

News Release

Aviva plc

Half Year Report 2016

4 August 2016



Aviva plc 2016 Interim Results Announcement

Mark Wilson, Group Chief Executive Officer, said:

"Operating profits are up 13% and the dividend is up 10%. We are delivering consistent, stable and predictable growth despite challenging market conditions.

"Our UK businesses delivered encouraging results. We are growing in the UK, we are investing in the UK. We like the UK. And we are also benefitting from Aviva's diversity, with 42% of our earnings¹ coming from outside of the UK.

"The 10% increase in the dividend, up 32% since 2013, is another step towards our target pay-out ratio of 50% and underpins our confidence in delivering sustainable and growing returns.

"We are continuing to maintain a strong balance sheet, with a solvency ratio of 174%^{2,3}, toward the upper end of our working range.

"Aviva's strong financial position and diversity mean we are well insulated from external events. We have deliberately designed Aviva to be resilient to a low interest rate environment.

"We remain confident in our ability to deliver on our key commitments to grow earnings, cash and dividends."

Profit

- Operating profit up 13% to £1,325 million (HY15: £1,170 million)
- Operating EPS up 1% to 22.4p (HY15: 22.1p)
- IFRS profit after tax £201 million (HY15: £545 million)

Capital

- Solvency II capital surplus £9.5 billion² (FY15: £9.7 billion)
- Solvency II coverage ratio³ of 174%² (FY15: 180%)
- Solvency II operating capital generation £1.2 billion
- IFRS net asset value up 6% to 412p per share (FY15: 390p⁴)
- Holding company liquidity £1.2 billion⁵ (February 2016: £1.3 billion)

Cash

- Cash remittances £752 million (HY15: £495 million)
- 2016 interim dividend up 10% to 7.42p (HY15: 6.75p)

Growth

- General insurance net written premiums up 7%⁶ to £3,991 million (HY15: £3,678 million)
- Life insurance value of new business up 7%⁶ to £583 million (HY15: £534 million)
- Fund management operating profit up 48% to £49 million (HY15: £33 million)
- UK Life platform AUM up 23% to £10.3 billion (FY15: £8.4 billion)

Combined ratio

- 96.2% general insurance combined operating ratio (HY15: 93.1%)
- HY16 combined operating ratio affected by an increase in natural catastrophe & weather claims (1.5%), Flood Re (0.6%) and commission strain from new distribution partnership (1.0%)

¹ Defined as operating profit before corporate centre costs and group debt and other interest costs.

² The estimated Solvency II position includes the estimated impact of acquiring the RBC General Insurance business (£0.3 billion) on a pro-forma basis. The acquisition completed on 1st July 2016, and was funded by an issue of £0.3 billion of subordinated debt in May 2016.

³ The estimated Solvency II ratio represents the shareholder view. This excludes the contribution to Group Solvency Capital Requirement (SCR) and Group Own Funds of fully ring fenced with-profits funds £2.7 billion (FY15: £2.7 billion) and staff pension schemes in surplus £0.9 billion (FY15: £0.7 billion) - these exclusions have no impact on Solvency II surplus.

⁴ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

⁵ Holding company liquidity consists of cash, liquid assets and £2 million of syndicated loans held in Aviva and Friends Life holding companies.

⁶ On a constant currency basis.

Operating capital generation: Solvency II basis

	6 months 2016 £bn
United Kingdom & Ireland Life	0.7
United Kingdom & Ireland General Insurance & Health	0.1
Europe	0.6
Canada	0.1
Asia and Other	(0.3)
Total	1.2

Operating profit before tax: IFRS basis

	6 months 2016 £m	6 months 2015 £m	Sterling % change
Life business	1,226	1,021	20%
General insurance and health	334	422	(21)%
Fund management	49	33	48%
Other*	(284)	(306)	7%
Total¹	1,325	1,170	13%
Operating earnings per share^{1**}	22.4p	22.1p	1%

* Includes other operations, corporate centre costs and group debt and other interest costs.

** Net of tax, non-controlling interests, preference dividends, coupon payments in respect of the direct capital instrument (DCI) and tier 1 notes (net of tax).

Expenses

	6 months 2016 £m	6 months 2015 £m	Sterling % change
Operating expenses	1,696	1,498	13%
Integration & restructuring costs	105	172	(39)%
Expense base	1,801	1,670	8%
Operating expense ratio	53.4%	52.8%	0.6pp

Value of new business: MCEV basis

	6 months 2016 £m	6 months 2015 £m	Sterling % change ²	Constant currency % change ²
United Kingdom & Ireland	280	260	8%	8%
France	103	98	6%	(1)%
Poland ³	27	30	(9)%	(11)%
Italy	71	39	82%	71%
Spain	16	13	29%	22%
Turkey	12	12	(6)%	—
Asia	61	76	(20)%	(23)%
Aviva Investors	13	6	106%	106%
Value of new business	583	534	9%	7%

General insurance combined operating ratio

	6 months 2016	6 months 2015	Change
United Kingdom & Ireland	95.4%	93.2%	2.2pp
Europe	96.7%	94.3%	2.4pp
Canada	95.8%	91.9%	3.9pp
General insurance combined operating ratio	96.2%	93.1%	3.1pp

IFRS profit after tax

	6 months 2016 £m	6 months 2015 £m	Sterling % change
IFRS profit after tax ¹	201	545	(63)%
Basic earnings per share ¹	2.5p	12.8p	(80)%

Interim dividend

	6 months 2016	6 months 2015	Sterling % change
Interim dividend per share	7.42p	6.75p	10%

Capital position

	30 June 2016	31 December 2015	Sterling % change
Estimated Solvency II cover ratio ^{4,5}	174%	180%	(6.0)pp
Estimated Solvency II surplus ⁵	£9.5bn	£9.7bn	(2)%
IFRS net asset value per share (restated) ⁶	412p	390p	6%

¹ Refer to 'Financial supplement' for the reconciliation of Group operating profit to profit after tax – IFRS basis and refer to B7 – Earnings per share for a reconciliation of operating earnings per share to basic earnings per share.

² Currency movements are calculated using unrounded numbers so minor rounding differences may exist.

³ Poland includes Lithuania.

⁴ The estimated Solvency II ratio represents the shareholder view. This excludes the contribution to Group Solvency Capital Requirement (SCR) and Group Own Funds of fully ring fenced with-profits funds £2.7 billion (FY15: £2.7 billion) and staff pension schemes in surplus £0.9 billion (FY15: £0.7 billion) - these exclusions have no impact on Solvency II surplus.

⁵ The estimated Solvency II position includes the estimated impact of acquiring the RBC General Insurance business (£(0.3) billion) on a pro-forma basis. The acquisition completed on 1st July 2016, and was funded by an issue of £0.3 billion of subordinated debt in May 2016.

⁶ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

Overview

Aviva is delivering consistency, stability and growth despite the challenging market backdrop.

Operating profit increased 13% to £1,325 million (*HY15: £1,170 million*) despite higher weather claims in general insurance, lower bulk purchase annuity sales in UK Life and new government levies.

Our Solvency II coverage ratio of 174%^{1,2} (*FY15: 180%*) remains toward the upper end of our working range. We have proven our resilience during a HY16 period of investment market volatility and record low interest rates. Solvency II operating capital generation was £1.2 billion, and business unit cash remittances were £752 million (*HY15: £495 million*).

Interim dividend per share has increased 10% to 7.42p. We remain on track to deliver on the plan outlined at our recent investor day to increase the dividend payout ratio to 50% of operating EPS by the end of 2017, up from 42%³ in 2015.

The steps we have taken to improve strength, resilience and operational consistency are reflected in our results. We remain confident in our ability to deliver on our key commitments to grow earnings, cash and dividends.

Operating profit

Operating profit increased 13% to £1,325 million (*HY15: £1,170 million*), driven by growth in UK Life, fund management and digital together with an additional 3 months contribution from Friends Life. This was partially offset by higher natural catastrophe and weather claims in Canada and Europe, new Government levies and investment for future growth across a number of our businesses.

Life insurance operating profit increased 20% to £1,226 million (*HY15: £1,021 million*). In the UK, growth was driven by Friends Life integration synergies together with positive momentum in protection, savings and individual annuities, partially offset by lower bulk purchase annuity sales. In Europe, our life business delivered stable operating profits on a constant currency basis, as growing protection and with-profits income were offset by a new government levy in Poland and higher project expenses in France. Operating profits from our Asia life business increased 49% to £118 million (*HY15: £79 million*) primarily due to an additional three months contribution from Friends Provident International.

General insurance & health operating profit declined 17% to £334 million (*HY15: £400 million*⁴). Underwriting profit of £165 million (*HY15: £222 million*) deteriorated due to the £23 million Flood Re levy in the UK and a c.£55 million increase in weather and natural catastrophe claims following fires in Canada and floods in France. The investment return fell by £12 million to £171 million (*HY15: £183 million*⁴) due to lower bond yields. During the second half of 2016 we expect our general insurance operations to benefit from the RBCI acquisition in Canada and distribution partnerships in the UK.

Fund management operating profit increased 48% to £49 million (*HY15: £33 million*). The result benefitted from higher average AUM following the transfer of £45.1 billion of Friends Life assets to Aviva Investors in 2015, an additional transfer of £1.5 billion of Friends Life assets in HY16 and positive external fund flows. Operating expenses increased reflecting our continued investment to secure long-term growth.

Capital

At 30 June 2016, our Solvency II coverage ratio was 174%^{1,2} (*FY15: 180%*). The resilience of our solvency position was proven during a period of heightened volatility in HY16. Despite bond yields at historic lows, a more challenging outlook for corporate credit and asset price weakness following the Brexit vote, our Solvency II coverage ratio remains toward the top end of our working range.

We enter the current period of macro, political and market uncertainty with confidence in our capital position. We have limited sensitivity to interest rate risk, exposure to equity markets is modest and protected by hedging, we have a diverse and prudent bond portfolio and the commercial mortgage assets backing UK annuities have an average LTV of 60% (*FY15: 61%*).

Solvency II operating capital generation was £1.2 billion during HY16, incorporating £1.5 billion from our operating business units, net of £0.3 billion of debt, corporate centre and other costs.

1 The estimated Solvency II position includes the estimated impact of acquiring the RBC General Insurance business (£0.3 billion) on a pro-forma basis. The acquisition completed on 1st July 2016, and was funded by an issue of £0.3 billion of subordinated debt in May 2016.

2 The estimated Solvency II ratio represents the shareholder view. This excludes the contribution to Group Solvency Capital Requirement (SCR) and Group Own Funds of fully ring fenced with-profits funds £2.7 billion (*FY15: £2.7 billion*) and staff pension schemes in surplus £0.9 billion (*FY15: £0.7 billion*) - these exclusions have no impact on Solvency II surplus.

3 Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

4 HY15 comparatives have been rebased for the reduction in the internal loan.

Friends Life integration

The integration of Friends Life remains on track. At HY16, we had secured run-rate synergies of £201 million, up from £168 million at the end of 2015. We reiterate our expectation that the £225 million integration synergy target will be delivered by the end of 2016, one year ahead of our original plan. UK Life is now effectively operating as a single entity. Over the course of the integration, we have reduced our property footprint by 258,000 square feet and transferred £46.6 billion of assets to Aviva Investors.

Life insurance: Value of new business: MCEV basis (VNB)

VNB increased 7%⁵ to £583 million (*HY15: £534 million*). In the UK, VNB growth was 6% with gains in protection, savings and individual annuities offset by weaker sales volumes in bulk purchase annuities and equity release. VNB from our European life businesses increased 14%⁵ driven by a strong result in Italy where we have followed through on our turnaround initiatives. In Asia, VNB declined 23%⁵ primarily as a result of the discontinuation of the DBS bancassurance relationship in Singapore. We recently launched our Aviva Financial Advisors network in Singapore.

General insurance

General insurance net written premiums increased 7%⁵ to £3,991 million (*HY15: £3,678 million*) reflecting our new partnership agreement with Homeserve in the UK and improved competitiveness across the Group as we benefit from operating expense reductions, our investment in digital and Solvency II diversification benefits. The Group combined operating ratio (COR) deteriorated by 3.1 percentage points to 96.2% (*HY15: 93.1%*). This reflected the impact of the Flood Re levy in the UK (0.6%), an increase in natural catastrophe claims mainly from fires in Canada and floods in France (1.5%), a reduction in prior year reserve releases (0.5%) and commission strain from our new distribution partnership in the UK (1.0%).

Fund management

Growth drivers from our fund management business are pointing in the right direction. External fund net flows have turned positive (£0.6 billion) and, together with an additional transfer of £1.5 billion of Friends Life assets and favourable market movements, assets under management (AUM) have grown 10% to £319 billion (*FY15: £290 billion*). The AIMS range of funds continues to make excellent progress, with AUM more than doubling during HY16 to £6.2 billion (*FY15: £3 billion*). Our UK Life platform also continues to increase in scale, with AUM increasing 23% during HY16 to £10.3 billion (*FY15: £8.4 billion*).

Digital

We continue to make strong progress with our digital transformation. Registrations on MyAviva, a key leading indicator, have surpassed 3 million (*FY15: 2.3 million*). We are investing significantly in our digital and direct capabilities to make dealing with Aviva simple and convenient. In the UK, we will have all of our customer information on a single database by the end of 2016. This will enable customers to see all their policies in one place, and deal with us whenever and however they choose.

Expenses

Operating expenses increased 13% to £1,696 million (*HY15: £1,498 million*). Growth was primarily due to an additional quarter from Friends Life, new government levies and foreign exchange. Excluding these factors, operating expenses were broadly flat, with realisation of Friends Life synergies in UK Life and savings in UK General Insurance offset by investment for growth in our acorn businesses (Aviva Investors, Asia and Digital) and higher project related expenses in France. There remains more to do in this area.

Outlook

We are committed to maintaining a strong and resilient balance sheet, a sustainable dividend and growing operating earnings. While uncertainty in the economic outlook may persist in the short term, we have not observed major disruption to our operating activities and we continue to target mid-single digit growth in operating profit over the medium term. We will maintain our self-help agenda, focusing on improving expense efficiency and reallocating capital to businesses with the highest returns and growth potential.



Mark Wilson
Group Chief Executive Officer

⁵ On a constant currency basis.

Overview

Operating earnings per share increased 1% to 22.4p (*HY15: 22.1p*), with an additional three months contribution from Friends Life, offset by higher weighted average share count. Within the operating result, we had £24 million of foreign exchange benefits, £27 million of increased expenses from the Flood Re levy in the UK and asset levy in Poland and a c£55 million increase in weather and natural catastrophe claims driven by forest fires in Canada and floods in France. Excluding these items, progression in operating EPS is consistent with our medium term objective of mid-single digit growth.

IFRS profit after tax declined to £201 million (*HY15: £545 million*), and was adversely impacted by non-cash market variances as at 30 June 2016, including the revaluation of our Euro-denominated and other debt obligations at a lower exchange rate.

At the end of HY16, our Solvency II capital ratio was 174%^{1,2} (*FY15: 180%*), down 6 percentage points compared with the end of 2015. Solvency II operating capital generation from our business units was £1.5 billion during HY16. Total Solvency II operating capital generation after centre, debt and other costs was £1.2 billion.

At our recent investor day, we outlined plans to increase our dividend payout ratio to 50% of operating EPS in 2017, up from 42%³ in 2015. We remain confident in our ability to deliver on this plan and have increased our interim dividend by 10% to 7.42p (*HY15: 6.75p*).

Balance sheet

The actions taken in recent years to improve our balance sheet enabled us to manage the challenging investment market conditions in HY16. Our Solvency II ratio of 174%^{1,2} (*FY15: 180%*) remains toward the upper end of our working range and we continue to have modest levels of sensitivity to fluctuations in investment markets.

We have maintained a prudent approach to managing risk. Asset and liability durations are closely matched and we have maintained a high quality corporate bond exposure, with only 1.1% of the shareholder backed bond portfolio securities rated below investment grade. We have seen limited levels of defaults from the portfolio over many years and, despite the downgrade of the UK sovereign credit rating in the wake of Brexit, the ratings of our corporate bond portfolio have been stable.

The commercial mortgage portfolio backing our UK annuity portfolio remains strongly positioned. The average loan-to-value ratio of the portfolio is 60% (*FY15: 61%*), the average loan interest cover ratio has increased to 2.14x (*FY15: 2.05x*) and we had negligible loans in arrears (*HY16: £0.1 million, FY15: £9 million*).

Net asset value (NAV) per share increased 22p to 412p (*FY15: 390p*³). Operating profit, positive foreign exchange movements and favourable IAS 19 pension revaluation more than offset payment of the final dividend, negative short term investment variances and amortisation of AVIF. Investment variances included a c.£250 million adverse impact reflecting the Group's lowered expectations for future property prices and rental income.

Capital generation and cash-flow

Operating capital generation on a Solvency II basis after debt, centre and other costs was £1.2 billion in HY16. We reiterate our expectation of 5-10 points of capital generation in 2016, after allowing for payment of dividends, but before economic and market variances. Our life businesses delivered £1.3 billion of Solvency II operating capital generation, general insurance contributed £0.2 billion and other businesses (including debt and centre costs) consumed £0.3 billion.

Remittances increased to £752 million (*HY15: £495 million*). Consistent with our messages at previous interim results, we evaluate remittances on a full year basis. Liquidity at centre was £1.2 billion⁴ (*February 2016: £1.3 billion*).

¹ The estimated Solvency II position includes the estimated impact of acquiring the RBC General Insurance business (£0.3 billion) on a pro-forma basis. The acquisition completed on 1st July 2016, and was funded by an issue of £0.3 billion of subordinated debt in May 2016.

² The estimated Solvency II ratio represents the shareholder view. This excludes the contribution to Group Solvency Capital Requirement (SCR) and Group Own Funds of fully ring fenced with-profits funds £2.7 billion (*FY15: £2.7 billion*) and staff pension schemes in surplus £0.9 billion (*FY15: £0.7 billion*) - these exclusions have no impact on Solvency II surplus.

³ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

⁴ Holding company liquidity consists of cash, liquid assets and £2 million of syndicated loans held in Aviva and Friends Life holding companies.

Business unit performance

In UK and Ireland life, operating profit increased 25% to £711 million (*HY15: £569 million*). In addition to the incremental impact of an extra quarter from Friends Life, operating profit grew due to the realisation of integration synergies, improved asset mix on annuities and positive momentum in protection and long-term savings. This was partially offset by the 27% reduction in annuity sales, with higher individual annuity volumes overshadowed by a decline in bulk purchase annuity sales. Long-term savings assets under management increased to £95 billion (*FY15: £88 billion*) on the back of £2.0 billion of net flows. Within this, platform assets under administration continue to grow strongly, up 23% during HY16 to £10.3 billion (*FY15: £8.4 billion*).

Operating profit from our UK and Ireland general insurance and health business declined 3% to £231 million (*HY15: £239 million*). The underwriting result was stable in UKGI at £115 million (*HY15: £115 million*) with increased costs associated with the Flood Re levy (£23 million) and higher weather claims offset by improved prior year development and our continued focus on portfolio rebalancing and expense management. The longer term investment return for UK & Ireland general insurance fell to £93 million (*HY15: £121 million*). Excluding the impact of the reduction in the internal loan, investment income in the UK & Ireland general insurance fell £6 million to £93 million (*HY15: £99 million*).

Our European insurance businesses delivered operating profit of £430 million (*HY15: £431 million*). Life operating profit of £395 million (*HY15: £372 million*) was stable in constant currency terms with growth in protection and with-profits products offset by lower unit-linked asset management charges, a new regulatory asset levy in Poland and higher expenses as we invested in a number of projects in France. General insurance operating profit fell to £35 million (*HY15: £59 million*) mainly reflecting adverse weather experience in France which experienced severe flooding in 2Q16.

In Canada, general insurance operating profit fell to £88 million (*HY15: £131 million*). Underwriting profit declined to £42 million (*HY15: £82 million*) with forest fires in Alberta and lower levels of prior year development partially offset by improvement in claims frequency. The longer term investment return fell to £47 million (*HY15: £51 million*) due to lower investment yields.

Fund management operating profit increased 48% to £49 million (*HY15: £33 million*). This was driven by the increase in average AUM following the onboarding of £45.1 billion of Friends Life assets in 2015 and additional £1.5 billion in HY16. The result also benefitted from improved net fund flows and assets under management. The AIMS range of funds continues to make strong progress, more than doubling assets under management during HY16 to £6.2 billion (*FY15: £3 billion*).

Operating profit from our Asian insurance businesses increased to £112 million (*HY15: £75 million*) reflecting a full six month contribution from Friends Provident International (FPI). Excluding FPI, results were stable despite the discontinuation of the DBS relationship in Singapore.



Thomas D. Stoddard
Chief Financial Officer

Notes to editors

All comparators are for the half year 2015 position unless otherwise stated.

Income and expenses of foreign entities are translated at average exchange rates while their assets and liabilities are translated at the closing rates on 30 June 2016. The average rates employed in this announcement are 1 euro = £0.78 (6 months to 30 June 2015: 1 euro = £0.74) and CAD\$1 = £0.53 (6 months to 30 June 2015: CAD\$1 = £0.53).

Growth rates in the press release have been provided in sterling terms unless stated otherwise. The following supplement presents this information on both a sterling and constant currency basis.

Cautionary statements:

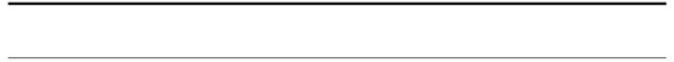
This should be read in conjunction with the documents filed by Aviva plc (the "Company" or "Aviva") with the United States Securities and Exchange Commission ("SEC"). This announcement contains, and we may make other verbal or written "forward-looking statements" with respect to certain of Aviva's plans and current goals and expectations relating to future financial condition, performance, results, strategic initiatives and objectives. Statements containing the words "believes", "intends", "expects", "projects", "plans", "will", "seeks", "aims", "may", "could", "outlook", "likely", "target", "goal", "guidance", "trends", "future", "estimates", "potential" and "anticipates", and words of similar meaning, are forward-looking. By their nature, all forward-looking statements involve risk and uncertainty. Accordingly, there are or will be important factors that could cause actual results to differ materially from those indicated in these statements. Aviva believes factors that could cause actual results to differ materially from those indicated in forward-looking statements in the announcement include, but are not limited to: the impact of ongoing difficult conditions in the global financial markets and the economy generally; the impact of simplifying our operating structure and activities; the impact of various local and international political, regulatory and economic conditions, market developments and government actions (including those arising from the referendum on UK membership of the European Union); the effect of credit spread volatility on the net unrealised value of the investment portfolio; the effect of losses due to defaults by counterparties, including potential sovereign debt defaults or restructurings, on the value of our investments; changes in interest rates that may cause policyholders to surrender their contracts, reduce the value of our portfolio and impact our asset and liability matching; the impact of changes in short or long-term inflation; the impact of changes in equity or property prices on our investment portfolio; fluctuations in currency exchange rates; the effect of market fluctuations on the value of options and guarantees embedded in some of our life insurance products and the value of the assets backing their reserves; the amount of allowances and impairments taken on our investments; the effect of adverse capital and credit market conditions on our ability to meet liquidity needs and our access to capital; changes in, or restrictions on, our ability to initiate capital management initiatives; changes in or inaccuracy of assumptions in pricing and reserving for insurance business (particularly with regard to mortality and morbidity trends, lapse rates and policy renewal rates), longevity and endowments; a cyclical downturn of the insurance industry; the impact of natural and man-made catastrophic events on our business activities and results of

operations; our reliance on information and technology and third-party service providers for our operations and systems; the inability of reinsurers to meet obligations or unavailability of reinsurance coverage; increased competition in the UK and in other countries where we have significant operations; regulatory approval of extension of use of the Group's internal model for calculation of regulatory capital under the European Union's Solvency II rules; the impact of actual experience differing from estimates used in valuing and amortising deferred acquisition costs ("DAC") and acquired value of in-force business ("AVIF"); the impact of recognising an impairment of our goodwill or intangibles with indefinite lives; changes in valuation methodologies, estimates and assumptions used in the valuation of investment securities; the effect of legal proceedings and regulatory investigations; the impact of operational risks, including inadequate or failed internal and external processes, systems and human error or from external events (including cyber attack); risks associated with arrangements with third parties, including joint ventures; our reliance on third-party distribution channels to deliver our products; funding risks associated with our participation in defined benefit staff pension schemes; the failure to attract or retain the necessary key personnel; the effect of systems errors or regulatory changes on the calculation of unit prices or deduction of charges for our unit-linked products that may require retrospective compensation to our customers; the effect of fluctuations in share price as a result of general market conditions or otherwise; the effect of simplifying our operating structure and activities; the effect of a decline in any of our ratings by rating agencies on our standing among customers, broker-dealers, agents, wholesalers and other distributors of our products and services; changes to our brand and reputation; changes in government regulations or tax laws in jurisdictions where we conduct business, including decreased demand for annuities in the UK due to changes in UK law; the inability to protect our intellectual property; the effect of undisclosed liabilities, integration issues and other risks associated with our acquisitions; and the timing/regulatory approval impact, integration risk and other uncertainties, such as non-realisation of expected benefits or diversion of management attention and other resources, relating to announced acquisitions and pending disposals and relating to future acquisitions, combinations or disposals within relevant industries; the policies, decisions and actions of government or regulatory authorities in the UK, the EU, the US or elsewhere, including the implementation of key legislation and regulation. For a more detailed description of these risks, uncertainties and other factors, please see Item 3d, "Risk Factors", and Item 5, "Operating and Financial Review and Prospects" in Aviva's most recent Annual Report on Form 20-F as filed with the SEC on 29 March 2016 and also the risk factors contained in the Euro Note Programme prospectus published on 22 April 2016. Aviva undertakes no obligation to update the forward looking statements in this announcement or any other forward-looking statements we may make. Forward-looking statements in this report are current only as of the date on which such statements are made.

Aviva plc is a company registered in England No. 2468686.
Registered office
St Helen's
1 Undershaft
London
EC3P 3DQ

Contacts

Investor contacts	Media contacts	Timings
Chris Esson +44 (0)20 7662 8115	Nigel Prideaux +44 (0)20 7662 0215	Presentation slides: 07:00 hrs BST www.aviva.com
David Elliot +44 (0)20 7662 8048	Andrew Reid +44 (0)20 7662 3131	Real time media conference call: 07:30 hrs BST
	Sarah Swailes +44 (0)20 7662 6700	Analyst presentation: 08:30 hrs BST
		Live webcast: 08:30 hrs BST http://www.avivawebcast.com/interim2016/



This page is intentionally left blank

Contents

In this section	Page
Overview	
Key financial metrics	2
1 Cash and operating capital generation	3
i Cash remitted to Group	3
ii Operating capital generation: Solvency II basis	3
2 Operating Profit: IFRS basis	4
3 Expenses	5
4 Value of new business	6
5 General insurance combined operating ratio	7
6 Business unit performance	8
i United Kingdom and Ireland Life	8
ii United Kingdom and Ireland General Insurance & Health	9
iii Europe	10
iv Canada	12
v Asia	13
vi Fund management	14
7 Profit drivers	15
i Life business: IFRS basis	15
ii General insurance and health: IFRS basis	18
iii Fund flows	21
8 Capital & assets summary	22
i Summary of assets	22
ii Net asset value	24
iii Return on equity	25
iv Solvency II	26
Financial supplement	29
A Income & expenses	30
B IFRS financial statements and notes	35
C Capital & liquidity	83
D Analysis of assets	87
E VNB & sales analysis	103
Other information	113

Operating capital generation: Solvency II basis

	6 months 2016 £bn
United Kingdom & Ireland Life	0.7
United Kingdom & Ireland General Insurance & Health	0.1
Europe	0.6
Canada	0.1
Asia and Other	(0.3)
Total	1.2

Operating profit before tax: IFRS basis

	6 months 2016 £m	6 months 2015 £m	Sterling % change
Life business	1,226	1,021	20%
General insurance and health	334	422	(21)%
Fund management	49	33	48%
Other*	(284)	(306)	7%
Total¹	1,325	1,170	13%
Operating earnings per share^{1**}	22.4p	22.1p	1%

* Includes other operations, corporate centre costs and group debt and other interest costs.

** Net of tax, non-controlling interests, preference dividends, coupon payments in respect of the direct capital instrument (DCI) and tier 1 notes (net of tax).

Expenses

	6 months 2016 £m	6 months 2015 £m	Sterling % change
Operating expenses	1,696	1,498	13%
Integration & restructuring costs	105	172	(39)%
Expense base	1,801	1,670	8%
Operating expense ratio	53.4%	52.8%	0.6pp

Value of new business: MCEV basis

	6 months 2016 £m	6 months 2015 £m	Sterling % change ²	Constant currency % change ²
United Kingdom & Ireland	280	260	8%	8%
France	103	98	6%	(1)%
Poland ³	27	30	(9)%	(11)%
Italy	71	39	82%	71%
Spain	16	13	29%	22%
Turkey	12	12	(6)%	—
Asia	61	76	(20)%	(23)%
Aviva Investors	13	6	106%	106%
Value of new business	583	534	9%	7%

General insurance combined operating ratio

	6 months 2016	6 months 2015	Change
United Kingdom & Ireland	95.4%	93.2%	2.2pp
Europe	96.7%	94.3%	2.4pp
Canada	95.8%	91.9%	3.9pp
General insurance combined operating ratio	96.2%	93.1%	3.1pp

IFRS profit after tax

	6 months 2016 £m	6 months 2015 £m	Sterling % change
IFRS profit after tax ¹	201	545	(63)%
Basic earnings per share ¹	2.5p	12.8p	(80)%

Interim dividend

	6 months 2016	6 months 2015	Sterling % change
Interim dividend per share	7.42p	6.75p	10%

Capital position

	30 June 2016	31 December 2015	Sterling % change
Estimated Solvency II cover ratio ^{4,5}	174%	180%	(6.0)pp
Estimated Solvency II surplus ⁵	£9.5bn	£9.7bn	(2)%
IFRS net asset value per share (restated) ⁶	412p	390p	6%

1 Refer to 'Financial supplement' for the reconciliation of Group operating profit to profit after tax – IFRS basis and refer to B7 – Earnings per share for a reconciliation of operating earnings per share to basic earnings per share.

2 Currency movements are calculated using unrounded numbers so minor rounding differences may exist.

3 Poland includes Lithuania.

4 The estimated Solvency II ratio represents the shareholder view. This excludes the contribution to Group Solvency Capital Requirement (SCR) and Group Own Funds of fully ring fenced with-profits funds £2.7 billion (FY15: £2.7 billion) and staff pension schemes in surplus £0.9 billion (FY15: £0.7 billion) - these exclusions have no impact on Solvency II surplus.

5 The estimated Solvency II position includes the estimated impact of acquiring the RBC General Insurance business (£(0.3) billion) on a pro-forma basis. The acquisition completed on 1st July 2016, and was funded by an issue of £0.3 billion of subordinated debt in May 2016.

6 Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

1.i – Cash remitted to Group

The flow of sustainable cash remittances from the Group's businesses is a key financial priority. The cash remittances for HY16 were £752 million (*HY15: £495 million*) including dividends and interest remitted on internal loans.

	6 months 2016 £m	6 months 2015 £m	Full Year 2015 £m
United Kingdom & Ireland Life	577	287	667
United Kingdom & Ireland General Insurance & Health ¹	—	—	358
France	22	98	252
Poland	136	81	81
Italy	—	—	45
Spain	8	3	49
Other Europe	3	4	4
Europe	169	186	431
Canada ²	4	2	6
Asia	—	—	21
Other ³	2	20	24
Total⁴	752	495	1,507

¹ FY15 cash remittances include £351 million received from UK & Ireland GI in February 2016 in respect of 2015 activity.

² In FY15, CAD\$230 million in respect of 2015 activity was retained at the Canadian holding company in order to part-fund the RBC General Insurance Company acquisition.

³ Other includes Aviva Investors and Group Reinsurance.

⁴ Cash remittances are amounts paid by our operating businesses to the Group, comprising dividends and interest on internal loans. These amounts are eliminated on consolidation and are hence not directly reconcilable to the Group's IFRS condensed statement of cash flows.

The increase in cash remitted to Group is primarily driven by UK Life's contribution of £577 million (*HY15: £287 million*). No dividends were received by the Group from Friends UK in HY15 as a result of a £150 million remittance paid to its holding company prior to the Group's acquisition of the Friends Life business. Poland's dividend increased to £136 million (*HY15: £81 million*) as a result of a legal entity restructuring deferring the timing of remittance for part of the HY15 Polish dividend until 2016. We currently expect to receive cash remittances from France and Aviva Investors in the second half of the year.

We will report excess centre cash flow annually following receipt of all cash remittances. Excess centre cash flow represents cash remitted by business units to the Group centre less central operating expenses and debt financing costs. It is an important measure of the cash that is available to pay dividends, reduce debt, pay exceptional charges or invest back into our business units. It does not include non-operating cash movements such as disposal proceeds or capital injections.

1.ii – Operating capital generation: Solvency II basis

The active management of the generation and utilisation of capital is a primary Group focus, balancing new business investment and shareholder distribution to deliver our "cash flow plus growth" investment thesis.

Solvency II operating capital generation was £1.2 billion during HY16, incorporating £1.5 billion from our operating business units, net of £0.3 billion of debt and corporate centre costs.

	6 months 2016 £bn
United Kingdom & Ireland Life	0.7
United Kingdom & Ireland General Insurance & Health	0.1
Europe	0.6
Canada	0.1
Asia and Other ¹	(0.3)
Total Group SII operating capital generation²	1.2

¹ Other primarily relates to Group centre costs.

² As reported in the movement in Group Solvency II surplus disclosure in Note 8.iv.

Operating capital generation (OCG) was previously calculated on a MCEV basis for long-term covered business and an adjusted IFRS basis for other business.

Following the introduction of the Solvency II regime on 1 January 2016, OCG is now reported on a Solvency II basis for all business. OCG is the Solvency II surplus movement in the period due to operating items including new business contribution, expected investment returns on existing business and management actions. It excludes economic variances, economic assumption changes and integration and restructuring costs which are included in non-operating capital generation. The expected investment returns are consistent with the returns used in IFRS (as set out in notes A4 and A5 in the financial supplement). This is the first time the disclosure has been calculated on a Solvency II basis and no prior period comparatives are available for 30 June 2015 or 31 December 2015. Total Group OCG is a component of the movement in Group Solvency II surplus over the period as set out in Note 8.iv and is not reconcilable to IFRS.

Our principal source of liquidity is cash remittances in the form of dividends and debt interest receipts from our businesses. OCG measures the amount of Solvency II capital the Group generates from operating activities. Capital generated adds to the Solvency II surplus which can be used to fund business unit remittances and, in turn, the group dividend as well as for investment in initiatives that provide potential future growth.

2 – Operating Profit: IFRS basis

Group operating profit before tax: IFRS basis

For the six month period ended 30 June 2016

	6 months 2016 £m	6 months 2015 £m	Restated ¹ Full Year 2015 £m
Operating profit before tax attributable to shareholders' profits			
Life business			
United Kingdom & Ireland	711	569	1,455
France	212	195	395
Poland	60	63	129
Italy	74	65	139
Spain	47	43	92
Turkey	2	6	11
Europe	395	372	766
Asia	118	79	244
Other	2	1	(23)
Total life business (note 7.i)	1,226	1,021	2,442
General insurance and health			
United Kingdom & Ireland ²	231	239	430
Europe	35	59	114
Canada	88	131	214
Asia	(6)	(4)	(6)
Other	(14)	(3)	13
Total general insurance and health² (note 7.ii)	334	422	765
Fund management			
Aviva Investors	49	32	105
Asia	—	1	1
Total fund management	49	33	106
Other			
Other operations (note A1)	(49)	(57)	(84)
Market operating profit²	1,560	1,419	3,229
Corporate centre (note A2)	(80)	(79)	(180)
Group debt costs and other interest (note A3)	(155)	(170)	(361)
Operating profit before tax attributable to shareholders' profits²	1,325	1,170	2,688
Tax attributable to shareholders' profit	(323)	(304)	(603)
Non-controlling interests	(67)	(82)	(152)
Preference dividends and other ³	(30)	(23)	(74)
Operating profit attributable to ordinary shareholders²	905	761	1,859
Operating earnings per share^{2,4}	22.4p	22.1p	49.7p

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

² FY15 excludes the impact from an outward quota share reinsurance agreement completed in 2015 in Aviva Insurance Limited (AIL).

³ Other includes coupon payments in respect of the direct capital instrument (DCI) and tier 1 notes (net of tax).

⁴ Net of tax, non-controlling interests, preference dividends, coupon payments in respect of the direct capital instrument (DCI) and tier 1 notes (net of tax). The calculation of earnings per share uses a weighted average of 4,046 million (HY15: 3,437 million; FY15: 3,741 million) ordinary shares in issue, after deducting treasury shares.

Overall operating profit increased to £1,325 million (HY15: £1,170 million). This reflects 6 months contribution from the Friends Life business compared to 3 months in the prior period and includes a favourable impact from foreign exchange movements of £24 million.

The life business result increased to £1,226 million (HY15: £1,021 million) mainly reflecting the additional 3 months contribution from the Friends Life business. UK Life operating profit includes a net benefit of £84 million including a c.£30 million benefit that is expected to recur (HY15: £50 million) from various net reserve and other movements. Excluding these items and allowing for the additional contribution from Friends UK in Q1 2015 on a comparable Aviva basis, UK Life have delivered low to mid-single digit growth in life operating profit. In Europe, life operating profit remained broadly stable on a constant currency basis with growth in Italy offset by the adverse impacts of a new regulatory levy in Poland and lower profits in Turkey.

The general insurance and health business result decreased to £334 million (HY15: £422 million), down 22% on a constant currency basis. Within this total LTIR reduced to £171 million (HY15: £205 million), with £22 million of this decrease due to the lower balance on the UKGI internal loan which is neutral at an overall Group level, while the remainder mainly reflects lower investment yields. The underwriting result was £165 million (HY15: £222 million), mainly due to adverse weather experience in France, the fires experienced in Alberta, Canada, and the adverse impact of the new Flood Re levy in UKGI partly offset by favourable prior year development in the UK.

Higher fund management operating profit of £49 million (HY15: £33 million) mainly reflects higher management fees due to increased funds under management, partly offset by investment to support the development of the business.

Operating earnings per share remained broadly stable at 22.4p (HY15: 22.1p).

3 – Expenses

a) Expenses

	6 months 2016 £m	6 months 2015 £m
United Kingdom & Ireland Life	439	369
United Kingdom & Ireland General Insurance & Health	372	364
Europe	318	267
Canada	167	158
Asia	88	65
Aviva Investors	192	169
Other Group activities	120	106
Operating cost base	1,696	1,498
Integration & restructuring costs ³	105	172
Expense base	1,801	1,670

The table below shows the lines of the IFRS consolidated income statement in which operating expenses have been included:

	6 months 2016 £m	6 months 2015 £m
Claims handling costs ¹	139	170
Non-commission acquisition costs ²	423	480
Other expenses ³	1,134	848
Operating cost base	1,696	1,498

¹ As reported within net claims and benefits paid of £11,453 million (HY15: £10,402 million).

² As reported within fee and commission expense of £1,654 million (HY15: £1,933 million).

³ As reported within other expenses of £2,071 million (HY15: £1,062 million).

Overall operating expenses for HY16 were £1,696 million (HY15: £1,498 million). This includes an adverse impact from foreign exchange movements of £23 million and reflects 6 months contribution from the Friends Life business compared to 3 months in the prior period.

Excluding these items, operating expenses increased as savings in the UK businesses were partly offset by new regulatory levies in UKGI and Poland and investment to support business growth, mainly in Aviva Investors, France and Canada.

In **UK and Ireland Life**, operating expenses were £439 million (HY15: £369 million). The increase is primarily driven by the additional 3 months contribution for Friends UK. Excluding this, UK Life's operating expenses have decreased mainly due to integration savings.

In **UK & Ireland GI** operating expenses were £372 million (HY15: £364 million) and increased mainly due to the impact of the Flood Re levy, partly offset by expense savings reflecting the continued focus on cost control.

Total operating expenses of our **European markets** were £318 million (HY15: £267 million), an increase of 12% on a constant currency basis, primarily driven by investment to grow the business in France and Italy, and the impact of a new regulatory asset levy effective from 1 February 2016 and additional expenses as a result of the acquisition of Expander (in July 2015) in Poland. In **Canada**, operating expenses were £167 million (HY15: £158 million) as a result of the continued investment in business growth.

Total operating expenses for **Asia** were £88 million (HY15: £65 million) mainly reflecting the additional 3 months contribution from Friends Provident International ("FPI"), together with investment to support business growth.

In **Aviva Investors**, operating expenses increased to £192 million (HY15: £169 million), mainly due to higher expenses incurred to support the growth and further development of the business.

Other Group activities, which include Group centre costs, were £120 million (HY15: £106 million). This includes centre costs relating to Friends Life and increased spending on digital initiatives across the Group.

Integration and restructuring costs were £105 million (HY15: £172 million) and mainly include integration spend relating to the acquisition of the Friends Life business, and £17 million (HY15: £46 million) of Solvency II project costs.

b) Operating expense ratios

	6 months 2016	6 months 2015
Life ¹	35.5%	33.9%
General insurance ²	13.8%	14.1%
Health ²	13.3%	12.3%
Fund management ³	13bps	13bps
Group total⁴	53.4%	52.8%

¹ Life non-commission acquisition and administration expenses gross of DAC on new business expressed as a percentage of Life operating income.

² Written expenses including claims handling costs expressed as a percentage of net written premiums.

³ Aviva Investors' operating expenses expressed as a percentage of average funds under management.

⁴ Group operating expenses expressed as a percentage of operating profit before operating expenses and group debt costs.

4 – Value of new business

a) Value of new business by market (MCEV basis)

	6 months 2016 £m	6 months 2015 £m	Full Year 2015 £m
Gross of tax and non-controlling interests			
United Kingdom	269	253	609
Ireland	11	7	16
United Kingdom & Ireland	280	260	625
France	103	98	198
Poland	27	30	65
Italy	71	39	79
Spain	16	13	31
Turkey	12	12	27
Europe	229	192	400
Asia	61	76	151
Aviva Investors	13	6	16
Total value of new business	583	534	1,192

The Group's **value of new business**¹ (VNB) increased to £583 million (*HY15: £534 million*), up 7% on a constant currency basis, primarily driven by a strong performance in Italy and the contribution of 6 months VNB for the Friends Life business compared to 3 months in the prior period, partly offset by reductions in Asia.

In the **UK**, VNB was £269 million (*HY15: £253 million*). Within this result, there was the benefit of an additional 3 months contribution from Friends UK. Higher sales on pensions and improved volumes and margins on individual annuities have been broadly offset by lower volumes in bulk purchase annuities and equity release business. In **Ireland**, VNB improved 58%² as a result of higher sales and margins on individual annuities and higher pension volumes, partially offset by reduced margins on protection business.

VNB in **Europe** increased 14%² largely driven by a strong performance in Italy. VNB in France remained broadly stable² as higher protection and with-profits sales were offset by lower unit-linked volumes, as a result of lower demand for equity-linked products in the market. In Poland³, VNB decreased by 11%² mainly due to the impact of a new regulatory asset levy impacting banking and insurance companies together with lower unit-linked volumes, partly offset by higher sales on protection business. VNB in Italy was up by 71%² mainly driven by strong volumes and improved margins on with-profits products, together with an improved business mix on protection business. In Spain, VNB increased by 22%² mainly driven by an improved business mix within protection business. Turkey's VNB remained broadly stable as lower pension volumes were offset by improved margins.

In **Asia**, VNB decreased to £61 million (*HY15: £76 million*), mainly reflecting the discontinuation of the Group's bancassurance agreement with DBS Bank Ltd on 31 December 2015.

VNB in **Aviva Investors** was £13 million (*HY15: £6 million*) due mainly to higher sales in the Aviva Investors Multi Strategy (AIMS) fund range.

b) Reconciliation of Group MCEV VNB to adjusted Solvency II VNB

Following the introduction of Solvency II, the new prudential regulatory framework that came into force on 1 January 2016, the Group has calculated VNB on an adjusted Solvency II basis in addition to MCEV VNB.

Adjusted Solvency II VNB reflects Solvency II assumptions and allowance for risk and is defined as the increase in Solvency II Own Funds resulting from business written in the period, adjusted to:

- Include business in MCEV VNB which is not included in the Solvency II valuation (e.g. UK and Asia Healthcare business and the UK Equity release business);
- Remove the impact of contract boundaries; and
- Include look through profits in service companies (where not included in Solvency II).

A reconciliation between MCEV VNB and adjusted Solvency II VNB is provided below. This is the first time this information has been calculated and no prior period comparatives are available for 30 June 2015 or 31 December 2015.

6 months 2016	UK & Ireland £m	Europe £m	Asia £m	Aviva Investors £m	Group £m
MCEV VNB (gross of tax and non-controlling interests)	280	229	61	13	583
Remove MCEV CNHR/frictional costs ⁴	30	34	14	—	78
Include Solvency II risk margin	(111)	(66)	(23)	(1)	(201)
Total risk adjustments	(81)	(32)	(9)	(1)	(123)
Difference in economic assumptions	6	(9)	(9)	—	(12)
Adjusted Solvency II VNB (gross of tax and non-controlling interests)	205	188	43	12	448

¹ The trend analysis of VNB and present value of new business premiums (PVNBP) is included in the financial supplement, section E: VNB & sales analysis.

² On a constant currency basis.

³ Poland includes Lithuania.

⁴ CNHR is the Cost of Non-Hedgeable Risks.

5 – General insurance combined operating ratio (COR)¹

	Net written premiums			Claims ratio ⁴			Commission and expense ratio ⁵			Combined operating ratio ⁶		
	6 months 2016 £m	6 months 2015 £m	Full Year 2015 £m	6 months 2016 %	6 months 2015 %	Full Year 2015 %	6 months 2016 %	6 months 2015 %	Full Year 2015 %	6 months 2016 %	6 months 2015 %	Full Year 2015 %
United Kingdom ^{2,3}	2,001	1,851	3,685	60.5	62.0	64.7	35.4	31.2	30.4	95.9	93.2	95.1
Ireland	179	134	282	62.3	65.5	67.9	27.7	28.0	26.7	90.0	93.5	94.6
United Kingdom & Ireland	2,180	1,985	3,967	60.6	62.2	64.9	34.8	31.0	30.1	95.4	93.2	95.0
Europe	757	674	1,200	68.5	67.4	66.2	28.2	26.9	29.2	96.7	94.3	95.4
Canada	1,049	1,013	1,992	64.6	60.9	63.3	31.2	31.0	30.5	95.8	91.9	93.8
Asia	5	6	12	66.9	71.6	62.6	43.8	39.3	39.0	110.7	110.9	101.6
Total^{3,7}	3,991	3,678	7,171	63.5	62.8	64.5	32.7	30.3	30.1	96.2	93.1	94.6

¹ Please refer to '7ii - General insurance and health' for further analysis of the components of COR.

² United Kingdom excluding Aviva Re and agencies in run-off.

³ Excludes the impact from an outward quota share reinsurance agreement completed in 2015 in Aviva Insurance Limited (AIL).

⁴ Claims ratio: incurred claims expressed as a percentage of net earned premiums.

⁵ Commission and Expense ratio: written commissions and expenses expressed as a percentage of net written premiums.

⁶ Combined operating ratio: aggregate of claims ratio and commission and expense ratio.

⁷ Includes Aviva Re.

Group **combined operating ratio** (COR) for the period was 96.2% (HY15: 93.1%) mainly due to a higher commission and expense ratio in the UK and Europe, adverse weather experience in France and the Alberta forest fires in Canada partly offset by favourable prior year development in the UK.

In the **UK**, GI COR was 95.9% (HY15: 93.2%), driven by a higher commission and expense ratio, partly offset by an improved claims ratio. The higher commission and expense ratio of 35.4% (HY15: 31.2%) resulted from the impact of the new Flood Re levy and a higher commission ratio mainly due to new deal commission strain on the new partnership agreement with Homeserve which will mitigate as premiums earn through, partly offset by expense savings. The claims ratio improved to 60.5% (HY15: 62.0%) primarily due to favourable prior year development, partly offset by less favourable weather experience. In **Ireland** GI COR improved to 90.0% (HY15: 93.5%), mainly due to an improved claims ratio reflecting higher prior year reserve releases.

Europe's GI COR was 96.7% (HY15: 94.3%) reflecting a deterioration in both the claims and commission and expense ratios. The claims ratio worsened by 1.1pp to 68.5% (HY15: 67.4%) mainly driven by adverse weather experience, primarily in France. The commission and expense ratio was impacted by investment to grow the business in France and Italy.

In **Canada**, GI COR was 95.8% (HY15: 91.9%), primarily driven by a higher claims ratio mainly due to the forest fires in Alberta contributing a £27 million adverse impact on net claims incurred and less favourable prior year development. The commission and expense ratio was broadly in line with the prior period.

We continue to apply our reserving policy consistently and to focus on understanding the true cost of claims to ensure that reserves are maintained at an appropriate level. Prior year reserve movements will vary year to year but our business is predominantly short tail in nature and the loss development experience is generally stable. In HY16 we have had a positive prior year development in our GI & Health business, benefitting operating profit by £57 million (HY15: £74 million benefit to operating profit) as higher releases in the UK and Ireland were offset by lower releases mainly in Canada.

Underlying combined operating ratio

	UK & Ireland		Europe		Canada		Total
	6 months 2016 %	6 months 2015 %	6 months 2016 %	6 months 2015 %	6 months 2016 %	6 months 2015 %	6 months 2016 %
Underlying claims ratio ¹	64.5	66.2	66.5	70.4	67.5	66.7	65.7
Prior year reserve strengthening/(release) ²	(1.5)	(0.5)	(0.7)	(1.5)	(3.8)	(5.8)	(1.6)
Weather over/(under) long term average ³	(2.4)	(3.5)	2.7	(1.5)	0.9	—	(0.6)
Claims ratio	60.6	62.2	68.5	67.4	64.6	60.9	63.5
Commission and expense ratio ⁴	34.8	31.0	28.2	26.9	31.2	31.0	32.7
Combined operating ratio	95.4	93.2	96.7	94.3	95.8	91.9	96.2

¹ Underlying claims ratio represents the claims ratio adjusted to exclude prior year claims development and weather variations vs. expectations, gross of the impact of profit sharing arrangements.

² Prior year reserve strengthening/(release) represents the changes in the ultimate cost of the claims incurred in prior years, gross of the impact of profit sharing arrangements.

³ Weather over/(under) long term average represents the difference between the reported net incurred cost of general insurance claims that have occurred as a result of weather events and the equivalent long term average expected net costs, gross of the impact of profit sharing arrangements.

⁴ Commission and expense ratio includes the impact of profit sharing arrangements.

Group underlying claims ratio for the period improved by 1.3pp to 65.7% (HY15: 67.0%) driven by UK & Ireland GI and Europe, partly offset by a deterioration in Canada. In UK & Ireland GI, the improvement of 1.7pp to 64.5% (HY15: 66.2%) was driven by favourable underlying claims experience mainly driven by underwriting actions. In Europe the improvement of 3.9pp to 66.5% (HY15: 70.4%) was largely driven by rating actions and more favourable large loss experience. In Canada the underlying claims ratio was impacted by higher claims severity, partly offset by lower claims frequency.

6.i – United Kingdom and Ireland Life

	6 months 2016 £m	6 months 2015 £m	Full Year 2015 £m
Cash remitted to Group	577	287	667
Life operating profit: IFRS basis (restated)¹	711	569	1,455
Expenses			
Operating expenses	439	369	815
Integration and restructuring costs	61	86	215
	500	455	1,030
Value of new business	280	260	625

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

Cash

During the first half of 2016, the cash remitted to Group was £577 million (*HY15: £287 million*). No dividends were received by the Group in HY15 from Friends UK as a result of a £150 million remittance paid to its holding company prior to the Group's acquisition of the Friends Life business.

Operating profit: IFRS basis

UK and Ireland life operating profit for HY16 increased to £711 million (*HY15: £569 million*).

UK Life operating profit was £699 million (*HY15: £555 million*), with the increase mainly due to the benefit of an additional 3 months contribution from Friends UK compared to the prior period.

Within the HY16 result there is a £26 million non-recurring benefit from various net reserve movements (including a £63 million benefit in relation to annuitant mortality assumption changes), a £28 million benefit from DAC, net of amortisation over the period, following a change in estimate related to DAC recoverability and a c.£30 million benefit (that is expected to recur) which includes increased spread margins following a refinement to reflect a lower expected cost of credit defaults in operating profit.

HY15 included a non-recurring benefit of £50 million, including £22 million in relation to expense reserve releases following property restructuring.

Excluding the items above and allowing for the additional contribution from Friends UK in Q1 2015 on a comparable Aviva basis, UK Life have delivered low to mid-single digit growth in life operating profit. Operating profit grew due to the realisation of integration synergies, improved asset mix on annuities and positive momentum in protection sales. This was partially offset by a 27% reduction in annuity sales, with higher individual annuity volumes overshadowed by a decline in bulk annuity sales as we maintained our pricing discipline in this market.

In Ireland, life operating profit decreased to £12 million (*HY15: £14 million*).

Expenses

Overall UK operating expenses increased to £418 million (*HY15: £354 million*) driven by the additional 3 months contribution for Friends UK. Excluding this, UK Life's expenses have decreased due to integration savings.

Integration and restructuring costs have decreased to £61 million (*HY15: £82 million*) primarily due to lower integration spend relating to the acquisition of the Friends Life business and lower Solvency II project costs.

Ireland operating expenses increased to £21 million (*HY15: £15 million*). Integration and restructuring costs incurred during the period were nil (*HY15: £4 million*).

Value of new business (MCEV Basis)

Value of new business (VNB) was £280 million (*HY15: £260 million*).

In the UK, VNB was £269 million (*HY15: £253 million*). Within this result, there was an additional 3 months contribution from Friends UK. Higher sales on pensions and improved volumes and margins on individual annuities have been broadly offset by lower sales in bulk purchase annuities and equity release business. In Ireland VNB improved 58% on a constant currency basis as a result of higher sales and margins on individual annuities and higher pension volumes, partially offset by reduced margins on protection business.

Net flows

UK long-term savings managed assets² have increased to c.£95 billion (*FY15: c.£88 billion*) during the period. Within this, the UK Life Platform continues to grow with managed assets increasing 23% in the period to £10.3 billion (*FY15: £8.4 billion*) including net inflows of £1.9 billion.

For further details on UK Life net flows see note 7.iii.

² Includes platform and pensions business and externally reinsured non-participating investment contracts.

6.ii – United Kingdom and Ireland general insurance & health

	6 months 2016 £m	6 months 2015 £m	Full Year 2015 £m
Cash remitted to Group¹	—	—	358
General insurance & health operating profit: IFRS basis²	231	239	430
Expenses			
Operating expenses	372	364	697
Integration and restructuring costs	8	13	26
	380	377	723
Combined operating ratio^{2,3}	95.4%	93.2%	95.0%

¹ FY15 cash remittances include £351 million received from UK & Ireland GI in February 2016 in respect of 2015 activity.

² FY15 excludes the impact from an outward quota share reinsurance agreement completed in 2015 in Aviva Insurance Limited (AIL).

³ General insurance business only.

Cash

Dividends from the business are expected to be determined in Q4 2016 and paid in Q1 2017.

Operating profit: IFRS basis

UK and Ireland general insurance and health operating profit was £231 million (HY15: £239 million).

Within this, longer-term investment return (LTIR) reduced to £93 million (HY15: £121 million) of which £22 million is as a result of the lower intercompany loan balance (which is neutral at an overall Group level).

The UK general insurance underwriting result remained stable at £115 million (HY15: £115 million) despite the impact of the Flood Re levy and less favourable weather compared to the prior period. This was partly offset by more favourable prior year development and portfolio underwriting actions combined with expense savings. The personal lines underwriting result increased to £76 million (HY15: £43 million), largely due to favourable prior year development compared to strengthening in HY15, partly offset by the Flood Re levy and less favourable weather experience. The underwriting result in commercial lines decreased to £39 million (HY15: £72 million), mostly reflecting broadly neutral prior year development compared to releases in HY15, partly offset by underwriting actions and expense savings. UKGI net written premiums (NWP) increased 8% year on year to £2,001 million (HY15: £1,851 million), primarily driven by strong growth in personal specialty lines driven by new partnership agreement with Homeserve. In Ireland, general insurance and health operating profit increased to £25 million (HY15: £18 million), mainly driven by an improved general insurance underwriting result of £12 million (HY15: £6 million). This reflects benefits from strong volume growth in both personal and commercial lines and higher reserve releases.

In UK health, operating profit increased to £7 million (HY15: £(2) million loss) mainly due to the non-recurrence of reserve strengthening which adversely impacted the prior period and the benefit of pricing actions.

Expenses

UK general insurance operating expenses were £321 million (HY15: £318 million) reflecting the impact from the Flood Re levy of £23 million, partly offset by continued focus on cost control. In Ireland, operating expenses increased to £51 million (HY15: £46 million), up 4% on a constant currency basis, as a result of continued investment to grow the business.

UK and Ireland's integration and restructuring costs were £8 million (HY15: £13 million).

Combined operating ratio^{2,3}

	Claims ratio			Commission and expense ratio			Combined operating ratio		
	6 months 2016 %	6 months 2015 %	Full Year 2015 %	6 months 2016 %	6 months 2015 %	Full Year 2015 %	6 months 2016 %	6 months 2015 %	Full Year 2015 %
United Kingdom & Ireland									
Personal	60.2	65.7	65.8	36.6	30.0	28.8	96.8	95.7	94.6
Commercial	61.2	57.1	63.6	32.3	32.4	32.1	93.5	89.5	95.7
Total	60.6	62.2	64.9	34.8	31.0	30.1	95.4	93.2	95.0

² FY15 excludes the impact from an outward quota share reinsurance agreement completed in 2015 in Aviva Insurance Limited (AIL).

³ General insurance business only.

The UK & Ireland general insurance combined operating ratio (COR) was 95.4% (HY15: 93.2%), mainly due to a higher commission and expense ratio, partly offset by a lower claims ratio.

UKGI COR has worsened to 95.9% (HY15: 93.2%), driven by the impact of the Flood Re levy and a higher commission ratio mainly due to new deal commission strain on the new partnership agreement with Homeserve, which will mitigate as premiums earn through, partly offset by more favourable prior year development.

Ireland COR was 90.0% (HY15: 93.5%) mainly benefitting from higher reserve releases.

6.iii – Europe¹

	6 months 2016 £m	6 months 2015 £m	Full Year 2015 £m
Cash remitted to Group	169	186	431
Operating profit: IFRS basis			
Life	395	372	766
General insurance & health	35	59	114
	430	431	880
Expenses			
Operating expenses	318	267	526
Integration and restructuring costs	5	10	22
	323	277	548
Value of new business	229	192	400
Combined operating ratio²	96.7%	94.3%	95.4%

¹ Our European business includes life and general insurance business written in France, Poland and Italy, life business in Spain and Turkey and health business in France.

² General insurance business only.

There has been a strengthening of the euro and the Polish zloty by 6% and 1% respectively (average rate) over the period which has had an impact across all metrics except COR.

Cash

Cash remitted to Group during the period was £169 million (*HY15: £186 million*), with remittances received from Poland³, Spain and Turkey. Poland's dividend increased to £136 million (*HY15: £81 million*) as a result of a legal entity restructuring deferring the timing of remittance for part of the HY15 Polish dividend until 2016. We currently expect to receive cash remittances from France in the second half of the year.

Life operating profit: IFRS basis

Life operating profit was £395 million (*HY15: £372 million*) and remained broadly stable on a constant currency basis.

Italy's operating profit increased to £74 million (*HY15: £65 million*), up 9%⁴, mostly due to improved margins on with-profits products. In France, operating profit was 9% higher at £212 million (*HY15: £195 million*), up 2%⁴, mainly from continued portfolio growth in protection and with-profits products, partly offset by lower unit-linked asset management charges impacted by adverse market movements during the period and higher operating expenses. Operating profit in Poland³ reduced to £60 million (*HY15: £63 million*), down 7%⁴, largely due to the impact of a new regulatory asset levy effective from 1 February 2016. In Spain, operating profit increased to £47 million (*HY15: £43 million*) up 2%⁴, mainly due to improved margins on protection business. Operating profit in Turkey decreased to £2 million (*HY15: £6 million*).

General insurance & health operating profit: IFRS basis

Operating profits decreased to £35 million (*HY15: £59 million*), mainly driven by France. In France, operating profit was £16 million (*HY15: £38 million*), with the reduction largely due to adverse weather experience. Operating profits in Italy remained broadly stable at £16 million (*HY15: £16 million*). Poland³ decreased to £3 million (*HY15: £5 million*) mainly due to higher large losses on commercial lines.

Expenses

Operating expenses were £318 million (*HY15: £267 million*), up 12%⁴. In France, expenses increased due to investment to grow the business. In Poland³, expenses increased due to the impact of the asset levy and additional expenses as a result of the acquisition of Expander in July 2015. Italy's expenses increased due to investment to support its business growth. Integration and restructuring costs were £5 million (*HY15: £10 million*).

Value of new business (MCEV basis)

Europe's value of new business (VNB) was £229 million (*HY15: £192 million*), an increase of 14% on a constant currency basis, mainly as a result of a strong performance in Italy. VNB in Italy was up by 71%⁴ mainly driven by higher volumes and margins on with-profits products, together with an improved business mix on protection business. In Poland³, VNB decreased by 11%⁴ mainly due to the impact of the asset levy together with lower unit-linked volumes, partly offset by higher sales on protection business. VNB in France remained broadly stable⁴ as higher protection and with-profits sales were offset by lower unit-linked volumes, as a result of lower demand for equity-linked products in the market. In Spain, VNB increased by 22%⁴ mainly driven by an improved business mix within the protection business. Turkey's VNB remained broadly stable at £12 million as lower pension volumes were offset by improved margins.

³ Poland includes Lithuania.

⁴ On a constant currency basis.

6.iii – Europe continued

Combined operating ratio¹

	Claims ratio			Commission and expense ratio			Combined operating ratio		
	6 months 2016 %	6 months 2015 %	Full Year 2015 %	6 months 2016 %	6 months 2015 %	Full Year 2015 %	6 months 2016 %	6 months 2015 %	Full Year 2015 %
Europe									
France	70.9	69.2	67.8	26.6	25.2	27.9	97.5	94.4	95.7
Poland	60.4	55.9	54.4	36.6	38.8	40.3	97.0	94.7	94.7
Italy	64.0	64.8	64.1	30.8	29.3	30.2	94.8	94.1	94.3
Total	68.5	67.4	66.2	28.2	26.9	29.2	96.7	94.3	95.4

¹ General insurance business only.

Combined operating ratio has deteriorated to 96.7% (HY15: 94.3%), reflecting the general insurance business performance as described in operating profit above.

Net written premiums (NWP) for the general insurance and health business increased to £912 million (HY15: £802 million), an increase of 7% on a constant currency basis, reflecting growth across the majority of lines in France and Italy and mainly in motor and commercial property lines in Poland.

6.iv – Canada

	6 months 2016 £m	6 months 2015 £m	Full Year 2015 £m
Cash remitted to Group	4	2	6
General Insurance operating profit: IFRS basis	88	131	214
Expenses			
Operating expenses	167	158	298
Integration and restructuring costs	3	2	7
	170	160	305
Combined operating ratio	95.8%	91.9%	93.8%

Cash

Cash paid to the Group during the period was £4 million (*HY15: £2 million*), with the remaining cash remittance expected to be paid in the second half of the year.

Operating profit: IFRS basis

General insurance operating profit was £88 million (*HY15: £131 million*), mainly due to the forest fires experienced in Alberta Canada in May 2016 contributing to a £27 million adverse impact on net claims incurred (compared with the benign weather conditions experienced in the prior period) and less favourable prior year development. These adverse factors were partially offset by improvements in claims frequency but overall resulted in a lower underwriting result of £42 million (*HY15: £82 million*).

Longer-term investment return reduced 8% to £47 million (*HY15: £51 million*), down 6% on a constant currency basis as a result of lower reinvestment rates.

Expenses

Operating expenses increased to £167 million (*HY15: £158 million*) mainly driven by the continuing volume growth with net written premiums 5% higher on a constant currency basis. Integration and restructuring costs were broadly stable at £3 million (*HY15: £2 million*) which represent costs associated with the acquisition of the RBC General Insurance Company.

Combined operating ratio

	Claims ratio			Commission and expense ratio			Combined operating ratio		
	6 months 2016 %	6 months 2015 %	Full Year 2015 %	6 months 2016 %	6 months 2015 %	Full Year 2015 %	6 months 2016 %	6 months 2015 %	Full Year 2015 %
Canada									
Personal	68.3	65.2	66.8	28.7	28.4	27.8	97.0	93.6	94.6
Commercial	58.1	53.4	57.1	35.9	35.8	35.4	94.0	89.2	92.5
Total	64.6	60.9	63.3	31.2	31.0	30.5	95.8	91.9	93.8

Combined operating ratio was 95.8% (*HY15: 91.9%*), driven by a higher claims ratio mainly due to the forest fires in Alberta and less favourable prior year development, partly offset by lower claims frequency. The commission and expense ratio was broadly in line with the prior period.

Net written premiums were £1,049 million (*HY15: £1,013 million*), up 5% on a constant currency basis. The growth predominantly reflects rate increases on personal property and across commercial lines.

6.v – Asia

	6 months 2016 £m	6 months 2015 £m	Full Year 2015 £m
Cash remitted to Group	—	—	21
Operating profit: IFRS basis			
Life	118	79	244
General insurance & health	(6)	(4)	(6)
	112	75	238
Expenses			
Operating expenses	88	65	141
Integration and restructuring costs	8	—	7
	96	65	148
Value of new business	61	76	151
Combined operating ratio¹	110.7%	110.9%	101.6%

¹ General insurance business only.

Cash

No dividends were received during the period (*HY15: nil*).

Operating profit: IFRS basis

Overall operating profit from life and general insurance and health business was £112 million (*HY15: £75 million*). Life operating profits increased to £118 million (*HY15: £79 million*) mainly as a result of 6 months contribution to operating profit from Friends Provident International ("FPI") compared to 3 months in the prior period partly offset by the discontinuation of the Group's Bancassurance distribution agreement with DBS Bank Ltd. Life operating profits net of amortisation of acquired value of in-force business were £47 million (*HY15: £32 million*).

The General and health insurance business reported a £(6) million loss (*HY15: £(4) million loss*), largely driven by Singapore Health as a result of unfavourable claims experience.

Expenses

Overall operating expenses were £88 million (*HY15: £65 million*) reflecting the additional 3 months of operating expenses for FPI and investment to support business growth across Asia.

Value of new business (MCEV basis)

Value of new business (VNB) declined to £61 million (*HY15: £76 million*), down 23% on a constant currency basis, primarily reflecting a £10 million decrease in Singapore. This decline in VNB was mainly as a result of the discontinuation of the Group's bancassurance distribution agreement with DBS Bank Ltd, partly offset by higher sales in protection through the independent financial advisors network. VNB in China remained broadly stable at £22 million (*HY15: £23 million*).

Combined Operating Ratio

Combined operating ratio for the general insurance business remained broadly stable at 110.7% (*HY15: 110.9%*).

Net written premiums for the general insurance and health business increased to £69 million (*HY15: £61 million*), up 9% on a constant currency basis, with strong sales in group and retail health schemes in Singapore.

6.vi – Fund Management

	6 months 2016 £m	6 months 2015 £m	Full Year 2015 £m
Cash remitted to Group¹	2	20	24
Fund management operating profit: IFRS basis			
Aviva Investors	49	32	105
Asia	—	1	1
	49	33	106
Aviva Investors: Operating profit: IFRS basis			
Fund management	49	32	105
Other operations	20	—	—
	69	32	105
Expenses¹			
Operating expenses	192	169	345
Integration and restructuring costs	10	2	11
	202	171	356
Value of new business¹	13	6	16

¹ Only includes Aviva Investors.

Cash

Further cash remittances are currently expected from Aviva Investors in the second half of the year.

Operating profit: IFRS basis

Fund management operating profit generated by Aviva Investors increased to £49 million (*HY15: £32 million*), an increase of £17 million compared with the prior period. This is mainly due to higher management fees arising primarily from the growth of the Aviva Investors Multi-Strategy (AIMS) funds and the addition of Friends Life assets transferred to Aviva Investors, partly offset by higher operating expenses.

Other operations comprises £20 million operating profit relating to insurance recoveries. Of this, £16 million is due from the Group's internal reinsurer which therefore has a neutral effect on overall Group operating profit.

Expenses

Operating expenses in Aviva Investors were £192 million (*HY15: £169 million*), reflecting investment to support the growth and further development of the business. Integration and restructuring costs were £10 million (*HY15: £2 million*) largely relating to the Friends Life integration.

Value of New Business (MCEV Basis)

Value of new business in Aviva Investors increased to £13 million (*HY15: £6 million*) driven by higher sales in the AIMS fund range.

Net flows and funds under management – Aviva Investors¹

	Internal £m	External £m	Total £m
Aviva Investors			
Funds under management at 1 January 2016	246,174	43,736	289,910
Gross Sales	20,531	4,037	24,568
Gross claims/redemptions	(19,429)	(3,393)	(22,822)
Market movements and other ²	17,233	8,215	25,448
Acquisitions	1,500	—	1,500
Funds under management at 30 June 2016	266,009	52,595	318,604

¹ Funds under management represents all assets actively managed or administered by Aviva Investors. These comprise Aviva (internal) assets which are included within the Group's statement of financial position and those belonging to external clients outside the Aviva Group which are therefore not included in the Group's statement of financial position. These funds under management exclude those funds that are managed by third parties.

² Within the market movements and other number is a £4.1 billion reclassification from internal funds under management to external funds under management. In addition there are £0.4 billion of external liquidity outflows.

Aviva Investors funds under management increased by £28.7 billion to £318.6 billion (*FY15: £289.9 billion*) during the first half of the year with net fund inflows of £1.7 billion and the transition of an additional £1.5 billion of Friends Life assets to Aviva Investors. The remaining increase of £25.4 billion comprised favourable foreign exchange rate movements of £15.3 billion and positive market movements, primarily on fixed income assets.

As at 30 June 2016, £6.2 billion (*FY15: £3.0 billion*) funds under management were invested within our flagship AIMS fund range.

7.i – Life business profit drivers

Life business operating profit before shareholder tax increased by 20% to £1,226 million (*HY15: £1,021 million*), up 18% on a constant currency basis, mainly due to the benefit of an additional 3 months contribution to operating profit from Friends Life compared to the prior period.

Overall, total income increased by 21% to £2,114 million (*HY15: £1,745 million*) and total expenses increased by 21% to £1,059 million (*HY15: £874 million*). This increase in net income of £184 million and a higher benefit from DAC and other items give a total increase in life operating profit of £205 million for the half year.

	United Kingdom & Ireland			Europe			Asia			Total		
	6 months 2016 £m	6 months 2015 £m	Restated ¹ Full Year 2015 £m	6 months 2016 £m	6 months 2015 £m	Full Year 2015 £m	6 months 2016 £m	6 months 2015 £m	Full Year 2015 £m	6 months 2016 £m	6 months 2015 £m	Restated ¹ Full Year 2015 £m
New business income ²	316	251	708	130	102	228	74	73	152	520	426	1,088
Underwriting margin ³	158	103	279	115	109	208	37	35	82	310	247	569
Investment return ⁴	677	547	1,208	545	494	989	62	31	90	1,284	1,072	2,287
Total Income	1,151	901	2,195	790	705	1,425	173	139	324	2,114	1,745	3,944
Acquisition expenses ⁵	(210)	(188)	(405)	(144)	(116)	(243)	(68)	(63)	(127)	(422)	(367)	(775)
Administration expenses ⁶	(332)	(253)	(584)	(258)	(226)	(434)	(47)	(28)	(73)	(637)	(507)	(1,091)
Total Expenses	(542)	(441)	(989)	(402)	(342)	(677)	(115)	(91)	(200)	(1,059)	(874)	(1,866)
DAC and other	102	109	249	7	9	18	60	31	120	169	149	387
	711	569	1,455	395	372	766	118	79	244	1,224	1,020	2,465
Other business ⁷										2	1	(23)
Total										1,226	1,021	2,442

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

² Represents the income earned on new business written during the period reflecting premiums less initial reserves.

³ Underwriting margin represents the release of reserves held to cover claims, surrenders and expenses less the cost of actual claims and surrenders in the period.

⁴ Represents the expected income on existing business (other than the underwriting margin). Life investment return comprises unit-linked margin, shareholders' return on participating business, spread margin and the expected return on shareholder assets.

⁵ Initial expenses and commission incurred in writing new business less deferred costs.

⁶ Expenses and renewal commissions incurred in managing existing business.

⁷ Other business includes the total result for Aviva Investors Pooled Pensions and Aviva Life Reinsurance.

Income: New business income and underwriting margin

	United Kingdom & Ireland		Europe		Asia		Total
	6 months 2016 £m	6 months 2015 £m	6 months 2016 £m	6 months 2015 £m	6 months 2016 £m	6 months 2015 £m	6 months 2016 £m
New business income (£m)	316	251	130	102	74	73	520
APE (£m) ¹	1,194	894	617	498	120	192	1,931
As margin on APE (%)	26%	28%	21%	20%	62%	38%	27%
Underwriting margin (£m)	158	103	115	109	37	35	310
Analysed by:							
Expenses	31	27	28	25	23	19	82
Mortality and longevity	135	76	82	73	12	13	229
Persistency	(8)	—	5	11	2	3	(1)

¹ Used as a measure of life sales. It is calculated as the sum of new regular premiums plus 10% of new single premiums written in the period. APE excludes UK Retail Fund Management and Health business in UK & Ireland and Asia.

(a) New business income

New business income increased to £520 million (*HY15: £426 million*), mainly driven by the additional quarter of Friends Life, Italy and UK Life.

The net contribution from new business is the new business income less associated acquisition expenses (see (g) below). This increased to a profit of £98 million (*HY15: profit of £59 million*).

In the UK & Ireland, net contribution from new business increased to £106 million (*HY15: £63 million*) mainly driven by Friends UK being part of the Group for an additional quarter in 2016, improved asset mix in individual annuities and improved individual protection performance, partly offset by a fall in bulk purchase annuity volumes.

In Europe, net contribution remained stable at a loss of £14 million (*HY15: loss of £14 million*) with a change in business mix towards higher margin products in Italy, offset by reduced contributions from France and Turkey mainly due to higher acquisition expenses. Volumes based on APE increased by 18% in constant currency, reflecting higher with-profit sales volumes in Italy and France, partly offset by lower sales volumes in Turkey and Spain. New business margin on APE remained broadly stable in Europe at 21% (*HY15: 20%*).

In Asia, net contribution decreased to a profit of £6 million (*HY15: profit of £10 million*) mainly as a result of the discontinuation of the bancassurance distribution agreement with DBS Bank Ltd, change in product mix and higher acquisition expenses.

(b) Underwriting margin

The underwriting margin increased to £310 million (*HY15: £247 million*). In the UK & Ireland, underwriting margin increased to £158 million (*HY15: £103 million*) mainly driven by Friends UK being part of the Group for an additional quarter in 2016 and improved mortality margins. In Europe, underwriting margin increased to £115 million (*HY15: £109 million*) driven by favourable foreign currency movements (1% increase in constant currency).

In Asia, underwriting margin increased 4% in constant currency to £37 million (*HY15: £35 million*) mainly due to favourable expense margins on protection business in Singapore and non-participating annuities in China.

7.i – Life business profit drivers continued

Income: Investment return

	United Kingdom & Ireland		Europe		Asia		Total
	6 months 2016 £m	Restated ¹ 6 months 2015 £m	6 months 2016 £m	6 months 2015 £m	6 months 2016 £m	6 months 2015 £m	Restated ¹ 6 months 2015 £m
Unit-linked margin² (£m)	429	353	236	225	52	26	604
As Annual management charge on average reserves (bps)	80	90	146	144	127	108	105
Average reserves (£bn)	107.2	78.7	32.4	31.2	8.2	4.8	114.7
Participating business³ (£m)	79	58	258	222	(5)	(7)	273
As bonus on average reserves (bps)	30	26	83	79	n/a	n/a	53
Average reserves (£bn)	51.9	44.9	62.2	56.1	3.3	2.5	103.5
Spread margin⁴ (£m)	135	105	3	4	8	6	115
As spread margin on average reserves (bps)	44	41	19	25	145	133	41
Average reserves (£bn)	61.4	51.6	3.2	3.2	1.1	0.9	55.7
Expected return on shareholder assets⁵ (£m)	34	31	48	43	7	6	80
Total (£m)	677	547	545	494	62	31	1,072

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

² Unit-linked margin represents the annual management charges on unit-linked business based on expected investment return.

³ The shareholders' share of the return on with-profit and other participating business.

⁴ Spread margin represents the return made on annuity and other non-linked business, based on the expected investment return less amounts credited to policyholders.

⁵ The expected investment return based on opening economic assumptions applied to expected surplus assets over the reporting period that are not backing policyholder liabilities.

⁶ An average of the insurance or investment contract liabilities over the reporting period, including managed pension business which is not consolidated within the statement of financial position.

(c) Unit-linked margin

The unit-linked average reserves have increased to £148 billion (*HY15: £115 billion*), with the movement largely driven by higher weighted average Group reserves reflecting that the Group acquired the Friends Life business on 10 April 2015. The unit-linked margin increased to £717 million (*HY15: £604 million*) mainly driven by an additional quarter of margins in Friends Life businesses and improvements in Italy, partly offset by lower margins in France and Spain. The margin as a proportion of average unit-linked reserves decreased to 97 bps (*HY15: 105 bps*).

The unit-linked margin in UK & Ireland has increased mainly due to the benefit of an additional 3 months contribution from Friends UK, however this has been partly offset by the expected run-off in the higher margin back book and lower margins on group pensions. Unit-linked margin in Europe remained broadly stable on a constant currency basis, with a change of business mix to higher margin products in Italy offset by reduced unit-linked margin in France and Spain. The increase in unit-linked margin in Asia is mainly due to the additional quarter from FPL.

(d) Participating business

The participating average reserves have increased to £117 billion (*HY15: £104 billion*), largely driven by the higher weighted average reserves as a result of the Friends Life acquisition. Income from participating business increased to £332 million (*HY15: £273 million*). In the UK & Ireland, the income has increased due to the additional quarter from Friends UK. In Europe, income has increased to £258 million (*HY15: £222 million*) reflecting favourable foreign currency movements of £14 million. The majority of participating business income is earned in France, where there is a fixed management charge of around 50bps on AFER business, which is the largest single component of this business.

(e) Spread margin

The average reserves have increased to £66 billion (*HY15: £56 billion*), largely driven by the higher weighted average reserves as a result of the Friends Life acquisition. Spread business income, which mainly relates to UK in-force immediate annuity and equity release business, improved to £146 million (*HY15: £115 million*). This includes the effect of c.£30 million relating to a refinement to reflect a lower expected cost of credit defaults in operating profit. The spread margin increased to 44 bps (*HY15: 41 bps*), on average reserves of £66 billion (*HY15: £56 billion*). In Europe, spread income remained broadly stable at £3 million. In Asia, spread business income increased to £8 million (*HY15: £6 million*) driven by higher investment margins in both Singapore and China.

(f) Expected return on shareholder assets

Expected returns, representing investment income on surplus funds, increased to £89 million (*HY15: £80 million*). The increase in income is mainly driven by the benefits of a larger asset base in France, partly offset by lower investment yields in Italy.

7.i – Life business profit drivers continued

Expenses

	United Kingdom & Ireland		Europe		Asia		Total
	6 months 2016 £m	Restated ¹ 6 months 2015 £m	6 months 2016 £m	6 months 2015 £m	6 months 2016 £m	6 months 2015 £m	Restated ¹ 6 months 2015 £m
Acquisition expenses (£m)	(210)	(188)	(144)	(116)	(68)	(63)	(422)
APE (£m) ²	1,194	894	617	498	120	192	1,931
As acquisition expense ratio on APE (%)	18%	21%	23%	23%	57%	33%	22%
Administration expenses (£m)	(332)	(253)	(258)	(226)	(47)	(28)	(637)
As existing business expense ratio on average reserves (bps)	30	29	53	50	75	68	39
Average reserves (£bn)	220.5	175.2	97.8	90.5	12.6	8.2	330.9

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

² APE excludes UK Retail Fund Management and Health business in UK & Ireland and Asia.

(g) Acquisition expenses

Acquisition expenses increased to £422 million (*HY15: £367 million*) primarily reflecting an additional quarter of Friends Life expenses, partly offset by integration synergies. Europe acquisition expenses have increased due to unfavourable exchange rate movements of £6 million, and increased expenses in Italy and France as a result of higher volumes.

The increase in Asia is due to a change of business mix in Singapore and China towards non-participating products. The overall group-wide ratio of acquisition expenses to APE improved to 22% (*HY15: 23%*).

(h) Administration expenses

Administration expenses increased to £637 million (*HY15: £507 million*). The expense ratio was 39 bps (*HY15: 37 bps*) on average reserves of £331 billion (*HY15: £274 billion*). The increase in UK & Ireland is driven by the additional quarter of Friends UK expenses, partly offset by integration synergies. Administration expenses in Europe have increased to £258 million (*HY15: £226 million*), with adverse exchange rate movements of £12 million, a new regulatory asset levy in Poland effective from 1 February 2016 and higher renewal-related expenses in France. On a constant currency basis, Asia administration expenses increased primarily due to the additional quarter of FPI costs.

The overall increase in life business acquisition and administration expenses was £185 million, with an additional quarter of Friends Life expenses, adverse foreign exchange rate movements, increasing expenses as the French and Italian businesses grow and a change of business mix in Singapore towards more non-participating business.

(i) DAC and other

DAC and other items amounted to an overall positive contribution of £169 million (*HY15: £149 million*), which was mainly driven by Asia reflecting an additional quarter of FPI.

Overview

Income & expenses

IFRS

Capital & Liquidity

Analysis of assets

VNB & sales analysis

Other information

7.ii – General insurance and health

6 months 2016	UK Personal £m	UK Commercial £m	Total UK £m	Ireland £m	Total UK & Ireland £m	Canada Personal £m	Canada Commercial £m	Total Canada £m	Europe £m	Asia & Other ¹ £m	Total £m
General insurance											
Gross written premiums	1,225	921	2,146	185	2,331	692	399	1,091	786	6	4,214
Net written premiums	1,188	813	2,001	179	2,180	680	369	1,049	757	5	3,991
Net earned premiums	1,121	763	1,884	159	2,043	655	365	1,020	658	6	3,727
Net claims incurred	(666)	(473)	(1,139)	(99)	(1,238)	(447)	(212)	(659)	(451)	(19)	(2,367)
<i>Of which claims handling costs</i>			(68)	(5)	(73)			(41)	(22)	—	(136)
Written commission	(340)	(165)	(505)	(27)	(532)	(133)	(75)	(208)	(148)	—	(888)
Written expenses²	(106)	(98)	(204)	(23)	(227)	(62)	(57)	(119)	(65)	(3)	(414)
Movement in DAC and other	67	12	79	2	81	7	1	8	16	—	105
Underwriting result	76	39	115	12	127	20	22	42	10	(16)	163
Longer-term investment return ³			85	8	93			47	28	1	169
Other ⁴			(1)	—	(1)			(1)	—	—	(2)
Operating profit			199	20	219			88	38	(15)	330
Health insurance											
Underwriting result					10			—	(3)	(5)	2
Longer-term investment return					2			—	—	—	2
Operating profit					12			—	(3)	(5)	4
Total operating profit					231			88	35	(20)	334
General insurance combined operating ratio											
Claims ratio	59.4%	62.0%	60.5%	62.3%	60.6%	68.3%	58.1%	64.6%	68.5%		63.5%
Commission ratio	28.6%	20.3%	25.2%	15.0%	24.4%	19.6%	20.4%	19.8%	19.5%		22.3%
Expense ratio	9.0%	12.0%	10.2%	12.7%	10.4%	9.1%	15.5%	11.4%	8.7%		10.4%
Combined operating ratio⁵	97.0%	94.3%	95.9%	90.0%	95.4%	97.0%	94.0%	95.8%	96.7%		96.2%
Assets supporting general insurance and health business											
Debt securities			3,474	413	3,887			3,500	2,168	202	9,757
Equity securities			8	—	8			201	16	—	225
Investment property			205	—	205			—	163	—	368
Cash and cash equivalents			811	71	882			462	236	43	1,623
Other ⁶			1,535	102	1,637			166	235	2	2,040
Assets at 30 June 2016			6,033	586	6,619			4,329	2,818	247	14,013
Debt securities			3,993	470	4,463			2,999	1,937	209	9,608
Equity securities			8	—	8			188	21	—	217
Investment property			198	—	198			—	137	—	335
Cash and cash equivalents			639	79	718			107	118	26	969
Other ⁶			2,559	104	2,663			135	209	1	3,008
Assets at 31 December 2015			7,397	653	8,050			3,429	2,422	236	14,137
Average assets			6,715	620	7,335			3,878	2,620	242	14,075
LTIR as % of average assets			2.5%	2.6%	2.6%			2.4%	2.1%	0.8%	2.4%

¹ Asia & Other includes Aviva Re.

² Operating expenses shown in note 3 includes claims handling costs and written expenses included in general insurance COR above, plus operating expenses of other non-insurance operations.

³ The UK & Ireland LTIR includes £37 million (*HY15: £59 million*) relating to the internal loan. This is lower than 2015 primarily as a result of the reduction in the balance of this loan during 2016.

⁴ Includes unwind of discount and pension scheme net finance costs.

⁵ COR is calculated as incurred claims expressed as a percentage of net earned premiums, plus written commissions and written expenses expressed as a percentage of net written premiums. COR is calculated using unrounded numbers so minor rounding differences may exist.

⁶ Includes loans and other financial investments.

7.ii – General insurance and health continued

6 months 2015	UK Personal £m	UK Commercial £m	Total UK £m	Ireland £m	Total UK & Ireland £m	Canada Personal £m	Canada Commercial £m	Total Canada £m	Europe £m	Asia & Other ¹ £m	Total £m
General insurance											
Gross written premiums	1,090	917	2,007	139	2,146	678	399	1,077	704	7	3,934
Net written premiums	1,047	804	1,851	134	1,985	657	356	1,013	674	6	3,678
Net earned premiums	1,067	741	1,808	128	1,936	642	372	1,014	591	7	3,548
Net claims incurred	(696)	(424)	(1,120)	(84)	(1,204)	(418)	(200)	(618)	(398)	(9)	(2,229)
<i>Of which claims handling costs</i>			(96)	(4)	(100)			(39)	(28)	—	(167)
Written commission	(245)	(165)	(410)	(18)	(428)	(128)	(72)	(200)	(134)	—	(762)
Written expenses²	(72)	(96)	(168)	(20)	(188)	(58)	(56)	(114)	(47)	(3)	(352)
Movement in DAC and other	(11)	16	5	—	5	4	(4)	—	13	—	18
Underwriting result	43	72	115	6	121	42	40	82	25	(5)	223
Longer-term investment return ³			111	10	121			51	30	1	203
Other ⁴			(3)	—	(3)			(2)	—	—	(5)
Operating profit			223	16	239			131	55	(4)	421
Health insurance											
Underwriting result					(2)			—	4	(3)	(1)
Longer-term investment return					2			—	—	—	2
Operating profit					—			—	4	(3)	1
Total operating profit					239			131	59	(7)	422
General insurance combined operating ratio											
Claims ratio	65.2%	57.2%	62.0%	65.5%	62.2%	65.2%	53.4%	60.9%	67.4%		62.8%
Commission ratio	23.3%	20.6%	22.1%	13.2%	21.5%	19.5%	20.2%	19.8%	19.9%		20.7%
Expense ratio	6.9%	12.1%	9.1%	14.8%	9.5%	8.9%	15.6%	11.2%	7.0%		9.6%
Combined operating ratio⁵	95.4%	89.9%	93.2%	93.5%	93.2%	93.6%	89.2%	91.9%	94.3%		93.1%
Assets supporting general insurance and health business											
Debt securities			4,399	555	4,954			3,014	1,851	214	10,033
Equity securities			7	—	7			206	19	—	232
Investment property			138	2	140			—	116	—	256
Cash and cash equivalents			634	52	686			97	181	24	988
Other ⁶			2,988	91	3,079			128	182	—	3,389
Assets at 30 June 2015			8,166	700	8,866			3,445	2,349	238	14,898
Debt securities			4,429	825	5,254			3,261	2,140	203	10,858
Equity securities			7	—	7			222	22	—	251
Investment property			91	4	95			—	128	—	223
Cash and cash equivalents			865	79	944			123	185	48	1,300
Other ⁶			3,372	101	3,473			122	172	—	3,767
Assets at 31 December 2014			8,764	1,009	9,773			3,728	2,647	251	16,399
Average assets			8,465	855	9,320			3,586	2,498	245	15,649
LTIR as % of average assets			2.6%	2.3%	2.6%			2.8%	2.4%	0.8%	2.6%

1 Asia & Other includes Aviva Re.

2 Operating expenses shown in note 3 includes claims handling costs and written expenses included in general insurance COR above, plus operating expenses of other non-insurance operations.

3 The UK & Ireland LTIR includes £59 million (HY14: £83 million) relating to the internal loan. This is lower than 2014 primarily as a result of a reduction in the balance of this loan during 2014 and 2015.

4 Includes unwind of discount and pension scheme net finance costs.

5 COR is calculated as incurred claims expressed as a percentage of net earned premiums, plus written commissions and written expenses expressed as a percentage of net written premiums. COR is calculated using unrounded numbers so minor rounding differences may exist.

6 Includes loans and other financial investments.

7.ii – General insurance and health continued

Full Year 2015	UK Personal £m	UK Commercial £m	Total UK £m	Ireland £m	Total UK & Ireland £m	Canada Personal £m	Canada Commercial £m	Total Canada £m	Europe £m	Asia & Other ² £m	Total £m
General insurance											
Gross written premiums	2,253	1,719	3,972	291	4,263	1,324	785	2,109	1,263	12	7,647
Net written premiums ¹	2,168	1,517	3,685	282	3,967	1,282	710	1,992	1,200	12	7,171
Net earned premiums¹	2,160	1,493	3,653	262	3,915	1,258	719	1,977	1,171	16	7,079
Net claims incurred¹	(1,413)	(950)	(2,363)	(177)	(2,540)	(840)	(411)	(1,251)	(775)	1	(4,565)
<i>Of which claims handling costs</i>			(170)	(7)	(177)			(74)	(45)	—	(296)
Written commission	(479)	(307)	(786)	(36)	(822)	(248)	(147)	(395)	(245)	—	(1,462)
Written expenses³	(153)	(182)	(335)	(39)	(374)	(108)	(105)	(213)	(105)	(7)	(699)
Movement in DAC and other	(18)	3	(15)	(1)	(16)	5	(3)	2	13	—	(1)
Underwriting result¹	97	57	154	9	163	67	53	120	59	10	352
Longer-term investment return ⁴			215	21	236			98	53	3	390
Other ⁵			(1)	—	(1)			(4)	—	—	(5)
Operating profit¹			368	30	398			214	112	13	737
Health insurance											
Underwriting result					27			—	1	(6)	22
Longer-term investment return					5			—	1	—	6
Operating profit					32			—	2	(6)	28
Total operating profit¹					430			214	114	7	765
General insurance combined operating ratio¹											
Claims ratio ¹	65.4%	63.6%	64.7%	67.9%	64.9%	66.8%	57.1%	63.3%	66.2%		64.5%
Commission ratio	22.1%	20.2%	21.3%	12.8%	20.7%	19.3%	20.7%	19.8%	20.4%		20.4%
Expense ratio	7.0%	12.0%	9.1%	13.9%	9.4%	8.5%	14.7%	10.7%	8.8%		9.7%
Combined operating ratio⁶	94.5%	95.8%	95.1%	94.6%	95.0%	94.6%	92.5%	93.8%	95.4%		94.6%
Assets supporting general insurance and health business											
Debt securities			3,993	470	4,463			2,999	1,937	209	9,608
Equity securities			8	—	8			188	21	—	217
Investment property			198	—	198			—	137	—	335
Cash and cash equivalents			639	79	718			107	118	26	969
Other ⁷			2,559	104	2,663			135	209	1	3,008
Assets at 31 December 2015			7,397	653	8,050			3,429	2,422	236	14,137
Debt securities			4,429	825	5,254			3,261	2,140	203	10,858
Equity securities			7	—	7			222	22	—	251
Investment property			91	4	95			—	128	—	223
Cash and cash equivalents			865	79	944			123	185	48	1,300
Other ⁷			3,372	101	3,473			122	172	—	3,767
Assets at 31 December 2014			8,764	1,009	9,773			3,728	2,647	251	16,399
Average assets			8,080	831	8,911			3,578	2,535	244	15,268
LTIR as % of average assets			2.7%	2.5%	2.7%			2.7%	2.1%	1.2%	2.6%

¹ Excludes the impact from an outward quota share reinsurance agreement completed in 2015 in Aviva Insurance Limited (AIL).

² Asia & Other includes Aviva Re.

³ Operating expenses shown in note 3 includes claims handling costs and written expenses included in general insurance COR above, plus operating expenses of other non-insurance operations.

⁴ The UK & Ireland LTIR includes £115 million (FY14: £156 million) relating to the internal loan. This is lower than 2014 primarily as a result of a reduction in the balance of this loan during 2015.

⁵ Includes unwind of discount and pension scheme net finance costs.

⁶ COR is calculated as incurred claims expressed as a percentage of net earned premiums, plus written commissions and written expenses expressed as a percentage of net written premiums. COR is calculated using unrounded numbers so minor rounding differences may exist.

⁷ Includes loans and other financial investments.

7.iii – Fund flows

Net flows is one of the measures of growth used by management and is a component of the movement in Life and platform business managed assets (excluding UK with-profits) during the period. It is the difference between the inflows (being IFRS net written premiums plus deposits received under investment contracts) and outflows (being IFRS net paid claims plus redemptions and surrenders under investment contracts). It excludes market and other movements.

	Restated ¹ Managed assets at 1 January 2016 ⁴ £m	Premiums and deposits, net of reinsurance £m	Claims and redemptions, net of reinsurance £m	Net flows ^{2,3} £m	Market and other movements £m	Managed assets at 30 June 2016 ⁴ £m
Life and platform business						
UK – non-profit:						
– platform	8,376	2,207	(287)	1,920	(35)	10,261
– pensions and other long term savings	79,261	3,509	(3,469)	40	4,996	84,297
– long term savings	87,637	5,716	(3,756)	1,960	4,961	94,558
– annuities and equity release	52,463	312	(1,373)	(1,061)	6,057	57,459
– other	25,801	422	(1,295)	(873)	743	25,671
Ireland	5,152	305	(300)	5	784	5,941
United Kingdom & Ireland (excluding UK with-profits)	171,053	6,755	(6,724)	31	12,545	183,629
Europe	94,632	5,311	(3,604)	1,707	11,679	108,018
Asia	11,484	1,062	(921)	141	834	12,459
Other	1,752	21	(93)	(72)	26	1,706
	278,921	13,149	(11,342)	1,807	25,084	305,812
UK – with-profits and other	62,067					63,430
Total life and platform business	340,988					369,242

¹ Restated to include externally reinsured non-participating investment contracts.

² Life business net flows in the table above are net of reinsurance.

³ For the period to 30 June 2016, net flows of £1.8 billion includes net flows of £0.7 billion that are included in the IFRS income statement within net written premiums and net paid claims.

⁴ Life and platform business managed assets at the balance sheet date includes financial investments, loans, investment property, externally reinsured non-participating investment contracts and cash and cash equivalents included on the IFRS statement of financial position, plus assets administered by the Group that are not included on the IFRS statement of financial position. At 30 June 2016, life and platform business managed assets of £369 billion (FY15: £341 billion⁵) includes £360 billion (FY15: £333 billion) that is on the IFRS statement of financial position.

United Kingdom & Ireland (excluding UK with-profits)

UK long term savings managed assets⁵ have increased to c.£95 billion (FY15: c.£88 billion) during the period. Within this, the UK Life Platform continues to grow, with managed assets increasing 23% in the period to £10.3 billion (FY15: £8.4 billion) including net inflows of £1.9 billion.

UK annuities and equity release and other non-profit outflows were £1,934 million driven by net outflows in annuities (including lower bulk purchase annuity volumes) and protection. Market and other movements include favourable market movements driven by a decrease in interest rates and growth in equities.

Europe

Net inflows were £1,707 million. This was mainly driven by increased with-profits sales in Italy and France. Market and other movements in Europe primarily reflect favourable foreign exchange movements mainly driven by the strengthening of the euro against sterling.

Asia and other

Net inflows in Asia were £141 million arising mainly in Singapore. Other business net outflows of £72 million primarily relate to Aviva Investors' Pooled Pensions business.

⁵ Includes platform and pensions business and externally reinsured non-participating investment contracts.

8.i – Summary of assets

The Group asset portfolio is invested to generate competitive investment returns for both policyholders and shareholders whilst remaining within the Group's appetite for market, credit and liquidity risk.

The Group has a low appetite for interest rate risk and currency risk which means that the asset portfolios are well matched by duration and currency to the liabilities they cover. The Group also runs a low level of liquidity risk which results in a high proportion of income generating assets and a preference for more liquid assets where there is the potential need to realise those assets before maturity.

The Group seeks to diversify its asset portfolio in order to reduce risk and provide more attractive risk-adjusted returns. In order to achieve this there is a comprehensive risk limit framework in place. There is an allowance for diversification in our economic capital model, actions have been taken to reduce our exposure to the Eurozone periphery, and we are broadening the investment portfolio in individual businesses.

Asset allocation decisions are taken at legal entity level and in many cases by fund within a legal entity in order to reflect the nature of the liabilities, customer expectations, the local accounting and regulatory treatment, and any local constraints. These asset allocation decisions are made in accordance with a Group-wide framework that takes into account consensus investment views across the Group, prioritised Group objectives and metrics and Group risk limits and constraints. This framework is overseen by the Group ALCO (Asset Liability Committee) and facilitates a consistent approach to asset allocation across the business units in line with Group risk appetite and shareholder objectives.

The asset allocation as at 30 June 2016 across the Group, split according to the type of liability the assets are covering, is shown in the table below. Further information on these assets is given in the Analysis of Assets section.

Carrying value in the statement of financial position	Shareholder business assets			Participating fund assets			Less assets of operation classified as held for sale £m	Carrying value in the statement of financial position £m
	General Insurance & health & other ¹ £m	Annuity and non-profit £m	Policyholder (unit linked assets) £m	UK style with profits £m	Continental European-style Participating funds £m	Total assets analysed £m		
Debt securities								
Government bonds	6,314	14,649	11,956	19,815	29,326	82,060	(2,346)	79,714
Corporate bonds	4,429	23,720	11,294	16,777	29,675	85,895	(4,326)	81,569
Other	234	2,700	2,591	1,474	6,219	13,218	(703)	12,515
	10,977	41,069	25,841	38,066	65,220	181,173	(7,375)	173,798
Loans								
Mortgage loans	—	18,074	—	258	1	18,333	—	18,333
Other loans	171	2,468	351	2,258	788	6,036	(64)	5,972
	171	20,542	351	2,516	789	24,369	(64)	24,305
Equity securities	238	235	46,755	13,038	3,606	63,872	(541)	63,331
Investment property	372	177	6,698	2,802	1,101	11,150	(44)	11,106
Other investments	865	3,148	42,677	4,515	2,925	54,130	(2,799)	51,331
Total as at 30 June 2016	12,623	65,171	122,322	60,937	73,641	334,694	(10,823)	323,871
Total as at 31 December 2015	11,550	58,586	117,941	57,508	62,366	307,951	—	307,951

¹ Of the £12.6 billion of assets 12% relates to other shareholder business assets.

There is an internal loan between Aviva Insurance Limited (AIL) and Aviva Group Holdings Limited (AGH) that has a net value of zero at a consolidated level.

General insurance and health

All the investment risk is borne by shareholders and the portfolio held to cover these liabilities contains a high proportion of fixed and variable income securities, of which 82% are rated A or above. The assets are relatively short duration reflecting the short average duration of the liabilities. Liquidity, interest rate and foreign exchange (FX) risks are maintained at a low level.

Annuity and other non-profit

All the investment risk is borne by shareholders. The annuity liabilities have a long duration but are also illiquid as customers cannot surrender their policies. The assets are chosen to provide stable income with a good cash flow, FX and interest rate match to the liabilities. We are able to invest part of the portfolio in less liquid assets in order to improve risk-adjusted returns given the illiquid nature of the liabilities. The asset portfolio is principally comprised of long maturity bonds and loans including a material book of commercial mortgage loans. As at 30 June 2016, unrealised losses and impairments on the bond portfolio of £41.1 billion amounted to £0.6 billion or 2% of the portfolio. The equivalent figure for 31 December 2015 was 5%. Unrealised gains on the portfolio were £6.9 billion as at 30 June 2016 or 17% of the portfolio. The equivalent unrealised gains figure for 31 December 2015 was 9%. The other non-profit business assets are a smaller proportion of this portfolio and are generally shorter in duration and have a high proportion invested in fixed income.

£10.9 billion of shareholder loan assets are backing UK annuity liabilities and comprise of commercial mortgage loans (£6.3 billion), Healthcare, Infrastructure and PFI mortgage loans (£3.5 billion) and Primary Healthcare, Infrastructure and PFI other loans (£1.1 billion). The Group carries a valuation allowance within the liabilities against the risk of default of commercial mortgages, including Healthcare and PFI mortgages, of £0.6 billion which equates to 66bps at 30 June 2016 (FY15: 59bps).

8.i – Summary of assets continued

Policyholder assets

These assets are invested in line with the fund choices made by our unit-linked policyholders and the investment risk is borne by the policyholder. This results in a high allocation to growth assets such as equity and property. Aviva's shareholder exposure to these assets arises from the fact that the income we receive is a proportion of the assets under management.

UK style with-profits (WP)

UK style with-profits funds hold relatively long-term contracts with policyholders participating in pooled investment performance subject to some minimum guarantees. Smoothed returns are used to declare bonuses to policyholders which increase the level of the guarantees through time. The part of the portfolio to which policyholder bonuses are linked is invested in line with their expectations and includes growth assets such as equity and property as well as fixed income. The remainder of the portfolio is invested to mitigate the resultant shareholder risk. This leads us to an overall investment portfolio that holds a higher proportion of growth assets (such as equity and property) than our other business lines although there are still material allocations to fixed income assets.

Continental European style participating funds

Continental European style participating funds hold relatively long-term contracts with policyholders participating in pooled investment performance subject to some minimum guarantees. Smoothed returns are used to declare bonuses to policyholders. Certain of the guarantees are subject to annual discretion declared at the start of the year. Other guarantees are subject to revision downwards at contractual dates. The investment portfolio holds a higher proportion of fixed income assets than the UK style equivalent. Fixed income assets also give rise to less volatility on the local statutory balance sheet than growth assets.

8.ii – Net asset value

At HY16, the IFRS net asset value per share was 412 pence (*FY15 restated³: 390 pence*). This movement was driven by operating profits, favourable foreign exchange movements and remeasurements of pension schemes, partly offset by the payment of the final 2015 dividend to shareholders, adverse economic variances and amortisation of acquired value of in-force business.

Total investment variances and economic assumption changes were £455 million adverse. This included £461 million adverse variances in the non-life business, reflecting unfavourable short-term fluctuations and adverse economic assumption changes. This was principally driven by foreign exchange losses in Group Centre holdings and the adverse impact of a decrease in the real interest rates used to discount reserves for periodic payment orders and latent claims.

In the life businesses, investment variances and economic assumption changes were £6 million positive (*HY15: £75 million negative; FY15: £14 million positive*). Positive variances in the UK reflecting lower interest rates were partially offset by a c.£250 million adverse impact reflecting the Group's revised expectation of future property prices and rental income in light of the UK referendum vote for the UK to leave the European Union. The positive variance in the UK has been offset by negative variances in Asia and France due to decreasing interest rates and equity underperformance.

The favourable movement on the Group's staff pension schemes of £607 million post tax is principally due to the main UK staff pension scheme. The surplus has increased over the period largely as a result of increased asset values, mainly driven by a reduction in interest rates in the UK. The favourable foreign exchange movement of £730 million is due to the weakening of sterling, particularly compared with the euro.

IFRS	30 June 2016 £m	pence per share ²	Restated ³ 31 December 2015 £m	Restated ³ pence per share ²
Equity attributable to shareholders of Aviva plc at 1 January¹	15,802	390p	10,038	340p
Operating profit	1,325	32p	2,688	67p
Investment return variances and economic assumption changes on life and non-life business	(455)	(11)p	(170)	(4)p
Profit/(loss) on the disposal and remeasurements of subsidiaries and associates	(18)	—	2	—
Goodwill impairment and amortisation of intangibles	(92)	(2)p	(177)	(4)p
Amortisation and impairment of acquired value of in-force business	(318)	(8)p	(498)	(12)p
Integration and restructuring costs	(105)	(3)p	(379)	(9)p
Other ⁴	—	—	(53)	(1)p
Tax on operating profit and on other activities	(136)	(3)p	(316)	(8)p
Non-controlling interests	(71)	(2)p	(161)	(4)p
Profit after tax attributable to shareholders of Aviva plc	130	3p	936	25p
AFS securities (fair value) & other reserve movements	21	—	10	—
Ordinary dividends	(570)	(14)p	(635)	(16)p
Direct capital instrument and tier 1 notes interest and preference share dividend	(30)	(1)p	(74)	(2)p
Foreign exchange rate movements	730	18p	(325)	(8)p
Remeasurements of pension schemes	607	15p	(142)	(4)p
Friends Life acquisition ⁵	—	—	5,975	55p
Other net equity movements	23	1p	19	—
Equity attributable to shareholders of Aviva plc at 30 June/31 December¹	16,713	412p	15,802	390p

¹ Excluding preference shares of £200 million (*FY15: £200 million*).

² Number of shares as at 30 June 2016: 4,058 million (*31 December 2015: 4,048 million*).

³ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

⁴ Comprises the impact from an outward quota share reinsurance agreement completed in 2015 in Aviva insurance Limited (AIL).

⁵ Includes the dilution effect on IFRS NAV per share of the increase in number of shares arising as a result of the acquisition of Friends Life.

8.iii – Return on equity¹

The return on equity calculation is based on operating return after tax attributable to ordinary shareholders on an IFRS basis expressed as a percentage of weighted average ordinary shareholders' equity.

During HY16, return on equity has decreased to 11.0% (FY15: 14.1% restated²), primarily driven by the higher weighted average shareholders' equity reflecting the Group's acquisition of the Friends Life business on 10 April 2015.

	6 months 2016 %	Restated ² Full Year 2015 %
United Kingdom & Ireland Life	9.9%	14.4%
United Kingdom & Ireland General Insurance and Health ^{3,4}	12.4%	10.2%
Europe	11.9%	12.7%
Canada ⁴	12.3%	16.2%
Asia	14.3%	22.0%
Fund management	18.8%	30.1%
Corporate and Other Business ³	n/a	n/a
Return on total capital employed	8.8%	10.8%
Subordinated debt	4.4%	4.4%
Senior debt	—	3.5%
Return on total equity	10.7%	13.4%
Less: Non-controlling interest	11.1%	12.2%
Direct capital instrument and tier 1 notes	5.6%	6.6%
Preference capital	9.0%	8.5%
Return on equity shareholders' funds	11.0%	14.1%

¹ Please refer to note C1 for further analysis of return on equity.

² Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

³ Return on equity for United Kingdom and Ireland general insurance and health excludes c.£0.9 billion of goodwill which does not support the general insurance and health business for capital purposes and is included in 'Corporate and Other Business'. Comparatives have been restated accordingly and there is no impact on Group return on equity as a result of this restatement.

⁴ FY15 comparatives have been restated for the impact of an internal loan between Canada and United Kingdom general insurance. There is no impact on Group return on equity as a result of this restatement.

8.iv – Solvency II

The estimated coverage ratio on a Solvency II basis is 174% at 30 June 2016. Solvency II, the new prudential regulatory framework, came into force on 1 January 2016 with the new regime introducing a consistent solvency framework for insurers across Europe.

Summary of Solvency II position

	30 June 2016 £bn	31 December 2015 £bn
Own Funds ¹	22.4	21.8
Solvency Capital Requirement before diversification ¹	(17.8)	(16.3)
Diversification benefit	4.9	4.2
Diversified Solvency Capital Requirement ¹	(12.9)	(12.1)
Estimated Solvency II Surplus at 30 June/31 December²	9.5	9.7
Cover Ratio¹	174%	180%

¹ The estimated Solvency II ratio represents the shareholder view. This excludes the contribution to Group Solvency Capital Requirement (SCR) and Group Own Funds of fully ring fenced with-profits funds £2.7 billion (FY15: £2.7 billion) and staff pension schemes in surplus £0.9 billion (FY15: £0.7 billion) – these exclusions have no impact on Solvency II surplus.

² The estimated Solvency II position includes the estimated impact of acquiring the RBC General Insurance business (£(0.3) billion) on a pro-forma basis. The acquisition completed on 1st July 2016, and was funded by an issue of £0.3 billion of subordinated debt in May 2016.

Movement in Group Solvency II Surplus

	Total £bn
Group Solvency II Surplus at 1 January 2016	9.7
Operating Capital Generation	1.2
Non-operating Capital Generation	(1.2)
	9.7
Dividends	(0.6)
Foreign exchange variances	0.4
Hybrid debt issuance ¹	0.3
Acquired/divested business ¹	(0.3)
Estimated Solvency II Surplus at 30 June 2016¹	9.5

¹ The estimated Solvency II position includes the estimated impact of acquiring the RBC General Insurance business (£(0.3) billion) on a pro-forma basis. The acquisition completed on 1st July 2016, and was funded by an issue of £0.3 billion of subordinated debt in May 2016.

The estimated Solvency II surplus at 30 June 2016 is £9.5 billion, with a cover ratio of 174%. This is a reduction of £0.2 billion compared to the 31 December 2015 surplus. Solvency II operating capital generation was £1.2 billion during HY16, incorporating £1.5 billion from our operating business units, net of £0.3 billion of debt and corporate centre costs. The beneficial impacts of operating capital generation and foreign exchange variances have been more than offset by the payment of the final 2015 dividend and adverse non-operating capital generation, driven by adverse market movements, notably falls in interest rates over the first half of 2016. The non-operating capital generation includes the beneficial impact arising from the recalculation of Solvency II transitional relief as permitted by the PRA in response to such reductions in interest rates.

The RBC General Insurance business was acquired on 1 July 2016. The table above allows for the impact of the RBC acquisition as a pro forma effect. The estimated Solvency II cover ratio at 30 June 2016 prior to the RBC acquisition was 176%.

Summary of analysis of diversified Solvency Capital Requirement

	30 June 2016 £bn	31 December 2015 £bn
Credit risk ¹	2.8	2.5
Equity risk ²	1.2	1.1
Interest rate risk ³	0.9	0.7
Other market risk ⁴	1.2	1.3
Life insurance risk ⁵	3.7	3.4
General insurance risk ⁶	0.9	0.8
Operational risk	1.1	1.1
Other risk ⁷	1.1	1.2
Total	12.9	12.1

¹ Capital held in respect of credit risk recognises the Group's shareholder exposure to changes in the market value of assets and defaults.

² Capital held in respect of equity risk recognises the Group's shareholder exposure to changes in the market value of assets.

³ Capital held in respect of interest rate risk recognises the Group's shareholder exposure to changes in the market value of assets. A range of specific stresses are applied reflecting the difference in assumed risk relative to investment grade and duration.

⁴ Capital held in respect of other market risk recognises the Group's shareholder exposure to changes in the market value of commercial mortgages and property, but also captures risk in association with inflation and foreign exchange.

⁵ Capital held in respect of life insurance risk recognises the Group's shareholder exposure to life insurance specific risks, such as longevity and lapse.

⁶ Capital held in respect of general insurance risk recognises the Group's shareholder exposure to general insurance specific risks, such as claims volatility and catastrophe.

⁷ Capital held in respect of other risk recognises the Group's shareholder exposure to specific risks unique to particular business units and other items.

The most significant changes in the analysis of diversified Solvency Capital Requirement have primarily arisen from the large reduction in interest rates during the first half of 2016, which has led to increases in credit risk and longevity risk within the Group's annuity portfolios.

8.iv – Solvency II continued

Sensitivity analysis of Solvency II surplus

The following table shows the sensitivity of the Group's Solvency II surplus to:

Economic assumptions:

- 25 basis point increase and decrease and 100 basis point increase in the risk-free rate, including all consequential changes (including assumed investment returns for all asset classes, market values of fixed interest assets, risk discount rates);
- 50 basis point increase and decrease and 100 basis point increase in credit spreads for corporate bonds with credit rating A at 10 year duration, with the other ratings and durations stressed by the same proportion relative to the stressed capital requirement;
- 10% increase and decrease and 25% decrease in market values of equity assets.

Non-Economic assumptions:

- 10% increase in maintenance expenses and investment expenses (a 10% sensitivity on a base expense assumption of £10 p.a. would represent an expense assumption of £11 p.a.);
- 10% increase in lapse rates (a 10% sensitivity on a base assumption of 5% p.a. would represent a lapse rate of 5.5% p.a.);
- 5% increase in both mortality and morbidity rates for life assurance;
- 5% decrease in mortality rates for annuity business;
- 5% increase in gross loss ratios for general insurance and health business.

All other assumptions remain unchanged for each sensitivity, except where these are directly affected by the revised economic conditions or where a management action that is allowed for in the Solvency Capital Requirement calculation is applicable for that sensitivity. For example, future bonus rates are automatically adjusted to reflect sensitivity changes to future investment returns.

Transitional relief on technical provisions is assumed to be recalculated in all sensitivities where its impact would be material.

The table below shows the absolute change in cover ratio under each sensitivity, e.g. a 1% positive impact would result in a cover ratio of 175%.

Sensitivities		Impact on cover ratio %
Changes in Economic assumptions	25bps increase in interest rate	1%
	100bps increase in interest rate	7%
	25bps decrease in interest rate	(3%)
	50bps increase in corporate bond spread ¹	0%
	100bps increase in corporate bond spread	(1%)
	50bps decrease in corporate bond spread	(1%)
	10% increase in market value of equity	(1%)
	10% decrease in market value of equity	(1%)
	25% decrease in market value of equity	(1%)
Changes in Non-Economic assumptions	10% increase in maintenance and investment expenses	(7%)
	10% increase in lapse rates	(3%)
	5% increase in mortality/morbidity rates – Life assurance	(2%)
	5% decrease in mortality rates – annuity business	(8%)
	5% increase in gross loss ratios	(2%)

¹ A 50bps increase in corporate bond spread results in a proportionate decrease in Group Own Funds and Group SCR with no overall impact on the rounded Group cover ratio.

Limitations of sensitivity analysis

The table above demonstrates the effect of a change in a key assumption while other assumptions remain unchanged. In reality, there is a correlation between the assumptions and other factors. It should also be noted that these sensitivities are non-linear, and larger or smaller impacts should not be interpolated or extrapolated from these results.

The sensitivity analysis does not take into consideration that the Group's assets and liabilities are actively managed. Additionally, the Solvency II position of the Group may vary at the time that any actual market movement occurs. For example, the Group's financial risk management strategy aims to manage the exposure to market fluctuations.

As investment markets move past various trigger levels, management actions could include selling investments, changing investment portfolio allocation, adjusting bonuses credited to policyholders, and taking other protective action.

Other limitations in the above sensitivity analysis include the use of hypothetical market movements to demonstrate potential risk that only represent the Group's view of possible near-term market changes that cannot be predicted with any certainty, and the assumption that all interest rates move in an identical fashion.

8.iv – Solvency II continued

Reconciliation of IFRS total equity to Solvency II Own Funds

The reconciliation from total Group equity on an IFRS basis to Solvency II Own Funds is presented below. The valuation differences reflect moving from IFRS valuations to a Solvency II regulatory basis. The Solvency II Own Funds represents a shareholder view, excluding the impact of ring-fenced with-profits funds, and staff pension schemes in surplus.

	30 June 2016 £bn	Restated ¹ Full Year 2015 £bn
Total Group equity on an IFRS basis	19.3	18.3
Elimination of goodwill and other intangible assets ²	(9.9)	(9.9)
Liability valuation differences (net of transitional deductions)	21.4	20.4
Inclusion of risk margin (net of transitional deductions)	(4.9)	(4.0)
Net deferred tax ³	(1.4)	(1.3)
Revaluation of subordinated liabilities	(1.1)	(0.7)
Solvency II Net Assets (gross of non-controlling interests)	23.4	22.8
Difference between Solvency II Net Assets and Own Funds ⁴	(1.0)	(1.0)
Solvency II Own Funds⁵	22.4	21.8

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

² Includes £1.9 billion (FY15: £1.9 billion) of goodwill and £8.0 billion (FY15: £8.0 billion) of other intangible assets comprising acquired value of in-force business of £4.0 billion (FY15: £4.4 billion), deferred acquisition costs (net of deferred income) of £2.6 billion (FY15: £2.3 billion) and other intangibles of £1.4 billion (FY15: £1.3 billion).

³ Net deferred tax includes the tax effect of all other reconciling items in the table above which are shown gross of tax.

⁴ Regulatory adjustments to bridge from Solvency II Net Assets to Own Funds include recognition of subordinated debt capital and non-controlling interests.

⁵ The estimated Solvency II position represents the shareholder view. It excludes the contribution to Group SCR and Group Own Funds of fully ring-fenced with-profits funds £2.7 billion (FY15: £2.7 billion) and staff pension schemes in surplus £0.9 billion (FY15: £0.7 billion) – these exclusions have no impact on Solvency II surplus. The estimated Solvency II position includes the impact of acquiring the RBC General Insurance business (£0.3 billion) on a pro-forma basis. The acquisition completed on 1st July 2016, and was funded by an issue of £0.3 billion of subordinated debt in May 2016.

Financial supplement

In this section	Page
A Income & expenses	30
B IFRS financial statements and notes	35
C Capital & liquidity	83
D Analysis of assets	87
E VNB & Sales analysis	103

Income & expenses

Reconciliation of Group operating profit to profit after tax – IFRS basis	30
A1 Other operations	31
A2 Corporate centre	31
A3 Group debt costs and other interest	31
A4 Life business: Investment return variances and economic assumption changes	32
A5 Non-life business: Short-term fluctuation in return on investments	33
A6 General insurance and health business: economic assumption changes	33
A7 Impairment of goodwill, associates, joint ventures and other amounts expensed	34
A8 Amortisation and impairment of acquired value of in-force business	34
A9 Profit/loss on the disposal and remeasurement of subsidiaries, joint ventures and associates	34
A10 Other	34

Reconciliation of Group operating profit to profit after tax – IFRS basis

For the six month period ended 30 June 2016

	6 months 2016 £m	6 months 2015 £m	Restated ¹ Full Year 2015 £m
Operating profit before tax attributable to shareholders' profits			
Life business			
United Kingdom & Ireland	711	569	1,455
Europe	395	372	766
Asia	118	79	244
Other	2	1	(23)
Total life business	1,226	1,021	2,442
General insurance and health			
United Kingdom & Ireland	231	239	430
Europe	35	59	114
Canada	88	131	214
Asia	(6)	(4)	(6)
Other	(14)	(3)	13
Total general insurance and health	334	422	765
Fund management			
Aviva Investors	49	32	105
Asia	—	1	1
Total fund management	49	33	106
Other			
Other operations (note A1)	(49)	(57)	(84)
Market operating profit	1,560	1,419	3,229
Corporate centre (note A2)	(80)	(79)	(180)
Group debt costs and other interest (note A3)	(155)	(170)	(361)
Operating profit before tax attributable to shareholders' profits	1,325	1,170	2,688
Integration and restructuring costs	(105)	(172)	(379)
Operating profit before tax attributable to shareholders' profits after integration and restructuring costs	1,220	998	2,309
Adjusted for the following:			
Investment return variances and economic assumption changes on long-term business (note A4)	6	(75)	14
Short-term fluctuation in return on investments backing non-long-term business (note A5)	(338)	166	(84)
Economic assumption changes on general insurance and health business (note A6)	(123)	(54)	(100)
Impairment of goodwill, joint ventures and associates and other amounts expensed (note A7)	—	(22)	(22)
Amortisation and impairment of intangibles	(92)	(61)	(155)
Amortisation and impairment of acquired value of in-force business (note A8)	(318)	(162)	(498)
(Loss)/profit on the disposal and re-measurement of subsidiaries, joint ventures and associates (note A9)	(18)	—	2
Other (note A10)	—	—	(53)
Non-operating items before tax	(883)	(208)	(896)
Profit before tax attributable to shareholders' profits	337	790	1,413
Tax on operating profit	(323)	(304)	(603)
Tax on other activities	187	59	287
	(136)	(245)	(316)
Profit for the period	201	545	1,097

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

Other Group Operating Profit Items

A1 – Other operations

	6 months 2016 £m	6 months 2015 £m	Full Year 2015 £m
United Kingdom & Ireland Life	(14)	(6)	(29)
United Kingdom & Ireland General Insurance	2	—	5
Europe	(10)	(12)	(22)
Asia	(14)	(9)	(16)
Other Group operations ¹	(13)	(30)	(22)
Total	(49)	(57)	(84)

¹ Other Group operations include Group and head office costs.

Other operations relate to non insurance activities and primarily include costs associated with our Group and regional head offices, pension scheme expenses, as well as non insurance income.

Total costs in relation to non insurance activities were £49 million (HY15: £57 million). Within this, costs in the United Kingdom increased following continued investment into the platform business.

'Other Group operations' includes income of £20 million relating to insurance recoveries. Of this, £16 million is due from the Group's internal reinsurer which therefore has a neutral effect on overall Group operating profit.

A2 – Corporate centre

	6 months 2016 £m	6 months 2015 £m	Full Year 2015 £m
Project spend	(12)	(2)	(6)
Central spend and share award costs	(68)	(77)	(174)
Total	(80)	(79)	(180)

A3 – Group debt costs and other interest

	6 months 2016 £m	6 months 2015 £m	Full Year 2015 £m
External debt			
Subordinated debt	(184)	(153)	(335)
Other	—	(10)	(15)
Total external debt	(184)	(163)	(350)
Internal lending arrangements	(15)	(53)	(92)
Extinguishment of debt	—	—	(13)
Net finance income on main UK pension scheme	44	46	94
Total	(155)	(170)	(361)

Overview

Income & expenses

IFRS

Capital & Liquidity

Analysis of assets

VNB & sales analysis

Other information

Non-operating profit items

A4 – Life Business: Investment variances and economic assumption changes

(a) Definitions

Operating profit for life business is based on expected investment returns on financial investments backing shareholder and policyholder funds over the period, with consistent allowance for the corresponding expected movements in liabilities. Operating profit includes the effect of variance in experience for non-economic items, such as mortality, persistency and expenses, and the effect of changes in non-economic assumptions, where not treated as exceptional. Changes due to economic items, such as market value movements and interest rate changes, which give rise to variances between actual and expected investment returns, and the impact of changes in economic assumptions on liabilities, are disclosed separately outside operating profit.

(b) Economic volatility

The investment variances and economic assumption changes excluded from the life operating profit are as follows:

	30 June 2016 £m	30 June 2015 £m	31 December 2015 £m
Life business			
Investment variances and economic assumptions	6	(75)	14

Investment variances and economic assumption changes were £6 million positive (HY15: £75 million negative; FY15: £14 million positive). Positive variances in the UK reflecting lower interest rates were partially offset by an adverse impact of c.£250 million, reflecting the Group's revised expectation of future property prices and rental income in light of the UK referendum vote for the UK to leave the European Union. The positive variance in the UK has been broadly offset by negative variances in Asia and France due to decreasing interest rates and equity underperformance.

The investment variances at HY15 were £75 million negative. The adverse variance was driven by increased risk-free rates in the UK, in addition to the cost of de-risking activities used to manage the UK's economic capital position. This was partly offset by positive equity market movements in Asia in the first half of 2015.

In 2015, positive investment variances of £14 million were driven by France and Asia, partially offset by a negative variance in Italy. The positive variance in France reflected realised bond gains and equity outperformance, while the positive variance in Asia was driven by increased interest rates in Singapore, which reduced liabilities by more than asset values. The negative variance in Italy was driven by widening credit spreads. The investment variance was largely neutral in the UK, reflecting the positive variance from a reduction in equity release asset default provisions following favourable property market performance, offset by the negative impact of widening credit spreads.

(c) Assumptions

The expected rate of investment return is determined using consistent assumptions at the start of the period between operations, having regard to local economic and market forecasts of investment return and asset classification under IFRS.

The principal assumptions underlying the calculation of the expected investment return for equities and properties are:

	Equities			Properties		
	6 months 2016 %	6 months 2015 %	Full Year 2015 %	6 months 2016 %	6 months 2015 %	Full Year 2015 %
United Kingdom	5.5%	5.4%	5.4%	4.0%	3.9%	3.9%
Eurozone	4.5%	4.3%	4.3%	3.0%	2.8%	2.8%

The expected return on equities and properties has been calculated by reference to the 10 year mid-price swap rate for an AA-rated bank in the relevant currency plus a risk premium. The use of risk premium reflects management's long-term expectations of asset return in excess of the swap yield from investing in different assets classes. The asset risk premiums are set out in the table below:

	6 months 2016 %	6 months 2015 %	Full Year 2015 %
All territories			
Equity risk premium	3.5%	3.5%	3.5%
Property risk premium	2.0%	2.0%	2.0%

The 10 year mid-price swap rates are set out in the table below:

	Full Year 2015 ¹ %	Full Year 2014 ² %
Territories		
United Kingdom	2.0%	1.9%
Eurozone	1.0%	0.8%

¹ Used to derive the expected return on equities and properties in 2016.

² Used to derive the expected return on equities and properties in 2015.

For fixed interest securities classified as fair value through profit or loss, the expected investment returns are based on average prospective yields for the actual assets held less an adjustment for credit risk; this includes an adjustment for credit risk on all Eurozone sovereign debt. Where such securities are classified as available for sale, the expected investment return comprises the expected interest or dividend payments and amortisation of the premium or discount at purchase.

A5 – Non-life business: Short-term fluctuation in return on investments

	6 months 2016 £m	6 months 2015 £m	Full Year 2015 £m
General Insurance and health			
Analysis of investment income:			
– Net investment income	209	141	240
– Foreign exchange gains/losses and other charges	(15)	(31)	(10)
	194	110	230
Analysed between:			
– Longer-term investment return, reported within operating profit	171	205	396
– Short-term fluctuations in investment return, reported outside operating profit	23	(95)	(166)
	194	110	230
Short-term fluctuations:			
– General insurance and health	23	(95)	(166)
– Other operations ¹	(361)	261	82
Total short-term fluctuations	(338)	166	(84)

¹ Represents short-term fluctuation on assets backing non-life business in Group centre investments, including the centre hedging programme.

The longer-term investment return is calculated separately for each principal non-life business unit. In respect of equities and properties, the return is calculated by multiplying the opening market value of the investments, adjusted for sales and purchases during the year, by the longer-term rate of investment return. The longer-term rate of investment return is determined using consistent assumptions between operations, having regard to local economic and market forecasts of investment return. The allocated longer-term return for other investments is the actual income receivable for the period. Actual income and longer-term investment return both contain the amortisation of the discounts/premium arising on the acquisition of fixed income securities.

Market value movements which give rise to variances between actual and longer-term investment returns are disclosed separately in short term fluctuations outside operating profit.

The impact of realised and unrealised gains and losses on Group centre investments, including the centre hedging programme which is designed to economically protect the total Group's capital against adverse equity and foreign exchange movements, is included in short-term fluctuations on other operations.

The adverse short-term fluctuations during the first half of 2016 are mainly due to foreign exchange losses on Group centre holdings, including the centre hedging programme, and Group external borrowings partly offset by favourable fluctuations due to reduced interest rates in the UK.

Total assets supporting the general insurance and health business, which contribute towards the longer-term return, are:

	30 June 2016 £m	30 June 2015 £m	31 December 2015 £m
Debt securities	9,757	10,033	9,608
Equity securities	225	232	217
Properties	368	256	335
Cash and cash equivalents	1,623	988	969
Other ¹	2,040	3,389	3,008
Assets supporting general insurance and health business	14,013	14,898	14,137
Assets supporting other non-long term business ²	513	816	538
Total assets supporting non-long term business	14,526	15,714	14,675

¹ Includes the internal loan.

² Represents assets backing non-life business in Group centre investments, including the centre hedging programme.

The principal assumptions underlying the calculation of the longer-term investment return are:

	Longer-term rates of return on equities			Longer-term rates of return on property		
	6 months 2016 %	6 months 2015 %	Full Year 2015 %	6 months 2016 %	6 months 2015 %	Full Year 2015 %
United Kingdom	5.5%	5.4%	5.4%	4.0%	3.9%	3.9%
Eurozone	4.5%	4.3%	4.3%	3.0%	2.8%	2.8%
Canada	5.4%	5.8%	5.8%	3.9%	4.3%	4.3%

The longer-term rates of return on equities and properties have been calculated by reference to the 10 year mid-price swap rate for an AA-rated bank in the relevant currency plus a risk premium. The underlying reference rates and risk premiums are shown in note A4(c).

A6 – General insurance and health business: economic assumption changes

Economic assumption changes of £123 million adverse (*HY15: £54 million adverse*) mainly arise as a result of a decrease in the real interest rates used to discount claim reserves for periodic payment orders and latent claims. Market interest rates used to discount periodic payment orders and latent claims have reduced and the estimated future inflation rate used to value periodic payment orders has been increased to be consistent with market expectations. This has, in part, been offset by a change in estimate for the interest rate used to discount periodic payment orders to allow for the illiquid nature of these liabilities.

A7 – Impairment of goodwill, associates, joint ventures and other amounts expensed

There was no impairment of goodwill, associates and joint ventures expensed in the period (*HY15: £22 million charge*).

A8 – Amortisation and impairment of acquired value of in-force business

Amortisation of acquired value of in-force business in the period is a charge of £318 million (*HY15: £162 million charge*). There were no impairments of acquired value of in-force business in the period (*HY15: £nil*).

A9 – Loss/profit on the disposal and remeasurement of subsidiaries, joint ventures and associates

The loss on the disposal or remeasurement of subsidiaries, joint ventures and associates in the period is £18 million (*HY15: £nil*). This relates to remeasurement losses following the classification of small operations as held for sale. Further details are provided in note B4.

A10 – Other

Other items are those items that, in the directors' view, are required to be separately disclosed by virtue of their nature or incidence to enable a full understanding of the Group's financial performance. There were no such items in the first half of 2016 (*HY15: £nil*).

IFRS financial statements

In this section	Page
Condensed consolidated financial statements	
Condensed consolidated income statement	36
Condensed consolidated statement of comprehensive income	37
Condensed consolidated statement of changes in equity	38
Condensed consolidated statement of financial position	39
Condensed consolidated statement of cash flows	40
Notes to the condensed consolidated financial statements	41
B1 Basis of preparation	41
B2 Prior period adjustments	42
B3 Exchange rates	42
B4 Subsidiaries, joint ventures and associates	43
B5 Segmental information	44
B6 Tax	55
B7 Earnings per share	57
B8 Dividends and appropriations	59
B9 Insurance liabilities	60
B10 Liability for investment contracts	62
B11 Reinsurance assets	63
B12 Effect of changes in assumptions and estimates during the period	63
B13 Unallocated divisible surplus	64
B14 Borrowings	65
B15 Pension obligations and other provisions	66
B16 Related party transactions	67
B17 Fair value	67
B18 Risk management	74
B19 Cash and cash equivalents	80
B20 Contingent liabilities and other risk factors	80
B21 Acquired value of in-force business and intangible assets	80
Directors' responsibility statement	81
Independent review report to Aviva plc	82

Condensed consolidated income statement

For the six month period ended 30 June 2016

	Note	Reviewed 6 months 2016 £m	Reviewed 6 months 2015 £m	Restated ¹ Audited Full Year 2015 £m
Income				
Gross written premiums		12,593	11,058	21,925
Premiums ceded to reinsurers		(1,160)	(1,004)	(2,890)
Premiums written net of reinsurance		11,433	10,054	19,035
Net change in provision for unearned premiums		(348)	(222)	(111)
Net earned premiums		11,085	9,832	18,924
Fee and commission income		996	753	1,797
Net investment income		15,164	606	2,825
Share of profit after tax of joint ventures and associates		195	88	180
(Loss)/profit on the disposal and remeasurement of subsidiaries, joint ventures and associates	B4	(18)	—	2
		27,422	11,279	23,728
Expenses				
Claims and benefits paid, net of recoveries from reinsurers		(11,453)	(10,402)	(21,985)
Change in insurance liabilities, net of reinsurance	B9a(ii)	(5,926)	2,761	6,681
Change in investment contract provisions		(4,576)	(605)	(1,487)
Change in unallocated divisible surplus	B13	(792)	743	984
Fee and commission expense		(1,654)	(1,933)	(3,324)
Other expenses		(2,071)	(1,062)	(2,784)
Finance costs		(295)	(271)	(618)
		(26,767)	(10,769)	(22,533)
Profit before tax		655	510	1,195
Tax attributable to policyholders' returns	B6	(318)	280	218
Profit before tax attributable to shareholders' profits		337	790	1,413
Tax expense	B6	(454)	35	(98)
Less: tax attributable to policyholders' returns	B6	318	(280)	(218)
Tax attributable to shareholders' profits		(136)	(245)	(316)
Profit for the period		201	545	1,097
Attributable to:				
Equity holders of Aviva plc		130	464	936
Non-controlling interests		71	81	161
Profit for the period		201	545	1,097
Earnings per share	B7			
Basic (pence per share)		2.5p	12.8p	23.1p
Diluted (pence per share)		2.4p	12.7p	22.8p

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

Condensed consolidated statement of comprehensive income

For the six month period ended 30 June 2016

	Note	Reviewed 6 months 2016 £m	Reviewed 6 months 2015 £m	Restated ¹ Audited Full Year 2015 £m
Profit for the period		201	545	1,097
Other comprehensive income:				
<i>Items that may be reclassified subsequently to income statement</i>				
Investments classified as available for sale				
Fair value gains/(losses)		26	(15)	(9)
Share of other comprehensive income of joint ventures and associates		3	(2)	(14)
Foreign exchange rate movements		866	(496)	(378)
Aggregate tax effect – shareholder tax on items that may be reclassified subsequently to income statement		(31)	19	13
<i>Items that will not be reclassified to income statement</i>				
Owner-occupied properties – fair value gains/(losses)		2	(4)	27
Remeasurements of pension schemes	B15	776	(338)	(235)
Aggregate tax effect – shareholder tax on items that will not be reclassified subsequently to income statement		(170)	71	93
Total other comprehensive income, net of tax		1,472	(765)	(503)
Total comprehensive income for the period		1,673	(220)	594
Attributable to:				
Equity holders of Aviva plc		1,488	(222)	478
Non-controlling interests		185	2	116
		1,673	(220)	594

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

Overview

Income & expenses

IFRS

Capital & Liquidity

Analysis of assets

VNB & sales analysis

Other information

Condensed consolidated statement of changes in equity

For the six month period ended 30 June 2016

	Note	Reviewed 6 months 2016 £m	Restated ¹ Reviewed 6 months 2015 £m	Restated ¹ Audited Full Year 2015 £m
Balance at 1 January as reported		18,270	12,276	12,276
Prior period adjustment ¹		—	20	20
Balance at 1 January as restated		18,270	12,296	12,296
Profit for the period		201	545	1,097
Other comprehensive income		1,472	(765)	(503)
Total comprehensive income for the period		1,673	(220)	594
Issue of share capital - acquisition of Friends Life		—	5,975	5,975
Non-controlling interests in acquired subsidiaries ²		—	504	504
Reclassification of non-controlling interests to financial liabilities ³		—	(272)	(272)
Dividends and appropriations	B8	(605)	(389)	(724)
Non-controlling interests share of dividends declared in the period		(62)	(67)	(142)
Transfer to profit on disposal of subsidiaries, joint ventures and associates		—	—	1
Capital contributions from non-controlling interests		8	—	5
Changes in non-controlling interests in subsidiaries		(1)	3	(1)
Treasury shares held by subsidiary companies		—	(20)	(27)
Reserves credit for equity compensation plans		20	23	40
Shares issued under equity compensation plans		3	1	6
Aggregate tax effect – shareholder tax		5	4	15
Balance at 30 June/31 December		19,311	17,838	18,270

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

² 2015 relates to Friends Life's Step-up Tier one Insurance Capital Securities (STICS) issuances which were classified as equity instruments within non-controlling interests at the date of acquisition.

³ On 29 May 2015 notification was given that the Group would redeem the 2005 STICS issuance. At that date the instrument was reclassified as a liability. The instrument was redeemed on 1 July 2015, £272 million represents the fair value of the instrument recognised on acquisition, made up of the £268 million outstanding principal redeemed on 1 July 2015 and £4 million amortised subsequent to the reclassification and included within finance costs in the income statement.

Condensed consolidated statement of financial position

As at 30 June 2016

	Note	Reviewed 30 June 2016 £m	Restated ¹ Reviewed 30 June 2015 £m	Restated ¹ Audited 31 December 2015 £m
Assets				
Goodwill		1,979	1,923	1,955
Acquired value of in-force business and intangible assets	B21	5,450	6,079	5,731
Interests in, and loans to, joint ventures		1,765	1,222	1,590
Interests in, and loans to, associates		449	383	329
Property and equipment		482	390	449
Investment property		11,106	11,567	11,301
Loans		24,305	24,121	22,433
Financial investments		288,460	274,811	274,217
Reinsurance assets	B11	22,983	20,432	20,918
Deferred tax assets		128	74	131
Current tax assets		76	18	114
Receivables		8,762	8,574	6,875
Deferred acquisition costs and other assets		6,293	4,817	5,018
Prepayments and accrued income		2,908	2,988	3,094
Cash and cash equivalents	B19	34,911	33,186	33,676
Assets of operations classified as held for sale	B4	14,193	9	—
Total assets		424,250	390,594	387,831
Equity				
Capital				
Ordinary share capital		1,014	1,011	1,012
Preference share capital		200	200	200
		1,214	1,211	1,212
Capital reserves				
Share premium		1,188	1,178	1,185
Merger reserve		8,974	8,974	8,974
		10,162	10,152	10,159
Treasury shares		(28)	(21)	(29)
Other reserves		587	(194)	(114)
Retained earnings		4,978	4,462	4,774
Equity attributable to shareholders of Aviva plc		16,913	15,610	16,002
Direct capital instrument and tier 1 notes		1,123	892	1,123
Equity excluding non-controlling interests		18,036	16,502	17,125
Non-controlling interests		1,275	1,336	1,145
Total equity		19,311	17,838	18,270
Liabilities				
Gross insurance liabilities	B9	147,977	143,288	140,556
Gross liabilities for investment contracts	B10	186,006	179,390	181,082
Unallocated divisible surplus	B13	9,624	8,815	8,811
Net asset value attributable to unitholders		13,045	10,728	11,415
Provisions	B15	1,484	1,615	1,416
Deferred tax liabilities		2,207	2,058	2,084
Current tax liabilities		484	169	177
Borrowings	B14	9,681	9,590	8,770
Payables and other financial liabilities		18,020	14,493	12,448
Other liabilities		2,795	2,608	2,802
Liabilities of operations classified as held for sale	B4	13,616	2	—
Total liabilities		404,939	372,756	369,561
Total equity and liabilities		424,250	390,594	387,831

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

Overview

Income & expenses

IFRS

Capital & Liquidity

Analysis of assets

VNB & sales analysis

Other information

Condensed consolidated statement of cash flows

For the six month period ended 30 June 2016

	Note	Reviewed 6 months 2016 £m	Reviewed 6 months 2015 £m	Audited Full Year 2015 £m
Cash flows from operating activities¹				
Cash generated from continuing operations		1,347	3,013	5,197
Tax paid		(219)	(191)	(442)
Total net cash from operating activities		1,128	2,822	4,755
Cash flows from investing activities				
Acquisitions of, and additions to, subsidiaries, joint ventures and associates, net of cash acquired		(114)	7,852	7,783
Disposals of subsidiaries, joint ventures and associates, net of cash transferred		—	—	(3)
New loans to joint ventures and associates		—	(9)	(21)
Repayment of loans to joint ventures and associates		71	—	—
Net new loans to joint ventures and associates		71	(9)	(21)
Purchases of property and equipment		(25)	(31)	(58)
Proceeds on sale of property and equipment		44	4	51
Other cash flow related to intangible assets		(35)	(43)	(111)
Total net cash from/(used in) investing activities		(59)	7,773	7,641
Cash flows from financing activities				
Proceeds from issue of ordinary shares		6	8	16
Treasury shares distributed from/(purchased for) employee trusts		1	(1)	(1)
New borrowings drawn down, net of expenses		1,355	1,583	2,049
Repayment of borrowings ²		(867)	(546)	(1,979)
Net drawdown of borrowings		488	1,037	70
Interest paid on borrowings		(284)	(263)	(588)
Preference dividends paid	B8	(9)	(9)	(17)
Ordinary dividends paid	B8	(570)	(362)	(635)
Coupon payments on direct capital instrument and tier 1 notes	B8	(26)	(18)	(72)
Capital contributions from non-controlling interests of subsidiaries		—	—	5
Dividends paid to non-controlling interests of subsidiaries ³		(62)	(51)	(142)
Changes in controlling interest in subsidiaries		(1)	(3)	(1)
Total net cash from/(used in) financing activities		(457)	338	(1,365)
Total net increase in cash and cash equivalents		612	10,933	11,031
Cash and cash equivalents at 1 January		33,170	22,564	22,564
Effect of exchange rate changes on cash and cash equivalents		1,053	(808)	(425)
Cash and cash equivalents at 30 June/31 December	B19	34,835	32,689	33,170

¹ Cash flows from operating activities includes interest received of £3,207 million (FY15: £5,251 million; HY15: £2,623 million) and dividends received of £1,204 million (FY15: £2,353 million; HY15: £953 million).

² In FY 2015 this included redemption of the 2005 STICS of £268 million.

³ Dividends paid to non-controlling interests of subsidiaries during HY15 included £7 million relating to the 2003 STICS which were reclassified from non-controlling interests to direct capital instruments and tier 1 notes in October 2015. Following reclassification, interest is included in coupon payments on direct capital instrument and tier 1 notes. Dividends paid to non-controlling interests of subsidiaries during HY15 also included £17 million relating to the 2005 STICS which were redeemed in July 2015.

The cash flows presented in this statement cover all the Group's activities and include flows from both policyholder and shareholder activities. Operating cash flows reflect the movement in both policyholder and shareholder controlled cash and cash equivalent balances.

B1 – Basis of preparation

The condensed consolidated interim financial statements for the six months to 30 June 2016 have been prepared in accordance with IAS 34, Interim Financial Reporting, as issued by the International Accounting Standards Board (IASB) and endorsed by the European Union (EU), and the Disclosure Rules and Transparency Rules of the Financial Conduct Authority.

The accounting policies applied in the condensed consolidated interim financial statements are the same as those applied in Aviva plc's 2015 Annual Report and Accounts. In addition, during the period ended 30 June 2016, Aviva plc ("the Group") adopted new amendments to International Financial Reporting Standards ("IFRS") that became effective on 1 January 2016, described in the 2015 Annual Report and Accounts, however these had no effect on reported profit or loss or equity, the statement of financial position or the statement of cash flows.

The results for the six months to 30 June 2016 are unaudited but have been reviewed by the auditor, PricewaterhouseCoopers LLP. The interim results do not constitute statutory accounts as defined in Section 434 of the Companies Act 2006. The results for the full year 2015 have been taken from the Group's 2015 Annual Report and Accounts and have been restated for adjustments detailed in Note B2. Therefore, these interim accounts should be read in conjunction with the 2015 Annual Report and Accounts that were prepared in accordance with IFRS as issued by the International Accounting Standards Board and endorsed by the European Union. PricewaterhouseCoopers LLP reported on the 2015 financial statements and their report was unqualified and did not contain a Statement under section 498 (2) or (3) of the Companies Act 2006. The Group's 2015 Annual Report and Accounts has been filed with the Registrar of Companies.

After making enquiries, the directors have a reasonable expectation that the Company and the Group as a whole have adequate resources to continue in operational existence over a period of at least 12 months from the date of approval of the interim financial statements. For this reason, they continue to adopt the going concern basis in preparing the interim financial statements.

Items included in the financial statements of each of the Group's entities are measured in the currency of the primary economic environment in which that entity operates (the 'functional currency'). The condensed consolidated financial statements are stated in pounds sterling, which is the Company's functional and presentational currency. Unless otherwise noted, the amounts shown in the financial statements are in millions of pounds sterling (£m).

The long-term nature of much of the Group's operations means that, for management's decision-making and internal performance management, short-term realised and unrealised investment gains and losses are treated as non-operating items.

The Group focuses instead on an operating profit measure that incorporates an expected return on investments supporting its long-term and non-long-term businesses. Operating profit for long-term business is based on expected investment returns on financial investments backing shareholder and policyholder funds over the reporting period, with allowance for the corresponding expected movements in liabilities. Variances between actual and expected investment returns, and the impact of changes in economic assumptions on liabilities, are disclosed separately outside operating profit. For non-long-term business, the total investment income, including realised and unrealised gains, is analysed between that calculated using a longer-term return and short-term fluctuations from that level. Operating profit also excludes impairment of goodwill, associates and joint ventures; amortisation and impairment of other intangibles; amortisation and impairment of acquired value of in-force business; the profit or loss on disposal and remeasurement of subsidiaries, joint ventures and associates; integration and restructuring costs; and other.

B2 – Prior period adjustments

During 2016, UK Life reviewed its accounting and modelling for annual management charge rebates relating to unit-linked investment contracts. It was concluded that an associated liability should be released partly offset by a reduction in deferred acquisition costs in accordance with IFRS. This has been presented as a prior year adjustment and has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in closing equity at 31 December 2015 of £38 million. The impact on the consolidated income statement, statement of financial position and equity are shown in the tables below. There is no impact on the consolidated statement of cash flows.

	Full Year 2015		
	As reported £m	Effect of prior period adjustments £m	Restated £m
Operating profit before tax attributable to shareholders' profits	2,665	23	2,688
Total expenses	(22,556)	23	(22,533)
<i>Effect analysed as:</i>			
Fee and commission expense	(3,347)	23	(3,324)
Profit before tax	1,172	23	1,195
Tax expense	(93)	(5)	(98)
Profit for the period	1,079	18	1,097
Profit attributable to equity holders of Aviva plc	918	18	936
Operating earnings per share			
Basic (pence per share)	49.2p	0.5p	49.7p
Diluted (pence per share)	48.7p	0.5p	49.2p
Earnings per share			
Basic (pence per share)	22.6p	0.5p	23.1p
Diluted (pence per share)	22.3p	0.5p	22.8p

	30 June 2015			31 December 2015		
	As reported £m	Effect of prior period adjustments £m	Restated £m	As reported £m	Effect of prior period adjustments £m	Restated £m
Total assets	390,660	(66)	390,594	387,874	(43)	387,831
<i>Effect analysed as:</i>						
Deferred acquisition costs and other assets	4,883	(66)	4,817	5,061	(43)	5,018
Total liabilities	372,842	(86)	372,756	369,642	(81)	369,561
<i>Effect analysed as:</i>						
Gross liabilities for investment contracts	179,481	(91)	179,390	181,173	(91)	181,082
Deferred tax liabilities	2,053	5	2,058	2,074	10	2,084

	30 June 2015			31 December 2015		
	As reported £m	Effect of prior period adjustments £m	Restated £m	As reported £m	Effect of prior period adjustments £m	Restated £m
Total equity						
Balance at 1 January	12,276	20	12,296	12,276	20	12,296
Total comprehensive income for the period	(220)	—	(220)	576	18	594
Other equity movements	5,762	—	5,762	5,380	—	5,380
Balance at 30 June/31 December	17,818	20	17,838	18,232	38	18,270

As a result of this adjustment, comparative information in Note B5 Segmental information, Note B6 Tax, Note B7 Earnings per Share, Note B10 Liability for investment contracts and Note B17 Fair Value has been restated.

B3 – Exchange rates

The Group's principal overseas operations during the period were located within the Eurozone, Canada and Poland. The results and cash flows of these operations have been translated into sterling at the average rates for the period and the assets and liabilities have been translated at the period end rates as follows:

	6 months 2016	6 months 2015	Full Year 2015
Eurozone			
Average rate (€1 equals)	£0.78	£0.74	£0.72
Period end rate (€1 equals)	£0.83	£0.71	£0.74
Canada			
Average rate (\$CAD1 equals)	£0.53	£0.53	£0.51
Period end rate (\$CAD1 equals)	£0.58	£0.51	£0.49
Poland			
Average rate (PLN1 equals)	£0.18	£0.18	£0.17
Period end rate (PLN1 equals)	£0.19	£0.17	£0.17

B4 – Subsidiaries, joint ventures and associates

This note provides details of the acquisitions and disposals of subsidiaries, joint ventures and associates that the Group has made during the period, together with details of businesses held for sale at the period end.

(a) Acquisitions

On 29 April 2016, Aviva plc completed the acquisition of an additional 23% share in Aviva Life Insurance Company India Limited ("Aviva India") from its partner Dabur Invest Corp (a part of the Dabur Group). Aviva's increased shareholding in Aviva India of 49% will continue to be equity accounted as an associate.

(b) Disposal and re-measurements of subsidiaries, joint ventures and associates

The (loss)/profit on the disposal and re-measurement of subsidiaries, joint ventures and associates comprises:

	6 months 2016 £m	6 months 2015 £m	Full Year 2015 £m
Ireland – health	(11)	—	—
Turkey – long-term business	—	—	1
Other small operations	(7)	—	1
Total (loss)/profit on disposal and remeasurement	(18)	—	2

The loss on the disposal and remeasurement of subsidiaries, joint ventures and associates of £18 million (*HY15: £nil*) relates to remeasurement losses following the classification of small operations as held for sale. See Note B4(c)(ii) for further details.

(c) Assets and liabilities of operations classified as held for sale

The assets and liabilities of operations classified as held for sale as at 30 June 2016 are as follows:

	30 June 2016 £m	30 June 2015 £m	31 December 2015 £m
Assets			
Goodwill, AVIF and other intangibles	25	—	—
Investment property	44	—	—
Loans	64	—	—
Financial investments	10,715	—	—
Reinsurance assets	972	—	—
Other assets	1,698	—	—
Cash and cash equivalents	683	9	—
	14,201	9	—
Additional impairment to write down the disposal group to fair value less cost to sell	(8)	—	—
Total assets	14,193	9	—
Liabilities			
Insurance liabilities	(4,717)	(1)	—
Liability for investment contracts	(7,655)	—	—
Unallocated divisible surplus	(852)	—	—
Other liabilities	(392)	(1)	—
Total liabilities	(13,616)	(2)	—
Net assets	577	7	—

Assets and liabilities of operations classified as held for sale as at 30 June 2016 relate to Antarius S.A. ("Antarius") and other small operations in the Group.

(i) Antarius

On 25 February 2015, Crédit du Nord, the Group's partner in Antarius, exercised its call option to purchase Aviva France's 50% share of Antarius. In accordance with the shareholders agreement, the exercise of the call option started a period of approximately two years to complete the disposal. In accordance with IFRS 5, the subsidiary has been classified as held for sale from May 2016, the date when the transaction was expected to complete within 12 months. The business is measured at its carrying amount.

(ii) Other small operations

Other small operations relate to the Group's sale of its entire stake in its Irish private medical insurance business and a closed book of offshore bonds business. As at 30 June 2016, the proposed transactions were subject to customary closing conditions including receipt of regulatory approvals and were expected to complete in the third quarter of 2016. The businesses have been re-measured at fair value based on the expected sales prices less costs to sell resulting in a total loss on re-measurement of £18 million in the first half of 2016 following their classification as held for sale.

(d) Subsequent events

On 21 January 2016 Aviva announced its Canadian business, Aviva Canada would acquire RBC General Insurance Company, the existing home and motor insurance business of RBC Insurance. On 1 July 2016, Aviva Canada announced the acquisition had completed. Under the agreement, Aviva paid RBC Insurance CAD\$582 million on completion.

The disposal of other small operations (see Note B4(c)(ii)) completed in late July to early August 2016.

B5 – Segmental information

The Group's results can be segmented, either by activity or by geography. Our primary reporting format is along market reporting lines, with supplementary information being given by business activity. This note provides segmental information on the condensed consolidated income statement and condensed consolidated statement of financial position.

The Group has determined its operating segments along market reporting lines and internal management reporting.

United Kingdom and Ireland

The United Kingdom and Ireland comprises two operating segments – Life and General Insurance. The principal activities of our UK and Ireland Life operations are life insurance, long-term health (in the UK) and accident insurance, savings, pensions and annuity business and include the UK insurance operations acquired as part of the acquisition of Friends Life in 2015. UK and Ireland General Insurance provides insurance cover to individuals and businesses, for risks associated mainly with motor vehicles, property and liability (such as employers' liability and professional indemnity liability) and medical expenses. UK and Ireland General Insurance includes the results of our Ireland Health business. As set out in note B4, the Group's entire stake in its Irish private medical insurance business and a closed book of offshore bonds business have been classified as held for sale as at 30 June 2016.

France

The principal activities of our French operations are long-term business and general insurance. The long-term business offers a range of long-term insurance and savings products, primarily for individuals, with a focus on the unit-linked market. The general insurance business predominantly sells personal and small commercial lines insurance products through agents and a direct insurer. As set out in note B4, the operations of Antarius have been classified as held for sale as at 30 June 2016.

Poland

Activities in Poland comprise long-term business and general insurance operations, including our long-term business in Lithuania.

Italy, Spain and Other

These countries are not individually significant at a Group level, so have been aggregated into a single reporting segment in line with IFRS 8. The principal activities of our Italian operations are long-term business and general insurance. The long term business offers a range of long-term insurance and savings products and the general insurance business provides motor and home insurance products to individuals, as well as small commercial risk insurance to businesses. The principal activity of the Spanish operation is the sale of long-term business, accident and health insurance and a selection of savings products. Our 'Other' operations include our life operations in Turkey.

Canada

The principal activity of the Canadian operation is general insurance. In particular it provides personal and commercial lines insurance products principally distributed through insurance brokers.

Asia

Our activities in Asia principally comprise our long-term insurance business operations in China, India, Singapore, Hong Kong, Vietnam, Indonesia, Taiwan and the international operations of Friends Life. This segment also includes general insurance and health operations in Singapore and health operations in Indonesia.

Aviva Investors

Aviva Investors operates in most of the markets in which the Group operates, in particular the UK, Europe, North America, Asia Pacific and other international businesses, managing policyholders' and shareholders' invested funds, providing investment management services for institutional pension fund mandates and managing a range of retail investment products, including investment funds, unit trusts, OEICs and ISAs. This segment also includes Friends Life Investments.

Other Group activities

Investment return on centrally held assets and head office expenses, such as Group treasury and finance functions, together with certain taxes and financing costs arising on central borrowings are included in 'Other Group activities', along with central core structural borrowings and certain tax balances in the segmental statement of financial position. The results of our reinsurance operations are also included in this segment.

Measurement basis

The accounting policies of the segments are the same as those for the Group as a whole. Any transactions between the business segments are subject to normal commercial terms and market conditions. The Group evaluates performance of operating segments on the basis of:

- (i) profit or loss from operations before tax attributable to shareholders
- (ii) profit or loss from operations before tax attributable to shareholders, adjusted for non-operating items outside the segment management's control, including investment market performance and fiscal policy changes.

B5 – Segmental information continued

(a) (i) Segmental income statement for the six month period ended 30 June 2016

	United Kingdom & Ireland		Europe							
	Life £m	GI £m	France £m	Poland £m	Italy, Spain and Other £m	Canada £m	Asia £m	Aviva Investors ² £m	Other Group activities ³ £m	Total £m
Gross written premiums	2,439	2,454	3,499	237	2,413	1,091	460	—	—	12,593
Premiums ceded to reinsurers	(751)	(229)	(41)	(4)	(19)	(42)	(74)	—	—	(1,160)
Internal reinsurance revenue	(3)	(2)	—	—	(1)	—	(5)	—	11	—
Premiums written net of reinsurance	1,685	2,223	3,458	233	2,393	1,049	381	—	11	11,433
Net change in provision for unearned premiums	(34)	(136)	(117)	(12)	(7)	(29)	(13)	—	—	(348)
Net earned premiums	1,651	2,087	3,341	221	2,386	1,020	368	—	11	11,085
Fee and commission income	453	78	115	28	50	8	103	162	(1)	996
Net investment income	2,104	2,165	3,456	249	2,436	1,028	471	162	10	12,081
Inter-segment revenue	13,431	132	704	3	416	42	316	39	81	15,164
Share of profit of joint ventures and associates	—	—	—	—	—	—	—	117	—	117
(Loss)/profit on the disposal and remeasurement of subsidiaries, joint ventures and associates	178	—	13	4	—	—	—	—	—	195
	(8)	(11)	—	—	—	—	—	—	1	(18)
Segmental income¹	15,705	2,286	4,173	256	2,852	1,070	787	318	92	27,539
Claims and benefits paid, net of recoveries from reinsurers	(5,637)	(1,315)	(2,423)	(153)	(1,114)	(619)	(178)	—	(14)	(11,453)
Change in insurance liabilities, net of reinsurance	(4,459)	(79)	(479)	30	(677)	(41)	(213)	—	(8)	(5,926)
Change in investment contract provisions	(3,600)	—	(196)	—	(564)	—	(176)	(40)	—	(4,576)
Change in unallocated divisible surplus	(14)	—	(568)	4	(168)	—	(46)	—	—	(792)
Fee and commission expense	(272)	(629)	(211)	(38)	(146)	(285)	(61)	(18)	6	(1,654)
Other expenses	(754)	(162)	(131)	(34)	(61)	(53)	(138)	(205)	(533)	(2,071)
Inter-segment expenses	(106)	(3)	(3)	(2)	—	(2)	—	—	(1)	(117)
Finance costs	(89)	(1)	(1)	—	(2)	(1)	(2)	—	(199)	(295)
Segmental expenses	(14,931)	(2,189)	(4,012)	(193)	(2,732)	(1,001)	(814)	(263)	(749)	(26,884)
Profit/(loss) before tax	774	97	161	63	120	69	(27)	55	(657)	655
Tax attributable to policyholders' returns	(317)	—	—	—	—	—	(1)	—	—	(318)
Profit/(loss) before tax attributable to shareholders' profits	457	97	161	63	120	69	(28)	55	(657)	337
Adjusted for non-operating items:										
Reclassification of corporate costs and unallocated interest	1	(1)	22	—	—	4	—	2	(28)	—
Investment return variances and economic assumption changes on long-term business	(82)	—	32	—	2	—	42	—	—	(6)
Short-term fluctuation in return on investments backing non-long-term business	(17)	(23)	(1)	(1)	4	4	—	—	372	338
Economic assumption changes on general insurance and health business	—	123	—	—	—	1	—	—	(1)	123
Impairment of goodwill, joint ventures and associates and other amounts expensed	—	—	—	—	—	—	—	—	—	—
Amortisation and impairment of intangibles	35	11	—	2	7	8	5	3	21	92
Amortisation and impairment of AVIF	241	—	2	1	1	—	71	—	2	318
Loss/(profit) on the disposal and remeasurement of subsidiaries, joint ventures and associates	8	11	—	—	—	—	—	—	(1)	18
Integration and restructuring costs	61	8	4	—	1	3	8	10	10	105
Other	—	—	—	—	—	—	—	—	—	—
Operating profit/(loss) before tax attributable to shareholders	704	226	220	65	135	89	98	70	(282)	1,325

¹ Total reported income, excluding inter-segment revenue, includes £17,606 million from the United Kingdom (Aviva plc's country of domicile). Income is attributed on the basis of geographical origin which does not differ materially from revenue by geographical destination, as most risks are located in the countries where the contracts are written.

² Aviva Investors operating profit also includes £1 million profit relating to the Aviva Investors Pooled Pensions business.

³ Other Group activities include Group Reinsurance.

B5 – Segmental information continued**(a) (ii) Segmental income statement for the six month period ended 30 June 2015**

	United Kingdom & Ireland		Europe					Aviva Investors ²	Other Group activities ³	Total
	Life £m	GI £m	France £m	Poland £m	Italy, Spain and Other £m	Canada £m	Asia £m	£m	£m	£m
Gross written premiums	2,501	2,266	3,011	244	1,439	1,077	519	—	1	11,058
Premiums ceded to reinsurers	(568)	(238)	(35)	(3)	(26)	(64)	(70)	—	—	(1,004)
Internal reinsurance revenue	(2)	(1)	—	—	(2)	—	—	—	5	—
Premiums written net of reinsurance	1,931	2,027	2,976	241	1,411	1,013	449	—	6	10,054
Net change in provision for unearned premiums	(47)	(49)	(95)	(7)	(4)	1	(21)	—	—	(222)
Net earned premiums	1,884	1,978	2,881	234	1,407	1,014	428	—	6	9,832
Fee and commission income	289	78	109	13	46	14	65	139	—	753
Net investment income/(expense)	2,173	2,056	2,990	247	1,453	1,028	493	139	6	10,585
Inter-segment revenue	(1,637)	76	1,726	58	111	41	(36)	81	186	606
Share of profit of joint ventures and associates	—	—	—	—	—	—	—	76	—	76
Profit/(loss) on the disposal and remeasurement of subsidiaries, joint ventures and associates	54	—	4	3	5	—	22	—	—	88
Segmental income¹	590	2,132	4,720	308	1,569	1,069	479	296	192	11,355
Claims and benefits paid, net of recoveries from reinsurers	(4,711)	(1,311)	(2,124)	(163)	(1,232)	(627)	(220)	—	(14)	(10,402)
Change in insurance liabilities, net of reinsurance	3,671	23	(911)	(45)	170	8	(159)	—	4	2,761
Change in investment contract provisions	1,355	—	(1,485)	11	(509)	—	105	(82)	—	(605)
Change in unallocated divisible surplus	(37)	—	519	11	263	—	(13)	—	—	743
Fee and commission expense	(327)	(607)	(382)	(25)	(129)	(292)	(52)	(14)	(105)	(1,933)
Other expenses	(469)	(139)	(108)	(26)	(56)	(43)	(101)	(175)	55	(1,062)
Inter-segment expenses	(66)	(2)	(3)	(3)	—	(2)	—	—	—	(76)
Finance costs	(82)	(3)	(1)	—	(3)	(2)	(1)	—	(179)	(271)
Segmental expenses	(666)	(2,039)	(4,495)	(240)	(1,496)	(958)	(441)	(271)	(239)	(10,845)
Profit/(loss) before tax	(76)	93	225	68	73	111	38	25	(47)	510
Tax attributable to policyholders' returns	280	—	—	—	—	—	—	—	—	280
Profit/(loss) before tax attributable to shareholders' profits	204	93	225	68	73	111	38	25	(47)	790
Adjusted for non-operating items:										
Reclassification of corporate costs and unallocated interest	1	—	7	—	—	2	—	2	(12)	—
Investment return variances and economic assumption changes on long-term business	106	—	(10)	1	13	—	(35)	—	—	75
Short-term fluctuation in return on investments backing non-long-term business	31	78	(9)	(1)	15	10	—	—	(290)	(166)
Economic assumption changes on general insurance and health business	—	51	—	—	—	2	—	—	1	54
Impairment of goodwill, joint ventures and associates	—	—	—	—	9	—	13	—	—	22
Amortisation and impairment of intangibles	27	6	—	1	8	5	4	4	6	61
Amortisation and impairment of AVIF	106	—	4	1	4	—	47	—	—	162
(Profit)/loss on the disposal and remeasurement of subsidiaries, joint ventures and associates	—	—	—	—	—	—	—	—	—	—
Integration and restructuring costs	86	13	8	—	2	2	—	2	59	172
Other	—	—	—	—	—	—	—	—	—	—
Operating profit/(loss) before tax attributable to shareholders	561	241	225	70	124	132	67	33	(283)	1,170

¹ Total reported income, excluding inter-segment revenue, includes £2,304 million from the United Kingdom (Aviva plc's country of domicile). Income is attributed on the basis of geographical origin which does not differ materially from revenue by geographical destination, as most risks are located in the countries where the contracts are written.

² Aviva Investors operating profit also includes £1 million profit relating to the Aviva Investors Pooled Pensions business.

³ Other Group activities include Group Reinsurance.

B5 – Segmental information continued

(a) (iii) Segmental income statement for the year ended 31 December 2015 – restated¹

	United Kingdom & Ireland		Europe							
	Life £m	GI £m	France £m	Poland £m	Italy, Spain and Other £m	Canada £m	Asia £m	Aviva Investors ² £m	Other Group activities ⁴ £m	Total £m
Gross written premiums	5,402	4,503	5,777	484	2,733	2,109	917	—	—	21,925
Premiums ceded to reinsurers	(1,355)	(1,163)	(75)	(6)	(42)	(117)	(132)	—	—	(2,890)
Internal reinsurance revenue	(5)	(1)	—	(1)	(4)	—	(2)	—	13	—
Premiums written net of reinsurance	4,042	3,339	5,702	477	2,687	1,992	783	—	13	19,035
Net change in provision for unearned premiums	(1)	(53)	(11)	(13)	(7)	(15)	(14)	—	3	(111)
Net earned premiums	4,041	3,286	5,691	464	2,680	1,977	769	—	16	18,924
Fee and commission income	810	160	232	40	115	28	134	281	(3)	1,797
Net investment income/(expense)	4,851	3,446	5,923	504	2,795	2,005	903	281	13	20,721
Inter-segment revenue	448	159	1,949	(1)	444	49	(325)	155	(53)	2,825
Share of profit of joint ventures and associates	—	—	—	—	—	—	—	195	—	195
Profit/(loss) on the disposal and remeasurement of subsidiaries, joint ventures and associates	149	—	7	5	8	—	11	—	—	180
	2	—	—	—	(1)	—	1	—	—	2
Segmental income²	5,450	3,605	7,879	508	3,246	2,054	590	631	(40)	23,923
Claims and benefits paid, net of recoveries from reinsurers	(10,663)	(2,533)	(4,454)	(302)	(2,343)	(1,240)	(415)	—	(35)	(21,985)
Change in insurance liabilities, net of reinsurance	7,070	492	(1,093)	17	264	(12)	(68)	—	11	6,681
Change in investment contract provisions	943	—	(1,915)	18	(702)	—	328	(159)	—	(1,487)
Change in unallocated divisible surplus	22	—	841	12	93	—	16	—	—	984
Fee and commission expense	(562)	(1,195)	(623)	(57)	(252)	(571)	(114)	(26)	76	(3,324)
Other expenses	(1,369)	(223)	(205)	(51)	(111)	(81)	(250)	(365)	(129)	(2,784)
Inter-segment expenses	(169)	(5)	(9)	(6)	—	(4)	—	—	(2)	(195)
Finance costs	(214)	(1)	(1)	—	(4)	(4)	(3)	—	(391)	(618)
Segmental expenses	(4,942)	(3,465)	(7,459)	(369)	(3,055)	(1,912)	(506)	(550)	(470)	(22,728)
Profit/(loss) before tax	508	140	420	139	191	142	84	81	(510)	1,195
Tax attributable to policyholders' returns	232	—	—	—	—	—	(14)	—	—	218
Profit/(loss) before tax attributable to shareholders' profits	740	140	420	139	191	142	70	81	(510)	1,413
Adjusted for non-operating items:										
Reclassification of corporate costs and unallocated interest	7	(1)	20	—	—	6	—	4	(36)	—
Investment return variances and economic assumption changes on long-term business	—	—	(17)	—	14	—	(11)	—	—	(14)
Short-term fluctuation in return on investments backing non-long-term business	53	84	2	(2)	31	47	—	—	(131)	84
Economic assumption changes on general insurance and health business	—	98	—	—	—	2	—	—	—	100
Impairment of goodwill, joint ventures and associates and other amounts expensed	—	—	—	—	9	—	13	—	—	22
Amortisation and impairment of intangibles	84	14	—	2	14	10	9	10	12	155
Amortisation and impairment of AVIF	350	—	5	2	5	—	136	—	—	498
(Profit)/loss on the disposal and remeasurement of subsidiaries, joint ventures and associates	(2)	—	—	—	1	—	(1)	—	—	(2)
Integration and restructuring costs	215	26	19	—	3	7	7	11	91	379
Other ⁵	—	53	—	—	—	—	—	—	—	53
Operating profit/(loss) before tax attributable to shareholders	1,447	414	449	141	268	214	223	106	(574)	2,688

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

² Total reported income, excluding inter-segment revenue, includes £9,031 million from the United Kingdom (Aviva plc's country of domicile). Income is attributed on the basis of geographical origin which does not differ materially from revenue by geographical destination, as most risks are located in the countries where the contracts are written.

³ Aviva Investors operating profit includes £1 million profit relating to the Aviva Investors Pooled Pensions business.

⁴ Other Group activities include Group Reinsurance.

⁵ Other items represents a day one loss upon the completion of an outwards reinsurance contract by the UK General Insurance business, which provides significant protection against claims volatility from mesothelioma, industrial deafness and other long tail risks. The £53 million loss comprises £712 million in premiums ceded less £659 million in reinsurance recoverables recognised.

B5 – Segmental information continued**(a) (iv) Segmental statement of financial position as at 30 June 2016**

	United Kingdom & Ireland		Europe							
	Life £m	GI £m	France £m	Poland £m	Italy, Spain and Other £m	Canada £m	Asia £m	Aviva Investors £m	Other Group activities £m	Total £m
Goodwill	663	1,016	6	26	192	26	50	—	—	1,979
Acquired value of in-force business and intangible assets	3,323	149	83	11	604	83	1,135	12	50	5,450
Interests in, and loans to, joint ventures and associates	1,415	—	166	46	78	10	499	—	—	2,214
Property and equipment	89	27	254	3	5	15	9	2	78	482
Investment property	7,165	205	2,336	—	1	—	—	1,140	259	11,106
Loans	23,338	5	732	1	29	164	36	—	—	24,305
Financial investments	171,680	4,201	65,171	2,720	22,774	3,703	10,500	523	7,188	288,460
Deferred acquisition costs	1,427	496	274	38	82	304	84	4	—	2,709
Other assets	47,874	6,461	7,743	246	1,687	1,603	1,565	989	5,184	73,352
Assets of operations classified as held for sale	1,197	455	12,541	—	—	—	—	—	—	14,193
Total assets	258,171	13,015	89,306	3,091	25,452	5,908	13,878	2,670	12,759	424,250
Insurance liabilities										
Long-term business and outstanding claims provisions	104,326	5,414	15,036	2,509	9,382	2,716	3,614	—	35	143,032
Unearned premiums	260	2,268	567	63	273	1,215	77	—	—	4,723
Other insurance liabilities	—	77	50	—	—	92	—	—	3	222
Liability for investment contracts	118,071	—	47,196	2	11,298	—	7,738	1,701	—	186,006
Unallocated divisible surplus	2,609	—	5,324	56	1,359	—	276	—	—	9,624
Net asset value attributable to unitholders	84	—	2,665	—	471	—	—	—	9,825	13,045
External borrowings	1,914	—	—	—	55	—	—	—	7,712	9,681
Other liabilities, including inter-segment liabilities	17,754	83	4,043	107	752	904	581	471	295	24,990
Liabilities of operations classified as held for sale	1,171	395	12,050	—	—	—	—	—	—	13,616
Total liabilities	246,189	8,237	86,931	2,737	23,590	4,927	12,286	2,172	17,870	404,939
Total equity										19,311
Total equity and liabilities										424,250

(a) (v) Segmental statement of financial position as at 30 June 2015 – restated¹

	United Kingdom & Ireland		Europe								
	Life £m	GI £m	France £m	Poland £m	Italy, Spain and Other £m	Canada £m	Asia £m	Aviva Investors £m	Other Group activities £m	Total £m	
Goodwill	663	1,022	—	7	166	22	43	—	—	1,923	
Acquired value of in-force business and intangible assets	3,893	128	82	4	522	59	1,345	22	24	6,079	
Interests in, and loans to, joint ventures and associates	972	—	133	36	73	3	388	—	—	1,605	
Property and equipment	103	33	199	2	5	9	8	1	30	390	
Investment property	8,203	140	1,707	—	1	—	—	1,145	371	11,567	
Loans	23,162	73	692	—	38	127	29	—	—	24,121	
Financial investments	169,195	5,147	62,318	2,653	18,036	3,220	9,880	657	3,705	274,811	
Deferred acquisition costs	1,278	440	222	26	76	261	25	6	—	2,334	
Other assets	41,605	4,460	11,200	167	1,666	873	1,425	736	5,623	67,755	
Assets of operations classified as held for sale	—	—	—	—	—	—	—	—	9	9	
Total assets	249,074	11,443	76,553	2,895	20,583	4,574	13,143	2,567	9,762	390,594	
Insurance liabilities											
Long-term business and outstanding claims provisions	103,081	5,301	15,658	2,329	7,510	2,121	2,882	—	34	138,916	
Unearned premiums	272	2,062	459	39	228	1,044	61	—	2	4,167	
Other insurance liabilities	—	80	42	—	—	81	—	—	2	205	
Liability for investment contracts	114,562	—	45,540	5	9,356	—	8,071	1,856	—	179,390	
Unallocated divisible surplus	2,624	—	5,073	55	843	—	220	—	—	8,815	
Net asset value attributable to unitholders	251	—	3,788	—	324	—	—	—	6,365	10,728	
External borrowings	2,037	—	—	—	47	—	—	—	7,506	9,590	
Other liabilities, including inter-segment liabilities	14,626	(1,676)	4,077	115	625	508	495	347	1,826	20,943	
Liabilities of operations classified as held for sale	—	—	—	—	—	—	—	—	2	2	
Total liabilities	237,453	5,767	74,637	2,543	18,933	3,754	11,729	2,203	15,737	372,756	
Total equity										17,838	
Total equity and liabilities										390,594	

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

B5 – Segmental information continued

(a) (vi) Segmental statement of financial position as at 31 December 2015 – restated¹

	United Kingdom & Ireland		Europe							Total £m
	Life £m	GI £m	France £m	Poland £m	Italy, Spain and Other £m	Canada £m	Asia £m	Aviva Investors £m	Other Group activities £m	
Goodwill	663	1,026	5	23	172	21	45	—	—	1,955
Acquired value of in-force business and intangible assets	3,600	139	86	12	539	69	1,206	15	65	5,731
Interests in, and loans to, joint ventures and associates	1,291	—	138	39	72	7	372	—	—	1,919
Property and equipment	130	27	225	3	5	10	8	1	40	449
Investment property	7,483	198	2,089	—	1	—	—	1,146	384	11,301
Loans	21,502	5	733	1	26	135	31	—	—	22,433
Financial investments	163,987	4,715	65,413	2,575	19,176	3,187	9,684	515	4,965	274,217
Deferred acquisition costs	1,351	418	227	32	77	255	57	4	—	2,421
Other assets	42,636	5,301	9,678	239	1,480	860	1,351	901	4,959	67,405
Assets of operations classified as held for sale	—	—	—	—	—	—	—	—	—	—
Total assets	242,643	11,829	78,594	2,924	21,548	4,544	12,754	2,582	10,413	387,831
Insurance liabilities										
Long-term business and outstanding claims provisions	99,435	5,439	16,487	2,308	7,699	2,058	2,865	—	18	136,309
Unearned premiums	226	2,083	393	45	237	1,016	48	—	—	4,048
Other insurance liabilities	—	76	44	—	—	77	—	—	2	199
Liability for investment contracts	114,052	—	47,834	2	9,770	—	7,681	1,743	—	181,082
Unallocated divisible surplus	2,575	—	4,941	55	1,047	—	193	—	—	8,811
Net asset value attributable to unitholders	203	—	2,863	—	413	—	—	—	7,936	11,415
External borrowings	1,903	—	—	—	49	—	—	—	6,818	8,770
Other liabilities, including inter-segment liabilities	12,271	(1,240)	4,066	99	715	596	565	370	1,485	18,927
Liabilities of operations classified as held for sale	—	—	—	—	—	—	—	—	—	—
Total liabilities	230,665	6,358	76,628	2,509	19,930	3,747	11,352	2,113	16,259	369,561
Total equity										18,270
Total equity and liabilities										387,831

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

(b) Further analysis by products and services

The Group's results can be further analysed by products and services which comprise long-term business, general insurance and health, fund management and other activities.

Long-term business

Our long-term business comprises life insurance, long-term health and accident insurance, savings, pensions and annuity business written by our life insurance subsidiaries, including managed pension fund business and our share of the other life and related business written in our associates and joint ventures, as well as lifetime mortgage business written in the UK.

General insurance and health

Our general insurance and health business provides insurance cover to individuals and to small and medium sized businesses, for risks associated mainly with motor vehicles, property and liability, such as employers' liability and professional indemnity liability, and medical expenses.

Fund management

Our fund management business invests policyholders' and shareholders' funds, provides investment management services for institutional pension fund mandates and manages a range of retail investment products, including investment funds, unit trusts, OEICs and ISAs. Clients include Aviva Group businesses and third-party financial institutions, pension funds, public sector organisations, investment professionals and private investors.

Other

Other includes service companies, head office expenses, such as Group treasury and finance functions, and certain financing costs and taxes not allocated to business segments.

B5 – Segmental information continued**(b) (i) Segmental income statement – products and services for the six month period ended 30 June 2016**

	Long-term business £m	General insurance and health ² £m	Fund management £m	Other £m	Total £m
Gross written premiums ¹	7,733	4,860	—	—	12,593
Premiums ceded to reinsurers	(845)	(315)	—	—	(1,160)
Premiums written net of reinsurance	6,888	4,545	—	—	11,433
Net change in provision for unearned premiums	—	(348)	—	—	(348)
Net earned premiums	6,888	4,197	—	—	11,085
Fee and commission income	638	20	139	199	996
	7,526	4,217	139	199	12,081
Net investment income/(expense)	14,905	209	(1)	51	15,164
Inter-segment revenue	—	—	119	—	119
Share of profit of joint ventures and associates	193	2	—	—	195
(Loss)/profit on the disposal and remeasurement of subsidiaries, joint ventures and associates	(8)	(11)	—	1	(18)
Segmental income	22,616	4,417	257	251	27,541
Claims and benefits paid, net of recoveries from reinsurers	(8,782)	(2,671)	—	—	(11,453)
Change in insurance liabilities, net of reinsurance	(5,739)	(187)	—	—	(5,926)
Change in investment contract provisions	(4,576)	—	—	—	(4,576)
Change in unallocated divisible surplus	(792)	—	—	—	(792)
Fee and commission expense	(451)	(1,102)	(17)	(84)	(1,654)
Other expenses	(976)	(261)	(206)	(628)	(2,071)
Inter-segment expenses	(113)	(6)	—	—	(119)
Finance costs	(112)	(2)	—	(181)	(295)
Segmental expenses	(21,541)	(4,229)	(223)	(893)	(26,886)
Profit/(loss) before tax	1,075	188	34	(642)	655
Tax attributable to policyholder returns	(318)	—	—	—	(318)
Profit/(loss) before tax attributable to shareholders' profits	757	188	34	(642)	337
Adjusted for:					
Non-operating items	469	146	15	358	988
Operating profit/(loss) before tax attributable to shareholders' profits	1,226	334	49	(284)	1,325

¹ Gross written premiums include inward reinsurance premiums assumed from other companies amounting to £71 million, of which £29 million relates to property and liability insurance and £42 million relates to long-term business.

² General insurance and health business segment includes gross written premiums of £646 million relating to health business. The remaining business relates to property and liability insurance.

B5 – Segmental information continued

(b) (ii) Segmental income statement – products and services for the six month period ended 30 June 2015

	Long-term business £m	General insurance and health ² £m	Fund management £m	Other £m	Total £m
Gross written premiums ¹	6,494	4,564	—	—	11,058
Premiums ceded to reinsurers	(658)	(346)	—	—	(1,004)
Premiums written net of reinsurance	5,836	4,218	—	—	10,054
Net change in provision for unearned premiums	—	(222)	—	—	(222)
Net earned premiums	5,836	3,996	—	—	9,832
Fee and commission income	472	27	136	118	753
	6,308	4,023	136	118	10,585
Net investment income/(expense)	284	141	(2)	183	606
Inter-segment revenue	—	—	79	—	79
Share of profit of joint ventures and associates	87	1	—	—	88
Profit/(loss) on the disposal and remeasurement of subsidiaries, joint ventures and associates	—	—	—	—	—
Segmental income	6,679	4,165	213	301	11,358
Claims and benefits paid, net of recoveries from reinsurers	(7,768)	(2,634)	—	—	(10,402)
Change in insurance liabilities, net of reinsurance	2,766	(5)	—	—	2,761
Change in investment contract provisions	(605)	—	—	—	(605)
Change in unallocated divisible surplus	743	—	—	—	743
Fee and commission expense	(609)	(1,075)	(13)	(236)	(1,933)
Other expenses	(698)	(203)	(175)	14	(1,062)
Inter-segment expenses	(74)	(5)	—	—	(79)
Finance costs	(80)	(5)	—	(186)	(271)
Segmental expenses	(6,325)	(3,927)	(188)	(408)	(10,848)
Profit/(loss) before tax	354	238	25	(107)	510
Tax attributable to policyholder returns	280	—	—	—	280
Profit/(loss) before tax attributable to shareholders' profits	634	238	25	(107)	790
Adjusted for:					
Non-operating items	387	184	8	(199)	380
Operating profit/(loss) before tax attributable to shareholders' profits	1,021	422	33	(306)	1,170

¹ Gross written premiums include inward reinsurance premiums assumed from other companies amounting to £80 million, of which £37 million relates to property and liability insurance and £43 million relates to long-term business.

² General insurance and health business segment includes gross written premiums of £630 million relating to health business. The remaining business relates to property and liability insurance.

B5 – Segmental information continued**(b) (iii) Segmental income statement – products and services for the year ended 31 December 2015 – restated¹**

	Long-term business £m	General insurance and health ³ £m	Fund management £m	Other £m	Total £m
Gross written premiums ²	13,187	8,738	—	—	21,925
Premiums ceded to reinsurers	(1,529)	(1,361)	—	—	(2,890)
Premiums written net of reinsurance	11,658	7,377	—	—	19,035
Net change in provision for unearned premiums	—	(111)	—	—	(111)
Net earned premiums	11,658	7,266	—	—	18,924
Fee and commission income	1,161	61	274	301	1,797
	12,819	7,327	274	301	20,721
Net investment income/(expense)	2,667	240	(5)	(77)	2,825
Inter-segment revenue	—	—	201	—	201
Share of profit of joint ventures and associates	177	3	—	—	180
Profit on the disposal and remeasurement of subsidiaries, joint ventures and associates	1	1	—	—	2
Segmental income	15,664	7,571	470	224	23,929
Claims and benefits paid, net of recoveries from reinsurers	(16,809)	(5,176)	—	—	(21,985)
Change in insurance liabilities, net of reinsurance	6,205	476	—	—	6,681
Change in investment contract provisions	(1,487)	—	—	—	(1,487)
Change in unallocated divisible surplus	984	—	—	—	984
Fee and commission expense	(1,098)	(2,118)	(23)	(85)	(3,324)
Other expenses	(1,663)	(368)	(367)	(386)	(2,784)
Inter-segment expenses	(190)	(11)	—	—	(201)
Finance costs	(202)	(5)	—	(411)	(618)
Segmental expenses	(14,260)	(7,202)	(390)	(882)	(22,734)
Profit/(loss) before tax	1,404	369	80	(658)	1,195
Tax attributable to policyholder returns	218	—	—	—	218
Profit/(loss) before tax attributable to shareholders' profits	1,622	369	80	(658)	1,413
Adjusted for:					
Non-operating items	820	396	26	33	1,275
Operating profit/(loss) before tax attributable to shareholders' profits	2,442	765	106	(625)	2,688

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

² Gross written premiums include inward reinsurance premiums assumed from other companies amounting to £146 million, of which £80 million relates to property and liability insurance and £66 million relates to long-term business.

³ General insurance and health business segment includes gross written premiums of £1,092 million relating to health business. The remaining business relates to property and liability insurance.

B5 – Segmental information continued

(c) (i) Segmental statement of financial position – products and services as at 30 June 2016

	Long-term business £m	General insurance and health £m	Fund management £m	Other £m	Total £m
Goodwill	887	1,025	—	67	1,979
Acquired value of in-force business and intangible assets	5,062	346	12	30	5,450
Interests in, and loans to, joint ventures and associates	2,167	39	—	8	2,214
Property and equipment	280	107	2	93	482
Investment property	10,479	368	—	259	11,106
Loans	24,135	170	—	—	24,305
Financial investments	270,739	10,527	32	7,162	288,460
Deferred acquisition costs	1,729	976	4	—	2,709
Other assets	56,016	9,680	901	6,755	73,352
Assets of operations classified as held for sale	13,738	455	—	—	14,193
Total assets	385,232	23,693	951	14,374	424,250
Gross insurance liabilities	132,840	15,137	—	—	147,977
Gross liabilities for investment contracts	186,006	—	—	—	186,006
Unallocated divisible surplus	9,624	—	—	—	9,624
Net asset value attributable to unitholders	3,221	—	—	9,824	13,045
External borrowings	1,872	—	—	7,809	9,681
Other liabilities, including inter-segment liabilities	20,694	1,416	455	2,425	24,990
Liabilities of operations classified as held for sale	13,221	395	—	—	13,616
Total liabilities	367,478	16,948	455	20,058	404,939
Total equity					19,311
Total equity and liabilities					424,250

(c) (ii) Segmental statement of financial position – products and services as at 30 June 2015 – restated¹

	Long-term business £m	General insurance and health £m	Fund management £m	Other £m	Total £m
Goodwill	853	1,030	—	40	1,923
Acquired value of in-force business and intangible assets	5,738	285	22	34	6,079
Interests in, and loans to, joint ventures and associates	1,570	32	—	3	1,605
Property and equipment	252	93	1	44	390
Investment property	10,941	256	—	370	11,567
Loans	23,920	201	—	—	24,121
Financial investments	260,499	10,634	25	3,653	274,811
Deferred acquisition costs	1,485	843	6	—	2,334
Other assets	53,040	6,589	629	7,497	67,755
Assets of operations classified as held for sale	—	9	—	—	9
Total assets	358,298	19,972	683	11,641	390,594
Gross insurance liabilities	129,766	13,522	—	—	143,288
Gross liabilities for investment contracts	179,390	—	—	—	179,390
Unallocated divisible surplus	8,815	—	—	—	8,815
Net asset value attributable to unitholders	4,362	—	—	6,366	10,728
External borrowings	1,995	—	—	7,595	9,590
Other liabilities, including inter-segment liabilities	17,556	(814)	329	3,872	20,943
Liabilities of operations classified as held for sale	—	2	—	—	2
Total liabilities	341,884	12,710	329	17,833	372,756
Total equity					17,838
Total equity and liabilities					390,594

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

B5 – Segmental information continued**(c) (iii) Segmental statement of financial position – products and services as at 31 December 2015 – restated¹**

	Long-term business £m	General insurance and health £m	Fund management £m	Other £m	Total £m
Goodwill	862	1,035	—	58	1,955
Acquired value of in-force business and intangible assets	5,369	309	15	38	5,731
Interests in, and loans to, joint ventures and associates	1,878	34	—	7	1,919
Property and equipment	299	95	1	54	449
Investment property	10,582	335	—	384	11,301
Loans	22,292	141	—	—	22,433
Financial investments	258,995	10,280	23	4,919	274,217
Deferred acquisition costs	1,604	812	5	—	2,421
Other assets	52,844	7,315	769	6,477	67,405
Assets of operations classified as held for sale	—	—	—	—	—
Total assets	354,725	20,356	813	11,937	387,831
Gross insurance liabilities	127,050	13,506	—	—	140,556
Gross liabilities for investment contracts	181,082	—	—	—	181,082
Unallocated divisible surplus	8,811	—	—	—	8,811
Net asset value attributable to unitholders	3,479	—	—	7,936	11,415
External borrowings	1,857	—	—	6,913	8,770
Other liabilities, including inter-segment liabilities	15,397	(307)	346	3,491	18,927
Liabilities of operations classified as held for sale	—	—	—	—	—
Total liabilities	337,676	13,199	346	18,340	369,561
Total equity					18,270
Total equity and liabilities					387,831

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

B6 – Tax

This note analyses the tax charge for the period and explains the factors that affect it.

(a) Tax charged/(credited) to the income statement

(i) The total tax charge/(credit) comprises:

	6 months 2016 £m	6 months 2015 £m	Restated ¹ Full Year 2015 £m
Current tax			
For the period	602	284	500
Prior period adjustments	(6)	(20)	(68)
Total current tax	596	264	432
Deferred tax			
Origination and reversal of temporary differences	(131)	(274)	(222)
Changes in tax rates or tax laws	(11)	—	(82)
Write back of deferred tax assets	—	(25)	(30)
Total deferred tax	(142)	(299)	(334)
Total tax charged/(credited) to income statement	454	(35)	98

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

(ii) The Group, as a proxy for policyholders in the UK, Ireland and Singapore, is required to record taxes on investment income and gains each year. Accordingly, the tax benefit or expense attributable to UK, Ireland and Singapore insurance policyholder returns is included in the tax charge/(credit). The tax charge attributable to policyholders' returns included in the charge/(credit) above is £318 million (HY15: £280 million credit; FY15: £218 million credit).

(iii) The tax charge/(credit) can be analysed as follows:

	6 months 2016 £m	6 months 2015 £m	Restated ¹ Full Year 2015 £m
UK tax	312	(234)	(289)
Overseas tax	142	199	387
	454	(35)	98

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

(b) Tax charged/(credited) to other comprehensive income

(i) The total tax charge/(credit) comprises:

	6 months 2016 £m	6 months 2015 £m	Full Year 2015 £m
Current tax			
In respect of pensions and other post-retirement obligations	(16)	(36)	(44)
In respect of foreign exchange movements	22	(13)	(7)
	6	(49)	(51)
Deferred tax			
In respect of pensions and other post-retirement obligations	185	(35)	(49)
In respect of fair value gains on owner-occupied properties	1	—	—
In respect of unrealised gains/(losses) on investments	9	(6)	(6)
	195	(41)	(55)
Total tax charged/(credited) to other comprehensive income	201	(90)	(106)

(ii) The tax charge attributable to policyholders' returns included above is £nil (HY15: £nil; FY15 £nil).

B6 – Tax continued**(c) Tax credited to equity**

Tax credited directly to equity in the period in respect of coupon payments on the direct capital instrument and tier 1 notes amounted to £5 million (*HY15: £4 million; FY15: £15 million*).

(d) Tax reconciliation

The tax on the Group's profit/(loss) before tax differs from the theoretical amount that would arise using the tax rate of the home country of the Company as follows:

	Shareholder £m	Policyholder £m	6 months 2016 £m	Shareholder £m	Policyholder £m	6 months 2015 £m	Shareholder £m	Policyholder £m	Restated ¹ Full Year 2015 £m
Total profit/(loss) before tax	337	318	655	790	(280)	510	1,413	(218)	1,195
Tax calculated at standard UK corporation tax rate of 20.00% (2015: 20.25%)	67	64	131	160	(57)	103	286	(44)	242
Reconciling items									
Different basis of tax – policyholders	—	254	254	—	(223)	(223)	—	(174)	(174)
Adjustment to tax charge in respect of prior periods	(1)	—	(1)	1	—	1	(46)	—	(46)
Non-assessable income and items not taxed at the full statutory rate	9	—	9	21	—	21	19	—	19
Non-taxable loss/(profit) on sale of subsidiaries and associates	2	—	2	—	—	—	1	—	1
Disallowable expenses	26	—	26	28	—	28	67	—	67
Different local basis of tax on overseas profits	50	—	50	62	—	62	126	—	126
Change in future local statutory tax rates	(11)	—	(11)	—	—	—	(82)	—	(82)
Movement in deferred tax not recognised	(1)	—	(1)	(26)	—	(26)	(52)	—	(52)
Tax effect of profit from joint ventures and associates	—	—	—	(6)	—	(6)	(6)	—	(6)
Other	(5)	—	(5)	5	—	5	3	—	3
Total tax charged/(credited) to income statement	136	318	454	245	(280)	(35)	316	(218)	98

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

The tax charge/(credit) attributable to policyholders' returns is removed from the Group's total profit before tax in arriving at the Group's profit before tax attributable to shareholders' profits. As the net of tax profit attributable to with-profit and unit-linked policyholders is zero, the Group's pre-tax profit/(loss) attributable to policyholders is an amount equal and opposite to the tax charge/(credit) attributable to policyholders included in the total tax charge. The difference between the policyholder tax charge/(credit) and the impact of this item in the tax reconciliation can be explained as follows:

	6 months 2016 £m	6 months 2015 £m	Full Year 2015 £m
Tax attributable to policyholder returns	318	(280)	(218)
UK corporation tax at a rate of 20.00% (2015: 20.25%) in respect of the policyholder tax deduction	(64)	57	44
Different basis of tax – policyholders per tax reconciliation	254	(223)	(174)

Finance (No 2) Act 2015 introduced legislation reducing the rate of corporation tax from 20% at 1 April 2016 to 19% from 1 April 2017 and to 18% from 1 April 2020. These reduced rates were used in the calculation of the UK's deferred tax assets and liabilities as at 31 December 2015 and 30 June 2016. On 16 March 2016, the UK government announced that the rate of corporation tax will be further reduced to 17% from 1 April 2020. A 1% reduction in the rate applied to the UK deferred tax liability at 30 June 2016 would reduce the liability by approximately £48 million.

B7 – Earnings per share

(a) Basic earnings per share

(i) The profit attributable to ordinary shareholders is:

	6 months 2016			6 months 2015			Restated ¹ Full Year 2015		
	Operating profit £m	Non-operating items £m	Total £m	Operating profit £m	Non-operating items £m	Total £m	Operating profit £m	Non-operating items £m	Total £m
Profit before tax attributable to shareholders' profits	1,325	(988)	337	1,170	(380)	790	2,688	(1,275)	1,413
Tax attributable to shareholders' profit	(323)	187	(136)	(304)	59	(245)	(603)	287	(316)
Profit for the period	1,002	(801)	201	866	(321)	545	2,085	(988)	1,097
Amount attributable to non-controlling interests	(67)	(4)	(71)	(82)	1	(81)	(152)	(9)	(161)
Cumulative preference dividends for the period	(9)	—	(9)	(9)	—	(9)	(17)	—	(17)
Coupon payments in respect of the direct capital instrument (DCI) and tier 1 notes (net of tax)	(21)	—	(21)	(14)	—	(14)	(57)	—	(57)
Profit attributable to ordinary shareholders	905	(805)	100	761	(320)	441	1,859	(997)	862

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

(ii) Basic earnings per share is calculated as follows:

	6 months 2016			6 months 2015			Restated ¹ Full Year 2015		
	Before tax £m	Net of tax, non-controlling interests, preference dividends and DCI ² £m	Per share p	Before tax £m	Net of tax, non-controlling interests, preference dividends and DCI ² £m	Per share p	Before tax £m	Net of tax, non-controlling interests, preference dividends and DCI ² £m	Per share p
Operating profit attributable to ordinary shareholders	1,325	905	22.4	1,170	761	22.1	2,688	1,859	49.7
Non-operating items:									
Investment return variances and economic assumption changes on long-term business	6	(2)	—	(75)	(59)	(1.7)	14	(37)	(1.0)
Short-term fluctuation in return on investments backing non-long-term business	(338)	(267)	(6.6)	166	132	3.9	(84)	(62)	(1.7)
Economic assumption changes on general insurance and health business	(123)	(98)	(2.4)	(54)	(43)	(1.3)	(100)	(80)	(2.1)
Impairment of goodwill, joint ventures and associates and other amounts expensed	—	—	—	(22)	(22)	(0.6)	(22)	(22)	(0.6)
Amortisation and impairment of intangibles	(92)	(68)	(1.7)	(61)	(47)	(1.4)	(155)	(121)	(3.2)
Amortisation and impairment of acquired value of in-force business	(318)	(270)	(6.7)	(162)	(136)	(4.0)	(498)	(376)	(10.1)
(Loss)/profit on disposal and remeasurement of subsidiaries, joint ventures and associates	(18)	(18)	(0.4)	—	—	—	2	2	0.1
Integration and restructuring costs and other	(105)	(82)	(2.1)	(172)	(145)	(4.2)	(432)	(301)	(8.0)
Profit attributable to ordinary shareholders	337	100	2.5	790	441	12.8	1,413	862	23.1

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

² DCI includes the direct capital instrument and tier 1 notes.

(iii) The calculation of basic earnings per share uses a weighted average of 4,046 million (HY15: 3,437 million; FY15: 3,741 million) ordinary shares in issue, after deducting treasury shares. The actual number of shares in issue at 30 June 2016 was 4,058 million (HY15: 4,046 million; FY15: 4,048 million) and 4,051 million (HY15: 4,040 million; FY15: 4,042 million) excluding treasury shares.

B7 – Earnings per share continued**(b) Diluted earnings per share**

(i) Diluted earnings per share is calculated as follows:

	6 months 2016			6 months 2015			Restated ¹ Full Year 2015		
	Total £m	Weighted average number of shares million	Per share p	Total £m	Weighted average number of shares million	Per share p	Total £m	Weighted average number of shares million	Per share p
Profit attributable to ordinary shareholders	100	4,046	2.5	441	3,437	12.8	862	3,741	23.1
Dilutive effect of share awards and options	—	39	(0.1)	—	43	(0.1)	—	39	(0.3)
Diluted earnings per share	100	4,085	2.4	441	3,480	12.7	862	3,780	22.8

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

(ii) Diluted earnings per share on operating profit attributable to ordinary shareholders is calculated as follows:

	6 months 2016			6 months 2015			Restated ¹ Full Year 2015		
	Total £m	Weighted average number of shares million	Per share p	Total £m	Weighted average number of shares million	Per share p	Total £m	Weighted average number of shares million	Per share p
Operating profit attributable to ordinary shareholders	905	4,046	22.4	761	3,437	22.1	1,859	3,741	49.7
Dilutive effect of share awards and options	—	39	(0.2)	—	43	(0.2)	—	39	(0.5)
Diluted operating profit per share	905	4,085	22.2	761	3,480	21.9	1,859	3,780	49.2

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

B8 – Dividends and appropriations

	6 months 2016 £m	6 months 2015 £m	Full Year 2015 £m
Ordinary dividends declared and charged to equity in the period			
Final 2015 – 14.05 pence per share, paid on 17 May 2016	570	—	—
Final 2014 – 12.25 pence per share, paid on 15 May 2015	—	362	362
Interim 2015 – 6.75 pence per share, paid on 17 November 2015	—	—	273
	570	362	635
Preference dividends declared and charged to equity in the period	9	9	17
Coupon payments on direct capital instrument and tier 1 notes	26	18	72
	605	389	724

Subsequent to 30 June 2016, the directors declared an interim dividend for 2016 of 7.42 pence per ordinary share (*HY15: 6.75 pence*), amounting to £301 million (*HY15: £273 million*) in total. The dividend will be paid on 17 November 2016 and will be accounted for as an appropriation of retained earnings in the year ending 31 December 2016.

Interest on the direct capital instrument and tier 1 notes is treated as an appropriation of retained profits and, accordingly, is accounted for when paid. Tax relief is obtained at a rate of 20.00% (*2015: 20.25%*).

B9 – Insurance liabilities**(a) Carrying amount****(i) Insurance liabilities (gross of reinsurance) at 30 June/31 December comprised:**

	30 June 2016			Restated ¹ 30 June 2015			Restated ¹ 31 December 2015		
	Long-term business £m	General insurance and health £m	Total £m	Long-term business £m	General insurance and health £m	Total £m	Long-term business £m	General insurance and health £m	Total £m
Long-term business provisions									
Participating	55,145	—	55,145	51,094	—	51,094	50,558	—	50,558
Unit-linked non-participating	15,031	—	15,031	15,776	—	15,776	14,768	—	14,768
Other non-participating	65,172	—	65,172	61,183	—	61,183	60,022	—	60,022
	135,348	—	135,348	128,053	—	128,053	125,348	—	125,348
Outstanding claims provisions	1,980	7,780	9,760	1,713	7,047	8,760	1,702	7,063	8,765
Provision for claims incurred but not reported	—	2,851	2,851	—	2,299	2,299	—	2,383	2,383
	1,980	10,631	12,611	1,713	9,346	11,059	1,702	9,446	11,148
Provision for unearned premiums	—	4,723	4,723	—	4,166	4,166	—	4,048	4,048
Provision arising from liability adequacy tests	—	12	12	—	11	11	—	12	12
Total	137,328	15,366	152,694	129,766	13,523	143,289	127,050	13,506	140,556
Less: Amounts classified as held for sale	(4,488)	(229)	(4,717)	—	(1)	(1)	—	—	—
	132,840	15,137	147,977	129,766	13,522	143,288	127,050	13,506	140,556

¹ Restated following a reclassification from participating to other non-participating long-term business provisions in the UK of £3,635 million at HY15 and £3,317 million at FY15.

(ii) Change in insurance liabilities recognised as an expense

The purpose of the following table is to reconcile the change in insurance liabilities, net of reinsurance, shown in the income statement, to the change in insurance liabilities recognised as an expense in the relevant movement tables in this note. The components of the reconciliation are the change in provision for outstanding claims on long-term business (which is not included in a separate movement table), and the unwind of discounting on general insurance reserves (which is included within finance costs in the income statement). For general insurance and health business, the change in the provision for unearned premiums is not included in the reconciliation as, within the income statement, this is included within earned premiums.

30 June 2016	Gross £m	Reinsurance £m	Net £m
Long-term business			
Change in long-term business provisions (note B9(b))	6,144	(564)	5,580
Change in provision for outstanding claims	171	(12)	159
	6,315	(576)	5,739
General insurance and health			
Change in insurance liabilities (note B9(c))	498	(310)	188
Less: Unwind of discount on GI reserves and other	(5)	4	(1)
	493	(306)	187
Total change in insurance liabilities	6,808	(882)	5,926

30 June 2015	Gross £m	Reinsurance £m	Net £m
Long-term business			
Change in long-term business provisions (note B9(b))	(2,809)	(184)	(2,993)
Change in provision for outstanding claims	226	1	227
	(2,583)	(183)	(2,766)
General insurance and health			
Change in insurance liabilities (note B9(c))	(126)	133	7
Less: Unwind of discount on GI reserves and other	(5)	3	(2)
	(131)	136	5
Total change in insurance liabilities	(2,714)	(47)	(2,761)

31 December 2015	Gross £m	Reinsurance ¹ £m	Net £m
Long-term business			
Change in long-term business provisions (note B9(b))	(6,640)	252	(6,388)
Change in provision for outstanding claims	179	4	183
	(6,461)	256	(6,205)
General insurance and health			
Change in insurance liabilities (note B9(c))	29	(504)	(475)
Less: Unwind of discount on GI reserves and other	(10)	9	(1)
	19	(495)	(476)
Total change in insurance liabilities	(6,442)	(239)	(6,681)

¹ The change in reinsurance assets for general insurance and health business includes the impact of the £659 million reinsurance asset recognised on completion of an outward reinsurance contract by the UK general insurance business, which provides significant protection against claims volatility from mesothelioma, industrial deafness and other long tail risks.

B9 – Insurance liabilities continued

(b) Movements in long-term business liabilities

The following movements have occurred in the long-term business provisions (gross of reinsurance) during the period:

	6 months 2016 £m	6 months 2015 £m	Full Year 2015 £m
Carrying amount at 1 January	125,348	98,110	98,110
Provisions in respect of new business	2,596	1,994	4,059
Expected change in existing business provisions	(3,778)	(3,430)	(8,180)
Variance between actual and expected experience	942	738	428
Impact of operating assumption changes	(125)	(28)	(735)
Impact of economic assumption changes	6,529	(2,119)	(2,242)
Other movements	(20)	36	30
Change in liability recognised as an expense (note B9 a(ii))	6,144	(2,809)	(6,640)
Effect of portfolio transfers, acquisitions and disposals ¹	—	35,105	35,099
Foreign exchange rate movements	3,861	(2,353)	(1,221)
Other movements	(5)	—	—
Carrying amount at 30 June/31 December	135,348	128,053	125,348

¹ The movement during 2015 primarily relates to Friends Life, as at the acquisition date.

(c) Movements in general insurance and health liabilities

The following changes have occurred in the general insurance and health claims provisions (gross of reinsurance) during the period:

	6 months 2016 £m	6 months 2015 £m	Full Year 2015 £m
Carrying amount at 1 January	9,446	9,876	9,876
Impact of changes in assumptions	239	31	115
Claim losses and expenses incurred in the current period	3,266	2,845	5,889
Decrease in estimated claim losses and expenses incurred in prior periods	(179)	(231)	(463)
Inurred claims losses and expenses	3,326	2,645	5,541
Less:			
Payments made on claims incurred in the current period	(1,260)	(1,339)	(3,153)
Payments made on claims incurred in prior periods	(1,716)	(1,559)	(2,650)
Recoveries on claim payments	143	122	281
Claims payments made in the period, net of recoveries	(2,833)	(2,776)	(5,522)
Unwind of discounting	5	5	10
Changes in claims reserve recognised as an expense (note B9 a(ii))	498	(126)	29
Effect of portfolio transfers, acquisitions and disposals	(38)	(2)	(64)
Foreign exchange rate movements	725	(402)	(395)
Carrying amount at 30 June/31 December	10,631	9,346	9,446

Overview

Income & expenses

IFRS

Capital & Liquidity

Analysis of assets

VNB & sales analysis

Other information

B10 – Liability for investment contracts**(a) Carrying amount**

The liability for investment contracts (gross of reinsurance) at 30 June/31 December comprised:

	30 June 2016 £m	Restated ¹ 30 June 2015 £m	Restated ¹ Full Year 2015 £m
Long-term business			
Participating contracts	87,709	76,038	78,048
Non-participating contracts at fair value	105,952	103,352	103,034
Total	193,661	179,390	181,082
Less: Amounts classified as held for sale	(7,655)	—	—
	186,006	179,390	181,082

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. See note B2 for further details.

(b) Movements in participating investment contracts

The following movements have occurred in the provisions (gross of reinsurance) during the period:

	6 months 2016 £m	6 months 2015 £m	Full Year 2015 £m
Carrying amount at 1 January	78,048	67,232	67,232
Provisions in respect of new business	2,332	1,937	3,710
Expected change in existing business provisions	(2,176)	(1,776)	(4,219)
Variance between actual and expected experience	1,011	1,287	1,590
Impact of operating assumption changes	—	(2)	43
Impact of economic assumption changes	236	(50)	97
Other movements	(5)	(16)	49
Change in liability recognised as an expense ¹	1,398	1,380	1,270
Effect of portfolio transfers, acquisitions and disposals ²	—	12,245	12,245
Foreign exchange rate movements	6,992	(4,819)	(2,699)
Other movements ³	1,271	—	—
Carrying amount at 30 June/31 December	87,709	76,038	78,048

¹ Total interest expense for participating investment contracts recognised in profit or loss is £2,082 million (HY15: £1,751 million, FY15: £1,931 million).

² The movement during 2015 relates to the acquisition of Friends Life.

³ Other movements during 2016 comprise liabilities in the UK of £1,271 million reclassified from non-participating investment contracts.

(c) Movements in non-participating investment contracts

The following movements have occurred in the provisions (gross of reinsurance) during the period:

	6 months 2016 £m	Restated ¹ 6 months 2015 £m	Restated ¹ Full Year 2015 £m
Carrying amount at 1 January	103,034	49,922	49,922
Provisions in respect of new business	1,455	1,744	2,644
Expected change in existing business provisions	(1,775)	(1,594)	(2,726)
Variance between actual and expected experience	3,660	(2,476)	(2,906)
Impact of operating assumption changes	—	—	32
Impact of economic assumption changes	1	—	3
Other movements	(2)	2	38
Change in liability	3,339	(2,324)	(2,915)
Effect of portfolio transfers, acquisitions and disposals ²	—	56,404	56,401
Foreign exchange rate movements	850	(650)	(374)
Other movements ³	(1,271)	—	—
Carrying amount at 30 June/31 December	105,952	103,352	103,034

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. See note B2 for further details.

² The movement during 2015 primarily relates to the acquisition of Friends Life.

³ Other movements during 2016 comprise liabilities in the UK of £1,271 million reclassified to participating investment contracts.

For non-participating investment contracts, deposits collected and amounts withdrawn are not shown on the income statement, but are accounted for directly through the statement of financial position as an adjustment to the gross liabilities for investment contracts. The associated change in investment contract provisions shown on the income statement consists of the attributed investment return. Participating investment contracts are treated consistently with insurance contracts with the change in investment contract provisions primarily consisting of the movement in participating investment contract liabilities (net of reinsurance) over the reporting period.

B11 – Reinsurance assets

The reinsurance assets at 30 June/31 December comprised:

	30 June 2016 £m	30 June 2015 £m	31 December 2015 £m
Long-term business			
Insurance contracts	5,712	5,405	5,018
Participating investment contracts	12	13	11
Non-participating investment contracts ^{1,2}	15,859	13,773	13,967
	21,583	19,191	18,996
Outstanding claims provisions	66	39	38
	21,649	19,230	19,034
General insurance and health			
Outstanding claims provisions ³	1,055	725	988
Provisions for claims incurred but not reported ³	911	223	607
	1,966	948	1,595
Provisions for unearned premiums	340	254	289
	2,306	1,202	1,884
	23,955	20,432	20,918
Less: Amounts classified as held for sale	(972)	—	—
Total	22,983	20,432	20,918

1 Balances in respect of all reinsurance treaties are included under reinsurance assets, regardless of whether they transfer significant insurance risk. The reinsurance assets classified as non-participating investment contracts are financial instruments measured at fair value through profit or loss.

2 Reinsurance assets in 2016 include the reclassification of £1,016 million of UK Life investments in certain life insurance funds from unit trusts and other investment vehicles (financial investments) to reinsurance assets.

3 Reinsurance assets at 31 December 2015 for General insurance and health business include the impact of the £659 million reinsurance asset recognised on completion of an outward reinsurance contract by the UK general insurance business, which provides significant protection against claims volatility from mesothelioma, industrial deafness and other long tail risks. The reinsurance assets at 30 June 2016 for General Insurance and health business also include recoveries expected in respect of the Alberta fires in Canada.

B12 – Effect of changes in assumptions and estimates during the period

This disclosure only allows for the impact on liabilities and related assets, such as unallocated divisible surplus, reinsurance, deferred acquisition costs and AVIF, and does not allow for offsetting movements in the value of backing financial assets.

	Effect on profit 6 months 2016 £m	Effect on profit 6 months 2015 £m	Effect on profit Full Year 2015 £m
Assumptions			
Long-term insurance business			
Interest rates	(4,269)	1,798	2,053
Expenses	—	22	248
Persistency rates	—	—	(2)
Mortality for assurance contracts	—	—	1
Mortality for annuity contracts	63	—	17
Tax and other assumptions	89	—	48
Investment contracts			
Expenses	—	—	(4)
General insurance and health business			
Change in discount rate assumptions	(123)	(54)	(100)
Change in expense ratio and other assumptions	—	—	1
Total	(4,240)	1,766	2,262

The impact of interest rates on long-term business relates primarily to annuities in the UK (including any change in credit default and reinvestment risk provisions), where a decrease in the valuation interest rate, in response to decreasing risk free rates partially offset by a widening of credit spreads, has increased liabilities. The overall impact on profit also depends on movements in the value of assets backing the liabilities, which is not included in this disclosure.

There has been a release of annuitant mortality reserves in the UK following the adoption of the CML 2015 mortality improvement assumptions and a review of exposure to anti-selection, partially offset by a change in base mortality assumptions in response to revisions in the calculation of mortality exposure.

Tax and other assumptions include the profit arising from a change in estimate related to the recoverability testing of the deferred acquisition cost assets (DAC) in the UK. The allowance for risk for non-participating investment contracts and the level of prudence for insurance contracts, has been re-assessed. Any amortisation or impairment of DAC is not included in this disclosure and may be reversed in subsequent reporting periods, subject to the original amortisation profile. The profit in the period includes £28 million in the UK relating to DAC net of amortisation.

The adverse change in discount rate assumptions on general insurance and health business of £123 million (HY15: £54 million adverse) arises mainly as a result of a decrease in the real interest rates used to discount claim reserves for periodic payment orders and latent claims. Market interest rates used to discount periodic payment orders and latent claims have reduced and the estimated future inflation rate used to value periodic payment orders has been increased to be consistent with market expectations. This has, in part, been offset by a change in estimate for the interest rate used to discount periodic payment orders to allow for the illiquid nature of these liabilities.

B13 – Unallocated divisible surplus

An unallocated divisible surplus (UDS) is established where the nature of policy benefits is such that the division between shareholder reserves and policyholder liabilities is uncertain at the reporting date. Therefore the expected duration for settlement of the UDS is not defined.

This note shows the movements in the UDS during the period.

	6 months 2016 £m	6 months 2015 £m	Full Year 2015 £m
Carrying amount at 1 January	8,811	9,467	9,467
Change in participating contract assets	802	(612)	(935)
Change in participating contract liabilities	(10)	34	(36)
Other movements	—	(165)	(13)
Change in liability recognised as an expense	792	(743)	(984)
Effect of portfolio transfers, acquisition and disposals ¹	—	724	724
Foreign exchange rate movements	873	(633)	(396)
Carrying amount at 30 June/31 December	10,476	8,815	8,811
Less: Amounts classified as held for sale	(852)	—	—
	9,624	8,815	8,811

¹ The movement during 2015 relates to the acquisition of Friends Life.

The amount of UDS at 30 June 2016 has increased to £10.5 billion including amounts classified as held for sale, and £9.6 billion excluding amounts classified as held for sale (*HY15: £8.8 billion, FY15: £8.8 billion*). The increase is mainly due to the decrease in Eurozone corporate and government bond yields during the period and the weakening of sterling against the euro.

B14 – Borrowings

The Group's borrowings are either core structural borrowings or operational borrowings. This note shows the carrying values of each type.

(a) Analysis of total borrowings:

Total borrowings comprise:

	30 June 2016 £m	30 June 2015 £m	31 December 2015 £m
Core structural borrowings, at amortised cost	7,809	7,593	6,912
Operational borrowings, at amortised cost	566	695	550
Operational borrowings, at fair value	1,306	1,302	1,308
	1,872	1,997	1,858
Total	9,681	9,590	8,770

(b) Core structural borrowings

The carrying amounts of these borrowings are:

	30 June 2016 £m	30 June 2015 £m	31 December 2015 £m
Subordinated debt			
6.125% £700 million subordinated notes 2036	693	692	693
5.70% €500 million undated subordinated notes	—	354	—
6.125% £800 million undated subordinated notes	795	794	795
6.292% £268 million undated STICS	—	268	—
6.875% £600 million subordinated notes 2058	594	594	594
6.875% €500 million subordinated notes 2018	415	353	368
12.00% £162 million subordinated notes 2021	219	229	221
8.25% £500 million subordinated notes 2022	607	623	615
6.625% £450 million subordinated notes 2041	447	447	447
8.25% \$400 million subordinated notes 2041	298	251	269
7.875% \$575 million undated subordinated notes	463	422	430
6.125% €650 million subordinated notes 2043	538	458	477
3.875% €700 million subordinated notes 2044	577	492	512
5.125% £400 million subordinated notes 2050	394	394	394
3.375% €900 million subordinated notes 2045	738	628	654
4.50% C\$450 million subordinated notes 2021	256	—	—
	7,034	6,999	6,469
Debenture loans			
9.5% guaranteed bonds 2016	—	200	—
Commercial paper	815	450	485
	7,849	7,649	6,954
Less: Amount held by Group companies	(40)	(56)	(42)
Total	7,809	7,593	6,912

On 9 May 2016 Aviva plc issued C\$450 million of subordinated debt which qualifies as tier 3 capital under current regulatory rules. The instrument was issued at 99.646% of the nominal amount and bears interest at 4.50% per annum. Maturity is on 10 May 2021.

(c) Operational borrowings

The carrying amounts of these borrowings are:

	30 June 2016 £m	30 June 2015 £m	31 December 2015 £m
Amounts owed to financial institutions			
Loans	566	695	550
Securitised mortgage loan notes			
UK lifetime mortgage business	1,306	1,302	1,308
Total	1,872	1,997	1,858

B15 – Pension obligations and other provisions**(a) Carrying amounts****(i) Provisions in the condensed consolidated statement of financial position**

In the condensed consolidated statement of financial position, provisions include pension scheme deficits and comprise:

	30 June 2016 £m	30 June 2015 £m	31 December 2015 £m
Total IAS 19 obligations to the main staff pension schemes	786	825	686
Deficits in other staff pension schemes	52	42	46
Total IAS 19 obligations to staff pension schemes	838	867	732
Restructuring provisions	170	156	166
Other provisions	476	592	518
Total	1,484	1,615	1,416

(ii) Pension obligations

The assets and liabilities of the Group's material defined benefit schemes as at 30 June/31 December are shown below.

	30 June 2016 £m	30 June 2015 £m	31 December 2015 £m
Total fair value of assets	19,726	17,062	16,707
Present value of scheme liabilities	(16,399)	(14,812)	(14,324)
Net surplus in the schemes	3,327	2,250	2,383
Less: consolidation elimination for non-transferable Group insurance policy ¹	(605)	(606)	(546)
Net IAS 19 surplus in the schemes	2,722	1,644	1,837
Surplus included in other assets	3,508	2,469	2,523
Deficits included in provisions	(786)	(825)	(686)
Net IAS 19 surplus in the schemes	2,722	1,644	1,837

¹ As at 30 June 2016, the scheme assets in the Friends Provident Pension Scheme include an insurance policy of £605 million (30 June 2015: £606 million, 31 December 2015: £546 million) issued by a Group company that is not transferable under IAS 19 and consequently is eliminated from the IAS 19 net surplus balance. The IAS 19 fair value of scheme assets at 30 June 2016, excluding this policy is £19,121 million (30 June 2015: £16,456 million, 31 December 2015: £16,161 million).

(b) Movements in the schemes' surpluses and deficits

Movements in the pension schemes' surpluses and deficits comprise:

	6 months 2016 £m	6 months 2015 £m	Full Year 2015 £m
Net IAS 19 surplus in the schemes at 1 January	1,837	2,304	2,304
Past service costs – amendments	(1)	(1)	1
Administrative expenses ¹	(7)	(12)	(15)
Total pension cost charged to net operating expenses	(8)	(13)	(14)
Net interest credited/(charged) to investment income /(finance costs) ²	37	41	80
Total recognised in income statement	29	28	66
Remeasurements:			
Actual return on these assets	3,090	113	99
Less: Interest income on scheme assets	(298)	(290)	(584)
Return on scheme assets excluding amounts in interest income	2,792	(177)	(485)
(Losses)/gains from change in financial assumptions	(2,022)	(166)	234
Gains from change in demographic assumptions	—	—	3
Experience gains	6	5	13
Total remeasurements recognised in other comprehensive income	776	(338)	(235)
Acquisitions – gross surplus ³	—	68	68
Acquisitions – consolidation elimination for non-transferable Group insurance policy ³	—	(631)	(631)
Acquisitions – net deficit	—	(563)	(563)
Employer contributions	123	183	240
Foreign exchange rate movements	(43)	30	25
Net IAS 19 surplus in the schemes at 30 June/31 December	2,722	1,644	1,837

¹ Administrative expenses are expensed as incurred.

² Net interest income of £48 million (HY15: £50 million, FY15: £105 million) has been credited to investment income and net interest expense of £11 million (HY15: £9 million, FY15: £25 million) has been charged to finance costs in HY16.

³ The gross surplus of £68 million on acquisition in 2015 relates to Friends Life. As the Friends Provident Pension scheme assets included an insurance policy of £631 million at acquisition date, issued by a Group company that is not transferable under IAS 19, it is eliminated from the scheme assets.

The increase in the surplus during the period is primarily due to remeasurements recognised in other comprehensive income which reflect increased asset values mainly driven by a reduction in interest rates in the UK partly offset by an increase in the defined benefit obligation following a decrease in the UK discount rate.

B16 – Related party transactions

During the period, there have been no changes in the nature of the related party transactions from those described in the Group's annual report and accounts for the year ended 31 December 2015. There were no transactions with related parties that had a material effect on the result for the period ended 30 June 2016, 30 June 2015 or 31 December 2015.

B17 – Fair value

This note explains the methodology for valuing our assets and liabilities measured at fair value, and for fair value disclosures. It also provides an analysis of these according to a 'fair value hierarchy', determined by the market observability of valuation inputs.

(a) Basis for determining fair value hierarchy

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the 'fair value hierarchy' described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

Level 1

Inputs to Level 1 fair values are quoted prices (unadjusted) in active markets for identical assets and liabilities that the entity can access at the measurement date.

Level 2

Inputs to Level 2 fair values are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. If the asset or liability has a specified (contractual) term, a Level 2 input must be observable for substantially the full term of the instrument. Level 2 inputs include the following:

- Quoted prices for similar assets and liabilities in active markets.
- Quoted prices for identical or similar assets and liabilities in markets that are not active, the prices are not current, or price quotations vary substantially either over time or among market makers, or in which little information is released publicly.
- Inputs other than quoted prices that are observable for the asset or liability (for example, interest rates and yield curves observable at commonly quoted intervals, implied volatilities, and credit spreads).
- Market-corroborated inputs.

Where we use broker quotes and no information as to the observability of inputs is provided by the broker, the investments are classified as follows:

- Where the broker price is validated by using internal models with market observable inputs and the values are similar, we classify the investment as Level 2.
- In circumstances where internal models are not used to validate broker prices, or the observability of inputs used by brokers is unavailable, the investment is classified as Level 3.

Level 3

Inputs to Level 3 fair values are unobservable inputs for the asset or liability. Unobservable inputs may have been used to measure fair value to the extent that observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at the measurement date. However, the fair value measurement objective remains the same, i.e. an exit price at the measurement date from the perspective of a market participant that holds the asset or owes the liability. Therefore, unobservable inputs reflect the assumptions the business unit considers that market participants would use in pricing the asset or liability. Examples are investment properties, certain private equity investments and private placements.

The majority of the Group's assets and liabilities measured at fair value are based on quoted market information or observable market data. 15.9% of assets and 4.7% of liabilities measured at fair value are based on estimates and recorded as Level 3. Where estimates are used, these are based on a combination of independent third-party evidence and internally developed models, calibrated to market observable data where possible. Third-party valuations using significant unobservable inputs validated against Level 2 internally modelled valuations are classified as Level 3, where there is a significant difference between the third-party price and the internally modelled value. Where the difference is insignificant, the instrument would be classified as Level 2.

(b) Changes to valuation technique

There were no changes in the valuation techniques during the period compared to those described in the 2015 annual report and accounts.

B17 – Fair value continued**(c) Comparison of the carrying amount and fair values of financial instruments**

Set out below is a comparison of the carrying amounts and fair values of financial assets and liabilities, excluding those classified as held for sale. These amounts may differ where the asset or liability is carried on a measurement basis other than fair value, e.g. amortised cost.

	30 June 2016		30 June 2015		31 December 2015	
	Fair value £m	Carrying amount £m	Fair value £m	Carrying amount £m	Fair value £m	Carrying amount £m
Financial assets						
Loans ¹	24,259	24,305	23,954	24,121	22,307	22,433
Financial Investments	288,460	288,460	274,811	274,811	274,217	274,217
Fixed maturity securities	173,798	173,798	162,146	162,146	162,964	162,964
Equity securities	63,331	63,331	65,057	65,057	63,558	63,558
Other investments (including derivatives)	51,331	51,331	47,608	47,608	47,695	47,695
Financial liabilities						
Non-participating investment contracts (restated) ^{2,3}	105,243	105,243	103,352	103,352	103,034	103,034
Net asset value attributable to unitholders	13,045	13,045	10,728	10,728	11,415	11,415
Borrowings ¹	9,866	9,681	10,052	9,590	9,091	8,770
Derivative liabilities ⁴	8,127	8,127	3,432	3,432	3,881	3,881

¹ Within the fair value, the estimated fair value has been provided for the portion of loans and borrowings that are carried at amortised cost as disclosed in note B17(d).

² Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. See note B2 for further details.

³ Non-participating investment contracts are included within gross liabilities for investment contracts on the condensed consolidated statement of financial position and disclosed in note B10.

⁴ Derivative liabilities are included within payables and other financial liabilities on the condensed consolidated statement of financial position.

Fair value of the following assets and liabilities approximate to their carrying amounts:

- Receivables
- Cash and cash equivalents
- Payables and other financial liabilities
- The equivalent assets to those above, which are classified as held for sale

(d) Fair value hierarchy analysis

An analysis of assets and liabilities measured at amortised cost and fair value categorised by fair value hierarchy is given below.

Financial instruments relating to operations classified as held for sale have been excluded from the individual asset and liability line items and have been disclosed separately.

	Fair value hierarchy				Amortised cost £m	Total carrying value £m
	Level 1 £m	Level 2 £m	Level 3 £m	Sub-total Fair value £m		
At 30 June 2016						
Recurring fair value measurements						
Investment Property	—	—	11,106	11,106	—	11,106
Loans	—	1,000	19,781	20,781	3,524	24,305
Financial investments measured at fair value						
Fixed maturity securities	94,715	63,214	15,869	173,798	—	173,798
Equity securities	62,341	—	990	63,331	—	63,331
Other investments (including derivatives)	39,265	8,043	4,023	51,331	—	51,331
Financial assets of operations classified as held for sale	9,462	445	852	10,759	64	10,823
Total	205,783	72,702	52,621	331,106	3,588	334,694
Financial liabilities measured at fair value						
Non-participating investment contracts ¹	101,612	300	3,331	105,243	—	105,243
Net asset value attributable to unit holders	13,022	—	23	13,045	—	13,045
Borrowings	—	809	497	1,306	8,375	9,681
Derivative liabilities ²	274	5,722	2,131	8,127	—	8,127
Financial liabilities of operations classified as held for sale	705	4	—	709	—	709
Total	115,613	6,835	5,982	128,430	8,375	136,805

¹ In addition to the balances in this table, included within reinsurance assets in the statement of condensed consolidated financial position and note B11 are £15,859 million of non-participating investment contracts, which are legally reinsurance but do not meet the definition of a reinsurance contract under IFRS. These assets are financial instruments measured at fair value through profit and loss and are classified as Level 1 assets.

² Derivative liabilities are included within payables and other financial liabilities on the condensed consolidated statement of financial position.

	Fair value hierarchy			Total fair value £m
	Level 1 £m	Level 2 £m	Level 3 £m	
At 30 June 2016				
Non-recurring fair value measurement¹				
Properties occupied by group companies	—	—	347	347
Total	—	—	347	347

¹ Non-recurring fair value measurements of assets or liabilities are those fair value measurements that other IFRSs permit or require in particular circumstances.

B17 – Fair value continued

	Fair value hierarchy					Total carrying value £m
	Level 1 £m	Level 2 £m	Level 3 £m	Sub-total Fair value £m	Amortised cost £m	
At 30 June 2015						
Recurring fair value measurements						
Investment Property	—	—	11,567	11,567	—	11,567
Loans	—	988	19,775	20,763	3,358	24,121
Financial investments measured at fair value						
Fixed maturity securities	86,371	62,617	13,158	162,146	—	162,146
Equity securities	63,991	—	1,066	65,057	—	65,057
Other investments (including derivatives)	36,859	5,945	4,804	47,608	—	47,608
Total	187,221	69,550	50,370	307,141	3,358	310,499
Financial liabilities measured at fair value						
Non-participating investment contracts (restated) ^{1,2}	100,969	473	1,910	103,352	—	103,352
Net asset value attributable to unit holders	10,682	—	46	10,728	—	10,728
Borrowings	—	850	452	1,302	8,288	9,590
Derivative liabilities ³	210	2,441	781	3,432	—	3,432
Total	111,861	3,764	3,189	118,814	8,288	127,102

1 Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. See note B2 for further details.

2 In addition to the balances in this table, included within reinsurance assets in the statement of condensed consolidated financial position and note B11 are £13,773 million of non-participating investment contracts, which are legally reinsurance but do not meet the definition of a reinsurance contract under IFRS. These assets are financial instruments measured at fair value through profit and loss and are classified as Level 1 assets.

3 Derivative liabilities are included within payables and other financial liabilities on the condensed consolidated statement of financial position.

	Fair value hierarchy			Total fair value £m
At 30 June 2015	Level 1 £m	Level 2 £m	Level 3 £m	
Non-recurring fair value measurement¹				
Properties occupied by group companies	—	—	332	332
Total	—	—	332	332

1 Non-recurring fair value measurements of assets or liabilities are those fair value measurements that other IFRSs permit or require in particular circumstances.

	Fair value hierarchy					
At 31 December 2015	Level 1 £m	Level 2 £m	Level 3 £m	Sub-total Fair value £m	Amortised cost £m	Total carrying value £m
Recurring fair value measurements						
Investment Property	—	—	11,301	11,301	—	11,301
Loans	—	950	18,129	19,079	3,354	22,433
Financial investments measured at fair value						
Fixed maturity securities	89,158	59,203	14,603	162,964	—	162,964
Equity securities	62,622	—	936	63,558	—	63,558
Other investments (including derivatives)	39,485	4,057	4,153	47,695	—	47,695
Total	191,265	64,210	49,122	304,597	3,354	307,951
Financial liabilities measured at fair value						
Non-participating investment contracts (restated) ^{1,2}	99,368	245	3,421	103,034	—	103,034
Net asset value attributable to unit holders	11,393	—	22	11,415	—	11,415
Borrowings	—	781	527	1,308	7,462	8,770
Derivative liabilities ³	304	2,484	1,093	3,881	—	3,881
Total	111,065	3,510	5,063	119,638	7,462	127,100

1 Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. See note B2 for further details.

2 In addition to the balances in this table, included within reinsurance assets in the statement of condensed consolidated financial position and note B11 are £13,967 million of non-participating investment contracts, which are legally reinsurance but do not meet the definition of a reinsurance contract under IFRS. These assets are financial instruments measured at fair value through profit and loss and are classified as Level 1 assets.

3 Derivative liabilities are included within payables and other financial liabilities on the condensed consolidated statement of financial position.

	Fair value hierarchy			Total fair value £m
	Level 1 £m	Level 2 £m	Level 3 £m	
At 31 December 2015				
Non-recurring fair value measurement¹				
Properties occupied by group companies	—	—	337	337
Total	—	—	337	337

1 Non-recurring fair value measurements of assets or liabilities are those fair value measurements that other IFRSs permit or require in particular circumstances.

B17 – Fair value continued**(e) Transfers between Levels of the fair value hierarchy**

For financial instruments that are recognised at fair value on a recurring basis, the Group determines whether transfers have occurred between levels of the fair value hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of the reporting period.

Transfers between Level 1 and Level 2

During the six month period ended 30 June 2016, transfers of financial assets from Level 1 to Level 2 of £0.5 billion and transfers from Level 2 to Level 1 of £0.7 billion are primarily driven by changes in the level of market activity for certain investments funds.

Transfers to/from Level 3

Transfers out of Level 3 of £1.1 billion relate principally to debt securities held by our business in the UK, which were transferred to Level 2, as observable inputs became available or where the valuation provided by the counterparty and broker quotes are corroborated using valuation models with observable inputs.

Transfers into Level 3 of £1.4 billion includes £1.2 billion of debt securities held in the UK and France which were transferred due to the unavailability of significant observable market data or sufficiently significant differences between the valuation provided by the counterparty and broker quotes and the validation models.

(f) Valuation approach for fair value assets and liabilities classified as Level 2

Please see note B17(a) for a description of typical Level 2 inputs.

Debt securities, in line with market practice, are generally valued using an independent pricing service. These valuations are determined using independent external quotations from multiple sources and are subject to a number of monitoring controls, such as monthly price variances, stale price reviews and variance analysis. Pricing services, where available, are used to obtain the third-party broker quotes. Where pricing service providers are used, a single valuation is obtained and applied. When prices are not available from pricing services, quotes are sourced from brokers.

Over the counter derivatives are valued using broker quotes or models such as the option pricing model, simulation models or a combination of models. The inputs for these models include current market and contractual prices for underlying instruments, period to maturity, correlations, yield curves and volatility of the underlying instruments which are deemed to be observable.

Unit Trusts and other investment funds included under the Other investments category are valued using net assets values which are not subject to a significant adjustment for restrictions on redemption or for a limited trading activity.

(g) Further information on Level 3 assets and liabilities:

The table below shows movement in the Level 3 assets and liabilities measured at fair value:

	Assets						Liabilities			
	Investment Property £m	Loans £m	Debt securities £m	Equity securities £m	Other investments (including derivatives) £m	Financial assets of operations classified as held for sale £m	Non participating investment contracts £m	Net asset value attributable to unitholders £m	Derivative liabilities £m	Borrowings £m
At 30 June 2016										
Opening balance at 1 January 2016	11,301	18,129	14,603	936	4,153	—	(3,421)	(22)	(1,093)	(527)
Total net gains/(losses) recognised in the income statement ¹	38	1,043	517	51	19	(76)	104	(1)	(952)	28
Purchases	99	46	860	66	240	65	(61)	—	(107)	—
Issuances	—	1,004	4	—	—	—	(22)	—	—	—
Disposals	(604)	(272)	(590)	(85)	(421)	(12)	43	—	25	—
Settlements ²	—	(171)	(5)	—	—	—	3	—	—	2
Transfers into Level 3	—	—	1,213	6	22	123	(22)	—	—	—
Transfers out of Level 3	—	—	(1,036)	(1)	(80)	(5)	51	—	—	—
Reclassification to held for sale	(40)	—	(590)	—	(36)	666	—	—	—	—
Foreign exchange rate movements	312	2	893	17	126	91	(6)	—	(4)	—
Balance at 30 June 2016	11,106	19,781	15,869	990	4,023	852	(3,331)	(23)	(2,131)	(497)

¹ Total net gains/(losses) recognised in the income statement includes realised gains/(losses) on disposals.

² Settlements include effective settlements of Group holdings.

B17 – Fair value continued

	Assets						Liabilities			
	Investment Property £m	Loans £m	Debt securities £m	Equity securities £m	Other investments (including derivatives) £m	Financial assets of operations classified as held for sale £m	Non participating investment contracts £m	Net asset value attributable to unitholders £m	Derivative liabilities £m	Borrowings £m
At 30 June 2015										
Opening balance at 1 January 2015	8,925	17,000	11,309	159	3,066	—	—	(19)	(991)	(560)
Total net gains/(losses) recognised in the income statement ¹	330	(476)	15	34	164	—	—	(19)	146	19
Purchases ²	3,103	376	2,723	912	2,074	—	(1,910)	(6)	(35)	—
Issuances	—	828	19	—	—	—	—	(2)	—	—
Disposals	(593)	(49)	(405)	(26)	(669)	—	—	—	97	1
Settlements ³	—	(772)	(88)	—	—	—	—	—	—	88
Transfers into Level 3	—	2,868	927	1	312	—	—	—	—	—
Transfers out of Level 3	—	—	(670)	(2)	(42)	—	—	—	—	—
Foreign exchange movements	(198)	—	(672)	(12)	(101)	—	—	—	2	—
Balance at 30 June 2015	11,567	19,775	13,158	1,066	4,804	—	(1,910)	(46)	(781)	(452)

¹ Total net (losses)/gains recognised in the income statement includes realised gains/(losses) on disposals.

² Purchases include Friends Life's Level 3 assets and liabilities at the date of acquisition.

³ Settlements include effective settlements of Group holdings.

	Assets						Liabilities			
	Investment Property £m	Loans £m	Debt securities £m	Equity securities £m	Other investments (including derivatives) £m	Financial assets of operations classified as held for sale £m	Non participating investment contracts £m	Net asset value attributable to unitholders £m	Derivative liabilities £m	Borrowings £m
At 31 December 2015										
Opening balance at 1 January 2015	8,925	17,000	11,309	159	3,066	—	—	(19)	(991)	(560)
Total net gains/(losses) recognised in the income statement ¹	898	(467)	172	29	236	—	42	4	26	(60)
Purchases ²	3,627	—	4,909	993	2,227	—	(3,644)	(5)	(145)	—
Issuances	—	2,464	—	—	—	—	(79)	(2)	—	—
Disposals	(2,042)	(2,275)	(1,916)	(242)	(1,373)	—	253	—	16	1
Settlements ³	—	(1,461)	(161)	—	—	—	69	—	—	92
Transfers into Level 3	—	2,868	1,302	6	75	—	(62)	—	—	—
Transfers out of Level 3	—	—	(624)	(2)	(22)	—	13	—	—	—
Foreign exchange rate movements	(107)	—	(388)	(7)	(56)	—	(13)	—	1	—
Balance at 31 December 2015	11,301	18,129	14,603	936	4,153	—	(3,421)	(22)	(1,093)	(527)

¹ Total net gains/(losses) recognised in the income statement includes realised gains/(losses) on disposals.

² Purchases include Friends Life's Level 3 assets and liabilities at the date of acquisition.

³ Settlements include effective settlements of Group holdings.

Total net gains recognised in the income statement in the first half of 2016 in respect of Level 3 assets measured at fair value amounted to £1,592 million (*HY15: net gains of £67 million*) with net losses in respect of liabilities of £821 million (*HY15: net gains of £146 million*). Included in this balance are £1,560 million of net gains (*HY15: net losses of £6 million*) attributable to those assets and £841 million net losses (*HY15: net gains of £142 million*) attributable to those liabilities still held at the end of the period.

The principal assets classified as Level 3, and the valuation techniques applied to them, are described below.

(i) Investment property

- Investment property amounting to £11.1 billion (*FY15: £11.3 billion*) is valued in the UK at least annually by external chartered surveyors in accordance with guidance issued by The Royal Institution of Chartered Surveyors, and using estimates during the intervening period. Outside the UK, valuations are produced by external qualified professional appraisers in the countries concerned. Investment properties are valued on an income approach that is based on current rental income plus anticipated uplifts at the next rent review, lease expiry, or break option taking into consideration lease incentives and assuming no further growth in the estimated rental value of the property. The uplift and discount rates are derived from rates implied by recent market transactions on similar properties. These inputs are deemed unobservable.

(ii) Loans

- Commercial mortgage loans, Primary Healthcare, Infrastructure and Private Finance Initiative (PFI) loans held by our UK Life business amounting to £11.9 billion (*FY15: £10.8 billion*), were valued using a Portfolio Credit Risk Model (PCRM). This model calculates a Credit Risk Adjusted Value (CRAV) for each loan. The risk-adjusted cash flows are discounted using a yield curve, taking into account the term dependent gilt yield curve, and global assumptions for the liquidity premium. Loans valued using this model have been classified as Level 3 as the liquidity premium is deemed to be non-market observable. The liquidity premium used in the discount rate ranges between 100 bps to 260 bps. Furthermore, assumptions regarding property growth and rental income forecasts have been revised in light of the UK referendum vote for the UK to leave the European Union, with short term reductions of c.12% for property growth and c.6% for rental income.

B17 – Fair value continued

- Equity release and securitised mortgage loans held by our UK Life business amounting to £7.3 billion (*FY15: £6.7 billion*) comprise:
 - £4.7 billion (*FY15: £4.3 billion*) of equity release mortgages held by our UK Life annuity business valued using an internal model. Inputs to the model include property growth rates, mortality and morbidity assumptions, cost of capital and liquidity premium which are not deemed to be market observable. Whilst the long-term property growth assumption is approximately 4% per annum, the valuation at 30 June 2016 reflects an immediate c.10% decrease in property value in light of the UK referendum vote for the UK to leave the European Union.
 - £2.6 billion (*FY15: £2.4 billion*) of securitised and equity release mortgages are valued using a discounted cash flow model. The inputs include liquidity risk and property risk premium which are deemed unobservable. The liquidity premium used ranges between 183 bps to 214 bps.
- Collateralised non-recourse loans of £0.6 billion (*FY15: £0.6 billion*) have been valued using internally developed models incorporating a significant number of modelling assumptions including the probability of counterparty default and the expected loss in the event of counterparty default. These inputs are deemed unobservable.

(iii) Debt securities

- Privately placed notes held by our UK Life business of £4.0 billion (*FY15: £3.3 billion*) have been valued using broker quotes or a discounted cash flow model using discount factors based on swap curves of similar maturity, plus internally derived spreads for credit risk. As these spreads have been deemed to be unobservable these notes have been classified as Level 3.
- Structured bond-type and non-standard debt products held by our business in France amounting to £6.5 billion (*FY15: £5.8 billion*) and bonds held by our UK business of £2.5 billion (*FY15: £2.2 billion*) have no active market. These debt securities are valued either using counterparty or broker quotes and validated against internal or third-party models. These bonds have been classified as Level 3 because either (i) the third-party models included a significant unobservable liquidity adjustment, or (ii) differences between the valuation provided by the counterparty and broker quotes and the validation model were sufficiently significant to result in a Level 3 classification.
- Collateralised loan obligations of £0.4 billion (*FY15: £0.4 billion*) have been valued using internally developed discounted cash flow models incorporating a significant number of modelling assumptions and unobservable market data including assumptions regarding correlation among the underlying loans, a probability of default and liquidity premium.
- Corporate debt securities held by our French business of £1.4 billion (*FY15: £1.5 billion*) and debt securities of £0.9 billion held by our UK and Asia businesses (*FY15: £0.9 billion*) which are not traded in an active market have been valued using third party or counterparty valuations. These prices are considered to be unobservable due to infrequent market transactions.

(iv) Equity securities

- Equity securities which primarily comprise private equity holdings of £0.8 billion (*FY15: £0.8 billion*) held in the UK are valued by a number of third party specialists. These are valued using a range of techniques, including earnings multiples, forecast cash flows and price/earnings ratios which are deemed to be unobservable.

(v) Other investments

- The following Other investments are valued based on external valuation reports received from fund managers:
 - Private equity investment funds amounting to £1.4 billion (*FY15: £1.4 billion*);
 - Other investment funds including property funds amounting to £0.9 billion (*FY15: £1.0 billion*);
 - External hedge funds held principally by businesses in the UK and France amounting to £0.4 billion (*FY15: £0.5 billion*); and
 - Discretionary managed funds held in Asia amount to £1.3 billion (*FY15: £1.2 billion*).

Where these valuations are at a date other than balance sheet date, as in the case of some private equity funds, we make adjustments for items such as subsequent draw-downs and distributions and the fund manager's carried interest.

Remaining Level 3 investments amount to £0.9 billion (*FY15: £0.7 billion*) within debt securities, equity securities and other investments mainly held by Antarius, which has been classified as held for sale (see Note B4 for further details). These investments are mainly structured bond-type and non-standard debt products in France, valued using the techniques described above.

Where possible, the Group tests the sensitivity of the fair values of Level 3 investments to changes in unobservable inputs to reasonable alternatives. Valuations for Level 3 investments are sourced from independent third parties when available and, where appropriate, validated against internally-modelled valuations, third-party models or broker quotes. Where third-party pricing sources are unwilling to provide a sensitivity analysis for their valuations, the Group undertakes, where feasible, sensitivity analysis on the following basis:

- For third-party valuations validated against internally-modelled valuations using significant unobservable inputs, the sensitivity of the internally modelled valuation to changes in unobservable inputs to a reasonable alternative is determined.
- For third-party valuations either not validated or validated against a third-party model or broker quote, the third-party valuation in its entirety is considered an unobservable input. Sensitivities are determined by flexing inputs of internal models to a reasonable alternative, including the yield, NAV multiple or other suitable valuation multiples of the financial instrument implied by the third-party valuation. For example, for a fixed income security the implied yield would be the rate of return which discounts the security's contractual cash flows to equal the third-party valuation.

On the basis of the methodology outlined above, the Group is able to perform sensitivity analysis for £52.3 billion of the Group's Level 3 assets. For these Level 3 assets, changing unobservable valuation inputs to a reasonable alternative would result in a change in fair value by +£1.7 billion / –£1.9 billion. Of the £0.3 billion Level 3 assets for which sensitivity analysis is not provided, it is estimated that a 10% change in valuation assumptions downwards of these assets would result in a change in fair value of approximately £30 million.

B17 – Fair value continued

(vi) Liabilities

The principal liabilities classified as Level 3, and the valuation techniques applied to them, are:

- £3.3 billion (FY15: £3.4 billion) of non-participating investment contract liabilities are classified as Level 3, either because the underlying unit funds are classified as Level 3 assets or because the liability relates to unfunded units or other non-unit adjustments which are based on a discounted cash flow analysis using unobservable market data and assumptions.
- Derivative liabilities of £2.1 billion (FY15: £0.9 billion) comprising over the counter derivatives such as credit default swaps and inflation swaps. These swaps are valued using either discounted cash flow models or other valuation models. Cash flows within these models may be adjusted based on assumptions reflecting the underlying credit risk and liquidity risk, these assumptions are deemed to be non-market observable.
- £0.5 billion (FY15: £0.5 billion) of securitised mortgage loan notes, presented within Borrowings, are valued using a similar technique to the related Level 3 securitised mortgage assets.
- Remaining Level 3 liabilities amount to £0.1 billion (FY15: £0.3 billion) and relate to a range of liabilities held by a number of businesses throughout the Group.

Where possible, the Group tests the sensitivity of the fair values of Level 3 liabilities to changes in unobservable inputs to reasonable alternatives. Sensitivities are determined by flexing inputs of internal models to a reasonable alternative, including the yield, NAV multiple or other suitable valuation multiples of the financial instrument implied by the third-party valuation.

On the basis of the methodology outlined above, the Group is able to perform sensitivity analysis for £5.8 billion of the Group's Level 3 liabilities. For these Level 3 liabilities, changing unobservable valuation inputs to a reasonable alternative would result in a change in fair value by approximately \pm £0.5 billion. Of the £0.2 billion Level 3 liabilities for which sensitivity analysis is not provided, it is estimated that a 10% change in valuation assumptions downwards of these assets would result in a change in fair value of approximately £20 million.

B18 – Risk management

As a global insurance group, risk management is at the heart of what we do and is the source of value creation as well as a vital form of control. It is an integral part of managing and maintaining financial strength and stability for our customers, shareholders and other stakeholders.

Our sustainability and financial strength are underpinned by an effective risk management process which helps us identify major risks to which we may be exposed, establish appropriate controls and take mitigating actions for the benefit of our customers and investors. The Group's risk strategy is to invest its available capital to optimise the balance between return and risk while maintaining an appropriate level of economic (i.e. risk-based) capital and regulatory capital. Consequently, our risk management goals are to:

- Embed rigorous risk management throughout the business, based on setting clear risk appetites and staying within these;
- Allocate capital where it will make the highest returns on a risk-adjusted basis; and
- Meet the expectations of our customers, investors and regulators that we will maintain sufficient capital surpluses to meet our liabilities even if a number of extreme risks materialise.

Aviva's risk management framework has been designed and implemented to support these objectives. The key elements of our risk management framework comprise our risk appetite; risk governance, including risk policies and business standards, risk oversight committees and roles and responsibilities; and the processes we use to identify, measure, manage, monitor and report risks, including the use of our risk models and stress and scenario testing.

Risk environment

The first half of 2016 began with concerns over an economic slowdown in China and its impact on the global economy, which have since partially abated, and culminated in the UK referendum vote for the UK to leave the European Union (EU). The outcome of the UK referendum resulted in sterling falling to a 31 year low against the US dollar and a reduction in yields on Eurozone and UK government treasuries to all time lows. In addition, expected falls in UK property prices following the referendum result have led to higher levels of redemptions in property funds and a need to close funds to redemptions or suspend dealing. This includes two Aviva Investors managed commercial property funds. Global equity markets had their worst start to the year on record, but have since recovered, while similarly there has been a pick-up in commodity prices since the beginning of the year, albeit still well below their historical highs. Supported by accommodative monetary policy, economic growth up to June in the Eurozone, UK and US remained relatively robust, albeit below the long term average prior to the 2008 financial crisis, while price inflation has remained around zero.

Looking forward, uncertainty over the future trading arrangement the UK will be able to negotiate with the European Union is likely to weigh negatively on UK macroeconomic growth and sterling, with an uplift to UK price inflation and potential contagion impact on growth in the rest of Europe. In response, the Bank of England is expected to further loosen monetary policy, resulting in continued exceptionally low long-term UK gilt yields and providing some support for bond, equity and other asset prices. Economic and regulatory risks are likely to remain elevated for a significant period following the UK's vote to leave the EU. In particular risks arise from the prospect of UK firms being subject to EU rules with limited ability to influence their development, while changes in legislation may impact Aviva's operations. Other possible shocks to global growth in the second half of 2016 include the outcome of the US Presidential election, a Eurozone banking crisis triggered by the Italian banking sector or a further slow down in growth in China.

In the UK, the introduction in the March 2016 Budget of Lifetime Investment Savings Accounts (LISA) together with further erosion in pension contribution tax relief may be a precursor to more significant changes to UK public policy on pensions and long-term savings, which will impact the demand for our products and the types of products we offer our customers. In April 2016 the Financial Conduct Authority began a consultation on the creation of a secondary annuity market, enabling annuitants to sell their annuity income to a third party for a cash lump sum, and in May 2016 began a consultation on capping early exit pension charges. In July 2016, the Polish government announced the part nationalisation of the country's remaining private pension funds, with residual funds being transferred to private retirement accounts.

On 1 January 2016, Solvency II the new capital regime for European insurers came into effect. The Group is in the process of applying for regulator approval to extend use of its partial internal model to calculate the capital requirements to the parts of the UK business, which were formerly part of the Friends Life Group. Once UK withdrawal from the European Union is complete, the timing of which is uncertain, there may be some subsequent divergence between the capital regime for UK insurers and that of the European Union.

The International Association of Insurance Supervisors (IAIS) continues to develop the higher loss absorbency capital requirements, which will apply from January 2019, should the Group remain a Global Systemically Important Insurer (G-SII) and a global Insurance Capital Standard. The International Accounting Standards Board (IASB) aims to issue a final standard for the accounting of insurance contracts around the end of 2016 with the implementation date to be determined.

Risk profile

We continue to manage our risk profile to reflect Aviva's objective of maintaining financial strength and reducing capital volatility. The Group's capital position has remained relatively resilient to credit and equity stresses partly due to additional hedging actions taken in 2015 which were extended and expanded in the first quarter of 2016, partly in anticipation of financial market uncertainty created by the UK referendum on EU membership. In the first half of 2016 the Group significantly increased the amount of business ceded to its primary on-shore internal reinsurance mixer vehicle, Aviva International Insurance Limited (AII), with the objective of promoting greater capital efficiency and realising the benefits of group diversification of risk through lower solo capital requirements in the ceding entities.

Going forward, the Group's focus will be on increasing cash flow and capital generation, while maintaining a strong balance sheet with limited volatility and external leverage at a level commensurate with a AA financial strength rating.

B18 – Risk management continued

Material risks and uncertainties

In accordance with the requirements of the FCA Handbook (DTR 4.2.7) we provide an update here on the material risks and uncertainties facing the Group. The types of risks to which the Group is exposed have not changed significantly over the half-year to 30 June 2016 and remain credit, market, life insurance, general insurance (including health insurance), liquidity, asset management, operational and reputational risks. These risks are described below. Further detail on these risks is given within note 57 of the Aviva plc Annual Report and Accounts 2015.

(a) Credit risk

Aviva has a strong record of managing credit risk and we see credit as an area where we can make a good return for the benefit of both our policyholders and shareholders. During the first half of 2016 limits to our sovereign and corporate debt exposure to Greece, Italy, Portugal and Spain, which have benefitted from an increase in market values and depreciation of sterling against the euro, remained in place. We have in place a comprehensive group-wide reporting system that consolidates credit exposures across geographies, business lines and exposure types. We have a robust framework of limits and controls to diversify the portfolio and enable the early identification of potential issues. Refer to section D.3.3.5 of this report for details of our sovereign exposures to Greece, Ireland, Portugal, Spain and Italy.

During the first half of 2016 the credit rating profile of our debt securities portfolio has remained strong, and the average rating has risen slightly in line with the general market's rating agency upgrades. At 30 June 2016, the proportion of our shareholder debt securities that are investment grade has increased slightly to 93.2% (31 December 2015: 92.9%). Of the remaining 6.8% of shareholder debt securities that do not have an external rating of BBB or higher 84% are not rated by the major rating agencies. However, most of these are allocated an internal rating using a methodology largely consistent with that adopted by an external rating agency, and are considered to be of investment grade credit quality.

Revised expectations of future property prices and rental income in light of the UK referendum vote for the UK to leave the European Union have adversely impacted the valuation of the Group's UK mortgage portfolio by c.£250 million.

The Group continues to hold a series of macro credit hedges to reduce the overall credit risk exposure.

(b) Market risk

We continue to limit our direct equity exposure. A rolling central equity hedging strategy remains in place to help control the Group's overall direct and indirect exposure to equities. At 30 June 2016 the Group continues to hold a series of macro equity hedges to reduce the overall shareholder equity risk exposure.

We have a limited appetite for interest rate risk as we do not believe it is currently adequately rewarded. Our conservative and disciplined approach to asset and liability management and pricing limit our exposure to interest rate and guarantee risk. Asset and liability durations across the Group are generally well matched and actions have been taken to manage guarantee risk in the current low interest rate environment. In particular, a key objective is to match the duration and expected cash flows of our annuity liabilities with assets of the same duration and cash flow. These assets include corporate bonds, residential mortgages and commercial mortgages. Should they default before maturity, it is assumed that the Group can reinvest in assets of a similar risk and return profile, which is subject to market conditions. Interest rate hedges are used to manage asymmetric interest rate exposures in some of our life insurance businesses as well as an efficient way to manage cash flow and duration matching (the most material examples relate to guaranteed annuity exposures in both UK and Ireland). These hedges are used to protect against interest rate falls and are sufficient in scale to materially reduce the Group's interest rate exposure.

At a Group level we actively seek to manage currency risk primarily by matching assets and liabilities in functional currencies at the business unit level. Foreign currency dividends from subsidiaries are hedged using foreign exchange forwards to provide certainty regarding the sterling value to be received by the Group. Hedges have also been used to protect the Group's capital against a significant depreciation in local currency versus sterling. At 30 June 2016 the Group had in place Canadian dollar hedges with notional values of £0.45 billion.

(c) Liquidity risk

Liquidity risk is the risk of not being able to make payments as they become due because there are insufficient assets in cash form or that can easily be turned into cash.

The relatively illiquid nature of insurance liabilities is a potential source of additional investment return by allowing us to invest in higher yielding, but less liquid assets such as commercial mortgages. The Group seeks to ensure that it maintains sufficient liquid financial resources to meet its obligations as they fall due through the application of a Group liquidity risk policy and business standard. At Group and business unit level, there is a liquidity risk appetite which requires that sufficient liquid resources be maintained to cover net outflows in a stress scenario. The Group centre's main sources of liquidity are liquid assets held within Aviva plc, Aviva Group Holdings Limited (AGH) and Friends Life Holdings plc, and dividends received from the Group's insurance and asset management businesses. Sources of liquidity in normal markets also include a variety of short and long-term instruments including commercial papers and medium and long-term debt. In addition to the existing liquid resources and expected inflows, the Group and Company maintain significant undrawn committed borrowing facilities (30 June 2016: £1.65 billion) from a range of leading international banks to further mitigate this risk.

B18 – Risk management continued

(d) Life insurance risk

The profile of our life insurance risks, primarily longevity, persistency, mortality and expense risk, has remained stable in the first half of 2016. The continuing reduction in individual annuity new business volumes, since the end to compulsory annuitisation in April 2015, compounded by record low annuity rates resulting from exceptionally low long term interest rates, will reduce our longevity risk exposure over the longer term to the extent not offset by increased bulk purchase annuity volumes. However, despite this, longevity risk remains the Group's most significant life insurance risk due to the Group's existing annuity portfolio and is amplified by the current low level of interest rates. Persistency risk remains significant and continues to have a volatile outlook, with underlying performance linked to economic conditions. Businesses across the Group mitigate this risk through a range of customer retention activities. The Group has continued to write substantial volumes of life protection business, and to utilise reinsurance to reduce exposure to potential mortality losses. All life insurance risks benefit from significant diversification against other risks in the portfolio, limiting the impact on the Group's aggregate risk profile.

Provisions made for insurance liabilities are inherently uncertain. Due to this uncertainty, life insurance reserves are regularly reviewed by qualified and experienced actuaries at the business unit and Group level in accordance with the Group's reserving framework. This and other risks are subject to an overarching risk management framework and various mechanisms to govern and control our risks and exposures.

(e) General insurance and health insurance risk

The Group writes a balanced portfolio of general insurance risk (including personal motor; household; commercial motor; property and liability) across a geographically diversified spread of markets including UK; Ireland; Canada; France; Italy; Singapore and Poland. This risk is taken on, in line with our underwriting and pricing expertise, to provide an appropriate level of return for an acceptable level of risk. Underwriting discipline and a robust governance process is at the core of the Group's underwriting strategy.

The Group's health insurance business (including private health insurance, critical illness cover, income protection and personal accident insurance, as well as a range of corporate healthcare products) exposes the Group to morbidity risk (the proportion of our customers falling sick) and medical expense inflation.

Provisions made for insurance liabilities are inherently uncertain. Due to this uncertainty, general and health insurance reserves are regularly reviewed by qualified and experienced actuaries at the business unit and Group level in accordance with the Group's reserving framework. These and other key risks, including the occurrence of unexpected claims from a single source or cause and inadequate reinsurance protection/risk transfer, are subject to an overarching risk management framework and various mechanisms to govern and control our risks and exposures.

During the first half of 2016, Aviva's general insurance and health insurance risk profile has remained stable. As with life insurance risks, general and health insurance risks also benefit from the significant diversification that arises from being part of a large and diverse portfolio, limiting the impact on the Group's aggregate risk profile.

Aviva successfully completed the renewal of its group-wide catastrophe protection on 1 April 2016, maintaining the level of reinsurance it purchases which includes both event and aggregate catastrophe protection on a group-wide basis. Processes are in place to manage catastrophe risk in individual business units and at a group level.

(f) Asset management risk

Asset management risk is the failure to provide expected investment outcomes for clients resulting in reduced new business and loss of sustainable earnings. The risk arises through loss of client business due to poor investment performance or fund liquidity, product competitiveness, talent retention and capability.

Aviva is directly exposed to the risks associated with operating an asset management business through its ownership of Aviva Investors. The underlying risk profile of our asset management risk is managed via investment performance reviews, recruitment and retention of specialist investment professionals and leadership, product development capabilities, fund liquidity management, competitive margins, client retention strategies, and proactive responses to regulatory developments. Funds invested in illiquid assets such as real estate and infrastructure projects are particularly exposed to liquidity risk. Following the UK referendum result on EU membership one Aviva Investors commercial property funds deferred redemption requests and another suspended dealing to safeguard the interests of investors in these funds. These key risks are monitored on an on-going basis with issues escalated to the Aviva Investors Risk Management Committee and ultimately to the Aviva Investors Holdings Limited Board Risk Committee.

(g) Operational risk

The Group continues to operate, validate and enhance its key operational controls and purchase insurance to minimise losses arising from inadequate or ineffective internal processes, people and systems or from external events. The Group maintains constructive relationships with its regulators around the world and developments in relation to key regulatory changes, such as requirements for Global Systemically Important Insurers (G-SII), are monitored closely. We continue to monitor the development of IFRS 4 Phase 2.

(h) Brand and reputation risk

Our success and results are, to a certain extent, dependent on the strength of our brands, the brands of our partners and our reputation with customers, agents, regulators, rating agencies, investors and analysts. While we are well recognised, we are vulnerable to adverse market and customer perception. Any of our brands or our reputation could also be affected if products or services recommended by us or any of our intermediaries do not perform as expected whether or not the expectations are founded, or the customer's expectations for the product have changed. We monitor this risk and have controls in place to limit our exposure.

B18 – Risk management continued

(i) Risk and capital management

(i) Sensitivity test analysis

The Group uses a number of sensitivity tests to understand the volatility of earnings, the volatility of its capital requirements, and to manage its capital more efficiently. Sensitivities to economic and operating experience are regularly produced on the Group's key financial performance metrics to inform the Group's decision making and planning processes, and as part of the framework for identifying and quantifying the risks to which each of its business units, and the Group as a whole are exposed.

(ii) Life insurance and investment contracts

The nature of long-term business is such that a number of assumptions are made in compiling these financial statements. Assumptions are made about investment returns, expenses, mortality rates, and persistency in connection with the in-force policies for each business unit. Assumptions are best estimates based on historic and expected experience of the business. A number of the key assumptions for the Group's central scenario are disclosed elsewhere in these statements.

(iii) General insurance and health business

General insurance and health claim liabilities are estimated by using standard actuarial claims projection techniques. These methods extrapolate the claims development for each accident year based on the observed development of earlier years. In most cases, no explicit assumptions are made as projections are based on assumptions implicit in the historic claims.

(iv) Sensitivity test results

Illustrative results of sensitivity testing for long-term business, general insurance and health business and the fund management and non-insurance business are set out below. For each sensitivity test the impact of a reasonably possible change in a single factor is shown, with other assumptions left unchanged.

Sensitivity factor	Description of sensitivity factor applied
Interest rate and investment return	The impact of a change in market interest rates by a 1% increase or decrease. The test allows consistently for similar changes to investment returns and movements in the market value of backing fixed interest securities.
Credit Spreads	The impact of a 0.5% increase in credit spreads over risk-free interest rates on corporate bonds and other non-sovereign credit assets. The test allows for any consequential impact on liability valuations.
Equity/property market values	The impact of a change in equity/property market values by $\pm 10\%$.
Expenses	The impact of an increase in maintenance expenses by 10%.
Assurance mortality/morbidity (life insurance only)	The impact of an increase in mortality/morbidity rates for assurance contracts by 5%.
Annuitant mortality (life insurance only)	The impact of a reduction in mortality rates for annuity contracts by 5%.
Gross loss ratios (non-life insurance only)	The impact of an increase in gross loss ratios for general insurance and health business by 5%.

Long-term business

Sensitivities as at 30 June 2016

	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Assurance mortality +5%	Annuitant mortality -5%
30 June 2016 Impact on profit before tax £m								
Insurance participating	40	(90)	(40)	(160)	80	(25)	(10)	(60)
Insurance non-participating	(130)	80	(555)	30	(30)	(165)	(80)	(760)
Investment participating	—	—	—	—	—	(5)	—	—
Investment non-participating	(15)	15	(5)	10	(30)	(10)	—	—
Assets backing life shareholders' funds	(130)	85	(90)	(85)	85	—	—	—
Total	(235)	90	(690)	(205)	105	(205)	(90)	(820)

	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Assurance mortality +5%	Annuitant mortality -5%
30 June 2016 Impact on shareholders' equity before tax £m								
Insurance participating	40	(90)	(40)	(160)	80	(25)	(10)	(60)
Insurance non-participating	(130)	80	(555)	30	(30)	(165)	(80)	(760)
Investment participating	—	—	—	—	—	(5)	—	—
Investment non-participating	(15)	15	(5)	10	(30)	(10)	—	—
Assets backing life shareholders' funds	(170)	125	(95)	(85)	85	—	—	—
Total	(275)	130	(695)	(205)	105	(205)	(90)	(820)

B18 – Risk management continued**Sensitivities as at 31 December 2015**

	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Assurance mortality +5%	Annuitant mortality -5%
31 December 2015 Impact on profit before tax £m								
Insurance Participating	30	(65)	(30)	(135)	130	(25)	(10)	(50)
Insurance non-participating	(75)	80	(495)	25	(25)	(155)	(115)	(725)
Investment participating	5	(5)	—	—	—	(5)	—	—
Investment non-participating	(20)	20	(5)	35	(35)	(20)	—	—
Assets backing life shareholders' funds	(140)	85	(65)	40	(40)	—	—	—
Total	(200)	115	(595)	(35)	30	(205)	(125)	(775)

	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Assurance mortality +5%	Annuitant mortality -5%
31 December 2015 Impact on shareholders' equity before tax £m								
Insurance Participating	30	(65)	(30)	(135)	130	(25)	(10)	(50)
Insurance non-participating	(75)	80	(495)	25	(25)	(155)	(115)	(725)
Investment participating	5	(5)	—	—	—	(5)	—	—
Investment non-participating	(20)	20	(5)	35	(35)	(20)	—	—
Assets backing life shareholders' funds	(175)	120	(70)	40	(40)	—	—	—
Total	(235)	150	(600)	(35)	30	(205)	(125)	(775)

Changes in sensitivities between HY16 and FY15 reflect underlying movements in market interest rates, portfolio growth, changes to asset mix and the relative durations of assets and liabilities and asset liability management actions. The sensitivities to economic movements relate mainly to business in the UK. In general, a fall in market interest rates has a beneficial impact on non-participating business, due to the increase in market value of fixed interest securities and the relative durations of assets and liabilities; similarly a rise in interest rates has a negative impact. Mortality and expense sensitivities also relate primarily to the UK.

General insurance and health business sensitivities as at 30 June 2016

	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Gross loss ratios +5%
30 June 2016 Impact on profit before tax £m							
Gross of reinsurance	(280)	245	(140)	80	(80)	(70)	(160)
Net of reinsurance	(340)	300	(140)	80	(80)	(70)	(140)

	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Gross loss ratios +5%
30 June 2016 Impact on shareholders' equity before tax £m							
Gross of reinsurance	(280)	245	(140)	85	(85)	(20)	(160)
Net of reinsurance	(340)	300	(140)	85	(85)	(20)	(140)

Sensitivities as at 31 December 2015

	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Gross loss ratios +5%
31 December 2015 Impact on profit before tax £m							
Gross of reinsurance	(225)	210	(130)	65	(65)	(100)	(270)
Net of reinsurance	(305)	300	(130)	65	(65)	(100)	(260)

	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Gross loss ratios +5%
31 December 2015 Impact on shareholders' equity before tax £m							
Gross of reinsurance	(225)	210	(130)	70	(70)	(20)	(270)
Net of reinsurance	(305)	300	(130)	70	(70)	(20)	(260)

For general insurance, the impact of the expense sensitivity on profit also includes the increase in ongoing administration expenses, in addition to the increase in the claims handling expense provision.

B18 – Risk management continued

Fund management and non-insurance business sensitivities as at 30 June 2016

	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%
30 June 2016 Impact on profit before tax £m					
Total	—	—	25	(20)	45

	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%
30 June 2016 Impact on shareholders' equity before tax £m					
Total	—	—	25	(20)	45

Sensitivities as at 31 December 2015

	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%
31 December 2015 Impact on profit before tax £m					
Total	—	—	10	(30)	45

	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%
31 December 2015 Impact on shareholders' equity before tax £m					
Total	—	—	10	(30)	45

Limitations of sensitivity analysis

The above tables demonstrate the effect of a change in a key assumption while other assumptions remain unchanged. In reality, there is a correlation between the assumptions and other factors. It should also be noted that these sensitivities are non-linear, and larger or smaller impacts should not be interpolated or extrapolated from these results.

The sensitivity analyses do not take into consideration that the Group's assets and liabilities are actively managed. Additionally, the financial position of the Group may vary at the time that any actual market movement occurs. For example, the Group's financial risk management strategy aims to manage the exposure to market fluctuations.

As investment markets move past various trigger levels, management actions could include selling investments, changing investment portfolio allocation, adjusting bonuses credited to policyholders, and taking other protective action.

A number of the business units use passive assumptions to calculate their long-term business liabilities. Consequently, a change in the underlying assumptions may not have any impact on the liabilities, whereas assets held at market value in the statement of financial position will be affected. In these circumstances, the different measurement bases for liabilities and assets may lead to volatility in shareholder equity. Similarly, for general insurance liabilities, the interest rate sensitivities only affect profit and equity where explicit assumptions are made regarding interest (discount) rates or future inflation.

Other limitations in the above sensitivity analyses include the use of hypothetical market movements to demonstrate potential risk that only represent the Group's view of possible near-term market changes that cannot be predicted with any certainty, and the assumption that all interest rates move in an identical fashion.

B19 – Cash and cash equivalents

Cash and cash equivalents in the statement of cash flows at 30 June/31 December comprised:

	30 June 2016 £m	30 June 2015 £m	31 December 2015 £m
Cash and cash equivalents	34,911	33,186	33,676
Cash and cash equivalents of operations classified as held for sale	683	9	—
Bank overdrafts	(759)	(506)	(506)
Net cash and cash equivalents at 30 June/31 December	34,835	32,689	33,170

B20 – Contingent liabilities and other risk factors

During the period, there have been no material changes in the main areas of uncertainty over the calculation of our liabilities from those described in note 52 of the Group's 2015 Annual report and accounts. An update on material risks is provided in Note B18 Risk management.

B21 – Acquired value of in-force business and intangible assets

Acquired value of in-force business and intangible assets presented in the statement of financial position is comprised of:

	30 June 2016 £m	30 June 2015 £m	31 December 2015 £m
Acquired value of in-force business on insurance contracts	1,870	2,185	2,002
Acquired value of in-force business on investment contracts	2,199	2,533	2,381
Intangible assets	1,394	1,361	1,348
	5,463	6,079	5,731
Less: Amounts classified as held for sale	(13)	—	—
Total	5,450	6,079	5,731

The acquired value of in-force business on insurance and investment contracts has reduced in the period due to an amortisation charge of £317 million (*HY15: £161 million charge, FY15: £496 million charge*), offset by £3 million of positive foreign exchange movements.

There were no impairments of acquired value of in-force business in the period (*HY15: £nil, FY15: £nil*).

Directors' responsibility statement

The directors confirm that these condensed interim financial statements have been prepared in accordance with International Accounting Standard 34, 'Interim Financial Reporting', as adopted by the European Union and as issued by the IASB and that the interim management report includes a fair review of the information required by DTR 4.2.7 and DTR 4.2.8, namely:

- an indication of important events that have occurred during the first six months and their impact on the condensed set of financial statements, and a description of the principal risks and uncertainties for the remaining six months of the financial year; and
- material related-party transactions in the first six months and any material changes in the related-party transactions described in the last annual report.

Information on the current directors responsible for providing this statement can be found on the Company's website at: <http://www.aviva.com/investor-relations/corporate-governance/board-of-directors/>

By order of the Board

Mark Wilson
Group chief executive officer
3 August 2016

Thomas D. Stoddard
Chief financial officer

Independent review report to Aviva plc

Report on the condensed consolidated interim financial statements

Our conclusion

We have reviewed Aviva plc's condensed consolidated interim financial statements (the 'interim financial statements') in the half year report of Aviva plc for the six month period ended 30 June 2016. Based on our review, nothing has come to our attention that causes us to believe that the condensed consolidated interim financial statements are not prepared, in all material respects, in accordance with International Accounting Standard 34, 'Interim Financial Reporting', as adopted by the European Union and as issued by the International Accounting Standards Board, and the Disclosure Rules and Transparency Rules of the United Kingdom's Financial Conduct Authority.

What we have reviewed

The Condensed consolidated interim financial statements, which are prepared by Aviva plc, comprise:

- the Condensed consolidated statement of financial position as at 30 June 2016;
- the Condensed consolidated income statement and statement of comprehensive income for the period then ended;
- the Condensed consolidated statement of cash flows for the period then ended;
- the Condensed consolidated statement of changes in equity for the period then ended; and
- the explanatory Notes to the condensed consolidated interim financial statements.

The condensed consolidated interim financial statements included in the half year report have been prepared in accordance with International Accounting Standard 34, 'Interim Financial Reporting', as adopted by the European Union and the Disclosure Rules and Transparency Rules of the United Kingdom's Financial Conduct Authority.

As disclosed in note B1 to the interim financial statements, the financial reporting framework that has been applied in the preparation of the full annual financial statements of the Group is applicable law and International Financial Reporting Standards (IFRSs) as adopted by the European Union and as issued by the International Accounting Standards Board.

Responsibilities for the condensed consolidated interim financial statements and the review

Our responsibilities and those of the directors

The half year report, including the condensed consolidated interim financial statements, is the responsibility of, and has been approved by, the directors. The directors are responsible for preparing the half year report in accordance with the Disclosure Rules and Transparency Rules of the United Kingdom's Financial Conduct Authority.

Our responsibility is to express to the company a conclusion on the condensed consolidated interim financial statements in the half year report based on our review. This report, including the conclusion, has been prepared for and only for the company for the purpose of complying with the Disclosure Rules and Transparency Rules of the United Kingdom's Financial Conduct Authority and for no other purpose. We do not, in giving this conclusion, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

What a review of condensed consolidated interim financial statements involves

We conducted our review in accordance with International Standard on Review Engagements (UK and Ireland) 2410, 'Review of Interim Financial Information Performed by the Independent Auditor of the Entity' issued by the Auditing Practices Board for use in the United Kingdom. A review of interim financial information consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures.

A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing (UK and Ireland) and, consequently, does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

We have read the other information contained in the half year report and considered whether it contains any apparent misstatements or material inconsistencies with the information in the condensed consolidated interim financial statements.

PricewaterhouseCoopers LLP

Chartered Accountants
3 August 2016
London

Notes:

- The maintenance and integrity of the Aviva plc website is the responsibility of the directors; the work carried out by the auditors does not involve consideration of these matters and, accordingly, the auditors accept no responsibility for any changes that may have occurred to the interim financial statements since they were initially presented on the website.
- Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Capital & liquidity

In this section	Page
Capital & liquidity	
C1 Analysis of return on equity – IFRS basis	84
C2 Group capital structure – IFRS basis	85
C3 Equity sensitivity analysis – IFRS basis	86

C1 – Analysis of return on equity – IFRS basis

	Operating return ¹		Weighted average shareholders' funds including non-controlling interests ² £m	Return on equity ² %
	Before tax £m	After tax £m		
6 months 2016				
United Kingdom & Ireland Life	711	547	11,057	9.9%
United Kingdom & Ireland General Insurance and Health	231	187	3,008	12.4%
Europe	430	296	4,960	11.9%
Canada	88	65	1,059	12.3%
Asia	112	106	1,478	14.3%
Fund management	49	39	414	18.8%
Corporate and Other Business ³	(112)	(91)	4,176	n/a
Return on total capital employed	1,509	1,149	26,152	8.8%
Subordinated debt	(184)	(147)	(6,711)	4.4%
Senior debt	—	—	(650)	—
Return on total equity	1,325	1,002	18,791	10.7%
Less: Non-controlling interests		(67)	(1,210)	11.1%
Direct capital instrument and tier 1 notes ⁴		(21)	(1,123)	5.6%
Preference capital		(9)	(200)	9.0%
Return on equity shareholders' funds		905	16,258	11.0%

1 The operating return is based upon Group operating profit, which is stated before integration and restructuring costs, impairment of goodwill, amortisation of intangibles and AVIF, other items and investment variances.

2 Return on equity is based on an annualised operating return after tax attributable to ordinary shareholders expressed as a percentage of weighted average ordinary shareholders' equity.

3 The 'Corporate' and 'Other Business' loss before tax of £112 million comprises corporate costs of £80 million, interest on internal lending arrangements of £15 million, other business operating loss (net of investment return) of £61 million, partly offset by finance income on the main UK pension scheme of £44 million.

4 The return on equity is based on an annualised operating return after tax reflecting the expected direct capital instrument interest in the second half of the year.

	Operating return ²		Weighted average shareholders' funds including non-controlling interests ² £m	Return on equity ² %
	Before tax £m	After tax £m		
Full Year 2015 - restated ¹				
United Kingdom & Ireland Life	1,455	1,277	9,586	14.4%
United Kingdom & Ireland General Insurance and Health ^{3,4,5}	412	332	3,249	10.2%
Europe	880	590	4,645	12.7%
Canada ⁵	214	157	972	16.2%
Asia	238	224	1,249	22.0%
Fund management	106	97	326	30.1%
Corporate and Other Business ^{4,6}	(254)	(303)	3,417	n/a
Return on total capital employed	3,051	2,374	23,444	10.8%
Subordinated debt	(335)	(267)	(6,240)	4.4%
Senior debt	(28)	(22)	(623)	3.5%
Return on total equity	2,688	2,085	16,581	13.4%
Less: Non-controlling interests		(152)	(1,248)	12.2%
Direct capital instrument and tier 1 notes		(57)	(952)	6.6%
Preference capital		(17)	(200)	8.5%
Return on equity shareholders' funds		1,859	14,181	14.1%

1 Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

2 Return on equity is based on an annualised operating return after tax attributable to ordinary shareholders expressed as a percentage of weighted average ordinary shareholders' equity. The operating return is based upon Group operating profit, which is stated before integration and restructuring costs, impairment of goodwill, amortisation of intangibles and AVIF, other items and investment variances. Following the acquisition of Friends Life, an annualisation factor of 1.33 was used to gross up the Friends Life operating return.

3 The operating return for United Kingdom & Ireland general insurance and health is presented net of £18 million of investment return, which is allocated to Corporate and Other Business. The £18 million represents the return on capital supporting Pillar II ICA risks deemed not to be supporting the ongoing general insurance operation.

4 Return on equity for United Kingdom & Ireland general insurance and health excludes c.£0.9 billion of goodwill which does not support the general insurance and health business for capital purposes and is included in 'Corporate and Other Business'. FY15 comparatives have been restated accordingly and there is no impact on Group return on equity as a result of this restatement.

5 FY15 comparatives have been restated for the impact of an internal loan between Canada and United Kingdom general insurance. There is no impact on Group return on equity as a result.

6 The 'Corporate' and 'Other Business' loss before tax of £254 million comprises corporate costs of £180 million, interest on internal lending arrangements of £92 million, other business operating loss (net of investment return) of £76 million, partly offset by finance income on the main UK pension scheme of £94 million.

C2 – Group capital structure – IFRS basis

The table below shows how our capital is deployed by product and service segments and how that capital is funded.

	30 June 2016 Capital Employed	Restated ¹ 31 December 2015 Capital Employed
Life business		
United Kingdom & Ireland	10,988	11,126
France	2,464	2,151
Poland	238	305
Italy	958	849
Spain	589	506
Other Europe	78	72
Europe	4,327	3,883
Asia	1,554	1,355
	16,869	16,364
General insurance & health		
United Kingdom & Ireland ²	2,850	3,165
France	580	506
Italy	264	231
Other Europe	65	63
Europe	909	800
Canada	1,160	957
Asia	22	24
	4,941	4,946
Fund Management	417	411
Corporate & Other Business^{2,3}	4,893	3,461
Total capital employed	27,120	25,182
Financed by		
Equity shareholders' funds	16,713	15,802
Non-controlling interests	1,275	1,145
Direct capital instrument & tier 1 notes	1,123	1,123
Preference shares	200	200
Subordinated debt ⁴	6,994	6,427
Senior debt	815	485
Total capital employed⁵	27,120	25,182

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. This has led to an increase in operating profit and profit before tax of £23 million for full year 2015 and an increase in opening retained earnings for 2015 of £20 million with an increase in equity at 31 December 2015 of £38 million. See note B2 for further details.

² Capital employed for United Kingdom & Ireland general insurance and health excludes c.£0.9bn of goodwill which does not support the general insurance and health business for capital purposes and is included in 'Corporate & Other Business'. Comparatives have been restated accordingly and there is no impact on Group return on equity as a result of this restatement.

³ 'Corporate & Other Business' includes centrally held tangible net assets, the main UK staff pension scheme surplus and also reflects internal lending arrangements. These internal lending arrangements, which net out on consolidation, include the formal loan arrangement between Aviva Group Holdings Limited and Aviva Insurance Limited.

⁴ Subordinated debt excludes amounts held by Group companies of £40 million (FY15: £42 million).

⁵ Goodwill, AVIF and other intangibles are maintained within the capital base. Goodwill includes goodwill in subsidiaries of £1,979 million (FY15: £1,955 million), goodwill in joint ventures of £23 million (FY15: £19 million) and goodwill in associates of £47 million (FY15: £26 million). AVIF and other intangibles comprise £5,450 million (FY15: £5,731 million) of intangibles in subsidiaries, £77 million (FY15: £71 million) of intangibles in joint ventures and £18 million (FY15: Nil) of intangibles in associates, net of deferred tax liabilities of £(782) million (FY15: £(814) million) and the non-controlling interest share of intangibles of £(217) million (FY15: £(195) million).

Total capital employed is financed by a combination of equity shareholders' funds, preference capital, subordinated debt and borrowings. Total capital employed at HY16 amounted to £27.1 billion (FY15: £25.2 billion).

At HY16 the market value of external debt, subordinated debt, preference shares (including both Aviva plc preference shares of £200 million and General Accident plc preference shares, within non-controlling interests, of £250 million), direct capital instrument and tier 1 notes is £9,870 million (FY15: £9,094 million).

C3 – Equity sensitivity analysis – IFRS Basis

The sensitivity of the group's total equity on an IFRS basis at 30 June 2016 to a 10% fall in global equity markets, a rise of 1% in global interest rates or a 0.5% increase in credit spreads is as follows:

Restated ¹ 31 December 2015 £bn	IFRS basis	30 June 2016 £bn	Equities down 10% £bn	Interest rates up 1% £bn	0.5% increased credit spread £bn
16.4	Long-term savings	16.9	—	(0.3)	(0.2)
8.8	General insurance and other	10.2	—	(0.4)	0.6
(6.9)	Borrowings	(7.8)	—	—	—
18.3	Total equity	19.3	—	(0.7)	0.4

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. See note B2 for further details.

These sensitivities assume a full tax charge/credit on market value assumptions. The interest rate sensitivity also assumes an equivalent movement in both inflation and discount rate (i.e. no change to real interest rates) and therefore incorporates the offsetting effects of these items on the pension scheme liabilities. A 1% increase in the real interest rate has the effect of reducing the pension scheme liability in the main UK pension scheme by £2.1 billion (before any associated tax impact).

The 0.5% increased credit spread sensitivity does not make an allowance for any adjustment to risk-free interest rates. The long-term business sensitivities provide for any impact of credit spread movements on liability valuations. The sensitivities also include the allocation of staff pension scheme sensitivities, which assume inflation rates and government bond yields remain constant. In practice, the sensitivity of the business to changes in credit spreads is subject to a number of complex interactions. The impact of the credit spread movements will be related to individual portfolio composition and may be driven by changes in credit or liquidity risk; hence, the actual impact may differ substantially from applying spread movements implied by various published credit spread indices to these sensitivities.

Analysis of assets

In this section	Page
Analysis of assets	
D1 Total assets	88
D2 Total assets – Valuation bases/fair value hierarchy	89
D3 Analysis of asset quality	92
D4 Pension fund assets	101
D5 Available funds	102
D6 Guarantees	102

D1 – Total assets

As an insurance business, Aviva Group holds a variety of assets to match the characteristics and duration of its insurance liabilities. Appropriate and effective asset liability matching (on an economic basis) is the principal way in which Aviva manages its investments. In addition, to support this, Aviva also uses a variety of hedging and other risk management strategies to diversify away any residual mis-match risk that is outside of Group's risk appetite.

	Policyholder assets £m	Participating fund assets £m	Shareholder assets £m	Total assets analysed £m	Less assets of operations classified as held for sale £m	Balance sheet total £m
30 June 2016						
Goodwill and acquired value of in-force business and intangible assets	—	—	7,454	7,454	(25)	7,429
Interests in joint ventures and associates	126	1,467	621	2,214	—	2,214
Property and equipment	—	199	283	482	—	482
Investment property	6,698	3,903	549	11,150	(44)	11,106
Loans	351	3,305	20,713	24,369	(64)	24,305
Financial investments						
Debt securities	25,841	103,286	52,046	181,173	(7,375)	173,798
Equity securities	46,755	16,644	473	63,872	(541)	63,331
Other investments	42,677	7,440	4,013	54,130	(2,799)	51,331
Reinsurance assets	15,934	1,918	6,103	23,955	(972)	22,983
Deferred tax assets	—	—	132	132	(4)	128
Current tax assets	—	—	76	76	—	76
Receivables and other financial assets	831	3,527	5,908	10,266	(1,504)	8,762
Deferred acquisition costs and other assets	16	772	5,534	6,322	(29)	6,293
Prepayments and accrued income	261	1,365	1,435	3,061	(153)	2,908
Cash and cash equivalents	9,691	15,577	10,326	35,594	(683)	34,911
Assets of operations classified as held for sale	—	—	—	—	14,193	14,193
Total	149,181	159,403	115,666	424,250	—	424,250
Total %	35.2%	37.5%	27.3%	100.0%	—	100.0%
FY15 Total – restated ¹	141,549	141,756	104,526	387,831	—	387,831
FY15 Total % – restated ¹	36.5%	36.6%	26.9%	100.0%	—	100.0%

¹ Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. See note B2 for further details.

As at 30 June 2016, 27.3% of Aviva's total asset base was shareholder assets, 37.5% participating assets where Aviva shareholders have partial exposure, and 35.2% policyholder assets where Aviva shareholders have no exposure. Of the total assets (excluding assets held for sale), investment property, loans and financial investments comprise £323.9 billion (FY15: £308.0 billion).

D2 – Total assets – Valuation bases/fair value hierarchy

	Fair value £m	Amortised cost £m	Equity accounted/ tax assets ¹ £m	Total £m
Total assets – 30 June 2016				
Goodwill and acquired value of in-force business and intangible assets	—	7,454	—	7,454
Interests in joint ventures and associates	—	—	2,214	2,214
Property and equipment	401	81	—	482
Investment property	11,150	—	—	11,150
Loans	20,781	3,588	—	24,369
Financial Investments				
Debt securities	181,173	—	—	181,173
Equity securities	63,872	—	—	63,872
Other investments	54,130	—	—	54,130
Reinsurance assets	15,859	8,096	—	23,955
Deferred tax assets	—	—	132	132
Current tax assets	—	—	76	76
Receivables and other financial assets	—	10,266	—	10,266
Deferred acquisition costs and other assets	—	6,322	—	6,322
Prepayments and accrued income	—	3,061	—	3,061
Cash and cash equivalents	35,594	—	—	35,594
Total	382,960	38,868	2,422	424,250
Total %	90.2%	9.2%	0.6%	100.0%
Assets of operations classified as held for sale	11,442	2,747	4	14,193
Total (excluding assets held for sale)	371,518	36,121	2,418	410,057
Total % (excluding assets held for sale)	90.6%	8.8%	0.6%	100.0%
FY15 Total – restated ²	352,629	33,038	2,164	387,831
FY15 Total % – restated ²	90.9%	8.5%	0.6%	100.0%

¹ Within the Group's statement of financial position, assets are recognised for deferred tax and current tax. The valuation basis of these assets does not directly fall within any of the categories outlined above. As such, these assets have been reported together with equity accounted items within the analysis of the Group's assets.

² Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. See note B2 for further details.

	Fair value £m	Amortised cost £m	Equity accounted/ tax assets ¹ £m	Total £m
Total assets – Policyholder assets 30 June 2016				
Goodwill and acquired value of in-force business and intangible assets	—	—	—	—
Interests in joint ventures and associates	—	—	126	126
Property and equipment	—	—	—	—
Investment property	6,698	—	—	6,698
Loans	—	351	—	351
Financial Investments				
Debt securities	25,841	—	—	25,841
Equity securities	46,755	—	—	46,755
Other investments	42,677	—	—	42,677
Reinsurance assets	15,854	80	—	15,934
Deferred tax assets	—	—	—	—
Current tax assets	—	—	—	—
Receivables and other financial assets	—	831	—	831
Deferred acquisition costs and other assets	—	16	—	16
Prepayments and accrued income	—	261	—	261
Cash and cash equivalents	9,691	—	—	9,691
Total	147,516	1,539	126	149,181
Total %	98.9%	1.0%	0.1%	100.0%
Assets of operations classified as held for sale	2,946	416	—	3,362
Total (excluding assets held for sale)	144,570	1,123	126	145,819
Total % (excluding assets held for sale)	99.1%	0.8%	0.1%	100.0%
FY15 Total – restated ²	140,525	883	141	141,549
FY15 Total % – restated ²	99.3%	0.6%	0.1%	100.0%

¹ Within the Group's statement of financial position, assets are recognised for deferred tax and current tax. The valuation basis of these assets does not directly fall within any of the categories outlined above. As such, these assets have been reported together with equity accounted items within the analysis of the Group's assets.

² Following a correction to accounting and modelling for annual management charge rebates in UK Life, prior year comparatives have been restated. See note B2 for further details.

D2 – Total assets – Valuation bases/fair value hierarchy continued

	Fair value £m	Amortised cost £m	Equity accounted/ tax assets ¹ £m	Total £m
Total assets – Participating fund assets 30 June 2016				
Goodwill and acquired value of in-force business and intangible assets	—	—	—	—
Interests in joint ventures and associates	—	—	1,467	1,467
Property and equipment	189	10	—	199
Investment property	3,903	—	—	3,903
Loans	258	3,047	—	3,305
Financial Investments				
Debt securities	103,286	—	—	103,286
Equity securities	16,644	—	—	16,644
Other investments	7,440	—	—	7,440
Reinsurance assets	—	1,918	—	1,918
Deferred tax assets	—	—	—	—
Current tax assets	—	—	—	—
Receivables and other financial assets	—	3,527	—	3,527
Deferred acquisition costs and other assets	—	772	—	772
Prepayments and accrued income	—	1,365	—	1,365
Cash and cash equivalents	15,577	—	—	15,577
Total	147,297	10,639	1,467	159,403
Total %	92.4%	6.7%	0.9%	100.0%
Assets of operations classified as held for sale	8,247	1,561	—	9,808
Total (excluding assets held for sale)	139,050	9,078	1,467	149,595
Total % (excluding assets held for sale)	93.0%	6.0%	1.0%	100.0%
FY15 Total	132,319	8,142	1,295	141,756
FY15 Total %	93.4%	5.7%	0.9%	100.0%

¹ Within the Group's statement of financial position, assets are recognised for deferred tax and current tax. The valuation basis of these assets does not directly fall within any of the categories outlined above. As such, these assets have been reported together with equity accounted items within the analysis of the Group's assets.

	Fair value £m	Amortised cost £m	Equity accounted/ tax assets ¹ £m	Total £m
Total assets – Shareholders assets 30 June 2016				
Goodwill and acquired value of in-force business and intangible assets	—	7,454	—	7,454
Interests in joint ventures and associates	—	—	621	621
Property and equipment	212	71	—	283
Investment property	549	—	—	549
Loans	20,523	190	—	20,713
Financial Investments				
Debt securities	52,046	—	—	52,046
Equity securities	473	—	—	473
Other investments	4,013	—	—	4,013
Reinsurance assets	5	6,098	—	6,103
Deferred tax assets	—	—	132	132
Current tax assets	—	—	76	76
Receivables and other financial assets	—	5,908	—	5,908
Deferred acquisition costs and other assets	—	5,534	—	5,534
Prepayments and accrued income	—	1,435	—	1,435
Cash and cash equivalents	10,326	—	—	10,326
Total	88,147	26,690	829	115,666
Total %	76.2%	23.1%	0.7%	100.0%
Assets of operations classified as held for sale	249	770	4	1,023
Total (excluding assets held for sale)	87,898	25,920	825	114,643
Total % (excluding assets held for sale)	76.7%	22.6%	0.7%	100.0%
FY15 Total	79,785	24,013	728	104,526
FY15 Total %	76.3%	23.0%	0.7%	100.0%

¹ Within the Group's statement of financial position, assets are recognised for deferred tax and current tax. The valuation basis of these assets does not directly fall within any of the categories outlined above. As such, these assets have been reported together with equity accounted items within the analysis of the Group's assets.

D2 – Total assets – Valuation bases/fair value hierarchy continued

Financial instruments (including investment property, derivatives and loans) – fair value hierarchy

The table below categorises the measurement basis for assets carried at fair value into a 'fair value hierarchy' in accordance with fair value methodology disclosed in Note B17 in the condensed consolidated financial statements (IFRS section).

	Fair value hierarchy					Less: Assets of operations classified as held for sale £m	Balance sheet total £m
	Level 1 £m	Level 2 £m	Level 3 £m	Sub-total fair value £m	Amortised cost £m		
Investment property and financial assets – Total 30 June 2016							
Investment property	—	—	11,150	11,150	—	(44)	11,106
Loans	—	1,000	19,781	20,781	3,588	(64)	24,305
Debt securities	100,995	63,547	16,631	181,173	—	(7,375)	173,798
Equity securities	62,882	—	990	63,872	—	(541)	63,331
Other investments (including derivatives)	41,906	8,155	4,069	54,130	—	(2,799)	51,331
Assets of operations classified as held for sale	—	—	—	—	—	10,823	10,823
Total	205,783	72,702	52,621	331,106	3,588	—	334,694
Total %	61.5%	21.7%	15.7%	98.9%	1.1%	—	100.0%
Assets of operations classified as held for sale	9,462	445	852	10,759	64	—	10,823
Total (excluding assets held for sale)	196,321	72,257	51,769	320,347	3,524	—	323,871
Total % (excluding assets held for sale)	60.6%	22.3%	16.0%	98.9%	1.1%	—	100.0%
FY15 Total	191,265	64,210	49,122	304,597	3,354	—	307,951
FY15 Total %	62.1%	20.8%	16.0%	98.9%	1.1%	—	100.0%

At 30 June 2016, the proportion of total investment property, financial investments and loans classified as Level 1 in the fair value hierarchy decreased to 61.5% (FY15: 62.1%). The proportion of Level 2 financial investments was 21.7% (FY15: 20.8%), while those classified as Level 3 represented 15.7% (FY15: 16.0%).

Excluding assets classified as held for sale, the proportion of Level 1 assets at 30 June 2016 is 60.6% with Level 2 assets at 22.3%.

D3 – Analysis of asset quality

The analysis of assets that follows provides information about the assets held by the Group.

D3.1 – Investment property

	30 June 2016				31 December 2015			
	Fair value hierarchy			Total £m	Fair value hierarchy			Total £m
Investment property – Shareholder assets	Level 1 £m	Level 2 £m	Level 3 £m		Level 1 £m	Level 2 £m	Level 3 £m	
Lease to third parties under operating leases	—	—	538	538	—	—	527	527
Vacant investment property/held for capital appreciation	—	—	11	11	—	—	11	11
Total	—	—	549	549	—	—	538	538
Total %	—	—	100.0%	100.0%	—	—	100.0%	100.0%

95.1% (FY15: 95.2%) of total investment property by value is held in unit-linked or participating funds. Shareholder exposure to investment properties is principally through investments in UK and French property.

Investment properties are stated at their market values as assessed by qualified external independent valuers or by local qualified staff of the Group, all with recent relevant experience. The investment properties are valued on an income basis that is based on current rental income plus anticipated uplifts at the next rent review, lease expiry, or break option taking into consideration lease incentives and assuming no further growth in the estimated value of the property. This uplift and the discount rate are derived from rates implied by recent market transactions on similar property. These inputs are deemed unobservable.

98.0% (FY15: 98.0%) of shareholder exposure to investment property is leased to third parties under operating leases.

D3 – Analysis of asset quality continued

D3.2 – Loans

The Group loan portfolio is principally made up of:

- Policy loans which are generally collateralised by a lien or charge over the underlying policy;
- Loans and advances to banks, which primarily relate to loans of cash collateral received in stock lending transactions. These loans are fully collateralised by other securities;
- Mortgage loans collateralised by property assets;
- Healthcare, Infrastructure & Private Finance Initiative (“PFI”) other loans; and
- Other loans, which include loans to brokers and intermediaries.

Loans with fixed maturities, including policy loans, mortgage loans (at amortised cost) and loans and advances to banks, are recognised when cash is advanced to borrowers. These loans are carried at their unpaid principal balances and adjusted for amortisation of premium or discount, non-refundable loan fees and related direct costs. These amounts are deferred and amortised over the life of the loan using the effective interest rate method.

For certain mortgage loans, the Group has taken advantage of the fair value option under IAS 39 to present the mortgages, associated borrowings, other liabilities and derivative financial instruments at fair value, since they are managed together on a fair value basis. The mortgage loans are not traded in active markets. These investments are classified as level 3 as the assumptions used to derive the credit risk, liquidity premium and property risk are not deemed to be market observable.

Loans – Total 30 June 2016	United Kingdom & Ireland £m	Europe £m	Canada £m	Asia £m	Total £m
Policy loans	16	795	—	36	847
Loans and advances to banks	2,798	23	—	—	2,821
Healthcare, Infrastructure & PFI other loans	1,874	—	—	—	1,874
Mortgage loans	18,332	1	—	—	18,333
Other loans	322	8	164	—	494
Total	23,342	827	164	36	24,369
Total %	95.8%	3.4%	0.7%	0.1%	100.0%
Assets of operations classified as held for sale	—	64	—	—	64
Total (excluding assets held for sale)	23,342	763	164	36	24,305
Total % (excluding assets held for sale)	96.1%	3.1%	0.7%	0.1%	100.0%
FY15 Total	21,507	760	135	31	22,433
FY15 Total %	95.9%	3.4%	0.6%	0.1%	100.0%

Loans – Shareholder assets 30 June 2016	United Kingdom & Ireland £m	Europe £m	Canada £m	Asia £m	Total £m
Policy loans	4	7	—	2	13
Loans and advances to banks	552	23	—	—	575
Healthcare, Infrastructure & PFI other loans	1,874	—	—	—	1,874
Mortgage loans	18,074	—	—	—	18,074
Other loans	5	8	164	—	177
Total	20,509	38	164	2	20,713
Total %	99.0%	0.2%	0.8%	0.0%	100.0%
FY15 Total	18,793	33	135	3	18,964
FY15 Total %	99.1%	0.2%	0.7%	0.0%	100.0%

The value of the Group’s loan portfolio (including Policyholder, Participating Fund and Shareholder assets), at 30 June 2016 stood at £24.4 billion (FY15: £22.4 billion), an increase of £2.0 billion.

The total shareholder exposure to loans was £20.7 billion (FY15: £19.0 billion), and represented 85% of the total loan portfolio, with the remaining 15% split between participating funds £3.3 billion (FY15: £3.4 billion) and policyholder assets £0.4 billion (FY15: £nil).

Of the Group’s total loan portfolio (including Policyholder, Participating Fund and Shareholder assets), 75% (FY15: 77%) is invested in mortgage loans.

D3 – Analysis of asset quality continued

D3.2 – Loans continued

Mortgage loans – Shareholder assets

30 June 2016	Total £m
Non-securitised mortgage loans	
– Residential (Equity release)	917
– Commercial	6,710
– Healthcare, Infrastructure & PFI mortgage loans	3,470
	11,097
Securitised mortgage loans	6,977
Total	18,074
FY15 Total	16,954

The Group's mortgage loan portfolio is mainly focused in the UK, across various sectors, including residential loans, commercial loans and government supported healthcare loans. Aviva's shareholder exposure to mortgage loans accounts for 87% of total shareholder asset loans. This section focuses on explaining the shareholder risk within these exposures.

United Kingdom & Ireland (Non-securitised mortgage loans)

Residential

The UK non-securitised residential mortgage portfolio has a total current value of £0.9 billion (FY15: £4.8 billion). On 1 January 2016 a UK subsidiary, Aviva Annuity UK Limited, securitised £4,179 million of equity release mortgages by transferring them to a wholly owned subsidiary, Aviva ERFA 15 UK Limited. In return, Aviva Annuity UK Limited received £4,154 million of loan notes issued by Aviva ERFA 15 UK Limited. This resulted in a £4.2 billion transfer from non-securitised residential loans to securitised residential mortgage loans. The remaining movement from the prior year is due to £0.3 billion of net new loans and accrued interest (net of redemptions). Fair value movements were less than £0.1 billion.

These mortgages are all in the form of equity release, whereby homeowners mortgage their property to release cash equity. Due to the structure of equity release mortgages, whereby interest amounts due are not paid in cash but instead rolled into the amount outstanding, they predominantly have a current Loan to Value ('LTV') of below 70%. The average LTV across the portfolio is 35.1% (FY15: 26.8%). The change from prior year reflects the change in portfolio mix following the transfer as outlined above.

Commercial

Gross exposure by loan to value and arrears is shown in the table below.

Shareholder assets

30 June 2016	>120% £m	115–120% £m	110–115% £m	105–110% £m	100–105% £m	95–100% £m	90–95% £m	80–90% £m	70–80% £m	<70% £m	Total £m
Not in arrears	—	—	—	—	301	349	48	310	1,160	4,542	6,710
0 – 3 months	—	—	—	—	—	—	—	—	—	—	—
3 – 6 months	—	—	—	—	—	—	—	—	—	—	—
6 – 12 months	—	—	—	—	—	—	—	—	—	—	—
> 12 months	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	301	349	48	310	1,160	4,542	6,710

Of the £6.7 billion (FY15: £6.4 billion) of UK non-securitised commercial mortgage loans in the shareholder fund held by our UK Life business, £6.3 billion are used to back annuity liabilities and are stated on a fair value basis. The loan exposures for our UK Life business are calculated on a discounted cash flow basis, and include a risk adjustment through the use of Credit Risk Adjusted Value ('CRAV') methods.

For commercial mortgages loan service collection ratios, a key indicator of mortgage portfolio performance, improved to 1.88x (FY15: 1.78x). Loan Interest Cover ('LIC'), which is defined as the annual net rental income (including rental deposits and less ground rent) divided by the annual loan interest service, also improved to 2.14x (FY15: 2.05x). Average mortgage LTV decreased by 1% compared to FY15 from 61% to 60% (CRAV). The value of loans in arrears included within our shareholder assets is £0.1 million (FY15: £9 million). Commercial mortgages and Healthcare, Infrastructure & PFI loans are held at fair value on the asset side of the statement of financial position. Insurance liabilities are valued using a discount rate derived from gross yield on assets, with adjustments to allow for risk. £10.9 billion of shareholder loan assets are backing annuity liabilities and comprise of commercial mortgage loans (£6.3 billion), Healthcare, Infrastructure and PFI mortgage loans (£3.5 billion) and Primary Healthcare, Infrastructure and PFI other loans (£1.1 billion).

D3 – Analysis of asset quality continued

D3.2 – Loans continued

The Group carries a valuation allowance within the liabilities against the risk of default of commercial mortgages, including Healthcare and PFI mortgages, of £0.6 billion which equates to 66bps at 30 June 2016 (*FY15: 59bps*). The total valuation allowance held by Aviva Annuity UK Limited in respect of corporate bonds and mortgages, including Healthcare and PFI mortgages is £1.6 billion (*FY15: £1.5 billion*) over the remaining term of the UK Life corporate bond and mortgage portfolio.

The UK portfolio remains well diversified in terms of property type, location and tenants as well as the spread of loans written over time. The risks in commercial mortgages are addressed through several layers of protection with the mortgage risk profile being primarily driven by the ability of the underlying tenant rental income to cover loan interest and amortisation. Should any single tenant default on their rental payment, rental from other tenants backing the same loan often ensures the loan interest cover does not fall below 1.0x. Where there are multiple loans to a single borrower further protection may be achieved through cross-charging (or pooling) such that any single loan is also supported by rents received within other pool loans. Additionally, there may be support provided by the borrower of the loan itself and further loss mitigation from any general floating charge held over assets within the borrower companies.

If the LIC cover falls below 1.0x and the borrower defaults then Aviva still retains the option of selling the security or restructuring the loans and benefitting from the protection of the collateral. A combination of these benefits and the high recovery levels afforded by property collateral (compared to corporate debt or other uncollateralised credit exposures) results in the economic exposure being significantly lower than the gross exposure reported above. We will continue to actively manage this position.

Healthcare

Primary Healthcare, Infrastructure and PFI mortgage loans included within shareholder assets of £3.5 billion (*FY15: £3.3 billion*) are secured against primary health care premises (including General Practitioner surgeries), education, social housing and emergency services related premises. For all such loans, Government support is provided through either direct funding or reimbursement of rental payments to the tenants to meet income service and provide for the debt to be reduced substantially over the term of the loan. Although the loan principal is not Government guaranteed, the nature of these businesses and premises provides considerable comfort of an ongoing business model and low risk of default.

On a market value basis, we estimate the average LTV of these mortgages to be 79% (*FY15: 75%*), although as explained above, we do not consider this to be a key risk indicator. Income support from the Government bodies and the social need for these premises provide sustained income stability. Aviva therefore considers these loans to be lower risk relative to other mortgage loans.

Securitised mortgage loans

Funding for the externally securitised residential mortgage assets of £2.6 billion (*FY15: £2.5 billion*) was obtained by issuing loan note securities. Of these loan notes approximately £260 million (*FY15: £256 million*) are held by Group companies. The remainder is held by third parties external to Aviva. As any cash shortfall arising once all mortgages have redeemed is borne by the loan note holders, the majority of the credit risk of these mortgages is borne by third parties. Securitised residential mortgages held are predominantly issued through vehicles in the UK.

As outlined above, on 1 January 2016, there was a £4.2 billion transfer from non-securitised residential loans to securitised residential mortgage loans.

D3.3 – Financial investments

	30 June 2016				31 December 2015			
	Cost/ amortised cost £m	Unrealised gains £m	Impairment and unrealised losses £m	Fair value £m	Cost/ amortised cost £m	Unrealised gains £m	Impairment and unrealised losses £m	Fair value £m
Financial Investments – Total								
Debt securities	163,925	18,719	(1,471)	181,173	155,247	10,864	(3,147)	162,964
Equity securities	57,795	9,415	(3,338)	63,872	60,124	7,663	(4,229)	63,558
Other investments	47,214	8,507	(1,591)	54,130	44,263	5,005	(1,573)	47,695
Total	268,934	36,641	(6,400)	299,175	259,634	23,532	(8,949)	274,217
Assets of operations classified as held for sale	9,820	934	(39)	10,715	—	—	—	—
Total (excluding assets held for sale)	259,114	35,707	(6,361)	288,460	259,634	23,532	(8,949)	274,217

Aviva holds large quantities of high quality bonds, primarily to match our liability to make guaranteed payments to policyholders. Some credit risk is taken, partly to increase returns to policyholders and partly to optimise the risk/return profile for shareholders. The risks are consistent with the products we offer and the related investment mandates, and are in line with our risk appetite.

The Group also holds equities, the majority of which are held in participating funds and policyholder funds, where they form an integral part of the investment expectations of policyholders and follow well-defined investment mandates. Some equities are also held in shareholder funds. The vast majority of equity investments are valued at quoted market prices.

D3 – Analysis of asset quality continued

D3.3 – Financial investments continued

D3.3.1 – Debt securities

Debt securities – Shareholder assets 30 June 2016	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m	
UK Government	9,370	666	123	10,159
Non-UK Government	3,072	7,244	488	10,804
Europe	3,010	4,177	425	7,612
North America	21	2,723	—	2,744
Asia Pacific & Other	41	344	63	448
Corporate bonds – Public utilities	186	5,043	506	5,735
Other Corporate bonds	1,368	16,719	4,327	22,414
Other	350	2,106	478	2,934
Total	14,346	31,778	5,922	52,046
Total %	27.5%	61.1%	11.4%	100.0%
Assets of operations classified as held for sale	33	—	—	33
Total (excluding assets held for sale)	14,313	31,778	5,922	52,013
Total % (excluding assets held for sale)	27.5%	61.1%	11.4%	100.0%
FY15 Total	12,870	29,959	5,107	47,936
FY15 Total %	26.8%	62.5%	10.7%	100.0%

11.4% (FY15: 10.7%) of shareholder exposure to debt securities is fair valued using models with significant unobservable market parameters (classified as fair value Level 3). Where estimates are used, these are based on a combination of independent third party evidence and internally developed models, calibrated to market observable data where possible.

27.5% (FY15: 26.8%) of shareholder exposure to debt securities is based on quoted prices in an active market and are therefore classified as fair value Level 1.

Debt securities – Shareholder assets 30 June 2016	External ratings						Total £m
	AAA £m	AA £m	A £m	BBB £m	Less than BBB £m	Non-rated £m	
Government							
UK Government	—	10,036	57	—	—	48	10,141
UK local authorities	—	—	—	—	—	18	18
Non-UK Government	4,618	3,759	1,186	1,238	2	1	10,804
	4,618	13,795	1,243	1,238	2	67	20,963
Corporate							
Public utilities	—	184	3,301	1,996	4	250	5,735
Other corporate bonds	2,382	3,045	8,644	5,537	357	2,449	22,414
	2,382	3,229	11,945	7,533	361	2,699	28,149
Certificates of deposits	—	—	21	8	32	5	66
Structured							
RMBS ¹ non-agency ALT A	—	29	12	1	—	—	42
RMBS ¹ non-agency prime	79	42	52	24	17	—	214
RMBS ¹ agency	1	—	—	—	—	—	1
	80	71	64	25	17	—	257
CMBS ²	256	103	48	25	—	1	433
ABS ³	41	547	423	50	38	10	1,109
CDO (including CLO) ⁴	16	—	—	—	—	—	16
ABCP ⁵	—	—	—	—	—	—	—
	313	650	471	75	38	11	1,558
Wrapped credit	—	13	431	47	55	47	593
Other	23	5	100	123	76	133	460
Total	7,416	17,763	14,275	9,049	581	2,962	52,046
Total %	14.2%	34.2%	27.4%	17.4%	1.1%	5.7%	100.0%
Assets of operations classified as held for sale	7	18	8	—	—	—	33
Total (excluding assets held for sale)	7,409	17,745	14,267	9,049	581	2,962	52,013
Total % (excluding assets held for sale)	14.2%	34.2%	27.4%	17.4%	1.1%	5.7%	100.0%
FY15 Total	6,770	16,271	13,145	8,347	691	2,712	47,936
FY15 Total %	14.1%	34.0%	27.4%	17.4%	1.4%	5.7%	100.0%

¹ RMBS – Residential Mortgage Backed Security.

² CMBS – Commercial Mortgage Backed Security.

³ ABS – Asset Backed Security.

⁴ CDO – Collateralised Debt Obligation, CLO – Collateralised Loan Obligation.

⁵ ABCP – Asset Backed Commercial Paper.

D3 – Analysis of asset quality continued

D3.3 – Financial investments continued

D3.3.1 – Debt securities continued

During the period, shareholder exposure to debt securities increased by £4.1 billion to £52.0 billion (*FY15: £47.9 billion*). The overall quality of the book remains strong. 40% of shareholder exposure to debt securities is in government holdings (*FY15: 39%*). Our corporate debt securities portfolio represents 54% (*FY15: 55%*) of total shareholder debt securities.

The majority of non-rated corporate bonds are held by our businesses in the UK.

At 30 June 2016, the proportion of our shareholder debt securities that are investment grade increased to 93.2% (*FY15: 92.9%*). The remaining 6.8% of shareholder debt securities that do not have an external rating of BBB or higher can be split as follows:

- 1.1% are debt securities that are rated as below investment grade;
- 5.7% are not rated by the major rating agencies.

Of the securities not rated by an external agency most are allocated an internal rating using a methodology largely consistent with that adopted by an external rating agency, and are considered to be of investment grade credit quality; these include £2.5 billion of debt securities held in our UK Life business, predominantly made up of private placements and other corporate bonds, which have been internally rated as investment grade (*FY15: £2.5 billion*).

The Group has limited shareholder exposure to CDOs, CLOs and 'Sub-prime' debt securities.

Out of the total shareholder asset backed securities (ABS), £1,088 million (*FY15: £1,023 million*) are held by the UK Life business. 95.7% of the Group's shareholder holdings in ABS are investment grade (*FY15: 95.3%*). ABS which either have a rating below BBB or are not rated represent approximately 0.1% of shareholder exposure to debt securities (*FY15: 0.1%*).

D3.3.2 – Equity securities

	30 June 2016				31 December 2015			
	Fair value hierarchy				Fair value hierarchy			
	Level 1 £m	Level 2 £m	Level 3 £m	Total £m	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Equity securities – Shareholder assets								
Public utilities	2	—	—	2	5	—	—	5
Banks, trusts and insurance companies	106	—	52	158	117	—	36	153
Industrial miscellaneous and all other	124	—	14	138	203	—	12	215
Non-redeemable preferred shares	175	—	—	175	164	—	—	164
Total	407	—	66	473	489	—	48	537
Total %	86.0%	—	14.0%	100.0%	91.1%	—	8.9%	100.0%

86.0% of our shareholder exposure to equity securities is based on quoted prices in an active market and as such is classified as Level 1 (*FY15: 91.1%*).

D3.3.3 – Other investments

	30 June 2016				31 December 2015			
	Fair value hierarchy				Fair value hierarchy			
	Level 1 £m	Level 2 £m	Level 3 £m	Total £m	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Other investments – Shareholders assets								
Unit trusts and other investment vehicles	1,059	10	36	1,105	741	7	39	787
Derivative financial instruments	59	2,388	78	2,525	91	864	59	1,014
Deposits with credit institutions	92	—	—	92	105	—	—	105
Minority holdings in property management undertakings	1	28	255	284	—	20	229	249
Other	7	—	—	7	6	—	—	6
Total	1,218	2,426	369	4,013	943	891	327	2,161
Total %	30.4%	60.4%	9.2%	100.0%	43.7%	41.2%	15.1%	100.0%
Assets of operations classified as held for sale	89	—	—	89	—	—	—	—
Total (excluding assets held for sale)	1,129	2,426	369	3,924	943	891	327	2,161
Total % (excluding assets held for sale)	28.8%	61.8%	9.4%	100.0%	43.7%	41.2%	15.1%	100.0%

In total 90.8% (*FY15: 84.9%*) of shareholder other investments are classified as Level 1 or 2 in the fair value hierarchy. Unit trusts and other investment vehicles invest in a variety of assets, which can include cash equivalents, debt, equity and property securities. Derivative financial instruments benefitted during the year from a fall in the GBP swap curve.

D3.3.4 – Available for sale investments – Impairments and duration and amount of unrealised losses

There was no impairment expense for the six months to 30 June 2016 for AFS securities (*HY15: £nil*).

Total unrealised losses on AFS debt securities, equity securities and other investments at 30 June 2016 were £nil (*HY15: £1 million*), £nil (*HY15: £nil*) and £nil (*HY15: £nil*) respectively.

D3 – Analysis of asset quality continued

D3.3 – Financial investments continued

D3.3.5 – Exposures to peripheral European countries

Included in our debt securities and other financial assets are exposures to peripheral European countries. All of these assets are valued on a mark to market basis under IAS 39, and therefore our statement of financial position and income statement already reflect any reduction in value between the date of purchase and the balance sheet date. The significant majority of these holdings are within our participating funds where the risk to our shareholders is governed by the nature and extent of our participation within those funds.

Net of non-controlling interests, our direct shareholder and participating fund asset exposure to the government (and local authorities and agencies) of Italy is £5.7 billion (FY15: £4.7 billion).

Direct sovereign exposures to Greece, Ireland, Portugal, Italy and Spain (net of non-controlling interests, excluding policyholder assets)

	Participating		Shareholder		Total	
	30 June 2016 £bn	31 December 2015 £bn	30 June 2016 £bn	31 December 2015 £bn	30 June 2016 £bn	31 December 2015 £bn
Greece	—	—	—	—	—	—
Ireland	0.7	0.6	0.1	0.1	0.8	0.7
Portugal	0.1	0.1	—	—	0.1	0.1
Italy	5.3	4.4	0.4	0.3	5.7	4.7
Spain	0.9	0.8	0.4	0.4	1.3	1.2
Total Greece, Ireland, Portugal, Italy and Spain	7.0	5.9	0.9	0.8	7.9	6.7

Direct sovereign exposures to Greece, Ireland, Portugal, Italy and Spain (gross of non-controlling interests, excluding policyholder assets)

	Participating		Shareholder		Total	
	30 June 2016 £bn	31 December 2015 £bn	30 June 2016 £bn	31 December 2015 £bn	30 June 2016 £bn	31 December 2015 £bn
Greece	—	—	—	—	—	—
Ireland	0.7	0.6	0.1	0.1	0.8	0.7
Portugal	0.1	0.1	—	—	0.1	0.1
Italy	7.3	6.1	0.5	0.5	7.8	6.6
Spain	1.2	1.1	0.7	0.6	1.9	1.7
Total Greece, Ireland, Portugal, Italy and Spain	9.3	7.9	1.3	1.2	10.6	9.1

D3 – Analysis of asset quality continued

D3.3 – Financial investments continued

D3.3.6 – Non-UK Government debt securities (gross of non-controlling interests)

	Policyholder		Participating		Shareholder		Total	
	30 June 2016 £m	31 December 2015 £m	30 June 2016 £m	31 December 2015 £m	30 June 2016 £m	31 December 2015 £m	30 June 2016 £m	31 December 2015 £m
Non-UK Government Debt Securities								
Austria	14	14	755	697	164	140	933	851
Belgium	25	34	1,272	1,195	187	166	1,484	1,395
France	140	139	13,203	10,673	2,103	1,846	15,446	12,658
Germany	164	145	1,573	1,470	665	590	2,402	2,205
Greece	—	—	—	—	—	—	—	—
Ireland	4	12	658	595	129	100	791	707
Italy	254	319	7,322	6,090	478	442	8,054	6,851
Netherlands	60	31	1,067	1,156	360	302	1,487	1,489
Poland	764	559	780	689	322	399	1,866	1,647
Portugal	3	7	119	110	—	—	122	117
Spain	92	98	1,227	1,093	716	636	2,035	1,827
European Supranational debt	164	72	2,881	2,798	1,970	1,760	5,015	4,630
Other European countries	224	167	958	1,107	518	520	1,700	1,794
Europe	1,908	1,597	31,815	27,673	7,612	6,901	41,335	36,171
Canada	21	49	192	178	2,247	1,917	2,460	2,144
United States	435	323	154	100	497	409	1,086	832
North America	456	372	346	278	2,744	2,326	3,546	2,976
Singapore	19	16	934	762	343	264	1,296	1,042
Other	1,902	648	2,758	1,752	105	75	4,765	2,475
Asia Pacific and other	1,921	664	3,692	2,514	448	339	6,061	3,517
Total	4,285	2,633	35,853	30,465	10,804	9,566	50,942	42,664
Less: assets of operations classified as held for sale	—	—	2,313	—	33	—	2,346	—
Total (excluding assets held for sale)	4,285	2,633	33,540	30,465	10,771	9,566	48,596	42,664

At 30 June 2016, the Group's total non-UK Government debt securities stood at £50.9 billion (*FY15: £42.7 billion*). The significant majority of these holdings are within our participating funds where the risk to our shareholders is governed by the nature and extent of our participation within those funds.

Our direct shareholder asset exposure to non-UK Government debt securities amounts to £10.8 billion (*FY15: £9.6 billion*). The primary exposures, relative to total shareholder non-UK Government debt exposure, are to Canadian (21%), French (19%), Spanish (7%), and German (6%) Government debt securities.

The participating funds exposure to non-UK Government debt amounts to £35.9 billion (*FY15: £30.5 billion*). The primary exposures, relative to total non-UK Government debt exposures included within our participating funds, are to the Government debt securities of France (37%), Italy (20%), Germany (4%), Belgium (4%), Netherlands (3%) and Spain (3%).

D3 – Analysis of asset quality continued

D3.3 – Financial investments continued

D3.3.7 – Exposure to worldwide bank debt securities

Direct shareholder and participating fund assets exposures to worldwide bank debt securities (net of non-controlling interests, excluding policyholder assets)

	Shareholder assets			Participating fund assets		
	Total senior debt £bn	Total subordinated debt £bn	Total debt £bn	Total senior debt £bn	Total subordinated debt £bn	Total debt £bn
30 June 2016						
Australia	0.3	—	0.3	0.3	—	0.3
Denmark	—	—	—	1.1	—	1.1
France	0.5	—	0.5	3.2	0.6	3.8
Germany	0.1	—	0.1	0.4	0.2	0.6
Ireland	—	—	—	—	—	—
Italy	0.1	—	0.1	0.2	—	0.2
Netherlands	0.3	0.2	0.5	1.3	0.3	1.6
Spain	0.7	—	0.7	0.7	0.1	0.8
Sweden	0.2	—	0.2	0.3	—	0.3
Switzerland	—	—	—	1.2	—	1.2
United Kingdom	1.3	0.5	1.8	1.5	1.0	2.5
United States	1.1	0.2	1.3	1.9	0.1	2.0
Other	0.4	0.1	0.5	2.8	0.5	3.3
Total	5.0	1.0	6.0	14.9	2.8	17.7
Less: assets of operations classified as held for sale	—	—	—	0.9	0.2	1.1
Total (excluding assets held for sale)	5.0	1.0	6.0	14.0	2.6	16.6
FY15 Total	4.9	1.0	5.9	12.9	2.8	15.7

Net of non-controlling interests, our direct shareholder exposure to worldwide debt bank securities increased by £0.1 billion to £6.0 billion. The majority of our holding (83%) is in senior debt. The primary exposures are to UK (30%), US (22%) and Spanish (12%) banks.

Net of non-controlling interests, the participating fund exposures to worldwide bank debt securities, where the risk to our shareholders is governed by the nature and extent of our participation within those funds, is £17.7 billion. The majority of the exposure (84%) is in senior debt. Participating funds are the most exposed to French (21%), UK (14%), US (11%) and Dutch (9%) banks.

Direct shareholder and participating fund assets exposures to worldwide bank debt securities (gross of non-controlling interests, excluding policyholder assets)

	Shareholder assets			Participating fund assets		
	Total senior debt £bn	Total subordinated debt £bn	Total debt £bn	Total senior debt £bn	Total subordinated debt £bn	Total debt £bn
30 June 2016						
Australia	0.3	—	0.3	0.3	—	0.3
Denmark	—	—	—	1.1	—	1.1
France	0.5	—	0.5	3.7	0.7	4.4
Germany	0.1	—	0.1	0.5	0.2	0.7
Ireland	—	—	—	—	—	—
Italy	0.1	—	0.1	0.3	—	0.3
Netherlands	0.3	0.2	0.5	1.4	0.3	1.7
Spain	0.8	—	0.8	0.8	0.1	0.9
Sweden	0.2	—	0.2	0.3	—	0.3
Switzerland	—	—	—	1.2	—	1.2
United Kingdom	1.3	0.5	1.8	1.6	1.0	2.6
United States	1.1	0.2	1.3	2.0	0.1	2.1
Other	0.4	0.1	0.5	3.1	0.6	3.7
Total	5.1	1.0	6.1	16.3	3.0	19.3
Less: assets of operations classified as held for sale	—	—	—	1.7	0.5	2.2
Total (excluding assets held for sale)	5.1	1.0	6.1	14.6	2.5	17.1
FY15 Total	5.0	1.0	6.0	14.2	2.9	17.1

Gross of non-controlling interests, our direct shareholder exposure to worldwide bank debt securities increased by £0.1 billion to £6.1 billion. The majority of our holding (84%) is in senior debt. The primary exposures are to UK (30%), US (21%) and Spanish (13%) banks.

Gross of non-controlling interests, the participating fund exposures to worldwide bank debt securities, where the risk to our shareholders is governed by the nature and extent of our participation within those funds, is £19.3 billion. The majority of the exposure (84%) is in senior debt. Participating funds are the most exposed to French (23%), UK (13%), US (11%) and Dutch (9%) banks.

D4 – Pension fund assets

In addition to the assets recognised directly on the Group's statement of financial position outlined in the disclosures above, the Group is also exposed to the "Scheme assets" that are shown net of the present value of scheme liabilities within the IAS 19 net pension surplus. Pension surpluses are included within other assets and pension deficits are recognised within provisions in the Group's consolidated statement of financial position. Refer to Note B15 for details on the schemes' surpluses and deficits.

Scheme assets are stated at their fair values. Total scheme assets in the UK, Ireland and Canada are comprised as follows:

	30 June 2016				31 December 2015			
	UK £m	Ireland £m	Canada £m	Total £m	UK £m	Ireland £m	Canada £m	Total £m
Bonds								
Fixed interest	6,199	250	156	6,605	5,542	216	133	5,891
Index-linked	11,179	157	—	11,336	5,758	114	—	5,872
Equities	85	—	—	85	70	—	—	70
Property	351	—	—	351	377	7	—	384
Pooled investment vehicles	3,082	172	109	3,363	2,904	143	96	3,143
Derivatives	(50)	—	—	(50)	96	—	—	96
Cash and other ¹	(1,970)	—	6	(1,964)	1,244	4	3	1,251
Total fair value of scheme assets	18,876	579	271	19,726	15,991	484	232	16,707
Less: consolidation elimination for non-transferable Group insurance policy ²	(605)	—	—	(605)	(546)	—	—	(546)
Total IAS 19 fair value of scheme assets	18,271	579	271	19,121	15,445	484	232	16,161

Total scheme assets are analysed by those that have a quoted market price in an active market and those that do not as follows:

	30 June 2016			31 December 2015		
	Total Quoted £m	Total Unquoted £m	Total £m	Total Quoted £m	Total Unquoted £m	Total £m
Bonds						
Fixed interest	3,175	3,430	6,605	2,796	3,095	5,891
Index-linked	10,886	450	11,336	5,436	436	5,872
Equities	85	—	85	70	—	70
Property	—	351	351	—	384	384
Pooled investment vehicles	319	3,044	3,363	291	2,852	3,143
Derivatives	(54)	4	(50)	6	90	96
Cash and other ¹	836	(2,800)	(1,964)	532	719	1,251
Total fair value of scheme assets	15,247	4,479	19,726	9,131	7,576	16,707
Less: consolidation elimination for non-transferable Group insurance policy ²	—	(605)	(605)	—	(546)	(546)
Total IAS 19 fair value of scheme assets	15,247	3,874	19,121	9,131	7,030	16,161

¹ Cash and other assets comprise cash at bank, insurance policies, receivables, payables and repos. At 30 June 2016, repos of £3,750 million (FY15: £nil) are included within cash and other assets.

² Friends Provident Pension Scheme assets are included in the UK balances. As at 30 June 2016, the Friends Provident Pension Scheme's cash and other balance includes an insurance policy of £605 million (FY15: £546 million) issued by a Group company that is not transferable under IAS 19 and is consequently eliminated from the Group's IAS 19 scheme assets.

Risk management and asset allocation strategy

The long-term investment objectives of the trustees and the employers are to limit the risk of the assets failing to meet the liabilities of the schemes over the long term, and to maximise returns consistent with an acceptable level of risk so as to control the long-term costs of these schemes. To meet these objectives, the schemes' assets are invested in a portfolio consisting primarily (approximately 75%³) of debt securities. The investment strategy will continue to evolve over time and is expected to match the liability profile increasingly closely with swap overlays to improve interest rate and inflation matching. The schemes are generally matched to interest rate risk relative to the funding basis.

Main UK Scheme

The Company works closely with the trustee, who is required to consult it on the investment strategy.

Interest rate and inflation risks are managed using a combination of liability-matching assets and swaps. Exposure to equity risk has been reducing over time and credit risk is managed within risk appetite. Currency risk is relatively small and is largely hedged. The other principal risk is longevity risk. In 2014, the Aviva Staff Pension Scheme entered into a longevity swap covering approximately £5 billion of pensioner in payment scheme liabilities.

Other schemes

The other schemes are considerably less material but their risks are managed in a similar way to those in the main UK scheme. In 2015, the RAC pension scheme entered into a longevity swap covering approximately £600 million of pensioner in payment scheme liabilities.

³ Excluding repos of £3,750 million

D5 – Available funds

To ensure access to liquidity as and when needed, the Group maintains £1.7 billion of undrawn committed central borrowing facilities with various highly rated banks. These facilities are used to support Aviva plc's commercial paper programmes. The expiry profile of the undrawn committed central borrowing facilities is as follows:

	30 June 2016 £m	31 December 2015 £m
Expiring within one year	—	575
Expiring beyond one year	1,650	1,075
Total	1,650	1,650

D6 – Guarantees

As a normal part of their operating activities, various Group companies have given guarantees and options, including investment return guarantees, in respect of certain long-term insurance and fund management products.

For the UK Life with-profit business, provisions in respect of these guarantees and options are calculated on a market consistent basis, in which stochastic models are used to evaluate the level of risk (and additional cost) under a number of economic scenarios, which allow for the impact of volatility in both interest rates and equity prices. For UK Life non-profit business, provisions do not materially differ from those determined on a market consistent basis.

In all other businesses, provisions for guarantees and options are calculated on a local basis with sensitivity analysis undertaken where appropriate to assess the impact on provisioning levels of a movement in interest rates and equity levels (typically a 1% decrease in interest rates and 10% decline in equity markets).

VNB & sales analysis

In this section	Page
VNB & sales analysis	
E1 Sales, VNB and new business margin analysis by market (MCEV basis)	104
E2 Trend analysis of VNB – cumulative	105
E3 Trend analysis of VNB – discrete	105
E4 Trend analysis of PVNBP – cumulative	106
E5 Trend analysis of PVNBP – discrete	106
E6 Trend analysis of PVNBP by product – cumulative	107
E7 Trend analysis of PVNBP by product – discrete	107
E8 Geographical analysis of regular and single premiums	108
E9 Trend analysis of investment sales – cumulative	108
E10 Trend analysis of investment sales – discrete	108
E11 Trend analysis of general insurance and health net written premiums – cumulative	109
E12 Trend analysis of general insurance and health net written premiums – discrete	109
E13 Reconciliation of sales to net written premiums in IFRS	110
E14 Principal Assumptions underlying the calculation of VNB (on a MCEV basis)	111

E1 – Sales, VNB and new business margin analysis by market (MCEV basis)

The table below sets out the present value of new business premiums (PVNBP) written by the life and related businesses, value generated by new business written during the period (VNB) and the resulting margin, gross of tax and non-controlling interests, on an MCEV basis. Following the introduction of the Solvency II regime on 1 January 2016, MCEV (which is calculated on the expired Solvency I basis) is no longer used as an indicator of the drivers of financial performance of the Group's in-force life and related businesses. However, PVNBP and VNB are still currently used alongside adjusted Solvency II VNB to give insight to the relative volume and profitability of business written in the year compared to prior periods. Adjusted Solvency II VNB is reported in note 4b of the overview section of this report.

The VNB shown below is the present value of the projected stream of pre-tax distributable profit generated by the new business written during the period, including expected profit between point of sale and the valuation date on an MCEV basis. It reflects the additional value to shareholders created through the activity of writing new business including the impacts of interactions between in-force and new business. The methodology underlying the calculation of PVNBP and VNB (on an MCEV basis) remains unchanged from the prior year as set out in F1 of the Aviva 2015 MCEV report. The demographic assumptions used are materially the same as that used at 31 December 2015 as set out in F2 of the Aviva 2015 MCEV report. The economic assumptions have been updated to be those relevant at the point of sale which has been implemented with the assumptions being taken as those appropriate to the start of each quarter. For contracts that are re-priced more frequently, weekly or monthly economic assumptions have been used. The principal economic assumptions are set out in note E14.

	Present value of new business premiums ¹			Value of new business ²			New business margin		
	6 months 2016 £m	6 months 2015 £m	Full year 2015 £m	6 months 2016 £m	6 months 2015 £m	Full year 2015 £m	6 months 2016 %	6 months 2015 %	Full year 2015 %
Gross of tax and non-controlling interests									
United Kingdom ³	8,214	7,071	16,236	269	253	609	3.3%	3.6%	3.8%
Ireland	339	270	561	11	7	16	3.2%	2.6%	2.9%
United Kingdom & Ireland	8,553	7,341	16,797	280	260	625	3.3%	3.5%	3.7%
France	2,889	2,553	4,821	103	98	198	3.6%	3.8%	4.1%
Poland	197	218	448	27	30	65	13.7%	13.8%	14.5%
Italy	2,025	1,116	2,147	71	39	79	3.5%	3.5%	3.7%
Spain	300	363	622	16	13	31	5.3%	3.6%	5.0%
Turkey	214	251	460	12	12	27	5.6%	4.8%	5.9%
Europe	5,625	4,501	8,498	229	192	400	4.1%	4.3%	4.7%
Asia ⁴	986	1,449	2,823	61	76	151	6.2%	5.2%	5.3%
Aviva Investors	1,388	761	1,647	13	6	16	0.9%	0.8%	1.0%
Total	16,552	14,052	29,765	583	534	1,192	3.5%	3.8%	4.0%

¹ A reconciliation to IFRS net written premiums can be found in note E13.

² A reconciliation to adjusted Solvency II VNB can be found in note 4b of the Overview section.

³ United Kingdom includes Friends UK from 10 April 2015.

⁴ Asia includes FPI from 10 April 2015.

E2 – Trend analysis of VNB – cumulative

Gross of tax and non-controlling interests	1Q15 YTD £m	2Q15 YTD £m	3Q15 YTD £m	4Q15 YTD £m	1Q16 YTD £m	2Q16 YTD £m	Growth ¹ on 2Q15	
							Sterling %	Constant currency %
United Kingdom ²	103	253	404	609	107	269	6%	6%
Ireland	3	7	11	16	5	11	68%	58%
United Kingdom & Ireland	106	260	415	625	112	280	8%	8%
France	56	98	144	198	59	103	6%	(1)%
Poland ³	15	30	46	65	15	27	(9)%	(11)%
Italy	19	39	57	79	26	71	82%	71%
Spain	6	13	20	31	6	16	29%	22%
Turkey	6	12	17	27	5	12	(6)%	—
Europe	102	192	284	400	111	229	20%	14%
Asia ³	36	76	115	151	31	61	(20)%	(23)%
Aviva Investors	3	6	9	16	5	13	106%	106%
Total	247	534	823	1,192	259	583	9%	7%

¹ Currency movements are calculated using unrounded numbers so minor rounding differences may exist.

² United Kingdom includes Friends UK from 10 April 2015.

³ Poland includes Lithuania. Asia includes FPI from 10 April 2015.

E3 – Trend analysis of VNB – discrete

Gross of tax and non-controlling interests	1Q15 Discrete £m	2Q15 Discrete £m	3Q15 Discrete £m	4Q15 Discrete £m	1Q16 Discrete £m	2Q16 Discrete £m	Growth ¹ on 2Q15	
							Sterling %	Constant currency %
United Kingdom ²	103	150	151	205	107	162	8%	8%
Ireland	3	4	4	5	5	6	56%	46%
United Kingdom & Ireland	106	154	155	210	112	168	9%	9%
France	56	42	46	54	59	44	6%	(1)%
Poland ³	15	15	16	19	15	12	(16)%	(18)%
Italy	19	20	18	22	26	45	125%	110%
Spain	6	7	7	11	6	10	51%	41%
Turkey	6	6	5	10	5	7	12%	13%
Europe	102	90	92	116	111	118	33%	25%
Asia ³	36	40	39	36	31	30	(27)%	(30)%
Aviva Investors	3	3	3	7	5	8	154%	154%
Total	247	287	289	369	259	324	13%	10%

¹ Currency movements are calculated using unrounded numbers so minor rounding differences may exist.

² United Kingdom includes Friends UK from 10 April 2015.

³ Poland includes Lithuania. Asia includes FPI from 10 April 2015.

E4 – Trend analysis of PVNBP – cumulative

							Growth ² on 2Q15	
	1Q15 YTD £m	2Q15 YTD £m	3Q15 YTD £m	4Q15 YTD £m	1Q16 YTD £m	2Q16 YTD £m	Sterling %	Constant currency %
Present value of new business premiums ¹								
United Kingdom ^{3,4}	2,445	7,071	11,696	16,236	4,136	8,214	16%	16%
Ireland	132	270	406	561	150	339	25%	18%
United Kingdom & Ireland	2,577	7,341	12,102	16,797	4,286	8,553	17%	16%
France	1,319	2,553	3,639	4,821	1,487	2,889	13%	7%
Poland ⁵	110	218	319	448	100	197	(10)%	(12)%
Italy	603	1,116	1,518	2,147	752	2,025	81%	71%
Spain	224	363	455	622	124	300	(17)%	(22)%
Turkey	134	251	347	460	98	214	(14)%	(9)%
Europe	2,390	4,501	6,278	8,498	2,561	5,625	25%	19%
Asia ⁵	623	1,449	2,218	2,823	497	986	(32)%	(34)%
Aviva Investors	366	761	1,165	1,647	485	1,388	83%	83%
Total	5,956	14,052	21,763	29,765	7,829	16,552	18%	15%

¹ Present value of new business premiums (PVNBP) is the present value of new regular premiums plus 100% of single premiums, calculated using assumptions consistent with those used to determine the value of new business.

² Currency movements are calculated using unrounded numbers so minor rounding differences may exist.

³ United Kingdom includes Friends UK from 10 April 2015.

⁴ Includes c.£1 billion PVNBP (net of reinsurance) relating to a longevity insurance transaction completed in 3Q15.

⁵ Poland includes Lithuania. Asia includes FPI from 10 April 2015.

E5 – Trend analysis of PVNBP – discrete

	1Q15 Discrete £m	2Q15 Discrete £m	3Q15 Discrete £m	4Q15 Discrete £m	1Q16 Discrete £m	2Q16 Discrete £m	Growth ² on 2Q15	
							Sterling %	Constant currency %
Present value of new business premiums ¹								
United Kingdom ^{3,4}	2,445	4,626	4,625	4,540	4,136	4,078	(12)%	(12)%
Ireland	132	138	136	155	150	189	37%	28%
United Kingdom & Ireland	2,577	4,764	4,761	4,695	4,286	4,267	(10)%	(11)%
France	1,319	1,234	1,086	1,182	1,487	1,402	14%	6%
Poland ⁵	110	108	101	129	100	97	(10)%	(12)%
Italy	603	513	402	629	752	1,273	148%	131%
Spain	224	139	92	167	124	176	26%	17%
Turkey	134	117	96	113	98	116	—	1%
Europe	2,390	2,111	1,777	2,220	2,561	3,064	45%	36%
Asia ⁵	623	826	769	605	497	489	(41)%	(43)%
Aviva Investors	366	395	404	482	485	903	129%	129%
Total	5,956	8,096	7,711	8,002	7,829	8,723	8%	6%

¹ Present value of new business premiums (PVNBP) is the present value of new regular premiums plus 100% of single premiums, calculated using assumptions consistent with those used to determine the value of new business.

² Currency movements are calculated using unrounded numbers so minor rounding differences may exist.

³ United Kingdom includes Friends UK from 10 April 2015.

⁴ Includes c.£1 billion PVNBP (net of reinsurance) relating to a longevity insurance transaction completed in 3Q15.

⁵ Poland includes Lithuania. Asia includes FPI from 10 April 2015.

E6 – Trend analysis of PVNBP by product – cumulative

Present value of new business premiums ¹	1Q15 YTD £m	2Q15 YTD £m	3Q15 YTD £m	4Q15 YTD £m	1Q16 YTD £m	2Q16 YTD £m	Growth ² on 2Q15	
							Sterling %	Constant currency %
Pensions	1,319	3,897	6,085	8,950	2,889	5,551	42%	42%
Annuities ³	136	777	2,205	2,945	224	570	(27)%	(27)%
Bonds	39	80	109	139	31	59	(26)%	(27)%
Protection	268	712	1,152	1,586	474	896	26%	26%
Equity release	206	458	584	699	111	247	(46)%	(46)%
Other	477	1,147	1,561	1,917	407	891	(22)%	(22)%
United Kingdom ⁴	2,445	7,071	11,696	16,236	4,136	8,214	16%	16%
Ireland	132	270	406	561	150	339	25%	18%
United Kingdom & Ireland	2,577	7,341	12,102	16,797	4,286	8,553	17%	16%
Savings	1,224	2,389	3,423	4,535	1,384	2,698	13%	6%
Protection	95	164	216	286	103	191	16%	10%
France	1,319	2,553	3,639	4,821	1,487	2,889	13%	7%
Pensions	192	356	493	700	156	320	(10)%	(9)%
Savings	754	1,330	1,767	2,443	792	2,139	61%	52%
Annuities	—	1	1	1	—	—	(13)%	(18)%
Protection	125	261	378	533	126	277	6%	2%
Poland⁵, Italy, Spain and Turkey	1,071	1,948	2,639	3,677	1,074	2,736	40%	35%
Europe	2,390	4,501	6,278	8,498	2,561	5,625	25%	19%
Asia⁵	623	1,449	2,218	2,823	497	986	(32)%	(34)%
Aviva Investors	366	761	1,165	1,647	485	1,388	83%	83%
Total	5,956	14,052	21,763	29,765	7,829	16,552	18%	15%

1 Present value of new business premiums (PVNBP) is the present value of new regular premiums plus 100% of single premiums, calculated using assumptions consistent with those used to determine the value of new business.

2 Currency movements are calculated using unrounded numbers so minor rounding differences may exist.

3 Includes c.£1 billion PVNBP (net of reinsurance) relating to a longevity insurance transaction completed in 3Q15.

4 United Kingdom includes Friends UK from 10 April 2015.

5 Poland includes Lithuania. Asia includes FPI from 10 April 2015.

E7 – Trend analysis of PVNBP by product – discrete

Present value of new business premiums ¹	1Q15 Discrete £m	2Q15 Discrete £m	3Q15 Discrete £m	4Q15 Discrete £m	1Q16 Discrete £m	2Q16 Discrete £m	Growth ² on 2Q15	
							Sterling %	Constant currency %
Pensions	1,319	2,578	2,188	2,865	2,889	2,662	3%	3%
Annuities ³	136	641	1,428	740	224	346	(46)%	(46)%
Bonds	39	41	29	30	31	28	(32)%	(32)%
Protection	268	444	440	434	474	422	(5)%	(5)%
Equity release	206	252	126	115	111	136	(46)%	(46)%
Other	477	670	414	356	407	484	(26)%	(26)%
United Kingdom ⁴	2,445	4,626	4,625	4,540	4,136	4,078	(12)%	(12)%
Ireland	132	138	136	155	150	189	37%	28%
United Kingdom & Ireland	2,577	4,764	4,761	4,695	4,286	4,267	(10)%	(11)%
Savings	1,224	1,165	1,034	1,112	1,384	1,314	13%	5%
Protection	95	69	52	70	103	88	28%	19%
France	1,319	1,234	1,086	1,182	1,487	1,402	14%	6%
Pensions	192	164	137	207	156	164	—	(2)%
Savings	754	576	437	676	792	1,347	—	(2)%
Annuities	—	1	—	—	—	—	(61)%	(64)%
Protection	125	136	117	155	126	151	10%	6%
Poland⁵, Italy, Spain and Turkey	1,071	877	691	1,038	1,074	1,662	89%	79%
Europe	2,390	2,111	1,777	2,220	2,561	3,064	45%	36%
Asia⁵	623	826	769	605	497	489	(41)%	(43)%
Aviva Investors	366	395	404	482	485	903	129%	129%
Total	5,956	8,096	7,711	8,002	7,829	8,723	8%	6%

1 Present value of new business premiums (PVNBP) is the present value of new regular premiums plus 100% of single premiums, calculated using assumptions consistent with those used to determine the value of new business.

2 Currency movements are calculated using unrounded numbers so minor rounding differences may exist.

3 Includes c.£1 billion PVNBP (net of reinsurance) relating to a longevity insurance transaction completed in 3Q15.

4 United Kingdom includes Friends UK from 10 April 2015.

5 Poland includes Lithuania. Asia includes FPI from 10 April 2015.

E8 – Geographical analysis of regular and single premiums

	Regular premiums							Single premiums		
	6 months 2016 £m	Constant currency growth ¹	WACF	Present value £m	6 months 2015 £m	WACF	Present value £m	6 months 2016 £m	6 months 2015 £m	Constant currency growth ¹
United Kingdom ²	869	52%	5.0	4,313	633	5.5	3,462	3,901	3,609	8%
Ireland	15	11%	6.5	97	12	6.4	77	242	193	18%
United Kingdom & Ireland	884	51%	5.0	4,410	645	5.5	3,539	4,143	3,802	9%
France	53	11%	8.8	465	45	9.1	409	2,424	2,144	6%
Poland ³	19	(3)%	8.1	153	20	7.5	149	44	69	(37)%
Italy	24	248%	2.9	70	7	6.7	47	1,955	1,069	72%
Spain	15	(18)%	5.9	89	17	6.4	108	211	255	(22)%
Turkey	39	(19)%	4.8	186	51	4.0	203	28	48	(39)%
Europe	150	7%	6.4	963	140	6.5	916	4,662	3,585	23%
Asia ³	100	(36)%	6.9	686	155	6.7	1,035	300	414	(29)%
Aviva Investors	—	—	—	—	—	—	—	1,388	761	83%
Total	1,134	29%	5.3	6,059	940	5.8	5,490	10,493	8,562	19%

¹ Currency movements are calculated using unrounded numbers so minor rounding differences may exist.

² United Kingdom includes Friends UK from 10 April 2015.

³ Poland includes Lithuania. Asia includes FPI from 10 April 2015.

E9 – Trend analysis of investment sales – cumulative

Investment sales ¹	1Q15 YTD £m	2Q15 YTD £m	3Q15 YTD £m	4Q15 YTD £m	1Q16 YTD £m	2Q16 YTD £m	Growth ² on 2Q15	
							Sterling %	Constant currency %
United Kingdom & Ireland ³	271	710	1,041	1,315	260	575	(19)%	(19)%
Aviva Investors ⁴	1,073	2,102	3,475	4,993	1,384	3,587	71%	65%
Asia ⁵	41	78	103	129	28	58	(25)%	(28)%
Total investment sales	1,385	2,890	4,619	6,437	1,672	4,220	46%	42%

¹ Investment sales are calculated as new single premiums plus the annualised value of new regular premiums.

² Currency movements are calculated using unrounded numbers so minor rounding differences may exist.

³ UK & Ireland investment sales are also reported in UK Life PVNBP following the extension of MCEV covered business. YTD investment sales of £271 million for 1Q15, £710 million for 2Q15, £1,041 million for 3Q15, £1,315 million for 4Q15, £260 million for 1Q16 and £575 million for 2Q16 are equivalent to £295 million, £774 million, £1,110 million, £1,352 million, £284 million and £636 million respectively on a PVNBP basis.

⁴ YTD investment sales of £362 million for 1Q15, £755 million for 2Q15, £1,156 million for 3Q15, £1,635 million for 4Q15, £480 million for 1Q16 and £1,381 million for 2Q16 are also included in Aviva Investors' PVNBP at the same level following the extension of MCEV covered business.

⁵ Asia investment sales are also reported in Asia PVNBP following an extension of MCEV covered business.

E10 – Trend analysis of investment sales – discrete

Investment sales ¹	1Q15 Discrete £m	2Q15 Discrete £m	3Q15 Discrete £m	4Q15 Discrete £m	1Q16 Discrete £m	2Q16 Discrete £m	Growth ² on 2Q15	
							Sterling %	Constant currency %
United Kingdom & Ireland ³	271	439	331	274	260	315	(28)%	(28)%
Aviva Investors ⁴	1,073	1,029	1,373	1,518	1,384	2,203	114%	106%
Asia ⁵	41	37	25	26	28	30	(17)%	(20)%
Total investment sales	1,385	1,505	1,729	1,818	1,672	2,548	69%	65%

¹ Investment sales are calculated as new single premiums plus the annualised value of new regular premiums.

² Currency movements are calculated using unrounded numbers so minor rounding differences may exist.

³ UK & Ireland investment sales are also reported in UK Life PVNBP following the extension of MCEV covered business. Discrete investment sales of £271 million for 1Q15, £439 million for 2Q15, £331 million for 3Q15, £274 million for 4Q15, £260 million for 1Q16, £315 million for 2Q16 are equivalent to £295 million, £479 million, £336 million, £242 million, £284 million and £352 million respectively on a PVNBP basis.

⁴ Discrete investment sales of £362 million for 1Q15, £393 million for 2Q15, £401 million for 3Q15, £479 million for 4Q15, £480 million for 1Q16 and £901 million for 2Q16 are also included in Aviva Investors' PVNBP at the same level following the extension of MCEV covered business.

⁵ Asia investment sales are also reported in Asia PVNBP following an extension of MCEV covered business.

E11 – Trend analysis of general insurance and health net written premiums – cumulative

	1Q15 YTD £m	2Q15 YTD £m	3Q15 YTD £m	4Q15 YTD £m	1Q16 YTD £m	2Q16 YTD £m	Growth ¹ on 2Q15	
							Sterling %	Constant currency %
General insurance								
United Kingdom ²	855	1,851	2,750	3,685	958	2,001	8%	8%
Ireland	63	134	210	282	83	179	33%	25%
United Kingdom & Ireland	918	1,985	2,960	3,967	1,041	2,180	10%	9%
Europe	399	674	910	1,200	437	757	12%	6%
Canada	409	1,013	1,519	1,992	417	1,049	4%	5%
Asia & Other	3	6	8	12	3	5	(8)%	(11)%
	1,729	3,678	5,397	7,171	1,898	3,991	9%	7%
Health insurance								
United Kingdom ³	158	315	423	529	151	292	(7)%	(7)%
Ireland	28	42	58	85	27	43	3%	(3)%
United Kingdom & Ireland	186	357	481	614	178	335	(6)%	(7)%
Europe	89	128	157	210	97	155	21%	14%
Asia ⁴	33	55	75	95	37	64	16%	11%
	308	540	713	919	312	554	3%	—
Total	2,037	4,218	6,110	8,090	2,210	4,545	8%	6%

¹ Currency movements are calculated using unrounded numbers so minor rounding differences may exist.

² Excludes the impact from an outward quota share reinsurance agreement completed in 2015 in Aviva insurance Limited (AIL).

³ These premiums are also reported in UK Life PVNBP following the extension of MCEV covered business. 1Q15 NWP of £158 million, 2Q15 YTD NWP of £315 million, 3Q15 YTD NWP of £423 million, 4Q15 YTD NWP of £529 million, 1Q16 NWP of £151 million and 2Q16 YTD NWP of £292 million are equivalent to £182 million, £373 million, £451 million, £565 million, £123 million and £255 million on a PVNBP basis respectively.

⁴ Singapore long term health business is also reported in Asia PVNBP following the extension of MCEV covered business. For Singapore long term health business, 1Q15 NWP of £10 million, 2Q15 YTD NWP of £23 million, 3Q15 YTD NWP of £36 million, 4Q15 YTD NWP of £51 million, 1Q16 NWP of £14 million and 2Q16 YTD NWP of £30 million are equivalent to £48 million, £120 million, £184 million, £214 million, £48 million and £97 million on a PVNBP basis respectively.

E12 – Trend analysis of general insurance and health net written premiums – discrete

	1Q15 Discrete £m	2Q15 Discrete £m	3Q15 Discrete £m	4Q15 Discrete £m	1Q16 Discrete £m	2Q16 Discrete £m	Growth ¹ on 2Q15	
							Sterling %	Constant currency %
General insurance								
United Kingdom ²	855	996	899	935	958	1,043	5%	5%
Ireland	63	71	76	72	83	96	35%	26%
United Kingdom & Ireland	918	1,067	975	1,007	1,041	1,139	7%	6%
Europe	399	275	236	290	437	320	16%	9%
Canada	409	604	506	473	417	632	5%	6%
Asia & Other	3	3	2	4	3	2	(18)%	(22)%
	1,729	1,949	1,719	1,774	1,898	2,093	7%	6%
Health insurance								
United Kingdom ³	158	157	108	106	151	141	(10)%	(10)%
Ireland	28	14	16	27	27	16	13%	5%
United Kingdom & Ireland	186	171	124	133	178	157	(8)%	(9)%
Europe	89	39	29	53	97	58	50%	39%
Asia ⁴	33	22	20	20	37	27	18%	13%
	308	232	173	206	312	242	4%	2%
Total	2,037	2,181	1,892	1,980	2,210	2,335	7%	6%

¹ Currency movements are calculated using unrounded numbers so minor rounding differences may exist.

² Excludes the impact from an outward quota share reinsurance agreement completed in 2015 in Aviva insurance Limited (AIL).

³ These premiums are also reported in UK Life PVNBP following the extension of MCEV covered business. 1Q15 NWP of £158 million, 2Q15 NWP of £157 million, 3Q15 NWP of £108 million, 4Q15 NWP of £106 million, 1Q16 NWP of £151 million and 2Q16 NWP of £141 million are equivalent to £182 million, £191 million, £78 million, £114 million, £123 million and £132 million on a PVNBP basis respectively.

⁴ Singapore long term health business is also reported in Asia PVNBP following the extension of MCEV covered business. For Singapore long term health business, 1Q15 NWP of £10 million, 2Q15 NWP of £13 million, 3Q15 NWP of £13 million, 4Q15 NWP of £15 million, 1Q16 NWP of £14 million and 2Q16 NWP of £16 million are equivalent to £48 million, £72 million, £64 million, £30 million, £48 million and £49 million on a PVNBP basis respectively.

E13 – Reconciliation of sales to net written premiums in IFRS

The table below presents our consolidated sales for the periods ended 30 June 2016, 30 June 2015 and the year ended 31 December 2015 as well as the reconciliation of sales to net written premiums in IFRS.

	6 months 2016 £m	6 months 2015 £m	Full Year 2015 £m
Present value of new business premiums	16,552	14,052	29,765
Investment sales	4,220	2,890	6,437
General insurance and health net written premiums	4,545	4,218	8,090
Less: long-term health and collectives business ²	(2,337)	(1,803)	(3,660)
Total sales	22,981	19,357	40,632
Less: Effect of capitalisation factor on regular premium long-term business	(4,926)	(4,551)	(10,357)
Share of long-term new business sales from JVs and associates	(238)	(232)	(427)
Annualisation impact of regular premium long-term business ¹	(142)	(127)	(251)
Deposits taken on non-participating investment contracts and equity release contracts	(3,781)	(3,073)	(6,560)
Retail sales of mutual fund type products (investment sales)	(4,220)	(2,890)	(6,437)
Add: IFRS gross written premiums from existing long-term business ¹	2,604	2,227	4,676
Less: long-term insurance and savings business premiums ceded to reinsurers	(845)	(657)	(1,529)
Less: Outward reinsurance premium relating to general insurance business ³	—	—	(712)
Total IFRS net written premiums	11,433	10,054	19,035
Analysed as:			
Long-term insurance and savings net written premiums	6,888	5,836	11,658
General insurance and health net written premiums	4,545	4,218	7,377
	11,433	10,054	19,035

¹ £200 million has been reclassified from 'Annualisation impact of regular premium long-term business' to 'IFRS gross written premiums from existing long-term business' in UK Life for FY15.

² Long-term health and collectives business are included as part of PVNBP following the extension of MCEV covered business.

³ 2015 represents a reinsurance premium ceded of £712 million relating to an outward reinsurance contract completed by the UK General Insurance business.

Effect of capitalisation factor on regular premium long-term business

PVNBP is derived from the single and regular premiums of the products sold during the financial period and is expressed at the point of sale. The PVNBP calculation is equal to total single premium sales received in the year plus the discounted value of regular premiums expected to be received over the term of the new contracts. The discounted value of regular premiums is calculated using the same market consistent embedded value methodology as for VNB (on a MCEV basis).

The discounted value reflects the expected income streams over the life of the contract, adjusted for expected levels of persistency, discounted back to present value. The discounted value can also be expressed as annualised regular premiums multiplied by a weighted average capitalisation factor (WACF). The WACF varies over time depending on the mix of new products sold, the average outstanding term of the new contracts and the projection assumptions.

Share of long-term new business sales from joint ventures and associates

Total long-term new business sales include our share of sales from joint ventures and associates. Under IFRS reporting, premiums from these sales are excluded from our consolidated accounts, with only our share of profits or losses from such businesses being brought into the income statement separately.

Annualisation impact of regular premium long-term business

As noted above, the calculation of PVNBP includes annualised regular premiums. The impact of this annualisation is removed in order to reconcile the non-GAAP new business sales to IFRS premiums and will vary depending on the volume of regular premium sales during the year.

Deposits taken on non-participating investment contracts and equity release contracts

Under IFRS, non-participating investment contracts are recognised in the Statement of Financial Position by recording the cash received as a deposit and an associated liability and are not recorded as premiums received in the IFRS income statement. Only the margin earned is recognised in the IFRS income statement.

Retail sales of mutual fund type products (investment sales)

Investment sales included in the total sales number represent the cash inflows received from customers to invest in mutual fund type products such as unit trusts and OEICs. We earn fees on the investment and management of these funds which are recorded separately in the IFRS income statement as 'fees and commissions received' and are not included in statutory premiums.

IFRS gross written premiums from existing long-term business

The non-GAAP measure of long-term and savings sales focuses on new business written in the year under review whilst the IFRS income statement includes premiums received from all business, both new and existing.

E14 – Principal Assumptions underlying the calculation of VNB (on a MCEV basis)

(a) Reference rates

Economic assumptions are derived actively, based on market yields on risk-free fixed interest assets at the end of each reporting period.

In setting the risk-free rate we have, wherever possible, used the mid-price swap yield curve for an AA-rated bank. For some businesses, where the impact is immaterial, a flat yield curve has been assumed. For most businesses, the curve is extrapolated beyond the last available market data point to an ultimate forward rate using the Nelson-Siegel functional form if necessary. For markets in which there is no reliable swap yield curve, the risk-free rate is based on relevant government bond yields with adjustments made to reflect the local market environment where necessary. For certain business, swap rates are adjusted for a 'liquidity premium' in deriving the risk-free rates, and these adjustments are shown below the reference rate table.

The principal economic assumptions used are as follows:

United Kingdom	2Q 2016	1Q 2016	4Q 2015	3Q 2015	2Q 2015	1Q 2015
Reference rate						
1 year	0.6%	0.7%	0.7%	0.7%	0.6%	0.6%
5 years	1.0%	1.6%	1.4%	1.7%	1.4%	1.5%
10 years	1.4%	2.0%	1.9%	2.2%	1.7%	1.9%
15 years	1.7%	2.2%	2.0%	2.4%	1.9%	2.1%
20 years	1.7%	2.3%	2.1%	2.4%	2.0%	2.2%

Eurozone	2Q 2016	1Q 2016	4Q 2015	3Q 2015	2Q 2015	1Q 2015
Reference rate						
1 year	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%
5 years	0.1%	0.3%	0.4%	0.5%	0.2%	0.4%
10 years	0.5%	1.0%	1.0%	1.2%	0.6%	0.8%
15 years	0.9%	1.5%	1.4%	1.6%	0.7%	1.2%
20 years	1.0%	1.6%	1.5%	1.7%	0.8%	1.4%

(b) Liquidity premiums

The following liquidity premium adjustments are made to the swap rate for certain contracts. The risk-free rate is taken as the swap yield curve for the currency of the liability, adjusted by adding the following to each swap rate:

	2Q 2016	1Q 2016	4Q 2015	3Q 2015	2Q 2015	1Q 2015
UK immediate annuities ¹	1.51%	1.51%	1.41%	1.40%	1.59%	1.59%
France immediate annuities	0.36%	0.38%	0.45%	0.28%	0.16%	0.19%
France participating business	0.27%	0.29%	0.34%	0.21%	0.12%	0.15%
Italy participating business	0.27%	0.29%	0.34%	0.21%	0.12%	0.15%

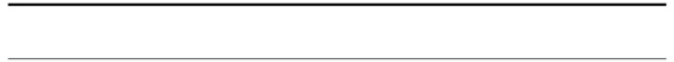
¹ Immediate annuities have also been sold in Friends UK as well as the UK annuity business (UKA). At Q216, the liquidity premium for Friends UK policies is 79 bps for new business.

In assessing the liquidity premium, an optimised notional portfolio is assumed which can include the actual assets backing the liabilities and the matching that exists between them.

For assets valued on a mark to model basis (notably UK commercial mortgages and equity release assets) the liquidity premium continues to be estimated consistently with the underlying valuation model. For all other assets, the formula structure proposed by the CFO / CRO Forum and adopted in the Solvency II Fifth Quantitative Impact Study (QIS 5) is adopted. The formula for the liquidity premium is:

United Kingdom/Europe: 50% of (iBoxx Corporate bond spread – 40bps)

For immediate and bulk purchase annuities, 100% of the full liquidity premium is applied, while 75% liquidity premium is applied to participating business and deferred annuities. No liquidity premium is applied to any other products.



This page is intentionally left blank

Other information

In this section	Page
Other information	
Glossary	114
Shareholder services	118

Product definitions

Annuity

A type of policy that pays out regular amounts of benefit, either immediately and for the remainder of a person's lifetime, or deferred to commence from a future date. Immediate annuities may be purchased for an individual and his or her dependants or on a bulk purchase basis for groups of people. Deferred annuities are accumulation contracts, which may be used to provide benefits in retirement. Annuities may be guaranteed, unit-linked or index-linked.

Bonds and savings

These are accumulation products with single or regular premiums and unit-linked or guaranteed investment returns.

Critical illness cover

Pays out a lump sum if the insured person is diagnosed with a serious illness that meets the plan definition.

Deferred annuity

An annuity (or pension) due to be paid from a future date or when the policyholder reaches a specified age. A deferred annuity may be funded by a policyholder by payment of a series of regular contributions or by a capital sum.

Equity release

Equity release mortgages allow a homeowner to receive a lump sum in return for a mortgage secured on their house. No interest is payable on the loan; instead, interest is rolled-up on the loan and the loan and accrued interest are repayable at redemption (upon death or moving into long-term care).

General insurance

Also known as non-life or property and casualty insurance. Property insurance covers loss or damage through fire, theft, flood, storms and other specified risks. Casualty insurance primarily covers losses arising from accidents that cause injury to other people or damage the property of others.

Group pension

A pension plan that covers a group of people, which is typically purchased by a company and offered to their employees.

Health insurance

Provides cover against loss from illness or bodily injury. Can pay for medicine, visits to the doctor, hospital stays, other medical expenses and loss of earnings, depending on the conditions covered and the benefits and choices of treatment available on the policy.

Income drawdown

The policyholder can transfer money from any pension fund to an income drawdown plan from which they receive an income. The remainder of the pension fund continues to be invested, giving it the potential for growth.

Investment sales

Comprise retail sales of mutual fund-type products such as unit trusts, individual savings accounts (ISAs) and open ended investment companies (OEICs).

Individual savings account (ISAs)

Tax-efficient plans for investing in stocks and shares, cash deposits or life insurance investment funds, subject to certain limits.

Mortgage endowment

An insurance contract combining savings and protection elements which is designed to repay the principal of a loan or mortgage.

Mortgage life insurance

A protection contract designed to pay off the outstanding amount of a mortgage or loan in the event of death of the insured.

Open ended investment company (OEIC)

A collective investment fund structured as a limited company in which investors can buy and sell shares.

Pension

A means of providing income in retirement for an individual and possibly his/her dependants.

Personal pension

A pension plan tailored to the individual policyholder, which includes the options to stop, start or change their payments.

Protection

An insurance contract that protects the policyholder or his/her dependants against financial loss on death or ill-health.

Regular premium

A series of payments are made by the policyholder, typically monthly or annually, for part of or all of the duration of the contract.

Collective investment scheme (SICAVs)

This is an open-ended investment fund, structured as a legally independent joint stock company, whose units are issued in the form of shares.

Single premium

A single lump sum is paid by the policyholder at the start of the contract.

Stakeholder pensions

Low cost and flexible pension plans available in the UK, governed by specific regulations.

Term assurance

A simple form of life insurance, offering cover over a fixed number of years during which a lump sum will be paid out if the life insured dies.

Unit trusts

A form of open ended collective investment constituted under a trust deed, in which investors can buy and sell units.

Whole life

A protection policy that remains in force for the insured's whole life; a lump sum will be paid out on death. Traditional whole life contracts have fixed premium payments that typically cannot be missed without lapsing the policy. Flexible whole life contracts allow the policyholder to vary the premium and/or amount of life cover, within certain limits.

General terms

Adjusted Solvency II value of new business

Adjusted Solvency II VNB reflects Solvency II assumptions and allowance for risk and is defined as the increase in Solvency II Own Funds resulting from business written in the period, adjusted to include business in MCEV VNB which is not included in the Solvency II valuation, remove the impact of contract boundaries and include look through profits in service companies (where not included in Solvency II). For the avoidance of doubt, it does not include the movement in the Solvency Capital Requirement.

In due course adjusted Solvency II VNB will replace MCEV VNB as a key performance indicator.

Adjusted Solvency II VNB can be reconciled to MCEV VNB; however there is no equivalent IFRS metric.

Available for sale (AFS)

Securities that have been acquired neither for short-term sale nor to be held to maturity. These are shown at fair value on the statement of financial position and changes in value are taken straight to equity instead of the income statement.

Association of British Insurers (ABI)

A major trade association for UK insurance companies, established in July 1985.

Acquired value of in force (AVIF)

The present value of future profits on a portfolio of long-term insurance and investment contracts, acquired either directly or through the purchase of a subsidiary.

Bancassurance/Affinity

An arrangement whereby banks and building societies sell insurance and investment products to their customers on behalf of other financial providers.

Best Estimate Liabilities (BEL)

The expected present value of future cash flows for a company's current insurance obligations, calculated using best estimate assumptions, projected over the contract's run-off period, taking into account all up-to-date financial market and actuarial information.

Cash remittances

Amounts paid by our operating businesses to the Group, comprising dividends and interest on internal loans.

Combined operating ratio (COR)

A financial measure of general insurance underwriting profitability calculated as incurred claims expressed as a percentage of net earned premiums, plus written commissions and written expenses expressed as a percentage of net written premiums. A COR below 100% indicates profitable underwriting.

Contract boundary

A contract boundary is the first point in time in the lifetime of an insurance policy at which the insurer has the ability to review the premiums charged at the individual policy level, without any contractual constraints. For policies in which such a point does not exist, contract boundary is the same as the full term of the contract. Under Solvency II, if a contract boundary on an insurance contract is less than the full term of the contract the expected future premiums and obligations that relate to cover which may be provided after that date are not recognised in the measurement of the insurance liabilities.

Cost of non-hedgeable risks

This is the cost of undertaking those risks for which a deep and liquid market in which to hedge that risk does not exist. This can include both financial risks and non-financial risks such as mortality, persistency and expense. The cost of non-hedgeable risks reduces the MCEV value of new business.

Covered business

The contracts managed as long-term business to which the VNB on an MCEV basis, adjusted Solvency II VNB and PVNBP has been applied.

Deferred acquisition costs (DAC)

The costs directly attributable to the acquisition of new business for insurance and investment contracts may be deferred to the extent that they are expected to be recoverable out of future margins in revenue on these contracts.

Excess centre cash flow

A measure of excess cash flow, calculated by deducting central operating expenses and debt financing costs from cash remitted by business units.

Fair value

The price that would be received to sell or paid to transfer a liability in an orderly transaction between market participants at the measurement date (i.e. an exit price).

Financial Conduct Authority (FCA)

The FCA is a company limited by guarantee and is independent of the Bank of England. It is responsible for the conduct business regulation of all firms (including those firms subject to prudential regulation by the PRA) and the prudential regulation of firms not regulated by the PRA. The FCA has three statutory objectives: securing an appropriate degree of protection for consumers, protecting and enhancing the integrity of the UK financial system and promoting effective competition in the interests of consumers.

Frictional costs

The additional taxation and investment costs incurred by shareholders through investing required capital in the Company rather than directly. Frictional costs reduce the MCEV value of new business.

Gross written premiums

The total earnings or revenue generated by sales of insurance products, before any reinsurance is taken into account. Not all premiums written will necessarily be treated as income in the current financial year, because some of them could relate to insurance cover for a subsequent period.

Independent Financial Advisers (IFAs)

A person or organisation, authorised under the FCA, to give independent advice on financial matters.

International financial reporting standards (IFRS)

These are accounting regulations designed to ensure comparable statement of financial position preparation and disclosure, and are the standards that all publicly listed companies in the European Union are required to use.

Inherited estate

In the UK, the assets of the long-term with-profit funds less the realistic reserves for non-profit policies written within the with-profit funds, less asset shares aggregated across the with-profit policies and any additional amounts expected at the valuation date to be paid to in-force policyholders in the future in respect of smoothing costs and guarantees.

Latent claims

General insurance claims that are often not made until many years after the period of cover provided, due to the impact of perils or causes not becoming evident for a number of years. Sources of latent claims include asbestos-related diseases, environmental pollution and industrial deafness.

Life business

Subsidiaries selling life and pensions contracts that are classified as covered business within MCEV VNB.

Liquidity premium

An addition to the risk-free rate used when projecting investment returns and discounting cash flows on certain types of contracts where the liabilities are illiquid and have cash flows that are predictable.

Longevity

Risk associated with increasing life expectancy trends among policyholders and pensioners.

Long-term and savings business

Collective term for life insurance, pensions, savings, investments and related business.

Market consistent embedded value (MCEV)

A measure of the value of a life business to its shareholders. It is the sum of shareholders net assets and today's value of the future profits that are expected to emerge from business already written, where the assumptions used to calculate future profits are consistent with current market prices for traded assets.

MCEV value of new business (VNB)

VNB is the present value of future profits from new business written at the point of sale. It is calculated on a market consistent basis using economic assumptions set at the start of each quarter or more frequently and best estimate operating assumptions. It is stated after the effect of any frictional costs and the cost of non-hedgeable risks.

MCEV VNB can be reconciled to adjusted Solvency II VNB; however there is no equivalent IFRS metric.

Minimum capital requirement (MCR)

The Minimum Capital Requirement is the minimum amount of capital that an insurer needs to hold to cover its risks under the Solvency II regulatory framework. If an insurer's capital falls below the MCR then authorisation will be withdrawn by the regulator unless a firm is able to meet the MCR within a short period of time.

Mortality

Rate of death, varying by such parameters as age, gender and health, used in pricing and computing liabilities for policyholders of life and annuity products, which contain mortality risks.

Morbidity

Rate of disease or how likely someone will fall ill, varying by such parameters as age, gender and health, used in pricing and computing liabilities for policyholders of life and annuity products.

Net written premiums

Total gross written premiums for the given period, minus premiums paid over or 'ceded' to reinsurers.

New business contribution

New business contribution is the increase in Solvency II own funds resulting from business written in the period.

New business margin

New business margins are calculated as the MCEV value of new business divided by the present value of new business premiums (PVNBP), and expressed as a percentage.

Operating Capital Generation (OCG)

OCG is the Solvency II surplus movement in the period due to operating items including new business contribution, expected investment returns on existing business and management actions. It excludes economic variances, economic assumption changes and integration and restructuring costs.

Operating expenses

The day-to-day expenses involved in running the business, including staff costs. For the avoidance of doubt, operating expenses excludes commission, non-operating integration and restructuring costs, and amortisation and impairment of AVIF and intangible assets.

Operating expense ratio

The Group operating expense ratio expresses operating expenses as a percentage of operating income. Operating income is calculated as operating profit before Group debt costs and operating expenses.

Operating profit

This is a non-GAAP financial performance measure. It is based on expected investment returns and stated before tax and before non-operating items including impairment of goodwill and amortisation and impairment of acquired value of in-force business, the profit or loss on disposal and remeasurement of subsidiaries, joint ventures and associates, integration and restructuring costs and other items.

Own Funds

Under Solvency II, available capital is referred to as own funds. This represents Solvency II own funds that are eligible to cover the SCR and MCR. This is the excess of Solvency II assets over liabilities in the SII economic balance sheet (including subordinated liabilities and net of transitional measures on technical provisions) calculated on best estimate, market-consistent assumptions and includes off-balance sheet own funds approved by the regulator and reflects any tiering restrictions.

Present value of new business (PVNBP)

PVNBP is equal to the total single premium sales received in the period plus the discounted value of regular premiums expected to be received over the terms of the new contracts. It is expressed at the point of sale and is calculated using assumptions consistent with those used to determine the MCEV value of new business.

Persistency

The rate at which policies are retained over time and therefore continue to contribute premium income and funds under management.

Prudential Regulatory Authority (PRA)

The PRA is a part of the Bank of England and is responsible for the prudential regulation of deposit taking institutions, insurers and major investment firms. The PRA has two statutory objectives: to promote the safety and soundness of these firms and, specifically for insurers, to contribute to the securing of an appropriate degree of protection for policyholders.

Required capital

The amount of assets, over and above the value placed on liabilities in respect of covered business, whose distribution to shareholders is restricted.

Risk-adjusted returns

Adjusting profits earned and investment returns by how much risk is involved in producing that return or profit.

Risk Margin

The amount an insurance company would require, in excess of best estimate liabilities, in order to take over and meet the whole portfolio of insurance and reinsurance obligations. It reflects the cost of providing capital equal to the Solvency II capital requirement for non-hedgable risks necessary to support the insurance obligations over their lifetime. Risk Margin represents the value of deviation risk of the actual outcome compared with the best estimate, expressed in terms of a defined risk measure.

Solvency II

These are insurance regulations designed to harmonise EU insurance regulation. Primarily this concerns the amount of capital that European insurance companies must hold under a measure of capital and risk. Solvency II became effective from 1 January 2016.

Solvency II surplus

Solvency II own funds less the Solvency Capital Requirement.

Solvency Capital Requirement (SCR)

The Solvency Capital Requirement is the amount of capital the regulator requires an insurer to hold to meet the requirements under the Solvency II regulatory framework. Holding capital in excess of the SCR demonstrates an insurer has adequate financial resources in place to meet all its liabilities as and when they fall due and that there is sufficient capital to absorb significant losses. Firms may use their own internal model, the European Insurance and Occupational Pensions Authority (EIOPA) prescribed standard formula or a partial internal model to determine SCR.

Solvency II cover ratio

Solvency II Own Funds divided by the Solvency II Solvency Capital Requirement. The estimated Solvency II cover ratio represents the shareholder view. This excludes the contribution to Group Solvency Capital Requirement (SCR) and Group Own Funds of fully ring fenced with-profits funds and staff pension schemes in surplus – these exclusions have no impact on Solvency II surplus.

Total shareholder return

A measure of company performance based on the overall value to shareholders of their investment in a stock over a given period of time. Includes movement in the share price and dividends paid and reinvested, expressed as a percentage of the initial value of the investment or share price at the beginning of the period.

Underwriting result

The profit or loss from operational activities, excluding investment performance. It is calculated as net earned premium less net insurance claims and total expenses.

UK Corporate Governance Code

The code sets out guidance in the form of principles and provisions on how companies should be directed and controlled to follow good governance practice.

Annual General Meeting (AGM)

- The voting results for the 2016 AGM, including proxy votes and votes withheld, can be viewed on our website at www.aviva.com/agm. There, you will also find a webcast of the formal business of the meeting and information relating to past general meetings.

Dividends

2016 interim dividend dates – ordinary shares

Ex-dividend date*	6 October 2016
Record date	7 October 2016
Last day for Dividend	
Reinvestment Plan election	27 October 2016
Dividend payment date*	17 November 2016

* Please note that the ADR ex-dividend date will be 5 October 2016. The ADR dividend payment date will be 23 November 2016.

- Dividends on ordinary shares are normally paid in May and November – please see the table above for the key dates in respect of the 2016 interim dividend
- Dividends on preference shares are normally paid in March, June, September and December – please visit www.aviva.com/preferenceshares for the latest dividend payment dates
- Holders of ordinary and preference shares will receive any dividends payable in sterling and holders of ADRs will receive any dividends payable in US dollars

Dividend Reinvestment Plan

- The Company offers a Dividend Reinvestment Plan which provides the option for eligible shareholders to reinvest their cash dividend in additional ordinary shares in the Company.
- Completed application forms must be sent to the Company's Registrar, Computershare Investor Services PLC (Computershare), by no later than 5pm on 27 October 2016.

Direct credit of dividend payments

- Receive your dividend payments directly into your UK bank or building society account on the dividend payment date. Using this option will prevent any postal delay, risk of loss or having to visit your bank or building society to deposit cheques

Global dividend service

- The Global Payments Service provided by Computershare enables shareholders living overseas to elect to receive their dividends in a choice of over 60 international currencies. For further details and fees for this service please visit www.investorcentre.co.uk/faq and select the Dividends and Payments tab, followed by Global Payment Service.

ShareGift

ShareGift is a UK registered charity (No. 1052686) which specialises in realising the value locked up in small shareholdings for charitable purposes. So far in 2016, over 600 Aviva shareholders have donated over £70,000 to ShareGift, which in turn supported local, national and international charities large and small. To donate your Aviva plc shares to ShareGift please visit www.ShareGift.org/donate-shares.

Online Shareholder Services

View and manage your holdings online

As an Aviva shareholder you can make a positive impact by electing for electronic communications and managing your shareholding online at www.aviva.com/online.

The Investor Centre is a free, secure online service run by Computershare, giving you convenient access to information on your shareholdings.

Manage your shareholding online and take advantage of the following features and more:

- View all of your Computershare managed holdings and their market values
- Update your dividend mandate bank instructions and your home address across your entire portfolio in a single transaction
- Apply to join the Aviva Dividend Reinvestment Plan
- Choose to have your dividend paid in your local currency direct to your bank account*
- View your transaction and payment history
- Check details of outstanding payments and request for replacement payments to be issued
- Elect to receive important shareholder communications by email or in hard copy format
- Download useful forms

To register you will be required to enter your Aviva Shareholder Reference Number (beginning with a C, I, or G followed by 10 numbers) which you can find at the top of any Aviva shareholder correspondence received from Computershare.

*Company and currency restrictions apply

Be on your guard – beware of fraudsters!

Please be very wary of any unsolicited telephone calls or correspondence offering to buy shares at a premium, sell shares at a discount or free financial advice.

The Financial Conduct Authority (FCA) takes action against fraudsters; for tips on how to protect you savings please visit www.fca.org.uk/scams. Alternatively please visit our warning to shareholders page at www.aviva.com/shareholders.

Remember:

- If it sounds too good to be true it probably is
- Keep in mind that firms authorised by the FCA are unlikely to call you out of the blue
- Do not get into a conversation, note the name of the firm and hang up

Contact details

Ordinary and preference shares – Computershare Investor Services Plc

For any queries regarding your shareholding, or to advise of changes to your personal details, please contact Computershare:



By telephone: 0371 495 0105

Lines are open from 8.30am to 5.30pm (UK time), Monday to Friday (excluding public holidays). Please call +44 117 378 8361 if calling from outside the UK.



By email: AvivaSHARES@computershare.co.uk



In writing: Computershare Investor Services Plc, The Pavilions, Bridgwater Road, Bristol BS99 6ZZ

American Depositary Receipts (ADRs) – Citibank

For any queries regarding Aviva ADRs, please contact Citibank Shareholder Services (Citibank):



By telephone: 1 877 248 4237 (1 877-CITI-ADR), or +1 781 575 4555 if you are calling from outside the US. (Lines are open from 8.30am to 6pm, Monday to Friday US Eastern Standard Time).



By email: citibank@shareholders-online.com



In writing: Citibank Shareholder Services, PO Box 43077, Providence, Rhode Island 02940-3077 USA

Please visit www.citi.com/dr for further information about Aviva's ADR programme.

Group company secretary

Shareholders may contact the group company secretary as follows:



By email: aviva.shareholders@aviva.com



In writing: Kirstine Cooper, Group Company Secretary, St Helen's, 1 Undershaft, London EC3P 3DQ



By telephone: +44 (0)20 7283 2000

Useful links for shareholders

Shareholder Services Centre:

www.aviva.com/shareholders

Manage your shares online:

www.aviva.com/online

Dividend information:

www.aviva.com/dividends

Annual General Meeting information:

www.aviva.com/agm

Aviva reports information:

www.aviva.com/reports

Aviva share price

www.aviva.com/shareprice

Aviva preference share price

www.londonstockexchange.com

Do you receive duplicate documents?

A number of shareholders still receive duplicate documentation and split dividend payments as a result of having more than one account on the Aviva Register of Members. If you think you fall into this group and would like to combine your accounts, please contact Computershare.