MCEV disclosure for covered business in Emerging Markets

For the year ended 31 December 2017

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1 Summary of MCEV results and components of MCEV for covered business

The following section provides a summary of the headline Market Consistent Embedded Value (MCEV) results and components of MCEV for the covered business in Emerging Markets. All MCEV results are post tax and non-controlling interests, unless stated otherwise.

The MCEV for 31 December 2017 has been calculated predominantly using a South African bond yield curve as the reference rate. This aligns with the anticipated Solvency Assessment and Management (SAM) reporting basis, but departs from MCEV Principles where the use of a swap curve is required.

1.1 Headline MCEV results

This section gives a high level summary of headline MCEV results, with further detailed commentary provided in section 2.

- The Return on Embedded Value remained strong at 13.8%, albeit lower than 14.9% in 2016. MCEV earnings (post-tax) declined by 3% on the prior year to R8,133 million, mainly due to a decline in positive experience variances and the one-off elective transfer of the protection book to the new tax fund in South Africa in 2016.
- Tough economic conditions impacted sales in 2017, with total APE sales 3% below prior year. OMEM reported a slight improvement in the PVNBP margin to 3.3% (2016: 3.2%), despite the 3% decline in life APE sales. VNB increased by 4% to R2,256 million mainly as a result of pricing reviews and achieving a more profitable mix of business.
- Experience variances remained positive, with expense and risk profits being partly offset by persistency and other losses. Expense profits reflect tight expense management across the business in response to the challenging economic environment. Disability experience variances in South Africa have improved since prior year, however losses have continued to emerge in Corporate. The tough economic environment also contributed to higher than expected investment pay-outs in Corporate, resulting in persistency losses.
- Investment returns were higher than expected, particularly in Zimbabwe following the significant increase in equity market levels. The steepening of the South African bond curve over the period also had a positive impact on earnings.
- Experience driven assumption changes showed a positive outcome as expense savings achieved in MFC and Namibia were capitalised.
- Methodology changes and management actions were moderately negative following the modelling changes for reinsurance of risk policies after the guarantee review date.

1.2 Components of MCEV for covered business

The MCEV increased by 9% compared to 31 December 2016 due to strong operating earnings which were partly offset by capital transfers.

The following table sets out the components of Market Consistent Embedded Value for covered business as at 31 December 2017.

		Rm
	At	At
Emerging Markets	**31 December 2017**	31 December 2016
Adjusted net worth (ANW)	**30,280**	27,225
Free surplus	**7,217**	6,173
Required capital	**23,063**	21,052
Value of in-force (VIF)	**34,193**	31,920
Present value of future profits (PVFP)	**40,504**	37,911
Frictional costs	**(3,900)**	(3,672)
Cost of residual non-hedgeable risks (CNHR)	**(2,411)**	(2,319)
MCEV	**64,473**	59,145

Required capital has increased since 31 December 2016 mainly due to growth in the covered business book. The methodology used to determine the allocation of required capital to South African covered business changed during the year to one based on the future Solvency Assessment and Management (SAM) regime.

Frictional costs have increased since 31 December 2016 due to the increase in required capital over the year being partly offset by methodology changes.

The cost of residual non-hedgeable risks (CNHR) increased slightly over the period due to methodology changes largely offsetting the impact of the growth in the covered business book.

Movements in ANW and VIF balances are detailed in section 2.

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2 Analysis of change in MCEV

Analysis of change in MCEV (post tax and non-controlling interest) for covered business for the year ended 31 December 2017

Commentary and additional information can be found in notes 2.2 to 2.8

						Rm
		Year ended 31 December 2017				
	Note	Free surplus	Required capital	Adjusted net worth	Value of in-force	MCEV
Opening MCEV		**6,173**	**21,052**	**27,225**	**31,920**	**59,145**
New business value	2.2	**(3,371)**	**2,590**	**(781)**	**3,037**	**2,256**
Expected existing business contribution (reference rate)		**392**	**1,328**	**1,720**	**3,165**	**4,885**
Expected existing business contribution (in excess of reference rate)		**147**	**251**	**398**	**413**	**811**
Transfers from VIF and required capital to free surplus		**7,142**	**(2,729)**	**4,413**	**(4,413)**	**-**
Experience variances	2.3	**757**	**(135)**	**622**	**(476)**	**146**
Development cost variances	2.4	**(273)**	**-**	**(273)**	**-**	**(273)**
Experience driven assumption changes	2.5	**781**	**20**	**801**	**(413)**	**388**
Methodology changes and management actions	2.6	**(863)**	**495**	**(368)**	**288**	**(80)**
Operating MCEV earnings		**4,712**	**1,820**	**6,532**	**1,601**	**8,133**
Investment variances and economic assumption changes	2.7	**1,335**	**436**	**1,771**	**868**	**2,639**
Regulatory and tax changes		**38**	**-**	**38**	**6**	**44**
Total MCEV earnings		**6,085**	**2,256**	**8,341**	**2,475**	**10,816**
Closing adjustments		**(5,041)**	**(245)**	**(5,286)**	**(202)**	**(5,488)**
Capital and dividend flows	2.8	**(4,642)**	**(2)**	**(4,644)**	**(62)**	**(4,706)**
Foreign exchange variance	2.8	**(399)**	**(243)**	**(642)**	**(140)**	**(782)**
Closing MCEV		**7,217**	**23,063**	**30,280**	**34,193**	**64,473**
Return on MCEV (RoEV)% per annum[1]						**13.8%**

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

2.1 Prior period comparatives

Analysis of change in MCEV for covered business for the year ended 31 December 2016

						Rm
		Year ended 31 December 2016				
	Note	Free surplus	Required capital	Adjusted net worth	Value of in-force	MCEV
Opening MCEV		5,953	19,110	25,063	31,248	56,311
New business value	2.2	(3,024)	1,920	(1,104)	3,277	2,173
Expected existing business contribution (reference rate)		415	1,267	1,682	3,132	4,814
Expected existing business contribution (in excess of reference rate)		69	232	301	446	747
Transfers from VIF and required capital to free surplus		6,739	(2,291)	4,448	(4,448)	-
Experience variances	2.3	405	279	684	(232)	452
Development cost variances	2.4	(270)	-	(270)	-	(270)
Experience driven assumption changes	2.5	(34)	(27)	(61)	(785)	(846)
Methodology changes and management actions	2.6	1,316	(314)	1,002	305	1,307
Operating MCEV earnings		5,616	1,066	6,682	1,695	8,377
Investment variances and economic assumption changes	2.7	(1,414)	1,037	(377)	(540)	(917)
Regulatory and tax changes		(135)	-	(135)	(190)	(325)
Total MCEV earnings		4,067	2,103	6,170	965	7,135
Closing adjustments		(3,847)	(161)	(4,008)	(293)	(4,301)
Capital and dividend flows	2.8	(3,614)	-	(3,614)	-	(3,614)
Foreign exchange variance	2.8	(338)	(291)	(629)	(246)	(875)
Other[1]	2.8	105	130	235	(47)	188
Closing MCEV		6,173	21,052	27,225	31,920	59,145
Return on MCEV (RoEV)% per annum[2]						14.9%

[1] Other closing adjustments relate to the impact of including Colombia on an MCEV basis and the simplification of MCEV reporting in certain African entities.

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

2.2 New business

As a result of the tough economic conditions placing pressure on customer disposable incomes and the business' desire to avoid writing business of poor quality, covered sales were slightly lower than 2016 (as measured by APE). Single premium life investments have been negatively affected by customers reverting to non-guaranteed products. Given exceptionally strong sales in 2016, Corporate sales were lower in 2017. Lower group risk sales followed repricing of most of the book to address the prior year adverse underwriting experience.

The following sections provide additional detail on the drivers of new business value and new business information by Emerging Markets business segment.

(a) Drivers of new business profitability (PVNBP margin)

		%
	31 December 2017	31 December 2016
Margin at the end of comparative reporting period	**3.2**	3.3
Change in volume and new business expenses	**(0.2)**	0.1
Change in country and product mix	**0.2**	(0.1)
Change in assumptions and models[1]	**-**	(0.1)
Change in economic assumptions	**0.1**	-
Change in tax/regulation	**-**	-
Margin at the end of the reporting period	**3.3**	3.2

[1] Includes experience driven assumption changes, methodology changes and management actions.

Overall there is a small increase in margin over the period.

The lower sales volumes reduced PVNBP margins due to distribution costs reducing proportionately less than sales volumes, particularly in Corporate and Personal Finance.

The positive 0.2% change in country and product mix reflects a reduced proportion of lower margin Corporate sales in South Africa and an increased proportion of higher margin smoothed bonus sales in Namibia as well as the positive impact of the pricing reviews on risk products in Mass Foundation and Personal Finance following the 2016 taxation changes in South Africa.

Assumption and model changes have had a negligible impact on PVNBP margins. Positive impacts of a lower allocation of distribution losses to life products in Personal Finance and the capitalisation of expense savings in Mass Foundation being offset by the negative impacts of assumption and modelling changes in Zimbabwe and Namibia.

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(b) Value of new business and new business profitability

The tables below provide information on the value of new business and new business profitability metrics by Emerging Markets business segment.

Emerging Markets covered business new business

Year ended 31 December 2017 **Rm**

	Annualised recurring premiums	Single premiums	PVNBP	PVNBP capitali-sation[1]	APE[2]	VNB	PVNBP margin
South Africa	6,291	31,507	59,083	4.4	9,441	**2,013**	3.4%
Personal Finance	1,672	8,309	15,561	4.3	2,502	**366**	2.4%
Mass Foundation	3,665	29	11,634	3.2	3,667	**1,236**	10.6%
Corporate	915	18,033	26,713	9.5	2,719	**254**	1.0%
OM Wealth	39	10,722	10,761	1.0	1,112	**157**	1.5%
Eliminations of intra-Group sales[3]		(5,586)	(5,586)		(559)		
Rest of Africa	1,109	2,375	6,214	3.5	1,347	**267**	4.3%
SADC	894	2,369	5,651	3.7	1,131	**337**	6.0%
East Africa	100	-	172	1.7	100	**(38)**	-22.2%
West Africa	115	6	391	3.3	116	**(32)**	-8.1%
Asia & Latin America[4]	408	1,621	2,958	3.3	570	**(24)**	-0.8%
OMEM covered business	7,808	35,503	68,255	4.2	11,358	**2,256**	3.3%

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

[2] Annual Premium Equivalent (APE) is calculated as annualised recurring premiums plus 10% of single premiums. For Mass Foundation, this excludes the 'short term pocket' of the 2-IN-ONE savings product, which is not valued on an MCEV basis.

[3] Sales of Corporate products through the retail platform are included in Personal Finance and OM Wealth as well as Corporate sales but eliminated on consolidation.

[4] Asia & Latin America includes Mexico and Colombia only.

Emerging Markets covered business new business

Year ended 31 December 2016 **Rm**

	Annualised recurring premiums	Single premiums	PVNBP	PVNBP capitali-sation[1]	APE[2]	VNB	PVNBP margin
South Africa	6,251	34,314	60,613	4.2	9,683	2,006	3.3%
Personal Finance	1,713	8,904	15,930	4.1	2,603	272	1.7%
Mass Foundation	3,529	38	11,240	3.2	3,533	1,055	9.4%
Corporate	985	20,516	28,587	8.2	3,037	501	1.8%
OM Wealth	24	10,535	10,535	-	1,078	178	1.7%
Eliminations of intra-Group sales[3]		(5,679)	(5,679)		(568)		
Rest of Africa	895	2,002	5,504	3.9	1,095	210	3.8%
SADC	657	1,994	4,963	4.5	857	279	5.6%
East Africa	130	-	251	1.9	130	(59)	-23.6%
West Africa	108	8	290	2.6	108	(10)	-3.4%
Asia & Latin America[4]	438	1,490	2,731	2.8	587	(43)	-1.6%
OMEM covered business	7,584	37,806	68,848	4.1	11,365	2,173	3.2%

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

[2] Annual Premium Equivalent (APE) is calculated as annualised recurring premiums plus 10% of single premiums. For Mass Foundation, this excludes the 'short term pocket' of the 2-IN-ONE savings product, which is not valued on an MCEV basis.

[3] Sales of Corporate products through the retail platform are included in Personal Finance and OM Wealth as well as Corporate sales but eliminated on consolidation.

[4] Asia & Latin America includes Mexico and Colombia only.

South Africa: The positive impacts of the operating assumption and methodology changes made at 31 December 2017 and a more profitable mix of business more than offset the negative impact of the lower sales volumes in 2017, resulting in a stable VNB and an increase in the PVNBP margin.

- The PVNBP margin in Personal Finance increased significantly mainly due to the change in methodology relating to the allocation of distribution costs to life products and the annual rate increases in Greenlight, partly offset by the impact of lower sales volumes and a higher proportion of lower margin investment business.
- In Mass Foundation, the PVNBP margin improved mainly due to higher sales volumes, the positive impacts of the operating assumption and methodology changes at 31 December 2017 and the full impact of pricing reviews on the risk book following the 2016 taxation changes. This was supplemented by advisor manpower successfully targeting a higher proportion of risk product relative to lower margin savings product sales and the lower yield curve at 31 December 2016.
- Corporate's PVNBP margin reduced mainly as a result of the lower sales volumes leading to a strain from distribution costs, the negative impact of operating assumption changes at 31 December 2017 and a lower proportion of group risk sales leading to a less profitable mix of business.
- OM Wealth's PVNBP margin reduced mainly as a result of the strain from distribution costs.

SADC: Higher sales volumes mainly due to significant corporate sales in Malawi and strong smoothed bonus sales in Namibia, partly offset by lower sales in Zimbabwe due to the tough economic conditions. Changes in the mix of business towards a higher proportion of higher margin smoothed bonus business have resulted in a further boost to VNB and PVNBP margin.

East Africa: We continue to build scale in East Africa and as such the VNB is currently negative. Whilst the focus on writing better quality business impacted sales volumes in 2017, lower life expenses resulted in an improvement in the PVNBP margin.

West Africa: We continue to build scale in West Africa and as such the VNB is currently negative. Higher sales volumes due to higher retail sales in Ghana and higher corporate sales in Nigeria are partly offset by currency translation effects from the appreciation of the Rand. Assumption and methodology changes in 2017 further reduced the PVNBP margin.

Asia & Latin America: We continue to build scale in Latin America and as such the VNB is currently negative. The PVNBP margin has improved as a result of a higher proportion of the higher margin endowment assurance product launched in April 2016 in Colombia.

The recurring premium PVNBP capitalisation factor increased relative to 31 December 2016 due to the lower yield curve at 31 December 2016 (compared to 31 December 2015) as PVNBP is based on the opening yield curve position. In addition, a shift to longer term smoothed bonus business in Corporate and the impact of the disability assumption changes in Personal Finance, effectively lengthened the runoff of the recurring premium business.

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(c) Additional new business written by Emerging Markets

This table shows the additional long-term business written, but excluded from covered business.

Total APE sales

Rm

	Year ended 31 December 2017			Year ended 31 December 2016		
	Annualised Recurring Premium	Single Premiums	APE	Annualised Recurring Premium	Single Premiums	APE
Covered business	7,808	35,503	**11,358**	7,584	37,806	**11,365**
Other long-term business	1,592	1,385	**1,731**	1,867	2,942	**2,161**
South Africa	424	-	**424**	423		**423**
Asia & Latin America	1,168	1,385	**1,307**	1,444	2,942	**1,738**
Total APE	9,400	36,888	**13,089**	9,451	40,748	**13,526**

The other long-term business relates to business where profits arise in the life business, but which are not valued on an MCEV basis (i.e. excluded from VNB and PVNBP). In South Africa, this relates to the 'short-term pocket' of the Mass Foundation 2-IN-ONE savings product. In Asia & Latin America, this includes India and China sales. Sales from these businesses are shown as part of long-term business APE sales in the Emerging Markets part of the Financial Disclosure Supplement.

Additional non-covered life sales

The Emerging Markets part of the Financial Disclosure Supplement sets out the information for additional non-covered business sales, which relate to unit trust sales and third party flows into segregated funds. This includes the value of new pension fund asset management business and certain individual unit trust linked retirement annuities written by the Emerging Markets long-term business of R9,875 million (2016: R12,028 million), which is excluded from VNB (as well as APE and PVNBP) above as the profits in this business arise outside of the covered business in the asset management business.

Premium increases

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

2.3 Experience variances

Rm

	Year ended 31 December 2017			Year ended 31 December 2016		
	Adjusted net worth	Value of in-force	MCEV	Adjusted net worth	Value of in-force	MCEV
Persistency	156	(501)	**(345)**	110	(479)	**(369)**
Risk	95	83	**178**	84	113	**197**
Expenses	252	111	**363**	346	6	**352**
Other	119	(169)	**(50)**	144	128	**272**
Experience variances	622	(476)	**146**	684	(232)	**452**

There were positive experience variances (excluding development costs) of R146 million mainly due to positive risk and expense variances, partly offset by negative persistency and other variances. Core underlying experience variances have remained stable in aggregate despite the change in other experience variance items.

(a) Persistency variance

The initiatives put in place during 2016 to manage the adverse persistency experience seen in recent years have improved the variances in Mass Foundation and Personal Finance. This has been more than offset by higher benefit payments on the Corporate savings business, which reflects the impact of the tough economic environment on clients.

(b) Risk variance

The favourable mortality experience in Mass Foundation and disability experience in Personal Finance have continued into 2017. Following the remedial actions taken to address poor performing schemes, disability experience variances have improved since prior year, although losses have continued to emerge in Corporate due to a higher than expected average size and number of disability income benefit claims.

(c) Expense variance

Expense variances have remained positive as a result of tight expense management across the business in response to the tough economic environment.

(d) Other experience variances

Other experience variances are negative in 2017 and include distribution costs carried by the life company in respect of asset management business. The variance in 2016 included significant one-off positive items which have not been repeated in this period (including the review of asset management fees on life funds in Personal Finance).

2.4 Development cost variances

The development cost variances in 2017 include costs in respect of:

- Initiatives to support the expansion into Africa and building the Old Mutual brand;
- Investment in information technology to improve customer experience and deliver efficiencies; and
- Development of alternative products and distribution capabilities.

2.5 Experience driven assumption changes

Rm

	Year ended 31 December 2017			Year ended 31 December 2016		
	Adjusted net worth	Value of in-force	**MCEV**	Adjusted net worth	Value of in-force	**MCEV**
Persistency	(2)	(270)	**(272)**	(342)	(55)	**(397)**
Risk	339	(5)	**334**	210	(18)	**192**
Expenses	464	(138)	**326**	71	(712)	**(641)**
Experience driven	801	(413)	**388**	(61)	(785)	**(846)**

(a) Persistency assumption changes

In light of the higher benefit payments on the Corporate savings business in 2017, and the position in the current economic cycle, a provision has been established to allow for higher expected investment payments in the short term.

(b) Risk assumption changes

Following an investigation into the disability experience of the Personal Finance risk book, the best estimate disability assumptions were reduced resulting in a release of reserves at 31 December 2017.

(c) Expense assumption changes

The positive expense assumption change mainly reflects the capitalisation of expense savings achieved in Mass Foundation and Namibia over recent years, partly offset by strengthening the expense assumptions in Corporate and Latin America.

2.6 Methodology changes and management actions

Methodology changes and management actions include the impact of modelling the cost of reinsurance of risk policies in Personal Finance beyond the guarantee review date. In addition, a reserve for strategic project costs was established within the South African business segments which was offset by the release of the VIF provision previously held centrally.

Various methodology changes and modelling improvements, including a correction to the modelling of tax in the Latin American business, resulted in a decrease in MCEV at 31 December 2017.

Methodology changes and management actions were materially lower than prior year which was boosted mainly by the one-off elective transfer of the protection book to the new tax fund in South Africa in 2016.

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2.7 Investment variances and economic assumption changes

			Rm			
	Year ended 31 December 2017			Year ended 31 December 2016		
	ANW	VIF	**MCEV**	ANW	VIF	**MCEV**
Investment variance on in-force business	559	396	**955**	528	(983)	**(455)**
Investment variance on adjusted net worth	1,035	-	**1,035**	(962)	-	**(962)**
Impact of economic assumption changes	177	472	**649**	57	443	**500**
Investment variances and economic assumption changes	1,771	868	**2,639**	(377)	(540)	**(917)**

(a) Investment variance on in-force business

The positive investment variance on in-force business relates to:

- The positive ANW impact of the favourable performance on South African non-profit annuity portfolios mainly due to the spread earned on credit asset portfolios backing these liabilities as well as interest earned on underwriting reserves in South Africa; and
- The positive VIF impact of higher than expected investment returns on policyholder funds resulting in higher future expected asset-based fee income on most investment and smoothed bonus products in South Africa and Zimbabwe.

(b) Investment variance on ANW

The positive investment variance on ANW relates mostly to very high returns from Zimbabwe's volatile equity market. Following an increase in cash shortages, the Zimbabwe Stock Exchange closed 130.4% ahead of the prior year as a result of investors moving funds into the equity market as an investment alternative. This was partly offset by lower than expected investment return on shareholder funds in South Africa.

(c) Effect of economic assumption changes

The positive economic assumption changes mainly relate to the positive impact of the steepening of the bond curve over the period on the South African retail risk book.

2.8 Closing adjustments

(a) Capital and dividend flows

Capital and dividend flows in 2017 relate mainly to capital injections into non-life businesses in order to support the appropriate capitalisation of all Emerging Markets businesses ahead of Managed Separation. Dividend payments were lower compared to 2016 in line with Old Mutual plc's conservative approach in setting the group dividend.

(b) Foreign exchange variance

The foreign exchange variance relates mainly to the appreciation of the Rand relative to other Emerging Markets currencies, including the appreciation of the Rand to the US Dollar which decreased the value of the Zimbabwe business.

2.9 Operating MCEV earnings by territory

	Rm	
	Year ended 31 December 2017	Year ended 31 December 2016
South Africa	7,335	7,549
Rest of Africa	909	799
Asia & Latin America	(111)	29
OMEM MCEV Operating Earnings	8,133	8,377

- **South Africa:** The decrease in MCEV operating earnings relates mainly to one-off positive impacts in 2016, particularly the elective transfer of a portion of the risk business to the new tax fund, not being repeated in 2017.
- **Rest of Africa:** The increase in MCEV operating earnings is mainly due to increased new business value following the successful targeting of a more profitable mix of business as well as an improvement in mortality experience.
- **Asia & Latin America:** The negative MCEV operating earnings follows a strengthening of the expense assumptions and an improvement to the modelling of tax, which places Latin America in a stronger position going forward.

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3 Reconciliation to IFRS

3.1 Reconciliation of IFRS NAV to MCEV for covered business

The table below provides a reconciliation of the IFRS net asset value (NAV) to the MCEV.

	Rm	
	At 31 December 2017	At 31 December 2016
OMEM IFRS Net Asset Value[1]	**46,393**	**42,115**
Less IFRS net asset value for non-covered business[2]	(18,620)	(17,505)
IFRS net asset value for Covered Business	**27,773**	**24,610**
Adjustment to include long-term business on a statutory basis[3]	(1,153)	(1,057)
Inclusion of Group equity and debt instruments held in life funds	4,517	4,370
Goodwill	-	(134)
Other[4]	(857)	(564)
Adjusted net worth attributable to ordinary equity holders of the parent	**30,280**	**27,225**
Value of in-force business	**34,193**	**31,920**
MCEV	**64,473**	**59,145**

[1] In 2016, Old Mutual International (Guernsey) Ltd ("OMIG") and the OMLACSA international branches are included in non-covered business. In 2017, these were brought into the covered business.

[2] The increase in IFRS net asset value of non-covered business since 31 December 2016 is driven by the capital injections into the asset management business from the covered business, partly offset by an impairment of goodwill in the Property & Casualty business in Rest of Africa and the appreciation of the Rand relative to other Emerging Markets currencies.

[3] The adjustment to include long-term business on a statutory solvency basis reflects deferred acquisition costs and deferred tax differences.

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

3.2 Reconciliation of operating MCEV earnings to IFRS AOP

This table reconciles IFRS AOP Post-tax & Non-controlling Interests (NCI) to Operating MCEV Earnings.

	Rm	
	Year ended 31 December 2017	Year ended 31 December 2016
OMEM Life and Savings AOP post-tax & NCI[1]	**6,784**	**6,879**
Less AOP Life and Savings post-tax & NCI of non-covered business	(186)	(206)
OMEM AOP post-tax & NCI for covered business[1]	6,598	6,673
Other Adjustments[1,2]	(66)	9
Adjusted Net Worth operating earnings	6,532	**6,682**
Other Value of in-force operating earnings[3]	1,601	1,695
Covered business MCEV operating earnings	**8,133**	**8,377**

[1] From 2017 long-term investment returns on assets in excess of capital requirements are now included within OMEM AOP. Comparatives have been restated (31 December 2016: R303m).

[2] Other adjustments include the impacts of differences between IFRS and MCEV reporting, including the different treatment of economic variances (which are included in IFRS AOP but not MCEV operating earnings)

[3] This represents the VIF earnings for the period as set out in section 2.

The reduction in VIF earnings compared to 2016 is driven by the reduced VIF contribution from new business and one-off positive other experience variance items in 2016 not repeated

4 Expected return for following period

The following table sets out the expected existing business contribution for the year ending 31 December 2018, based on the 31 December 2017 closing MCEV.

	Rm				
	Year ended 31 December 2018				
	Free surplus	**Required capital**	**Adjusted net worth**	**Value of in-force**	**MCEV**
Expected existing business contribution (reference rate)	463	1,386	1,849	3,120	4,969
Expected existing business contribution (in excess of reference rate)	15	273	288	451	739

5 MCEV sensitivity information

The tables below show the sensitivity of the MCEV, the value of in-force business and the value of the new business for the year ended 31 December 2017 and the year ended 31 December 2016 to the following:

- **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.
- **Equity/property market value 10% increase/decrease:** Equity and property market value increasing/decreasing by 10%, with all pre-tax investment and economic assumptions unchanged.
- **10bps increase in liquidity spreads:** Recognising the present value of an additional 10bps of liquidity spreads assumed on corporate bonds over the lifetime of the liabilities (annuities only), with credited rates and discount rates changing commensurately.
- **50bps contraction on corporate bond spreads**
- **25% increase in equity/property and swaption implied volatilities:** 25% multiplicative increase in implied volatilities.
- **10% decrease in discontinuance rates/10% decrease in maintenance expenses:** Maintenance expense levels decreasing by 10%, with no corresponding decrease in policy charges.
- **5% decrease in mortality/morbidity rates:** Mortality and morbidity assumptions for assurances decreasing by 5%, with no corresponding decrease in policy charges.
- **5% decrease in annuitant mortality assumption:** Mortality assumption for annuities decreasing by 5%, with no corresponding increase in policy charges.
- **VNB 10% increase in acquisition expenses:** For value of new business, acquisition expenses other than commission and commission-related expenses increasing by 10%, with no corresponding increase in policy charges.
- **VNB on closing economic assumptions:** Value of new business calculated on economic assumptions at the end of the reporting period.
- **Minimum capital requirement:** Required capital equal to the minimum statutory requirement.
- **NHR capital diversification:** Residual non-hedgeable risk capital reduced to incorporate diversification benefits between hedgeable and non-hedgeable risks for covered business.

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	**31 December 2017**	31 December 2016
Central assumptions	**64,473**	59,145
Value given changes in:		
Economic assumptions 100bps increase	**64,238**	58,993
Economic assumptions 100bps decrease	**64,541**	59,126
Equity/property market value 10% increase	**66,574**	60,991
Equity/property market value 10% decrease	**62,350**	57,284
10bps increase of liquidity spreads	**64,644**	59,310
50bps contraction on corporate bond spreads	**64,956**	59,242
25% increase in equity/property implied volatilities	**63,299**	57,752
25% increase in swaption implied volatilities	**64,452**	59,133
10% decrease in discontinuance rates	**66,103**	60,740
10% decrease in maintenance expenses	**66,459**	60,925
5% decrease in mortality/morbidity rates	**66,483**	61,304
5% decrease in annuitant mortality assumption	**64,329**	58,966
Minimum capital requirement	**65,442**	59,983
NHR capital diversification	**64,729**	59,521

MCEV disclosure for covered business in Emerging Markets

For the year ended 31 December 2017

VIF	**31 December 2017**	31 December 2016
		Rm
Central assumptions	**34,193**	31,920
Value given changes in:		
Economic assumptions 100bps increase	**33,948**	31,759
Economic assumptions 100bps decrease	**34,272**	31,910
Equity/property market value 10% increase	**35,758**	33,371
Equity/property market value 10% decrease	**32,605**	30,454
10bps increase of liquidity spreads	**34,364**	32,085
50bps contraction on corporate bond spreads	**34,193**	31,913
25% increase in equity/property implied volatilities	**33,018**	30,527
25% increase in swaption implied volatilities	**34,172**	31,908
10% decrease in discontinuance rates	**35,823**	33,515
10% decrease in maintenance expenses	**36,178**	33,700
5% decrease in mortality/morbidity rates	**36,203**	34,079
5% decrease in annuitant mortality assumption	**34,049**	31,741
Minimum capital requirement	**35,162**	32,758
NHR capital diversification	**34,449**	32,296

VNB	**31 December 2017**	31 December 2016
		Rm
Central assumptions	**2,256**	2,173
Value given changes in:		
Economic assumptions 100bps increase	**2,120**	2,049
Economic assumptions 100bps decrease	**2,392**	2,300
Equity/property market value 10% increase	**2,256**	2,173
Equity/property market value 10% decrease	**2,256**	2,173
10bps increase of liquidity spreads	**2,269**	2,173
50bps contraction on corporate bond spreads	**2,259**	2,178
25% increase in equity/property implied volatilities	**2,256**	2,173
25% increase in swaption implied volatilities	**2,256**	2,173
10% decrease in discontinuance rates	**2,805**	2,633
10% decrease in maintenance expenses	**2,419**	2,348
5% decrease in mortality/morbidity rates	**2,457**	2,387
5% decrease in annuitant mortality assumption	**2,245**	2,162
10% increase in acquisition expenses	**2,126**	2,011
Closing economic assumptions	**2,245**	2,244
Minimum capital requirement	**2,319**	2,222
NHR capital diversification	**2,276**	2,197

6 Methodology

The following section provides information on the methodology used to calculate MCEV results. The methodology used to calculate MCEV at 31 December 2017 is consistent with 31 December 2016 unless explicitly noted in this disclosure.

6.1 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.

(a) Compliance with CFO Forum MCEV Principles

The Market Consistent Embedded Value Principles (Copyright © Stichting CFO Forum Foundation 2008) issued in June 2008 and updated in May 2016 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.

We have not changed our MCEV methodology in light of the May 2016 updates to the CFO Forum MCEV Principles, which allows (but does not require) the alignment of MCEV and Solvency II methodologies and assumptions.

Apart from Principle 14 and the methodology disclosure requirements, the Principles have been materially complied with in the preparation of MCEV information for the Emerging Markets business at 31 December 2017. Principle 14 requires the use of a swap curve as the reference curve, however a government bond curve has been used predominantly as the reference curve in South Africa for consistency with the planned new regulatory solvency reporting regime (SAM) which is expected to confirm the standard use of a government bond curve as the risk free rate. Where the liabilities are hedged with swaps, the risk free rate will remain the swap rate which is allowed under SAM requirements with prior FSB approval, 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 curves as South Africa.

The covered business within certain African entities (Kenya, Uganda, Malawi, Swaziland, Nigeria, Ghana and Botswana) has been included in MCEV at their respective ANW values only. No VIF for these entities have been recognised. However, the VNB for these entities have been calculated allowing for VIF.

(b) Scope of covered business

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 some individual unit trusts and some 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.

6.2 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 making 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, 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, consisting of
  - Present value of future profits (PVFP) from in-force covered business; less
  - Time value of financial options and guarantees; less
  - Frictional costs of required capital; less
  - Cost of residual non-hedgeable risks (CNHR)

(b) Adjusted net worth (ANW)

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. The liability to repay and finance the subordinated debt allocated to the covered business has been allowed for in the ANW.

(c) 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.

(d) Free surplus

Free surplus is the market value of any assets allocated to, but not required to support, the in-force covered business. It is determined as the ANW less the required capital.

The market value of OMLAC(SA)'s investment in Nedbank is excluded from the OMEM ANW as this investment is shown separately on consolidation. In practice the required capital in respect of OMLAC(SA)'s covered business is partially covered by this investment in Nedbank. If this investment were to be included in the OMEM ANW, the reported free surplus of Emerging Markets would increase by R1.9 billion at 31 December 2017.

(e) Value of in-force (VIF) covered business

VIF is the allowance for the future profits net of reinsurance expected to emerge from in-force covered business, after allowing for the cost of non-hedgable risk, the frictional cost of required capital and the time value of options and guarantees. The results are adjusted for default risk of reinsurers where material.

(f) Present value of future profits (PVFP)

The PVFP is calculated as the discounted value of future distributable earnings (taking account of local statutory reserving requirements) that are expected to emerge from the in-force covered business, including the value of contractual renewal of in-force business, on a best estimate basis where assumed earned rates of return and discount rates are equal to the risk free reference rates.

(g) Financial options and guarantees

Allowance is made in the determination of MCEV for the potential impact of variability of investment returns (i.e. asymmetric impact) on future shareholder cash flows of policyholder financial options and guarantees within the in-force covered business.

The time value of financial options and guarantees describes that part of the value of financial options and guarantees that arises from the variability of future investment returns on assets to the extent that it is not already included in the local statutory reserves. For Emerging Markets, the full market consistent value of financial options and guarantees is already reflected in the local statutory reserves, so no additional allowance is required.

The calculation of the value of financial options and guarantees (including the allowance in ANW and VIF components of MCEV) is based on market consistent stochastic modelling techniques.

In the generated economic scenarios, allowance is made, where appropriate, for the effect of dynamic management and/or policyholder actions in different circumstances.

(h) Frictional costs of required capital

From the shareholders' perspective there is a cost due to restrictions on the distribution of required capital that is locked in entities within the Group. An allowance has been made for the frictional costs in respect of the taxation on investment return and investment costs on the assets backing the required capital for covered business, where material.

The run-off pattern of the required capital is projected on an approximate basis over the lifetime of the underlying risks.

(i) Cost of residual non-hedgeable risks (CNHR)

An allowance is made in the CNHR to reflect uncertainty in the best estimate of shareholder cash flows as a result of both symmetric and asymmetric non-hedgeable risks since these risks cannot be hedged in deep and liquid capital markets and are managed, inter alia, by holding risk capital.

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. A cost of capital charge of 2.0% has been applied to non-hedgeable capital over the life of the contracts.

The amount of diversified economic capital held in respect of residual non-hedgeable risks in Emerging Markets is R16,884 million at 31 December 2017 (2016: R16,543 million). The risks considered include mortality and morbidity, persistency and expense risk (among others), but excludes market risks.

(j) Participating business

For participating business in Emerging Markets, the method of valuation makes assumptions about future bonus rates and the determination of profit allocation between policyholders and shareholders. These assumptions are made on a basis consistent with other projection assumptions, especially the projected future risk free investment returns, established Company practice (with due consideration of the PPFM for South African business), past external communication, any payout smoothing strategy, local market practice, regulatory/contractual restrictions and bonus participation rules.

Where current benefit levels are higher than can be supported by the existing fund assets together with projected investment returns, a downward 'glide path' in benefit levels is projected so that the policyholder fund would be exhausted on payment of the last benefit.

(k) 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.

(l) New business and renewals

The market consistent value of new business measures the value of the future profits expected to emerge from all new business sold, and in certain cases from premium increases to existing contracts, during the reporting period after allowance for the time value of financial options and guarantees, frictional costs and the cost of residual non-hedgeable risks associated with writing the new business.

VNB includes contractual renewals and voluntary increments that are not allowed for in PVFP. Where increases are allowed for in PVFP, variations from this expectation are classified as experience variance, rather than new business.

The key principles applied in calculating VNB are noted below:

- Economic assumptions at the start of the reporting period are used, except for OMLAC(SA)'s Non-Profit Annuity products where point of sale assumptions are used that are consistent with the pricing basis.
- Demographic and operating assumptions at the end of the reporting period are used.
- VNB is calculated at point of sale and rolled forward to the end of the reporting period.
- Generally a stand-alone approach is used unless a marginal approach would better reflect the additional value to shareholders created through the activity of writing new business.
- Expense allowances include all acquisition expenses, including any acquisition expense overruns. Strategic business development expenses are excluded.
- VNB is calculated net of tax, reinsurance and non-controlling interests.
- Economic and operating variances are not attributed to VNB.

PVNBP is calculated at point of sale using premiums before reinsurance and applying a valuation approach that is consistent with the calculation of VNB.

7 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 2016 calculations unless explicitly stated as a change in this disclosure note.

7.1 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.

A liquidity premium adjustment has been applied to OMLAC(SA)'s immediate annuity business. For this business, the adjusted risk free reference rates were derived at 31 December 2017 by adding 75bps of liquidity premium (2016: 70bps) and 50bps of liquidity premium (2016: 70bps) to the reference rates used for setting investment return and discounting assumptions for Personal Finance and Corporate immediate annuities respectively.

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.

South African risk free reference spot yields (excluding liquidity adjustments) and expense inflation

		%
	Risk free rate	**Expense inflation**
At 31 December 2017 (bond curve)		
1 year	**7.3**	**5.6**
5 years	**8.1**	**6.0**
10 years	**9.3**	**7.0**
20 years	**10.5**	**8.1**
At 31 December 2016 (bond curve)		
1 year	8.0	6.7
5 years	8.6	6.7
10 years	9.3	7.4
20 years	10.2	8.3

(b) 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 bond return equals the one year risk free reference rate (plus the liquidity premium for applicable product portfolios).
- The property risk premium is 1.5%.

(c) Effective tax rates

The weighted average effective tax rate that applies to the cash flow projections in OMLAC(SA) at 31 December 2017 is 29% (2016: 29%).

7.2 Non-economic assumptions

The appropriate non-economic projection assumptions for future experience (e.g. mortality, disability, 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), one-off costs and development projects.

- All expected maintenance expense overruns affecting the covered business are allowed for in the calculations at the time identified.
- 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).
- Holding company expenses have been included to the extent that they are notionally allocated to the covered business. The allocation of these expenses is based on the proportion that the management expenses incurred by the covered businesses bears to the management expenses incurred by all subsidiary businesses in Emerging Markets.