European Embedded Value (EEV) basis results

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Description of EEV basis reporting

In broad terms, IFRS profit for long-term business reflects the aggregate of results on a traditional accounting basis. By contrast, EEV is a way of reporting the value of the life insurance business.

The EEV basis results have been prepared in accordance with the EEV Principles dated April 2016, issued by the European Insurance CFO Forum. The EEV Principles provide consistent definitions, a framework for setting actuarial assumptions, and an approach to the underlying methodology and disclosures.

Results prepared under the EEV Principles capture the discounted value of future profits expected to arise from the current book of long-term business. The results are prepared by projecting cash flows, by product, using best estimate assumptions for all relevant factors. Furthermore, in determining these expected profits, full allowance is made for the risks attached to their emergence and the associated cost of capital, taking into account recent experience in assessing likely future persistency, mortality, morbidity and expenses. Further details are explained in notes 12 and 13.

^{*} The additional financial information is not covered by the KPMG LLP independent review opinion.

European Embedded Value (EEV) Basis Results

POST-TAX OPERATING PROFIT BASED ON LONGER-TERM INVESTMENT RETURNS

		2018 £m	2017 £m	1
		Half year	Half year	Full year
	Note		notes (iii)(iv)	note (iii)
Asia operations				_
New business	3	1,122	1,092	2,368
Business in force	4	631	549	1,337
Long-term business		1,753	1,641	3,705
Asset management		77	73	155
Total		1,830	1,714	3,860
US operations		,,		
New business	3	466	436	906
Business in force	4	539	452	1,237
Long-term business		1,005	888	2,143
Asset management		(2)	(4)	7
Total		1,003	884	2,150
UK and Europe operations				
New business	3	179	161	342
Business in force	4	592	304	673
Long-term business		771	465	1,015
General insurance commission		15	14	13
Total insurance operations		786	479	1,028
Asset management		221	201	403
Total		1,007	680	1,431
Other income and expenditure ^{note (i)}		(340)	(381)	(746)
Restructuring costs ^{note (ii)}		(57)	(27)	(97)
Operating profit based on longer-term investment returns		3,443	2,870	6,598
Analysed as profit (loss) from:	_			
New business	3	1,767	1,689	3,616
Business in force	4	1,762	1,305	3,247
Long-term business		3,529	2,994	6,863
Asset management and general insurance commission		311	284	578
Other results		(397)	(408)	(843)
		3,443	2,870	6,598

- EEV basis other income and expenditure represents the post-tax IFRS basis results for other operations (including Group and Asia Regional Head Office, holding company borrowings, Africa operations and Prudential Capital) less the unwind of expected margins on the internal management of the assets of the covered business (as explained in note 12(a)(vii)).

 Restructuring costs comprise the post-tax charge recognised on an IFRS basis and the additional amount recognised on an EEV basis for the shareholders' share incurred by the PAC with-profits fund. The costs are primarily incurred in the UK, Europe and Asia and represent the cost of business transformation and integration.

- The comparative results have been prepared using previously reported average exchange rates for the period.

 The half year 2017 comparative results have been re-presented from those previously published following the reassessment of the Group's operating segments as described in note B1.3 of the IFRS financial statements. This approach has been adopted consistently throughout this supplementary information.

POST-TAX SUMMARISED CONSOLIDATED INCOME STATEMENT

		2018 £m	2017 £m	
	Note	Half year	Half year	Full year
Asia operations		1,830	1,714	3,860
US operations		1,003	884	2,150
UK and Europe operations		1,007	680	1,431
Other income and expenditure		(340)	(381)	(746)
Restructuring costs		(57)	(27)	(97)
Operating profit based on longer-term investment returns		3,443	2,870	6,598
Short-term fluctuations in investment returns	5	(1,234)	739	2,111
Effect of changes in economic assumptions	6	592	(50)	(102)
Mark to market value movements on core structural borrowings		579	(262)	(326)
Impact of US tax reform	16	-	-	390
(Loss) profit attaching to corporate transactions	15	(412)	-	80
Total non-operating (loss) profit		(475)	427	2,153
Profit for the period		2,968	3,297	8,751
Attributable to:				
Equity holders of the Company		2,967	3,297	8,750
Non-controlling interests		[′] 1	, -	1
		2,968	3,297	8,751

Basic earnings per share

	2018	2017	
	Half year	Half year	Full year
Based on post-tax operating profit including longer-term investment returns			
after non-controlling interests (in pence)	133.8p	111.9p	257.0p
Based on post-tax profit attributable to equity holders of the Company (in pence)	115.3p	128.5p	340.9p
Weighted average number of shares (millions)	2,573	2,565	2,567

MOVEMENT IN SHAREHOLDERS' EQUITY

		2018 £m	2017 £m	
	Note	Half year	Half year	Full year
Profit for the period attributable to equity holders of the Company		2,967	3,297	8,750
Items taken directly to equity:				
Exchange movements on foreign operations and net investment hedges		523	(1,045)	(2,045)
External dividends		(840)	(786)	(1,159)
Mark to market value movements on Jackson assets backing surplus and				
required capital		(32)	31	40
Other reserve movements		127	55	144
Net increase in shareholders' equity	8	2,745	1,552	5,730
Shareholders' equity at beginning of period		44,698	38,968	38,968
Shareholders' equity at end of period	8	47,443	40,520	44,698

	30 J	un 2018 £m	 -	30 J	un 2017 £m		31 D	ec 2017 £m	
		Asset			Asset			Asset	
		manage-			manage-			manage-	
	Long-term	ment		Long-term	ment		Long-term	ment	
	business	and other	Group	business	and other	Group	business	and other	Group
Comprising:	operations	operations	total	operations	operations	total	operations	operations	total
Asia operations	22,194	414	22,608	19,851	382	20,233	21,191	401	21,592
US operations	14,096	204	14,300	11,370	202	11,572	13,257	235	13,492
UK and Europe operations	11,614	2,029	13,643	10,878	1,882	12,760	11,713	1,914	13,627
Other operations	-	(3,108)	(3,108)	-	(4,045)	(4,045)		(4,013)	(4,013)
Shareholders' equity at end of period	47,904	(461)	47,443	42,099	(1,579)	40,520	46,161	(1,463)	44,698
Representing:									
Net assets attributable to equity									
holders of the Company excluding									
acquired goodwill, holding company net									
borrowings and non-controlling interests	47,659	2.122	49,781	41.854	1.292	43.146	45.917	1.562	47,479
Acquired goodwill	245	1,214	•	245	1,230	1,475	244	1,214	
Holding company net borrowings		-,	,		-,	,		-,	,
at market value ^{note 7}	-	(3,797)	(3,797)	-	(4,101)	(4,101)	-	(4,239)	(4,239)
	47,904		47,443	42,099	(1,579)	40,520	46,161		44,698

SUMMARY STATEMENT OF FINANCIAL POSITION

		2018 £m	2017 £m	า
	Note	30 Jun	30 Jun	31 Dec
Total assets less liabilities, before deduction of insurance funds		429,035	419,811	434,615
Less insurance funds:*				
Policyholder liabilities (net of reinsurers' share) and unallocated surplus				
of with-profits funds		(413,145)	(404,361)	(418,521)
Less shareholders' accrued interest in the long-term business	8	31,561	25,071	28,611
		(381,584)	(379,290)	(389,910)
Less non-controlling interests		(8)	(1)	(7)
Total net assets attributable to equity holders of the Company	8	47,443	40,520	44,698
Share capital		129	129	129
Share premium		1,954	1,937	1,948
IFRS basis shareholders' reserves		13,799	13,383	14,010
Total IFRS basis shareholders' equity	8	15,882	15,449	16,087
Additional EEV basis retained profit	8	31,561	25,071	28,611
Total EEV basis shareholders' equity	8	47,443	40,520	44,698

^{*} Including liabilities in respect of insurance products classified as investment contracts under IFRS 4.

Net asset value per share

	2018	2017	
	30 Jun	30 Jun	31 Dec
Based on EEV basis shareholders' equity of £47,443 million			
(30 Jun 2017: £40,520 million, 31 Dec 2017: £44,698 million) (in pence)	1,830p	1,567p	1,728p
Number of issued shares at period end (millions)	2,592	2,586	2,587
Annualised return on embedded value*	15%	15%	17%

^{*} Annualised return on embedded value is based on EEV post-tax operating profit after non-controlling interests, as a percentage of opening EEV basis shareholders' equity. Half year profits are annualised by multiplying by two.

NOTES ON THE EEV BASIS RESULTS

1 Basis of preparation

The EEV basis results have been prepared in accordance with the EEV Principles dated April 2016, issued by the European Insurance CFO Forum. Where appropriate, the EEV basis results include the effects of adoption of EU-endorsed IFRS.

The directors are responsible for the preparation of the supplementary information in accordance with the EEV Principles. The EEV basis results for half year 2018 and half year 2017 are unaudited. The full year 2017 results have been derived from the EEV basis results supplement to the Company's statutory accounts for 2017. The supplement included an unqualified audit report from the auditors.

A detailed description of the EEV methodology and accounting presentation is provided in note 12.

2 Results analysis by business area

The half year 2017 comparative results are shown below on both actual exchange rates (AER) and constant exchange rates (CER) bases. The half year 2017 CER comparative results are translated at half year 2018 average exchange rates.

Annual premium equivalents (APE)^{note 14}

		Half year 2018 £m	Half year 2017	'£m	% char	nge
	Note		AER	CER	AER	CER
Asia		1,736	1,943	1,811	(11)%	(4)%
US		816	960	879	(15)%	(7)%
UK and Europe		770	721	721	7%	7%
Group total	3	3,322	3,624	3,411	(8)%	(3)%

Post-tax operating profit

	Half year 2018 £m		Half year 2017 £m		% change		
	Note		AER	CER	AER	CER	
Asia operations							
New business	3	1,122	1,092	1,009	3%	11%	
Business in force	4	631	549	510	15%	24%	
Long-term business		1,753	1,641	1,519	7%	15%	
Asset management		77	73	68	5%	13%	
Total		1,830	1,714	1,587	7%	15%	
US operations							
New business	3	466	436	399	7%	17%	
Business in force	4	539	452	413	19%	31%	
Long-term business		1,005	888	812	13%	24%	
Asset management		(2)	(4)	(4)	50%	50%	
Total		1,003	884	808	13%	24%	
UK and Europe operations							
New business	3	179	161	161	11%	11%	
Business in force	4	592	304	304	95%	95%	
Long-term business		771	465	465	66%	66%	
General insurance commission		15	14	14	7%	7%	
Total insurance operations		786	479	479	64%	64%	
Asset management		221	201	201	10%	10%	
Total		1,007	680	680	48%	48%	
Other income and expenditure		(340)	(381)	(375)	11%	9%	
Restructuring costs		(57)	(27)	(27)	(111)%	(111)%	
Operating profit based on				,,			
longer-term investment returns		3,443	2,870	2,673	20%	29%	
Analysed as profit (loss) from:							
New business	3	1,767	1,689	1,569	5%	13%	
Business in force	4	1,762	1,305	1,227	35%	44%	
Total long-term business		3,529	2,994	2,796	18%	26%	
Asset management and general insurance		•	•	•			
commission		311	284	279	10%	11%	
Other results		(397)	(408)	(402)	3%	1%	
		3,443	2,870	2,673	20%	29%	

Post-tax profit

		Half year 2018 £m	Half year 2017	£m	% change	
	Note		AER	CER	AER	CER
Operating profit based on longer-term						
investment returns		3,443	2,870	2,673	20%	29%
Short-term fluctuations in investment returns	5	(1,234)	739	707		
Effect of changes in economic assumptions	6	592	(50)	(38)		
Mark to market value movements on						
core structural borrowings		579	(262)	(262)		
Loss attaching to corporate transactions	15	(412)	-	1		
Total non-operating (loss) profit		(475)	427	407	(211)%	(217)%
Profit for the period		2,968	3,297	3,080	(10)%	(4)%

Basic earnings per share

	Half year 2018	Half year 2017		% change	
		AER	CER	AER	CER
Based on post-tax operating profit including longer-term investment returns after non-controlling interests (in pence) Based on post-tax profit attributable to equity	133.8p	111.9p	104.2p	20%	28%
holders of the Company (in pence)	115.3p	128.5p	120.1p	(10)%	(4)%

3 Analysis of new business contribution

(i) Group summary for long-term business operations

		Half year 2018				
	Annual premium	Present value Annual premium of new business New business				
	equivalents (APE)	premiums (PVNBP)	contribution	APE	PVNBP	
	£m	£m	£m	%	%	
	note 14	note 14	note			
Asia ^{note (ii)}	1,736	9,132	1,122	65	12.3	
US	816	8,163	466	57	5.7	
UK and Europe	770	7,088	179	23	2.5	
Total	3,322	24,383	1,767	53	7.2	

		Half y	ear 2017		
		Present value			
	Annual premium	of new business	New business	New business	margin
	equivalents (APE)	premiums (PVNBP)	contribution	APE	PVNBP
	£m	£m	£m	%	%
	note 14	note 14			
Asia ^{note (ii)}	1,943	10,095	1,092	56	10.8
US	960	9,602	436	45	4.5
UK and Europe	721	6,616	161	22	2.4
Total	3,624	26,313	1,689	47	6.4

	Full year 2017				
		Present value			
	Annual premium	of new business	New business	New business	margin
	equivalents (APE)	premiums (PVNBP)	contribution	APE	PVNBP
	£m	£m	£m	%	%
	note 14	note 14			
Asia ^{note (ii)}	3,805	20,405	2,368	62	11.6
US	1,662	16,622	906	55	5.5
UK and Europe	1,491	13,784	342	23	2.5
Total	6,958	50,811	3,616	52	7.1

Note

After allowing for foreign exchange effects of £(120) million, the new business contribution increased by £198 million on a CER basis. This increase is driven by the beneficial effect of pricing, product mix and other actions of £186 million and the positive effect of changes in long-term interest rates and other economic assumptions (£53 million), partially offset by lower sales volumes (a negative impact of £(41) million). The £186 million impact of pricing, product mix and other actions reflects the beneficial impact of our strategic emphasis on increasing sales from health and protection business in Asia, together with a positive £46 million effect in the US for the impact of US tax reform that arose in the second half of 2017 (see note 16).

(ii) Asia new business contribution by business unit

	2018 £m		2017 £m	
	·	AER	CER	AER
	Half year	Half year	Half year	Full year
China	76	67	66	133
Hong Kong	731	706	641	1,535
Indonesia	59	88	78	174
Taiwan	21	27	26	57
Other	235	204	198	469
Total Asia	1,122	1,092	1,009	2,368

4 Operating profit from business in force

(i) Group summary for long-term business operations

	Half year 2018 £m				
	Asia	US	UK and Europe	T-1-1	
	operations	•	operations	operations	Total
	note (ii)	note (iii)	note (iv)	note	
Unwind of discount and other expected returns	601	433	234	1,268	
Effect of changes in operating assumptions	-	-	-	-	
Experience variances and other items	30	106	358	494	
Group total	631	539	592	1,762	

	Half year 2017 £m				
	Asia	Asia US UK and Europe			
	operations	operations	operations	Total	
	note (ii)	note (iii)	note (iv)		
Unwind of discount and other expected returns	499	312	232	1,043	
Effect of changes in operating assumptions	6	-	-	6	
Experience variances and other items	44	140	72	256	
Group total	549	452	304	1,305	

	Full year 2017 £m				
	Asia	US	UK and Europe		
	operations	operations	operations	Total	
	note (ii)	note (iii)	note (iv)		
Unwind of discount and other expected returns	1,007	694	465	2,166	
Effect of changes in operating assumptions	241	196	195	632	
Experience variances and other items	89	347	13	449	
Group total	1,337	1,237	673	3,247	

Note

The movement in operating profit from business in force of £457 million from £1,305 million for half year 2017 to £1,762 million for half year 2018 comprises:

	£m
Movement in unwind of discount and other expected returns:	
Effects of changes in:	
Growth in opening value	207
Interest rates and other economic assumptions	77
Foreign exchange	(59)
	225
Movement in effect of changes in operating assumptions, experience variances and other items	232
Net movement in operating profit from business in force	457

(ii) Asia

	2018 £m	2017 £m	1
	Half year	Half year	Full year
Unwind of discount and other expected returns note (a)	601	499	1,007
Effect of changes in operating assumptions	-	6	241
Experience variances and other items ^{note (b)}	30	44	89
Total	631	549	1,337

Notes

- (a) The £102 million increase in unwind of discount and other expected returns from £499 million in half year 2017 to £601 million for half year 2018 is primarily driven by growth in the in-force book and a positive £40 million impact from increases in interest rates and other economic assumption changes offset by the effect of foreign exchange movements (£(33) million).
- (b) The £30 million effect of experience variances and other items in half year 2018 is driven by positive mortality and morbidity experiences in a number of business units, together with positive persistency variances from participating and health and protection products, partially offset by unfavourable persistency variances on unit-linked products. Experience variances also include expense overruns where these are expected to be short-lived, including businesses that are growing rapidly or are sub-scale.

(iii) US

()	2018 £m	2018 £m 2017 £m	
	Half year	Half year	Full year
Unwind of discount and other expected returns ^{note (a)}	433	312	694
Effect of changes in operating assumptions	-	-	196
Experience variances and other items:			
Spread experience variance	26	42	71
Amortisation of interest-related realised gains and losses	45	47	91
Other ^{note (b)}	35	51	185
	106	140	347
Total	539	452	1,237

Notes

- (a) The £121 million increase in unwind of discount and other expected returns from £312 million in half year 2017 to £433 million for half year 2018 reflects growth in the in-force book (after allowing for the benefit of US tax reform) and a £27 million benefit from a 55 basis point increase in the US 10-year treasury yield since 30 June 2017 offset by a £(26) million adverse effect for foreign exchange movements.
- (b) Other experience variances of £35 million in half year 2018 include the effects of positive persistency experience in the period.

(iv) UK and Europe

	2018 £m		£m
	Half year	Half year	Full year
Unwind of discount and other expected returns ^{note (a)}	234	232	465
Change in longevity assumption basis	-	-	195
Other items ^{note (b)}	358	72	13
Total	592	304	673

Notes

- (a) Unwind of discount and other expected returns is broadly consistent with half year 2017.
- (b) Other items comprise the following:

	2018 £m	2018 £m 2017 £m	
-	Half year	Half year	Full year
Longevity reinsurance		(6)	(6)
Impact of specific management actions to improve solvency position	141	65	127
Provision for cost of undertaking past non-advised annuity sales review and related redress ^{note (c)}	-	-	(187)
Insurance recoveries in respect of above costs note (c)	138	-	` -
Other	79	13	79
	358	72	13

(c) In response to the findings of the FCA's Thematic Review of Annuities Sales Practices, the UK business has agreed to review all internally vesting annuities sold without advice after 1 July 2008. A gross provision before any costs incurred of £(332) million (post-tax) had been established at 31 December 2017, of which £(187) million was charged in full year 2017. Following a reassessment of the provision held, no further amount has been provided in the first half of 2018. The ultimate amount that will be expended remains uncertain. During the first half of 2018, the Group agreed with its professional indemnity insurers that they will meet £166 million of the Group's claims costs, which will be paid as the Group incurs costs/redress. This benefit has been recognised on the Group balance sheet at 30 June 2018 and a post-tax credit of £138 million is recognised in the EEV operating profit.

5 Short-term fluctuations in investment returns

Short-term fluctuations in investment returns included in profit for the period arise as follows:

(i) Group summary

	2018 £m		
	Half year	Half year	Full year
Asia operations ^{note (ii)}	(515)	544	887
US operations ^{note (iii)}	(528)	(126)	582
UK and Europe operations ^{note (iv)}	(269)	242	621
Other operations ^{riote (v)}	78	79	21
Total	(1,234)	739	2,111

(ii) Asia operations

The short-term fluctuations in investment returns for Asia operations comprise:

	2018 £m	2018 £m 2017 £m		
	Half year	Half year	Full year	
Hong Kong	(212)	371	531	
Singapore	(126)	85	126	
Other	(177)	88	230	
Total	(515)	544	887	

Note

For half year 2018, the charge of £(515) million mainly reflects losses on bonds arising from increases in interest rates, together with lower than assumed returns on equities backing with-profits business in Hong Kong and Singapore and unit-linked businesses in Indonesia, Singapore and Malaysia.

(iii) US operations

The short-term fluctuations in investment returns for US operations comprise:

	2018 £m	2017 £n	າ
	Half year	Half year	Full year
Investment return related experience on fixed income securities note (a)	15	=	(46)
Investment return related impact due to changed expectation of profits on in-force			
variable annuity business in future periods based on current period separate account			
return, net of related hedging activity and other items ^{note (b)}	(543)	(126)	628
Total	(528)	(126)	582

Notes

- (a) The net result relating to fixed income securities reflects a number of offsetting items as follows:
 - the impact on portfolio yields of changes in the asset portfolio in the period;
 - the difference between actual realised gains and losses and the amortisation of interest-related realised gains and losses that is recorded within operating profit; and
 - credit experience (versus the longer-term assumption).
- (b) This item reflects the net impact of:
 - changes in projected future fees and future benefit costs arising from the difference between the actual growth in separate account asset values of 2.2 per cent and that assumed of 3.2 per cent for the period (half year 2017: actual growth of 7.9 per cent compared to assumed growth of 2.9 per cent; full year 2017: actual growth of 17.5 per cent compared to assumed growth of 5.9 per cent); and
 - related hedging activity arising from realised and unrealised gains and losses on equity-related hedges and interest rate options, and other items.

(iv) UK and Europe operations

The short-term fluctuations in investment returns for UK and Europe operations comprise:

	2018 £m	2017 £m	1
	Half year	Half year	Full year
Insurance operations:			
Shareholder-backed annuity business	(17)	204	387
With-profits and other	(247)	11	229
Asset management	(5)	27	5
Total ^{note}	(269)	242	621

Note

The £(269) million fluctuation in half year 2018 primarily represents the impact of achieving a 0.1 per cent pre-tax return on the with-profits fund (including unallocated surplus) compared to the assumed rate of return of 2.6 per cent for the period (half year 2017: achieved return of 4.3 per cent compared to assumed rate of 2.6 per cent; full year 2017: achieved return of 9 per cent compared to assumed rate of 5 per cent), partially offset by the effect of a partial hedge of future shareholder transfers expected to emerge from the UK's with-profits sub-fund entered into to protect future shareholder with-profit transfers from movements in the UK equity market.

(v) Other operations

Short-term fluctuations in investment returns of positive £78 million include unrealised value movements on financial instruments held outside of the main life operations.

6 Effect of changes in economic assumptions

The effects of changes in economic assumptions for in-force business included in the profit for the period arise as follows:

(i) Group summary for long-term business operations

	2018 £m	2017 £m		
	Half year	Half year	Full year	
Asia ^{note (ii)}	243	55	(95)	
US ^{note (iii)}	367	(159)	(136)	
UK and Europe ^{note (iv)}	(18)	54	129	
Total	592	(50)	(102)	

(ii) Asia

The effect of changes in economic assumptions for Asia comprises:

	2018 £m	2017 £m	
	Half year	Half year	Full year
Hong Kong	400	(72)	(321)
Indonesia	(89)	67	81
Malaysia	(41)	(20)	59
Singapore	(32)	59	131
Taiwan	16	(16)	(12)
Other	(11)	37	(33)
Total	243	55	(95)

Note

The positive effect in half year 2018 of £243 million largely arises from movements in long-term interest rates, resulting in higher assumed fund earned rates in Hong Kong and Taiwan, partially offset by the impact of valuing future profits for health and protection business at higher discount rates in Indonesia, Malaysia and Singapore (see note 13(i)).

(iii) US

The effect of changes in economic assumptions for US comprises:

	2018 £m	2017 £	€m
	Half year	Half year	Full year
Variable annuity business	497	(194)	(101)
Fixed annuity and other general account business	(130)	35	(35)
Total	367	(159)	(136)

Note

For half year 2018, the credit of £367 million mainly reflects the increase in the assumed separate account return and reinvestment rates, following the 46 basis points increase in the US 10-year treasury yield since 31 December 2017, resulting in higher projected fee income and a decrease in projected benefit costs for variable annuity business. For fixed annuity and other general account business, the impact reflects the effect on the present value of future projected spread income from discounting at a higher risk discount rate as a result of the increase in interest rates. In June 2018, the National Association of Insurance Commissioners (NAIC) formally approved changes to RBC capital factors that reflect the December 2017 US tax reform. Consequently, the effect of changes in economic assumptions for half year 2018 of £367 million also includes a negative £(22) million impact resulting from these changes.

(iv) UK and Europe

The effect of changes in economic assumptions for UK and Europe comprises:

	2018 £m	2017 £	€m
	Half year	Half year	Full year
Shareholder-backed annuity business	6	=	28
With-profits and other business	(24)	54	101
Total	(18)	54	129

Note

The charge of £(18) million includes the impact of the movement in expected long-term rates of investment return and risk discount rates as shown in note 13(iii). In addition, the effect of changes in economic assumptions for with-profits and other business of £(24) million includes a £(78) million charge for the effect of lower fund earned rates on equities and property as a result of the change in UK indexation of capital gains rules effective from 1 January 2018.

7 Net core structural borrowings of shareholder-financed operations

	2018 £m		2017 £m						
	30 Jun			30 Jun		31 Dec			
		Mark to	EEV		Mark to	EEV		Mark to	EEV
		market	basis at		market	basis at		market	basis at
	IFRS	value	market	IFRS	value	market	IFRS	value	market
	basis	adjustment	value	basis	adjustment	value	basis	adjustment	value
Holding company (including central finance subsidiaries) cash and short-term investments	(2,210)	-	(2,210)	(2,657)	-	(2,657)	(2,264)	-	(2,264)
Central funds									
Subordinated debt	5,354	(39)	5,315	5,598	443	6,041	5,272	515	5,787
Senior debt	549	143	692	549	168	717	549	167	716
	5,903	104	6,007	6,147	611	6,758	5,821	682	6,503
Holding company net borrowings	3,693	104	3,797	3,490	611	4,101	3,557	682	4,239
Prudential Capital bank loan	275	-	275	275	-	275	275	-	275
Jackson Surplus Notes	189	47	236	192	62	254	184	61	245
Group total	4,157	151	4,308	3,957	673	4,630	4,016	743	4,759

Note

The movement in IFRS basis core structural borrowings from 31 December 2017 to 30 June 2018 includes foreign exchange effects for US dollar denominated core structural borrowings.

8 Reconciliation of movement in shareholders' equity

		I	Half year 2018 £m		
	Asia	US	UK and Europe	Other	Group
	operations	operations	operations	operations	total
	note (i)			note (i)	note (iv)
Operating profit (based on longer-term					
investment returns)					
Long-term business:					
New business ^{note 3}	1,122	466	179	-	1,767
Business in force ^{note 4}	631	539	592	-	1,762
	1,753	1,005	771	-	3,529
Asset management and general					
insurance commission	77	(2)	236	-	311
Restructuring costs	(10)	-	(39)	(8)	(57)
Other results	-	-	-	(340)	(340)
Operating profit based on					
longer-term investment returns	1,820	1,003	968	(348)	3,443
Non-operating items	(282)	(181)	(651)	639	(475)
Non-controlling interests	-	-	-	(1)	(1)
Profit for the period attributable to equity					
holders of the Company	1,538	822	317	290	2,967
Other items taken directly to equity:					
Exchange movements on foreign operations					
and net investment hedges	230	354	(5)	(56)	523
Intra-group dividends and investment in					
operations ^{note (ii)}	(748)	(327)	(341)	1,416	-
External dividends	-	-	-	(840)	(840)
Mark to market value movements on Jackson					
assets backing surplus and required capital	-	(32)	-	-	(32)
Other movements ^{note (iii)}	(5)	(9)	45	96	127
Net increase in shareholders' equity	1,015	808	16	906	2,745
Shareholders' equity at beginning of period	21,348	13,492	13,627	(3,769)	44,698
Shareholders' equity at end of period	22,363	14,300	13,643	(2,863)	47,443
<u> </u>			·	• • • • • • • • • • • • • • • • • • • •	
Representing:					
IFRS basis shareholders' equity:					
Net assets (liabilities)	5,434	5,100	6,893	(3,004)	14,423
Goodwill	61	-	1,153	245	1,459
Total IFRS basis shareholders' equity	5,495	5,100	8,046	(2,759)	15,882
Additional retained profit (loss) on an	·	·	,	,	•
EEV basis	16,868	9,200	5,597	(104)	31,561
EEV basis shareholders' equity	22,363	14,300	13,643	(2,863)	47,443
	,	,		· · · · · · · · · · · · · · · · · · ·	
Balance at beginning of period:					
IFRS basis shareholders' equity:					
Net assets (liabilities)	5,620	5,248	7,092	(3,331)	14,629
Goodwill	61		1,153	244	1,458
Total IFRS basis shareholders' equity	5,681	5.248	8,245	(3,087)	16,087
Additional retained profit (loss) on an	3,001	5,240	0,240	(3,007)	10,007
EEV basis	15,667	8,244	5,382	(682)	28,611
EEV basis shareholders' equity	21,348	13,492	13,627	(3,769)	44,698
LL V Dasis sitaterioliders equity	21,340	13,432	13,021	(3,709)	44,090

Notes

- (i) Other operations of £(2,863) million represents the shareholders' equity of £(3,108) million as shown in the movement in shareholders' equity and includes goodwill of £245 million (half year 2017: £245 million; full year 2017: £244 million) related to Asia long-term operations.
 (ii) Intra-group dividends represent dividends that have been declared in the period and investment in operations reflect increases/decreases in
- (ii) Intra-group dividends represent dividends that have been declared in the period and investment in operations reflect increases/decreases in share capital. The amounts included for these items in the analysis of movement in free surplus in note 10 are as per the holding company cash flow at transaction rates. The difference primarily relates to intra-group loans, foreign exchange and other non-cash items.
- (iii) Other movements include reserve movements in respect of the shareholders' share of actuarial gains and losses on defined benefit pension schemes, share capital subscribed, share-based payments and treasury shares and intra-group transfers between operations which have no overall effect on the Group's embedded value.
- (iv) Group total EEV basis shareholders' equity can be further analysed as follows:

		30 Jun 201	8 £m			31 Dec 2017	7 £m	
	Total long-term business operations note 9	Asset management and general insurance commission	Other operations	Group total	Total long-term business operations note 9	Asset management and general insurance commission	Other operations	Group total
Total IFRS basis shareholders' equity Additional retained profit(loss)	15,994	2,647	(2,759)	15,882	16,624	2,550	(3,087)	16,087
on an EEV basis ^{note (v)}	31,665	-	(104)	31,561	29,293	-	(682)	28,611
Total EEV basis shareholders' equity	47,659	2,647	(2,863)	47,443	45,917	2,550	(3,769)	44,698

⁽v) The additional retained loss on an EEV basis for other operations represents the mark to market value adjustment for holding company net borrowings of a cumulative charge of £(104) million (30 June 2017: £(611) million, 31 December 2017: £(682) million), as shown in note 7.

9 Analysis of movement in net worth and value of in-force for long-term business

	Half year 2018 £m					
			-	Value of	Total	
	Free	Required	Total	in-force	embedded	
	surplus	capital	net worth	business	value	
	p			note (i)		
Group						
Shareholders' equity at beginning of period	6,242	10,265	16,507	29,410	45,917	
New business contribution ^{note 3}	(540)	366	(174)	1,941	1,767	
Existing business – transfer to net worth	1,698	(349)	1,349	(1,349)	-,	
Expected return on existing business ^{note 4}	88	110	198	1,070	1,268	
Changes in operating assumptions and experience variances ^{note 4}	350	(76)	274	220	494	
Restructuring costs	(15)	-	(15)	(5)	(20)	
Operating profit based on longer-term investment returns	1,581	51	1,632	1,877	3,509	
Non-operating items	(583)	(291)	(874)	(203)	(1,077)	
Profit for the period	998	(240)	758	1,674	2,432	
Exchange movements on foreign operations and		(= . •)		.,	_, .~_	
net investment hedges	37	72	109	471	580	
Intra-group dividends and investment in operations	(1,238)	• -	(1,238)		(1,238)	
Other movements	(32)	_	(32)	_	(32)	
Shareholders' equity at end of period	6.007	10.097	16,104	31,555	47,659	
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Asia						
New business contribution ^{note 3}	(260)	76	(184)	1,306	1,122	
Existing business – transfer to net worth	692	(85)	607	(607)	-,	
Expected return on existing business ^{note 4}	32	29	61	540	601	
Changes in operating assumptions and experience variances ^{note 4}	49	(32)	17	13	30	
Operating profit based on longer-term investment returns	513	(12)	501	1,252	1,753	
Non-operating items	(167)	(75)	(242)	(40)	(282)	
Profit for the period	346	(87)	259	1,212	1,471	
Tone for the period	040	(01)	200	1,212	1,471	
US						
New business contribution ^{note 3}	(180)	174	(6)	472	466	
Existing business – transfer to net worth	702	(92)	610	(610)	-	
Expected return on existing business ^{note 4}	26	32	58	375	433	
Changes in operating assumptions and experience variances ^{note 4}	47	(3)	44	62	106	
Operating profit based on longer-term investment returns	595	111	706	299	1,005	
Non-operating items ^{note (ii)}	(457)	91	(366)	217	(149)	
Profit for the period	138	202	340	516	856	
UK and Europe						
New business contribution ^{note 3}	(100)	116	16	163	179	
Existing business – transfer to net worth	304	(172)	132	(132)	-	
Expected return on existing business ^{note 4}	30	` 49́	79	`15 5	234	
Changes in operating assumptions and experience variances ^{note 4}	254	(41)	213	145	358	
Restructuring costs	(15)	` -	(15)	(5)	(20)	
Operating profit based on longer-term investment returns	473	(48)	425	326	751	
Non-operating items	41	(307)	(266)	(380)	(646)	
Profit for the period	514	(355)	159	(54)	105	
	V 1 7	(000)	100	(0-7)	.00	

Notes

(i) The net value of in force business comprises the value of future margins from current in force business less the cost of holding required capital for long-term business as shown below:

	30 Jun 2018 £m				31 Dec 2017 £m			
	UK and						UK and	
	Asia	US	Europe	Total	Asia	US	Europe	Total
Value of in-force business before				.,				
deduction of cost of capital and								
time value of guarantees	19,700	11,096	3,481	34,277	17,539	10,486	3,648	31,673
Cost of capital	(535)	(310)	(494)	(1,339)	(588)	(232)	(607)	(1,427)
Cost of time value of guarantees*	(976)	(407)		(1,383)	(186)	(650)	` -	(836)
Net value of in-force business	18,189	10,379	2,987	31,555	16,765	9,604	3,041	29,410
Total net worth	3,760	3,717	8,627	16,104	4,182	3,653	8,672	16,507
Total embedded value ^{note 8}	21,949	14,096	11,614	47,659	20,947	13,257	11,713	45,917

^{*} The cost of time value of guarantees arises from the variability of economic outcomes in the future and is, where appropriate, calculated as the difference between a full stochastic valuation and a single deterministic valuation, as described in note 12(a)(iv). Both valuations reflect the level of policyholder benefits (including guaranteed benefits and discretionary bonuses) and associated charges, and management actions in response to emerging investment and fund solvency conditions. The increase in the cost of time value of guarantees for Asia operations from £(186) million at 31 December 2017 to £(976) million at 30 June 2018 reflects the interaction between these different effects on the full stochastic and single deterministic valuations at the respective level of interest rates and equity markets, as well as the growth in the business over the period.

⁽ii) In June 2018, the National Association of Insurance Commissioners (NAIC) formally approved changes to RBC capital factors that reflect the December 2017 US tax reform. The half year 2018 EEV results reflect these changes, with a resulting increase in required capital and a corresponding reduction in free surplus of £(160) million.

10 Analysis of movement in free surplus

For EEV covered business, free surplus is the excess of the regulatory basis net assets for EEV reporting purposes (net worth) over the capital required to support the covered business. Where appropriate, adjustments are made to the net worth so that backing assets are included at fair value rather than cost so as to comply with the EEV Principles. In Asia and US operations, assets deemed to be inadmissible on local regulatory basis are included in net worth where considered fully recognisable on an EEV basis. Free surplus for asset management operations and the UK general insurance commission is taken to be IFRS basis post-tax earnings and shareholders' equity, net of goodwill. Free surplus for other operations (including Group and Asia Regional Head Office, holding company borrowings, Africa operations and Prudential Capital) is taken to be EEV basis post-tax earnings and shareholders' equity net of goodwill, with subordinated debt recorded as free surplus to the extent that it is classified as available capital under Solvency II.

Free surplus for insurance and asset management operations and Group total free surplus, including other operations, are shown in the tables below.

(i) Underlying free surplus generated – insurance and asset management operations

The half year 2017 comparative results are shown below on both actual exchange rates (AER) and constant exchange rates (CER) bases. The half year 2017 CER comparative results are translated at half year 2018 average exchange rates.

	Half year 2018 £m	Half year 2017	£m	% change		
		AER	CER	AER	CER	
Asia operations						
Underlying free surplus generated from						
in-force life business	773	763	714	1%	8%	
Investment in new business ^{note (iii)(a)}	(260)	(283)	(265)	8%	2%	
Long-term business	513	480	449	7%	14%	
Asset management	77	73	68	5%	13%	
Total	590	553	517	7%	14%	
US operations						
Underlying free surplus generated from						
in-force life business	775	801	733	(3)%	6%	
Investment in new business ^{note (iii)(a)}	(180)	(246)	(225)	27%	20%	
Long-term business	595	555	508	7%	17%	
	(2)	(4)	(4)	50%	50%	
Asset management	593					
Total	593	551	504	8%	18%	
UK and Europe operations						
Underlying free surplus generated from		500	500	00/	00/	
in-force life business	588	569	569	3%	3%	
Investment in new business ^{note (iii)(a)}	(100)	(42)	(42)	(138)%	(138)%	
Long-term business	488	527	527	(7)%	(7)%	
General insurance commission	15	14	14	7%	7%	
Asset management	221	201	201	10%	10%	
Total	724	742	742	(2)%	(2)%	
Underlying free surplus generated from						
insurance and asset management						
operations before restructuring costs	1,907	1,846	1,763	3%	8%	
Restructuring costs	(44)	(6)	(6)	(633)%	(633)%	
Underlying free surplus generated from					•	
insurance and asset management operations	1,863	1,840	1,757	1%	6%	
Representing:						
Long-term business:						
Expected in-force cash flows (including						
expected return on net assets)	1,786	1,785	1,676	0%	7%	
Effects of changes in operating assumptions,	-,	.,	.,	-,-	. , ,	
operating experience variances and other						
items before restructuring costs	350	348	340	1%	3%	
Underlying free surplus generated from		0.10		170	070	
in-force life business before restructuring costs	2,136	2,133	2,016	0%	6%	
Investment in new business note (iii)(a)	(540)	2,133 (571)	(532)	5%	(2)%	
Total long-term business	1,596	\ /		2%	8%	
	1,596	1,562	1,484	∠70	8%	
Asset management and general insurance	044	004	070	4.007	440/	
commission	311	284	279	10%	11%	
Restructuring costs	(44)	(6)	(6)	(633)%	(633)%	
	1,863	1,840	1,757	1%	6%	

(ii) Underlying free surplus generated - Group total

	Half year 2018 £m	Half year 2017	£m	% change		
		AER		AER	CER	
Underlying free surplus generated from						
insurance and asset management operations note (i)	1,863	1,840	1,757	1%	6%	
Other income and expenditure	(348)	(402)	(396)	13%	12%	
Group total	1,515	1,438	1,361	5%	11%	

(iii) Movement in free surplus

	Half year 2018 £m								
		Total insurance							
			UK and	and asset					
	Asia	US	Europe	management	Other	Group			
	operations	operations	operations	operations	operations	total			
Underlying free surplus generated before restructuring									
costs	590	593	724	1,907	(340)	1,567			
Restructuring costs	(10)	-	(34)	(44)	(8)	(52)			
Underlying free surplus generated ^{notes (i)(ii)}	580	593	690	1,863	(348)	1,515			
Non-operating items ^{note (b)}	(167)	(489)	36	(620)	97	(523)			
	413	104	726	1,243	(251)	992			
Net cash flows to parent companynote (c)	(391)	(342)	(378)	(1,111)	1,111	-			
External dividends	-	-	-	-	(840)	(840)			
Exchange rate movements, timing differences and									
other items ^{note (d)}	(359)	12	77	(270)	413	143			
Net movement in free surplus	(337)	(226)	425	(138)	433	295			
Balance at beginning of period	2,470	1,928	3,180	7,578	1,774	9,352			
Balance at end of period	2,133	1,702	3,605	7,440	2,207	9,647			

	Half year 2017 £m							
				Total insurance				
			UK and	and asset				
	Asia	US	Europe	management	Other	Group		
	operations	operations	operations	operations	operations	total		
Underlying free surplus generated before restructuring								
costs	553	551	742	1,846	(381)	1,465		
Restructuring costs	-	-	(6)	(6)	(21)	(27)		
Underlying free surplus generated ^{notes(i)(ii)}	553	551	736	1,840	(402)	1,438		
Non-operating items ^{note (b)}	268	(470)	267	65	82	147		
	821	81	1,003	1,905	(320)	1,585		
Net cash flows to parent company ^{note (c)}	(350)	(475)	(405)	(1,230)	1,230	-		
External dividends	` -	` -		-	(786)	(786)		
Exchange rate movements, timing differences and								
other items ^{note (d)}	(266)	(74)	30	(310)	224	(86)		
Net movement in free surplus	205	(468)	628	365	348	713		
Balance at beginning of period	2,142	2,418	2,006	6,566	1,648	8,214		
Balance at end of period	2,347	1,950	2,634	6,931	1,996	8,927		

	Full year 2017 £m							
				Total insurance				
			UK and	and asset				
	Asia	US	Europe	management	Other	Group		
	operations	operations	operations	operations	operations	total		
Underlying free surplus generated before restructuring								
costs	1,078	1,328	1,311	3,717	(746)	2,971		
Restructuring costs	(14)	-	(63)	(77)	(10)	(87)		
Underlying free surplus generated	1,064	1,328	1,248	3,640	(756)	2,884		
Non-operating items ^{note (b)}	330	(1,203)	572	(301)	27	(274)		
	1,394	125	1,820	3,339	(729)	2,610		
Net cash flows to parent company ^{note (c)}	(645)	(475)	(668)	(1,788)	1,788	-		
External dividends	-	-	· -	· -	(1,159)	(1,159)		
Exchange rate movements, timing differences and								
other items ^{note (d)}	(421)	(140)	22	(539)	226	(313)		
Net movement in free surplus	328	(490)	1,174	1,012	126	1,138		
Balance at beginning of year	2,142	2,418	2,006	6,566	1,648	8,214		
Balance at end of year	2,470	1,928	3,180	7,578	1,774	9,352		

Notes

- Free surplus invested in new business primarily represents acquisition costs and amounts set aside for required capital.
- Non-operating items include short-term fluctuations in investment returns, the effect of changes in economic assumptions for long-term business operations and the effect of corporate transactions as described in note 15. For half year 2017 and full year 2017, it reflects the release of £76 million of required capital and corresponding recognition of free surplus upon completion of the sale of the Group's life insurance subsidiary in Korea. In addition, for full year 2017 this includes the impact of US tax reform (see note 16) and for half year 2018 this includes the consequent changes to RBC factors approved by the National Association of Insurance Commissioners (NAIC), which were formally approved in June 2018.
- Net cash flows to parent company for long-term business operations reflect the flows as included in the holding company cash flow at (c) transaction rates.
- Exchange rate movements, timing differences and other items represent:

			Half year 20	018 £m			
				Total insurance			
			UK and	and asset			
	Asia	US	Europe	management	Other	Group	
	operations	operations	operations	operations	operations	total	
Exchange rate movements	3	38	(5)	36	9	45	
Mark to market value movements on Jackson assets							
backing surplus and required capital	-	(32)	-	(32)	-	(32)	
Other items ^{nofe (e)}	(362)	6	82	(274)	404	130	
	(359)	12	77	(270)	413	143	
	Half year 2017 £m						
•				Total insurance			
			UK and	and asset			
	Asia	US	Europe	management	Other	Group	
	operations	operations	operations	operations	operations	total	
Exchange rate movements	(52)	(106)	3	(155)	(17)	(172)	
Mark to market value movements on Jackson assets							
backing surplus and required capital	=	31	-	31	-	31	
Other items ^{note (e)}	(214)	1	27	(186)	241	55	
	(266)	(74)	30	(310)	224	(86)	
			Full year 20)17 £m			
•			•	Total insurance			
				and asset			
	Asia	US	UK and Europe	management	Other	Group	
	operations	operations	operations	operations	operations	total	
Exchange rate movements	(113)	(190)	6	(297)	(13)	(310)	
Mark to market value movements on Jackson assets	• •						
backing surplus and required capital	-	40	=	40	-	40	
Other items ^{note (e)}	(308)	10	16	(282)	239	(43)	
	(421)	(140)	22	(530)	226	(212)	

(140)

(313)

Other items include the effect of movements in subordinated debt for other operations, intra-group loans and other intra-group transfers between operations and other non-cash items.

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11 Sensitivity of results to alternative assumptions

Sensitivity analysis - economic assumptions

The tables below show the sensitivity of the embedded value as at 30 June 2018 and 31 December 2017 and the new business contribution after the effect of required capital for half year 2018 and full year 2017 for long-term business operations to:

- 1 per cent increase in the discount rates;
- 1 per cent increase in interest rates and risk discount rates, including consequential changes (assumed investment returns for all asset classes, market values of fixed interest assets);
- 0.5 per cent decrease in interest rates and risk discount rates, including consequential changes (assumed investment returns for all asset classes, market values of fixed interest assets);
- 1 per cent rise in equity and property yields;
- 10 per cent fall in market value of equity and property assets (embedded value only);
- The statutory minimum capital level in contrast to EEV basis required capital (for embedded value only); and
- 5 basis points increase in UK long-term expected defaults.

In each sensitivity calculation, all other assumptions remain unchanged except where they are directly affected by the revised economic conditions.

New business contribution from long-term business operations

	Half year 2018 £m				Full year 2017 £m			
	UK and				UK and			
	Asia	US	Europe	Total	Asia	US	Europe	Total
New business contribution note 3	1,122	466	179	1,767	2,368	906	342	3,616
Discount rates – 1% increase	(223)	(25)	(24)	(272)	(477)	(34)	(48)	(559)
Interest rates – 1% increase	(94)	34	24	(36)	(103)	124	44	65
Interest rates – 0.5% decrease	20	(39)	(13)	(32)	(59)	(85)	(23)	(167)
Equity/property yields – 1% rise	54	52	27	133	130	130	52	312
Long-term expected defaults – 5 bps increase	-	-	-	-	-	-	(1)	(1)

Embedded value of long-term business operations

	30 Jun 2018 £m				31 Dec 2017 £m			
	UK and						UK and	
	Asia	US	Europe	Total	Asia	US	Europe	Total
Shareholders' equity ^{note 9}	21,949	14,096	11,614	47,659	20,947	13,257	11,713	45,917
Discount rates – 1% increase	(2,813)	(540)	(727)	(4,080)	(2,560)	(440)	(774)	(3,774)
Interest rates – 1% increase	(1,326)	(61)	(666)	(2,053)	(944)	26	(635)	(1,553)
Interest rates – 0.5% decrease	395	(199)	390	586	121	(166)	384	339
Equity/property yields – 1% rise	959	878	429	2,266	873	896	425	2,194
Equity/property market values – 10% fall	(420)	(201)	(451)	(1,072)	(429)	(209)	(479)	(1,117)
Statutory minimum capital	133	214	-	347	169	158	-	327
Long-term expected defaults – 5 bps increase	-	-	(82)	(82)	-	-	(135)	(135)

The sensitivities shown above are for the impact of instantaneous changes on the embedded value of long-term business operations and include the combined effect on the value of in-force business and net assets at the balance sheet dates indicated. If the change in assumptions shown in the sensitivities were to occur, then the effect shown above would be recorded within two components of the profit analysis for the following year, namely the effect of economic assumption changes and short-term fluctuations in investment returns. In addition to the sensitivity effects shown above, the other components of the profit for the following year would be calculated by reference to the altered assumptions, for example new business contribution and unwind of discount, together with the effect of other changes such as altered corporate bond spreads. In addition for changes in interest rates, the effect shown above for Jackson would also be recorded within the fair value movements on assets backing surplus and required capital, which are taken directly to shareholders' equity.

12 Methodology and accounting presentation

(a) Methodology

Overview

The embedded value is the present value of the shareholders' interest in the earnings distributable from assets allocated to covered business after sufficient allowance has been made for the aggregate risks in that business. The shareholders' interest in the Group's long-term business comprises:

- the present value of future shareholder cash flows from in-force covered business (value of in-force business), less deductions for:
 - the cost of locked-in required capital; and
 - the time value of cost of options and guarantees;
- locked-in required capital; and
- the shareholders' net worth in excess of required capital (free surplus).

The value of future new business is excluded from the embedded value.

Notwithstanding the basis of presentation of results as explained in note 12(b)(iii), no smoothing of market or account balance values, unrealised gains or investment return is applied in determining the embedded value or profit. Separately, the analysis of profit is delineated between operating profit based on longer-term investment returns and other constituent items, as explained in note 12(b)(i).

(i) Covered business

The EEV results for the Group are prepared for 'covered business', as defined by the EEV Principles. Covered business represents the Group's long-term insurance business, including the Group's investments in joint venture and associate insurance operations, for which the value of new and in-force contracts is attributable to shareholders. The post-tax EEV basis results for the Group's covered business are then combined with the post-tax IFRS basis results of the Group's asset management and other operations (including Group and Asia Regional Head Office, holding company borrowings, Africa operations and Prudential Capital). Under the EEV Principles, the results for covered business incorporate the projected margins of attaching internal asset management, as described in note 12(a)(vii).

The definition of long-term business operations comprises those contracts falling under the definition for regulatory purposes together with, for US operations, contracts that are in substance the same as guaranteed investment contracts (GICs) but do not fall within the technical definition.

Covered business comprises the Group's long-term business operations, with two exceptions:

- the closed Scottish Amicable Insurance Fund (SAIF) which is excluded from covered business. SAIF is a ring-fenced subfund of The Prudential Assurance Company Limited (PAC) long-term fund, established by a Court Approved Scheme of Arrangement in October 1997. SAIF is closed to new business and the assets and liabilities of the fund are wholly attributable to the policyholders of the fund.
- the presentational treatment of the Group's principal defined benefit pension scheme, the Prudential Staff Pension Scheme (PSPS). The partial recognition of the surplus for PSPS is recognised in 'Other' operations.

A small amount of UK group pensions business is also not modelled for EEV reporting purposes.

(ii) Valuation of in-force and new business

The embedded value results are prepared incorporating best estimate assumptions about all relevant factors including levels of future investment returns, expenses, persistency, mortality and morbidity, as described in note 13(vii). These assumptions are used to project future cash flows. The present value of the future cash flows is then calculated using a discount rate which reflects both the time value of money and the non-diversifiable risks associated with the cash flows that are not otherwise allowed for.

New business

In determining the EEV basis value of new business, premiums are included in projected cash flows on the same basis of distinguishing annual and single premium business as set out for statutory basis reporting.

New business premiums reflect those premiums attaching to covered business, including premiums for contracts classified as investment products for IFRS basis reporting. New business premiums for regular premium products are shown on an annualised basis. Internal vesting business is classified as new business where the contracts include an open market option.

The post-tax contribution from new business represents profits determined by applying operating and economic assumptions as at the end of the period. New business profitability is a key metric for the Group's management of the development of the business. In addition, post-tax new business margins are shown by reference to annual premium equivalents (APE) and the present value of new business premiums (PVNBP). These margins are calculated as the percentage of the value of new business profit to APE and PVNBP. APE is calculated as the aggregate of regular premiums and one-tenth of single premiums. PVNBP is calculated as the aggregate of single premiums and the present value of expected future premiums from regular premium new business, allowing for lapses and the other assumptions made in determining the EEV new business contribution. The half year 2018 new business contribution for Hong Kong and Singapore medical reimbursement business allows explicitly for expected future premium inflation and separately for future medical claims inflation. Previously the new business contribution allowed for such inflation implicitly as a single effect.

Valuation movements on investments

With the exception of debt securities held by Jackson, investment gains and losses during the period (to the extent that changes in capital values do not directly match changes in liabilities) are included directly in the profit for the period and shareholders' equity as they arise.

The results for any covered business conceptually reflect the aggregate of the IFRS results and the movements on the additional shareholders' interest recognised on the EEV basis. Thus the start point for the calculation of the EEV results for Jackson, as for other businesses, reflects the market value movements recognised on an IFRS basis.

However, in determining the movements on the additional shareholders' interest, the basis for calculating the EEV result for Jackson acknowledges that, for debt securities backing liabilities, the aggregate EEV results reflect the fact that the value of inforce business instead incorporates the discounted value of future spread earnings. This value is not affected generally by short-term market movements on securities that, broadly speaking, are held for the longer term.

Fixed income securities backing the free surplus and required capital for Jackson are accounted for at fair value. However, consistent with the treatment applied under IFRS for Jackson securities classified as available-for-sale, movements in unrealised appreciation/depreciation on these securities are accounted for in equity rather than in the income statement, as shown in the movement in shareholders' equity.

(iii)Cost of capital

A charge is deducted from the embedded value for the cost of locked-in required capital supporting the Group's long-term business. The cost is the difference between the nominal value of the capital and the discounted value of the projected releases of this capital, allowing for post-tax investment earnings on the capital.

The annual result is affected by the movement in this cost from year to year which comprises a charge against new business profit and generally a release in respect of the reduction in capital requirements for business in force as this runs off.

Where required capital is held within a with-profits long-term fund, the value placed on surplus assets in the fund is already discounted to reflect its expected release over time and no further adjustment is necessary in respect of required capital.

(iv) Financial options and quarantees

Nature of financial options and guarantees in Prudential's long-term business

Asia

Subject to local market circumstances and regulatory requirements, the guarantee features described below in respect of UK and Europe business broadly apply to similar types of participating contracts in Asia which are principally written in Hong Kong, Singapore and Malaysia. Participating products have both guaranteed and non-guaranteed elements.

There are also various non-participating long-term products with guarantees. The principal guarantees are those for whole-of-life contracts with floor levels of policyholder benefits that accrue at rates set at inception and do not vary subsequently with market conditions.

US (Jackson)

The principal financial options and guarantees in Jackson are associated with the fixed annuity (FA) and variable annuity (VA) lines of business.

Fixed annuities provide that, at Jackson's discretion, it may reset the interest rate credited to policyholders' accounts, subject to a guaranteed minimum. The guaranteed minimum return varies from 1.0 per cent to 5.5 per cent for all periods, depending on the particular product, jurisdiction where issued, and date of issue. At 30 June 2018, 88 per cent of the account values on fixed annuities are for policies with guarantees of 3 per cent or less (30 June 2017: 87 per cent; 31 December 2017: 87 per cent), and the average guarantee rate is 2.6 per cent for all periods shown.

Fixed annuities also present a risk that policyholders will exercise their option to surrender their contracts in periods of rapidly rising interest rates, possibly requiring Jackson to liquidate assets at an inopportune time.

Jackson issues variable annuity (VA) contracts for which it contractually guarantees to the contract holder, subject to specific conditions, either: a) return of no less than total deposits made to the contract adjusted for any partial withdrawals; b) total deposits made to the contract adjusted for any partial withdrawals plus a minimum return; or c) the highest contract value on a specified anniversary date adjusted for any withdrawals following the specified contract anniversary. These guarantees include benefits that are payable upon depletion of funds (Guaranteed Minimum Withdrawal Benefit (GMWB)), as death benefits (Guaranteed Minimum Death Benefits (GMDB)) or as income benefits (Guaranteed Minimum Income Benefits (GMIB)). These guarantees generally protect the policyholders' value in the event of poor equity market performance. Jackson hedges the GMWB and GMDB quarantees through the use of equity options and futures contracts, and essentially fully reinsures the GMIB guarantees.

Jackson also issues fixed index annuities (FIA) that enable policyholders to obtain a portion of an equity-linked return while providing a guaranteed minimum return. The guaranteed minimum returns are of a similar nature to those described above for fixed annuities.

UK and Europe (M&G Prudential)

The only significant financial options and guarantees in M&G Prudential's covered business arise in the with-profits fund.

With-profits products provide returns to policyholders through bonuses that are smoothed. There are two types of bonuses - annual and final. Annual bonuses are declared once a year and, once credited, are guaranteed in accordance with the terms of the particular product. Final bonuses are guaranteed only until the next bonus declaration. The PAC with-profits fund also held a provision of £52 million at 30 June 2018 (30 June 2017: £62 million; 31 December 2017: £53 million) to honour guarantees on a small number of guaranteed annuity option products.

The Group's main exposure to guaranteed annuity options in M&G Prudential is through the non-covered business of SAIF. A provision of £467 million was held in SAIF at 30 June 2018 (30 June 2017: £572 million; 31 December 2017: £503 million) to honour the guarantees. As described in note 12(a)(i), the assets and liabilities are wholly attributable to the policyholders of the fund. Therefore the movement in the provision has no direct impact on shareholders' funds.

Time value

The value of financial options and guarantees comprises two parts:

- The first part arises from a deterministic valuation on best estimate assumptions (the intrinsic value).
- The second part arises from the variability of economic outcomes in the future (the time value).

Where appropriate, a full stochastic valuation has been undertaken to determine the time value of the financial options and guarantees.

The economic assumptions used for the stochastic calculations are consistent with those used for the deterministic calculations. Assumptions specific to the stochastic calculations reflect local market conditions and are based on a combination of actual market data, historic market data and an assessment of long-term economic conditions. Common principles have been adopted across the Group for the stochastic asset models, for example, separate modelling of individual asset classes but with an allowance for correlation between the various asset classes. Details of the key characteristics of each model are given in notes 13(iv), (v) and (vi).

In deriving the time value of financial options and guarantees, management actions in response to emerging investment and fund solvency conditions have been modelled. Management actions encompass, but are not confined to, investment allocation decisions, levels of reversionary and terminal bonuses and credited rates. Bonus rates are projected from current levels and varied in accordance with assumed management actions applying in the emerging investment and fund solvency conditions.

In all instances, the modelled actions are in accordance with approved local practice and therefore reflect the options actually available to management. For the PAC with-profits fund, the actions assumed are consistent with those set out in the Principles and Practices of Financial Management which explains how regular and final bonus rates within the discretionary framework are determined, subject to the general legislative requirements applicable.

(v) Level of required capital

In adopting the EEV Principles, Prudential has based required capital on its internal targets, subject to it being at least the local statutory minimum requirements.

For with-profits business written in a segregated life fund, as is the case in Asia and the UK, the capital available in the fund is sufficient to meet the required capital requirements. For M&G Prudential, a portion of future shareholder transfers expected from the with-profits fund is recognised within net worth, together with the associated capital requirements.

For shareholder-backed business, the following capital requirements for long-term business operations apply:

- Asia: the level of required capital has been set to an amount at least equal to the higher of local statutory requirements and the internal target. For China operations, from 31 December 2017, the level of required capital follows the approach for embedded value reporting issued by the China Association of Actuaries (CAA), reflecting the C-ROSS regime;
- US: the level of required capital has been set at 250 per cent of the risk-based capital (RBC) required by the National Association of Insurance Commissioners (NAIC) at the Company Action Level (CAL); and
- UK and Europe: the capital requirements are set at the Solvency II Solvency Capital Requirement (SCR) for shareholder-backed business as a whole. Following the announced demerger, from 1 January 2018 this does not allow for diversification outside the planned perimeter of the business to be demerged.

(vi)With-profits business and the treatment of the estate

The proportion of surplus allocated to shareholders from the PAC with-profits fund has been based on the present level of 10 per cent. The value attributed to the shareholders' interest in the estate is derived by increasing final bonus rates (and related shareholder transfers) so as to exhaust the estate over the lifetime of the in-force with-profits business. In any scenarios where the total assets of the life fund are insufficient to meet policyholder claims in full, the excess cost is fully attributed to shareholders. Similar principles apply, where appropriate, for other with-profits funds of the Group's Asia operations.

(vii) Internal asset management

The in-force and new business results from long-term business include the projected value of profits or losses from asset management and service companies that support the Group's covered insurance businesses. The results of the Group's asset management operations include the current period profits from the management of both internal and external funds. EEV basis shareholders' other income and expenditure is adjusted to deduct the unwind of the expected internal asset management profit margin for the period as included in 'Other operations'. The deduction is on a basis consistent with that used for projecting the results for covered insurance business. Group operating profit accordingly includes the variance between actual and expected profit in respect of management of the assets for covered business.

(viii) Allowance for risk and risk discount rates

Overview

Under the EEV Principles, discount rates used to determine the present value of future cash flows are set by reference to risk-free rates plus a risk margin.

For Asia and the US, the risk-free rates are based on 10-year local government bond yields.

For UK and Europe, the EEV risk-free rate is based on the full term structure of interest rates, ie a yield curve, which is used to determine the embedded value at the end of the reporting period.

The risk margin should reflect any non-diversifiable risk associated with the emergence of distributable earnings that is not allowed for elsewhere in the valuation. In order to better reflect differences in relative market risk volatility inherent in each product group, Prudential sets the risk discount rates to reflect the expected volatility associated with the cash flows for each product category in the embedded value model, rather than at a Group level.

Since financial options and guarantees are explicitly valued under the EEV methodology, risk discount rates under EEV are set excluding the effect of these product features.

The risk margin represents the aggregate of the allowance for market risk, additional allowance for credit risk where appropriate, and allowance for non-diversifiable non-market risk. No allowance is required for non-market risks where these are assumed to be fully diversifiable.

Market risk allowance

The allowance for market risk represents the beta multiplied by an equity risk premium. Except for UK shareholder-backed annuity business (as explained below), such an approach has been used for the Group's businesses.

The beta of a portfolio or product measures its relative market risk. The risk discount rates reflect the market risk inherent in each product group and hence the volatility of product cash flows. These are determined by considering how the profits from each product are affected by changes in expected returns on various asset classes. By converting this into a relative rate of return, it is possible to derive a product-specific beta.

Product level betas reflect the most recent product mix to produce appropriate betas and risk discount rates for each major product grouping.

Additional credit risk allowance

The Group's methodology is to allow appropriately for credit risk. The allowance for total credit risk is to cover:

- expected long-term defaults;
- credit risk premium (to reflect the volatility in downgrade and default levels); and
- short-term downgrades and defaults.

These allowances are initially reflected in determining best estimate returns and through the market risk allowance described above. However, for those businesses largely backed by holdings of debt securities these allowances in the projected returns and market risk allowances may not be sufficient and an additional allowance may be appropriate.

The practical application of the allowance for credit risk varies depending upon the type of business as described below:

Asia

For Asia, the allowance for credit risk incorporated in the projected rates of return and the market risk allowance are considered to be sufficient. Accordingly, no additional allowance for credit risk is required.

The projected rates of return for holdings of corporate bonds comprise the risk-free rate plus an assessment of long-term spread over the risk-free rate.

US (Jackson)

For Jackson business, the allowance for long-term defaults is reflected in the risk margin reserve (RMR) charge which is deducted in determining the projected spread margin between the earned rate on the investments and the policyholder crediting rate.

The risk discount rate incorporates an additional allowance for credit risk premium and short-term downgrades and defaults (0.2 per cent for variable annuity business and 1.0 per cent for non-variable annuity business for all periods), as shown in note 13(ii). In determining this allowance a number of factors have been considered. These factors, in particular, include:

- How much of the credit spread on debt securities represents an increased short-term credit risk not reflected in the RMR long-term default assumptions, and how much is liquidity premium (which is the premium required by investors to compensate for the risk of longer-term investments which cannot be easily converted into cash at the fair market value). In assessing this effect, consideration has been given to a number of approaches to estimating the liquidity premium by considering recent statistical data; and
- Policyholder benefits for Jackson fixed annuity business are not fixed. It is possible in adverse economic scenarios to pass
 on a component of credit losses to policyholders (subject to guarantee features) through lower investment returns credited
 to policyholders. Consequently, it is only necessary to allow for the balance of the credit risk in the risk discount rate.

The level of the additional allowance is assessed at each reporting period to take account of prevailing credit conditions and as the business in force alters over time. The additional allowance for variable annuity business has been set at one-fifth of the non-variable annuity business to reflect the proportion of the allocated holdings of general account debt securities.

The level of allowance differs from that for UK annuity business for investment portfolio differences and to take account of the management actions available in adverse economic scenarios to reduce crediting rates to policyholders, subject to guarantee features of the products.

UK and Europe (M&G Prudential)

(1) Shareholder-backed annuity business

For shareholder-backed annuity business, Prudential has used a market consistent embedded value (MCEV) approach to derive an implied risk discount rate which is then applied to the projected best estimate cash flows.

In the annuity MCEV calculations, as the assets are generally held to maturity to match liabilities, the future cash flows are discounted using the swap yield curve plus an allowance for liquidity premium based on the Solvency II allowance for credit risk. The Solvency II allowance is set by the European Insurance and Occupational Pensions Authority (EIOPA) using a prudent assumption that all future downgrades will be replaced annually, and allowing for the credit spread floor.

For the purposes of presentation in the EEV results, the results produced on this basis are reconfigured. Under this approach the projected earned rate of return on the debt securities held is determined after allowing for a best estimate credit risk allowance. The remaining elements of prudence within the Solvency II allowance are incorporated into the risk margin included in the discount rate, shown in note 13(iii).

(2) With-profits fund non-profit annuity business

For non-profit annuity business attributable to the PAC with-profits fund, the basis for determining the aggregate allowance for credit risk is consistent with that applied for UK shareholder-backed annuity business (as described above). The allowance for credit risk for this business is taken into account in determining the projected cash flows from the with-profits fund, which are in turn discounted at the risk discount rate applicable to all of the projected cash flows from the fund.

(3) With-profits fund holdings of debt securities

The with-profits fund holds debt securities as part of its investment portfolio backing policyholder liabilities and unallocated surplus. The assumed earned rate for with-profit holdings of corporate bonds is defined as the risk-free rate plus an assessment of the long-term spread over risk free, net of expected long-term defaults. This approach is similar to that applied for equities and properties for which the projected earned rate is defined as the risk-free rate plus a long-term risk premium.

Allowance for non-diversifiable non-market risks

The majority of non-market and non-credit risks are considered to be diversifiable. An allowance for non-diversifiable non-market risks is estimated as set out below:

A base level allowance of 50 basis points is applied to cover the non-diversifiable non-market risks associated with the Group's businesses. For the Group's Asia operations in China, Indonesia, the Philippines, Taiwan, Thailand and Vietnam, additional allowances are applied for emerging market risk ranging from 100 to 250 basis points. The level of these allowances are reviewed and updated based on an assessment of a range of pre-defined emerging market risk indicators, as well as the Group's exposure and experience in the business units. For the Group's US business and UK and Europe business, no additional allowance is necessary.

(ix)Foreign currency translation

Foreign currency profits and losses have been translated at average exchange rates for the period. Foreign currency assets and liabilities have been translated at period-end exchange rates. The principal exchange rates are shown in note A1 of the IFRS financial statements.

(x) Taxation

In determining the post-tax profit for the period for covered business, the overall tax rate includes the impact of tax effects determined on a local regulatory basis. Tax payments and receipts included in the projected cash flows to determine the value of in-force business are calculated using rates that have been announced and substantively enacted by the end of the reporting period.

(xi)Inter-company arrangements

The EEV results for covered business incorporate annuities established in the PAC non-profit sub-fund from vesting pension policies in SAIF (which is not covered business). The EEV results also incorporate the effect of the reinsurance arrangement of non-profit immediate pension annuity liabilities of SAIF to the PAC non-profit sub-fund.

(b) Accounting presentation

(i) Analysis of post-tax profit

To the extent applicable, the presentation of the EEV post-tax profit for the period is consistent in the classification between operating and non-operating results with the basis that the Group applies for the analysis of IFRS basis results. Operating results reflect underlying results including longer-term investment returns (which are determined as described in note 12(b)(ii)) and incorporate the following:

- new business contribution, as defined in note 12(a)(ii);
- unwind of discount on the value of in-force business and other expected returns, as described in note 12(b)(iii);
- the impact of routine changes of estimates relating to operating assumptions, as described in note 12(b)(iv); and
- operating experience variances, as described in note 12(b)(v).

Non-operating results comprise:

- short-term fluctuations in investment returns;
- the mark to market value movements on core structural borrowings;
- the effect of changes in economic assumptions; and
- the impact of corporate transactions undertaken in the period.

In addition, operating results include the effect of changes in tax legislation, unless these changes are one-off and structural in nature, such as the impact of the US tax reform in full year 2017 (see note 16), or primarily affect the level of projected investment returns, in which case they are reflected as a non-operating result.

Total profit attributable to shareholders and basic earnings per share include these items, together with actual investment returns. The Group believes that operating profit, as adjusted for these items, better reflects underlying performance.

(ii) Investment returns included in operating profit

For the investment element of the assets covering the net worth of long-term insurance business, investment returns are recognised in operating results at the expected long-term rate of return. These expected returns are calculated by reference to the asset mix of the portfolio. For the purpose of calculating the longer-term investment return to be included in the operating result of the PAC with-profits fund of M&G Prudential, where assets backing the liabilities and unallocated surplus are subject to market volatility, asset values at the beginning of the reporting period are adjusted to remove the effects of short-term market movements as explained in note 12(b)(iii).

For the purpose of determining the long-term returns for debt securities of US operations for fixed annuity and other general account business, a risk margin reserve charge is included which reflects the expected long-term rate of default based on the credit quality of the portfolio. For Jackson, interest-related realised gains and losses are amortised to the operating results over the maturity period of the sold bonds and for equity-related investments, a long-term rate of return is assumed, which reflects the aggregation of end-of-period risk-free rates and the equity risk premium. For US variable annuity separate account business, operating profit includes the unwind of discount on the opening value of in-force business adjusted to reflect end-of-period projected rates of return with the excess or deficit of the actual return recognised within non-operating profit, together with related hedging activity.

For UK annuity business, rebalancing of the asset portfolio backing the liabilities to policyholders may, from time to time, take place to align it more closely with the internal benchmark of credit quality that management applies. Such rebalancing will result in a change in the projected yield on the asset portfolio and the allowance for default risk. The net effect of these changes is included in the operating result for the period.

(iii) Unwind of discount and other expected returns

The Group's methodology in determining the unwind of discount and other expected returns is by reference to:

- the value of in-force business at the beginning of the period (adjusted for the effect of current period economic and operating assumption changes); and
- required capital and surplus assets.

In applying this general approach, the unwind of discount included in operating profit for M&G Prudential is described below.

M&G Prudential

The unwind is determined by reference to an implied single risk discount rate. The EEV risk-free rate is based on a yield curve (as set out in note 12(a)(viii)), which is used to derive a single implied discount rate which, if this rate had been used, would reproduce the same embedded value as that calculated by reference to the yield curve. The difference between the operating profit determined using the single implied discount rate and that derived using the yield curve is included within non-operating profit.

For with-profits business, the opening value of in-force is adjusted for the effect of short-term investment volatility due to market movements (ie smoothed). In the summary statement of financial position and for total profit reporting, asset values and investment returns are not smoothed. At 30 June 2018 the shareholders' interest in the smoothed surplus assets used for this purpose only were £14 million higher (30 June 2017: £31 million lower; 31 December 2017: £57 million lower) than the surplus assets carried in the statement of financial position.

(iv) Effect of changes in operating assumptions

Operating profit includes the effect of changes to non-economic assumptions on the value of in-force at the end of the period. For presentational purposes the effect of changes is delineated to show the effect on the opening value of in-force as operating assumption changes, with the experience variances subsequently being determined by reference to the end-of-period assumptions (see note 12(b)(v)).

(v) Operating experience variances

Operating profit includes the effect of experience variances on non-economic assumptions, such as persistency, mortality and morbidity, expenses and other factors, which are calculated with reference to the end-of-period assumptions.

(vi) Effect of changes in economic assumptions

Movements in the value of in-force business at the beginning of the period caused by changes in economic assumptions, net of the related change in the time value of cost of options and guarantees, are recorded in non-operating results. For M&G Prudential, the embedded value incorporates Solvency II transitional measures, which are recalculated using management's estimate of the impact of operating and market conditions at the valuation date. The effect of changes in economic assumptions is after allowing for this recalculation.

13 Assumptions

Principal economic assumptions

The EEV basis results for the Group's operations have been determined using economic assumptions where the long-term expected rates of return on investments and risk discount rates are set by reference to period-end risk-free rates of return (defined below for each of the Group's insurance operations). Expected returns on equity and property asset classes and corporate bonds are derived by adding a risk premium, based on the Group's long-term view, to the risk-free rate.

The total profit that emerges over the lifetime of an individual contract as calculated using the embedded value basis is the same over time as that calculated under the IFRS basis. Since the embedded value basis reflects discounted future cash flows, under the EEV methodology the profit emergence is advanced, thus more closely aligning the timing of the recognition of profit with the efforts and risks of current management actions, particularly with regard to business sold during the period.

(i) Asia^{notes (b)(c)}

The risk-free rates of return for Asia are defined as 10-year government bond yields at the end of the period.

	Risk discount rate %								
	Nev	v business		In-force business					
	2018	2017		2018	2017				
	30 Jun	30 Jun	31 Dec	30 Jun	30 Jun	31 Dec			
China	9.3	9.3	9.7	9.3	9.3	9.7			
Hong Kong ^{notes (b)(d)}	4.3	3.6	4.1	4.4	3.7	4.1			
Indonesia	12.1	11.2	10.6	12.1	11.2	10.6			
Malaysia ^{note (d)}	6.8	6.8	6.4	6.8	6.9	6.5			
Philippines	14.1	12.2	12.7	14.1	12.2	12.7			
Singapore ^{note (d)}	3.9	3.8	3.5	4.9	4.7	4.4			
Taiwan	4.5	3.8	4.3	4.0	4.1	3.9			
Thailand	10.1	10.0	9.8	10.1	10.0	9.8			
Vietnam	12.2	13.2	12.6	12.2	13.2	12.6			
Total weighted risk discount rate ^{note (a)}	5.6	5.1	5.3	6.0	5.8	5.7			

	10-year gove	Expected long-term Inflation %				
	2018	2017		2018	2017	
	30 Jun	30 Jun	31 Dec	30 Jun	30 Jun	31 Dec
China	3.5	3.6	3.9	3.0	3.0	3.0
Hong Kong ^{notes (b)(d)}	2.9	2.3	2.4	2.5	2.5	2.5
Indonesia	7.9	6.9	6.4	4.5	4.5	4.5
Malaysia ^{note (d)}	4.2	3.9	3.9	2.5	2.5	2.5
Philippines	6.6	4.7	5.2	4.0	4.0	4.0
Singapore ^{note (d)}	2.6	2.1	2.0	2.0	2.0	2.0
Taiwan	0.9	1.1	0.9	1.5	1.5	1.5
Thailand	2.6	2.5	2.3	3.0	3.0	3.0
Vietnam	4.7	5.7	5.1	5.5	5.5	5.5

Notes

- The weighted risk discount rates for Asia operations shown above have been determined by weighting each market's risk discount rates by reference to the post-tax EEV basis new business contribution and the closing value of in-force business. The changes in the risk discount rates for individual Asia business units reflect the movements in 10-year government bond yields, changes in product mix and the effect of changes in the economic basis.
- (b) For Hong Kong the assumptions shown are for US dollar denominated business. For other business units, the assumptions are for local currency denominated business.
- Equity risk premiums in Asia range from 4.0 per cent to 9.4 per cent for all periods.
- The mean equity return assumptions for the most significant equity holdings of the Asia operations are:

	2018 %	2017	2017 %	
	30 Jun	30 Jun	31 Dec	
Hong Kong	6.9	6.3	6.4	
Malaysia	10.7	10.4	10.4	
Singapore	9.1	8.6	8.5	

(ii) US

The risk-free rates of return for the US are defined as the 10-year treasury bond yield at the end of the period.

	2018 %	2017 %	
	30 Jun	30 Jun	31 Dec
Assumed new business spread margins:*			<u> </u>
Fixed annuity business:**			
January to June issues	1.75	1.50	1.50
July to December issues	n/a	n/a	1.25
Fixed index annuity business:			
January to June issues	2.00	1.75	1.75
July to December issues	n/a	n/a	1.50
Institutional business	0.50	0.50	0.50
Allowance for long-term defaults included in projected spread ^{note 12(a)(viii)}	0.18	0.20	0.19
Risk discount rate:			
Variable annuity:			
Risk discount rate	7.3	6.7	6.8
Additional allowance for credit risk included in risk discount rate ^{note 12(a)(viii)}	0.2	0.2	0.2
Non-variable annuity:			
Risk discount rate	4.6	3.9	4.1
Additional allowance for credit risk included in risk discount rate ^{note 12(a)(viii)}	1.0	1.0	1.0
Weighted average total:			
New business	7.1	6.5	6.7
In-force business	7.0	6.3	6.5
US 10-year treasury bond yield	2.9	2.3	2.4
Pre-tax expected long-term nominal rate of return for US equities	6.9	6.3	6.4
Expected long-term rate of inflation	3.1	2.9	3.0
Equity risk premium	4.0	4.0	4.0
S&P equity return volatility ^{note (v)}	18.0	18.0	18.0

^{*} For fixed annuity and fixed index annuity business, the assumed spread margin grades up linearly by 25 basis points to a long-term assumption over five years.

(iii) UK and Europe

The risk-free rate is based on the full term structure of interest rates, ie a yield curve, which is used to determine the embedded value at the end of the reporting period. These yield curves are used to derive pre-tax expected long-term nominal rates of investment return and risk discount rates. For the purpose of determining the unwind of discount in the analysis of operating profit, these yield curves are used to derive a single implied risk discount rate, as explained in note 12(a)(viii).

This single implied risk discount rate is shown, along with the 15-year nominal rate of investment return and 15-year rate of inflation based on the inflation yield curve.

	2018 %	2017 %	
	30 Jun	30 Jun	31 Dec
Shareholder-backed annuity in-force business ^{note (a)} :			
Risk discount rate	4.1	4.3	4.0
Pre-tax expected 15-year nominal rates of investment return	2.9	2.7	2.6
With-profits and other business:			
Risk discount rate ^{note (b)} :			
New business	4.8	4.9	4.7
In-force business	4.9	4.9	4.8
Pre-tax expected 15-year nominal rates of investment return:			
Overseas equities	6.6 to 10.3	6.1 to 9.9	6.2 to 10.1
Property	4.4	4.5	4.4
15-year gilt yield	1.7	1.7	1.6
Corporate bonds	3.5	3.5	3.4
Expected 15-year rate of inflation	3.4	3.5	3.5
Equity risk premium	4.0	4.0	4.0

Notes

- (a) For shareholder-backed annuity business, the movements in the pre-tax long-term nominal rates of return and risk discount rates reflect the effect of changes in asset yields.
- (b) The risk discount rates for with-profits and other business shown above represents a weighted average total of the rates applied to determine the present value of future cash flows, including the portion of future with-profits business shareholders' transfers recognised in net worth.
- (c) The table below shows the pattern of the UK risk-free Solvency II spot yield curve at the end of all periods shown:

	1 year	5 year	10 year	15 year	20 year
30 Jun 2018	0.8%	1.2%	1.4%	1.5%	1.6%
31 Dec 2017	0.6%	0.9%	1.2%	1.3%	1.4%
30 Jun 2017	0.4%	0.8%	1.2%	1.4%	1.5%

Stochastic assumptions

Details are given below of the key characteristics of the models used to determine the time value of the financial options and guarantees as referred to in note 12(a)(iv).

^{**} Including the proportion of variable annuity business invested in the general account.

(iv) Asia

- The stochastic cost of guarantees is primarily of significance for the Hong Kong, Malaysia, Singapore and Taiwan operations:
- The principal asset classes are government and corporate bonds;
- The asset return models are similar to the models as described for M&G Prudential below; and
- The volatility of equity returns ranges from 18 per cent to 35 per cent, and the volatility of government bond yields ranges from 1.1 per cent to 2.0 per cent (half year 2017: from 0.9 per cent to 2.3 per cent; full year 2017: from 1.1 per cent to 2.0 per cent) following a number of modelling changes at full year 2017 in respect of future bond returns.

(v) US (Jackson)

- Interest rates and equity returns are projected using a log-normal generator reflecting historical market data;
- Corporate bond returns are based on treasury yields plus a spread that reflects current market conditions; and
- The volatility of equity returns ranges from 18 per cent to 27 per cent for all periods, and the standard deviation of interest rates ranges from 2.6 per cent to 2.9 per cent (half year 2017: from 2.4 per cent to 2.7 per cent; full year 2017: from 2.5 per cent to 2.8 per cent).

(vi) UK and Europe (M&G Prudential)

- Interest rates are projected using a stochastic interest rate model calibrated to the current market yields;
- Equity returns are assumed to follow a log-normal distribution;
- The corporate bond return is calculated based on a risk-free return plus a mean-reverting spread;
- Property returns are also modelled based on a risk-free return plus a risk premium with a stochastic process reflecting total property returns; and
- The standard deviation of equities and property ranges from 14 per cent to 20 per cent (half year 2017: from 15 per cent to 20 per cent; full year 2017: from 14 per cent to 20 per cent).

Operating assumptions

(vii) Best estimate assumptions

Best estimate assumptions are used for the cash flow projections, where best estimate is defined as the mean of the distribution of future possible outcomes. The assumptions are reviewed actively and changes are made when evidence exists that material changes in future experience are reasonably certain.

Assumptions required in the calculation of the value of options and guarantees, for example relating to volatilities and correlations, or dynamic algorithms linking liabilities to assets, have been set equal to the best estimates and, wherever material and practical, reflect any dynamic relationships between the assumptions and the stochastic variables.

Demographic assumptions

Persistency, mortality and morbidity assumptions are based on an analysis of recent experience, but also reflect expected future experience. Where relevant, when calculating the time value of financial options and guarantees, policyholder withdrawal rates vary in line with the emerging investment conditions according to management's expectations.

Expense assumptions

Expense levels, including those of service companies that support the Group's long-term business operations, are based on internal expense analysis and are appropriately allocated to acquisition of new business and renewal of in-force business. Exceptional expenses are identified and reported separately. For mature business, it is Prudential's policy not to take credit for future cost reduction programmes until the actions to achieve the savings have been delivered. Expense overruns are reported where these are expected to be short-lived, including businesses that are growing rapidly or are sub-scale.

For Asia operations, the expenses comprise costs borne directly and recharged costs from the Asia Regional Head Office that are attributable to covered business. The assumed future expenses for these operations also include projections of these future recharges. Development expenses are charged as incurred.

Corporate expenditure, which is included in other income and expenditure, comprises:

- expenditure for Group Head Office, to the extent not allocated to the PAC with-profits funds, together with restructuring costs: and
- expenditure of the Asia Regional Head Office that is not allocated to the covered business or asset management operations which is charged as incurred. These costs are primarily for corporate related activities and are included within corporate expenditure.

(viii) Tax rates

The assumed long-term effective tax rates for operations reflect the incidence of taxable profits and losses in the projected cash flows as explained in note 12(a)(x).

The local statutory corporate tax rates applicable for the most significant operations for 2017 and 2018 are as follows:

Statutory corporate tax rates	<u> </u>
Asia operations:	
Hong Kong	16.5 per cent on 5 per cent of premium income
Indonesia	25.0
Malaysia	24.0
Singapore	17.0
US operations	2017: 35.0; 2018: 21.0
UK operations	1 January 2017 until 31 March 2017: 20.0; from 1 April 2017: 19.0; from 1 April 2020: 17.0

14 Total insurance and investment products new business note (i)

Group insurance operations - new business premiums and contributions

	Single premiums				Regular premiums			Annual premium equivalents (APE) note 12(a)(ii) 2018 £m 2017 £m			Present value of new business premiums (PVNBP) note 12(a)(ii)			
	2018 £m	2017		2018 £m	2017		2018 £m			2018 £m	2017			
	Half	Half	Full	Half	Half	Full	Half	Half	Full	Half	Half	Full		
	year	year	year	year	year	year	year	year	year	year	year	year		
Asia	1,121	1,131	2,299	1,624	1,830	3,575	1,736	1,943	3,805	9,132	10,095	20,405		
US	8,163	9,602	16,622		-		816	960	1,662	8,163	9,602	16,622		
UK and Europe	6,690	6,251	13,044	101	96	187	770	721	1,491	7,088	6,616	13,784		
Group Total note (iv)	15,974	16,984	31,965	1,725	1,926	3,762	3,322	3,624	6,958	24,383	26,313	50,811		
Asia														
Cambodia	-	-	-	8	8	16	8	8	16	37	37	70		
Hong Kong	157	368	582	726	877	1,667	742	914	1,725	4,210	5,190	10,027		
Indonesia	118	126	288	101	131	268	113	144	297	434	558	1,183		
Malaysia	31	33	73	114	125	271	117	128	278	583	623	1,398		
Philippines	22	28	62	36	33	71	38	36	77	134	134	287		
Singapore	420	323	859	163	163	361	205	195	447	1,529	1,451	3,463		
Thailand	124	53	139	41	37	70	53	42	84	289	199	421		
Vietnam	8	3	8	60	62	133	61	62	134	305	298	659		
SE Asia operations														
including Hong Kong	880	934	2,011	1,249	1,436	2,857	1,337	1,529	3,058	7,521	8,490	17,508		
China ^{note (ii)}	30	141	179	184	173	276	187	187	294	759	827	1,299		
Taiwan	180	25	46	90	102	208	108	105	213	426	314	634		
India ^{note (iii)}	31	31	63	101	119	234	104	122	240	426	464	964		
Total	1,121	1,131	2,299	1,624	1,830	3,575	1,736	1,943	3,805	9,132	10,095	20,405		
US														
Variable annuities	5,439	6,041	11,536	-	-	-	544	604	1,154	5,439	6,041	11,536		
Elite Access														
(variable annuity)	898	1,101	2,013	-	-	-	89	110	201	898	1,101	2,013		
Fixed annuities	166	245	454	-	-	-	17	24	45	166	245	454		
Fixed index annuities	125	158	295	-	-	-	13	16	30	125	158	295		
Wholesale	1,535	2,057	2,324	-	-	-	153	206	232	1,535	2,057	2,324		
Total	8,163	9,602	16,622	-	-	-	816	960	1,662	8,163	9,602	16,622		
UK and Europe														
Bonds	1,650	1,742	3,509	-	-	-	165	174	351	1,650	1,742	3,510		
Corporate pensions	43	['] 77	103	70	67	130	75	75	140	275	286	533		
Individual pensions	2,989	2,609	5,747	17	18	32	316	279	607	3,072	2,690	5,897		
Income drawdown	1,226	1,061	2,218	-	-	-	123	106	222	1,226	1,061	2,218		
Other products	782	762	1,467	14	11	25	91	87	171	865	837	1,626		
Total	6,690	6,251	13,044	101	96	187	770	721	1,491	7,088	6,616	13,784		
Group Total	15,974	16,984	31,965	1,725	1,926	3,762	3,322	3,624	6,958	24,383	26,313	50,811		

Present value of new

Notes

(i) The tables shown above are provided as an indicative volume measure of transactions undertaken in the reporting period that have the potential to generate profits for shareholders. The amounts shown are not, and not intended to be, reflective of premium income recorded in the IFRS income statement. A reconciliation of APE and gross earned premiums on an IFRS basis is provided in Note D within the EEV unaudited financial information.

The format of the tables shown above is consistent with the distinction between insurance and investment products as applied for previous financial reporting periods. With the exception of some US institutional business, products categorised as 'insurance' refer to those classified as contracts of long-term insurance business for regulatory reporting purposes, ie falling within one of the classes of insurance specified in Part II of Schedule 1 to the Regulated Activities Order under Prudential Regulation Authority regulations.

The details shown above for insurance products include contributions for contracts that are classified under IFRS 4 'Insurance Contracts' as not containing significant insurance risk. These products are described as investment contracts or other financial instruments under IFRS. Contracts included in this category are primarily certain unit-linked and similar contracts written in UK insurance operations and Guaranteed Investment Contracts and similar funding agreements written in US operations.

- (ii) New business in China is included at Prudential's 50 per cent interest in the China life operation.
- (iii) New business in India is included at Prudential's 26 per cent interest in the India life operation.
- (iv) During the first half of 2018 the African business sold £18 million APE of new business. Given the relative immaturity of the African business, it is incorporated into the Group's EEV results on an IFRS basis and for now it is excluded from our new business sales and profit metrics.

		Ha	ait year 2018 £m		
				Market	
				exchange	
		Market		translation	
		gross		and other	
	1 Jan 2018	inflows	Redemptions	movements	30 Jun 2018
Eastspring Investments	46,568	10,456	(11,319)	(3,335)	42,370
M&G Prudential	163,855	21,401	(17,853)	(1,913)	165,490
Group total	210,423	31,857	(29,172)	(5,248)	207,860

Half waar 2010 Cr

		Half year 2017 £m							
		Market gross		Market exchange translation and other					
	1 Jan 2017	inflows	Redemptions	movements	30 Jun 2017				
Eastspring Investments	38,042	11,536	(9,263)	4,281	44,596				
M&G Prudential	136,763	22,677	(15,498)	5,176	149,118				
Group total	174,805	34,213	(24,761)	9,457	193,714				

Notes

- (i) Investment products referred to in the tables for funds under management above are unit trusts, mutual funds and similar types of retail fund management arrangements. These are unrelated to insurance products that are classified as 'investment contracts' under IFRS 4, although similar IFRS recognition and measurement principles apply to the acquisition costs and fees attaching to this type of business.
- (ii) Investment flows for half year 2018 exclude Eastspring Money Market Funds gross inflows of £95,336 million (half year 2017: gross inflows of £96,704 million) and net inflows of £665 million (half year 2017: net inflows of £499 million).
- (iii) New business and market gross inflows and redemptions have been translated at an average exchange rate for the period applicable. Funds under management at points in time are translated at the exchange rate applicable to those dates.

15 Corporate transactions

The (loss) profit attaching to corporate transactions represents the following:

			£m
	Half year	Half year	Full year
Transactions associated with M&G Prudential ^{note (i)}	(364)	-	-
Other ^{note (ii)}	(48)	-	80
	(412)	-	80

Notes

(i) Transactions associated with M&G Prudential

Intention to demerge the Group's UK business and transfer of Hong Kong insurance subsidiaries

In March 2018, the Group announced its intention to demerge its UK and Europe business (M&G Prudential) from Prudential plc, resulting in two separately listed companies. In addition, Prudential plc announced its intention to transfer the legal ownership of its Hong Kong insurance subsidiaries from The Prudential Assurance Company Limited (M&G Prudential's UK regulated insurance entity) to Prudential Corporation Asia Limited in preparation for the UK demerger process.

Sale of shareholder annuity portfolio

In March 2018, M&G Prudential announced the sale of £12.0 billion (IFRS liabilities value as at 31 December 2017) of its shareholder annuity portfolio to Rothesay Life. Under the terms of the agreement, M&G Prudential reinsured the liabilities to Rothesay Life, which is expected to be followed by a Part VII transfer of the portfolio by the end of 2019. The half year 2018 EEV results include the impact on EEV resulting from this transfer.

These transactions reduced the Group's EEV by £(364) million which primarily reflects the loss of profits on the portion of annuity liabilities sold.

(ii) Other Transactions

In half year 2018, other corporate transactions resulted in an EEV loss of £(48) million (half year 2017: £nil; full year 2017: £80 million gain). On 15 August 2017, the Group, through its subsidiary National Planning Holdings, Inc. (NPH), sold its US independent broker-dealer network to LPL Financial LLC, which realised a post-tax gain of £80 million in full year 2017.

Other transaction costs of £(48) million incurred in the first half of 2018 primarily relate to additional costs incurred in exiting the NPH broker-dealer business and costs related to preparation for the announced demerger discussed above.

16 Impact of US tax reform

On 22 December 2017, a significant US tax reform package, The Tax Cuts and Jobs Act, was enacted into law effective from 1 January 2018. The tax reform package as a whole, which includes a reduction in the corporate income tax rate from 35 per cent to 21 per cent, and a number of specific measures affecting US life insurers, resulted in a £390 million benefit in non-operating profit reflected within the full year 2017 results. The positive impact on an EEV basis represented the benefit of future profits being taxed at a lower rate, partially offset by a reduction in the net deferred tax asset held in the balance sheet to reflect remeasurement at the new lower tax rate, together with a reduction in the benefit from the dividend received deduction on taxable profits from variable annuity business.

In June 2018, the National Association of Insurance Commissioners (NAIC) formally approved changes to RBC capital factors that reflect the December 2017 US tax reform. The half year 2018 EEV results reflect these changes as shown in notes 6 and 9.

17 Post balance sheet events

On 25 July 2018 the Group announced that Eastspring had reached an agreement to initially acquire 65 per cent of TMB Asset Management Co., Ltd., an asset management company in Thailand, from TMB Bank Public Company Limited ("TMB"). Eastspring has an option to increase its ownership to 100 per cent in the future. As part of this acquisition, Eastspring has also entered into a distribution agreement with TMB to provide investment solutions to their customers. The completion of the transaction is subject to local regulatory approval.

In August 2018, the Group announced the extension of the geographical scope of its bancassurance partnership with Standard Chartered Bank to include Ghana. Under the partnership, a range of Prudential Ghana's life insurance products will be made available to clients through Standard Chartered's branch network.

In August 2018 the Group announced that it had entered into an agreement with the UK-based healthcare technology and services company Babylon Health to provide customers in Asia access to a suite of health services that utilise artificial intelligence technology.

Additional EEV financial information*

A New business

BASIS OF PREPARATION

The format of the schedules is consistent with the distinction between insurance and investment products as applied for previous financial reporting periods. With the exception of some US institutional business, products categorised as 'insurance' refer to those classified as contracts of long-term insurance business for regulatory reporting purposes, ie falling within one of the classes of insurance specified in Part II of Schedule 1 to the Regulated Activities Order under Prudential Regulation Authority regulations.

The details shown for insurance products include contributions for contracts that are classified under IFRS 4 'Insurance Contracts' as not containing significant insurance risk. These products are described as investment contracts or other financial instruments under IFRS. Contracts included in this category are primarily certain unit-linked and similar contracts written in UK and Europe Insurance Operations, and Guaranteed Investment Contracts and similar funding agreements written in US Insurance Operations.

New business premiums reflect those premiums attaching to covered business, including premiums for contracts designed as investment products for IFRS reporting and for regular premium products are shown on an annualised basis.

Investment products referred to in the tables for funds under management are unit trusts, mutual funds and similar types of retail fund management arrangements. These are unrelated to insurance products that are classified as investment contracts under IFRS 4, as described in the preceding paragraph, although similar IFRS recognition and measurement principles apply to the acquisition costs and fees attaching to this type of business.

Post-tax New Business Profit has been determined using the European Embedded Value (EEV) methodology set out in our EEV basis results supplement.

In determining the EEV basis value of new business written in the period when policies incept, premiums are included in projected cash flows on the same basis of distinguishing annual and single premium business as set out for statutory basis reporting.

Annual premium equivalent (APE) sales are subject to rounding.

* The additional financial information is not covered by the KPMG LLP independent review opinion.

Notes to Schedules A(i) to A(v)

(1) Prudential plc reports its results using both actual exchange rates (AER) and constant exchange rates (CER) so as to eliminate the impact of exchange translation.

		Average rate*		Closing rate				
·		9	6 appreciation		9/	6 appreciation		
	Half year	Half year (deprec	•	30 Jun	30 Jun (deprec	,		
Local currency: £	2018	2017 currenc	y against GBP	2018	2017 currency against GBP			
China	8.76	8.66	(1)%	8.75	8.81	1%		
Hong Kong	10.78	9.80	(9)%	10.36	10.14	(2)%		
Indonesia	18,938.64	16,793.63	(11)%	18,919.18	17,311.76	(8)%		
Malaysia	5.42	5.53	2%	5.33	5.58	5%		
Singapore	1.83	1.77	(3)%	1.80	1.79	(1)%		
Thailand	43.66	43.72	0%	43.74	44.13	1%		
US	1.38	1.26	(9)%	1.32	1.30	(2)%		
Vietnam	31,329.01	28,612.70	(9)%	30,310.96	29,526.43	(3)%		

		Average rate		Closing rate					
	,		% appreciation			% appreciation			
Half year* Full year (depreciation) of				30 Jun	31 Dec (depre	eciation) of local			
Local currency: £	2018	2017 current	y against GBP	2018	2017 currency against GBP				
China	8.76	8.71	(1)%	8.75	8.81	1%			
Hong Kong	10.78	10.04	(7)%	10.36	10.57	2%			
Indonesia	18,938.64	17,249.38	(9)%	18,919.18	18,353.44	(3)%			
Malaysia	5.42	5.54	2%	5.33	5.47	3%			
Singapore	1.83	1.78	(3)%	1.80	1.81	1%			
Thailand	43.66	43.71	0%	43.74	44.09	1%			
US	1.38	1.29	(7)%	1.32	1.35	2%			
Vietnam	31,329.01	29,279.71	(7)%	30,310.96	30,719.60	1%			

Average rate is for the 6 month period to 30 June.

- (2) Annual Premium Equivalents (APE), calculated as regular new business contributions plus 10 per cent of single new business contributions, are subject to rounding. Present value of new business premiums (PVNBP) are calculated as equalling single premiums plus the present value of expected premiums of new regular premium business. In determining the present value, allowance is made for lapses and other assumptions applied in determining the EEV new business profit.
- (3) Balance includes segregated and pooled pension funds, private finance assets and other institutional clients.
- (4) New business in India is included at Prudential's 26 per cent interest in the India life operation.
- (5) Balance sheet figures have been calculated at the closing exchange rates.
- (6) New business in China is included at Prudential's 50 per cent interest in the China life operation.
- (7) Mandatory Provident Fund (MPF) product sales in Hong Kong are included at Prudential's 36 per cent interest in Hong Kong MPF operation.
- (8) Investment flows for the year exclude year-to-date Eastspring Money Market Funds (MMF) gross inflows of £95,336 million (half year 2017: gross inflows of £96,704 million; full year 2017: gross inflows of £192,662 million) and net inflows of £665 million (half year 2017: net inflows of £499 million; full year 2017: net inflows of £1,495 million).
- (9) Total Group Investment Operations funds under management exclude MMF funds under management of £10,067 million at 30 June 2018 (30 June 2017: £8,327 million; 31 December 2017: £9,317 million).

Schedule A(i) New Business Insurance Operations (Actual Exchange Rates)

Note: The 2017 comparative results are shown below on actual exchange rates (AER) as previously reported.

	Single premiums			Regula	Regular premiums			APE ⁽²⁾		Р	VNBP ⁽²⁾	
	2018	2017	+/(-)	2018	2017	+/(-)	2018	2017	+/(-)	2018	2017	+/(-)
	Half	Half		Half	Half		Half	Half		Half	Half	
	year	year		year	year		year	year		year	year	
	£m	£m	%	£m	£m	%	£m	£m	%	£m	£m	%
Group insurance operations												
Asia	1,121	1,131	(1)%	1,624	1,830	(11)%	1,736	1,943	(11)%	9,132	10,095	(10)%
US	8,163	9,602	(15)%	-	-	-	816	960	(15)%	8,163	9,602	(15)%
UK and Europe	6,690	6,251	7%	101	96	5%	770	721	7%	7,088	6,616	7%
Group total	15,974	16,984	(6)%	1,725	1,926	(10)%	3,322	3,624	(8)%	24,383	26,313	(7)%
Asia insurance												
operations												
Cambodia	-	-	_	8	8	-	8	8	_	37	37	-
Hong Kong	157	368	(57)%	726	877	(17)%	742	914	(19)%	4,210	5,190	(19)%
Indonesia	118	126	`(6)%	101	131	(23)%	113	144	(22)%	434	558	(22)%
Malaysia	31	33	(6)%	114	125	`(9)%	117	128	`(9)%	583	623	(6)%
Philippines	22	28	(21)%	36	33	9%	38	36	6%	134	134	` ,
Singapore	420	323	30%	163	163]	205	195	5%	1,529	1,451	5%
Thailand	124	53	134%	41	37	11%	53	42	26%	289	199	45%
Vietnam	8	3	167%	60	62	(3)%	61	62	(2)%	305	298	2%
SE Asia operations						` ′			` /			
including Hong Kong	880	934	(6)%	1,249	1,436	(13)%	1,337	1,529	(13)%	7,521	8,490	(11)%
China ⁽⁶⁾	30	141	(79)%	184	173	` 6%	187	187	` _	759	827	(8)%
Taiwan	180	25	62Ó%	90	102	(12)%	108	105	3%	426	314	36%
India ⁽⁴⁾	31	31	_	101	119	(15)%	104	122	(15)%	426	464	(8)%
Total Asia insurance						` ′			· /			
operations	1,121	1,131	(1)%	1,624	1,830	(11)%	1,736	1,943	(11)%	9,132	10,095	(10)%
US insurance												
operations												
Variable annuities	5,439	6,041	(10)%	-	_	_	544	604	(10)%	5,439	6,041	(10)%
Elite Access (variable	-,	-,	(10),0						(10),0	-,	-,	(10)
annuity)	898	1,101	(18)%	_	_	_	89	110	(19)%	898	1,101	(18)%
Fixed annuities	166	245	(32)%	-	_	_	17	24	(29)%	166	245	(32)%
Fixed index annuities	125	158	(21)%	-	_	_	13	16	(19)%	125	158	(21)%
Wholesale	1,535	2,057	(25)%	-	_	_	153	206	(26)%	1,535	2,057	(25)%
Total US insurance	,	,	` -,						\	,	,	\ -//
operations	8,163	9,602	(15)%	-	-	-	816	960	(15)%	8,163	9,602	(15)%
UK and Europe insurance												
operations												
Bonds	1,650	1,742	(5)%	_	_		165	174	(5)%	1,650	1,742	(5)%
Corporate pensions	43	77	(44)%	70	67	4%	75	75	(0)/0	275	286	(4)%
Individual pensions	2,989	2,609	15%	17	18	(6)%	316	279	13%	3,072	2,690	14%
Income drawdown	1,226	1,061	16%	- '-	-	(3) /0	123	106	16%	1,226	1,061	16%
Other products	782	762	3%	14	11	27%	91	87	5%	865	837	3%
Total UK and Europe	, UL	102	370			Z1 /0	<u> </u>	01	3 /0	000	001	370
insurance operations	6,690	6,251	7%	101	96	5%	770	721	7%	7,088	6,616	7%
Group total	15,974	16,984	(6)%	1,725	1,926	(10)%	3,322	3,624	(8)%	24,383	26,313	(7)%

During the first half of 2018 the African business sold £18 million APE of new business. Given the relative immaturity of the African business, it is incorporated into the Group's EEV results on an IFRS basis and for now it is excluded from our new business sales and profit metrics.

Schedule A(ii) New Business Insurance Operations (Constant Exchange Rates)

Note: The half year 2017 comparative results are shown below on constant exchange rates (CER), ie translated at half year 2018 average exchange rates.

	Single premiums			Regula	r premiu	ns		APE ⁽²⁾		Р	VNBP ⁽²⁾	
	2018	2017	+/(-)	2018	2017	+/(-)	2018	2017	+/(-)	2018	2017	+/(-)
	Half	Half		Half	Half		Half	Half		Half	Half	
	year	year		year	year		year	year		year	year	
	£m	£m	%	£m	£m	%	£m	£m	%	£m	£m	%
Group insurance operations												
Asia	1,121	1,064	5%	1,624	1,705	(5)%	1,736	1,811	(4)%	9,132	9,414	(3)%
US	8,163	8,793	(7)%	-	-	-	816	879	(7)%	8,163	8,793	(7)%
UK and Europe	6,690	6,251	7%	101	96	5%	770	721	7%	7,088	6,616	7%
Group total	15,974	16,108	(1)%	1,725	1,801	(4)%	3,322	3,411	(3)%	24,383	24,823	(2)%
Asia insurance												
operations												
Cambodia	-	_	_	8	8	_	8	8	_	37	34	9%
Hong Kong	157	334	(53)%	726	796	(9)%	742	830	(11)%	4,210	4,714	(11)%
Indonesia	118	112	5%	101	117	(14)%	113	128	(12)%	434	495	(12)%
Malaysia	31	33	(6)%	114	127	(10)%	117	130	(10)%	583	635	(8)%
Philippines	22	25	(12)%	36	29	24%	38	32	19%	134	118	14%
Singapore	420	313	34%	163	158	3%	205	189	8%	1,529	1.405	9%
Thailand	124	53	134%	41	37	11%	53	42	26%		199	45%
Vietnam	8	3	167%	60	57	5%	61	57	7%	305	273	12%
SE Asia operations												
including Hong Kong	880	873	1%	1,249	1,329	(6)%	1,337	1,416	(6)%	7,521	7,873	(4)%
China ⁽⁶⁾	30	139	(78)%	184	170	8%	187	184	2%	759	818	(7)%
Taiwan	180	24	650%	90	97	(7)%	108	100	8%	426	298	43%
India ⁽⁴⁾	31	28	11%	101	109	(7)%	104	111	(6)%	426	425	0%
Total Asia insurance			1170		100	(1)/0			(0)70		120	0 70
operations	1,121	1,064	5%	1,624	1,705	(5)%	1,736	1,811	(4)%	9,132	9,414	(3)%
- I - I - I - I - I - I - I - I - I - I	.,	1,001	070	.,02.	1,700	(0)70	.,	1,011	(1)/0	0,102	0,111	(0)70
US insurance												
operations												
Variable annuities	5,439	5,531	(2)%	_	_		544	553	(2)%	5,439	5,531	(2)%
Elite Access (variable	0, .00	0,001	(=) /0				• • • • • • • • • • • • • • • • • • • •	000	(=) / 0	0, 100	0,001	(=) /0
annuity)	898	1,008	(11)%	_	_	_	89	101	(12)%	898	1.008	(11)%
Fixed annuities	166	226	(27)%	_	_		17	23	(26)%	166	226	(27)%
Fixed index annuities	125	145	(14)%	_	_		13	14	(7)%	125	145	(14)%
Wholesale	1,535	1,883	(18)%	_	_		153	188	(19)%	1,535	1,883	(18)%
Total US insurance	1,000	1,000	(10)70				100	100	(10)70	1,000	1,000	(10)/0
operations	8,163	8,793	(7)%	_	-	-	816	879	(7)%	8,163	8,793	(7)%
IIIZ and Famous '												
UK and Europe insurance												
operations	4 050	4 740	(5)01				40-		(5)01	4 0=0	4 740	/=\c:
Bonds	1,650	1,742	(5)%	-	-	46.	165	174	(5)%	1,650	1,742	(5)%
Corporate pensions	43	77	(44)%	70	67	4%	75	75	4000	275	286	(4)%
Individual pensions	2,989	2,609	15%	17	18	(6)%	316	279	13%	3,072	2,690	14%
Income drawdown	1,226	1,061	16%	-	-		123	106	16%	1,226	1,061	16%
Other products	782	762	3%	14	11	27%	91	87	5%	865	837	3%
Total UK and Europe												
insurance operations	6,690	6,251	7%	101	96	5%	770	721	7%	7,088	6,616	7%
Group total	15,974	16,108	(1)%	1,725	1,801	(4)%	3,322	3,411	(3)%	24,383	24,823	(2)%

Schedule A(iii) Total Insurance New Business APE (Actual and Constant Exchange Rates)

Note: Comparative results for the first half (H1) and second half (H2) of 2017 are presented on both actual exchange rates (AER) and constant exchange rates (CER). The H2 amounts are presented on year-to-date average exchange rates (including the effect of retranslating H1 results for movements in average exchange rates between H1 and the year to date)

		201	7		2018
	AER		CER		AER
	H1	H2	H1	H2	H1
	£m	£m	£m	£m	£m
Group insurance operations					
Asia	1,943	1,862	1,811	1,801	1,736
US	960	702	879	678	816
UK and Europe	721	770	721	770	770
Group total	3,624	3,334	3,411	3,249	3,322
Asia insurance operations					
Cambodia	8	8	8	7	8
Hong Kong	914	811	830	776	742
Indonesia	144	153	128	142	113
Malaysia	128	150	130	155	117
Philippines	36	41	32	38	38
Singapore	195	252	189	247	205
Thailand	42	42	42	42	53
Vietnam	62	72	57	68	61
SE Asia operations including Hong Kong	1,529	1,529	1,416	1,475	1,337
China ⁽⁶⁾	187	107	184	108	187
Taiwan	105	108	100	106	108
India ⁽⁴⁾	122	118	111	112	104
Total Asia insurance operations	1,943	1,862	1,811	1,801	1,736
US insurance operations					
Variable annuities	604	550	553	528	544
Elite Access (variable annuity)	110	91	101	88	89
Fixed annuities	24	21	23	20	17
Fixed index annuities	16	14	14	13	13
Wholesale	206	26	188	29	153
Total US insurance operations	960	702	879	678	816
UK and Europe insurance operations					
Bonds	174	177	174	177	165
Corporate pensions	75	65	75	65	75
Individual pensions	279	328	279	328	316
Income drawdown	106	116	106	116	123
Other products	87	84	87	84	91
Total UK and Europe insurance operations	721	770	721	770	770
Group total	3,624	3,334	3,411	3,249	3,322

Schedule A(iv) Investment Operations (Actual Exchange Rates)

Note: The H1 and H2 of 2017 comparative results are shown below on actual exchange rates (AER) as previously reported.

	2017		2018
	H1	H2	H1
	£m	£m	£m
Group investment operations			
Opening FUM	174,805	193,714	210,423
Net flows: ⁽⁸⁾	9,452	11,026	2,685
- Gross inflows	34,213	35,201	31,857
- Redemptions	(24,761)	(24,175)	(29,172)
Other movements	9,457	5,683	(5,248)
Group total ⁽⁹⁾	193,714	210,423	207,860
M&G Prudential			
Retail			
Opening FUM	64,209	72,500	79,697
Net flows:	5,515	5,528	2,154
- Gross inflows	15,871	15,078	16,471
- Redemptions	(10,356)	(9,550)	(14,317)
Other movements	2,776	1,669	(2,030)
Closing FUM	72,500	79,697	79,821
Comprising amounts for:			
UK	35,201	35,740	33,786
Europe (excluding UK)	35,192	42,321	44,571
South Africa	2,107	1,636	1,464
	72,500	79,697	79,821
Institutional ⁽³⁾			
Opening FUM	72,554	76,618	84,158
Net flows:	1,664	4,630	1,394
- Gross inflows	6,806	8,414	4,930
- Redemptions	(5,142)	(3,784)	(3,536)
Other movements	2,400	2,910	117
Closing FUM	76,618	84,158	85,669
Total M&G Prudential	149,118	163,855	165,490
PPM South Africa FUM included			
in total M&G Prudential	5,427	5,963	5,452
Eastspring - excluding MMF ⁽⁸⁾			
Third party retail ⁽⁷⁾			
Opening FUM	30,793	36,093	38,676
Net flows:	2,186	1,567	25
- Gross inflows	10,781	11,017	10,118
- Redemptions	(8,595)	(9,450)	(10,093)
Other movements	3,114	1,016	(2,615)
Closing FUM ⁽⁵⁾	36,093	38,676	36,086
Third party institutional			
Opening FUM	7.240	0.503	7 000
Net flows:	7,249	8,503	7,892
	87	(699)	(888)
- Gross inflows	755 (668)	692	338
- Redemptions	(668)	(1,391)	(1,226)
Other movements	1,167	88	(720)
Closing FUM ⁽⁵⁾	8,503	7,892	6,284
Total Eastspring investment operations	44.500	40 500	40.070
(excluding MMF)	44,596	46,568	42,370

Schedule A(v) Total Insurance New Business Profit (Actual and Constant Exchange Rates)

Note: Comparative results for half year (HY) and full year (FY) 2017 are presented on both actual exchange rates (AER) and constant exchange rates (CER). The half year 2018 results are presented on actual exchange rates.

		20	17		2018
	AER		CER		AER
	HY	FY	HY	FY	НҮ
	£m	£m	£m	£m	£m
New business profit					
Total Asia insurance operations	1,092	2,368	1,009	2,234	1,122
Total US insurance operations	436	906	399	849	466
Total UK and Europe insurance operations	161	342	161	342	179
Group total	1,689	3,616	1,569	3,425	1,767
APE ⁽²⁾					
Total Asia insurance operations	1,943	3,805	1,811	3,612	1,736
Total US insurance operations	960	1,662	879	1,557	816
Total UK and Europe insurance operations	721	1,491	721	1,491	770
Group total	3,624	6,958	3,411	6,660	3,322
New business margin (NBP as % of APE)					
Total Asia insurance operations	56%	62%	56%	62%	65%
Total US insurance operations	45%	55%	45%	55%	57%
Total UK and Europe insurance operations	22%	23%	22%	23%	23%
Group total	47%	52%	46%	51%	53%
PVNBP ⁽²⁾					
Total Asia insurance operations	10,095	20,405	9,414	19,382	9,132
Total US insurance operations	9,602	16,622	8,793	15,570	8,163
Total UK and Europe insurance operations	6,616	13,784	6,616	13,784	7,088
Group total	26,313	50,811	24,823	48,736	,
New business margin (NBP as % of PVNBP)					
Total Asia insurance operations	10.8%	11.6%	10.7%	11.5%	12.3%
Total US insurance operations	4.5%	5.5%	4.5%	5.5%	5.7%
Total UK and Europe insurance operations	2.4%	2.5%	2.4%	2.5%	2.5%
Group total	6.4%	7.1%	6.3%	7.0%	7.2%

B Foreign currency source of key metrics

The tables below show the Group's key free surplus, IFRS and EEV metrics analysis by contribution by currency group:

Half year 2018 free surplus and Group IFRS results

Hair year 2018 free surplus and Group IFKS results	Underlying free surplus generated for total insurance and asset management operations %	IFRS pre-tax operating profit % notes (2)(3)	IFRS shareholders' funds %
US dollar linked ^{note (1)}	14%	26%	notes (2)(3) 21%
Other Asia currencies	17%	16%	15%
Total Asia	31%	42%	36%
UK sterling ^{notes (2)(3)}	37%	16%	52%
US dollar ^{note (3)}	32%	42%	12%
Total	100%	100%	100%

Half year 2018 Group EEV post-tax results

	New business		
	profit	Operating profit	Shareholders' funds
	%	%	%
		notes (2)(3)	notes (2)(3)
US dollar linked ^{note (1)}	53%	41%	37%
Other Asia currencies	11%	12%	10%
Total Asia	64%	53%	47%
UK sterling ^{notes (2)(3)} US dollar ^{note (3)}	10%	18%	29%
US dollar ^{note (3)}	26%	29%	24%
Total	100%	100%	100%

Notes

- (1) US dollar linked comprise the Hong Kong and Vietnam operations where the currencies are pegged to the US dollar and the Malaysia and Singapore operations where the currencies are managed against a basket of currencies including the US dollar.
- (2) For operating profit and shareholders' funds, UK sterling includes amounts in respect of M&G Prudential and other operations (including central operations and Prudential Capital). Operating profit for central operations includes amounts for corporate expenditure for Group Head Office as well as Asia Regional Head Office which is incurred in HK dollars.
- (3) For shareholders' funds, the US dollar grouping includes US dollar denominated core structural borrowings. Sterling operating profits include all interest payable as sterling denominated, reflecting interest rate currency swaps in place.

C Reconciliation between IFRS and EEV shareholders' funds

The table below shows the reconciliation of EEV shareholders' funds and IFRS shareholders' funds at the end of the period:

	2018 £m	2017 £m	1
	30 Jun	30 Jun	31 Dec
EEV shareholders' funds	47,443	40,520	44,698
Less: Value of in-force business of long-term business ^{note (a)}	(31,555)	(26,104)	(29,410)
Deferred acquisition costs assigned zero value for EEV purposes	9,652	9,076	9,227
Other ^{note (b)}	(9,658)	(8,043)	(8,428)
IFRS shareholders' funds	15,882	15,449	16,087

Notes

- (a) The EEV shareholders' funds comprises the present value of the shareholders' interest in the value of in-force business, net worth of long-term business operations and IFRS shareholders' funds of asset management and other operations. The value of in-force business reflects the present value of future shareholder cash flows from long-term in-force business which are not captured as shareholders' interest on an IFRS basis. Net worth represents the net assets for EEV reporting purposes that reflect the regulatory basis position, sometimes with adjustments to achieve consistency with the IFRS treatment of certain items.
- (b) Other adjustments represent asset and liability valuation differences between IFRS and the local regulatory reporting basis used to value net worth for long-term insurance operations. For the UK, this would be the difference between IFRS and Solvency II.

It also includes the mark to market of the Group's core structural borrowings which are fair valued under EEV but not IFRS. The most significant valuation differences relate to changes in the valuation of insurance liabilities. For example, in Jackson where IFRS liabilities are higher than the local regulatory basis as they are principally based on policyholder account balances (with a deferred acquisition costs recognised as an asset) whereas the local regulatory basis used for EEV is based on future cash flows due to the policyholder on a prudent basis with consideration of an expense allowance as applicable, but with no separate deferred acquisition cost asset.

D Reconciliation of APE new business sales to earned premiums

The Group reports APE new business sales as a measure of the new policies sold in the period. This differs from the IFRS measure of premiums earned as shown below:

	2018 £m	2017 £m	1
	Half year	Half year	Full year
Annual premium equivalents as published	3,322	3,624	6,958
Adjustment to include 100% of single premiums on new business sold in the period ^{note (a)}	14,377	15,286	28,769
Premiums from in-force business and other adjustments note (b)	3,642	3,195	8,278
Gross premiums earned	21,341	22,105	44,005
Outward reinsurance premiums ^{note(c)}	(12,961)	(947)	(2,062)
Earned premiums, net of reinsurance as shown in the IFRS financial statements	8,380	21,158	41,943

Notes

- (a) APE new business sales only include one tenth of single premiums, recorded on policies sold in the period. Gross premiums earned include 100 per cent of such premiums.
- (b) Other adjustments principally include amounts in respect of the following:
 - Gross premiums earned include premiums from existing in-force business as well as new business. The most significant amount is
 recorded in Asia, where a significant portion of regular premium business is written. Asia in-force premiums form the vast majority of the
 other adjustment amount;
 - APE includes new policies written in the period which are classified as investment contracts without discretionary participation features under IFRS 4, arising mainly in Jackson for guaranteed investment contracts and in M&G Prudential for certain unit-linked savings and similar contracts. These are excluded from gross premiums earned and recorded as deposits;
 - APE new business sales are annualised while gross premiums earned are recorded only when revenues are due; and
 - For the purpose of reporting APE new business sales, we include the Group's share of amounts sold by the Group's insurance joint ventures and associates. Under IFRS, joint ventures and associates are equity accounted and so no amounts are included within gross premiums earned.
- (c) Outward reinsurance premiums in half year 2018 include £12,130 million in respect of the reinsurance of the UK annuity portfolio.

E Calculation of return on embedded value

Return on embedded value is calculated as the EEV post-tax operating profit based on longer-term investment returns, as a percentage of opening EEV basis shareholders' funds.

	2018	2017	
	Half year	Half year	Full year
Operating profit based on longer-term investment returns (£ million)	3,443	2,870	6,598
Opening EEV basis shareholders' funds (£ million)	44,698	38,968	38,968
Return on embedded value	15%	15%	17%

F Calculation of EEV shareholders' funds per share

EEV shareholders' funds per share is calculated as closing EEV shareholders' funds divided by the number of issued shares at the balance sheet date. EEV shareholders' funds per share excluding goodwill attributable to shareholders is calculated in the same manner, except goodwill attributable to shareholders is deducted from closing EEV shareholders' funds.

	2018	2017	
	30 Jun	30 Jun	31 Dec
Closing EEV shareholders' funds (£ million)	47,443	40,520	44,698
Less: Goodwill attributable to shareholders (£ million)	(1,459)	(1,475)	(1,458)
Closing EEV shareholders' funds excluding goodwill attributable to		•	<u> </u>
shareholders (£ million)	45,984	39,045	43,240
Number of issued shares at period end (millions)	2,592	2,586	2,587
Shareholders' funds per share (in pence)	1,830p	1,567p	1,728p
Shareholders' funds per share excluding goodwill attributable to shareholders			
(in pence)	1,774p	1,510p	1,671p