MCEV disclosure for covered business in Emerging Markets

For the six months ended 30 June 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 30 June 2017 has been calculated predominantly using a bond yield curve as the reference rate. This aligns with the anticipated Solvency Assessment and Management (SAM) reporting basis, but departs from MCEV Principles.

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 overall operating return on embedded value (RoEV) remained strong at 12.8% in the first half of 2017.
- MCEV operating earnings of R3,769 million in the first half of 2017 are 10% lower than in the first half of 2016 due to lower VNB and one-off positive impacts in the first half of 2016 not being repeated in 2017.
- Due to the tough economic conditions and an ongoing focus on quality of new business, total APE sales were 10% below prior year. Given exceptionally strong sales in 2016, Corporate sales were lower in the first half of 2017 with lower group risk sales following the repricing of most of the book to address the prior year adverse underwriting experience.
- PVNBP decreased by 13% and VNB decreased by 14% compared to prior year as a result of the lower sales volumes due to the challenging macro environment and the effect of 2016 year end operating assumption and methodology changes in Corporate and Mass Foundation. Despite the lower sales volumes, the PVNBP margin held up well, remaining relatively stable at 3.2%.
- Experience variances remained positive albeit in total lower than prior year, with improved expense and risk profits being partly offset by small persistency losses. Disability experience variances in South Africa have improved significantly since prior year following the remedial actions taken to address poor performing schemes in Corporate. Expense profits reflect tighter expense management across the business in response to the tough economic environment. Other experience variances were negative, with the first half of 2016 having exceptional positive one off items (including the review of asset management fees on life funds in Retail Affluent).
- Economic variances were positive mainly due to higher than expected investment returns in Zimbabwe following the material increase in equity market levels and the positive impact of the steepening of the South African bond curve over the period.

1.2 Components of MCEV for covered business

The MCEV increased by 6% compared to 31 December 2016 due to strong operating earnings.

The following table sets out the components of Market Consistent Embedded Value for covered business as at 30 June 2017.

			Rm
Emerging Markets	**At 30 June 2017**	At 30 June 2016	At 31 December 2016
Adjusted net worth (ANW)	**29,840**	25,144	27,225
Free surplus	**8,001**	5,447	6,173
Required capital	**21,839**	19,697	21,052
Value of in-force (VIF)	**32,916**	32,622	31,920
Present value of future profits (PVFP)	**39,010**	38,484	37,911
Frictional costs	**(3,738)**	(3,523)	(3,672)
Cost of residual non-hedgeable risks (CNHR)	**(2,356)**	(2,339)	(2,319)
MCEV	**62,756**	57,766	59,145

Required capital has increased since 31 December 2016 mainly due to growth in the covered business book.

Frictional costs and 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 six months ended 30 June 2017

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

						Rm
		Six months ended 30 June 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	**(1,798)**	**1,191**	**(607)**	**1,605**	**998**
Expected existing business contribution (reference rate)		**148**	**662**	**810**	**1,543**	**2,353**
Expected existing business contribution (in excess of reference rate)		**74**	**125**	**199**	**210**	**409**
Transfers from VIF and required capital to free surplus		**3,811**	**(1,467)**	**2,344**	**(2,344)**	**-**
Experience variances	2.3	**219**	**105**	**324**	**(177)**	**147**
Development cost variances	2.4	**(115)**	**-**	**(115)**	**-**	**(115)**
Experience driven assumption changes	2.5	**-**	**-**	**-**	**-**	**-**
Methodology changes and management actions	2.6	**(75)**	**117**	**42**	**(65)**	**(23)**
Operating MCEV earnings		**2,264**	**733**	**2,997**	**772**	**3,769**
Investment variances and economic assumption changes	2.7	**296**	**155**	**451**	**256**	**707**
Regulatory and tax changes		**(8)**	**-**	**(8)**	**(10)**	**(18)**
Total MCEV earnings		**2,552**	**888**	**3,440**	**1,018**	**4,458**
Closing adjustments		**(724)**	**(101)**	**(825)**	**(22)**	**(847)**
Capital and dividend flows	2.8	**(548)**	**(1)**	**(549)**	**-**	**(549)**
Foreign exchange variance	2.8	**(176)**	**(100)**	**(276)**	**(22)**	**(298)**
Closing MCEV		**8,001**	**21,839**	**29,840**	**32,916**	**62,756**
Return on MCEV (RoEV)% per annum[1]						**12.8%**

[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.

2.1 Prior period comparatives

Analysis of change for covered business for the six months ended 30 June 2016

						Rm
		Six months ended 30 June 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	(1,570)	961	(609)	1,771	1,162
Expected existing business contribution (reference rate)		205	638	843	1,539	2,382
Expected existing business contribution (in excess of reference rate)		34	116	150	214	364
Transfers from VIF and required capital to free surplus		3,523	(1,167)	2,356	(2,356)	-
Experience variances	2.3	57	128	185	160	345
Development cost variances	2.4	(121)	-	(121)	-	(121)
Experience driven assumption changes	2.5	-	-	-	-	-
Methodology changes and management actions	2.6	(110)	-	(110)	160	50
Operating MCEV earnings		2,018	676	2,694	1,488	4,182
Investment variances and economic assumption changes	2.7	(174)	(86)	(260)	35	(225)
Regulatory and tax changes		4	-	4	3	7
Total MCEV earnings		1,848	590	2,438	1,526	3,964
Closing adjustments		(2,354)	(3)	(2,357)	(152)	(2,509)
Capital and dividend flows	2.8	(2,352)	-	(2,352)	-	(2,352)
Foreign exchange variance	2.8	(119)	(134)	(253)	(104)	(357)
Other[1]	2.8	117	131	248	(48)	200
Closing MCEV		5,447	19,697	25,144	32,622	57,766
Return on MCEV (RoEV)% per annum[2]						14.8%

[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 annualised operating MCEV earnings after tax divided by opening MCEV. The operating assumption changes and other operating variances are not annualised.

Analysis of change 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.

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2.2 New business

As a result of the tough economic conditions placing pressure on disposable incomes and a desire to avoid writing business of poor quality, covered sales were 9% below prior year (as measured by APE). Single premium life investments have been negatively affected by customers reverting to shorter term interest-bearing products. Given exceptionally strong sales in 2016, Corporate sales were lower in the first half of 2017 with lower group risk sales following 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)

			%
	30 June 2017	30 June 2016	31 December 2016
Margin at the end of comparative reporting period	**3.3**	3.2	3.3
Change in volume and new business expenses	**(0.3)**	-	0.1
Change in country and product mix	**0.5**	(0.3)	(0.1)
Change in assumptions and models[1]	**(0.3)**	0.5	(0.1)
Change in economic assumptions	**-**	(0.1)	-
Change in tax/regulation	**-**	-	-
Margin at the end of the reporting period	**3.2**	3.3	3.2

[1] Includes experience driven assumption changes, methodology changes and management actions and for 30 June 2016 a change in the treatment of OMUT.

Overall there is a small decrease 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 Retail Affluent.

The positive 0.5% change in country and product mix reflects the phase in of premium increases for the Mass Foundation and Retail Affluent risk books following the 2016 taxation changes in South Africa, a reduced proportion of lower margin Corporate sales in South Africa and an increased proportion of higher margin smoothed bonus sales in Namibia. This was partly offset by a reduced proportion of higher margin Corporate group risk sales in South Africa.

Assumption and model changes have had a negative impact of 0.3% on PVNBP margins. This is mainly due to modelling improvements in Mass Foundation and Corporate, partly offset by lower expense assumptions in Namibia.

Although the decrease in the yield curve between 31 December 2015 and 31 December 2016 increases the value of new business, the impact on the margin is muted as the lower yield curve increases the PVNBP by a similar proportion overall.

(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

Six months ended 30 June 2017 **Rm**

	Annualised recurring premiums	Single premiums	PVNBP	PVNBP capitali-sation[1]	APE[2]	VNB	PVNBP margin
South Africa	2,770	14,538	26,531	4.3	4,224	**880**	3.3%
Retail Affluent	844	9,270	12,850	4.2	1,771	**165**	1.3%
Mass Foundation	1,585	12	5,744	3.6	1,586	**585**	10.2%
Corporate	341	8,178	10,859	7.9	1,159	**130**	1.2%
Eliminations of intra-Group sales[3]		(2,922)	(2,922)		(292)		
Rest of Africa	437	1,053	2,985	4.4	542	**127**	4.3%
Namibia	193	744	1,732	5.1	267	**128**	7.4%
Zimbabwe	87	236	693	5.3	111	**42**	6.0%
East Africa	45	-	102	2.3	45	**(22)**	-21.3%
Other African Countries[4]	112	73	458	3.4	119	**(21)**	-4.6%
Asia & Latin America[5]	197	736	1,533	4.0	271	**(9)**	-0.6%
OMEM covered business	3,404	16,327	31,049	4.3	5,037	**998**	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 both Retail Affluent and Corporate sales but eliminated on consolidation.

[4] Other African Countries includes Malawi, Swaziland, Nigeria, Ghana and Botswana.

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

Emerging Markets covered business new business

Six months ended 30 June 2016 **Rm**

	Annualised recurring premiums	Single premiums	PVNBP	PVNBP capitali-sation[1]	APE[2]	VNB	PVNBP margin
South Africa	3,010	16,850	31,711	4.9	4,695	1,094	3.5%
Retail Affluent	850	10,218	13,641	4.0	1,872	203	1.5%
Mass Foundation	1,586	22	6,070	3.8	1,588	602	9.9%
Corporate	574	9,533	14,923	9.4	1,527	289	1.9%
Eliminations of intra-Group sales[3]		(2,923)	(2,923)		(292)		
Rest of Africa	444	981	2,616	3.7	542	92	3.5%
Namibia	181	518	1,308	4.4	233	78	5.9%
Zimbabwe	100	361	776	4.2	136	49	6.4%
East Africa	66	-	130	2.0	66	(30)	-23.3%
Other African Countries[4]	97	102	402	3.1	107	(5)	-1.3%
Asia & Latin America[5]	205	724	1,352	3.1	277	(24)	-1.8%
OMEM covered business	3,659	18,555	35,679	4.7	5,514	1,162	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 both Retail Affluent and Corporate sales but eliminated on consolidation.

[4] Other African Countries includes Malawi, Swaziland, Nigeria and Ghana.

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

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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%
Retail Affluent	1,737	19,439	26,465	4.0	3,681	450	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%
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%
Namibia	408	1,124	3,037	4.7	520	168	5.5%
Zimbabwe	183	677	1,508	4.5	251	102	6.7%
East Africa	130	-	251	1.9	130	(59)	-23.6%
Other African Countries[4]	174	201	708	2.9	194	(1)	-0.3%
Asia & Latin America[5]	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 both Retail Affluent and Corporate sales but eliminated on consolidation.

[4] Other African Countries includes Malawi, Swaziland, Nigeria, Ghana and Botswana.

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

South Africa: Compared to the first half of 2016, the positive impact of a more profitable mix of business was more than offset by the negative impacts of the operating assumption and methodology changes made at 31 December 2016 and lower sales volumes in the first half of 2017, resulting in a net decrease in VNB and the PVNBP margin.

- The PVNBP margin in Retail Affluent reduced as a result of the lower sales volumes in the first half of 2017 leading to distribution strains, partly offset by the lower yield curve at 31 December 2016.
- In Mass Foundation, the PVNBP margin improved mainly due to the impact of phasing in premium increases over the year on the risk book following the 2016 taxation changes. This was supplemented by a higher proportion of risk product relative to lower margin savings product sales, improved distribution efficiencies and the lower yield curve at 31 December 2016. These positive impacts were partly offset by the negative impact of the operating assumption and methodology changes made 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 methodology changes at 31 December 2016 and a lower proportion of group risk sales leading to a less profitable mix of business.

Namibia: Very strong smoothed bonus sales and a large single premium Corporate deal in the first half of 2017 have boosted sales volumes and VNB. 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.

Zimbabwe: Lower reported Rand sales volumes are largely as a result of currency translation effects from the appreciation of the Rand to the US Dollar (PVNBP increased by 4% on a constant currency basis). In addition, a lower proportion of credit life and single premium smoothed bonus sales led to a small reduction in PVNBP margin.

East Africa, Other African countries and Asia & Latin America: We continue to build scale in these other businesses and as such the VNB is currently negative. The PVNBP margin for East Africa has improved as a result of lower expenses and a higher proportion of retail affluent sales. The PVNBP margin for Other African Countries has reduced due to higher sales volumes in countries which are still sub-scale. The PVNBP margin for Asia & Latin America 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 reduced relative to 30 June 2016 mainly due to the operating assumption and methodology changes made at 31 December 2016 in Corporate and Mass Foundation (which shortened the effective duration of the business), partly offset by the impact of the lower yield curve at 31 December 2016 (compared to 31 December 2015) as PVNBP is based on the opening yield curve position.

(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

	Six months ended 30 June 2017			Six months ended 30 June 2016			Year ended 31 December 2016		
	Annualised Recurring Premium	Single Premiums	**APE**	Annualised Recurring Premium	Single Premiums	**APE**	Annualised Recurring Premium	Single Premiums	**APE**
Covered business	3,404	16,327	**5,037**	3,659	18,555	**5,514**	7,584	37,806	**11,365**
Other long-term business	967	1,223	**1,089**	1,053	2,738	**1,327**	1,867	2,942	**2,161**
South Africa	180	-	**180**	240		**240**	423		**423**
Asia & Latin America	787	1,223	**909**	813	2,738	**1,087**	1,444	2,942	**1,738**
Total APE	4,371	17,550	**6,126**	4,712	21,293	**6,841**	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 (section 3.4).

Additional non-covered life sales

The Emerging Markets part of the Financial Disclosure Supplement (section 3.7) 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 R5,039 million (30 June 2016: R6,822 million; 31 December 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

	Six months ended 30 June 2017			Six months ended 30 June 2016			Year ended 31 December 2016		
	Adjusted net worth	Value of in-force	**MCEV**	Adjusted net worth	Value of in-force	**MCEV**	Adjusted net worth	Value of in-force	**MCEV**
Persistency	62	(121)	**(59)**	(2)	(4)	**(6)**	110	(479)	**(369)**
Risk	159	39	**198**	(54)	(53)	**(107)**	84	113	**197**
Expenses	168	33	**201**	108	11	**119**	346	6	**352**
Other	(65)	(128)	**(193)**	133	206	**339**	144	128	**272**
Experience variances	324	(177)	**147**	185	160	**345**	684	(232)	**452**

There were positive experience variances (excluding development costs) of R147 million mainly due to improved mortality, disability and expense variances, partly offset by negative persistency and other variances.

(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 Retail Affluent. 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, and higher group disability scheme terminations following rate reviews over the period.

(b) Risk variance

Following the remedial actions taken to address poor performing schemes, disability experience variances have improved significantly 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. The favourable mortality experience has continued into 2017 at higher levels across all South African segments, supported by growth in the Mass Foundation risk book and improvements in the Retail Affluent and Corporate group life businesses.

(c) Expense variance

Expense variances have improved since 2016 as a result of tighter 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 as well as an increase in the cost of capital in Zimbabwe (as included in the calculation of CNHR and frictional cost for this business) due to the higher allocated capital over the period. The variance in the first half of 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 Retail Affluent). The change in other experience variance items has masked the improvement in the core underlying experience variances in aggregate.

2.4 Development cost variances

Development costs have reduced mainly due to lower expenditure in Nigeria and Ghana, partly offset by an increase in project expenditure in South Africa. The development cost variances in the first half of 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

There were no experience driven assumption changes for the six months ended 30 June 2017.

2.6 Methodology changes and management actions

Various methodology changes and modelling improvements, including a correction to the modelling of the Corporate administration business, resulted in a small decrease in MCEV at 30 June 2017.

2.7 Investment variances and economic assumption changes

	Six months ended 30 June 2017			Six months ended 30 June 2016			Year ended 31 December 2016		
Rm	ANW	VIF	**MCEV**	ANW	VIF	**MCEV**	ANW	VIF	**MCEV**
Investment variance on in-force business	329	(214)	**115**	334	(142)	**192**	528	(983)	**(455)**
Investment variance on adjusted net worth	122	-	**122**	(647)	-	**(647)**	(962)	-	**(962)**
Impact of economic assumption changes	-	470	**470**	53	177	**230**	57	443	**500**
Investment variances and economic	451	256	**707**	(260)	35	**(225)**	(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; partly offset by
- The negative VIF impact of lower than expected investment returns on policyholder funds resulting in lower future expected asset-based fee income on most investment and smoothed bonus products in South Africa and Namibia.

(b) Investment variance on ANW

The positive investment variance on ANW relates mostly to higher than expected investment returns in Zimbabwe following the continued material increase in equity market levels over the first half of 2017, partly offset by lower than expected investment return on shareholder funds in South Africa as a result of the relatively flat market there.

(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 dividends paid from OMEM covered business (R2.6 billion), with contributions from dividends received from Nedbank (R1.6 billion) and Old Mutual Insure (R0.5 billion). The lower dividends compared to the first half of 2016 is 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.

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2.9 Operating MCEV earnings by territory

			Rm
	Six months ended 30 June 2017	Six months ended 30 June 2016	Year ended 31 December 2016
South Africa	3,388	3,942	7,549
Rest of Africa	330	261	799
Namibia	369	299	688
Zimbabwe	127	146	303
East Africa	(3)	(27)	(86)
Other African Countries	(163)	(157)	(106)
Asia & Latin America	51	(21)	29
OMEM MCEV Operating Earnings	3,769	4,182	8,377

- **South Africa:** The decrease in MCEV operating earnings relates mainly to a lower VNB (as discussed in section 2.2 above) and one-off positive impacts in the first half of 2016 not being repeated in 2017.
- **Namibia:** The increase in MCEV operating earnings relates mainly to a much stronger VNB and positive modelling changes, partly offset by lower risk and persistency experience variances.
- **Zimbabwe:** The decrease in MCEV operating earnings relates mainly to the currency translation effect of the appreciation of the Rand to the US Dollar (MCEV operating earnings increased by 2% on a constant currency basis). In addition, improved persistency and mortality experience variances were largely offset by a higher cost of capital as included in the calculation of CNHR and frictional cost for this business.
- **East Africa:** The improvement in MCEV operating earnings is driven by lower expenses following the integration of the East African life companies and a higher VNB.
- **Other African Countries:** The decrease in MCEV operating earnings is driven by a lower VNB and an increase in expense provisions in Malawi, largely offset by lower development costs.
- **Asia & Latin America:** The increase in MCEV operating earnings relates mainly to an improvement in persistency and mortality experience as well as a higher VNB.

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.

	At 30 June 2017	At 30 June 2016	At 31 December 2016
			Rm
OMEM IFRS Net Asset Value	**44,756**	**41,290**	**41,622**
Less IFRS net asset value for non-covered business[1]	(16,679)	(18,400)	(17,012)
IFRS net asset value for Covered Business	**28,077**	**22,890**	**24,610**
Adjustment to include long-term business on a statutory basis[2]	(1,108)	(1,021)	(1,057)
Inclusion of Group equity and debt instruments held in life funds	3,701	3,880	4,370
Goodwill	(138)	(150)	(134)
Other[3]	(692)	(455)	(564)
Adjusted net worth attributable to ordinary equity holders of the parent	**29,840**	**25,144**	**27,225**
Value of in-force business	**32,916**	**32,622**	**31,920**
MCEV	**62,756**	**57,766**	**59,145**

[1] The decrease in IFRS net asset value of non-covered business since 31 December 2016 is driven 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. These negative impacts were partly offset by the transfer of the investment in Kotak Mahindra and Old Mutual Guodian from Old Mutual plc to Emerging Markets.

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

[3] 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.

	Six months ended 30 June 2017	Six months ended 30 June 2016	Year ended 31 December 2016
			Rm
OMEM Life and Savings AOP post-tax & NCI[1]	**3,118**	**2,995**	**6,879**
Less AOP Life and Savings post-tax & NCI of non-covered business	(153)	(126)	(206)
OMEM AOP post-tax & NCI for covered business[1]	2,965	2,869	6,673
Other Adjustments[1,2]	32	(175)	9
Adjusted Net Worth operating earnings	2,997	**2,694**	**6,682**
Other Value of in-force operating earnings[3]	772	1,488	1,695
Covered business MCEV operating earnings	**3,769**	**4,182**	**8,377**

[1] From 30 June 2017 long-term investment returns on assets in excess of capital requirements are now included within OMEM AOP. Comparatives have been restated (30 June 2016: R165m; 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 half year 2016 is driven by the negative impact of methodology changes and modelling improvements; the impact of lower sales volumes on VIF generation in 2017; one-off positive other experience variance items in 2016 not repeated; and the lower persistency of Corporate group disability schemes.

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4 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 six months ended 30 June 2017, six months ended 30 June 2016 and 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.
- **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.

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 2017**	30 June 2016	31 December 2016
Central assumptions	**62,756**	57,766	59,145
Value given changes in:			
Economic assumptions 100bps increase	**62,407**	57,565	58,993
Economic assumptions 100bps decrease	**62,894**	57,782	59,126
10bps increase of liquidity spreads	**62,920**	57,939	59,310

			Rm
VIF	**30 June 2017**	30 June 2016	31 December 2016
Central assumptions	**32,916**	32,622	31,920
Value given changes in:			
Economic assumptions 100bps increase	**32,559**	32,411	31,759
Economic assumptions 100bps decrease	**33,062**	32,648	31,910
10bps increase of liquidity spreads	**33,081**	32,795	32,085

			Rm
VNB	**30 June 2017**	30 June 2016	31 December 2016
Central assumptions	**998**	1,162	2,173
Value given changes in:			
Economic assumptions 100bps increase	**935**	1,102	2,049
Economic assumptions 100bps decrease	**1,063**	1,224	2,300
10bps increase of liquidity spreads	**1,003**	1,167	2,173

5 Methodology

The following section provides information on the methodology used to calculate MCEV results. The methodology used to calculate MCEV at 30 June 2017 is consistent with 31 December 2016 unless explicitly noted in this disclosure.

5.1 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 30 June 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 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.

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.

5.2 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) 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.

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(c) 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 R16,266 million at 30 June 2017 (30 June 2016: R16,196 million; 31 December 2016: R16,543 million). The risks considered include mortality and morbidity, persistency and expense risk (among others), but excludes market risks.

(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.

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

6.1 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 30 June 2017 by adding 75bps of liquidity premium (30 June 2016: 60bps; 31 December 2016: 70bps) to the reference rates used for setting investment return and discounting assumptions.

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 30 June 2017 (bond curve)		
1 year	**7.6**	**5.4**
5 years	**8.2**	**5.9**
10 years	**9.4**	**7.1**
20 years	**10.7**	**8.5**
At 30 June 2016 (bond curve)		
1 year	7.9	6.8
5 years	8.5	7.2
10 years	9.2	7.7
20 years	10.1	8.5
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 30 June 2017 is 29% (30 June 2016: 29%; 31 December 2016: 29%).

6.2 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).
- Notional unallocated Old Mutual plc holding company expenses have been included to the extent that they are allocated to the covered business. The amount of these expenses attributable to the covered business in Emerging Markets at 30 June 2017 are R79 million (30 June 2016: R102 million; 31 December 2016: R194 million). 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 Old Mutual plc.