the currency of the cash flows and a liquidity premium where appropriate.

Apart from Principle 14, the Principles have been materially complied with in the preparation of MCEV information for the Emerging Markets business at 30 June 2015. Principle 14 requires the use of a swap curve as the reference curve, however a government bond curve has been used as the reference curve in South Africa for consistency with the planned new regulatory solvency reporting regime (SAM) which is expected to confirm the use of a government bond curve as the risk free rate. Where the liabilities are hedged with swaps then the risk free rate will remain as swaps as per the SAM requirements, however this is only a small percentage of covered business. The reference curve and resulting Embedded Value is still considered to be market consistent as it is derived directly from market indicators. Namibia uses the same reference curve as South Africa.

Note also that detailed consolidated disclosure information has not been prepared for the Old Mutual Group as required by the Principles.

The covered business within certain African entities (Zimbabwe, Kenya, Malawi, Swaziland, Nigeria and Ghana) has been included on an MCEV basis, although simplified approaches have been used where appropriate to the size of the business, or where insufficient market data is available to perform full bottom-up MCEV calculations.

For the Emerging Markets business, covered business includes, where material, any contracts that are regarded by local insurance supervisors as long-term life insurance business, and other business, where material, directly related to such long-term life assurance business where the profits are included in the IFRS long-term business profits in the primary financial statements. For the life businesses in entities where the covered business is not material, the treatment within this supplementary information is the same as in the primary IFRS financial statements (i.e. expected future profits for this business are not capitalised for MCEV reporting purposes).

Some types of business are legally written by a life company but are classified as asset management under IFRS because 'long-term business' only serves as a wrapper. This business is excluded from covered business, for example individual unit trusts and some Group market-linked business written by asset management companies in South Africa through the life company, as profits from this business arise in the asset management and asset administration companies.

The detailed methodology and assumptions made in presenting this information are set out in the following sections. The MCEV for Emerging Markets is presented after an adjustment to include the market value of life fund investments in Group equity and debt instruments.

Methodology

(a) Introduction

The MCEV represents the present value of shareholders' interests in the earnings that are distributable from assets allocated to the in-force covered business after sufficient and appropriate allowance for the aggregate risks in the covered business.

The MCEV consists of the sum of the following components:

- Adjusted net worth (ANW), which excludes acquired intangibles and goodwill, consisting of:
  - free surplus allocated to the covered business; and
  - required capital to support the covered business.
- Value of in-force covered business (VIF).

The ANW is the market value of shareholders' assets held in respect of the covered business after allowance for the liabilities which are determined by local regulatory reserving requirements. In a change from the approach adopted in 2014, we have allowed for the liability to repay and finance the subordinated debt allocated to the covered business in the ANW.

(b) Required capital

Required capital is the market value of assets that is attributed to support the covered business, over and above that required to back regulatory liabilities for covered business, whose distribution to shareholders is restricted.

For Emerging Markets, capital is determined with reference to internal management objectives. The required capital in respect of OMLAC(SA)'s covered business is partially covered by the market value of the Group's investments in banking in South Africa. On consolidation these investments are shown separately.

The table below shows the level of required local capital expressed as a percentage of the minimum local regulatory capital requirements.

			Rm
	At 30 June 2015	At 30 June 2014	At 31 December 2014
Required capital (a)	**21,119**	19,697	20,223
Regulatory capital (b)	**16,161**	14,390	15,561
Ratio (a/b)	**1.3**	1.4	1.3

(c) Cost of residual non-hedgeable risks

The cost of residual non-hedgeable risks (CNHR) is calculated using a cost of capital approach, i.e. it is determined as the present value of capital charges for all future non-hedgeable risk capital requirements until the liabilities have run off.

A cost of capital charge of 2.0% has been applied to residual symmetric and asymmetric non-hedgeable capital at a business unit level over the life of the contracts.

The amount of diversified economic capital held in respect of residual non-hedgeable risks in Emerging Markets is R15,757 million at 30 June 2015 (30 June 2014: R15,256 million; 31 December 2014: R15,603 million).

(d) Taxation

In valuing shareholders' cash flows, allowance is made in the cash flow projections for taxes in the relevant jurisdiction affecting the covered business. Tax assumptions are based on best estimate assumptions, applying current local corporate tax legislation and practice together with known future changes and taking credit for any deferred tax assets.

The value of deferred tax assets is partly recognised in the MCEV. Typically those tax assets are expected to be utilised in future by being offset against expected tax liabilities that are generated on expected profits emerging from in-force business. MCEV may therefore understate the true economic value of such deferred tax assets because it does not allow for future new business sales which could affect the utilisation of such assets.

6. MCEV assumptions

The following section provides details of the economic and non-economic assumptions used in the MCEV calculations. The assumptions have been derived in a consistent manner to 31 December 2014 calculations unless explicitly stated as a change in this disclosure note.

Economic assumptions

Economic assumptions for South Africa are set out in the following sections. In other territories, economic assumptions are determined with reference to local economic conditions.

(a) Risk free reference rates and inflation

The risk free reference rates, reinvestment rates and discount rates are determined as set out in the basis of preparation. For Emerging Markets the swap yield curve is sourced internally (using market data provided by the Bond Exchange of South Africa) and is checked for reasonability relative to the Bloomberg swap yield curve, whereas the government bond curve is published by the Financial Services Board in South Africa and validated internally.

At 30 June 2015, a liquidity premium adjustment has been applied to OMLAC(SA)'s Immediate Annuity business and Fixed Bond business. A liquidity premium adjustment is applied to OMLAC(SA)'s Fixed Bond business as OMLAC(SA) holds a portfolio of non-government bonds which have a market yield in excess of the risk free rate and the duration of the asset portfolio and the liability duration are a good match (meaning the asset portfolio is held to maturity). Cash flows on this product are predictable and the company has adequate liquidity to withstand a substantial increase in lapses at all durations without having to sell bonds, which further strengthens the case for applying a liquidity premium.

It is the directors' view that a proportion of non-government bond spreads at 30 June 2015 is attributable to a liquidity premium rather than only to credit and default allowances and that returns in excess of reference rates can be achieved rather than entire spreads being lost to worsening default experience. For OMLAC(SA)'s Immediate Annuity business the currency, credit quality and duration of the actual bond portfolios were considered and adjusted risk free reference rates were derived at 30 June 2015 by adding 60bps of liquidity premium for this business (30 June 2014: 50bps; December 2014: 55bps) to the reference rates used for setting investment return and discounting assumptions. For OMLAC(SA)'s Fixed Bond products 60bps of liquidity premium was added to the reference rates (30 June 2014: 40bps; 31 December 2014: 50bps). These adjustments reflect the liquidity premium component in non-government bond spreads over reference rates that are expected to be earned on the portfolios. The liquidity premium was derived by comparing the yields of South African government bonds with bonds of similar duration issued by state-owned enterprises.

The risk free reference spot yields (excluding any applicable liquidity adjustments) at various terms are provided in the table below. Expense inflation rates have been derived by comparing real rates of return against nominal risk free rates, with adjustments for higher anticipated inflation rates where appropriate. For 30 June 2015 we show the risk free rates and associated inflation based on government bonds.

Risk free reference spot yields (excluding liquidity adjustments) and expense inflation

		%
	Risk free rate	**Expense inflation**
At 30 June 2015		
1 year	**7.2**	**6.9**
5 years	**8.1**	**7.0**
10 years	**8.5**	**7.1**
20 years	**9.5**	**7.8**
At 30 June 2014		
1 year	6.6	6.6
5 years	7.9	7.4
10 years	8.7	8.0
20 years	9.3	8.3
At 31 December 2014		
1 year	6.6	6.3
5 years	7.6	6.9
10 years	8.3	7.5
20 years	9.1	8.2

(b) Volatilities and correlations

Where cash flows contain financial options and guarantees that do not move linearly with market movements, asset cash flows are projected and all cash flows are discounted using risk-neutral stochastic models. These models project the assets and liabilities using a distribution of asset returns where all asset types, on average, earn the same risk free reference rates.

Apart from the risk free reference spot yields specified above, other key economic assumptions for the calibration of economic scenarios include the implied volatilities for each asset class and correlations of investment returns between different asset classes. The risk free rates used for the value of options and guarantees are based on the swap curve.

The at-the money annualised asset volatility assumptions of the asset classes incorporated in the stochastic models are detailed below.

ZAR volatilities[1]

Option term	1 year swap	5 year swap	10 year swap	20 year swap	Equity (total return index) %
At 30 June 2015					
1 year	**23.8**	**20.8**	**19.2**	**17.8**	**18.7**
5 years	**20.9**	**19.8**	**18.5**	**18.7**	**25.0**
10 years	**19.1**	**17.9**	**18.0**	**19.5**	**26.3**
20 years	**18.5**	**19.7**	**19.9**	**19.3**	**29.0**
At 30 June 2014					
1 year	25.3	22.7	21.0	20.0	15.9
5 years	21.1	20.0	19.2	19.7	25.0
10 years	19.2	18.8	19.3	20.7	28.2
20 years	22.6	23.8	24.8	24.3	28.3
At 31 December 2014					
1 year	19.7	17.9	16.3	14.9	19.7
5 years	19.4	18.0	16.6	16.6	25.2
10 years	17.9	17.0	17.2	18.3	26.5
20 years	18.6	19.5	19.8	19.2	29.0

[1]Due to limited liquidity in the ZAR swaption market, the market consistent asset model has been calibrated by extrapolating swaption and equity implied volatility data beyond a term of one year and 5 years respectively.

(c) Expected asset returns in excess of the risk free reference rates

The expected asset returns in excess of the risk free reference rates have no impact on the calculated MCEV other than the calculation of the expected existing business contribution in the analysis of MCEV earnings. Real world economic assumptions are determined with reference to one-year forward risk free reference rates applicable to the currency of the liabilities at the start of the reporting period. All other economic assumptions, for example future bonus rates, are set at levels consistent with the real world investment return assumptions.

Pre-tax real world economic assumptions are determined as follows:

- The equity risk premium is 3.7%.
- The cash return equals the one year risk free reference rate.
- The property risk premium is 1.5%.
- Returns on corporate bonds reference actual yields from assets held.

(d) Effective tax rates

The weighted average effective tax rates that apply to the cash flow projections in OMLAC(SA) at 30 June 2015 is 29% (30 June 2014: 29%; 31 December 2014: 29%).

Non-economic assumptions

The appropriate non-economic projection assumptions for future experience (e.g. mortality, persistency and expenses) are determined using best estimate assumptions of each component of future cash flows and have regard to past, current and expected future experience where sufficient evidence exists (e.g. longevity improvements and AIDS-related claims), as derived from both entity-specific and industry data where deemed appropriate.

These assumptions are based on the covered business being part of a going concern. Favourable changes in maintenance expenses, such as productivity improvements, are generally not included beyond what has been achieved by the end of the reporting period.

The management expenses attributable to life assurance business have been analysed between expenses relating to the acquisition of new business, maintenance of in-force business (including investment management expenses) and development projects.

- All expected maintenance expense overruns affecting the covered business are allowed for in the calculations.
- The MCEV makes provision for future development costs and one-off expenses relating to in-force covered business that are known with sufficient certainty, based on three-year business plans. The provision is reduced to the extent that projects have associated benefits that are directly quantifiable and are considered to emerge within a reasonable timeframe (e.g. over the business plan period).
- Unallocated Group holding company expenses have been included to the extent that they are allocated to the covered business. The future expenses attributable to the long-term business in Emerging Markets at 30 June 2015 are R80 million (30 June 2014: R82 million; 31 December 2014: R172 million). The allocation of these expenses is based on the proportion that the management expenses incurred by the covered businesses bears to the total management expenses incurred by the Group.

7. Appendix – MCEV economic variances

The following section provides additional information on the MCEV economic variances.

Analysis of economic variances

									Rm
	Six months ended 30 June 2015			Six months ended 30 June 2014			Year ended 31 December 2014		
	ANW	**VIF**	**MCEV**	ANW	VIF	MCEV	ANW	VIF	MCEV
Opening MCEV	**31,442**	**24,502**	**55,944**	28,262	23,210	51,472	28,262	23,210	51,472
Expected existing business contribution[1]	**983**	**1,227**	**2,210**	787	1,052	1,839	1,576	2,128	3,704
Other operating earnings and transfers[2]	**1,774**	**(529)**	**1,245**	1,323	(691)	632	2,715	(1,319)	1,396
Operating MCEV earnings	**2,757**	**698**	**3,455**	2,110	361	2,471	4,291	809	5,100
Investment variance of in-force business[3]	**291**	**106**	**397**	441	650	1,091	538	697	1,235
Investment variance on ANW[3]	**(219)**	**-**	**(219)**	159	-	159	(495)	-	(495)
Effect of economic assumption changes[3]	**(13)**	**716**	**703**	(13)	(107)	(120)	(4)	(238)	(242)
Other non-operating variance	**148**	**43**	**191**	-	-	-	54	138	192
Total MCEV earnings	**2,964**	**1,563**	**4,527**	2,697	904	3,601	4,384	1,406	5,790
Closing adjustments	**(5,802)**	**49**	**(5,753)**	(2,493)	26	(2,467)	(1,204)	(114)	(1,318)
Closing MCEV	**28,604**	**26,114**	**54,718**	28,466	24,140	52,606	31,442	24,502	55,944
Return on MCEV (RoEV)% per annum			**12.3%**			10.2%			9.9%

[1] Consists of 'reference rate' and 'in excess of reference rate' expected existing business contribution.

[2] Consists of new business value, transfers from VIF to ANW, experience variances, assumption changes, and other operating variances.

[3] Reported together as 'economic variances' in the MCEV analysis of change.

Expected existing contribution: The impact of projecting forward MCEV from the start of the reporting period to the end of the reporting period using expected real world rates of return, where appropriate allowance is made for market risk premiums in addition to the risk free rate of return (10.3% p.a. total expected return has been used for South African equities over 2015). The expected real world return on ANW is based on the opening ANW for the period.

Investment variance on in-force business: Mainly consists of the impact of higher than expected returns on policyholder funds over 2015, including:

- An increase in VIF due to higher than assumed investment returns on policyholder funds in 2015; and
- Positive ANW variance due to favourable investment variances on the non-profit annuity portfolios (yield pick-up on credit assets, partly offset by the revaluation of state-owned enterprises and financial sector credit assets) and the capitalisation of higher asset-based margins (based on higher fund values) which reduced liabilities.

Investment variance on ANW: Lower than expected post-tax investment return on shareholder funds following negative equity market returns in Zimbabwe and lower than expected returns on the shareholder portfolio in South Africa.

Effect of economic assumption changes: Positive economic variances mainly relate to:

- The impact of moving the definition of risk free rate to align with the anticipated SAM regulations, as set out in section 5.
- A reduction in Investment Guarantee Reserves over the first half of 2015 due to the higher swap yields and the lower equity implied volatilities.