AVIVA

News Release

2 August 2018

AVIVA PLC 2018 INTERIM RESULTS ANNOUNCEMENT

Mark Wilson, Group Chief Executive Officer, said:

> Aviva has grown operating earnings per share by 4% and increased the dividend by 10%.
>
> The 10% increase in the interim dividend is our fourth consecutive half-year of double digit dividend growth and further proof of Aviva's progress.
>
> During these choppy market conditions, it is reassuring that Aviva's results are consistent, dependable and growing.
>
> Aviva remains financially strong with a capital surplus of £11 billion. In the first half of 2018, we started a £600 million share buy-back and paid off €500 million of expensive debt.
>
> We remain on track to achieve our financial targets.

Profit	• Operating EPS up 4% to 26.8 pence *(HY17: 25.8 pence)* • Operating profit[‡,#,1] down 2% to £1,438 million *(HY17: £1,465 million)*. Excluding disposals, operating profit rose 4% to £1,421 million *(HY17: £1,365 million)* • IFRS profit after tax £376 million *(HY17: £716 million)*
Dividend	• Interim dividend per share up 10% to 9.25 pence *(HY17: 8.40 pence)*
Capital	• Solvency II capital surplus[2] £11.0 billion *(2017: £12.2 billion)*, including £1.8 billion of distributions to investors. • Solvency II cover ratio[‡,2] 187% *(2017: 198%)* • Operating capital generation[#] £0.9 billion *(HY17: £1.1 billion)* • IFRS net asset value per share 411 pence *(2017: 423 pence)*
Cash	• Cash remittances[‡,#] £1,493 million *(HY17: £1,170 million)* • UK Insurance special remittance £500 million. Cumulative special remittances from UK Insurance since 2016 totalled £1.25 billion, ahead of £1 billion target. • Holding company liquidity £1.4[3] billion *(February 2018: £2.0 billion)*

‡ Denotes Alternative Performance Measures (APMs) which are key performance indicators of the Group used to measure our performance and financial strength.
\# Denotes key performance indicators which are used by the Group to determine or modify remuneration.
1 All references throughout this report to 'Operating profit' represent 'Group adjusted operating profit', an APM which is not bound by the requirements of IFRS.
2 The estimated Solvency II position represents the shareholder view as defined in section 8.i of the Analyst Pack.
3 Stated as at July 2018 but excluding amounts set aside to meet the remainder of our ordinary share repurchase programme.

[Key financial metrics](#)

Operating profit‡,#

	6 months 2018 £m	6 months 2017 £m	Sterling % change	Full year 2017 £m
Life business[1]	1,392	1,296	7%	2,852
General insurance and health[1]	302	418	(28)%	704
Fund management	74	69	7%	164
Other[1,2]	(330)	(318)	(4)%	(652)
Total	1,438	1,465	(2)%	3,068
Operating earnings per share	26.8p	25.8p	4%	54.8p

Cash remittances[3,‡,#]

	6 months 2018 £m	6 months 2017 £m	Sterling % Change	Full year 2017 £m
United Kingdom[3]	1,226	930	32%	1,800
Canada	13	13	—	55
Europe[3]	217	190	14%	485
Asia & Aviva Investors	37	37	—	58
Total	1,493	1,170	28%	2,398

Operating capital generation (OCG): Solvency II basis[#,3]

	6 months 2018 £bn	6 months 2017 £bn	Sterling % Change	Full year 2017 £bn
United Kingdom[3]	0.9	0.8	13%	2.8
Canada	—	0.1	(100)%	(0.1)
Europe[3]	0.4	0.4	—	0.9
Asia & Aviva Investors	—	0.1	(100)%	0.1
Other[4]	(0.4)	(0.3)	(33)%	(1.1)
Total	0.9	1.1	(18)%	2.6

Expenses

	6 months 2018 £m	6 months 2017 £m	Sterling % change	Full year 2017 £m
Operating expenses	1,929	1,851	4%	3,778
Integration & restructuring costs	—	52	(100)%	141
Expense Base	1,929	1,903	1%	3,919
Operating expense ratio	54.9%	53.3%	1.6pp	52.7%

Value of new business: Adjusted Solvency II basis‡

	6 months 2018 £m	6 months 2017 £m	Sterling % change	Constant currency % change	Full year 2017 £m
United Kingdom[5]	198	267	(26)%	(26)%	527
Europe[5]	307	246	25%	24%	533
Asia & Aviva Investors	98	83	18%	21%	183
Total	603	596	1%	1%	1,243

General insurance combined operating ratio‡

	6 months 2018	6 months 2017	Change	Full year 2017
United Kingdom[5]	94.3%	93.2%	1.1pp	93.9%
Canada	104.6%	98.9%	5.7pp	102.2%
Europe[5]	93.5%	91.0%	2.5pp	93.3%
Combined operating ratio‡	97.4%	94.5%	2.9pp	96.6%

Profit after tax

	6 months 2018 £m	6 months 2017 £m	Sterling % change	Full year 2017 £m
IFRS profit after tax	376	716	(47)%	1,646
Basic earnings per share	7.9p	14.9p	(47)%	35.0p

Interim dividend

	6 months 2018	6 months 2017	Sterling % change
Interim dividend per share	9.25p	8.40p	10%

Capital position

	30 June 2018	31 December 2017	Sterling % change	30 June 2017
Estimated Shareholder Solvency II cover ratio[‡,6]	187%	198%	(11.0)pp	193%
Estimated Solvency II surplus	£11.0bn	£12.2bn	(10)%	£11.4bn
Net asset value per share	411p	423p	(3)%	412p

1 Non-insurance operations relating to the UK have been reclassified to their respective market segments to better align with the segmental note as per note B5 'Segmental Information' in the analyst pack.
2 Other includes other operations, corporate centre costs and group debt and other interest costs, including coupon payments in respect of the direct capital instrument (DCI) and tier 1 notes (net of tax).
3 Cash remitted to Group and Solvency II operating capital generation are managed at legal entity level. As Ireland constitutes a branch of the United Kingdom business, cash remittances from Ireland are not aligned to the new management structure within Europe, but they are reported within United Kingdom.
4 Other includes Group activities and the Group diversification benefit.
5 Following the launch of UK Insurance which brings together UK Life, UK General Insurance and UK Health into a combined business, the Ireland Life and General Insurance businesses have been aligned to the new management structure and reported within Europe. As a result, comparative balances for HY17 have been restated.
6 The estimated Solvency II position represents the shareholder view as defined in section 8.i of the analyst pack.

Overview

In the first half of 2018, Aviva has continued to deliver attractive growth from its major businesses.

Operating earnings per share increased 4% to 26.8 pence *(HY17: 25.8 pence)*, with seven of our major markets achieving operating profit[‡,#] growth from continuing operations ranging from 7% to 14%. Operating profit declined 2% to £1,438 million *(HY17: £1,465 million)* due to weak results in Canadian motor insurance, adverse weather and business divestments. As these factors are expected to abate or reverse in the second half, we remain confident of meeting our ambition of greater than 5% growth in operating earnings per share.

At 30 June 2018, our Solvency II surplus[1] was £11.0 billion *(2017: £12.2 billion)*, equivalent to a cover ratio[‡,1] of 187% *(2017: 198%)*. During the first half, we deployed surplus capital to repay expensive subordinated debt and commenced a £600 million share repurchase programme. Together with the payment of the 2017 final dividend, capital returned to equity and debt holders in the first half totalled £1.8 billion.

Our confidence in the full year outlook and our financial strength is reflected in the dividend, which has increased 10% to 9.25 pence per share *(HY17: 8.40 pence per share)*. This marks the fourth consecutive interim period of double digit growth in dividend per share. Providing shareholders with a sustainable and growing dividend remains paramount for Aviva.

Managing for growth

Aviva has maintained respectable, broad based growth from its major markets in the first half of 2018. While our major markets are concentrated in developed economies, our ability to deliver growth is underpinned by attractive market dynamics coupled with Aviva specific factors. These Aviva-led initiatives can be grouped into three broad categories: distribution, product mix and expenses.

We are expanding distribution and working towards improving productivity across all of our channels and markets. In the first half of 2018, we made progress diversifying distribution in Italy, where we have increased our presence in the IFA market, and Singapore, where our financial advisor network has increased in scale to 772 advisers *(2017: 673 advisers)* and is growing sales volumes. In France, we are focused on helping our strong distribution network fulfil its potential and we are aligning this network under a single Aviva brand.

We continue to proactively manage product mix to maximise returns. In the UK, our general insurance net written premiums were stable as we grew in our preferred channels, particularly commercial non-motor and direct personal lines, offset by a reduction in motor due to the softening market. Similarly, in Ireland, we have tempered top-line growth in general insurance as the competitive environment has evolved. In France, Poland and Singapore, we've emphasised capital-light unit-linked and protection volumes in our life insurance sales. While in the UK, we've strengthened transactional capability in the bulk purchase annuity market, helping us to secure our largest ever transaction with Marks & Spencer and giving rise to a five-fold increase in new business volumes.

Operating expenses have grown 4%, while total expenses (including integration and restructure costs) have risen 1% in the first half. Our expense growth has been deliberate and targeted. We have temporarily increased investment to modernise our IT infrastructure, moving to the cloud and accelerating investment in digital across a number of markets as we work towards launching simpler, more convenient and rewarding product propositions for customers. In our European markets and Aviva Investors, we have managed expenses to deliver improved efficiency and higher profit margins. We also tightened our existing criteria for classifying expenses as integration and restructure costs. While it is possible future major projects may give rise to integration and restructure costs being excluded from operating profit, spending on less material projects is being absorbed within operating expenses. As a result of these changes, integration and restructure costs were held at zero in the first half of 2018 *(HY17: £52 million)*.

Our performance shows the benefits of our diversity, both geographic and by business line, with strength in some areas compensating for weakness in others. Investment in the business is being managed based on affordability in the context of our growth. For example, in the UK business, benefits from longevity reserve releases were offset by provisions for potential redress costs, short-term weakness in annuity new business contribution and higher levels of investment in IT, IFRS 17 and other change projects.

‡ Denotes Alternative Performance Measures (APMs) which are key performance indicators of the Group used to measure our performance and financial strength.
# Denotes key performance indicators which are used by the Group to determine of modify remuneration.
1 The estimated Solvency II position represents the shareholder view as defined in section 8.i of the analyst pack.
2 All percentage movements in this section are quoted as reported in converted sterling unless otherwise stated.

Capital allocation

At 30 June 2018, Aviva's capital surplus was £11.0 billion *(2017: £12.2 billion)*, equating to a cover ratio of 187%. The reduction in capital surplus is primarily attributable to our capital management initiatives, including £1.8 billion of distribution to investors from payment of the final dividend, paying down hybrid debt and buying back shares. Cash remittances[‡,#] during the first half totalled £1,493 million *(HY17: £1,170 million)*. Included within this was a £500 million special remittance from UK Insurance: since 2016, these have totalled £1.25 billion, exceeding our target of £1 billion.

In the first half of 2018, Aviva completed a number of acquisitions and divestments, invested organically in growing and modernising our business and used surplus funds on capital management initiatives.

We have now finalised our withdrawal from Spain and Taiwan and completed the sale of our shareholding in the Avipop joint venture in Italy. We recently completed the acquisition of Friends First in Ireland for €146 million. Friends First will complement our strong existing franchise in Ireland, increasing the scale, product breadth and customer numbers of our life insurance business. This further strengthens our multi-line positioning in Ireland, where we are the leading general insurance provider. The completion of the sale of Friends Provident International Limited is expected to occur in late 2018.

In our existing businesses, we are investing to strengthen our long-term competitiveness. For example, we added capacity in product segments such as bulk purchase annuities, where sales volumes have increased five-fold relative to HY17, and global corporate and specialty, which continues to deliver measured growth in premium volumes. We have invested in building capability, such as hiring in Aviva Investors to expand our equity fund management team. We are also continuing to allocate resource to our modernisation and innovation programmes. In this regard, we are using the additional profitability from releases of excess longevity reserves to accelerate spending on digital and other temporary change programmes that we believe will provide lasting benefits to Aviva in terms of cost efficiency, operational agility and customer proposition.

In 2018, we are targeting £2 billion of surplus capital deployment, comprising debt reduction, bolt-on acquisitions and additional returns to investors. In the first half of 2018, we made significant progress on our deployment plans, completing the Friends First acquisition, paying down €500 million of subordinated debt and commencing a £600 million share repurchase plan (which at the end of July is just over 60% complete). In the second half, we have ear-marked a further $575 million for debt reduction, leaving approximately £400 million to be deployed to reach our £2 billion target. We remain on the lookout for attractive acquisition opportunities that can strengthen our core businesses; however, at this time it is considered unlikely that any such opportunity would be completed during 2018. Accordingly, it is likely that for the remaining £400 million we would prioritise further debt reduction or allocate funds into next year's capital deployment budget.

Digital

Digital remains a strategic focus to drive future growth. The hard work and investment of recent years is reflected in our growing customer numbers. Active Customer Registrations[#] at our UK Digital business are up 1.4 million to 3.5 million. June alone saw a record month for registrations, adding 190,000 customers. In turn, our digital customers are coming to us to meet more of their needs, with the number of customers with more than one Aviva product growing 16% to 1.6 million. Digital continues to play a vital role in Aviva's growth initiatives; broadening and strengthening our distribution, enhancing our business through deepening customer engagement and improving efficiency. We now have new propositions coming to market.

Outlook

Our progress in the first half of 2018 shows the strength and depth of our businesses, with attractive growth maintained across our major markets. Continuation of these major market growth trends coupled with improvements in Canada and further benefit from capital deployment reinforce our confidence in delivering our target of greater than 5% operating earnings per share growth in 2018.

Mark Wilson
Group Chief Executive Officer

Overview

Aviva made operational and financial progress in the first half of 2018, with seven out of our eight major markets delivering attractive growth in operating profit[‡,#] and operating earnings per share increasing 4% to 26.8 pence *(HY17: 25.8 pence).*

Operating profit declined 2% to £1,438 million (*HY17: £1,465 million)* due to the impact of divestitures, challenging market conditions in Canadian motor insurance and a significant increase in weather related claims. However, many of the factors that have adversely affected our results in the first half are temporary and should either diminish or reverse in the second half. We therefore remain confident we can reach our ambition of greater than 5% growth in operating earnings per share in 2018, subject to unexpected changes in foreign exchange, weather or regulation. Reflecting our confidence in the full year prospects, we have increased the interim dividend by 10% to 9.25 pence *(HY17: 8.40 pence)*.

Within operating profit, longevity reserve releases from our UK annuity portfolio were £200 million. This was partly offset by an additional £90 million provision relating to potential redress from historic advised sales by Friends Provident, over 90% of which relate to the period before 2002. In addition, the new business margin from UK annuities was lower than expected as we did not reach target asset mix during the period. Lastly, we have temporarily increased expenditure on IT and other projects in the UK Insurance business and at group centre, reinvesting profits from annuity reserve releases to generate long term benefits for the Group.

IFRS profit after tax was £376 million *(HY17: £716 million)*. Integration and restructure costs have been held at zero *(HY17: £52 million)*, with spending on less material projects now classified as operating expense. Profit on disposal and remeasurement of subsidiaries was £31 million *(HY17: £202 million)* while investment variances were minus £688 million *(HY17: minus £384 million)* due to increased bond yields and widening of fixed income spreads as hedges that protected our economic and Solvency II capital gave rise to negative movements in the IFRS balance sheet.

The Solvency II cover ratio[‡,2] declined to 187% *(2017: 198%)* due to payment of the final dividend and capital deployment initiatives including repayment of €500 million of subordinated debt and the £600 million share repurchase programme. Operating capital generation[#] was £0.9 billion *(HY17: £1.1 billion)* reflecting weaker results in Canada, new business strain on higher annuity sales and completed divestitures.

United Kingdom

In UK Insurance, operating profit rose 10% to £1,040 million *(HY17: £949 million)* with growth in long-term savings and annuities and equity release and benefits from changes in longevity assumptions offsetting lower profits in protection and general insurance.

In long-term savings, operating profit increased 19% to £106 million *(HY17: £89 million)* reflecting higher assets under management and administration (AUM) and continued stability in net profit margin from the in-force business. Net fund inflows increased to £2.5 billion *(HY17: £2.1 billion)* due to growth in workplace pensions. The advisor platform maintained positive net fund flows and increased AUM despite the major IT migration project undertaken during the period. At the end of the first half, AUM in our long-term savings business were up 11% to £121 billion *(HY17: £109 billion)*.

Operating profit from annuities and equity release rose 4% to £322 million *(HY17: £309 million)*. New business volumes increased 83% to £2.6 billion *(HY17: £1.4 billion)* due to a five-fold increase in BPA sales; however, this was not fully reflected in operating profit, with the new business contribution steady at £108 million *(HY17: £109 million)*. In view of the large increase in annuity sales, we were unable to reach our target asset allocation by 30 June and this has temporarily affected the IFRS new business margin. We expect the new business margin to improve in the second half as our long-term asset origination catches up with the sales volumes. The contribution from existing annuity business was £214 million *(HY17: £200 million)* with growth in annuity assets and positive experience variances offsetting the non-recurrence of a £54 million benefit in the prior year related to asset mix optimisation.

In life protection, the competitive environment and claims trends remained challenging in the first half of 2018, with operating profit declining 19% to £108 million *(HY17: £133 million)*. We have maintained a disciplined approach to underwriting as we seek to improve operating profit margins for new and existing business. This caused a contraction in volumes from individual protection that was only partially offset by higher volumes in group protection.

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\# Denotes key performance indicators which are used by the Group to determine of modify remuneration.
1 All percentage movements in this section are quoted in constant currency unless otherwise stated.
2 The estimated Solvency II position represents the shareholder view as defined in section 8.i of the Analyst Pack.

United Kingdom (continued)

General insurance continues to improve normalised underwriting profitability; however, the first half of 2018 saw higher weather-related claims costs compared with the benign prior year. As a result, operating profit declined 9% to £195 million *(HY17: £214 million)*. We continue to proactively manage product and channel mix. Net written premiums (NWP) were stable at £2,110 million *(HY17: £2,105 million)* as a 5% increase in our commercial non-motor portfolios offset a 4% reduction from personal motor. The UK general insurance business has maintained attractive margins, reporting a combined operating ratio (COR)‡ of 94.3% (*HY17: 93.2%)* despite the higher weather claims.

The legacy business of mature savings products achieved operating profit of £188 million *(HY17: £187 million)*. We expect assets under management and operating profit from the legacy portfolio to decline gradually as policies mature. However, in the first half of 2018, we have mitigated this through active management of the portfolio.

In addition to the core product lines, we have continued to generate operating profit from changes to assumptions and positive experience. In the first half of 2018, these contributed £107 million *(HY17: £9 million)* with releases of £200 million of longevity provisions from our annuity portfolio partially offset by an additional £90 million provision relating to potential redress for advised sales by Friends Provident. Over 90% of cases identified are pre-2002. (Further details of this provision are included in note B14 of the Analyst Pack.)

As we look to the second half of the year, we remain focused on asset origination for our annuity portfolio and maintaining underwriting discipline in protection and general insurance. In the absence of a reversal of recent life expectancy trends, we would expect further releases of longevity provisions.

Canada

In Canada, the motor insurance market continues to see heightened levels of claims activity while results were also affected by elevated weather and natural catastrophe losses. Against this backdrop, Aviva Canada reported an operating loss of £13 million in HY18. This represents an improvement relative to the £25 million loss in the second half of 2017, though is significantly below the £71 million operating profit achieved in HY17.

NWP increased 5% in constant currency terms to £1.5 billion *(HY17: £1.5 billion)*. Personal lines premiums rose 6% because of higher premium rates while commercial lines premiums gained 1% as we adjusted our underwriting risk appetite. The COR remained elevated at 104.6% in the first half *(HY17: 98.9%, 2H17: 105.3%)*. The normalised COR improved by 2.5 percentage points compared to the second half of 2017; however, this was offset by weather, which added 2.2 percentage points to our COR compared with long-term average experience.

In response to the challenging market environment, we have increased premium rates, tightened underwriting risk appetite and adjusted distribution and claims handling strategies. As a result of these actions, underlying results are showing encouraging signs of progress and, weather notwithstanding, we expect this to be reflected in strong growth in profitability in the second half of 2018 and into 2019. Further actions on pricing should drive additional growth as we strive to return the COR to the targeted 94-96% range in 2020.

France

Aviva France has maintained positive momentum in 2018, with operating profit from continuing operations increasing 10% to £279 million *(HY17: £250 million)*. In life insurance, operating profit rose 15% to £229 million *(HY17: £196 million)* due to supportive investment markets coupled with our focus on improving productivity of our multi-channel distribution network, further optimisation of business mix and tight control over operating expenses, which we reduced by 2%.

Life insurance value of new business (VNB)‡ increased 9% as a result of a 6% increase in new business volumes and continued improvement in mix, with protection and unit linked comprising 49% of sales *(HY17: 46%)*. In general insurance, operating profit declined 8% to £50 million *(HY17: £54 million)* with 4% growth in net written premiums offset by a modest deterioration in the COR to 95.5% *(HY17: 93.2%)* as a result of adverse trends in prior year reserve development partially offset by lower large losses.

Poland

Aviva Poland made steady progress in the first half, with operating profit up 4% to £95 million *(HY17: £88 million)*. In life insurance, operating profit rose 8% to £86 million *(HY17: £77 million)* due to higher AUM balances which supported increased fee income and our continued emphasis on high margin protection products. General insurance operating profit saw a modest reduction due to lower profitability in motor insurance, though the COR remained attractive at 89.0% *(HY17: 86.2%)*.

Italy

Excluding divestments, Aviva Italy grew operating profit by 7% to £82 million *(HY17: £75 million)*. In life insurance, VNB rose 189% due to continued success with our innovative hybrid product and initiatives to broaden distribution reach. The impact of growing sales has begun to emerge in life operating profits, though this was offset in the first half by reserve movements that are not expected to recur. In general insurance, we adjusted underwriting risk appetite which gave rise to a 10% decline in net written premium to £162 million *(HY17: £176 million)* and an improvement in COR to 97.4% *(HY17: 98.7%)*.

Ireland

Aviva Ireland's operating profit rose 11% to £50 million *(HY17: £44 million)* with stronger results from life insurance more than offsetting a modest (£1 million) decline in contribution from general insurance. As competitive intensity returns to the Irish general insurance market, we have adapted our trading strategy accordingly, with net written premiums consistent with the prior year at £223 million *(HY17: £221 million)*. We maintained an excellent underwriting performance, with COR of 87.1% *(HY17: 84.7%)*, despite higher weather-related claims. During the first half, we completed the acquisition of Friends First. This acquisition will increase the scale and competitiveness of our life insurance operations in Ireland and is expected to contribute to improving operating profit.

Aviva Investors

In the first half of 2018, Aviva Investors grew operating profit 7% to £76 million *(HY17: £71 million)*. Revenues increased 4% to £284 million *(HY17: £273 million)* while operating expenses rose 3% to £208 million *(HY17: £202 million)* as we invested to strengthen our distribution and equities capabilities. AUM ended the half year at £347 billion *(2017: £351 billion[1])*, primarily due to negative net fund flows of £3.7 billion *(HY17: £0.5 billion net inflow)*. Internal legacy net outflows of £2.4 billion were consistent with the prior year, though we also experienced modest net outflows from internal core and external mandates. Looking forward, Aviva Investors remains focused on developing its distribution capability and product range to deliver long-term gains in operating profit.

Singapore

Aviva continues to make financial and strategic progress in Singapore. Operating profit rose 10% to £46 million *(HY17: £42 million)* as the 22% growth in life operating profit more than offset an increase in losses from general insurance and health. VNB rose 47% to £62 million *(HY17: £44 million)* as a result of higher sales volumes and a shift in product mix towards protection. In large part, this is due to the success of our Aviva Financial Advisor network, which now has 772 advisers on board *(2017: 673 advisers)*.

Strategic Investments

In addition to its major markets, Aviva has strategic investments which are managed to produce long-term growth in operating profit and value. Collectively, the strategic investment businesses saw operating losses widen during the first half of 2018 to £59 million *(HY17: £33 million loss)*. This was primarily due to accelerated investment into our global digital operations as we work towards launching new product propositions, which more than offset an increase in profitability from Aviva-COFCO, our joint venture in China.

Capital & Cash

At 30 June 2018, Aviva's Solvency II capital surplus[2] was £11.0 billion *(2017: £12.2 billion)*, equivalent to a cover ratio of 187% *(2017: 198%)*. The reduction in surplus and cover ratio during the first half is attributable to our capital deployment initiatives, including repayment of €500 million of subordinated debt and the £600 million share buy-back programme.

Operating capital generation was £0.9 billion, down from £1.1 billion in HY17. Operating capital generation from our business units declined to £0.9 billion reflecting the impact of weaker results in Canada, higher annuity volumes and divestments. Debt and centre costs remained stable at £0.2 billion.

1 Following a review of external funds under management, comparative amounts have been amended from those previously reported to reflect the fact that certain crossholdings had not been correctly eliminated on consolidation. The effect of this change is to reduce external funds under management by £2.5 billion.
2 The estimated Solvency II position represents the shareholder view as defined in section 8.i of the Analyst Pack.

Capital & Cash (continued)

Cash remittances[‡,#] rose 28% to £1,493 million while holding company liquidity ended July at £1.4 billion *(Feb 2018: £2.0 billion)*. It is customary for Aviva to focus on cash remittances at the full year stage given variations in the timing of dividends paid by our business units. However, we highlight that the first half included a £500 million special remittance from the UK Insurance business. This brings the total cumulative amount of special remittances to £1.25 billion since 2016, exceeding our £1 billion target.

Over the course of 2018, we are targeting total surplus capital deployment of £2 billion on debt reduction, bolt-on acquisitions, and additional returns to shareholders. So far, we have deployed or earmarked approximately £1.6 billion, leaving £400 million available for the remainder of this year. Our preference remains to invest in our businesses and we remain on the lookout for bolt-on acquisition opportunities. However, if we are unable to find attractive M&A opportunities, it is likely we would prioritise further debt reduction or allocate funds into next year's capital deployment budget.

Outlook

In the first half of 2018, Aviva has continued to demonstrate its ability to deliver growth from across its major markets and we remain focused on extending this track record.

Confirming our guidance for the full year result in 2018, we would note the following:
- We continue to expect our major market businesses to grow more than 5% in aggregate;
- Looking solely at Canada, results may be broadly comparable with the prior year given the higher than expected weather costs in the first half; and
- Other factors, such as divestiture impacts, capital management and tax rate are expected to broadly offset each other.

Taking these factors together, we remain confident in our ability to achieve our target of greater than 5% growth, subject to the usual caveats with respect to factors outside of our control such as foreign exchange movements, regulatory change and weather.

Thomas D. Stoddard
Chief Financial Officer

Notes to editors

All comparators are for the half year 2017 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 2018. The average rates employed in this announcement are 1 euro = £0.88 *(6 months to 30 June 2017: 1 euro = £0.86)* and CAD$1 = £0.57 *(6 months to 30 June 2017: CAD$1 = £0.59)*.

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 distributed by Aviva plc (the "Company" or "Aviva") through the Regulatory News Service (RNS). 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 'Other information – Shareholder Information – Risks relating to our business' in Aviva's most recent Annual Report. 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 presentation are current only as of the date on which such statements are made.

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Contents

As a reminder

Throughout this report we use a range of financial metrics to measure our performance and financial strength. These metrics include Alternative Performance Measures (APMs), which are non-GAAP measures that are not bound by the requirements of IFRS. Further guidance in respect of the APMs used by the Group, including a reconciliation to the financial statements (where possible), can be found within the Other Information section.

All references to 'Operating profit' represent 'Group adjusted operating profit'.

Symbol denotes key financial performance indicators used as a base to determine or modify remuneration.

‡ denotes APMs which are key performance indicators. There have been no changes to the APMs used by the Group during the period under review.

All currency movements are calculated on unrounded numbers so minor rounding differences may exist.

A glossary explaining key terms used in this report is available on www.aviva.com/glossary.

Key financial metrics

Operating profit‡#

	6 months 2018 £m	6 months 2017 £m	Sterling % change	Full year 2017 £m
Life business[1]	**1,392**	1,296	7%	2,852
General insurance and health[1]	**302**	418	(28)%	704
Fund management	**74**	69	7%	164
Other[1,2]	**(330)**	(318)	(4)%	(652)
Total	**1,438**	1,465	(2)%	3,068
Operating earnings per share	**26.8p**	25.8p	4%	54.8p

Cash remittances[3,‡#]

	6 months 2018 £m	6 months 2017 £m	Sterling % change	Full year 2017 £m
United Kingdom[3]	**1,226**	930	32%	1,800
Canada	**13**	13	—	55
Europe[3]	**217**	190	14%	485
Asia & Aviva Investors	**37**	37	—	58
Total	**1,493**	1,170	28%	2,398

Operating capital generation (OCG): Solvency II basis[3#]

	6 months 2018 £bn	6 months 2017 £bn	Sterling % change	Full year 2017 £bn
United Kingdom[3]	**0.9**	0.8	13%	2.8
Canada	**—**	0.1	(100)%	(0.1)
Europe[3]	**0.4**	0.4	—	0.9
Asia & Aviva Investors	**—**	0.1	(100)%	0.1
Other[4]	**(0.4)**	(0.3)	(33)%	(1.1)
Total	**0.9**	1.1	(18)%	2.6

Expenses

	6 months 2018 £m	6 months 2017 £m	Sterling % change	Full year 2017 £m
Operating expenses	**1,929**	1,851	4%	3,778
Integration & restructuring costs	**—**	52	(100)%	141
Expense base	**1,929**	1,903	1%	3,919
Operating expense ratio	**54.9%**	53.3%	1.6pp	52.7%

Value of new business: Adjusted Solvency II basis‡

	6 months 2018 £m	6 months 2017 £m	Sterling % change	Constant currency % change	Full year 2017 £m
United Kingdom[5]	**198**	267	(26)%	(26)%	527
Europe[5]	**307**	246	25%	24%	533
Asia & Aviva Investors	**98**	83	18%	21%	183
Total	**603**	596	1%	1%	1,243

General insurance combined operating ratio‡

	6 months 2018	6 months 2017	Change	Full year 2017
United Kingdom[5]	**94.3%**	93.2%	1.1pp	93.9%
Canada	**104.6%**	98.9%	5.7pp	102.2%
Europe[5]	**93.5%**	91.0%	2.5pp	93.3%
Combined operating ratio‡	**97.4%**	94.5%	2.9pp	96.6%

Profit after tax

	6 months 2018 £m	6 months 2017 £m	Sterling % change	Full year 2017 £m
IFRS profit after tax	**376**	716	(47)%	1,646
Basic earnings per share	**7.9p**	14.9p	(47)%	35.0p

Interim dividend

	6 months 2018	6 months 2017	Sterling % change
Interim dividend per share	**9.25p**	8.40p	10%

Capital position

	30 June 2018	31 December 2017	Sterling % change	30 June 2017
Estimated Shareholder Solvency II cover ratio[‡,6]	**187%**	198%	(11.0)pp	193%
Estimated Solvency II surplus	**£11.0bn**	£12.2bn	(10)%	£11.4bn
Net asset value per share	**411p**	423p	(3)%	412p

1 Non-insurance operations relating to the UK have been reclassified to their respective market segments to better align with the segmental note as per note B5 'Segmental Information'.
2 Other includes other operations, corporate centre costs and group debt and other interest costs, including coupon payments in respect of the direct capital instrument (DCI) and tier 1 notes (net of tax).
3 Cash remitted to Group and Solvency II operating capital generation are managed at legal entity level. As Ireland constitutes a branch of the United Kingdom business, cash remittances from Ireland are not aligned to the new management structure within Europe, but they are reported within United Kingdom.
4 Other includes Group activities and the Group SCR diversification benefit.
5 Following the launch of UK Insurance which brings together UK Life, UK General Insurance and UK Health into a combined business, the Ireland Life and General Insurance businesses have been aligned to the new management structure and reported within Europe. As a result, comparative balances for HY17 have been restated.
6 The estimated Solvency II position represents the shareholder view only. See Section 8i for more details.

1 – Operating profit‡#

For the six month period ended 30 June 2018

	6 months 2018 £m	6 months 2017 £m	Full year 2017 £m
Operating profit before tax attributable to shareholders' profits			
Life business			
United Kingdom[1,2]	**831**	727	1,728
Europe[2]	**414**	439	873
Asia	**143**	120	235
Other	**4**	10	16
Total life business	**1,392**	1,296	2,852
General insurance and health			
United Kingdom[1,2]	**209**	222	447
Canada	**(13)**	71	46
Europe[2]	**112**	123	223
Asia	**(11)**	(5)	(8)
Other	**5**	7	(4)
Total general insurance and health	**302**	418	704
Fund management			
Aviva Investors	**76**	71	168
Asia	**(2)**	(2)	(4)
Total fund management	**74**	69	164
Other			
Other operations[1,3]	**(83)**	(76)	(143)
Market operating profit	**1,685**	1,707	3,577
Corporate centre	**(99)**	(83)	(184)
Group debt costs and other interest	**(148)**	(159)	(325)
Operating profit before tax attributable to shareholders' profits	**1,438**	1,465	3,068
Tax attributable to shareholders' profit	**(303)**	(311)	(639)
Non-controlling interests	**(46)**	(73)	(134)
Preference dividends and other[4]	**(15)**	(32)	(82)
Operating profit attributable to ordinary shareholders	**1,074**	1,049	2,213

Operating earnings per share	**26.8p**	25.8p	54.8p

1 Non-insurance operations relating to the UK have been reclassified to their respective market segments to better reflect the management of the underlying businesses consistent with the segmental analysis shown in note B5. The impact of this change was to reduce UK Life operating profit for HY18 by £37 million *(HY17: £23 million, 2017: £30 million)*. The impact of this change on General insurance and Health is not significant.
2 Following the launch of UK Insurance which brings together UK Life, UK General Insurance and UK Health into a combined business, the Ireland Life and General Insurance businesses have been aligned to the new management structure and reported within Europe. As a result, comparative balances for HY17 have been restated.
3 Other operations relate to non-insurance activities and include costs associated with our Group and regional head offices, pension scheme expenses, as well as non-insurance income.
4 Other includes coupon payments in respect of the direct capital instrument (DCI) and tier 1 notes (net of tax).

2.i – Cash remittances‡#

The flow of sustainable cash remittances from the Group's businesses is a key financial priority. We use a wholly owned, UK domiciled reinsurance subsidiary for internal capital and cash management purposes. Some of the remittances otherwise attributable to the operating businesses arise from this internal reinsurance vehicle.

The table below reflects actual remittances received by the Group, comprising dividends and interest on internal loans paid by our operating segments. Cash remittances are eliminated on consolidation and hence are not directly reconcilable to the Group's IFRS statement of cash flows.

	6 months 2018 £m	6 months 2017 £m	Full year 2017 £m
United Kingdom[1,2]	**1,226**	930	1,800
Canada	**13**	13	55
Europe[2]	**217**	190	485
Asia & Aviva Investors	**37**	37	58
Total	**1,493**	1,170	2,398

1 Full year 2017 cash remittances include £337 million received from UK General Insurance in February 2018 in respect of 2017 activity.
2 Cash remitted to Group is managed at legal entity level. As Ireland constitutes a branch of the United Kingdom business, cash remittances from Ireland were not aligned to the new management structure within Europe, but they are reported within United Kingdom.

2.ii – Operating capital generation: Solvency II (SII) 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 cash flow plus growth for our shareholders.

Solvency II Operating Capital Generation (OCG) measures the amount of Solvency II capital the Group generates from operating activities. Capital generated enhances 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.

	Life business SII operating capital generation				Non-life SII operating capital generation	
6 months 2018 **£bn**	**Impact of new business**	**Earnings from existing business**	**Other[1]**	**Life SII operating capital generation**	**GI, Health, FM & other SII operating capital generation**	**Total SII operating capital generation**
United Kingdom & Ireland Life[2]	**(0.1)**	**0.5**	**0.2**	**0.6**	**—**	**0.6**
United Kingdom & Ireland General Insurance and Health[2]					**0.3**	**0.3**
Canada					**—**	**—**
Europe[2]	**—**	**0.3**	**—**	**0.3**	**0.1**	**0.4**
Asia & Aviva Investors[3]	**—**	**—**	**—**	**—**	**—**	**—**
Group centre costs and Other[1]	**—**	**—**	**—**	**—**	**(0.4)**	**(0.4)**
Total Group Solvency II operating capital generation	**(0.1)**	**0.8**	**0.2**	**0.9**	**—**	**0.9**

	Life business SII operating capital generation				Non-life SII operating capital generation	
6 months 2017 £bn	Impact of new business	Earnings from existing business	Other[1]	Life SII operating capital generation	GI, Health, FM & other SII operating capital generation	Total SII operating capital generation
United Kingdom & Ireland Life[2]	—	0.4	0.2	0.6	—	0.6
United Kingdom & Ireland General Insurance and Health[2]					0.2	0.2
Canada					0.1	0.1
Europe[2]	—	0.3	—	0.3	0.1	0.4
Asia & Aviva Investors	—	—	—	—	0.1	0.1
Group centre costs and Other[1]	—	—	—	—	(0.3)	(0.3)
Total Group Solvency II operating capital generation	—	0.7	0.2	0.9	0.2	1.1

	Life business SII operating capital generation				Non-life SII operating capital generation	
Full Year 2017 £bn	Impact of new business	Earnings from existing business	Other[1]	Life SII operating capital generation	GI, Health, FM & other SII operating capital generation	Total SII operating capital generation
United Kingdom & Ireland Life[2]	(0.1)	0.9	1.6	2.4	—	2.4
United Kingdom & Ireland General Insurance and Health[2]					0.4	0.4
Canada					(0.1)	(0.1)
Europe[2]	—	0.6	0.1	0.7	0.2	0.9
Asia & Aviva Investors	—	0.1	—	0.1	—	0.1
Group centre costs and Other[1]	—	—	(0.8)	(0.8)	(0.3)	(1.1)
Total Group Solvency II operating capital generation	(0.1)	1.6	0.9	2.4	0.2	2.6

1 Other includes the effect of non-recurring capital actions, non-economic assumption changes and Group diversification benefit.
2 Solvency II operating capital generation is managed at legal entity level. As Ireland constitutes a branch of the United Kingdom business, Solvency II operating capital generation from Ireland was not aligned to the new management structure within Europe, but it was reported within United Kingdom.
3 The methodology used to calculate OCG for our UK Fund Management business, Aviva Investors, has been changed such that profit is now recognised as it is earned (in line with the insurance businesses) rather than at the point at which it is audited. This represents a difference to regulatory Solvency II own funds. Due to roundings, there is no impact on reported OCG at HY17 and FY17 as a result of this change.

Solvency II OCG was £0.9 billion during HY18 *(HY17: £1.1 billion)*.

The life business OCG remains stable at £0.9 billion. In the UK, OCG remained at £0.6 billion, where a slight increase in earnings from existing business was offset by the adverse impact on OCG from increased volumes of Bulk Purchase Annuities (BPAs). It is expected that monies received in respect of BPAs will be invested in appropriate higher yielding assets in the second half of 2018, at which point additional operational capital will be generated. Other OCG of £0.2 billion includes the benefit of operating assumption changes, primarily longevity, in the first half of 2018.

The general insurance, health, fund management and other business OCG reduced by £0.2 billion to nil at HY18. This was mainly due to a reduction of £0.1 billion in Canada due to adverse weather claims experience and challenges in the motor market and a reduction of £0.1 billion due to a lower benefit arising from Group diversification. These reductions were partially offset by higher surplus generation in the UK general insurance business.

3 – Expenses

	6 months 2018 £m	6 months 2017 £m	Full year 2017 £m
United Kingdom[1]	**789**	720	1,493
Canada	**237**	234	478
Europe[1]	**402**	408	820
Asia	**91**	101	207
Aviva Investors	**208**	202	409
Other Group activities	**202**	186	371
Operating cost base	**1,929**	1,851	3,778
Integration & restructuring costs	**—**	52	141
Expense base	**1,929**	1,903	3,919
Operating expense ratio	**54.9%**	53.3%	52.7%

1 Following the launch of UK Insurance which brings together UK Life, UK General Insurance and UK Health into a combined business, the Ireland Life and General Insurance businesses have been aligned to the new management structure and reported within Europe. As a result, comparative balances for HY17 have been restated.

As communicated at the Capital Markets day in November 2017, we have improved our quality of earnings by more strictly applying the criteria used to determine whether integration and restructuring costs should be excluded from operating profit. As these costs are not material in the period to 30 June 2018, they have been absorbed within operating profit. It is possible that significant integration and restructuring activity undertaken in the future may result in the related costs being excluded from operating profit.

4 – New business

4.i – Value of new business on an adjusted Solvency II basis (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, including the impacts of interactions between in-force and new business, adjusted to:

- Remove the impact of the contract boundary restrictions under Solvency II;
- Allow for businesses which are not within the scope of Solvency II own funds (e.g. UK and Asia Healthcare business, Retail fund management business and UK equity release business); and
- Include the impacts of tax and 'look through profits' in service companies (where not included in Solvency II) and deduct the impacts of non-controlling interests.

The methodology underlying the calculation of VNB remains unchanged from the prior year. Consistent with the prior year, new business written since the introduction of Solvency II has been reflected in the calculation of UK Life's transitional measures (in line with the clarification issued by the PRA in 2017). Further details of the methodology are included in the Other Information section.

A reconciliation between adjusted Solvency II VNB and the Solvency II own funds impact of new business is provided below.

6 months 2018	UK £m	Europe £m	Asia & Other £m	Group £m
Adjusted Solvency II VNB (gross of tax and non-controlling interests)	**198**	**307**	**98**	**603**
Allowance for Solvency II contract boundary restrictions	**55**	**(26)**	**(9)**	**20**
Allowance for businesses which are not in the scope of the Solvency II own funds	**(65)**	**(1)**	**(15)**	**(81)**
Tax & Other[2]	**(40)**	**(130)**	**(12)**	**(182)**
Solvency II own funds impact of new business (net of tax and non-controlling interests)	**148**	**150**	**62**	**360**

6 months 2017	UK[1] £m	Europe[1] £m	Asia & Other £m	Group £m
Adjusted Solvency II VNB (gross of tax and non-controlling interests)	267	246	83	596
Allowance for Solvency II contract boundary restrictions	32	(42)	2	(8)
Allowance for businesses which are not in the scope of the Solvency II own funds	(85)	(22)	(14)	(121)
Tax & Other[2]	(45)	(89)	(12)	(146)
Solvency II own funds impact of new business (net of tax and non-controlling interests)	169	93	59	321

Full year 2017	UK £m	Europe £m	Asia & Other £m	Group £m
Adjusted Solvency II VNB (gross of tax and non-controlling interests)	527	533	183	1,243
Allowance for Solvency II contract boundary restrictions	54	(64)	4	(6)
Allowance for businesses which are not in the scope of the Solvency II own funds	(167)	(45)	(34)	(246)
Tax & Other[2]	(105)	(184)	(25)	(314)
Solvency II own funds impact of new business (net of tax and non-controlling interests)	309	240	128	677

1 Following the launch of UK Insurance which brings together UK Life, UK General Insurance and UK Health into a combined business, the Ireland Life and General Insurance businesses have been aligned to the new management structure and reported within Europe. As a result, comparative balances for HY17 have been restated.
2 Other includes the impact of 'look through profits' in service companies (where not included in Solvency II) of £(34) million at HY18 and the reduction in value when moving to a net of non-controlling interests basis of £(51) million at HY18.

4.ii – Sales, VNB and new business margin analysis

The table below sets out the present value of new business premiums (PVNBP) written by the life and related businesses, VNB and the resulting margin, gross of tax and non-controlling interests, on an adjusted Solvency II basis. PVNBP is calculated using assumptions consistent with those used to determine VNB.

	PVNBP			VNB			New business margin		
Gross of tax and non-controlling interests	**6 months 2018 £m**	6 months 2017 £m	Full year 2017 £m	**6 months 2018 £m**	6 months 2017 £m	Full year 2017 £m	**6 months 2018 %**	6 months 2017 %	Full year 2017 %
United Kingdom[1]	**12,550**	11,191	23,764	**198**	267	527	**1.6%**	2.4%	2.2%
Europe[1]	**6,799**	6,244	12,065	**307**	246	533	**4.5%**	3.9%	4.4%
Asia & Other	**2,160**	2,590	4,966	**98**	83	183	**4.5%**	3.2%	3.7%
Total	**21,509**	20,025	40,795	**603**	596	1,243	**2.8%**	3.0%	3.0%

1 Following the launch of UK Insurance which brings together UK Life, UK General Insurance and UK Health into a combined business, the Ireland Life and General Insurance businesses have been aligned to the new management structure and reported with Europe. As a result, comparative balances for HY17 have been restated.

New business margins have reduced slightly to 2.8% (*HY17: 3.0%*). This reduction was primarily driven by a fall in new business margin in the UK from 2.4% to 1.6%. Despite the five-fold increase in volumes for BPAs, new business margin reduced due to the lead time required to achieve the asset mix assumed at pricing. It is expected that monies already received in respect of BPAs will be invested in appropriate higher yielding investments in the second half of 2018, at which point additional VNB will be generated. Additionally, we experienced margin reduction due to economic factors impacting the annuity business and lower volumes in the protection business as we maintained pricing discipline in a competitive market.

In Europe new business margins increased over the first half of the year mainly driven by Italy and France. In Italy this was due to the growth of the new unit-linked/with-profits product with a higher profit margin. In France this was due to increased volumes of unit-linked products with higher margins as a result of favourable economic assumptions and a decrease in acquisition costs.

The new business margin in Asia & Other increased to 4.5% (*HY17: 3.2%*) reflecting an improved product mix in Singapore towards higher margin protection business.

5 – General insurance combined operating ratio (COR)‡

	Net earned premiums			Claims ratio			Commission and expense ratio			Combined operating ratio		
	6 months 2018 £m	6 months 2017 £m	Full year 2017 £m	**6 months 2018 %**	6 months 2017 %	Full year 2017 %	**6 months 2018 %**	6 months 2017 %	Full year 2017 %	**6 months 2018 %**	6 months 2017 %	Full year 2017 %
United Kingdom[1]	**2,014**	1,996	4,015	**61.6**	59.9	61.0	**32.7**	33.3	32.9	**94.3**	93.2	93.9
Canada	**1,450**	1,429	2,944	**74.1**	69.5	72.2	**30.5**	29.4	30.0	**104.6**	98.9	102.2
Europe[1]	**991**	980	2,001	**64.7**	61.2	63.1	**28.8**	29.8	30.2	**93.5**	91.0	93.3
Other[2]	**11**	6	16	**80.4**	87.3	85.9	**44.6**	44.1	37.3	**125.0**	131.4	123.2
Total	**4,466**	4,411	8,976	**66.3**	63.2	65.3	**31.1**	31.3	31.3	**97.4**	94.5	96.6

1 Following the launch of UK Insurance which brings together UK Life, UK General Insurance and UK Health into a combined business, the Ireland Life and General Insurance businesses have been aligned to the new management structure and reported within Europe. As a result, comparative balances for HY17 have been restated.
2 Includes Asia and Aviva Re.

Normalised accident year COR

The normalised accident year combined operating ratio represents the combined operating ratio adjusted to exclude the impact of prior year reserve development and weather variations versus expectations, gross of the impact of profit sharing arrangements. Dealing with each of these adjustments in turn:

- Prior year reserve development represents the change in the ultimate cost of the claims incurred in prior years.
- Weather claims over/(under) long-term average represents the difference between the reported net incurred cost of claims that have occurred as a result of weather events and the equivalent long-term average expected net costs.

These adjustments are made so that the underlying performance of the Group can be assessed excluding factors that might distort the trend in the claims ratio on a year on year basis. A reconciliation between the reported and normalised accident year COR is provided below.

	UK[1]			Canada			Europe[1]			Total		
	6 months 2018 %	6 months 2017 %	Full year 2017 %	**6 months 2018 %**	6 months 2017 %	Full year 2017 %	**6 months 2018 %**	6 months 2017 %	Full year 2017 %	**6 months 2018 %**	6 months 2017 %	Full year 2017 %
Normalised accident year COR	**96.1**	96.5	96.9	**101.9**	96.9	100.7	**91.9**	93.2	94.1	**97.1**	96.0	97.8
Prior year reserve development	**(2.0)**	(0.5)	(1.0)	**0.5**	1.6	1.3	**0.1**	(3.1)	(0.9)	**(0.8)**	(0.6)	(0.3)
Weather claims over/(under) long-term average	**0.2**	(2.8)	(2.0)	**2.2**	0.4	0.2	**1.5**	0.9	0.1	**1.1**	(0.9)	(0.9)
Combined operating ratio	**94.3**	93.2	93.9	**104.6**	98.9	102.2	**93.5**	91.0	93.3	**97.4**	94.5	96.6

1 Following the launch of UK Insurance which brings together UK Life, UK General Insurance and UK Health into a combined business, the Ireland Life and General Insurance businesses have been aligned to the new management structure and reported within Europe. As a result, comparative balances for HY17 have been restated.

The Group normalised COR increased to 97.1% *(HY17: 96.0%)*. This increase was mainly due to Canada where the normalised COR increased to 101.9% *(HY17: 96.9%)* as a result of adverse claims experience and challenges in the motor market which continued into 2018. An extensive profit remediation plan is in progress with ongoing actions around pricing, indemnity management and risk selection. The performance in Canada was partially offset by an improvement in the normalised COR in the UK to 96.1% *(HY17: 96.5%)* due to growth in high margin channels of the commercial book and the benefit of underwriting actions taken in 2017 in commercial motor (including exiting underperforming lines of business and rate increases) and a focus on managing large losses. The normalised COR in Europe has improved to 91.9% *(HY17: 93.2%)* primarily due to lower large losses in France, remediation actions in Italy and improved underlying performance in Ireland.

6 – Business unit performance
6.i – United Kingdom

	6 months 2018 £m	6 months 2017 £m	Sterling % change	Full year 2017 £m
Operating profit[1,2, ‡#]				
Life	**831**	727	14%	1,728
General Insurance	**195**	214	(9)%	411
Health	**14**	8	75%	36
	1,040	949	10%	2,175
Cash remitted to Group[3,4, ‡#]				
Life	**1,217**	922	32%	1,366
General Insurance and Health	**9**	8	13%	434
	1,226	930	32%	1,800
Expenses				
Operating expenses[1]	**789**	720	10%	1,493
Integration and restructuring costs	**—**	32	(100)%	76
	789	752	5%	1,569
New business				
PVNBP	**12,550**	11,191	12%	23,764
Solvency II VNB[1, ‡]	**198**	267	(26)%	527
General Insurance				
COR[1, ‡]	**94.3%**	93.2%	1.1pp	93.9%
Net written premium (NWP)[1]	**2,110**	2,105	—	4,078

1 Following the launch of UK Insurance which brings together UK Life, UK General Insurance and UK Health into a combined business, the Ireland Life and General Insurance businesses have been aligned to the new management structure and reported within Europe. As a result, comparative balances for HY17 have been restated.
2 Non-insurance operations relating to the UK have been reclassified to their respective market segments to better align with the segmental note as per note B5 'Segmental Information'. UK Life operating profit reduced by £23 million at HY17 and £30 million at 2017; UK General Insurance operating profit increased by £1 million at HY17 and £3 million at 2017; UK Health increased by £1 million at 2017 *(HY17: nil)*.
3 In 2017 cash remittances include amounts of £337 million received from UK General Insurance in February 2018 in respect of 2017 activity.
4 Cash remitted to Group is managed at legal entity level. As Ireland constitutes a branch of the United Kingdom business, cash remittances from Ireland were not aligned to the new management structure within Europe, but they were reported within United Kingdom.

Overview

UK Insurance's operating profit increased by 10% to £1,040 million *(HY17: £949 million)*. Our position as the UK's leading multi-line insurer has allowed us to deliver year on year increase in operating profit. We have benefitted from continued positive longevity developments, growth in long-term savings and annuities, stable performance in general insurance while absorbing the costs of investment in growth and simplification initiatives.

The Friends Life Part VII transfer was completed on 1 October 2017. Cash remittances of £1,226 million include a special cash remittance of £500 million *(HY17: £315 million)* arising as a result of the transfer, taking the total remittances from the transfer to £1.25 billion, exceeding the targeted £1 billion.

UK Insurance operating entities remain in a strong capital position.

Operating and financial performance
Operating profit[1, ‡#]

Operating profit	6 months 2018 New business	Existing business	Total £m	6 months 2017 New business	Existing business	Total £m	Sterling % change	Full year 2017 New business	Existing business	Total £m
Long-term savings[2]	**(41)**	**147**	**106**	(40)	129	89	19%	(74)	259	185
Annuities and equity release	**108**	**214**	**322**	109	200	309	4%	335	390	725
Protection	**51**	**57**	**108**	67	66	133	(19)%	130	97	227
Legacy[3]	**—**	**188**	**188**	—	187	187	1%	—	331	331
Other[4]	**—**	**107**	**107**	—	9	9	1089%	—	260	260
Life	**118**	**713**	**831**	136	591	727	14%	391	1,337	1,728
Underwriting result			**115**			135	(15)%			246
Longer-term investment return			**79**			78	1%			163
Other[5]			**1**			1	—			2
General Insurance			**195**			214	(9)%			411
Health			**14**			8	75%			36
Total operating profit			**1,040**			949	10%			2,175

1 Non-insurance operations relating to the UK have been reclassified to their respective market segments to better align with the segmental note as per note B5 'Segmental Information'.
2 Includes pensions and the savings Platform.
3 Legacy represents products no longer actively marketed, including with-profits and bonds.
4 Other Life represents changes in assumptions and modelling, non-recurring items and non-product specific items.
5 Other General Insurance includes unwind of discount and pension scheme net finance costs.

Symbol denotes key financial performance indicators used as a base to determine or modify remuneration.

‡ denotes APMs which are key performance indicators. There have been no changes to the APMs used by the Group during the period under review.

6.i – United Kingdom continued

UK Life operating profit increased by 14% to £831 million *(HY17: £727 million)* due to further benefits from changes in longevity assumptions and the continued growth of our long-term savings franchise. Annuity new business profit reflect the yield on assets actually held at the reporting date rather than the asset mix assumed at pricing, with reported profit adversely impacted by the increased volume of BPAs in the period. It is expected that monies already received in respect of BPAs will be invested in appropriate higher yielding investments in the second half of 2018, at which point additional operating profit will be generated.

UK General Insurance operating profit decreased by 9% to £195 million *(HY17: £214 million)* despite improved underlying performance, because of higher weather-related costs than in 2017, primarily from adverse weather conditions in March.

UK Health operating profit increased by 75% to £14 million *(HY17: £8 million)* due to strong underlying margins.

Long-term savings

Long-term savings operating profit increased by 19% to £106 million *(HY17: £89 million)* with positive net inflows of £2.5 billion *(HY17: £2.1 billion)* leading to an increase in assets under management (AUM) to £121 billion *(HY17: £109 billion)*, while maintaining a stable in-force profit margin. Along with growth in workplace pension net flows, we delivered continued positive platform net flows of £2.2 billion *(HY17: £3.0 billion)* despite a temporary impact that affected independent financial adviser and customer functionality as we migrated between platform service providers. Platform assets under administration grew by 12% in the year to £22.7 billion *(2017: £20.2 billion)*.

Annuities and Equity Release

Annuities and equity release operating profit increased by 4% to £322 million *(HY17: £309 million)* with new business being broadly in line with the prior year, despite the adverse impact of increased BPA volumes. It is expected that monies already received in respect of BPAs will be invested in appropriate higher yielding investments in the second half of 2018, at which point additional operating profit will be generated. PVNBP increased by 83% to £2,631 million *(HY17: £1,435 million)* as a result of BPA growth, including Aviva's largest bulk annuity deal to date of £925 million with Marks & Spencer as well as two other large deals towards the end of June 2018. Existing business operating profit increased by £14 million to £214 million due to favourable longevity experience variances, offset by the non-recurrence of a £54 million benefit recognised in HY17 from optimising the asset mix.

Protection

Protection operating profit decreased by 19% to £108 million *(HY17: £133 million)* reflecting a reduction in new business volumes as PVNBP fell by 11% to £892 million *(HY17: £1,006 million)* as we maintained pricing discipline in a competitive Individual Protection market.

Legacy

Legacy contributed operating profit of £188 million *(HY17: £187 million)*. The expected reduction in assets under management as policies matured was partly offset by favourable market movements and an increase in backbook management actions. We continue to expect operating profit from the legacy business to decline by approximately 10% per annum over the medium term.

Other

Other of £107 million includes the impact of a refinement in the application of our bulk annuity assumptions and an update for recent experience on individual annuities that has led to a positive change to base mortality (£200 million), partly offset by an additional £90 million provision relating to potential redress for advised sales by Friends Provident, with over 90% of cases being pre-2002 (refer to note B14 for further details of this provision).

Other of £9 million in HY17 mainly relates to a change in the allocation strategy for assets backing annuities (£55 million), partly offset by various other reserving and modelling impacts.

General insurance

UK General Insurance operating profit decreased by 9% to £195 million *(HY17: £214 million)*.

The underwriting result decreased by 15% to £115 million *(HY17: £135 million)*, reflecting higher weather costs related to the March freeze but in line with long-term weather expectations compared to the benign experience at HY17. This has been partly offset by an improvement in underlying performance as a result of more disciplined underwriting and higher prior year reserve releases.

Longer-term investment return (LTIR) remained stable at £79 million *(HY17: £78 million)*, with the reduction in the internal loan return (net neutral to Group) offset by improved investment returns.

Cash‡#

Cash remitted to Group was £1,226 million *(HY17: £930 million)* including an additional £500 million *(HY17: £315 million)* of Friends Life integration remittance taking instalments to date to £1.25 billion, exceeding the target of £1 billion.

Expenses

Total expenses increased by 5% to £789 million *(HY17: £752 million)*, as we continue to invest in growth and simplification initiatives including building our bulk purchase annuity capability and improvements to customer experience. Excluding these initiatives, UKI expenses were broadly flat.

6.i – United Kingdom continued
New business

	PVNBP				Solvency II VNB‡			
	6 months 2018 £m	6 months 2017 £m	Sterling % change[1]	Full year 2017 £m	**6 months 2018 £m**	6 months 2017 £m	Sterling % change[1]	Full year 2017 £m
Long-term savings	**8,729**	8,372	4%	16,813	**81**	82	(1)%	153
Annuities and equity release	**2,631**	1,435	83%	4,287	**32**	77	(58)%	157
Protection	**892**	1,006	(11)%	1,964	**68**	88	(23)%	183
Health and Other	**298**	378	(21)%	700	**17**	20	(15)%	34
Total	**12,550**	11,191	12%	23,764	**198**	267	(26)%	527

PVNBP was up by 12% to £12,550 million *(HY17: £11,191 million)*. At the same time VNB decreased by 26% to £198 million *(HY17: £267 million)*. The increase in PVNBP is primarily due to BPA growth, including Aviva's largest bulk annuity deal to date of £925 million with Marks & Spencer as well as two other large deals transacted towards the end of June 2018.

Long-term savings VNB was broadly flat year on year at £81 million *(HY17: £82 million)*, with lower Platform volumes reflecting the impact of transition offset by increased workplace pension volumes and improved margins.

Annuities and equity release VNB decreased by 58% to £32 million *(HY17: £77 million)*, with the growth in BPAs offset by the adverse impact of a timing difference as we invest monies received in appropriate higher yielding investments in the second half of 2018, at which point additional VNB is expected to be generated. Margins have also been impacted by asset mix and lower spreads.

Protection VNB reduced by 23% to £68 million *(HY17: £88 million)* driven by reduced sales as we maintained pricing discipline in a competitive market.

Health and other VNB decreased by 15% to £17 million *(HY17: £20 million)* with a fall in volumes offset by increased margins.

Net written premiums (NWP) and combined operating ratio (COR)‡

	Net written premiums				Combined operating ratio			
United Kingdom General insurance	**6 months 2018 £m**	6 months 2017 £m	Sterling % change	Full year 2017 £m	**6 months 2018 %**	6 months 2017 %	Change	Full year 2017 %
Personal motor	**559**	580	(4)%	1,142				
Personal non-motor	**687**	689	—	1,359				
UK personal lines	**1,246**	1,269	(2)%	2,501	**95.2%**	92.9%	2.3pp	92.0%
Commercial motor	**270**	269	—	514				
Commercial non-motor	**594**	567	5%	1,063				
UK commercial lines	**864**	836	3%	1,577	**93.0%**	93.6%	(0.6)pp	96.7%
Total	**2,110**	2,105	—	4,078	**94.3%**	93.2%	1.1pp	93.9%

NWP
NWP increased to £2,110 million as we continue to grow in our preferred channels of Commercial non-motor and Personal lines direct, while maintaining discipline in Motor as market rates reduce.

UK Personal motor decreased by 4%, reflecting lower average premiums as a result of the softening motor market. New business rates are in line with the market. UK Personal non-motor was broadly flat, but includes growth in direct home.

UK Commercial lines were up by 3%, driven by a 5% increase in Commercial non-motor, reflecting growth in both SME and Global Corporate Speciality (GCS). Commercial motor was flat as we maintained disciplined underwriting, taking growth opportunities as they arise.

COR‡
The COR of 94.3% was 1.1pp higher than prior year, due to higher weather costs as a result of the March freeze, but broadly in line with long-term weather expectations compared to the benign weather experience in HY17. This was partly offset by improved underlying performance and higher prior year reserve releases.

UK Personal lines COR of 95.2% was 2.3pp higher year on year, reflecting the impact of the March freeze, partly offset by higher prior year reserve releases and improved business mix from growth in our preferred personal lines channels.

UK Commercial lines COR of 93.0% was 0.6pp lower year on year, reflecting growth in preferred Commercial lines channels and the earning through of underwriting actions taken in 2017 in Commercial motor.

6.ii – International

(a) Canada

	6 months 2018 £m	6 months 2017 £m	Sterling % change	Constant currency %	Full year 2017 £m
Operating (loss)/profit‡	**(13)**	71	(118)%	(119)%	46
Cash remitted to Group‡	**13**	13	—	4%	55
Expenses					
Operating expenses	**237**	234	2%	6%	478
Integration and restructuring costs	**—**	9	(100)%	(100)%	15
	237	243	(2)%	2%	493
COR‡	**104.6%**	98.9%	5.7pp	5.7pp	102.2%
NWP	**1,483**	1,477	—	5%	3,028

Overview

During 2018, operating profit fell significantly compared to the prior year due to adverse weather and challenges in the Canadian motor market experienced in the second half of 2017 which continued into the current year. Losses from natural catastrophes were £31 million worse than the long-term average and £25 million higher than the prior year. An extensive profit remediation plan is well underway with ongoing actions around pricing, indemnity management and risk selection. The impacts of these actions are starting to flow through our results. While the overall COR shows a deterioration from the prior year, the normalised COR has improved from 104.4% in the second half of 2017 to 101.9%, with recent rate increases yet to earn through.

All percentage movements below are quoted in constant currency unless otherwise stated.

Operating and financial performance

Operating profit‡#

	6 months 2018 £m	6 months 2017 £m	Sterling % change	Constant currency %	Full year 2017 £m
Underwriting result	**(67)**	16	(510)%	(527)%	(64)
Longer-term investment return	**56**	57	(1)%	3%	115
Other[1]	**(2)**	(2)	(41)%	(47)%	(5)
Total	**(13)**	71	(118)%	(119)%	46

1 Includes unwind of discount and pension scheme net finance costs

In 2018, the underwriting result decreased to a loss of £67 million *(HY17: profit of £16 million)*, mainly driven by adverse weather experience, and increased claims frequency and severity in our personal auto line of business. This result should be set against the fact that there have been persistent extreme weather events over the period, particularly in Ontario following significant snow, wind and ice storms.

The longer-term investment result was broadly in line with the prior year.

Cash‡#

Cash remittances during the period of £13 million *(HY17: £13 million)* were in line with the comparable period.

Expenses

Operating expenses increased modestly to £237 million *(HY17: £234 million)* mostly due to an increase in claims handling costs, premium taxes and project spend. £6 million *(HY17: £9 million)* of RBC integration costs were incurred within operating expenses as we complete systems migration and staff relocation. The integration of RBC is due to be completed in 2018.

Net written premiums (NWP) and combined operating ratio (COR)‡

	Net written premiums					Combined operating ratio			
	6 months 2018 £m	6 months 2017 £m	Sterling % change	Constant currency %	Full year 2017 £m	6 months 2018 %	6 months 2017 %	Change	Full year 2017 %
Personal lines	**1,066**	1,047	2%	6%	2,171	**107.3%**	99.4%	7.9pp	102.5%
Commercial lines	**417**	430	(3)%	1%	857	**97.8%**	97.6%	0.2pp	101.2%
Total	**1,483**	1,477	—	5%	3,028	**104.6%**	98.9%	5.7pp	102.2%

NWP

NWP were £1,483 million *(HY17: £1,477 million)*, a slight increase from HY17 due to growth in personal lines from rate increases. Commercial lines premiums reduced slightly over the prior year as rate increases were offset by lower new business sales and retention as we tightened our underwriting risk appetite.

COR‡

The COR increased to 104.6% *(HY17: 98.9%)* due to increased claims frequency and severity, particularly in motor, as well as heightened natural catastrophe losses.

Symbol denotes key financial performance indicators used as a base to determine or modify remuneration.

‡ denotes APMs which are key performance indicators. There have been no changes to the APMs used by the Group during the period under review.

6.ii – International continued

(b) Europe[1]

	6 months 2018 £m	6 months 2017[1] £m	Sterling % change	Constant currency %	Full year 2017 £m
Operating profit[‡#]					
Life	**414**	439	(6)%	(8)%	873
General insurance & health	**112**	123	(8)%	(10)%	223
	526	562	(6)%	(8)%	1,096
Cash remitted to Group[1, ‡#]	**217**	190	14%	12%	485
Expenses					
Operating expenses	**402**	408	(2)%	(4)%	820
Integration and restructuring costs	**—**	9	(100)%	(100)%	36
	402	417	(4)%	(6)%	856
New business					
PVNBP	**6,799**	6,244	9%	8%	12,065
Solvency II VNB[‡]	**307**	246	25%	24%	533
General Insurance					
COR[‡]	**93.5%**	91.0%	2.5pp	2.5pp	93.3%
NWP	**1,092**	1,100	(1)%	(3)%	2,018

1 Following the launch of UK Insurance which brings together UK Life, UK General Insurance and UK Health into a combined business, the Ireland Life and General Insurance businesses have been aligned to the new management structure and reported within Europe. As a result, comparative balances for HY17 have been restated. This realignment was not implemented for cash remitted to Group, as this metric is managed at legal entity level and Ireland constitutes a branch of the United Kingdom business.

Overview

On a reported basis, operating profit in Europe was down by 6% to £526 million *(HY17: £562 million)*. However, excluding disposals, Europe demonstrated continued strong operating profit growth of 9% to £518 million (*HY17: £474 million*), driven primarily by our Life businesses which continue to grow revenue, improve product mix and drive expense efficiencies.

In France, we completed the sale of Antarius in April 2017 to Sogecap, a subsidiary of Société Générale. In Spain, we completed the sale of our shareholdings in our life insurance and pension joint ventures, Unicorp Vida and Caja España Vida, in September 2017 as well as our retail life insurance business, Aviva Vida y Pensiones. We also announced the sale of our shareholding in Caja Murcia Vida and Caja Granada Vida, which completed in July 2018. In Italy, we completed the sale of our shareholdings in Avipop Assicurazioni S.p.A and Avipop Vita S.p.A. (collectively known as Avipop) in March 2018. In Ireland, we completed our acquisition of Friends First Life Assurance Company in June 2018.

All percentage movements below are quoted in constant currency unless otherwise stated.

Operating and financial performance

Operating profit[‡#]

	Life					General insurance & health				
	6 months 2018 £m	6 months 2017[1] £m	Sterling % change	Constant currency %	Full year 2017 £m	6 months 2018 £m	6 months 2017[1] £m	Sterling % change	Constant currency %	Full year 2017 £m
France (excl. Antarius)	**229**	196	17%	15%	403	**50**	54	(7)%	(8)%	104
Poland	**86**	77	12%	8%	156	**9**	11	(13)%	(16)%	21
Italy (excl. Avipop)	**68**	67	1%	(1)%	136	**14**	8	71%	69%	26
Ireland	**13**	6	109%	106%	33	**37**	38	(2)%	(4)%	53
Other Europe (excl. Unicorp, Caja España and Aviva Vida)[2]	**12**	17	(29)%	(26)%	40	**—**	—	—	—	—
Total (excl. Antarius, Avipop, Unicorp, Caja España & Aviva Vida)	**408**	363	12%	10%	768	**110**	111	—	(2)%	204
Antarius	**—**	21	(100)%	(100)%	22	**—**	—	—	—	—
Avipop	**6**	16	(63)%	(63)%	32	**2**	12	(83)%	(84)%	19
Unicorp, Caja España and Aviva Vida	**—**	39	(100)%	(100)%	51	**—**	—	—	—	—
Total	**414**	439	(6)%	(8)%	873	**112**	123	(8)%	(10)%	223

1 Following the launch of UK Insurance which brings together UK Life, UK General Insurance and UK Health into a combined business, the Ireland Life and General Insurance businesses have been aligned to the new management structure and reported within Europe. As a result, comparative balances for HY17 have been restated.
2 Includes Spain and Turkey.

Excluding the impact of disposals, the operating profit of our Life businesses grew by 10% to £408 million *(HY17: £363 million)* demonstrating continued strong underlying growth. Dealing with each of the markets in turn:

- In France, operating profit was £229 million *(HY17: £196 million)*, representing an increase of 15% due to continued mix improvement towards higher margin unit-linked products and improved expense efficiencies.
- In Poland, operating profit was £86 million *(HY17: £77 million)*, an increase of 8% as a result of the favourable impact of equity market movements on pension assets and the subsequent increase in fee income and an increased shift towards protection business.
- In Italy, operating profit was broadly flat, with significant new business growth in our hybrid product and initiatives to broaden distribution reach, offset by one-off reserve adjustments.
- In Ireland, operating profit increased to £13 million *(HY17: £6 million)* due to management actions taken to improve profitability including a review of annuity pricing and experience. The acquisition of Friends First received final regulatory approval in June 2018 and the benefit to the Group's results of this will be seen in the second half of 2018.

Symbol denotes key financial performance indicators used as a base to determine or modify remuneration.

‡ denotes APMs which are key performance indicators. There have been no changes to the APMs used by the Group during the period under review.

Business unit performance continued

6.ii – International continued

Operating profit continued

Excluding Avipop, the profit of our General Insurance businesses remained broadly flat at £110 million *(HY17: £111 million)*. Dealing with each of the markets in turn:

- In France, operating profit was £50 million *(HY17: £54 million)*, with a change in the trend of prior year development partially offset by lower large losses.
- In Poland, operating profit was £9 million *(HY17: £11 million)* with the slight decrease mainly due to a reduction in the underwriting result of our motor business.
- In Italy, operating profit increased to £14 million *(HY17: £8 million)* due to improved claims experience and investment return. We expect action taken on this book in 2017 to continue to show positive results in the second half of 2018.

Cash‡#

Cash remitted to the Group was £217 million *(HY17: £190 million)* mainly reflecting the impact of timing differences from an earlier remittance from France compared to HY17, partially offset by a delay in the remittance from Poland.

Expenses

Operating expenses of £402 million *(HY17: £408 million)* were down by 4%, mainly due to the disposal of our Spanish businesses, supported by a continued focus on cost control.

New business

	PVNBP					Solvency II VNB‡				
	6 months 2018 £m	6 months 2017[1] £m	Sterling % change	Constant currency % change	Full year 2017 £m	**6 months 2018 £m**	6 months 2017[1] £m	Sterling % change	Constant currency % change	Full year 2017 £m
France (excl. Antarius)	**2,159**	2,000	8%	6%	4,042	**123**	111	10%	9%	216
Poland	**217**	202	8%	4%	468	**25**	28	(9)%	(12)%	57
Italy (excl. Avipop)	**3,787**	2,134	77%	74%	4,519	**146**	50	194%	189%	162
Ireland	**433**	495	(13)%	(14)%	1,050	**2**	3	(27)%	(28)%	11
Other Europe (excl. Unicorp, Caja España and Aviva Vida)[2]	**187**	336	(44)%	(34)%	322	**8**	15	(48)%	(41)%	30
Total (excl. Antarius, Avipop, Unicorp, Caja España & Aviva Vida)	**6,783**	5,167	31%	30%	10,401	**304**	207	47%	46%	476
Antarius	**—**	405	(100)%	(100)%	411	**—**	9	(100)%	(100)%	12
Avipop	**16**	57	(72)%	(72)%	98	**3**	10	(75)%	(75)%	17
Unicorp, Caja España and Aviva Vida	**—**	615	(100)%	(100)%	1,155	**—**	20	(100)%	(100)%	28
Total	**6,799**	6,244	9%	8%	12,065	**307**	246	25%	24%	533

1 Following the launch of UK Insurance which brings together UK Life, UK General Insurance and UK Health into a combined business, the Ireland Life and General Insurance businesses have been aligned to the new management structure and reported within Europe. As a result, comparative balances for HY17 have been restated.
2 Includes Spain and Turkey.

Excluding disposals, PVNBP was up by 30% to £6,783 million *(HY17: £5,167 million)* and VNB increased by 46% with a strong performance driven by Italy and France. In Italy, VNB growth of 189% was mainly due to continued growth in our unit-linked/with-profits hybrid product. In France, VNB growth of 9% was due to higher volumes of unit-linked products with higher margins and a decrease in acquisition costs.

Net written premiums (NWP) and combined operating ratio (COR)‡

	Net written premiums					Combined operating ratio[1]			
	6 months 2018 £m	6 months 2017[1] £m	Sterling % change	Constant currency %	Full year 2017 £m	**6 months 2018 %**	6 months 2017[1] %	Change	Full year 2017 %
France	**641**	605	6%	4%	1,053	**95.5%**	93.2%	2.3pp	94.5%
Poland	**52**	59	(13)%	(16)%	117	**89.0%**	86.2%	2.8pp	86.7%
Italy (excl. Avipop)	**162**	176	(8)%	(10)%	337	**97.4%**	98.7%	(1.3)pp	98.1%
Ireland	**223**	221	1%	—	436	**87.1%**	84.7%	2.4pp	91.4%
Total (excl. Avipop)	**1,078**	1,061	2%	—	1,943	**93.6%**	91.9%	1.7pp	93.9%
Avipop	**14**	39	(64)%	(65)%	75	**87.8%**	67.6%	20.2pp	72.4%
Total	**1,092**	1,100	(1)%	(3)%	2,018	**93.5%**	91.0%	2.5pp	93.3%

1 Following the launch of UK Insurance which brings together UK Life, UK General Insurance and UK Health into a combined business, the Ireland Life and General Insurance businesses have been aligned to the new management structure and reported within Europe. As a result, comparative balances for HY17 have been restated.

NWP

NWP was flat with growth in France and Ireland offset by a decrease in Poland and Italy as we look to improve the quality of our book. In France, NWP grew to £641 million (*HY17: £605 million*) with broad based growth across all major products, primarily reflecting underwriting actions undertaken in 2017. In Ireland, NWP increased slightly despite rate reductions in a softening motor market. In Poland, NWP decreased by 16% to £52 million *(HY17: £59 million)* reflecting a reduction in personal motor volumes as we refine our underwriting criteria. In Italy, NWP decreased by 10% due to continued underwriting action taken on segments of the motor book.

COR‡

Excluding the disposal of Avipop, European COR has worsened by 1.7pp to 93.6% due to prior year reserve strengthening in France, adverse weather in Ireland in Q1 2018 and a softening personal motor market in Poland. This was partly offset by lower larger losses in France and underwriting action taken in the motor book in Italy.

6.iii – Asia

	6 months 2018 £m	6 months 2017 £m	Sterling % change	Constant currency %	Full year 2017 £m
Operating profit‡#					
Life	**143**	120	19%	19%	235
General insurance & health	**(11)**	(5)	(139)%	(146)%	(8)
	132	115	14%	14%	227
Cash remitted to Group‡#	**—**	—	—	—	—
Expenses					
Operating expenses	**91**	101	(10)%	(8)%	207
Integration and restructuring costs	**—**	—	—	—	—
	91	101	(10)%	(8)%	207
New business					
PVNBP	**1,327**	1,328	—	2%	2,719
Solvency II VNB‡	**91**	71	28%	31%	162
General Insurance					
COR‡	**125.0%**	131.4%	(6.4)pp	(6.4)pp	123.2%
NWP	**7**	6	6%	9%	13

Overview

Investment in Asia's distribution channel, digital and analytic capabilities continued in 2018. Singapore continues to grow its core distribution platform, Aviva Financial Advisers, with 772 advisers now on board. In China, the combined agency and broker channel continues to expand with an increase in profitability from Aviva-COFCO, our joint venture in China, while Vietnam accelerates its business via a stronger partnership with Vietinbank. The business in Hong Kong received regulatory approval for a change in the shareholding structure in January 2018 and is expected to launch its first set of protection products in the second half of 2018 utilising a pure digital channel. In January 2018, Aviva announced the sale of its entire 49% shareholding in its joint venture in Taiwan, First Aviva Life to its JV partner, First Financial Holding Co. Ltd.

All percentage movements below are quoted in constant currency unless otherwise stated.

Operating and financial performance

Operating profit‡#

	6 months 2018 £m	6 months 2017 £m	Sterling % change	Constant currency %	Full year 2017 £m
Life operating profit					
Singapore	**57**	47	19%	22%	118
Other Asia (excl. Friends Provident International Limited (FPIL))	**15**	3	487%	362%	(2)
Total (excl. FPIL)	**72**	50	43%	45%	116
FPIL[1]	**71**	70	1%	1%	119
Total	**143**	120	19%	19%	235
General insurance & health operating profit	**(11)**	(5)	(139)%	(146)%	(8)
Total operating profit	**132**	115	14%	14%	227

1 In July 2017, Aviva announced the sale of FPIL. The subsidiary has been classified as held for sale from July 2017, when management were committed to a plan to sell the business. The transaction is subject to regulatory approvals and is expected to complete in the second half of 2018.

Operating profit increased by 14% to £132 million *(HY17: £115 million)* mainly due to a new business contribution of £10 million in Singapore generated from its financial advisory channel and the release of prudent margins in China as the existing business runs off, in addition to positive lapse experience.

The general insurance and health business reported a loss of £11 million *(HY17: £5 million)* as a result of higher claims experience from our health business in Singapore. A remediation plan for the business will be rolled out in the second half of 2018, including a review of pricing and underwriting guidelines, if appropriate.

Cash‡#

No dividends were remitted to Group (*HY17: £nil*) as we continue to reallocate capital to support distribution and digital initiatives in the region.

Expenses

Operating expenses are 8% below the prior period mainly as a result of lower expenses for Hong Kong (following the change in shareholding structure) as only back book expenses are now consolidated, and lower expenses in the Asia regional office due to reduced JV support.

Symbol denotes key financial performance indicators used as a base to determine or modify remuneration.

‡ denotes APMs which are key performance indicators. There have been no changes to the APMs used by the Group during the period under review.

6.iii – Asia continued

New business

	PVNBP					Solvency II VNB‡				
	6 months 2018 £m	6 months 2017 £m	Sterling % change	Constant currency % change	Full year 2017 £m	**6 months 2018 £m**	6 months 2017 £m	Sterling % change	Constant currency % change	Full year 2017 £m
Singapore	**583**	533	9%	12%	1,164	**62**	44	43%	47%	123
Other Asia	**532**	570	(7)%	(4)%	1,088	**31**	28	8%	8%	45
Total (excl. FPIL)	**1,115**	1,103	1%	4%	2,252	**93**	72	30%	32%	168
FPIL[1]	**212**	225	(6)%	(6)%	467	**(2)**	(1)	(113)%	(113)%	(6)
Total	**1,327**	1,328	—	2%	2,719	**91**	71	28%	31%	162

1 In July 2017, Aviva announced the sale of FPIL. The subsidiary has been classified as held for sale from July 2017, when management were committed to a plan to sell the business. The transaction is subject to regulatory approvals and is expected to complete in the second half of 2018.

PVNBP has remained stable at £1,327 million *(HY17: £1,328 million)*, while VNB increased by 31% to £91 million *(HY17: £71 million).* This was primarily driven by Singapore where VNB increased by 47% due to higher business volumes from its financial advisory channel and an improved product mix towards protection products.

COR‡

The COR improved by 6.4pp to 125.0% *(HY17: 131.4%)* due to more favourable claims experience following a shift in focus away from motor to travel business.

NWP

NWP contribution from Singapore remains broadly flat at £7 million *(HY17: £6 million)* as the business continues to invest to build scale.

Business unit performance continued

6.iv – Aviva Investors

	6 months 2018 £m	6 months 2017 £m	Sterling % change	Full year 2017 £m
Revenue: Fee income	**284**	273	4%	577
Expenses				
Operating expenses	**208**	202	3%	409
Integration and restructuring costs	**—**	—	—	3
	208	202	3%	412
Operating profit‡#				
Fund management	**76**	71	7%	168
Other operations	**—**	25	(100)%	32
	76	96	(21)%	200
Cash remitted to Group‡#	**37**	37	—	58

Overview

Fund management operating profit increased by 7% to £76 million from HY17. We continue to invest in growing the business and further progress has been made in developing our global distribution capability and product range resulting in a more diverse client base. During the period, we diversified our illiquid product range and continue to promote our Aviva Investors Multi-Strategy (AIMS) Fixed Income funds.

Operating and financial performance

Revenue

Revenue increased by 4% to £284 million driven by sales across the business and a transfer of £2.3 billion in respect of Stewardship fund in the first half of 2018. Revenue from external clients generated 35% of total revenue *(HY17: 35%).*

Expenses

Operating expenses were £208 million *(HY17: £202 million)* as we continue to control our recurring business expenditure. The increase during the period reflects the support required to finance growth initiatives.

Operating profit‡#

Fund management operating profit increased by £5 million to £76 million *(HY17: £71 million)*. Targeted investment in the business has led to an increase in the operating profit margin, up 1pp to 27% *(HY17: 26%)* as revenues have grown faster than the increase in expenses.

Operating profit from other operations of £25 million in HY17 related to insurance recoveries.

Cash‡#

Cash remitted to Group was £37 million during the first half of 2018, in line with the prior period.

Net flows and assets under management and under administration

Assets under management represent all assets managed by Aviva Investors and third parties. These comprise assets which are included within the Group's statement of financial position and those belonging to external clients outside the Group which are not included in the statement of financial position. Internal legacy relates to assets managed by Aviva Investors on behalf of the Group relating to products that are no longer actively marketed.

Assets under administration comprise assets managed by Aviva Investors and by third parties on platforms administered by Aviva Investors.

	Internal legacy £m	Internal core £m	External £m[1]	Total £m
Aviva Investors				
Assets under management at 1 January 2018	90,939	187,542	72,246	350,727
Total inflows	7,680	17,223	3,618	28,521
Total outflows	(10,034)	(17,976)	(4,188)	(32,198)
Net Flows	(2,354)	(753)	(570)	(3,677)
Net flows into liquidity funds	(88)	(742)	270	(560)
Transfer in from external managers	—	2,329	—	2,329
Transfer out to external managers	(1,400)	(800)	—	(2,200)
Market and foreign exchange movements	(226)	1,464	(586)	652
Assets under management at 30 June 2018	**86,871**	**189,040**	**71,360**	**347,271**
Externally managed assets under administration at 1 January 2018				30,483
Externally managed assets under administration net flows and other movements				(2,609)
Externally managed assets under administration at 30 June 2018				**27,874**
Assets under management and administration at 1 January 2018				381,210
Assets under management and administration at 30 June 2018				**375,145**

1 Following a review of external funds under management, comparative amounts have been amended from those previously reported to reflect the fact that certain crossholdings had not been correctly eliminated on consolidation. The effect of this change is to reduce external funds under management previously reported at 1 January 2018 by £2.5 billion.

Assets under management decreased by £3.5 billion to £347.3 billion *(2017: £350.7 billion)* during the period as net inflows from transfers and market movements of £0.1 billion were more than offset by net fund outflows of £3.7 billion. Assets under management and administration at 30 June 2018 are £375.1 billion *(2017: £381.2 billion)*.

Symbol denotes key financial performance indicators used as a base to determine or modify remuneration.

‡ denotes APMs which are key performance indicators. There have been no changes to the APMs used by the Group during the period under review.

Profit drivers

7.i – Life business profit drivers

	United Kingdom[1,2]			Europe[1]			Asia[5]			Total		
	6 months 2018 £m	6 months 2017 £m[1]	Full year 2017 £m	**6 months 2018 £m**	6 months 2017 £m[1]	Full year 2017 £m	**6 months 2018 £m**	6 months 2017 £m	Full Year 2017 £m	**6 months 2018 £m**	6 months 2017 £m	Full year 2017 £m
New business income	**342**	362	868	**163**	137	335	**141**	101	252	**646**	600	1,455
Underwriting margin	**191**	151	280	**92**	137	215	**57**	36	85	**340**	324	580
Investment return	**684**	677	1,324	**559**	621	1,171	**119**	138	227	**1,362**	1,436	2,722
Total income	**1,217**	1,190	2,472	**814**	895	1,721	**317**	275	564	**2,348**	2,360	4,757
Acquisition expenses	**(219)**	(228)	(473)	**(152)**	(141)	(326)	**(106)**	(91)	(191)	**(477)**	(460)	(990)
Administration expenses	**(356)**	(316)	(689)	**(262)**	(318)	(558)	**(46)**	(53)	(99)	**(664)**	(687)	(1,346)
Total expenses	**(575)**	(544)	(1,162)	**(414)**	(459)	(884)	**(152)**	(144)	(290)	**(1,141)**	(1,147)	(2,336)
Other[3]	**189**	81	418	**14**	3	36	**(22)**	(11)	(39)	**181**	73	415
	831	727	1,728	**414**	439	873	**143**	120	235	**1,388**	1,286	2,836
Net income from other Group activities[4]										**4**	10	16
Total life business operating profit										**1,392**	1,296	2,852

	United Kingdom[1,2]			Europe[1]			Asia[5]			Total		
	6 months 2018	6 months 2017	Full year 2017	**6 months 2018**	6 months 2017	Full year 2017	**6 months 2018**	6 months 2017	Full Year 2017	**6 months 2018**	6 months 2017	Full year 2017
New business income (£m) (A)	**342**	362	868	**163**	137	335	**141**	101	252	**646**	600	1,455
APE (£m)[6]	**1,659**	1,495	3,140	**902**	689	1,327	**174**	180	358	**2,735**	2,364	4,825
As margin on APE (%)	**21%**	24%	28%	**18%**	20%	25%	**81%**	56%	70%	**24%**	25%	30%
Acquisition expenses (£m) (B)	**(219)**	(228)	(473)	**(152)**	(141)	(326)	**(106)**	(91)	(191)	**(477)**	(460)	(990)
As acquisition expense ratio on APE (%)	**13%**	15%	15%	**17%**	20%	25%	**61%**	51%	53%	**17%**	19%	21%
Administration expenses (£m)	**(356)**	(316)	(689)	**(262)**	(318)	(558)	**(46)**	(53)	(99)	**(664)**	(687)	(1,346)
As existing business expense ratio on total average reserves (bps)	**29**	26	29	**46**	56	49	**59**	73	66	**35**	37	37
Net contribution (A-B)	**123**	134	395	**11**	(4)	9	**35**	10	61	**169**	140	465
Underwriting margin (£m)	**191**	151	280	**92**	137	215	**57**	36	85	**340**	324	580
Analysed by:												
Expenses	**31**	31	63	**15**	34	65	**40**	28	65	**86**	93	193
Mortality and longevity	**160**	120	217	**71**	103	157	**18**	8	21	**249**	231	395
Persistency	**—**	—	—	**6**	—	(7)	**(1)**	—	(1)	**5**	—	(8)

	United Kingdom[1,2]			Europe[1]			Asia[5]			Total		
	6 months 2018	6 months 2017	Full year 2017	**6 months 2018**	6 months 2017	Full year 2017	**6 months 2018**	6 months 2017	Full Year 2017	**6 months 2018**	6 months 2017	Full year 2017
Unit-linked margin (£m)	**446**	443	891	**291**	299	585	**110**	121	202	**847**	863	1,678
As annual management charge on average reserves (bps)	**64**	70	68	**135**	143	138	**227**	257	213	**88**	97	92
Average reserves (£bn)[7]	**138.9**	126.4	130.1	**43.0**	41.9	42.3	**9.7**	9.4	9.5	**191.6**	177.7	181.9
Participating business (£m)[8]	**86**	88	164	**220**	270	487	**(4)**	1	(4)	**302**	359	647
As bonus on average reserves (bps)	**38**	36	34	**66**	80	73	**(20)**	5	(10)	**52**	60	55
Average reserves (£bn)[7]	**45.3**	48.6	48.1	**66.2**	67.9	66.4	**4.0**	3.9	3.9	**115.5**	120.4	118.4
Spread margin (£m)	**124**	128	271	**1**	4	6	**3**	7	12	**128**	139	289
As spread margin on average reserves (bps)	**38**	40	43	**5**	17	13	**30**	108	80	**36**	40	42
Average reserves (£bn)[7]	**64.5**	64.0	62.4	**4.3**	4.6	4.5	**2.0**	1.3	1.5	**70.8**	69.9	68.4
Expected return on shareholder assets (£m)[9]	**28**	18	(2)	**47**	48	93	**10**	9	17	**85**	75	108
Total (£m)	**684**	677	1,324	**559**	621	1,171	**119**	138	227	**1,362**	1,436	2,722
Total average reserves (£bn)[7]	**248.7**	239.0	240.6	**113.5**	114.4	113.2	**15.7**	14.6	14.9	**377.9**	368.0	368.7

1 Following the launch of UK Insurance which brings together UK Life, UK General Insurance and UK Health into a combined business, the Ireland Life and General Insurance businesses have been aligned to the new management structure and reported within Europe. As a result, comparative balances for HY17 have been restated.
2 Non-insurance operations relating to the UK have been reclassified to their respective market segments to better reflect the management of the underlying businesses consistent with the segmental analysis shown in note B5.
3 Other represents changes in assumptions and modelling, non-recurring items and non-product specific items.
4 Other Group activities includes the total result for Aviva Investors' Pooled Pensions and Aviva Life Reinsurance.
5 Following a change in the methodology applied by Friends Provident International, the deferred actuarial funding which forms part of the deferred expense for Investment return was included in the Unit-linked margin and not 'Other'. Comparatives have been restated resulting in an increase in the Investment return and a decrease in DAC and other for Asia by £53 million at HY17.
6 APE excludes UK Retail Fund Management and Health business in UK & Ireland and Asia.
7 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.
8 The shareholders' share of the return on with-profits and other participating business.
9 The expected investment return based on opening economic assumptions applied to expected surplus assets over the reporting period that are not backing policyholder liabilities.

Profit drivers continued

7.i – Life business profit drivers continued

Life business operating profit before shareholder tax increased by 7% to £1,392 million *(HY17: £1,296 million)*, up by 5% on a constant currency basis.

Overall, total income decreased by 1% to £2,348 million *(HY17: £2,360 million)* and total expenses decreased by 1% to £1,141 million *(HY17: £1,147 million)*. The resulting decrease in net income was partly offset by a higher benefit from 'Other' items, driven by changes in actuarial assumptions in the UK, to give a total increase in life operating profit of £96 million for the period.

(a) Net contribution from new business

The net contribution from new business increased by 21% to a profit of £169 million *(HY17: profit of £140 million)*. In the UK, the net contribution decreased to a profit of £123 million *(HY17: profit of £134 million)* mainly as a result of lower protection volumes offsetting growth in the sales of annuities. New business margin on APE decreased slightly to 21% *(HY17: 24%)* due to lower protection margins. In Europe, the net contribution increased to a profit of £11 million *(HY17: loss of £4 million)* due to growth in Italy and Poland and higher fee income in France, offset by the impact of disposals. New business margin on APE decreased slightly to 18% *(HY17: 20%)*. In Asia, the net contribution increased to a profit of £35 million *(HY17: profit of £10 million)* as a result of higher sales in Singapore (protection) and China. New business margin on APE increased to 81% *(HY17: 56%)* due to the favourable impact of changes in product mix on acquisition expenses.

(b) Administration expenses

The overall expense ratio remained stable at 35 bps (*HY17: 37 bps*) on average reserves of £378 billion *(HY17: £368 billion)* with offsetting movements across markets. The increase in the UK is driven by increased investment in growth. The decrease in Europe is due to higher protection volumes in Poland offset by a fall in commission as a result of the impact of disposals. The decrease in Asia is due to a focus on cost control as we continue to invest in growth.

(c) Underwriting margin

The overall increase in the underwriting margin was driven by the UK, which increased to £191 million *(HY17: £151 million)* mainly due to favourable annuity experience. In Europe, the underwriting margin decreased to a profit of £92 million *(HY17: £137 million)* due to a reduction in persistency margins in Italy and the impact of disposals in Spain. In Asia, the underwriting margin increased to £57 million *(HY17: £36 million)* due to favourable margins on in-force business in China.

(d) Unit-linked margin

The unit-linked margin decreased to £847 million *(HY17: £863 million)* and the margin as a proportion of average reserves decreased to 88 bps *(HY17: 97 bps)*. In the UK, the unit-linked margin has increased mainly due to favourable market movements and growth in the sales of Group pensions business. At the same time, the margin on average reserves decreased to 64 bps *(HY17: 70 bps)* due to the expected run-off of the higher margin back book combined with sales of lower margin Group pensions business. In Europe, the unit-linked margin decreased to £291 million *(HY17: £299 million)* due to growth in Italy and Poland offset by a decrease in France as a result of the disposal of Antarius. In Asia, the decrease in margin to £110 million *(HY17: £121 million)* is mainly due to lower reserve releases in China.

(e) Participating business

Participating average reserves have decreased to £116 billion *(HY17: £120 billion)*. Income from participating business decreased to £302 million *(HY17: £359 million)*. In the UK, income from participating business decreased to £86 million *(HY17: £88 million)*, mainly due to expected run-off offset by an increase in maturing endowments. In Europe, income decreased to £220 million *(HY17: £270 million)* as the profitability of participating business in Italy fell due to various reserving adjustments required by local regulations and lower income as a result of disposals in Spain.

(f) Spread margin

Spread business income mainly relates to UK in-force immediate annuity and equity release business and decreased during the period to £128 million *(HY17: £139 million)*, as a result of the adverse impact of an increase in BPA volumes. It is expected that monies already received in respect of BPAs will be invested in appropriate higher yielding investments in the second half of 2018, at which point additional spread margin will be generated.

(g) Expected return on shareholder assets

Expected returns, representing investment income on surplus funds, increased to £85 million *(HY17: £75 million)* due mainly to the impact of reduced capital optimisation (hedging) activity in the UK.

(h) Other

Other made a positive contribution of £181 million *(HY17: £73 million)*, mainly as a result of longevity assumption changes in the UK.

7.ii – General insurance and health

6 months 2018	UK Personal £m	UK Commercial £m	**Total UK £m**	Canada Personal £m	Canada Commercial £m	**Total Canada £m**	**Europe £m**	**Asia & Other[1] £m**	**Total £m**
General insurance									
Gross written premiums	1,285	981	**2,266**	1,082	453	**1,535**	**1,135**	**6**	**4,942**
Net written premiums	1,246	864	**2,110**	1,066	417	**1,483**	**1,092**	**12**	**4,697**
Net earned premiums	1,229	785	**2,014**	1,039	411	**1,450**	**991**	**11**	**4,466**
Net claims incurred	(769)	(472)	**(1,241)**	(825)	(250)	**(1,075)**	**(641)**	**(5)**	**(2,962)**
Of which claims handling costs			***(78)***			***(56)***	***(30)***	**—**	***(164)***
Earned commission	(312)	(164)	**(476)**	(185)	(85)	**(270)**	**(189)**	**(1)**	**(936)**
Earned expenses	(88)	(94)	**(182)**	(106)	(66)	**(172)**	**(97)**	**(3)**	**(454)**
Underwriting result	60	55	**115**	(77)	10	**(67)**	**64**	**2**	**114**
Longer-term investment return (LTIR)[2]			**79**			**56**	**44**	**2**	**181**
Other[3]			**1**			**(2)**	**—**	**—**	**(1)**
Operating profit (GI)			**195**			**(13)**	**108**	**4**	**294**
Health insurance									
Gross written premiums			**285**			**—**	**122**	**100**	**507**
Net written premiums			**285**			**—**	**122**	**85**	**492**
Underwriting result			**11**			**—**	**4**	**(10)**	**5**
Longer-term investment return (LTIR)			**3**			**—**	**—**	**—**	**3**
Operating profit (Health)			**14**			**—**	**4**	**(10)**	**8**
Total operating profit (GI and Health)			**209**			**(13)**	**112**	**(6)**	**302**
Total gross written premiums			**2,551**			**1,535**	**1,257**	**106**	**5,449**
Total net written premiums			**2,395**			**1,483**	**1,214**	**97**	**5,189**
General insurance combined operating ratio									
Claims ratio	62.6%	60.1%	**61.6%**	79.4%	60.9%	**74.1%**	**64.7%**		**66.3%**
Commission ratio	25.4%	20.9%	**23.6%**	17.7%	20.9%	**18.6%**	**19.1%**		**20.9%**
Expense ratio	7.2%	12.0%	**9.1%**	10.2%	16.0%	**11.9%**	**9.7%**		**10.2%**
Combined operating ratio	95.2%	93.0%	**94.3%**	107.3%	97.8%	**104.6%**	**93.5%**		**97.4%**
Assets supporting general insurance and health business									
Debt securities			**2,745**			**4,186**	**2,470**	**175**	**9,576**
Equity securities			**489**			**234**	**108**	**—**	**831**
Investment property			**329**			**—**	**130**	**—**	**459**
Cash and cash equivalents			**475**			**163**	**428**	**28**	**1,094**
Other[4]			**1,795**			**269**	**376**	**1**	**2,441**
Assets at 30 June 2018			**5,833**			**4,852**	**3,512**	**204**	**14,401**
Debt securities			**3,020**			**4,273**	**2,592**	**169**	**10,054**
Equity securities			**492**			**247**	**33**	**—**	**772**
Investment property			**323**			**—**	**176**	**—**	**499**
Cash and cash equivalents			**546**			**140**	**399**	**30**	**1,115**
Other[4]			**1,763**			**252**	**481**	**2**	**2,498**
Assets at 31 December 2017			**6,144**			**4,912**	**3,681**	**201**	**14,938**
Average assets			**5,989**			**4,882**	**3,597**	**203**	**14,670**
Annualised LTIR as % of average assets			**2.7%**			**2.3%**	**2.4%**	**2.0%**	**2.5%**

1 Asia & Other includes Aviva Re.
2 LTIR includes UK £19 million *(HY17: £25 million)* and Ireland £2 million *(HY17: £3 million)* relating to the internal loan.
3 Includes the result of non-insurance operations, unwind of discount rate and pension scheme net finance costs.
4 Includes loans and other financial investments.

7.ii – General insurance and health continued

6 months 2017	UK Personal £m	UK Commercial £m	Total UK[1] £m	Canada Personal £m	Canada Commercial £m	Total Canada £m	Europe[1] £m	Asia & Other[2] £m	Total £m
General insurance									
Gross written premiums	1,300	934	2,234	1,066	463	1,529	1,140	6	4,909
Net written premiums	1,269	836	2,105	1,047	430	1,477	1,100	6	4,688
Net earned premiums	1,218	778	1,996	1,019	410	1,429	980	6	4,411
Net claims incurred	(719)	(477)	(1,196)	(742)	(250)	(992)	(600)	2	(2,786)
Of which claims handling costs			*(72)*			*(58)*	*(31)*	—	*(161)*
Earned commission	(327)	(159)	(486)	(174)	(87)	(261)	(198)	—	(945)
Earned expenses	(87)	(92)	(179)	(94)	(66)	(160)	(94)	(3)	(436)
Underwriting result	85	50	135	9	7	16	88	5	244
Longer-term investment return (LTIR)[3]			78			57	35	1	171
Other[4,5]			1			(2)	—	—	(1)
Operating profit (GI)			214			71	123	6	414
Health insurance									
Gross written premiums			293			—	165	95	553
Net written premiums			293			—	165	78	536
Underwriting result			7			—	—	(4)	3
Longer-term investment return (LTIR)			1			—	—	—	1
Operating profit (Health)			8			—	—	(4)	4
Total operating profit (GI and Health)			222			71	123	2	418
Total gross written premiums			2,527			1,529	1,305	101	5,462
Total net written premiums			2,398			1,477	1,265	84	5,224
General insurance combined operating ratio									
Claims ratio	59.0%	61.4%	59.9%	72.8%	61.0%	69.5%	61.2%		63.2%
Commission ratio	26.8%	20.4%	24.3%	17.2%	20.9%	18.2%	20.2%		21.4%
Expense ratio	7.1%	11.8%	9.0%	9.4%	15.7%	11.2%	9.6%		9.9%
Combined operating ratio	92.9%	93.6%	93.2%	99.4%	97.6%	98.9%	91.0%		94.5%
Assets supporting general insurance and health business									
Debt securities			3,255			4,247	2,553	174	10,229
Equity securities			6			249	41	—	296
Investment property			207			—	137	—	344
Cash and cash equivalents			902			145	366	38	1,451
Other[6]			1,808			213	380	2	2,403
Assets at 30 June 2017			6,178			4,854	3,477	214	14,723
Debt securities			3,718			4,349	2,535	197	10,799
Equity securities			7			235	25	—	267
Investment property			208			—	133	—	341
Cash and cash equivalents			757			115	267	23	1,162
Other[6]			1,464			256	309	3	2,032
Assets at 31 December 2016			6,154			4,955	3,269	223	14,601
Average assets			6,165			4,904	3,374	219	14,662
Annualised LTIR as % of average assets			2.6%			2.3%	2.1%	0.9%	2.3%

1 Following the launch of UK Insurance which brings together UK Life, UK General Insurance and UK Health into a combined business, the Ireland Life and General insurance businesses have been aligned to the new management structure and reported within Europe. As a result, comparatives balances at HY17 have been restated.
2 Asia & Other includes Aviva Re.
3 LTIR includes UK £25 million *(HY16: £33 million)* and Ireland £3 million *(HY16: £4 million)* relating to the internal loan.
4 Includes the result of non-insurance operations, unwind of discount rate and pension scheme net finance costs.
5 Non-insurance operations relating to the UK have been reclassified to their respective market segments to better align with the segmental note as per note B5 'Segmental Information'.
6 Includes loans and other financial investments.

7.ii – General insurance and health continued

Full year 2017	UK Personal £m	UK Commercial £m	Total UK £m	Canada Personal £m	Canada Commercial £m	Total Canada £m	Europe £m	Asia & Other[1] £m	Total £m
General insurance									
Gross written premiums	2,567	1,788	4,355	2,209	929	3,138	2,104	13	9,610
Net written premiums	2,501	1,577	4,078	2,171	857	3,028	2,018	17	9,141
Net earned premiums	2,461	1,554	4,015	2,103	841	2,944	2,001	16	8,976
Net claims incurred	(1,457)	(992)	(2,449)	(1,583)	(543)	(2,126)	(1,262)	(19)	(5,856)
Of which claims handling costs			*(149)*			*(119)*	*(59)*	—	*(327)*
Earned commission	(647)	(324)	(971)	(372)	(178)	(550)	(390)	(1)	(1,912)
Earned expenses	(161)	(188)	(349)	(201)	(132)	(333)	(213)	(6)	(901)
Underwriting result	196	50	246	(53)	(12)	(65)	136	(10)	307
Longer-term investment return (LTIR)[2]			163			115	79	3	360
Other[3,4]			2			(4)	—	—	(2)
Operating profit (GI)			411			46	215	(7)	665
Health insurance									
Gross written premiums			509			—	240	164	913
Net written premiums			509			—	240	145	894
Underwriting result			33			—	7	(5)	35
Longer-term investment return (LTIR)			3			—	1	—	4
Operating profit (Health)			36			—	8	(5)	39
Total operating profit (GI and Health)			447			46	223	(12)	704
Total gross written premiums			4,864			3,138	2,344	177	10,523
Total net written premiums			4,587			3,028	2,258	162	10,035
General insurance combined operating ratio									
Claims ratio	59.2%	63.8%	61.0%	75.3%	64.5%	72.2%	63.1%		65.3%
Commission ratio	26.3%	20.8%	24.2%	17.7%	21.1%	18.7%	19.5%		21.3%
Expense ratio	6.5%	12.1%	8.7%	9.5%	15.6%	11.3%	10.7%		10.0%
Combined operating ratio	92.0%	96.7%	93.9%	102.5%	101.2%	102.2%	93.3%		96.6%
Assets supporting general insurance and health business									
Debt securities			3,020			4,273	2,592	169	10,054
Equity securities			492			247	33	—	772
Investment property			323			—	176	—	499
Cash and cash equivalents			546			140	399	30	1,115
Other[5]			1,763			252	481	2	2,498
Assets at 31 December 2017			6,144			4,912	3,681	201	14,938
Debt securities			3,718			4,349	2,535	197	10,799
Equity securities			7			235	25	—	267
Investment property			208			—	133	—	341
Cash and cash equivalents			757			115	267	23	1,162
Other[5]			1,464			256	309	3	2,032
Assets at 31 December 2016			6,154			4,955	3,269	223	14,601
Average assets			6,149			4,934	3,475	212	14,770
LTIR as % of average assets			2.7%			2.3%	2.3%	1.4%	2.5%

1 Asia & Other includes Aviva Re.
2 LTIR includes UK £52 million (*2016: £62 million*) and Ireland £6 million *(2016: £7 million)* relating to the internal loan.
3 Includes the result of non-insurance operations, unwind of discount rate and pension scheme net finance costs.
4 Non-insurance operations relating to the UK have been reclassified to their respective market segments to better align with the segmental note as per note B5 'Segmental Information'.
5 Includes loans and other financial investments.

Profit drivers continued

7.iii – Life business 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 net written premiums plus deposits received under investment contracts) and outflows (being net paid claims plus redemptions and surrenders under investment contracts). It excludes market and other movements.

The table shown below sets out the Life and platform business managed assets of the Group and excludes managed assets relating to our general insurance and health businesses. It includes managed assets of £19.7 billion (*2017: £17.5 billion*) which are excluded from the Group's statement of financial position, mainly due to the platform business. For these reasons, the amounts disclosed are not directly reconcilable to the Aviva Investors assets under management and administration set out in section 6.iv.

	Managed assets at 1 January 2018 £m	Premiums and deposits, net of reinsurance £m	Claims and redemptions, net of reinsurance £m	Net flows[1,2] £m	Market and other movements £m	Managed assets at 30 June 2018 £m
Life and platform business						
UK – non-profit:						
– platform	20,238	2,988	(799)	2,189	244	**22,671**
– pensions and other long-term savings	97,970	3,808	(3,471)	337	303	**98,610**
– long-term savings[3]	118,208	6,796	(4,270)	2,526	547	**121,281**
– annuities and equity release	60,797	1,891	(1,372)	519	(848)	**60,468**
– other	24,727	789	(1,238)	(449)	(1,114)	**23,164**
United Kingdom(excluding UK with-profits)	203,732	9,476	(6,880)	2,596	(1,415)	**204,913**
Europe	114,068	6,069	(3,533)	2,536	2,461	**119,065**
Asia	14,526	386	(203)	183	(189)	**14,520**
Other	1,290	12	(106)	(94)	35	**1,231**
	333,616	15,943	(10,722)	5,221	892	**339,729**
UK – with-profits and other	58,200					**54,425**
Total life and platform business	391,816					**394,154**

1 Life business net flows in the table above are net of reinsurance.
2 For the period to 30 June 2018, net flows of £5.2 billion includes net flows of £3.5 billion that are included in the IFRS income statement within net written premiums and net paid claims.
3 Includes platform and pensions business and externally reinsured non-participating investment contracts

United Kingdom (excluding UK with-profits)

UK long-term savings managed assets have increased to £121.3 billion *(2017: £118.2 billion)* during the period. Within this, net inflows were £2.5 billion with growth in workplace pension and continued growth in the platform business with net inflows of £2.2 billion. Platform assets under administration grew by 12% in the year to £22.7 billion *(2017 £20.2 billion)*.

UK annuities and equity release inflows were £0.5 billion, reflecting increased BPA volumes in 2018. Other non-profit outflows were £0.4 billion driven by Bonds & Savings as the book continues to run off as expected. Market and other movements include the adverse impact of widening spreads and increasing interest rates.

Europe

Net inflows in Europe of £2.5 billion were mainly driven by the growth in sales of our new unit-linked with-profits hybrid product in Italy. Market and other movements in Europe includes £4.0 billion of investment assets following the acquisition of Friends First, partly offset by the disposal of £0.3 billion of investment assets following the sale of Avipop in Italy.

Asia and other

Net inflows in Asia were £0.2 billion arising mainly in Singapore. Other business net outflows of £0.1 billion primarily relate to Aviva Investors' Pooled Pensions business.

8.i – Solvency II

The estimated Solvency II shareholder cover ratio is 187% at 30 June 2018. The Solvency II position disclosed is based on a 'shareholder view'. The shareholder view is considered by management to be more representative of the shareholders' risk exposure and the Group's ability to cover the Solvency Capital Requirement (SCR) with eligible own funds, and aligns with management's approach to dynamically manage its capital position. In arriving at the shareholder position, the following adjustments are made to the regulatory Solvency II position:

- The contribution to the Group's SCR and own funds of fully ring fenced with-profits funds of £3.1 billion at 30 June 2018 *(HY17: £3.2 billion, 2017: £3.3 billion)* and staff pension schemes in surplus of £1.4 billion at 30 June 2018 *(HY17: £1.2 billion, 2017: £1.5 billion)* are excluded. These exclusions have no impact on Solvency II surplus as these funds are self-supporting on a Solvency II capital basis with any surplus capital above SCR not recognised.
- The 30 June 2018 Solvency II position includes a notional reset of the transitional measure on technical provisions (TMTP), calculated using the same method as used for formal TMTP resets (£0.2 billion decrease to surplus). This presentation avoids step changes to the Solvency II position that arise only when the formal TMTP reset points are triggered. The 31 December 2017 Solvency II position includes a formal, rather than notional, reset of the TMTP in line with the regulatory requirement to reset the TMTP at least every two years or in the event of a material change in the risk profile. The 30 June 2017 Solvency II position includes a notional reset of the TMTP in respect of the impact of interest rate movements on the risk margin (£0.5 billion decrease to surplus). The TMTP is amortised on a straight-line basis over 16 years from 1 January 2016 in line with the Solvency II rules.
- The 30 June 2018 Solvency II position includes two pro forma adjustments to reflect known or highly likely events materially affecting the Group's solvency position post 30 June 2018. The pro forma adjustments consist of the disposal of Caja Murcia Vida, Caja Granada Vida and Pelayo Vida in Spain (£0.1 billion increase to surplus), and the disposal of FPIL (£0.1 billion increase to surplus). These adjustments have been made in order to show a more representative view of the Group's solvency position. The 31 December 2017 Solvency II position includes the pro forma impact of the disposals of FPIL (£0.1 billion increase to surplus) and Avipop in Italy (£0.1 billion increase to surplus). The 30 June 2017 Solvency II position includes the pro forma impacts of the disposal of the joint ventures Unicorp Vida and Caja España Vida and its retail life insurance business Aviva Vida y Pensiones in Spain (£0.1 billion increase to surplus), the disposal of FPIL (£0.1 billion increase to surplus), and the remaining £0.2 billion of the buy-back of ordinary shares announced on 25 May 2017.

Summary of Solvency II position

	30 June 2018 £bn	30 June 2017 £bn	31 December 2017 £bn
Own funds	**23.6**	23.7	24.7
Solvency capital requirement	**(12.6)**	(12.3)	(12.5)
Estimated Solvency II surplus at 30 June/31 December	**11.0**	11.4	12.2
Estimated Solvency II shareholder cover ratio‡	**187%**	193%	198%

Movement in Group Solvency II surplus

	30 June 2018 £bn	30 June 2017 £bn	31 December 2017 £bn
Group Solvency II surplus at 1 January	**12.2**	11.3	11.3
Operating capital generation	**0.9**	1.1	2.6
Non-operating capital generation	**(0.4)**	(0.3)	(0.3)
Dividends	**(0.8)**	(0.7)	(1.1)
Share buy-back	**(0.6)**	(0.3)	(0.3)
Foreign exchange variances	**—**	0.1	0.1
Hybrid debt repayments	**(0.4)**	—	(0.5)
Acquired/divested business	**0.1**	0.2	0.4
Estimated Solvency II surplus at 30 June/31 December	**11.0**	11.4	12.2

The estimated Solvency II surplus at 30 June 2018 is £11.0 billion, with a shareholder cover ratio of 187%. The decrease in surplus of £1.2 billion from 31 December 2017 reflects our stated intent to deploy surplus capital to deliver sustainable benefits to our shareholders. During the first half of 2018 the beneficial impact from operating capital generation was therefore more than offset by the buy-back of ordinary shares of £(0.6) billion, hybrid debt repayments of £(0.4) billion and the payment of the Aviva plc dividend. Non-operating capital generation of £(0.4) billion arose primarily from the impact of widening sovereign and corporate bond spreads in Italy.

8.i – Solvency II continued

Summary of analysis of diversified Solvency Capital Requirement

	30 June 2018 £bn	30 June 2017 £bn	31 December 2017 £bn
Credit risk	**3.6**	3.4	3.4
Equity risk	**1.6**	1.4	1.6
Interest rate risk	**0.3**	0.4	0.4
Other market risk	**1.4**	1.5	1.4
Life insurance risk	**2.6**	3.1	2.8
General insurance risk	**0.7**	0.6	0.7
Operational risk	**1.1**	1.1	1.1
Other risk[1]	**1.3**	0.8	1.1
Total	**12.6**	12.3	12.5

1 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 profile of the diversified SCR is stable relative to 31 December 2017. Credit risk increased by £0.2 billion over the first half of 2018 due to a combination of exposure changes and market movements, primarily in Italy. Life insurance risk decreased by £0.2 billion primarily as a result of higher interest rates reducing longevity risk in the UK annuity portfolios.

Sensitivity analysis of Solvency II surplus

The following sensitivity analysis of Solvency II surplus allows for any consequential impact on the asset and liability valuations. 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 SCR calculation is applicable for that sensitivity. For example, future bonus rates are automatically adjusted to reflect sensitivity changes to future investment returns.

TMTP are 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 4% positive impact would result in a cover ratio of 191%.

Sensitivities		**Impact on cover ratio %**
Changes in economic assumptions	25 bps increase in interest rate	**4%**
	50 bps increase in interest rate	**8%**
	100 bps increase in interest rate	**12%**
	25 bps decrease in interest rate	**(6%)**
	50 bps decrease in interest rate	**(12%)**
	50 bps increase in corporate bond spread[1]	**(4%)**
	100 bps increase in corporate bond spread[1]	**(8%)**
	50 bps decrease in corporate bond spread[1]	**4%**
	Credit downgrade on annuity portfolio[2]	**(4%)**
	10% increase in market value of equity	**2%**
	25% increase in market value of equity	**5%**
	10% decrease in market value of equity	**(2%)**
	25% decrease in market value of equity	**(5%)**
Changes in non-economic assumptions	10% increase in maintenance and investment expenses	**(8%)**
	10% increase in lapse rates	**(3%)**
	5% increase in mortality/morbidity rates – life assurance	**(3%)**
	5% decrease in mortality rates – annuity business	**(12%)**
	5% increase in gross loss ratios	**(3%)**

1 Credit spread movement 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.
2 An immediate full letter downgrade on 20% of the annuity portfolio bonds (e.g. from AAA to AA, from AA to A).

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 allocations, 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.

Capital continued

8.ii – Net asset value

	30 June 2018 £m	pence per share[2]	30 June 2017 £m	pence per share[2]	31 December 2017 £m	pence per share[2]
Equity attributable to shareholders of Aviva plc at 1 January[1]	**16,969**	**423p**	16,803	414p	16,803	414p
Group adjusted operating profit	**1,438**	**36p**	1,465	37p	3,068	76p
Investment return variances and economic assumption changes on life and non-life business	**(654)**	**(17)p**	(396)	(10)p	(318)	(8)p
Profit on the disposal and remeasurements of subsidiaries, joint ventures and associates	**31**	**1p**	202	5p	135	3p
Goodwill impairment and amortisation of intangibles	**(101)**	**(3)p**	(110)	(3)p	(246)	(6)p
Amortisation and impairment of acquired value of in-force business	**(210)**	**(5)p**	(234)	(6)p	(495)	(12)p
Integration and restructuring costs	**—**	**—**	(52)	(1)p	(141)	(3)p
Other[3]	**22**	**1p**	—	—	—	—
Tax on operating profit and on other activities	**(150)**	**(4)p**	(159)	(4)p	(357)	(9)p
Non-controlling interests	**(46)**	**(1)p**	(79)	(2)p	(149)	(4)p
Profit after tax attributable to shareholders of Aviva plc	**330**	**8p**	637	16p	1,497	37p
AFS securities fair value & other reserve movements	**(13)**	**—**	(3)	—	7	—
Ordinary dividends	**(764)**	**(19)p**	(646)	(16)p	(983)	(25)p
Direct capital instrument and tier 1 notes interest and preference share dividend	**(15)**	**—**	(32)	(1)p	(82)	(2)p
Foreign exchange rate movements	**(99)**	**(2)p**	(21)	—	33	1p
Remeasurements of pension schemes	**113**	**3p**	(25)	—	(2)	—
Shares purchased in buy-back	**(197)**	**(5)p**	(73)	(2)p	(300)	(7)p
Other net equity movements	**40**	**3p**	51	1p	(4)	5p
Equity attributable to shareholders of Aviva plc at 30 June/31 December[1]	**16,364**	**411p**	16,691	412p	16,969	423p

1 Excluding preference shares of £200 million *(2017: £200 million)*.
2 Number of shares as at HY18: 3,983 million *(HY17: 4,055 million, 2017: 4,013 million)*.
3 Other includes a gain of £36 million relating to negative goodwill on the acquisition of Friends First and a charge of £14 million relating to the goodwill payments to preference shareholders which were announced on 30 April 2018.

On 1 May 2018 Aviva announced a buy-back of ordinary shares for an aggregate purchase price of up to £600 million of which £197 million has been expended at HY18. In 2017, a £300 million buy-back was announced on 25 May 2017 which was completed on 19 September 2017.

At HY18 IFRS net asset value per share was 411 pence *(2017: 423 pence)*. The main increases in net asset value related to operating profit and the remeasurement of pension schemes which were more than offset by the final 2017 dividend payment to shareholders, cost of ordinary shares purchased in the buy-back and adverse investment return variances. Further details of the investment return variances are shown in sections A4 and A5.

Capital continued

8.iii – Analysis of return on equity

6 months 2018	Operating return Before tax £m	Operating return After tax £m	Weighted average shareholders' funds including non-controlling interests £m	Return on equity %
United Kingdom	1,040	828	12,603	13.1%
Canada	(13)	(10)	1,325	(1.5)%
Europe	526	374	5,495	13.6%
Asia	132	128	1,596	16.0%
Fund management	74	53	527	20.1%
Corporate and other business[1]	(132)	(85)	5,597	n/a
Return on total capital employed	1,627	1,288	27,143	9.5%
Subordinated debt	(188)	(152)	(6,988)	4.4%
Senior debt	(1)	(1)	(1,417)	0.1%
Return on total equity	1,438	1,135	18,738	12.1%
Less: Non-controlling interests		(46)	(1,141)	8.1%
Direct capital instrument and tier 1 notes		(6)	(730)	4.9%
Preference capital		(9)	(200)	8.5%
Return on equity shareholders' funds		1,074	16,667	12.7%

1 The Corporate and other business loss before tax of £132 million comprises corporate costs of £99 million, other business operating loss of £74 million, partly offset by interest on internal lending arrangements of £5 million and finance income on the main UK pension scheme of £36 million.

6 months 2017	Operating return Before tax £m	Operating return After tax £m	Weighted average shareholders' funds including non-controlling interests £m	Return on equity %
United Kingdom[2,3]	949	767	12,976	11.8%
Canada	71	52	1,468	7.1%
Europe[2]	562	404	5,923	13.6%
Asia	115	107	1,661	12.9%
Fund management	69	55	481	22.9%
Corporate and other business[1,3]	(108)	(75)	5,540	n/a
Return on total capital employed	1,658	1,310	28,049	9.3%
Subordinated debt	(191)	(154)	(7,223)	4.3%
Senior debt	(2)	(2)	(1,384)	0.3%
Return on total equity	1,465	1,154	19,442	11.9%
Less: Non-controlling interests		(73)	(1,372)	10.6%
Direct capital instrument and tier 1 notes		(23)	(1,123)	6.1%
Preference capital		(9)	(200)	8.5%
Return on equity shareholders' funds		1,049	16,747	12.4%

1 The Corporate and other business loss before tax of £108 million comprises corporate costs of £83 million, interest on internal lending arrangements of £3 million, other business operating loss of £59 million, partly offset by finance income on the main UK pension scheme of £37 million.
2 Following the launch of UK Insurance which brings together UK Life, UK General Insurance and UK Health into a combined business, the Ireland Life and General Insurance businesses have been aligned to the new management structure and reported within Other Europe.
3 Non-insurance operations relating to the UK have been reclassified to their respective market segments to better align with the segmental note as per B5 'Segmental Information', resulting in a reclassification of operating return before tax of £22 million from other business to the UK reporting segments.

Capital continued

8.iii – Analysis of return on equity continued

	Operating return			
Full year 2017	Before tax £m	After tax £m	Weighted average shareholders' funds including non-controlling interests £m	Return on equity %
United Kingdom[1]	2,175	1,767	13,000	13.6%
Canada	46	34	1,442	2.4%
Europe	1,096	787	5,890	13.4%
Asia	227	212	1,638	12.9%
Fund management	164	127	495	25.7%
Corporate and other business[1,2]	(247)	(181)	5,497	n/a
Return on total capital employed	3,461	2,746	27,962	9.8%
Subordinated debt	(389)	(314)	(7,224)	4.3%
Senior debt	(4)	(3)	(1,398)	0.2%
Return on total equity	3,068	2,429	19,340	12.6%
Less: Non-controlling interests		(134)	(1,325)	10.1%
Direct capital instrument and tier 1 notes		(65)	(1,025)	6.3%
Preference capital		(17)	(200)	8.5%
Return on equity shareholders' funds		2,213	16,790	13.2%

1 Non-insurance operations relating to the UK have been reclassified to their respective market segments to better align with the segmental note as per B5 'Segmental Information', resulting in a reclassification of operating return before tax of £26 million from other business to the UK reporting segment.
2 The Corporate and other business loss before tax of £247 million comprises corporate costs of £184 million, interest on internal lending arrangements of £7 million, other business operating loss of £131 million, partly offset by finance income on the main UK pension scheme of £75 million.

Capital continued

8.iv – Group capital under IFRS basis

The table below shows how our capital is deployed by market and how that capital is funded.

	30 June 2018 Capital employed £m	30 June 2017 Capital employed £m	31 December 2017 Capital employed £m
Life business			
United Kingdom[1,2]	**10,274**	10,799	11,493
France	**2,644**	2,769	2,704
Poland	**409**	283	352
Italy	**605**	967	954
Other Europe[1]	**584**	818	422
Europe	**4,242**	4,837	4,432
Asia	**1,624**	1,650	1,558
	16,140	17,286	17,483
General insurance & health			
United Kingdom General insurance[1,2,3]	**1,356**	1,689	1,872
United Kingdom Health[2]	**107**	85	106
Canada	**1,287**	1,466	1,364
France	**570**	504	589
Poland	**140**	119	140
Italy	**172**	304	319
Other Europe[1]	**185**	263	203
Europe	**1,067**	1,190	1,251
Asia	**—**	12	10
	3,817	4,442	4,603
Fund management	**532**	501	520
Corporate and other business[2,3,4]	**6,021**	5,740	5,169
Total capital employed	**26,510**	27,969	27,775
Financed by			
Equity shareholders' funds	**16,364**	16,691	16,969
Non-controlling interests	**1,045**	1,319	1,235
Direct capital instrument and tier 1 notes	**731**	1,123	731
Preference shares	**200**	200	200
Subordinated debt[5]	**6,755**	7,233	7,221
Senior debt	**1,415**	1,403	1,419
Total capital employed[6]	**26,510**	27,969	27,775

1 Following the launch of UK Insurance which brings together UK Life, UK General Insurance and UK Health into a combined business, the Ireland Life and General Insurance businesses have been aligned to the new management structure and reported within Other Europe which also includes Spain and Turkey. As a result, HY17 comparative balances have been restated.
2 Non-insurance operations relating to the UK have been reclassified to their respective market segments to better reflect the management of the underlying businesses consistent with the segmental analysis shown in note B5.
3 Capital employed for United Kingdom General Insurance excludes c.£0.9 billion of goodwill which does not support the general insurance business for capital purposes and is included in Corporate and other business.
4 Corporate and 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.
5 Subordinated debt excludes amounts held by Group companies of £8 million *(2017: £9 million)*.
6 Goodwill, AVIF and other intangibles are maintained within the capital base.

Total capital employed is financed by a combination of equity shareholders' funds, preference capital, subordinated debt and other borrowings. At 30 June 2018 the Group had £26.5 billion *(2017: £27.8 billion)* of total capital employed in our trading operations measured on an IFRS basis.

Aviva has significant excess capital and has committed to deploy £2 billion of this in 2018. The deployment includes £900 million of debt reduction, £500 million for bolt-on acquisitions and a £600 million ordinary share buy-back. In 2017 the Group redeemed the $650 million fixed rate tier 1 notes in full at the first call date on 3 November and completed in full a share buy-back of ordinary shares for an aggregate purchase price of £300 million *(HY17: £73 million)*. The number of shares in issue reduced by 57,724,500 in respect of shares acquired and cancelled under the 2017 buy-back programme. On 1 May 2018 the Group announced a further share buy-back of ordinary shares for an aggregate purchase price of up to £600 million. As at 30 June 2018 a further 43,911,450 shares had been purchased and subsequently cancelled bringing the total cancelled under the programme to 101,635,950 shares. In addition, the Group redeemed its €500 million 6.875% fixed/floating rate notes in full at the first call date on 22 May 2018.

At 30 June 2018 the market value of our external debt (subordinated debt and senior 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), and direct capital instrument and tier 1 notes was £10,139 million *(2017: £11,311 million)*.

Financial supplement

In this section

A Income & expenses

symbol denotes key performance indicators used as a base to determine or modify remuneration.
‡ denotes APMs which are key performance indicators. There have been no changes to the APMs used by the Group during period under review.

Reconciliation of Group adjusted operating profit‡# to profit for the period

For the six month period ended 30 June 2018

	6 months 2018 £m	6 months 2017 £m	Full year 2017 £m
Group adjusted operating profit before tax attributable to shareholders' profits			
Life business			
United Kingdom[1,2]	**831**	727	1,728
Europe[1]	**414**	439	873
Asia	**143**	120	235
Other	**4**	10	16
Total life business	**1,392**	1,296	2,852
General insurance and health			
United Kingdom General insurance[1]	**195**	214	411
United Kingdom Health	**14**	8	36
Canada	**(13)**	71	46
Europe[1]	**112**	123	223
Asia	**(11)**	(5)	(8)
Other	**5**	7	(4)
Total general insurance and health	**302**	418	704
Fund management			
Aviva Investors	**76**	71	168
Asia	**(2)**	(2)	(4)
Total fund management	**74**	69	164
Other			
Other operations (note A1)[2]	**(83)**	(76)	(143)
Market adjusted operating profit	**1,685**	1,707	3,577
Corporate centre (note A2)	**(99)**	(83)	(184)
Group debt costs and other interest (note A3)	**(148)**	(159)	(325)
Group adjusted operating profit before tax attributable to shareholders' profits	**1,438**	1,465	3,068
Integration and restructuring costs	**—**	(52)	(141)
Group adjusted operating profit before tax attributable to shareholders' profits after integration and restructuring costs	**1,438**	1,413	2,927
Adjusted for the following:			
Investment variances and economic assumption changes (note A4)	**(482)**	(179)	34
Non-life business: Short-term fluctuation in return on investments (note A5)	**(206)**	(205)	(345)
General insurance and health business: Economic assumption changes (note A6)	**34**	(12)	(7)
Impairment of goodwill, joint ventures, associates and other amounts expensed (note A7)	**—**	(19)	(49)
Amortisation and impairment of intangibles (note A8)	**(101)**	(91)	(197)
Amortisation and impairment of acquired value of in-force business (note A9)	**(210)**	(234)	(495)
Profit on the disposal and remeasurement of subsidiaries, joint ventures and associates (note A10)	**31**	202	135
Other (note A11)	**22**	—	—
Adjusting items before tax	**(912)**	(538)	(924)
Profit before tax attributable to shareholders' profits	**526**	875	2,003
Tax on Group adjusted operating profit	**(303)**	(311)	(639)
Tax on other activities	**153**	152	282
	(150)	(159)	(357)
Profit for the period	**376**	716	1,646

1 Following the launch of UK Insurance which brings together UK Life, UK General Insurance and UK Health into a combined business, the Ireland Life and General Insurance businesses have been aligned to the new management structure and reported within Europe. As a result, the comparatives for HY17 have been restated.
2 Non-insurance operations relating to the UK have been reclassified to their respective market segments to better reflect the management of the underlying businesses consistent with the segmental analysis shown in note B5. The change resulted in reclassification losses of £22 million and £26 million for HY17 and 2017 respectively from other operations to UK Life businesses.

Other Group adjusted operating profit Items
A1 – Other operations

	6 months 2018 £m	6 months 2017 £m	Full year 2017 £m
Europe	**(18)**	(19)	(37)
Asia	**(12)**	(17)	(32)
Other Group operations[1]	**(53)**	(40)	(74)
Total[2]	**(83)**	(76)	(143)

1 Other Group operations include Group and head office costs, expenditure on UK digital business and non-insurance Group adjusted operating profit relating to Aviva Re.
2 Non-insurance operations relating to the UK have been reclassified to their respective market segments to better align with the segmental note as per note B5 'Segmental Information'. As a result losses of £22 million at HY17 and £26 million at FY17 are now presented within the UK reporting segments in section 6.i "United Kingdom".

Other operations relate to non-insurance activities and 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 £83 million *(HY17: £76 million)*.

'Other Group operations' includes increased investment in the development of the Group's digital business through its UK insurance intermediary which places business primarily on behalf of UK General Insurance.

A2 – Corporate centre

	6 months 2018 £m	6 months 2017 £m	Full year 2017 £m
Project spend	**(24)**	(4)	(29)
Central spend and share award costs	**(75)**	(79)	(155)
Total	**(99)**	(83)	(184)

Corporate centre costs of £99 million increased by £16 million *(HY17: £83 million)* mainly due to higher Group led project costs offset by a decrease in share schemes and central spend. The project spend increase relates to specific expenditure incurred as we look to upgrade and simplify our IT estate, the implementation of IFRS 17 and compliance costs relating to the General Data Protection Regulations which became effective in 2018.

A3 – Group debt costs and other interest

	6 months 2018 £m	6 months 2017 £m	Full year 2017 £m
External debt			
Subordinated debt	**(188)**	(191)	(391)
Other	**(1)**	(2)	(2)
Total external debt	**(189)**	(193)	(393)
Internal lending arrangements	**5**	(3)	(7)
Net finance income on main UK pension scheme	**36**	37	75
Total	**(148)**	(159)	(325)

Non-operating profit items

A4 – Life business: Investment variances and economic assumption changes

(a) Definitions

Group adjusted operating profit for life business is based on expected investment returns on financial investments backing shareholder funds over the period, with consistent allowance for the corresponding expected movements in liabilities. Group adjusted operating profit includes the effect of variance in experience for operating items, such as mortality, persistency and expenses, and the effect of changes in operating assumptions. 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 Group adjusted operating profit.

(b) Economic volatility

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

Life business	**6 months 2018 £m**	6 months 2017 £m	Full year 2017 £m
Investment variances and economic assumptions	**(482)**	(179)	34

Investment variances and economic assumption changes were £482 million negative in the period to 30 June 2018 *(HY17: £179 million negative)*, primarily due to negative variances in the UK, France and Italy. In the UK, these variances were mainly due to an increase in yields, lower equity returns and the widening of fixed income spreads, reflecting that we hedge on an economic rather than an IFRS basis, together with the impact of updating our view of UK house price inflation based on current market conditions in our equity release mortgage portfolio. The negative variance in France was driven by lower than expected return on equities and an increase in spreads partly offset by a reduction in equity volatility. The negative variance in Italy was primarily driven by a widening of credit spreads and a fall in equity markets due to the recent volatile political climate.

The negative variance in the period to 30 June 2017 primarily reflected the treatment on disposal of our French subsidiary Antarius and falling interest rates in Asia. The profit on sale of Antarius of £180 million was reported as a profit on disposal of subsidiaries. Under French reserving rules (applicable under grandfathering of French GAAP when IFRS was adopted), £147 million of the profit arising on disposal was transferred to insurance liabilities and included within investment variances; with releases following during the second half of 2017 in accordance with French rules governing the annual minimum allocation of bonuses to policyholders.

The Group continues to keep its long-term assumptions for future property prices and rental income under review to allow for the possible future adverse impact of the decision for the UK to leave the European Union. No change has been made to this allowance in the period to 30 June 2018 as the impact of the Brexit process on the UK economy remains uncertain.

(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 2018 %	6 months 2017 %	Full year 2017 %	**6 months 2018 %**	6 months 2017 %	Full year 2017 %
United Kingdom	**4.8%**	4.8%	4.8%	**3.3%**	3.3%	3.3%
Eurozone	**4.4%**	4.2%	4.2%	**2.9%**	2.7%	2.7%

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 asset classes. The asset risk premiums are set out in the table below:

All territories	**6 months 2018 %**	6 months 2017 %	Full year 2017 %
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 at the start of the period are set out in the table below:

Territories	**2018 %**	2017 %
United Kingdom	**1.3%**	1.3%
Eurozone	**0.9%**	0.7%

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 (assessed on a best estimate basis). 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

General Insurance and health	6 months 2018 £m	6 months 2017 £m	Full year 2017 £m
Analysis of investment income:			
– Net investment income	**42**	122	331
– Foreign exchange gains/losses and other charges	**4**	(17)	(24)
	46	105	307
Analysed between:			
– Longer-term investment return, reported within operating profit	**184**	172	364
– Short-term fluctuations in investment return, reported outside operating profit	**(138)**	(67)	(57)
	46	105	307
Short-term fluctuations:			
– General insurance and health	**(138)**	(67)	(57)
– Other operations[1]	**(68)**	(138)	(288)
Total short-term fluctuations	**(206)**	(205)	(345)

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. It 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 discount/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 adverse short-term fluctuations during the first half of 2018 are due to interest rate increases, reducing the value of fixed income securities, and other adverse market movements on Group centre holdings, including the centre hedging programme.

At HY17, total short-term fluctuations of £205 million adverse are mainly due to interest rate increases reducing the value of fixed income securities, and foreign exchange losses and adverse market movements on Group centre holdings.

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

	6 months 2018 £m	6 months 2017 £m	Full year 2017 £m
Debt securities	**9,576**	10,229	10,054
Equity securities	**831**	296	772
Properties	**459**	344	499
Cash and cash equivalents	**1,094**	1,451	1,115
Other[1]	**2,441**	2,403	2,498
Assets supporting general insurance and health business	**14,401**	14,723	14,938
Assets supporting other non-long-term business[2]	**808**	1,173	685
Total assets supporting non-long-term business	**15,209**	15,896	15,623

1 Includes the internal loan to Group from UKI.
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 2018 %	6 months 2017 %	Full year 2017 %	6 months 2018 %	6 months 2017 %	Full year 2017 %
United Kingdom	**4.8%**	4.8%	4.8%	**3.3%**	3.3%	3.3%
Eurozone	**4.4%**	4.2%	4.2%	**2.9%**	2.7%	2.7%
Canada	**5.9%**	5.5%	5.5%	**4.4%**	4.0%	4.0%

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

In the general insurance and health business, a positive impact of £34 million *(HY17: £12 million adverse)* has arisen as a result of a decrease in the estimated future inflation rate used to value periodic payment orders (PPOs) and an increase in the interest rates used to discount claim reserves for both PPOs and latent claims.

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

There was no impairment of goodwill, associates or joint ventures expensed in the period *(HY17: £19 million)*. Negative goodwill of £36 million has arisen relating to the acquisition of Friends First. This has been recognised in Other items (see Note A11).

A8 – Amortisation and impairment of intangibles

The amortisation and impairment of intangible assets increased to £101 million *(HY17: £91 million)* mainly due to an increase in the amortisation charge on software costs which were capitalised during the second half of 2017.

A9 – Amortisation and impairment of acquired value of in-force business

Amortisation and impairment of acquired value of in-force business (AVIF) is a charge of £210 million *(HY17: £234 million charge)*, which relates solely to amortisation in respect of the Group's subsidiaries and joint ventures. Impairment charges of £4 million in relation to FPIL remeasurement losses are recorded within profit on disposal and remeasurement of subsidiaries, joint ventures and associates (see Note A10).

A10 – Profit/loss on the disposal and remeasurement of subsidiaries, joint ventures and associates

The total Group profit on disposal and remeasurement of subsidiaries, joint ventures and associates is £31 million *(HY17: £202 million profit)*. This consists of £35 million profit on the disposals of Italy, Taiwan and other small operations; offset by £4 million remeasurement loss in relation to FPIL. Further details of these items are provided in note B4.

A11 – 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. At half year 2018, other items is a net gain of £22 million *(HY17: £nil)*, which comprises the following:

- A charge of £14 million relating to a provision for goodwill payments announced on 30 April 2018 to those preference shareholders who were adversely affected by the sale of shares between 8 March and 22 March 2018. The nature of these costs and the restricted time-period that defines eligibility to receive a payment demonstrates that they are non-recurrent and are not reflective of the Group's ongoing financial performance.
- A gain of £36 million relating to negative goodwill arising on the acquisition of Friends First (refer to Note B4 (a)), which arose primarily due to differences between the valuation of the pension scheme liability used to determine the transaction price and the recognition and measurement principles defined by IAS 19 *Employee Benefits*. The gain has been recognised immediately in the Income Statement as required by IFRS 3 *Business Combinations* and, in line with the treatment of impairments of goodwill, it has been treated as a non-operating item. The gain has been reported within 'other' as significant negative goodwill is unusual and its inclusion within alternative line items of the Reconciliation of Group adjusted operating profit to profit before tax would distort the year on year comparability.

IFRS financial statements

In this section	Page

symbol denotes key performance indicators used as a base to determine or modify remuneration.
‡ denotes APMs which are key performance indicators. There have been no changes to the APMs used by the Group during period under review.

Financial supplement continued

Condensed consolidated income statement

For the six month period ended 30 June 2018

	Note	Reviewed 6 months 2018 £m	Reviewed 6 months 2017 £m	Audited full year 2017 £m
Income				
Gross written premiums	B5	**15,180**	13,576	27,606
Premiums ceded to reinsurers		**(1,096)**	(1,076)	(2,229)
Premiums written net of reinsurance		**14,084**	12,500	25,377
Net change in provision for unearned premiums		**(299)**	(365)	(153)
Net earned premiums		**13,785**	12,135	25,224
Fee and commission income		**1,042**	1,125	2,187
Net investment (expense)/income		**(492)**	10,754	22,066
Share of profit after tax of joint ventures and associates		**24**	10	41
Profit on the disposal and remeasurement of subsidiaries, joint ventures and associates	B4(b)	**31**	202	135
		14,390	24,226	49,653
Expenses				
Claims and benefits paid, net of recoveries from reinsurers		**(11,506)**	(12,501)	(24,113)
Change in insurance liabilities, net of reinsurance	B9(a)(ii)	**1,832**	(1,684)	(1,074)
Change in investment contract provisions		**(1,703)**	(5,584)	(13,837)
Change in unallocated divisible surplus		**1,508**	794	294
Fee and commission expense		**(2,117)**	(2,200)	(4,329)
Other expenses		**(1,706)**	(1,669)	(3,537)
Finance costs		**(266)**	(353)	(683)
		(13,958)	(23,197)	(47,279)
Profit before tax		**432**	1,029	2,374
Tax attributable to policyholders' returns	B6	**94**	(154)	(371)
Profit before tax attributable to shareholders' profits		**526**	875	2,003
Tax expense	B6	**(56)**	(313)	(728)
Less: tax attributable to policyholders' returns	B6	**(94)**	154	371
Tax attributable to shareholders' profits		**(150)**	(159)	(357)
Profit for the period		**376**	716	1,646
Attributable to:				
Equity holders of Aviva plc		**330**	637	1,497
Non-controlling interests		**46**	79	149
Profit for the period		**376**	716	1,646
Earnings per share	B7			
Basic (pence per share)		**7.9p**	14.9p	35.0p
Diluted (pence per share)		**7.8p**	14.7p	34.6p

Condensed consolidated statement of comprehensive income

For the six month period ended 30 June 2018

	Note	Reviewed 6 months 2018 £m	Reviewed 6 months 2017 £m	Audited full year 2017 £m
Profit for the period		**376**	716	1,646
Other comprehensive income:				
Items that may be reclassified subsequently to income statement				
Investments classified as available for sale				
Fair value losses		**(3)**	(10)	(7)
Fair value gains transferred to profit on disposals		**(2)**	(2)	(2)
Share of other comprehensive (loss)/income of joint ventures and associates		**(9)**	1	6
Foreign exchange rate movements		**(81)**	46	68
Aggregate tax effect – shareholder tax on items that may be reclassified subsequently to income statement	B6(b)	**4**	5	5
Items that will not be reclassified to income statement				
Owner-occupied properties – fair value losses		**—**	(1)	(1)
Remeasurements of pension schemes	B14	**137**	(36)	(5)
Aggregate tax effect – shareholder tax on items that will not be reclassified subsequently to income statement	B6(b)	**(24)**	12	5
Total other comprehensive income, net of tax		**22**	15	69
Total comprehensive income for the period		**398**	731	1,715
Attributable to:				
Equity holders of Aviva plc		**362**	619	1,523
Non-controlling interests		**36**	112	192
		398	731	1,715

Financial supplement continued

Condensed consolidated statement of changes in equity

For the six month period ended 30 June 2018

	Note	**Reviewed 6 months 2018 £m**	Reviewed 6 months 2017 £m	Audited full year 2017 £m
Balance at 1 January as reported		**19,135**	19,551	19,551
Profit for the period		**376**	716	1,646
Other comprehensive income		**22**	15	69
Total comprehensive income for the period		**398**	731	1,715
Dividends and appropriations	B8	**(780)**	(684)	(1,081)
Non-controlling interests share of dividends declared in the period		**(46)**	(55)	(103)
Transfer to profit on disposal of subsidiaries, joint ventures and associates		**(31)**	(31)	12
Capital contributions from non-controlling interests		**2**	39	36
Changes in non-controlling interests in subsidiaries		**(178)**	(202)	(315)
Treasury shares held by subsidiary companies		**—**	—	1
Reserves credit for equity compensation plans		**35**	46	77
Shares issued under equity compensation plans		**—**	5	10
Shares purchased in buy-back[1]		**(197)**	(73)	(300)
Reclassification of tier 1 notes to financial liabilities[2]		**—**	—	(484)
Aggregate tax effect – shareholder tax		**2**	6	16
Balance at 30 June/31 December		**18,340**	19,333	19,135

1 On 1 May 2018, the Group announced a share buy-back of ordinary shares for an aggregate purchase price of up to £600 million *(2017: £300 million announced on 25 May 2017)*. In the period ended 30 June 2018, £197 million of shares *(HY17: £73 million, 2017: £300 million)* had been purchased and shares with a nominal value of £10 million *(HY17: £3 million, 2017: £14 million)* have been cancelled, giving rise to an additional capital redemption reserve of an equivalent amount.

2 On 28 September 2017, notification was given that the Group would redeem the $650 million fixed rate tier 1 notes. At that date, the instrument was reclassified as a financial liability of £484 million, representing its fair value on translation into sterling on that date. The resulting foreign exchange loss of £92 million was charged to retained earnings.

Financial supplement continued

Condensed consolidated statement of financial position

As at 30 June 2018

	Note	Reviewed 30 June 2018 £m	Reviewed 30 June 2017 £m	Audited 31 December 2017 £m
Assets				
Goodwill		**1,881**	1,911	1,876
Acquired value of in-force business and intangible assets	B20	**3,375**	4,841	3,455
Interests in, and loans to, joint ventures		**1,226**	1,214	1,221
Interests in, and loans to, associates		**362**	472	421
Property and equipment		**531**	510	509
Investment property		**11,151**	10,719	10,797
Loans		**27,717**	25,452	27,857
Financial investments		**309,403**	309,222	311,082
Reinsurance assets	B11	**13,831**	18,512	13,492
Deferred tax assets		**156**	186	144
Current tax assets		**118**	80	94
Receivables		**9,352**	9,060	8,285
Deferred acquisition costs		**2,943**	2,898	2,906
Pension surpluses and other assets	B14	**3,626**	3,509	3,468
Prepayments and accrued income		**3,129**	2,929	2,860
Cash and cash equivalents	B18	**44,443**	42,456	43,347
Assets of operations classified as held for sale	B4(c)	**9,665**	6,042	10,871
Total assets		**442,909**	440,013	442,685
Equity				
Capital				
Ordinary share capital		**996**	1,014	1,003
Preference share capital		**200**	200	200
		1,196	1,214	1,203
Capital reserves				
Share premium		**1,210**	1,201	1,207
Capital redemption reserve		**24**	3	14
Merger reserve		**8,974**	8,975	8,974
		10,208	10,179	10,195
Treasury shares		**(16)**	(14)	(14)
Currency translation reserve		**1,028**	1,212	1,141
Other reserves		**(289)**	(432)	(274)
Retained earnings		**4,437**	4,732	4,918
Equity attributable to shareholders of Aviva plc		**16,564**	16,891	17,169
Direct capital instrument and tier 1 notes		**731**	1,123	731
Equity excluding non-controlling interests		**17,295**	18,014	17,900
Non-controlling interests		**1,045**	1,319	1,235
Total equity		**18,340**	19,333	19,135
Liabilities				
Gross insurance liabilities	B9	**147,811**	150,714	148,650
Gross liabilities for investment contracts	B10	**208,397**	203,726	203,986
Unallocated divisible surplus	B21	**7,605**	8,524	9,082
Net asset value attributable to unitholders		**17,778**	18,469	18,327
Pension deficits and other provisions	B14	**1,406**	1,426	1,429
Deferred tax liabilities		**2,342**	2,325	2,377
Current tax liabilities		**128**	188	290
Borrowings	B13	**9,786**	10,338	10,286
Payables and other financial liabilities		**17,271**	17,057	16,459
Other liabilities		**2,949**	2,733	2,791
Liabilities of operations classified as held for sale	B4(c)	**9,096**	5,180	9,873
Total liabilities		**424,569**	420,680	423,550
Total equity and liabilities		**442,909**	440,013	442,685

Condensed consolidated statement of cash flows

For the six month period ended 30 June 2018

	Note	Reviewed 6 months 2018 £m	Reviewed 6 months 2017 £m	Audited full year 2017 £m
Cash flows from operating activities[1]				
Cash generated from operating activities		**2,572**	5,255	8,361
Tax paid		**(292)**	(405)	(620)
Total net cash from operating activities		**2,280**	4,850	7,741
Cash flows from investing activities				
Acquisitions of, and additions to, subsidiaries, joint ventures and associates, net of cash acquired		**191**	25	25
Disposals of subsidiaries, joint ventures and associates, net of cash transferred		**218**	(36)	(49)
New loans to joint ventures and associates		**—**	(2)	—
Repayment of loans to joint ventures and associates		**—**	—	—
Net repayment of loans to joint ventures and associates		**—**	(2)	—
Purchases of property and equipment		**(21)**	(40)	(69)
Proceeds on sale of property and equipment		**1**	2	5
Purchases of intangible assets		**(20)**	(44)	(107)
Total net cash from/(used in) investing activities		**369**	(95)	(195)
Cash flows from financing activities				
Proceeds from issue of ordinary shares		**6**	6	12
Shares purchased in buy-back		**(197)**	(73)	(300)
Treasury shares distributed from employee trusts		**—**	1	—
New borrowings drawn down, net of expenses		**900**	21	1,320
Repayment of borrowings[2]		**(1,377)**	(129)	(1,904)
Net repayment of borrowings		**(477)**	(108)	(584)
Interest paid on borrowings		**(253)**	(294)	(610)
Preference dividends paid	B8	**(9)**	(9)	(17)
Ordinary dividends paid	B8	**(764)**	(646)	(983)
Coupon payments on direct capital instrument and tier 1 notes	B8	**(7)**	(29)	(81)
Capital contributions from non-controlling interests of subsidiaries		**2**	39	36
Dividends paid to non-controlling interests of subsidiaries		**(46)**	(55)	(103)
Total net cash used in financing activities		**(1,745)**	(1,168)	(2,630)
Total net increase in cash and cash equivalents		**904**	3,587	4,916
Cash and cash equivalents at 1 January		**43,587**	38,405	38,405
Effect of exchange rate changes on cash and cash equivalents		**(43)**	248	266
Cash and cash equivalents at 30 June/31 December	B18	**44,448**	42,240	43,587

1 Cash flows from operating activities includes interest received of £2,646 million *(HY17: £2,669 million, 2017: £5,302 million)* and dividends received of £2,418 million *(HY17: £2,054 million, 2017: £2,606 million)*.
2 HY18 includes redemption of €500 million 6.875% fixed/floating rate notes at their first call date of £439 million, full year 2017 includes redemption of 8.25% US $650 million fixed rate tier 1 notes of £488 million.

B1 – Basis of preparation

The condensed consolidated interim financial statements for the six months to 30 June 2018 have been prepared in accordance with IAS 34 *Interim Financial Reporting* as endorsed by the European Union (EU), and the Disclosure Rules and Transparency Rules of the Financial Conduct Authority.

Except as described below, the accounting policies applied in the condensed consolidated interim financial statements are the same as those applied in Aviva plc's 2017 Annual Report and Accounts.

The Group has adopted IFRS 15 *Revenue from Contracts with Customers* from 1 January 2018 which has resulted in the following minor amendments to the Group accounting policies:

- (I) Other investment contract fee revenue has been updated to clarify that fees related to investment management services are recognised as revenue over time, as performance obligations are satisfied; and variable consideration, such as performance fees and commission subject to clawback arrangements, is not recognised as revenue until it is reasonably certain that no significant reversal of amounts recognised would occur.
- (J) Other fee and commission income has been updated to clarify that all other fee and commission income is recognised over time as the services are provided.

These amendments did not have a material effect on the Group's financial statements.

IFRS 9 *Financial Instruments* is effective from 1 January 2018, however the Group has chosen to apply the deferral option from 2018 as its activities are predominantly connected with insurance, as defined by the amendments to IFRS 4 *Insurance Contracts*.

The results for the six months to 30 June 2018 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 comparative results for the full year 2017 have been taken from the Group's 2017 Annual Report and Accounts. Therefore, these interim financial statements should be read in conjunction with the 2017 Annual Report and Accounts that were prepared in accordance with IFRS as endorsed by the European Union. PricewaterhouseCoopers LLP reported on the 2017 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 2017 Annual Report and Accounts have 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).

B2 – Presentation changes

During 2017, following the launch of UK Insurance which brings together the UK Life, UK General Insurance and UK Health businesses, the Ireland Life and General insurance businesses have been aligned to the new management structure and reported within Europe. The UK Insurance business continues to be dealt with as two businesses, UK Life and UK General Insurance and health, under the overall leadership of Andy Briggs, CEO of UK Insurance. The Ireland Life and General insurance businesses are now part of the European operations under the overall leadership of Maurice Tulloch, CEO of International Insurance. As a result of this change, comparative information for half year 2017 has been restated.

Additionally, a number of non-insurance businesses in the UK which were previously reported within Other products and services segment are now reported within Long-term business or General insurance and health segments, as appropriate, as this is more reflective of the Group's operating segments. Comparative information in the products and services segmental note B5(b) has been restated to reflect this change. This resulted in a loss before tax of £22 million and £26 million, for half year 2017 and 2017 respectively, being transferred from the 'Other' products and services segment. The corresponding net assets amounts are £177 million and £140 million for half year 2017 and 2017 respectively. This change has no impact on the operating segmental disclosures in note B5(a).

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 2018	6 months 2017	Full year 2017
Eurozone			
Average rate (€1 equals)	**£0.88**	£0.86	£0.88
Period end rate (€1 equals)	**£0.88**	£0.88	£0.89
Canada			
Average rate ($CAD1 equals)	**£0.57**	£0.59	£0.60
Period end rate ($CAD1 equals)	**£0.58**	£0.59	£0.59
Poland			
Average rate (PLN1 equals)	**£0.21**	£0.20	£0.21
Period end rate (PLN1 equals)	**£0.20**	£0.21	£0.21

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

(i) Wealthify

On 8 February 2018, Aviva acquired a majority shareholding in Wealthify Group Limited, the holding company of Wealthify, for a cash consideration of £17 million. The investment is part of Aviva's strategy to build customer loyalty by providing customers with a wide range of insurance and investment services all managed through the convenience and simplicity of Aviva's digital hub, MyAviva.

(ii) Friends First

On 14 November 2017, Aviva plc announced the acquisition of Friends First Life Assurance Company DAC (Friends First), an Irish insurer, for a consideration of €146 million (approximately £129 million). Following completion of the transaction announced on 1 June 2018, Friends First is now a wholly owned subsidiary. As a result of this acquisition, Aviva is now one of the largest composite insurers in Ireland.

The following table summarises the consideration for the acquisition, the fair value of the assets acquired, liabilities assumed and resulting allocation to goodwill. The actuarial assumptions used in the valuation of insurance liabilities have yet to be aligned with Group accounting policies due to the proximity of the acquisition date to interim reporting. The balance sheet values are subject to amendment during the measurement period of up to 12 months after the acquisition date as permitted under IFRS 3 *Business Combinations*.

	1 June 2018 Fair Value £m
Assets	
AVIF and other intangibles	96
Financial investments	3,207
Reinsurance assets	502
Receivables	32
Net tax asset	3
Other assets	426
Cash and cash equivalents	354
Total identifiable assets	**4,620**
Liabilities	
Insurance liabilities	1,408
Investment contract liabilities	2,922
Payables and other financial liabilities	33
Other liabilities	92
Total identifiable liabilities	**4,455**
Net identifiable assets acquired	**165**
Consideration	**129**
Negative goodwill arising on acquisition	**36**

The acquisition resulted in a gain from negative goodwill of £36 million, as the fair value of the net assets acquired of £165 million exceeded the consideration paid of £129 million. The gain arose primarily due to differences between the valuation of the pension scheme liability used to determine the transaction price and the recognition and measurement principles defined by IAS 19 *Employee Benefits*. The gain has been recognised immediately in the Income Statement as required by IFRS 3. The receivables balance of £32 million is made up of other receivables, prepayments and accrued income, measured at fair value and assessed as fully recoverable. Due to the timing of the acquisition, the income statement of Friends First since acquisition has had no material impact on the Group's results in the period.

(b) Disposal and remeasurements of subsidiaries, joint ventures and associates

The profit on disposal and remeasurement of subsidiaries, joint ventures and associates comprises:

	6 months 2018 £m	6 months 2017 £m	Full year 2017 £m
Remeasurements due to change in control status			
Asia – Vietnam	—	6	7
Poland	—	16	16
Other small operations	2	—	—
Disposals			
France – Antarius	—	180	180
France – health	1	—	36
Spain	1	—	28
Italy (see (b)(i) below)	24	—	—
Asia – Taiwan (see (b)(ii) below)	7	—	(7)
Other small operations	—	—	(7)
Held for sale remeasurements			
Asia – FPIL (see (c)(i) below)	(4)	—	(118)
Total profit on disposal and remeasurements	**31**	202	135

B4 – Subsidiaries, joint ventures and associates continued

The profit on the disposal and remeasurement of subsidiaries, joint ventures and associates during the period of £31 million *(HY17: profit of £202 million)* consists of a £24 million gain on disposal of Italy Avipop (see note B4(b)(i)), £7 million gain on disposal of Taiwan (see note B4(b)(ii)), £2 million gains relating to France and Spain transactions which completed in 2017 and a £2 million remeasurement gain in respect of other small operations. This has been offset by £4 million remeasurement loss relating to FPIL (see note B4 (c)(i) below).

Remeasurements due to change in control status

On 13 February 2018, Aviva announced that it has completed the transaction to develop a digital insurance joint venture in Hong Kong with Hillhouse Capital Group (Hillhouse) and Tencent Holdings Limited (Tencent). The joint venture commenced operating under its new corporate structure during the first half of 2018. The transaction included the sale of 60% of the shareholding in Aviva Life Insurance Company Limited (Aviva Hong Kong) for cash consideration of HKD 301 million (approximately £29 million). The transaction resulted in a remeasurement gain of £2 million mainly arising through the recycling of reserves to the income statement and, additionally, a loss of £4 million which has been recognised directly in equity in accordance with IFRS 10 *Consolidated Financial Statements* as Aviva has retained control of certain activities under the sale agreement.

Disposals

(i) Italy – Avipop

On 29 March 2018, Aviva announced that it had completed the sale of its entire shareholding of Avipop Assicurazioni S.p.A and Avipop Vita S.p.A to Banco BPM for cash consideration of €265 million (approximately £232 million). The transaction resulted in a total gain on disposal of £24 million, calculated as follows:

	£m
Assets	
Goodwill, AVIF and other intangibles	439
Deferred acquisition costs	15
Investments	376
Receivables and other financial assets	17
Reinsurance assets	75
Other assets	—
Cash and cash equivalents	42
Total assets	**964**
Liabilities	
Insurance liabilities	376
Payables and other financial liabilities	2
Tax liabilities	143
Other liabilities	6
Total liabilities	**527**
Net assets	**437**
Non-controlling interests before disposal	(213)
Group's share of net assets disposed	**224**
Cash consideration	235
Less: transaction costs	(3)
Net consideration	**232**
Reserves recycled to the income statement	16
Profit on disposal	**24**

(ii) Taiwan

On 19 January 2018, Aviva announced the sale of its entire 49% shareholding in its joint venture in Taiwan, First Aviva Life (Aviva Taiwan) to Aviva's joint venture partner, First Financial Holding Co. Ltd (FFH) for cash consideration of $1. The transaction resulted in a gain of £7 million arising from reserves recycled to the Income Statement. Remeasurement losses arising from the classification of Aviva Taiwan as held for sale were recognised in 2017.

B4 – Subsidiaries, joint ventures and associates continued

(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 2018 are as follows:

	30 June 2018 £m	30 June 2017 £m	31 December 2017 £m
Assets			
Goodwill, AVIF and other intangibles	**950**	598	1,467
Property and equipment	**5**	1	5
Investment property	**—**	1	—
Loans	**—**	67	6
Financial investments	**7,747**	4,777	8,306
Reinsurance assets	**46**	101	123
Other assets	**210**	91	225
Cash and cash equivalents	**707**	406	739
Total assets	**9,665**	6,042	10,871
Liabilities			
Insurance liabilities	**(509)**	(4,061)	(914)
Liability for investment contracts	**(8,437)**	—	(8,663)
Unallocated divisible surplus	**(19)**	(248)	(19)
Net assets attributable to unit holders	**—**	(555)	—
External borrowings	**—**	(13)	—
Other liabilities	**(131)**	(303)	(277)
Total liabilities	**(9,096)**	(5,180)	(9,873)
Net assets	**569**	862	998

Assets and liabilities of operations classified as held for sale as at 30 June 2018 relate to the expected disposal of the international operations of FPIL and Spain. See below for further details:

(i) FPIL

On 19 July 2017, Aviva announced the sale of FPIL to RL360 Holding Company Limited, a subsidiary of International Financial Group Limited, for a total consideration of £340 million. The conditions defined in IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations* for a subsidiary to be classified as held for sale include the presumption that the sale will be completed within 12 months of the date of reclassification. The transaction remains subject to regulatory approvals and is now expected to complete in the second half of 2018. As such, the subsidiary continues to be classified as held for sale and has been remeasured at fair value based on the expected sales price less costs to sell, calculated as £334 million. This resulted in a total loss on remeasurement of £118 million in 2017, and an additional remeasurement adjustment of £4 million at 30 June 2018. The business remains a consolidated subsidiary of Aviva at the balance sheet date.

(ii) Spain

On 23 February 2018, Aviva announced that it has agreed to sell its entire shareholding in life insurance and pensions joint ventures Caja Murcia Vida and Caja Granada Vida to Bankia. The transaction completed on 10 July 2018 for a total consideration of €203 million (approximately £180 million). In addition, Aviva has agreed to sell its 50% shareholding in the small life insurance operation, Pelayo Vida to Santa Lucia. The transaction is expected to complete in the second half of 2018.

(d) Subsequent events

In addition to the subsequent events shown above relating to Spain, on 17 July 2018, L'Union Financiere de France Banque (UFFB), a subsidiary company of Aviva located in France, announced that it had agreed to sell its entire 30.3% shareholding in asset management company Primonial Real Estate Investment Management to Groupe Primonial for a total consideration of €91 million. The transaction is subject to regulatory approvals and is expected to complete in the second half of 2018. The investment has not been reclassified from 'interests in, and loans to, associates' to 'assets of operations classified as held for sale' on the grounds of materiality.

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 consolidated income statement and consolidated statement of financial position.

(a) Operating segments

During 2017, following the launch of UK Insurance which brings together the UK Life, UK General Insurance and UK Health businesses, the Group's operating segments were changed to align them with the new management structure (see note B2 for further details). Results for the period ended 30 June 2017 have been restated accordingly.

United Kingdom

United Kingdom comprises two operating segments – Life and General insurance. The principal activities of our UK Life operations (including Friends Life) are life insurance, long-term health and accident insurance, savings, pensions and annuity business. UK 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.

Canada

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

France

The principal activities of our operations in France 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.

Poland

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

Italy, Ireland, 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 *Operating Segments*. The principal activities of our operations in Italy and Ireland are long-term business and general insurance. The principal activity of our operation in Spain is the sale of accident and health insurance and a selection of savings products. Our 'Other' operations include our life operations in Turkey. This segment includes Friends First. See note B4(a) for more details. The results of certain entities within Spain are included up to the date of disposal on 15 September 2017 and the results of Avipop, part of our operations in Italy, have been included up to the date of disposal on 29 March 2018. See note B4(b) for more details.

Asia

Our activities in Asia principally comprise our long-term insurance business operations in China, India, Singapore, Hong Kong, Vietnam, Indonesia, Taiwan (up to 19 January 2018, see note B4(b)) and the international operations of Friends Life. This segment also includes general insurance and health operations in Singapore and health operations in Indonesia. This segment includes the results of the digital insurance joint venture in Hong Kong, which commenced operating under its new corporate structure during the first half of 2018.

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, open-ended investment companies and individual savings accounts.

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 and digital broker operations and the Group's interest in Wealthify (see note B4(a)) are also included in this segment, as are the elimination entries for certain inter-segment transactions.

B5 – Segmental information continued

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.

(a) (i) Segmental income statement for the six month period ended 30 June 2018

	United Kingdom			Europe						
	Life £m	GI £m	Canada[4] £m	France £m	Poland £m	Italy, Ireland, Spain and Other £m	Asia £m	Aviva Investors £m	Other Group activities[2] £m	Total £m
Gross written premiums	3,941	2,266	1,535	2,828	297	3,769	544	—	—	15,180
Premiums ceded to reinsurers	(737)	(150)	(52)	(38)	(5)	(51)	(63)	—	—	(1,096)
Internal reinsurance revenue	—	(6)	—	—	—	(1)	(4)	—	11	—
Premiums written net of reinsurance	3,204	2,110	1,483	2,790	292	3,717	477	—	11	14,084
Net change in provision for unearned premiums	(34)	(96)	(33)	(124)	6	(6)	(12)	—	—	(299)
Net earned premiums	3,170	2,014	1,450	2,666	298	3,711	465	—	11	13,785
Fee and commission income	447	59	8	137	46	45	114	186	—	1,042
	3,617	2,073	1,458	2,803	344	3,756	579	186	11	14,827
Net investment income/(expense)	166	25	22	(138)	(95)	(441)	(269)	28	210	(492)
Inter-segment revenue	—	—	—	—	—	—	—	118	—	118
Share of profit/(loss) of joint ventures and associates	25	—	—	(5)	—	3	1	—	—	24
Profit on the disposal and remeasurement of subsidiaries, joint ventures and associates	—	—	—	1	—	25	5	—	—	31
Segmental income[1]	3,808	2,098	1,480	2,661	249	3,343	316	332	221	14,508
Claims and benefits paid, net of recoveries from reinsurers	(5,150)	(1,357)	(962)	(2,231)	(183)	(1,333)	(271)	—	(19)	(11,506)
Change in insurance liabilities, net of reinsurance	1,915	144	(112)	124	143	(348)	(51)	—	17	1,832
Change in investment contract provisions	672	—	—	(581)	—	(1,947)	183	(30)	—	(1,703)
Change in unallocated divisible surplus	130	—	—	590	6	680	102	—	—	1,508
Fee and commission expense	(337)	(620)	(377)	(254)	(66)	(191)	(87)	(21)	(164)	(2,117)
Other expenses	(711)	(117)	(95)	(133)	(50)	(55)	(135)	(209)	(201)	(1,706)
Inter-segment expenses	(106)	(3)	(3)	—	(2)	(3)	—	—	(1)	(118)
Finance costs	(53)	(1)	(3)	—	—	(2)	(3)	—	(204)	(266)
Segmental expenses	(3,640)	(1,954)	(1,552)	(2,485)	(152)	(3,199)	(262)	(260)	(572)	(14,076)
Profit/(loss) before tax	168	144	(72)	176	97	144	54	72	(351)	432
Tax attributable to policyholders' returns	95	—	—	—	—	—	(1)	—	—	94
Profit/(loss) before tax attributable to shareholders' profits	263	144	(72)	176	97	144	53	72	(351)	526
Adjusting items:										
Reclassification of corporate costs and unallocated interest	—	(8)	16	24	—	—	—	2	(34)	—
Investment return variances and economic assumption changes	401	—	—	44	2	35	—	—	—	482
Short-term fluctuation in return on investments backing	—	71	23	23	(1)	26	—	—	64	206
General insurance and health business: economic assumption changes	—	(27)	(1)	(6)	—	—	—	—	—	(34)
Impairment of goodwill, joint ventures, associates and other amounts expensed	—	—	—	—	—	—	—	—	—	—
Amortisation and impairment of intangibles	38	15	22	1	3	1	6	2	13	101
Amortisation and impairment of AVIF	143	—	—	1	—	—	64	—	2	210
Profit on the disposal and remeasurement of subsidiaries, joint ventures and associates	—	—	—	(1)	—	(25)	(5)	—	—	(31)
Other[3]	—	—	—	—	—	(36)	—	—	14	(22)
Group adjusted operating profit/(loss) before tax attributable to shareholders' profits after integration and restructuring costs	845	195	(12)	262	101	145	118	76	(292)	1,438
Integration and restructuring costs	—	—	—	—	—	—	—	—	—	—
Group adjusted operating profit/(loss) before tax‡ attributable to shareholders' profits	845	195	(12)	262	101	145	118	76	(292)	1,438

1 Total reported income, excluding inter-segment revenue, includes £6,054 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 Other Group activities include Group Reinsurance.
3 Other includes a gain of £36 million relating to negative goodwill on the acquisition of Friends First (refer to note B4(a)) and a charge of £14 million relating to the goodwill payments to preference shareholders which were announced on 30 April 2018. Refer to note A11.
4 Canada operating profit includes £1 million profit relating to non-insurance activities.

B5 – Segmental information continued

(a) (ii) Segmental income statement for the six month period ended 30 June 2017 – restated[1]

	United Kingdom			Europe						
	Life £m	GI £m	Canada £m	France £m	Poland £m	Italy, Ireland, Spain and Other £m	Asia £m	Aviva Investors £m	Other Group activities[3] £m	Total £m
Gross written premiums	2,889	2,235	1,529	3,053	286	3,067	517	—	—	13,576
Premiums ceded to reinsurers	(732)	(130)	(52)	(40)	(5)	(51)	(66)	—	—	(1,076)
Internal reinsurance revenue	—	—	—	—	—	(5)	(5)	—	10	—
Premiums written net of reinsurance	2,157	2,105	1,477	3,013	281	3,011	446	—	10	12,500
Net change in provision for unearned premiums	(38)	(110)	(48)	(128)	—	(27)	(14)	—	—	(365)
Net earned premiums	2,119	1,995	1,429	2,885	281	2,984	432	—	10	12,135
Fee and commission income	499	60	12	146	40	61	103	206	(2)	1,125
	2,618	2,055	1,441	3,031	321	3,045	535	206	8	13,260
Net investment income	8,018	29	57	1,417	197	279	480	61	216	10,754
Inter-segment revenue	—	—	—	—	—	—	—	113	—	113
Share of profit/(loss) of joint ventures and associates	29	—	—	12	—	4	(35)	—	—	10
Profit on the disposal and remeasurement of subsidiaries, joint ventures and associates	—	—	—	180	16	—	6	—	—	202
Segmental income[2]	10,665	2,084	1,498	4,640	534	3,328	986	380	224	24,339
Claims and benefits paid, net of recoveries from reinsurers	(5,580)	(1,257)	(898)	(2,717)	(215)	(1,593)	(235)	—	(6)	(12,501)
Change in insurance liabilities, net of reinsurance	(193)	38	(94)	(442)	(93)	(613)	(306)	—	19	(1,684)
Change in investment contract provisions	(3,719)	—	—	(859)	—	(766)	(178)	(62)	—	(5,584)
Change in unallocated divisible surplus	604	—	—	133	(4)	159	(98)	—	—	794
Fee and commission expense	(262)	(633)	(367)	(354)	(68)	(233)	(58)	(21)	(204)	(2,200)
Other expenses	(599)	(113)	(97)	(146)	(44)	(105)	(146)	(206)	(213)	(1,669)
Inter-segment expenses	(96)	(3)	(3)	(1)	(2)	(6)	—	—	(2)	(113)
Finance costs	(129)	—	(2)	(1)	—	(3)	(2)	—	(216)	(353)
Segmental expenses	(9,974)	(1,968)	(1,461)	(4,387)	(426)	(3,160)	(1,023)	(289)	(622)	(23,310)
Profit/(loss) before tax	691	116	37	253	108	168	(37)	91	(398)	1,029
Tax attributable to policyholders' returns	(145)	—	—	—	—	1	(10)	—	—	(154)
Profit/(loss) before tax attributable to shareholders' profits	546	116	37	253	108	169	(47)	91	(398)	875
Adjusting items:										
Reclassification of corporate costs and unallocated interest	—	(6)	14	24	—	—	—	2	(34)	—
Investment variances and economic assumption changes	(38)	—	—	157	(3)	7	56	—	—	179
Short-term fluctuation in return on investments backing	—	66	(11)	4	(1)	13	1	—	133	205
General insurance and health business: economic assumption changes	—	23	—	(9)	—	—	—	—	(2)	12
Impairment of goodwill, joint ventures, associates and other amounts expensed	—	—	—	—	—	—	19	—	—	19
Amortisation and impairment of intangibles	33	15	22	—	3	3	5	3	7	91
Amortisation and impairment of AVIF	162	—	—	1	—	1	68	—	2	234
Profit on the disposal and remeasurement of subsidiaries, joint ventures and associates	—	—	—	(180)	(16)	—	(6)	—	—	(202)
Group adjusted operating profit/(loss) before tax attributable to shareholders' profits after integration and restructuring costs	703	214	62	250	91	193	96	96	(292)	1,413
Integration and restructuring costs	32	—	9	9	—	—	—	—	2	52
Group adjusted operating profit/(loss) before tax attributable to shareholders' profits	735	214	71	259	91	193	96	96	(290)	1,465

1 Following the launch of UK Insurance which brings together UK Life, UK General Insurance and UK Health into a combined business, the Ireland Life and General insurance businesses have been aligned to the new management structure and reported within Europe. As a result comparatives have been restated.
2 Total reported income, excluding inter-segment revenue, includes £12,837 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 Other Group activities include Group Reinsurance.

B5 – Segmental information continued

(a) (iii) Segmental income statement for the year ended 31 December 2017

	United Kingdom			Europe						
	Life £m	GI £m	Canada £m	France £m	Poland £m	Italy, Ireland, Spain and Other £m	Asia £m	Aviva Investors[2] £m	Other Group activities[3] £m	Total £m
Gross written premiums	6,872	4,355	3,138	5,692	594	5,923	1,032	—	—	27,606
Premiums ceded to reinsurers	(1,531)	(271)	(110)	(78)	(11)	(101)	(127)	—	—	(2,229)
Internal reinsurance revenue	—	(6)	—	—	—	(9)	(10)	—	25	—
Premiums written net of reinsurance	5,341	4,078	3,028	5,614	583	5,813	895	—	25	25,377
Net change in provision for unearned premiums	—	(63)	(84)	23	3	(21)	(11)	—	—	(153)
Net earned premiums	5,341	4,015	2,944	5,637	586	5,792	884	—	25	25,224
Fee and commission income	906	121	24	316	83	141	193	407	(4)	2,187
	6,247	4,136	2,968	5,953	669	5,933	1,077	407	21	27,411
Net investment income	16,202	138	86	2,613	292	811	1,465	136	323	22,066
Inter-segment revenue	—	—	—	—	—	—	—	239	—	239
Share of profit/(loss) of joint ventures and associates	72	—	—	14	—	12	(57)	—	—	41
Profit/(loss) on the disposal and remeasurement of subsidiaries, joint ventures and associates	—	—	—	216	16	28	(118)	—	(7)	135
Segmental income[1]	22,521	4,274	3,054	8,796	977	6,784	2,367	782	337	49,892
Claims and benefits paid, net of recoveries from reinsurers	(10,783)	(2,547)	(1,902)	(5,145)	(397)	(2,799)	(526)	—	(14)	(24,113)
Change in insurance liabilities, net of reinsurance	1,380	78	(221)	(804)	(134)	(928)	(450)	—	5	(1,074)
Change in investment contract provisions	(9,041)	—	—	(1,591)	—	(2,121)	(947)	(137)	—	(13,837)
Change in unallocated divisible surplus	195	—	—	153	(2)	85	(137)	—	—	294
Fee and commission expense	(496)	(1,268)	(796)	(703)	(134)	(421)	(144)	(39)	(328)	(4,329)
Other expenses	(1,385)	(221)	(178)	(281)	(102)	(229)	(298)	(418)	(425)	(3,537)
Inter-segment expenses	(207)	(8)	(6)	2	(6)	(12)	—	—	(2)	(239)
Finance costs	(233)	(1)	(5)	(1)	—	(7)	(3)	—	(433)	(683)
Segmental expenses	(20,570)	(3,967)	(3,108)	(8,370)	(775)	(6,432)	(2,505)	(594)	(1,197)	(47,518)
Profit/(loss) before tax	1,951	307	(54)	426	202	352	(138)	188	(860)	2,374
Tax attributable to policyholders' returns	(330)	—	—	—	—	(4)	(37)	—	—	(371)
Profit/(loss) before tax attributable to shareholders' profits	1,621	307	(54)	426	202	348	(175)	188	(860)	2,003
Adjusting items:										
Reclassification of corporate costs and unallocated interest	—	(12)	28	48	—	—	—	5	(69)	—
Investment variances and economic assumption changes	(323)	—	—	249	(7)	12	38	—	(3)	(34)
Short-term fluctuation in return on investments backing	—	56	7	(26)	(3)	27	—	—	284	345
General insurance and health business: economic assumption changes	—	18	(2)	(9)	—	—	—	—	—	7
Impairment of goodwill, joint ventures, associates and other amounts expensed	—	—	2	—	—	—	47	—	—	49
Amortisation and impairment of intangibles	74	31	50	1	7	5	9	5	15	197
Amortisation and impairment of AVIF	327	—	—	2	—	1	154	—	11	495
(Profit)/loss on the disposal and remeasurement of subsidiaries, joint ventures and associates	—	—	—	(216)	(16)	(28)	118	—	7	(135)
Group adjusted operating profit/(loss) before tax attributable to shareholders' profits after integration and restructuring costs	1,699	400	31	475	183	365	191	198	(615)	2,927
Integration and restructuring costs	65	11	15	25	—	11	—	3	11	141
Group adjusted operating profit/(loss) before tax attributable to shareholders' profits	1,764	411	46	500	183	376	191	201	(604)	3,068

1 Total reported income, excluding inter-segment revenue, includes £26,949 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 includes £1 million profit relating to the Aviva Investors Pooled Pensions business.
3 Other Group activities include Group Reinsurance.

B5 – Segmental information continued

(a) (iv) Segmental statement of financial position as at 30 June 2018

	United Kingdom			Europe						
	Life £m	GI £m	Canada £m	France £m	Poland £m	Italy, Ireland, Spain and Other £m	Asia £m	Aviva Investors £m	Other Group activities £m	Total £m
Goodwill	663	924	82	—	28	123	53	—	8	1,881
Acquired value of in-force business and intangible assets	2,602	144	236	88	73	103	27	6	96	3,375
Interests in, and loans to, joint ventures and associates	928	—	9	134	—	55	462	—	—	1,588
Property and equipment	70	29	46	253	4	5	7	4	113	531
Investment property	6,160	329	—	3,339	—	643	—	774	(94)	11,151
Loans	26,571	—	199	701	—	211	35	—	—	27,717
Financial investments	179,772	3,960	4,490	72,757	3,466	32,079	5,099	384	7,396	309,403
Deferred acquisition costs	1,351	505	378	356	116	226	11	—	—	2,943
Other assets	39,074	5,524	1,355	8,961	310	4,787	754	1,193	12,697	74,655
Assets of operations classified as held for sale	—	—	—	—	—	706	8,959	—	—	9,665
Total assets	**257,191**	**11,415**	**6,795**	**86,589**	**3,997**	**38,938**	**15,407**	**2,361**	**20,216**	**442,909**
Insurance liabilities										
Long-term business and outstanding claims provisions	97,888	5,188	3,447	17,031	2,982	11,973	4,125	—	16	142,650
Unearned premiums	263	2,111	1,576	581	107	417	91	—	—	5,146
Other insurance liabilities	—	15	—	—	—	—	—	—	—	15
Gross liabilities for investment contracts	130,131	—	—	53,917	4	23,176	—	1,169	—	208,397
Unallocated divisible surplus	2,383	—	—	4,625	60	300	237	—	—	7,605
Net asset value attributable to unitholders	21	—	—	2,611	—	—	—	—	15,146	17,778
External borrowings	1,574	—	—	—	—	34	—	—	8,178	9,786
Other liabilities, including inter-segment liabilities	13,669	(96)	948	5,384	255	989	664	575	1,708	24,096
Liabilities of operations classified as held for sale	—	—	—	—	—	470	8,626	—	—	9,096
Total liabilities	**245,929**	**7,218**	**5,971**	**84,149**	**3,408**	**37,359**	**13,743**	**1,744**	**25,048**	**424,569**
Total equity										**18,340**
Total equity and liabilities										**442,909**

(a) (v) Segmental statement of financial position as at 30 June 2017 – restated[1]

	United Kingdom			Europe						
	Life £m	GI £m	Canada £m	France £m	Poland £m	Italy, Ireland, Spain and Other £m	Asia £m	Aviva Investors £m	Other Group activities £m	Total £m
Goodwill	663	924	87	—	28	147	62	—	—	1,911
Acquired value of in-force business and intangible assets	2,956	151	279	88	79	191	1,001	6	90	4,841
Interests in, and loans to, joint ventures and associates	937	—	14	183	—	70	482	—	—	1,686
Property and equipment	72	26	39	248	4	3	10	4	104	510
Investment property	6,215	207	—	2,998	—	212	—	909	178	10,719
Loans	24,393	5	157	741	—	120	36	—	—	25,452
Financial investments	180,226	3,836	4,552	70,211	3,493	26,016	11,934	545	8,409	309,222
Deferred acquisition costs	1,233	514	375	323	106	210	137	—	—	2,898
Other assets	41,048	5,649	1,373	10,381	310	3,681	1,704	1,056	11,530	76,732
Assets of operations classified as held for sale	—	—	—	—	—	6,042	—	—	—	6,042
Total assets	257,743	11,312	6,876	85,173	4,020	36,692	15,366	2,520	20,311	440,013
Insurance liabilities										
Long-term business and outstanding claims provisions	102,607	5,438	3,352	16,675	3,158	10,131	4,130	—	8	145,499
Unearned premiums	265	2,049	1,549	607	118	528	86	—	—	5,202
Other insurance liabilities	—	13	—	—	—	—	—	—	—	13
Gross liabilities for investment contracts	124,647	—	—	52,233	2	16,852	8,509	1,483	—	203,726
Unallocated divisible surplus	2,105	—	—	5,200	69	847	303	—	—	8,524
Net asset value attributable to unitholders	76	—	—	3,141	—	—	—	—	15,252	18,469
External borrowings	1,798	—	—	1	—	34	—	—	8,505	10,338
Other liabilities, including inter-segment liabilities	14,527	(393)	981	4,797	211	961	657	457	1,531	23,729
Liabilities of operations classified as held for sale	—	—	—	—	—	5,180	—	—	—	5,180
Total liabilities	246,025	7,107	5,882	82,654	3,558	34,533	13,685	1,940	25,296	420,680
Total equity										19,333
Total equity and liabilities										440,013

1 Following the launch of UK Insurance which brings together UK Life, UK General Insurance and UK Health into a combined business, the Ireland Life and General insurance businesses have been aligned to the new management structure and reported within Europe. As a result comparatives have been restated.

B5 – Segmental information continued

(a) (vi) Segmental statement of financial position as at 31 December 2017

	United Kingdom			Europe						
	Life £m	GI £m	Canada £m	France £m	Poland £m	Italy, Ireland, Spain and Other £m	Asia £m	Aviva Investors £m	Other Group activities £m	Total £m
Goodwill	663	924	84	—	29	124	52	—	—	1,876
Acquired value of in-force business and intangible assets	2,751	152	258	90	78	4	26	4	92	3,455
Interests in, and loans to, joint ventures and associates	936	—	9	184	—	68	445	—	—	1,642
Property and equipment	52	30	46	253	4	3	8	4	109	509
Investment property	6,242	324	—	3,322	—	215	—	788	(94)	10,797
Loans	26,695	5	180	739	7	197	34	—	—	27,857
Financial investments	184,428	4,184	4,592	72,886	3,775	27,403	5,007	400	8,407	311,082
Deferred acquisition costs	1,364	487	383	322	118	222	8	2	—	2,906
Other assets	38,800	5,370	1,338	8,567	244	3,591	765	1,020	11,995	71,690
Assets of operations classified as held for sale	—	—	—	—	—	1,685	9,186	—	—	10,871
Total assets	261,931	11,476	6,890	86,363	4,255	33,512	15,531	2,218	20,509	442,685
Insurance liabilities										
Long-term business and outstanding claims provisions	100,183	5,360	3,449	17,213	3,275	10,110	4,056	—	11	143,657
Unearned premiums	228	2,003	1,578	458	119	520	74	—	—	4,980
Other insurance liabilities	—	13	—	—	—	—	—	—	—	13
Gross liabilities for investment contracts	130,890	—	—	53,529	2	18,335	—	1,230	—	203,986
Unallocated divisible surplus	2,514	—	—	5,239	68	922	339	—	—	9,082
Net asset value attributable to unitholders	57	—	—	2,472	—	—	—	—	15,798	18,327
External borrowings	1,566	—	—	1	—	70	—	—	8,649	10,286
Other liabilities, including inter-segment liabilities	14,234	(294)	971	4,927	253	869	618	392	1,376	23,346
Liabilities of operations classified as held for sale	—	—	—	—	—	1,021	8,852	—	—	9,873
Total liabilities	249,672	7,082	5,998	83,839	3,717	31,847	13,939	1,622	25,834	423,550
Total equity										19,135
Total equity and liabilities										442,685

(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. Non-insurance businesses in the UK previously included within 'Other' have been reclassified to the long-term business or general insurance and health segments, as appropriate, as this presentation is consistent with how the business is managed (see note B2 for further details). Results for the periods ended 30 June 2017 and 31 December 2017 have been restated accordingly.

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. Long-term business also includes 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, open-ended investment companies and individual savings accounts. 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, certain financing costs and taxes not allocated to business segments, and elimination entries for certain inter-segment transactions.

B5 – Segmental information continued

(b) (i) Segmental income statement – products and services for the six month period ended 30 June 2018

	Long-term business £m	General insurance and health[2] £m	Fund management £m	Other £m	Total £m
Gross written premiums[1]	9,731	5,449	—	—	15,180
Premiums ceded to reinsurers	(836)	(260)	—	—	(1,096)
Premiums written net of reinsurance	8,895	5,189	—	—	14,084
Net change in provision for unearned premiums	—	(299)	—	—	(299)
Net earned premiums	8,895	4,890	—	—	13,785
Fee and commission income	715	61	184	82	1,042
	9,610	4,951	184	82	14,827
Net investment (expense)/income	(719)	42	(2)	187	(492)
Inter-segment revenue	—	—	120	—	120
Share of profit/(loss) of joint ventures and associates	25	(1)	—	—	24
Profit on the disposal and remeasurement of subsidiaries, joint ventures and associates	30	1	—	—	31
Segmental income	8,946	4,993	302	269	14,510
Claims and benefits paid, net of recoveries from reinsurers	(8,267)	(3,239)	—	—	(11,506)
Change in insurance liabilities, net of reinsurance	1,843	(11)	—	—	1,832
Change in investment contract provisions	(1,703)	—	—	—	(1,703)
Change in unallocated divisible surplus	1,508	—	—	—	1,508
Fee and commission expense	(620)	(1,275)	(20)	(202)	(2,117)
Other expenses	(912)	(307)	(213)	(274)	(1,706)
Inter-segment expenses	(113)	(7)	—	—	(120)
Finance costs	(56)	(3)	—	(207)	(266)
Segmental expenses	(8,320)	(4,842)	(233)	(683)	(14,078)
Profit/(loss) before tax	626	151	69	(414)	432
Tax attributable to policyholders' returns	94	—	—	—	94
Profit/(loss) before tax attributable to shareholders' profits	720	151	69	(414)	526
Adjusting items	672	151	5	84	912
Group adjusted operating profit/(loss) before tax attributable to shareholders' profits‡	1,392	302	74	(330)	1,438

1 Gross written premiums include inward reinsurance premiums assumed from other companies amounting to £51 million relating to property and liability insurance.
2 General insurance and health business segment includes gross written premiums of £507 million relating to health business. The remaining business relates to property and liability insurance.

(b) (ii) Segmental income statement – products and services for the six month period ended 30 June 2017 – restated[1]

	Long-term business £m	General insurance and health[3] £m	Fund management £m	Other £m	Total £m
Gross written premiums[2]	8,114	5,462	—	—	13,576
Premiums ceded to reinsurers	(838)	(238)	—	—	(1,076)
Premiums written net of reinsurance	7,276	5,224	—	—	12,500
Net change in provision for unearned premiums	—	(365)	—	—	(365)
Net earned premiums	7,276	4,859	—	—	12,135
Fee and commission income	778	61	178	108	1,125
	8,054	4,920	178	108	13,260
Net investment income/(expense)	10,443	122	(1)	190	10,754
Inter-segment revenue	—	—	115	—	115
Share of profit of joint ventures and associates	10	—	—	—	10
Profit on the disposal and remeasurement of subsidiaries, joint ventures and associates	196	6	—	—	202
Segmental income	18,703	5,048	292	298	24,341
Claims and benefits paid, net of recoveries from reinsurers	(9,418)	(3,083)	—	—	(12,501)
Change in insurance liabilities, net of reinsurance	(1,620)	(64)	—	—	(1,684)
Change in investment contract provisions	(5,584)	—	—	—	(5,584)
Change in unallocated divisible surplus	794	—	—	—	794
Fee and commission expense	(644)	(1,285)	(20)	(251)	(2,200)
Other expenses	(856)	(321)	(208)	(284)	(1,669)
Inter-segment expenses	(107)	(7)	—	(1)	(115)
Finance costs	(132)	(2)	—	(219)	(353)
Segmental expenses	(17,567)	(4,762)	(228)	(755)	(23,312)
Profit/(loss) before tax	1,136	286	64	(457)	1,029
Tax attributable to policyholder returns	(154)	—	—	—	(154)
Profit/(loss) before tax attributable to shareholders' profits	982	286	64	(457)	875
Adjusting items	314	132	5	139	590
Group adjusted operating profit/(loss) before tax attributable to shareholders' profits	1,296	418	69	(318)	1,465

1 Non-insurance businesses in the UK previously included within 'Other' have been reclassified to the Long-term business and General insurance and health segments as this presentation is consistent with how the business is managed.
2 Gross written premiums include inward reinsurance premiums assumed from other companies amounting to £40 million, of which £22 million relates to property and liability insurance and £18 million relates to long-term business.
3 General insurance and health business segment includes gross written premiums of £552 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 2017 – restated[1]

	Long-term business £m	General insurance and health[3] £m	Fund management £m	Other £m	Total £m
Gross written premiums[2]	17,083	10,523	—	—	27,606
Premiums ceded to reinsurers	(1,741)	(488)	—	—	(2,229)
Premiums written net of reinsurance	15,342	10,035	—	—	25,377
Net change in provision for unearned premiums	—	(153)	—	—	(153)
Net earned premiums	15,342	9,882	—	—	25,224
Fee and commission income	1,486	134	369	198	2,187
	16,828	10,016	369	198	27,411
Net investment income/(expense)	21,468	331	(1)	268	22,066
Inter-segment revenue	—	—	244	—	244
Share of profit of joint ventures and associates	41	—	—	—	41
Profit/(loss) on the disposal and remeasurement of subsidiaries, joint ventures and associates	100	42	—	(7)	135
Segmental income	38,437	10,389	612	459	49,897
Claims and benefits paid, net of recoveries from reinsurers	(17,791)	(6,322)	—	—	(24,113)
Change in insurance liabilities, net of reinsurance	(863)	(211)	—	—	(1,074)
Change in investment contract provisions	(13,837)	—	—	—	(13,837)
Change in unallocated divisible surplus	294	—	—	—	294
Fee and commission expense	(1,210)	(2,668)	(36)	(415)	(4,329)
Other expenses	(1,919)	(626)	(425)	(567)	(3,537)
Inter-segment expenses	(226)	(15)	—	(3)	(244)
Finance costs	(240)	(6)	—	(437)	(683)
Segmental expenses	(35,792)	(9,848)	(461)	(1,422)	(47,523)
Profit/(loss) before tax	2,645	541	151	(963)	2,374
Tax attributable to policyholders' returns	(371)	—	—	—	(371)
Profit/(loss) before tax attributable to shareholders' profits	2,274	541	151	(963)	2,003
Adjusting items	578	163	13	311	1,065
Group adjusted operating profit/(loss) before tax attributable to shareholders' profits	2,852	704	164	(652)	3,068

1 Non-insurance businesses in the UK previously included within 'Other' have been reclassified to the long-term business and General insurance and health segments as this presentation is consistent with how the business is managed.
2 Gross written premiums include inward reinsurance premiums assumed from other companies amounting to £91 million, of which £73 million relates to property and liability insurance and £18 million relates to long-term business.
3 General insurance and health business segment includes gross written premiums of £914 million relating to health business. The remaining business relates to property and liability insurance.

(b) (iv) Segmental statement of financial position – products and services as at 30 June 2018

	Long-term business £m	**General insurance and health £m**	**Fund management £m**	**Other £m**	**Total £m**
Goodwill	**721**	**1,082**	**3**	**75**	**1,881**
Acquired value of in-force business and intangible assets	**2,869**	**407**	**6**	**93**	**3,375**
Interests in, and loans to, joint ventures and associates	**1,563**	**8**	**—**	**17**	**1,588**
Property and equipment	**258**	**136**	**4**	**133**	**531**
Investment property	**10,786**	**459**	**—**	**(94)**	**11,151**
Loans	**27,518**	**199**	**—**	**—**	**27,717**
Financial investments	**290,516**	**11,581**	**66**	**7,240**	**309,403**
Deferred acquisition costs	**1,811**	**1,132**	**—**	**—**	**2,943**
Other assets	**50,578**	**9,739**	**1,095**	**13,243**	**74,655**
Assets of operations classified as held for sale	**9,665**	**—**	**—**	**—**	**9,665**
Total assets	**396,285**	**24,743**	**1,174**	**20,707**	**442,909**
Gross insurance liabilities	**130,996**	**16,815**	**—**	**—**	**147,811**
Gross liabilities for investment contracts	**208,397**	**—**	**—**	**—**	**208,397**
Unallocated divisible surplus	**7,605**	**—**	**—**	**—**	**7,605**
Net asset value attributable to unitholders	**2,632**	**—**	**—**	**15,146**	**17,778**
External borrowings	**1,608**	**—**	**—**	**8,178**	**9,786**
Other liabilities, including inter-segment liabilities	**18,903**	**1,645**	**561**	**2,987**	**24,096**
Liabilities of operations classified as held for sale	**9,096**	**—**	**—**	**—**	**9,096**
Total liabilities	**379,237**	**18,460**	**561**	**26,311**	**424,569**
Total equity					**18,340**
Total equity and liabilities					**442,909**

B5 – Segmental information continued

(b) (v) Segmental statement of financial position – products and services as at 30 June 2017– restated[1]

	Long-term business £m	General insurance and health £m	Fund management £m	Other £m	Total £m
Goodwill	755	1,086	3	67	1,911
Acquired value of in-force business and intangible assets	4,304	458	6	73	4,841
Interests in, and loans to, joint ventures and associates	1,663	10	—	13	1,686
Property and equipment	262	125	4	119	510
Investment property	10,197	344	—	178	10,719
Loans	25,288	164	—	—	25,452
Financial investments	289,348	11,432	51	8,391	309,222
Deferred acquisition costs	1,756	1,142	—	—	2,898
Other assets	54,158	9,732	953	11,889	76,732
Assets of operations classified as held for sale	5,733	309	—	—	6,042
Total assets	393,464	24,802	1,017	20,730	440,013
Gross insurance liabilities	133,908	16,806	—	—	150,714
Gross liabilities for investment contracts	203,726	—	—	—	203,726
Unallocated divisible surplus	8,524	—	—	—	8,524
Net asset value attributable to unitholders	3,216	—	—	15,253	18,469
External borrowings	1,702	—	—	8,636	10,338
Other liabilities, including inter-segment liabilities	19,224	1,233	440	2,832	23,729
Liabilities of operations classified as held for sale	5,006	174	—	—	5,180
Total liabilities	375,306	18,213	440	26,721	420,680
Total equity					19,333
Total equity and liabilities					440,013

1 Non-insurance businesses in the UK previously included within 'Other' have been reclassified to the Long-term business and General insurance and health segments as this presentation is consistent with how the business is managed.

(b) (vi) Segmental statement of financial position – products and services as at 31 December 2017– restated[1]

	Long-term business £m	General insurance and health £m	Fund management £m	Other £m	Total £m
Goodwill	720	1,084	3	69	1,876
Acquired value of in-force business and intangible assets	2,922	439	4	90	3,455
Interests in, and loans to, joint ventures and associates	1,617	9	—	16	1,642
Property and equipment	240	136	4	129	509
Investment property	10,392	499	—	(94)	10,797
Loans	27,671	186	—	—	27,857
Financial investments	290,840	11,934	54	8,254	311,082
Deferred acquisition costs	1,804	1,100	2	—	2,906
Other assets	49,118	9,283	905	12,384	71,690
Assets of operations classified as held for sale	10,552	319	—	—	10,871
Total assets	395,876	24,989	972	20,848	442,685
Gross insurance liabilities	131,987	16,663	—	—	148,650
Gross liabilities for investment contracts	203,986	—	—	—	203,986
Unallocated divisible surplus	9,082	—	—	—	9,082
Net asset value attributable to unitholders	2,529	—	—	15,798	18,327
External borrowings	1,601	—	—	8,685	10,286
Other liabilities, including inter-segment liabilities	18,828	1,413	376	2,729	23,346
Liabilities of operations classified as held for sale	9,694	179	—	—	9,873
Total liabilities	377,707	18,255	376	27,212	423,550
Total equity					19,135
Total equity and liabilities					442,685

1 Non-insurance businesses in the UK previously included within 'Other' have been reclassified to the Long-term business and General insurance and health segments as this presentation is consistent with how the business is managed.

B6 – Tax

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

(a) Tax charged to the income statement

(i) The total tax charge comprises:

	6 months 2018 £m	6 months 2017 £m	Full year 2017 £m
Current tax			
For the period	**144**	269	651
Prior period adjustments	**(4)**	8	(46)
Total current tax	**140**	277	605
Deferred tax			
Origination and reversal of temporary differences	**(81)**	48	134
Changes in tax rates or tax laws	**—**	(13)	(8)
Write (back)/ down of deferred tax assets	**(3)**	1	(3)
Total deferred tax	**(84)**	36	123
Total tax charged to income statement	**56**	313	728

(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. The tax charge attributable to policyholders' returns included in the charge above is £(94) million *(HY17: £154 million charge, 2017: £371 million charge)*.

(iii) The tax charge above, comprising current and deferred tax, can be analysed as follows:

	6 months 2018 £m	6 months 2017 £m	Full year 2017 £m
UK tax	**(39)**	209	528
Overseas tax	**95**	104	200
	56	313	728

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

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

	6 months 2018 £m	6 months 2017 £m	Full year 2017 £m
Current tax			
In respect of pensions and other post-retirement obligations	**(26)**	(29)	(45)
In respect of foreign exchange movements	**(4)**	3	4
	(30)	(26)	(41)
Deferred tax			
In respect of pensions and other post-retirement obligations	**50**	18	42
In respect of fair value losses on owner-occupied properties	**—**	(1)	(2)
In respect of unrealised losses on investments	**—**	(8)	(9)
	50	9	31
Total tax charged/(credited) to other comprehensive income	**20**	(17)	(10)

(ii) The tax charge attributable to policyholders' returns included above is £nil *(HY17: £nil, 2017 £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 £2 million *(HY17: £6 million, 2017: £16 million).*

(d) Tax reconciliation

The tax on the Group's profit 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 2018 £m**	Shareholder £m	Policyholder £m	6 months 2017 £m	Shareholder £m	Policyholder £m	Full year 2017 £m
Total profit before tax	**526**	**(94)**	**432**	875	154	1,029	2,003	371	2,374
Tax calculated at standard UK corporation tax rate of 19.00% (2017: 19.25%)	**100**	**(18)**	**82**	168	30	198	386	71	457
Reconciling items									
Different basis of tax – policyholders	**—**	**(76)**	**(76)**	—	124	124	—	301	301
Adjustment to tax charge in respect of prior periods	**(8)**	**—**	**(8)**	(10)	—	(10)	(44)	—	(44)
Non-assessable income and items not taxed at the full statutory rate	**8**	**—**	**8**	(8)	—	(8)	(47)	—	(47)
Non-taxable profit on sale of subsidiaries and associates	**(3)**	**—**	**(3)**	(52)	—	(52)	(27)	—	(27)
Disallowable expenses	**37**	**—**	**37**	25	—	25	47	—	47
Different local basis of tax on overseas profits	**20**	**—**	**20**	49	—	49	82	(1)	81
Change in future local statutory tax rates	**—**	**—**	**—**	(13)	—	(13)	(36)	—	(36)
Movement in deferred tax not recognised	**(6)**	**—**	**(6)**	(3)	—	(3)	(3)	—	(3)
Tax effect of profit from joint ventures and associates	**(1)**	**—**	**(1)**	2	—	2	(3)	—	(3)
Other	**3**	**—**	**3**	1	—	1	2	—	2
Total tax charged/(credited) to income statement	**150**	**(94)**	**56**	159	154	313	357	371	728

The tax charge 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-profits and unit-linked policyholders is zero, the Group's pre-tax profit attributable to policyholders is an amount equal and opposite to the tax charge attributable to policyholders included in the total tax charge.

The rate of corporation tax in the UK will be reduced from 19% to 17% from 1 April 2020. In addition, during 2017 the French government introduced a stepped reduction to the French corporation tax rate from 34.43% to 25.83% from 1 January 2022. These reduced rates were used in the calculation of deferred tax assets and liabilities in the UK and France at 31 December 2017 and 30 June 2018.

Financial supplement continued

B7 – Earnings per share

(a) Basic earnings per share

(i) The profit attributable to ordinary shareholders is:

	6 months 2018			6 months 2017			Full year 2017		
	Group adjusted operating profit £m	**Adjusting items £m**	**Total £m**	Group adjusted operating profit £m	Adjusting items £m	Total £m	Group adjusted operating profit £m	Adjusting items £m	Total £m
Profit before tax attributable to shareholders' profits	**1,438**	**(912)**	**526**	1,465	(590)	875	3,068	(1,065)	2,003
Tax attributable to shareholders' profit	**(303)**	**153**	**(150)**	(311)	152	(159)	(639)	282	(357)
Profit for the period	**1,135**	**(759)**	**376**	1,154	(438)	716	2,429	(783)	1,646
Amount attributable to non-controlling interests	**(46)**	**—**	**(46)**	(73)	(6)	(79)	(134)	(15)	(149)
Cumulative preference dividends for the year	**(9)**	**—**	**(9)**	(9)	—	(9)	(17)	—	(17)
Coupon payments in respect of the direct capital instrument (DCI) and tier 1 notes (net of tax)	**(6)**	**—**	**(6)**	(23)	—	(23)	(65)	—	(65)
Profit attributable to ordinary shareholders	**1,074**	**(759)**	**315**	1,049	(444)	605	2,213	(798)	1,415

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

	6 months 2018			6 months 2017			Full year 2017		
	Before tax £m	**Net of tax, NCI, preference dividends and DCI[1] £m**	**Per share p**	Before tax £m	Net of tax, NCI, preference dividends and DCI[1] £m	Per share p	Before tax £m	Net of tax, NCI, preference dividends and DCI[1] £m	Per share p
Group adjusted operating profit attributable to ordinary shareholders	**1,438**	**1,074**	**26.8**	1,465	1,049	25.8	3,068	2,213	54.8
Integration and restructuring costs	**—**	**—**	**—**	(52)	(40)	(1.0)	(141)	(111)	(2.8)
Group adjusted operating profit attributable to ordinary shareholders after integration and restructuring costs	**1,438**	**1,074**	**26.8**	1,413	1,009	24.8	2,927	2,102	52.0
Adjusting items:									
Investment variances and economic assumption changes	**(482)**	**(419)**	**(10.5)**	(179)	(129)	(3.2)	34	86	2.1
Short-term fluctuation in return on investments backing	**(206)**	**(160)**	**(4.0)**	(205)	(166)	(4.1)	(345)	(250)	(6.3)
General insurance and health business: economic assumption changes	**34**	**27**	**0.7**	(12)	(10)	(0.2)	(7)	(6)	(0.1)
Impairment of goodwill, joint ventures, associates and other amounts expensed	**—**	**—**	**—**	(19)	(19)	(0.5)	(49)	(49)	(1.2)
Amortisation and impairment of intangibles	**(101)**	**(82)**	**(2.0)**	(91)	(71)	(1.7)	(197)	(151)	(3.7)
Amortisation and impairment of acquired value of in-force business	**(210)**	**(178)**	**(4.4)**	(234)	(201)	(4.9)	(495)	(430)	(10.6)
Profit on disposal and remeasurement of subsidiaries, joint ventures and associates	**31**	**31**	**0.8**	202	192	4.7	135	113	2.8
Other[2]	**22**	**22**	**0.5**	—	—	—	—	—	—
Profit attributable to ordinary shareholders	**526**	**315**	**7.9**	875	605	14.9	2,003	1,415	35.0

1 DCI includes the direct capital instrument and tier 1 notes.
2 Other includes a gain of £36 million relating to negative goodwill on the acquisition of Friends First (refer to Note B4(a)) and a charge of £14 million relating to goodwill payments to preference shareholders which were announced on 30 April 2018 (refer to note A2).

(iii) The calculation of basic earnings per share uses a weighted average of 4,009 million *(HY17: 4,061 million, 2017: 4,041 million)* ordinary shares in issue, after deducting treasury shares. The actual number of shares in issue at 30 June 2018 was 3,983 million *(HY17: 4,055 million, 2017: 4,013 million)* and 3,980 million *(HY17: 4,052 million, 2017: 4,010 million)* excluding treasury shares.

(iv) Aviva has significant excess capital and has committed to deploy £2 billion of this in 2018. The deployment includes £900 million of debt reduction, £500 million for bolt-on acquisitions and a £600 million ordinary share buy-back.

In 2017 a share buy-back of ordinary shares for an aggregate share purchase price of £300 million was carried out in full. As at 30 June 2017 £73 million had been completed of the share buy-back. The number of shares in issue reduced by 57,724,500 in 2017 in respect of shares acquired and cancelled under the buy-back programme.

On 1 May 2018 the Group announced a further share buy-back of ordinary shares for an aggregate purchase price of up to £600 million. As at 30 June 2018 a further 43,911,450 shares, had been purchased and subsequently cancelled bringing the total cancelled under the programme to 101,635,950 shares.

B7 – Earnings per share continued

(b) Diluted earnings per share

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

	6 months 2018			6 months 2017			Full year 2017		
	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	**315**	**4,009**	**7.9**	605	4,061	14.9	1,415	4,041	35.0
Dilutive effect of share awards and options	**—**	**54**	**(0.1)**	—	47	(0.2)	—	48	(0.4)
Diluted earnings per share	**315**	**4,063**	**7.8**	605	4,108	14.7	1,415	4,089	34.6

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

	6 months 2018			6 months 2017			Full year 2017		
	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
Group adjusted operating profit attributable to ordinary shareholders	**1,074**	**4,009**	**26.8**	1,049	4,061	25.8	2,213	4,041	54.8
Dilutive effect of share awards and options	**—**	**54**	**(0.4)**	—	47	(0.3)	—	48	(0.7)
Diluted Group adjusted operating profit per share	**1,074**	**4,063**	**26.4**	1,049	4,108	25.5	2,213	4,089	54.1

B8 – Dividends and appropriations

	6 months 2018	6 months 2017	Full year 2017
Ordinary dividends declared and charged to equity in the year			
Final 2017 – 19.00 pence per share, paid on 17 May 2018	**764**	—	—
Final 2016 – 15.88 pence per share, paid on 17 May 2017	**—**	646	646
Interim 2017 – 8.40 pence per share, paid on 17 November 2017	**—**	—	337
	764	646	983
Preference dividends declared and charged to equity in the year	**9**	9	17
Coupon payments on DCI and tier 1 notes	**7**	29	81
	780	684	1,081

Subsequent to 30 June 2018, the directors declared an interim dividend for 2018 of 9.25 pence per ordinary share *(HY17: 8.40 pence)*, amounting to £366 million *(HY17: £337 million)* in total based on shares in issue as at 31 July 2018. The dividend will be paid on 24 September 2018 and will be accounted for as an appropriation of retained earnings in the year ending 31 December 2018.

Interest on the DCI 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 19% *(2017: 19.25%)*.

B9 – Insurance liabilities

(a) Carrying amount

(i) Components of insurance liabilities (gross of reinsurance)

	30 June 2018			30 June 2017			31 December 2017		
	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	**47,716**	**—**	**47,716**	53,134	—	53,134	49,928	—	49,928
Unit-linked non-participating	**15,977**	**—**	**15,977**	16,941	—	16,941	16,040	—	16,040
Other non-participating	**65,754**	**—**	**65,754**	65,677	—	65,677	65,004	—	65,004
	129,447	**—**	**129,447**	135,752	—	135,752	130,972	—	130,972
Outstanding claims provisions	**2,058**	**9,127**	**11,185**	2,090	9,041	11,131	1,798	8,964	10,762
Provision for claims incurred but not reported	**—**	**2,527**	**2,527**	—	2,676	2,676	—	2,837	2,837
	2,058	**11,654**	**13,712**	2,090	11,717	13,807	1,798	11,801	13,599
Provision for unearned premiums	**—**	**5,146**	**5,146**	—	5,203	5,203	—	4,980	4,980
Provision arising from liability adequacy tests[1]	**—**	**15**	**15**	—	13	13	—	13	13
	131,505	**16,815**	**148,320**	137,842	16,933	154,775	132,770	16,794	149,564
Less: Amounts classified as held for sale	**(509)**	**—**	**(509)**	(3,934)	(127)	(4,061)	(783)	(131)	(914)
Total	**130,996**	**16,815**	**147,811**	133,908	16,806	150,714	131,987	16,663	148,650

1 Provision arising from liability adequacy tests relates to general insurance business only.

(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.

30 June 2018	Gross £m	Reinsurance £m	Net £m
Long-term business			
Change in long-term business provisions (note B9(b))	**(2,466)**	**390**	**(2,076)**
Change in provision for outstanding claims	**246**	**(13)**	**233**
	(2,220)	**377**	**(1,843)**
General insurance and health			
Change in insurance liabilities (note B9(c))	**(23)**	**35**	**12**
Less: Unwind of discount on reserves and other	**(5)**	**4**	**(1)**
	(28)	**39**	**11**
Total change in insurance liabilities	**(2,248)**	**416**	**(1,832)**

30 June 2017	Gross £m	Reinsurance £m	Net £m
Long-term business			
Change in long-term business provisions (note B9(b))	2,000	(523)	1,477
Change in provision for outstanding claims	147	(4)	143
	2,147	(527)	1,620
General insurance and health			
Change in insurance liabilities (note B9(c))	(8)	73	65
Less: Unwind of discount on reserves and other	(5)	4	(1)
	(13)	77	64
Total change in insurance liabilities	2,134	(450)	1,684

31 December 2017	Gross £m	Reinsurance £m	Net £m
Long-term business			
Change in long-term business provisions (note B9(b))	624	315	939
Change in provision for outstanding claims	(65)	(11)	(76)
	559	304	863
General insurance and health			
Change in insurance liabilities (note B9(c))	73	138	211
Less: Unwind of discount on reserves and other	(9)	9	—
	64	147	211
Total change in insurance liabilities	623	451	1,074

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 2018 £m	6 months 2017 £m	Full year 2017 £m
Carrying amount at 1 January	**130,972**	137,218	137,218
Provisions in respect of new business	**3,353**	2,959	5,731
Expected change in existing business provisions	**(4,082)**	(4,027)	(7,747)
Variance between actual and expected experience	**(67)**	1,512	1,520
Impact of operating assumption changes	**(199)**	(2)	(1,175)
Impact of economic assumption changes	**(1,389)**	1,274	2,115
Other movements recognised as an expense[1]	**(82)**	284	180
Change in liability recognised as an expense (note B9a(ii))	**(2,466)**	2,000	624
Effect of portfolio transfers, acquisitions and disposals[2]	**1,144**	(4,429)	(8,124)
Foreign exchange rate movements	**(197)**	897	1,252
Other movements	**(6)**	66	2
Carrying amount at 30 June/31 December	**129,447**	135,752	130,972

1 Other movements during 2018 and 2017 primarily relates to a special bonus distribution to with-profits policyholders in UK Life.
2 The movement during 2018 includes the acquisition of Friends First in Ireland offset by the disposal of Avipop in Italy. The movement during the first 6 months of 2017 primarily relates to the disposal of Antarius in France, while full year 2017 also includes the disposal of a major share of the business in Spain offset by the consolidation of the Poland and Vietnam joint ventures.

For many types of long-term business, including unit-linked and participating funds, movement in asset values are offset by corresponding changes in liabilities, limiting the net impact on profit. The variance between actual and expected experience of £(67) million in the current period is due to various demographic factors (with the prior period variances being the result of increased equity returns in the UK). The impact of operating assumption changes of £(199) million relates mainly to a release of longevity reserves in the UK (with the corresponding amounts in 2017 also arising from changes in longevity assumptions offset by an increase in expense and persistency reserves). The £(1,389) million impact of economic assumption changes reflects an increase in valuation interest rates in response to increasing interest rates and widening spreads on immediate annuity and participating insurance contracts in the UK (with the prior period variances reflecting a decrease in valuation interest rates).

For participating business, a movement in liabilities is generally offset by a corresponding adjustment to the unallocated divisible surplus and does not impact on profit. The impact of assumption changes on profit are included in the effect of changes in assumptions and estimates during the period shown in note B12.

(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 2018 £m	6 months 2017 £m	Full year 2017 £m
Carrying amount at 1 January	**11,801**	11,709	11,709
Impact of changes in assumptions[1]	**(66)**	(12)	(7)
Claim losses and expenses incurred in the current year	**3,490**	3,342	6,890
Decrease in estimated claim losses and expenses incurred in prior periods	**(83)**	(88)	(172)
Incurred claims losses and expenses	**3,341**	3,242	6,711
Less:			
Payments made on claims incurred in the current year	**(1,461)**	(1,363)	(3,642)
Payments made on claims incurred in prior periods	**(2,080)**	(2,014)	(3,283)
Recoveries on claim payments	**172**	122	278
Claims payments made in the period, net of recoveries	**(3,369)**	(3,255)	(6,647)
Unwind of discounting	**5**	5	9
Changes in claims reserve recognised as an expense (note B9a(ii))	**(23)**	(8)	73
Effect of portfolio transfers, acquisitions and disposals[2]	**(29)**	2	3
Foreign exchange rate movements	**(96)**	14	16
Other movements	**1**	—	—
Carrying amount at 30 June/31 December	**11,654**	11,717	11,801

1 Shown gross of reinsurance. The impact of reinsurance was £32 million, resulting in a net impact of £(34) million as per note B12.
2 The movement during 2018 relates to the disposal of Avipop in Italy.

B10 – Liability for investment contracts

(a) Carrying amount

The liability for investment contracts (gross of reinsurance) comprised:

	30 June 2018 £m	30 June 2017 £m	31 December 2017 £m
Long-term business			
Participating contracts	**89,604**	85,435	87,654
Non-participating contracts at fair value	**127,230**	118,291	124,995
	216,834	203,726	212,649
Less: Amounts classified as held for sale	**(8,437)**	—	(8,663)
Total	**208,397**	203,726	203,986

Of the non-participating investment contracts measured at fair value, £126,186 million at 30 June 2018 *(HY17: £120,508 million, 2017: £123,916 million)* are unit-linked in structure and the fair value liability is equal to the current fund value, including any unfunded units, plus if required additional non-unit reserves based on a discounted cash flow analysis.

(b) Movements in participating investment contracts

For participating investment contracts, the change in investment contract provisions on the income statement primarily consists of the movement in participating investment contract liabilities over the reporting period. The following movements have occurred in these provisions (gross of reinsurance) during the period:

	6 months 2018 £m	6 months 2017 £m	Full year 2017 £m
Carrying amount at 1 January	**87,654**	89,739	89,739
Provisions in respect of new business	**3,743**	2,339	5,193
Expected change in existing business provisions	**(2,112)**	(2,510)	(4,986)
Variance between actual and expected experience	**397**	1,085	2,072
Impact of operating assumption changes	**—**	(1)	10
Impact of economic assumption changes	**(443)**	92	411
Other movements recognised as an expense[1]	**153**	132	(16)
Change in liability recognised as an expense[2]	**1,738**	1,137	2,684
Effect of portfolio transfers, acquisitions and disposals[3]	**428**	(7,243)	(7,243)
Foreign exchange rate movements	**(216)**	1,780	2,452
Other movements	**—**	22	22
Carrying amount at 30 June/31 December	**89,604**	85,435	87,654

1 Other movements during 2018 and 2017 primarily relates to a special bonus distribution to with-profits policyholders in UK Life.
2 Total interest expense for participating investment contracts recognised in the income statement is £189 million *(HY17: £2,374 million, 2017: £2,489 million)*.
3 The movement during 2018 relates to the acquisition of Friends First in Ireland. The movement during 2017 relates to the disposal of Antarius in France.

For many types of long-term business, including unit-linked and participating funds, movements in asset values are offset by corresponding changes in liabilities, limiting the net impact on profit. The variance between actual and expected experience of £397 million in the period to 30 June 2018 is the result of various demographic factors across different product groups (with the variances shown in the prior period being mainly due to positive equity returns in the UK). The impact of assumption changes shown above, sets out the movements in the carrying value of liabilities, which for participating business is generally offset by a corresponding adjustment to the unallocated divisible surplus. Accordingly, these changes do not directly impact profit.

B10 – Liability for investment contracts continued

(c) Movements in non-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 in the income statement relates to the attributed investment return. The following movements have occurred in these provisions (gross of reinsurance) during the period:

	6 months 2018 £m	6 months 2017 £m	Full year 2017 £m
Carrying amount at 1 January	**124,995**	114,531	114,531
Provisions in respect of new business	**2,659**	1,796	4,484
Expected change in existing business provisions	**(2,567)**	(2,129)	(4,427)
Variance between actual and expected experience	**(394)**	3,872	10,115
Impact of operating assumption changes	**—**	—	2
Impact of economic assumption changes	**6**	(1)	(1)
Other movements recognised as an expense	**21**	—	10
Change in liability	**(275)**	3,538	10,183
Effect of portfolio transfers, acquisitions and disposals[1]	**2,494**	(4)	(4)
Foreign exchange rate movements	**(7)**	199	277
Other movements	**23**	27	8
Carrying amount at 30 June/31 December	**127,230**	118,291	124,995

1 The movement during 2018 relates to the acquisition of Friends First in Ireland. The movement during 2017 relates to the disposal of Antarius in France.

For unit-linked investment contracts, movements in asset values are offset by corresponding changes in liabilities, limiting the net impact on profit. The variance between actual and expected experience of £(394) million in the period to 30 June 2018 is the result of various demographic factors across different product groups (with the variances shown in the prior period being primarily the result of positive equity returns in the UK). The impact of assumption changes in the above analysis shows the resulting movement in the carrying value of the non-participating investment contract liabilities. The impacts of assumption changes on profit are included in the effect of changes in assumptions and estimates during the year as set out in note B12.

B11 – Reinsurance assets

The reinsurance assets comprised:

	30 June 2018 £m	30 June 2017 £m	31 December 2017 £m
Long-term business			
Insurance contracts	**5,494**	6,278	5,469
Participating investment contracts	**1**	22	2
Non-participating investment contracts[1]	**6,356**	10,170	6,094
	11,851	16,470	11,565
Outstanding claims provisions	**91**	67	64
	11,942	16,537	11,629
General insurance and health			
Outstanding claims provisions	**851**	1,065	845
Provisions for claims incurred but not reported	**832**	741	884
	1,683	1,806	1,729
Provisions for unearned premiums	**252**	270	257
	1,935	2,076	1,986
	13,877	18,613	13,615
Less: Amounts classified as held for sale	**(46)**	(101)	(123)
Total	**13,831**	18,512	13,492

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. During the first half of 2018, £1,117 million of reinsurance assets (UK Life) have been reclassified as collective investments in unit-linked funds following a restructure of a reinsurance treaty. This is a continuation of activity undertaken in 2017.

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

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

	Effect on profit 6 months 2018 £m	Effect on profit 6 months 2017 £m	Effect on profit Full year 2017 £m
Assumptions			
Long-term insurance business			
Interest rates	**907**	(970)	(1,720)
Expenses	**(1)**	(2)	(128)
Persistency rates	**—**	—	(79)
Mortality for assurance contracts	**—**	—	113
Mortality for annuity contracts	**200**	—	779
Tax and other assumptions	**—**	—	2
Investment contracts			
Expenses	**—**	(1)	—
General insurance and health business			
Change in discount rate assumptions	**34**	(12)	(7)
Total	**1,140**	(985)	(1,040)

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 an increase in the valuation interest rate, in response to increasing risk-free rates and widening of credit spreads, has reduced liabilities. The overall impact on profit as a result of these changes also depends on movements in the value of assets backing the liabilities, which is not included in the above disclosure.

The impact of mortality for annuity contracts on long-term business relates to the UK with a reduction in reserves of £200 million arising from changes in base mortality assumptions. These changes include a refined financial estimate of the impact of longevity experience for bulk annuities (£145 million) and the impact of completing our review of prior period longevity experience for individual annuities (£55 million). There were no equivalent impacts arising in the first half of 2017.

In the general insurance and health business, a positive impact of £34 million *(HY17: £12 million adverse)* has arisen as a result of a decrease in the estimated future inflation rate used to value periodic payment orders (PPOs) and an increase in the interest rates used to discount claim reserves for both PPOs and latent claims. During the first half of 2017, the effect of an increase in the estimated future inflation rate was offset by a marginal increase in interest rates.

B13 – Borrowings

Our borrowings are classified as either core structural borrowings, which are included within the Group's capital employed, or operational borrowings drawn by operating subsidiaries. This note shows the carrying values of each type.

(a) Analysis of total borrowings:

Total borrowings comprise:

	30 June 2018 £m	30 June 2017 £m	31 December 2017 £m
Core structural borrowings, at amortised cost	**8,170**	8,636	8,640
Operational borrowings, at amortised cost	**417**	501	466
Operational borrowings, at fair value	**1,199**	1,214	1,180
	1,616	1,715	1,646
	9,786	10,351	10,286
Less: Amounts classified as held for sale	**—**	(13)	—
Total	**9,786**	10,338	10,286

(b) Core structural borrowings

The carrying amounts of these borrowings are:

	30 June 2018 £m	30 June 2017 £m	31 December 2017 £m
Subordinated debt			
6.125% £700 million subordinated notes 2036	**694**	693	694
6.125% £800 million undated subordinated notes	**796**	795	796
6.875% £600 million subordinated notes 2058	**594**	594	594
6.875% €500 million subordinated notes 2038[1]	**—**	439	444
12.000% £162 million subordinated notes 2021	**197**	208	202
8.250% £500 million subordinated notes 2022	**572**	590	581
6.625% £450 million subordinated notes 2041	**448**	448	448
7.875% $575 million undated subordinated notes	**441**	463	437
6.125% €650 million subordinated notes 2043	**573**	568	575
3.875% €700 million subordinated notes 2044	**615**	611	618
5.125% £400 million subordinated notes 2050	**395**	395	394
3.375% €900 million subordinated notes 2045	**787**	780	789
4.500% $450 million subordinated notes 2021	**257**	265	264
4.375% £400 million subordinated notes 2049	**394**	393	394
	6,763	7,242	7,230
Senior notes			
0.100% €350 million senior notes 2018	**309**	306	310
0.625% €500 million senior notes 2023	**440**	436	441
	749	742	751
Commercial paper	**666**	661	668
	8,178	8,645	8,649
Less: Amount held by Group companies	**(8)**	(9)	(9)
Total	**8,170**	8,636	8,640

1 The 6.875% €500 million subordinated notes 2038 were redeemed in full at the first call on 22 May 2018.

(c) Operational borrowings

The carrying amounts of these borrowings are:

	30 June 2018 £m	30 June 2017 £m	31 December 2017 £m
Amounts owed to financial institutions			
Loans[1]	**417**	501	466
Securitised mortgage loan notes			
UK lifetime mortgage business[2]	**1,199**	1,214	1,180
Total	**1,616**	1,715	1,646

1 Includes held for sale operational borrowings of nil on 30 June 2018 (*2017: £13 million*).
2 The fair value of these loan notes is calculated using similar techniques to the related securitised mortgage assets discussed in notes B16.

B14 – 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 2018 £m	30 June 2017 £m	31 December 2017 £m
Total IAS 19 obligations to the main staff pension schemes	**662**	892	764
Deficits in other staff pension schemes	**63**	60	64
Total IAS 19 obligations to staff pension schemes	**725**	952	828
Restructuring provisions	**71**	80	92
Other provisions	**617**	397	515
	1,413	1,429	1,435
Less: Amounts classified as held for sale	**(7)**	(3)	(6)
Total	**1,406**	1,426	1,429

Other provisions shown above primarily include amounts set aside throughout the Group for costs of customer compensation, litigation and staff entitlements. Other provisions have increased during the period under review mainly as a result of a further product governance provision of £90 million, which is in addition to the £75 million provision set aside at 31 December 2017. This provision relates to a historical issue with over 90% of cases identified being pre-2002 and is limited to advice given by Friends Provident tied agents and appointed representatives, where a number of external defined benefit pension policies transferred into Friends Provident pension arrangements. Initial indications are that some advice may not have been suitable. The issue does not affect any other part of our business. Affected customers will not be financially disadvantaged. The Group has notified its professional indemnity insurers and intends to make a claim on its insurance to mitigate the financial impact.

(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 2018 £m	30 June 2017 £m	31 December 2017 £m
Total fair value of assets	**18,994**	19,225	19,308
Present value of scheme liabilities	**(15,473)**	(16,115)	(16,043)
Net surplus in the schemes	**3,521**	3,110	3,265
Less: consolidation elimination for non-transferable Group insurance policy[1]	**(606)**	(628)	(630)
Net IAS 19 surplus in the schemes	**2,915**	2,482	2,635
Surplus included in other assets[2]	**3,577**	3,374	3,399
Deficits included in provisions	**(662)**	(892)	(764)
Net IAS 19 surplus in the schemes	**2,915**	2,482	2,635

1 As at 30 June 2018, the scheme assets in the Friends Provident Pension Scheme include an insurance policy of £606 million *(HY17: £628 million, 2017: £630 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 2018, excluding this policy is £18,388 million *(HY17: £18,597 million, 2017: £18,678 million)*.

2 Pension surpluses and other assets totalling £3,626 million *(HY17: £3,509 million, 2017: £3,468 million)* includes pension surpluses of £3,577 million *(HY17: £3,374 million, 2017: £3,399 million)* and other assets of £49 million *(HY17: £135 million, 2017: £69 million)*.

B14 – Pension obligations and other provisions continued

(b) Movements in the schemes' surpluses and deficits

Movements in the pension schemes' surpluses and deficits since 31 December 2017 comprise:

	6 months 2018 £m	6 months 2017 £m	Full year 2017 £m
Net IAS 19 surplus in the schemes at 1 January	**2,635**	2,347	2,347
Past service costs – amendments	**—**	—	(1)
Administrative expenses	**(10)**	(8)	(18)
Total pension cost charged to net operating expenses	**(10)**	(8)	(19)
Net interest credited to investment income/(finance costs)[1]	**31**	30	63
Total recognised in income statement	**21**	22	44
Remeasurements:			
Actual return on these assets	**(79)**	16	740
Less: Interest income on scheme assets	**(220)**	(239)	(470)
Return on scheme assets excluding amounts in interest income	**(299)**	(223)	270
Gains/(losses) from change in economic assumptions	**449**	282	(182)
(Losses) from change in operating assumptions	**—**	(36)	(30)
Experience (losses)	**(13)**	(59)	(63)
Total remeasurements recognised in other comprehensive income	**137**	(36)	(5)
Acquisitions	**(8)**	—	—
Employer contributions	**129**	153	259
Administrative expenses paid from scheme assets	**(2)**	—	(3)
Foreign exchange rate movements	**3**	(4)	(7)
Net IAS 19 surplus in the schemes at 30 June/31 December	**2,915**	2,482	2,635

1 Net interest income of £43 million *(HY17: £40 million, 2017: £87 million)* has been credited to investment income and net interest expense of £12 million *(HY17: £10 million, 2017: £24 million)* has been charged to finance costs in HY18.

Under the IAS 19 valuation basis, the Group applies the principles of IFRIC 14, IAS 19 *The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction*, whereby a surplus is only recognised to the extent that the Company is able to access the surplus either through an unconditional right of refund to the surplus or through reduced future contributions relating to ongoing service, which have been substantively enacted or contractually agreed. The Group has determined that it can derive economic benefit from the surplus in the Aviva Staff Pension Scheme (ASPS) via a reduction to future employer contributions for defined contribution members, which could theoretically be paid from the surplus funds in the ASPS. In the RAC 2003 Pension Scheme (RAC) and Friends Provident Pension Scheme (FPPS), the Group has determined that the rules set out in the schemes' governing documentation provide for an unconditional right to a refund from any future surplus funds in the schemes.

The increase in the surplus during the period is primarily due to employer contributions into the schemes and remeasurements recognised in other comprehensive income. The remeasurements recognised are principally a result of widening corporate spreads in the UK, partly offset by lower inflation in the UK.

B15 – 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 2017. There were no transactions with related parties that had a material effect on the result for the period ended 30 June 2018, 30 June 2017 or 31 December 2017.

Financial supplement continued

B16 – 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. 16.2% of assets and 3.2% 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 2017 Annual Report and Accounts.

B16 – 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 2018		30 June 2017[1]		31 December 2017	
	Fair value £m	Carrying amount £m	Fair value £m	Carrying amount £m	Fair value £m	Carrying amount £m
Financial assets						
Loans	**27,666**	**27,717**	25,459	25,452	27,796	27,857
Financial investments	**309,403**	**309,403**	309,222	309,222	311,082	311,082
Fixed maturity securities	**173,564**	**173,564**	176,410	176,410	174,808	174,808
Equity securities	**87,132**	**87,132**	78,037	78,037	89,968	89,968
Other investments (including derivatives)	**48,707**	**48,707**	54,775	54,775	46,306	46,306
Financial liabilities						
Non-participating investment contracts	**118,793**	**118,793**	118,291	118,291	116,332	116,332
Net asset value attributable to unitholders	**17,778**	**17,778**	18,469	18,469	18,327	18,327
Borrowings	**10,456**	**9,786**	11,545	10,338	11,538	10,286
Derivative liabilities	**5,246**	**5,246**	6,093	6,093	5,751	5,751

1 Following a review of the Group's investment classifications, comparative amounts have been amended from those previously reported, reflecting the fact that equity and debt securities held indirectly through majority owned investment funds in the UK managed by third parties, which at 30 June 2017 were presented as unit trusts and other investment vehicles within other investments, are now presented as debt and equity securities. The effect of this change at HY17 is to increase equity and debt securities by £4,462 million and £5,340 million respectively and decrease unit trusts and other investment vehicles within other investments by £9,802 million.

(d) Fair value hierarchy analysis

IFRS 13 *Fair Value Measurement*, permits assets and liabilities to be measured at fair value on either a recurring or non-recurring basis. Recurring fair value measurements are those that other IFRSs require or permit in the statement of financial position at the end of each reporting period, whereas non-recurring fair value measurements of assets or liabilities are those that other IFRSs require or permit in the statement of financial position in particular circumstances.

An analysis of assets and liabilities measured at amortised cost and fair value categorised by fair value hierarchy is given below for both recurring and non-recurring fair value measurements.

	Fair value hierarchy					
At 30 June 2018	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	—	—	**11,151**	**11,151**	—	**11,151**
Loans	—	**437**	**23,885**	**24,322**	**3,395**	**27,717**
Financial investments measured at fair value						
Fixed maturity securities	**108,067**	**49,566**	**15,931**	**173,564**	—	**173,564**
Equity securities	**86,623**	**1**	**508**	**87,132**	—	**87,132**
Other investments (including derivatives)	**40,741**	**4,333**	**3,633**	**48,707**	—	**48,707**
Financial assets of operations classified as held for sale	**5,740**	**7**	**2,000**	**7,747**	—	**7,747**
Total	**241,171**	**54,344**	**57,108**	**352,623**	**3,395**	**356,018**
Financial liabilities measured at fair value						
Non-participating investment contracts[1]	**118,594**	**199**	—	**118,793**	—	**118,793**
Net asset value attributable to unit holders	**17,757**	—	**21**	**17,778**	—	**17,778**
Borrowings	—	—	**1,199**	**1,199**	**8,587**	**9,786**
Derivative liabilities	**435**	**4,400**	**411**	**5,246**	—	**5,246**
Financial liabilities of operations classified as held for sale	**5,283**	**23**	**3,147**	**8,453**	—	**8,453**
Total	**142,069**	**4,622**	**4,778**	**151,469**	**8,587**	**160,056**

1 In addition to the balances in this table, included within reinsurance assets in the condensed consolidated statement of financial position and note B11 are £6,356 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.

	Fair value hierarchy			
At 30 June 2018	Level 1 £m	Level 2 £m	Level 3 £m	Total fair value £m
Non-recurring fair value measurement				
Properties occupied by Group companies	—	—	**337**	**337**
Total	—	—	**337**	**337**

The value of owner-occupied properties measured on a non-recurring basis at 30 June 2018 was £337 million *(HY17: £327 million, 2017: £333 million)*, stated at their revalued amounts in line with the requirements of IAS 16 *Property, Plant and Equipment*.

B16 – Fair value continued
(d) Fair value hierarchy analysis continued

	Fair value hierarchy					
At 30 June 2017[1]	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	—	—	10,719	10,719	—	10,719
Loans	—	3	22,225	22,228	3,224	25,452
Financial investments measured at fair value						
Fixed maturity securities	98,044	61,770	16,596	176,410	—	176,410
Equity securities	77,137	—	900	78,037	—	78,037
Other investments (including derivatives)	45,270	5,164	4,341	54,775	—	54,775
Financial assets of operations classified as held for sale	4,135	705	5	4,845	—	4,845
Total	224,586	67,642	54,786	347,014	3,224	350,238
Financial liabilities measured at fair value						
Non-participating investment contracts[2]	114,721	227	3,343	118,291	—	118,291
Net asset value attributable to unit holders	18,445	—	24	18,469	—	18,469
Borrowings	—	—	1,214	1,214	9,124	10,338
Derivative liabilities	431	5,510	152	6,093	—	6,093
Financial liabilities of operations classified as held for sale	555	—	—	555	—	555
Total	134,152	5,737	4,733	144,622	9,124	153,746

1 Following a review of the Group's investment classifications, comparative amounts in respect of unit trusts and other investment vehicles and equity and debt securities have been amended from those previously reported. Refer to table (c) above for further details of this adjustment and the financial impact arising.
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 £10,170 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.

	Fair value hierarchy			
At 30 June 2017	Level 1 £m	Level 2 £m	Level 3 £m	Total fair value £m
Non-recurring fair value measurement				
Properties occupied by Group companies	—	—	327	327
Total	—	—	327	327

	Fair value hierarchy					
At 31 December 2017	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	—	—	10,797	10,797	—	10,797
Loans	—	443	23,949	24,392	3,465	27,857
Financial investments measured at fair value						
Fixed maturity securities	107,771	51,900	15,137	174,808	—	174,808
Equity securities	89,192	—	776	89,968	—	89,968
Other investments (including derivatives)	38,249	5,194	2,863	46,306	—	46,306
Financial assets of operations classified as held for sale	6,192	27	2,093	8,312	—	8,312
Total	241,404	57,564	55,615	354,583	3,465	358,048
Financial liabilities measured at fair value						
Non-participating investment contracts[1]	116,123	209	—	116,332	—	116,332
Net asset value attributable to unit holders	18,314	—	13	18,327	—	18,327
Borrowings	—	—	1,180	1,180	9,106	10,286
Derivative liabilities	521	4,872	358	5,751	—	5,751
Financial liabilities of operations classified as held for sale	5,346	26	3,306	8,678	—	8,678
Total	140,304	5,107	4,857	150,268	9,106	159,374

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 £6,094 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.

	Fair value hierarchy			
At 31 December 2017	Level 1 £m	Level 2 £m	Level 3 £m	Total fair value £m
Non-recurring fair value measurement				
Properties occupied by Group companies	—	—	333	333
Total	—	—	333	333

B16 – 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

There were no significant transfers between Level 1 and Level 2 investments during the six month period ended 30 June 2018.

Transfers to/from Level 3

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

Transfers into Level 3 assets of £1.6 billion relate principally to £1.3 billion of debt securities held in the UK, France and Italy which were transferred from Level 1 and Level 2 due to the unavailability of significant observable market data or where there were sufficiently significant differences between the valuation provided by the counterparty and broker quotes and the validation models.

Transfers out of Level 3 assets of £1.0 billion relate principally to £0.8 billion of debt securities which were transferred to Level 2 by our UK business as observable inputs became available, or where the valuation provided by the counterparty and broker quotes are corroborated using valuation models with observable inputs.

	Assets								Liabilities		
At 30 June 2018	**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**	**Financial liabilities of operations classified as held for sale £m**
Opening balance at 1 January 2018	**10,797**	**23,949**	**15,137**	**776**	**2,863**	**2,093**	**—**	**(13)**	**(358)**	**(1,180)**	**(3,306)**
Total net gains/(losses) recognised in the income statement[1]	**163**	**(309)**	**(80)**	**(11)**	**(6)**	**(37)**	**—**	**—**	**(89)**	**(20)**	**37**
Purchases	**531**	**631**	**798**	**124**	**940**	**56**	**—**	**—**	**—**	**—**	**(56)**
Issuances	**—**	**51**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Disposals	**(319)**	**(437)**	**(411)**	**(544)**	**(157)**	**(78)**	**—**	**(8)**	**36**	**1**	**144**
Settlements[2]	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Transfers into Level 3	**5**	**—**	**1,322**	**165**	**158**	**15**	**—**	**—**	**—**	**—**	**(15)**
Transfers out of Level 3	**—**	**—**	**(802)**	**(2)**	**(161)**	**(49)**	**—**	**—**	**—**	**—**	**49**
Reclassification to held for sale	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Foreign exchange rate movements	**(26)**	**—**	**(33)**	**—**	**(4)**	**—**	**—**	**—**	**—**	**—**	**—**
Balance at 30 June 2018	**11,151**	**23,885**	**15,931**	**508**	**3,633**	**2,000**	**—**	**(21)**	**(411)**	**(1,199)**	**(3,147)**

1 Total net gains/(losses) recognised in the income statement includes realised gains/(losses) on disposals.
2 Settlements include effective settlements of Group holdings.

	Assets								Liabilities		
At 30 June 2017	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	Financial liabilities of operations classified as held for sale £m
Opening balance at 1 January 2017	10,768	20,923	16,447	913	4,001	980	(3,408)	(20)	(1,600)	(1,110)	—
Total net gains/(losses) recognised in the income statement[1]	223	536	154	(64)	(75)	—	(25)	(4)	(52)	(121)	—
Purchases	217	505	358	57	699	—	(70)	—	(40)	—	—
Issuances	—	72	—	—	—	—	—	—	—	—	—
Disposals	(577)	(96)	(495)	(12)	(319)	(988)	171	—	156	17	—
Settlements[2]	—	(6)	(9)	—	—	—	9	—	—	—	—
Transfers into Level 3	—	288	1,203	4	61	—	(17)	—	(2)	—	—
Transfers out of Level 3	—	—	(1,262)	—	(105)	—	4	—	1,387	—	—
Reclassification to held for sale	(1)	—	—	—	(4)	5	—	—	—	—	—
Foreign exchange rate movements	89	3	200	2	83	8	(7)	—	(1)	—	—
Balance at 30 June 2017	10,719	22,225	16,596	900	4,341	5	(3,343)	(24)	(152)	(1,214)	—

1 Total net (losses)/gains recognised in the income statement includes realised gains/(losses) on disposals.
2 Settlements include effective settlements of Group holdings.

B16 – Fair value continued

At 31 December 2017	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	Financial liabilities of operations classified as held for sale £m
Opening balance at 1 January 2017	10,768	20,923	16,447	913	4,001	980	(3,408)	(20)	(1,600)	(1,110)	—
Total net gains/(losses) recognised in the income statement[1]	511	643	(795)	(179)	55	162	—	7	(105)	(97)	(165)
Purchases	672	3,252	1,745	66	944	267	(153)	—	(9)	—	(113)
Issuances	—	151	—	—	—	(1)	—	—	—	—	—
Disposals	(1,289)	(1,025)	(1,771)	(12)	(439)	(1,383)	153	—	180	27	377
Settlements[2]	—	—	—	—	—	—	—	—	—	—	—
Transfers into Level 3	—	—	899	2	10	132	—	—	(164)	—	(132)
Transfers out of Level 3	—	—	(1,399)	—	(83)	(135)	—	—	1,342	—	135
Reclassification to held for sale	—	—	(340)	(19)	(1,682)	2,041	3,408	—	—	—	(3,408)
Foreign exchange rate movements	135	5	351	5	57	30	—	—	(2)	—	—
Balance at 31 December 2017	10,797	23,949	15,137	776	2,863	2,093	—	(13)	(358)	(1,180)	(3,306)

1 Total net gains/(losses) recognised in the income statement includes realised gains/(losses) on disposals.
2 Settlements include effective settlements of Group holdings.

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

Total net losses recognised in the income statement in the first half of 2018 in respect of Level 3 assets measured at fair value amounted to £0.3 billion *(HY17: net gains of £0.8 billion)* with net losses in respect of liabilities of £0.1 billion *(HY17: net losses of £0.2 billion)*.

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

(i) Investment property

Investment property amounting to £11.2 billion *(2017: £10.8 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 and Primary Healthcare loans held by our UK Life business amounting to £11.6 billion *(2017: £12.2 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 45 bps to 240 bps.
- Equity release and securitised mortgage loans held by our UK Life business amounting to £9.1 billion *(2017: £9.3 billion)* are valued using an internal model. Inputs to the model include primarily property growth rates, mortality and morbidity assumptions, cost of capital and liquidity premium which are not deemed to be market observable.
- Infrastructure and Private Finance Initiative (PFI) loans held by our UK Life business amounting to £2.2 billion *(2017: £1.8 billion)* are valued using a discounted cash flow model. This adds spreads for credit and illiquidity to a risk-free discount rate. Credit spreads used in the discount rate are calculated using an internally developed methodology which depends on the credit rating of each loan, credit spreads on publicly traded bonds and an estimated recovery rate in event of default and are deemed to be unobservable.

(iii) Debt securities

- Privately placed notes, commercial real estate loans, PFI loans and infrastructure loans held by our UK Life business of £1.4 billion *(2017: £1.5 billion)* are not traded in active markets. Valuations are obtained from third party evaluated pricing services which represent the vendor's opinion of the asset values or discounted cash flow models which incorporate significant unobservable inputs.
- Structured bond-type and non-standard debt products held by our business in France amounting to £6.4 billion *(2017: £5.9 billion)* and bonds held by our UK business of £1.0 billion *(2017: £1.2 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.
- Corporate debt securities held by our French business of £2.3 billion *(2017: £2.7 billion)* and debt securities of £3.8 billion held by our UK and Asia businesses *(2017: £3.0 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 £0.5 billion *(2017: £0.8 billion)* held predominantly 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.

B16 – Fair value continued

(v) Other investments

- The following Other investments are valued based on external valuation reports received from fund managers:
  - Private equity investment funds amounting to £1.0 billion *(2017: £0.6 billion)*;
  - Other investment funds including property funds amounting to £1.8 billion *(2017: £1.8 billion)*;
  - External hedge funds held principally by businesses in France amounting to £0.5 billion *(2017: £0.4 billion)*; and
  - Discretionary funds held in Asia amounting to £1.4 billion *(2017: £1.6 billion)* which are currently held for sale.

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 £56 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 +£2.3 billion / –£2.0 billion. Of the £1.1 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 £110 million.

(vi) Liabilities

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

- £3.1 billion (*2017: £3.3 billion*) of non-participating investment contract liabilities, classified as held for sale, 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.
- £1.2 billion (*2017: £1.3 billion*) of securitised mortgage loan notes, presented within Borrowings, are valued using a similar technique to the related Level 3 securitised mortgage assets.

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 £4.6 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 ±£0.6 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 £15 million.

B17 – 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 2018 witnessed continued normalisation of US monetary policy with two further increases in the US Federal Reserve rates, while the ECB has indicated that it plans to end its asset purchase programme in December 2018. In the UK, constrained consumer spending, continued central government fiscal restraint and subdued investment spend due to uncertainty over the outcome of Brexit negotiations have resulted in lacklustre economic growth. While growth in the US and Eurozone has been buoyed by fiscal stimulus and accommodative monetary policy respectively, concerns remain over its sustainability given the rising threat of trade protectionism and inflation pressures. Although interest rates are likely to remain below pre-2008 financial crisis levels, in the EU and UK in particular, for some time to come, there is a risk that a rapid increase in rates as a response to inflationary pressures could result in a collapse in bond prices and widening spreads. These uncertainties have resulted in increased equity market volatility in the first six months of the year.

Looking forward, uncertainty over the outcome of Brexit negotiations and future trading arrangements with the European Union are likely to continue to weigh negatively on UK macroeconomic growth and possibly sterling. Meanwhile the new Italian government's proposed loosening of fiscal policy threatens to create tensions with the EU and a re-emergence of the Eurozone sovereign debt and banking crisis. Likely further increases in interest rates by the US Federal reserve raises the prospect of increasing divergence in US and European monetary policy. Other possible shocks to global growth in the second half of 2018 include a credit crunch in China, where indebtedness remains at record levels, and increasing trade protectionism and retaliatory response to it.

During the first six months of 2018, as in 2017, there were several high profile cyber security breaches for corporates in the UK and elsewhere and nefarious attempts to access the Group's systems and data have increased. This risk is expected to continue to increase in the future. We continue to invest to reduce our residual exposure to the increasing cyber security threat through ongoing investment in our Security Transformation programme.

We continue to progress our operational plans, which address the likely loss of the ability for UK firms to passport business into the EU, to ensure continuous service to our customers in the EU after the UK's withdrawal from the EU on 29 March 2019, independent of the final outcome of Brexit negotiations between the UK and EU.

The Group has taken action to ensure it will be compliant with the Markets in Financial Instruments Directive (MiFID II) and the General Data Protection Regulations, which became effective in the EU during the first half of 2018, and the Insurance Distribution Directive which will become effective on 1 October 2018. Going forward we expect increased focus in the EU on the fair treatment of customers, in particular how the insurance and fund management industry sells and administers insurance and investment products. EIOPA has recently set out its intentions to focus on the convergence of supervision within the EU with the aim of achieving comparable levels of consumer protection. In April 2018, a further consultation was published by the FCA as part of its thematic work related to the Asset Management Market Study to ensure the fair treatment of customers across the sector.

The International Association of Insurance Supervisors (IAIS) continues to develop higher loss absorbency capital requirements, which may become effective in 2020, should the Group remain a Global Systemically Important Insurer (G-SII). The Group is in the process of implementing the new international accounting standards for insurance contracts, IFRS 17 *Insurance Contracts.* The standard applies to reporting periods beginning on or after 1 January 2021 and has not yet been endorsed by the EU. Given the current stage of the Group's implementation of *IFRS17*, and given that industry practice and interpretation of the standard is still developing, the likely full impact of implementing the standard remains uncertain.

On 2 July 2018, the PRA published Consultation Paper CP13/18 *Solvency II Equity release mortgages* with the intention of providing a clarification to Supervisory Statement SS3/17, published last year. The CP focuses on whether firms are making appropriate allowance for the risks retained when including equity release mortgages (ERM) within their Solvency II matching adjustment (MA) portfolios. The key updates proposed by the CP relate to the Effective Value Test (EVT), which was introduced by the PRA to assess the property risk introduced by the no-negative-equity-guarantee (NNEG) and other risks inherent in ERM. These updates may have an adverse impact on the solvency position of insurers. The PRA are accepting feedback on CP13/18 until 30 September 2018 and have proposed an implementation date of 31 December 2018. We remain committed to ERM as a component of our MA framework and we will engage positively in the PRA consultation process. At this stage, it remains too early to assess the full impact of the updates on our solvency position and the extent to which these impacts can be mitigated by management actions.

B17 – Risk management continued

Risk profile

We continue to manage our risk profile to reflect Aviva's objective of maintaining financial strength and reducing capital volatility, and reallocating capital in line with the Group's strategy. During the half year we continued to progress the disposals of most of our remaining business in Spain (completed on 11 July 2018) and of FPIL, while completing our acquisition of Friends First in Ireland and investing in new organic growth opportunities. Measures to maintain the resilience of the Group's capital position include putting in place a number of foreign exchange, credit and equity hedges. These are used to mitigate the Group's foreign exchange, credit and equity risk exposure, and enable the Group to accept other credit risks offering better risk adjusted returns while remaining within appetite. In addition, we renewed our catastrophe reinsurance programme to reduce the Group's potential loss to an extreme insurance loss event.

Going forward, the Group's focus will continue to be on sustainable growth in cash flow and capital generation, to invest in growth opportunities and increasing returns to shareholders, while maintaining a strong balance sheet with limited volatility and external leverage at a level commensurate with an AA financial strength rating.

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 2018 and remain credit, market, life insurance, general insurance (including health insurance), liquidity, asset management, operational and reputational risks. These risks are described below.

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

During the first half of 2018 restrictions to our sovereign and corporate debt exposure to Greece, Italy and Portugal remained in place, while restrictions on Spain were lifted as a result of our reduced exposure following disposal of most of our business in the country and Spain's improved economic and fiscal prospects. 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 C9 of this report for details of our sovereign exposures to Greece, Ireland, Portugal, Spain and Italy.

During the first half of 2018 the credit rating profile of our debt securities portfolio has remained strong. At 30 June 2018, the proportion of our shareholder debt securities that are investment grade has decreased slightly to 92.8% *(2017: 93.5%)*. Of the remaining 7.2% of shareholder debt securities that do not have an external rating of BBB or higher, 73.1% have been internally assessed as being of investment grade quality applying an internal rating methodology largely consistent with that adopted by an external rating agency.

The Group's largest reinsurance counterparty is BlackRock Life Ltd (including subsidiaries) as a result of the BlackRock funds offered to UK Life customers via unit-linked contracts. However, the risk of default is considered remote due to the nature of the arrangement and the counterparty. The Group's credit exposure to BlackRock Life Ltd has increased slightly to £5.5 billion at 30 June 2018 *(2017: £5.3 billion)*. The Group is currently restructuring its agreements with BlackRock Life Ltd to reduce this exposure going forward.

(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. 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 by matching assets and liabilities in functional currencies at the business unit level. Planned foreign currency remittances from subsidiaries and disposal proceeds are often hedged using foreign exchange forwards to provide certainty regarding the sterling value to be received by the Group, while foreign exchange swaps are in place to hedge certain non-sterling borrowings. Hedges can be used to protect the Group's capital against a significant depreciation in local currency versus sterling. At 30 June 2018, hedges with notional values of £1.5 billion (Canadian dollar £0.7 billion, Euro £0.4 billion and US dollar £0.4 billion) were in place.

B17 – Risk management continued

(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 and its subsidiary, Aviva Group Holdings Limited (AGH), 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 (HY18: £1.65 billion) from a range of leading international banks to further mitigate this risk.

(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 2018. Longevity risk remains the Group's most significant life insurance risk due to the Group's annuity portfolio and is amplified by the current low level of interest rates. We are also exposed to longevity risk through the Aviva Staff Pension Scheme, to which our economic exposure has been reduced since 2014 by entering into a longevity swap covering approximately £5 billion of pensioner in payment scheme liabilities. 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, as well as a growing global exposure to corporate speciality risks. 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. We recognise that the increased severity and frequency of weather-related events has the potential to adversely impact provisions for insurance liabilities and our earnings, with the result that there is some seasonality in our results from period to period. Large catastrophic (CAT) losses arising as a result of these events are explicitly considered in our economic capital modelling to ensure we are resilient to such CAT scenarios.

Lump sum payments in settlement of bodily injury claims decided by the UK courts are calculated in accordance with the Ogden Tables and discount rate. The Ogden discount rate is set by the Lord Chancellor in accordance with the Damages Act 1996 and is applied when calculating the present value of future care costs and loss of earnings for claims settlement purposes. Due to the uncertainty around the Ogden discount rate, the claim reserves in the UK have been calculated using the current Ogden discount rate of -0.75%, as this is the enacted legislative rate that was announced by the Lord Chancellor in 2017. In March 2018 the Lord Chancellor announced the introduction of the Civil Liability Bill (the Bill) which includes provisions to amend the discount rate to be used in the Ogden Tables. It is expected that the Bill will go through the parliamentary process during 2018 and the first half of 2019. The Government expect the revised approach for setting the discount rate to result in a higher discount rate than the current rate of -0.75%. By way of illustration, should the Ogden discount rate increase in the future by 1%, then this would be expected to reduce reserves by approximately £250 million with an equivalent impact on profit before tax.

B17 – Risk management continued

(e) General insurance and health insurance risk continued

During the first half of 2018, 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 January 2018, 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. These key risks are monitored on an ongoing 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 age and complexity of the Group's IT infrastructure creates a significant operational risk for the Group, which at times during the first half of 2018 has resulted in disruption to continuous service to our customers, while our UK long-term savings business has also experienced some functionality issues during its update of its platform capability. The Group continues to invest significant sums to both simplify and upgrade its IT estate to minimise the risk of disruption to customer service in the future. 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.

(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 well founded, or the customer's expectations for the product have changed. We monitor this risk and have controls in place to limit our exposure.

(i) Sensitivity test analysis

The Group uses a number of sensitivity tests to understand the volatility of its earnings and 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.

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 ±10%.
Expenses	The impact of an increase in maintenance expenses by 10%.
Assurance mortality/morbidity (long-term insurance only)	The impact of an increase in mortality/morbidity rates for assurance contracts by 5%.
Annuitant mortality (long-term insurance only)	The impact of a reduction in mortality rates for annuity contracts by 5%.
Gross loss ratios (non-long-term insurance only)	The impact of an increase in gross loss ratios for general insurance and health business by 5%.

Financial supplement continued

B17 – Risk management continued

(i) Sensitivity test analysis continued

Long-term business sensitivities

30 June 2018 Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Assurance mortality +5%	Annuitant mortality -5%
Insurance participating	(80)	75	(15)	(40)	25	(30)	—	(5)
Insurance non-participating	(645)	690	(610)	(110)	90	(200)	(105)	(890)
Investment participating	(90)	35	(5)	(5)	(10)	(10)	—	—
Investment non-participating	—	(20)	—	10	(30)	(40)	—	—
Assets backing life shareholders' funds	(85)	95	(25)	20	(20)	—	—	—
Total	(900)	875	(655)	(125)	55	(280)	(105)	(895)

30 June 2018 Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Assurance mortality +5%	Annuitant mortality -5%
Insurance participating	(80)	75	(15)	(40)	25	(30)	—	(5)
Insurance non-participating	(645)	690	(610)	(110)	90	(200)	(105)	(890)
Investment participating	(90)	35	(5)	(5)	(10)	(10)	—	—
Investment non-participating	—	(20)	—	10	(30)	(40)	—	—
Assets backing life shareholders' funds	(140)	135	(30)	20	(20)	—	—	—
Total	(955)	915	(660)	(125)	55	(280)	(105)	(895)

31 December 2017 Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Assurance mortality +5%	Annuitant mortality - 5%
Insurance participating	(45)	25	(15)	(20)	(40)	(25)	(5)	(10)
Insurance non-participating	(475)	485	(790)	(135)	115	(215)	(105)	(905)
Investment participating	—	10	(5)	(5)	—	(15)	—	—
Investment non-participating	—	(10)	(5)	10	(10)	(30)	—	—
Assets backing life shareholders' funds	(90)	115	(25)	20	(20)	—	—	—
Total	(610)	625	(840)	(130)	45	(285)	(110)	(915)

31 December 2017 Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Assurance mortality +5%	Annuitant mortality -5%
Insurance participating	(45)	25	(15)	(20)	(40)	(25)	(5)	(10)
Insurance non-participating	(475)	485	(790)	(135)	115	(215)	(105)	(905)
Investment participating	—	10	(5)	(5)	—	(15)	—	—
Investment non-participating	—	(10)	(5)	10	(10)	(30)	—	—
Assets backing life shareholders' funds	(150)	175	(35)	20	(20)	—	—	—
Total	(670)	685	(850)	(130)	45	(285)	(110)	(915)

Changes in sensitivities between HY18 and 2017 reflect underlying movements in the value of assets and liabilities, the relative duration of assets and liabilities and asset liability management actions. The sensitivities to economic and demographic movements relate mainly to business in the UK.

General insurance and health business sensitivities

30 June 2018 Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Gross loss ratios +5%
Gross of reinsurance	(275)	265	(125)	150	(150)	(70)	(160)
Net of reinsurance	(340)	325	(125)	150	(150)	(70)	(155)

30 June 2018 Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property - 10%	Expenses +10%	Gross loss ratios +5%
Gross of reinsurance	(275)	265	(125)	150	(150)	(25)	(160)
Net of reinsurance	(340)	325	(125)	150	(150)	(25)	(155)

31 December 2017 Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Gross loss ratios +5%
Gross of reinsurance	(285)	300	(130)	165	(165)	(120)	(335)
Net of reinsurance	(345)	355	(130)	165	(165)	(120)	(325)

31 December 2017 Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Gross loss ratios +5%
Gross of reinsurance	(285)	300	(130)	165	(165)	(25)	(335)
Net of reinsurance	(345)	355	(130)	165	(165)	(25)	(325)

Financial supplement continued

B17 – Risk management continued

(i) Sensitivity test analysis continued

For general insurance and health, 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.

Fund management and non-insurance business sensitivities

30 June 2018 Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%
Total	**(25)**	**25**	**80**	**(5)**	**10**

30 June 2018 Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%
Total	**(20)**	**20**	**80**	**(5)**	**10**

31 December 2017 Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%[1]	Equity/ property +10%	Equity/ property -10%
Total	(30)	30	80	(10)	20

31 December 2017 Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%[1]	Equity/ property +10%	Equity/ property -10%
Total	(25)	25	80	(10)	15

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.

B18 – Cash and cash equivalents

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

	30 June 2018 £m	30 June 2017 £m	31 December 2017 £m
Cash and cash equivalents	**44,443**	42,456	43,347
Cash and cash equivalents of operations classified as held for sale	**707**	406	739
Bank overdrafts	**(702)**	(622)	(499)
Net cash and cash equivalents at 30 June/31 December	**44,448**	42,240	43,587

B19 – 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 2017 Annual Report and Accounts. An update on material risks is provided in note B17 Risk management.

B20 – 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 2018 £m	30 June 2017 £m	31 December 2017 £m
Acquired value of in-force business on insurance contracts[1]	**1,510**	1,646	1,533
Acquired value of in-force business on investment contracts[2]	**1,631**	1,967	1,725
Intangible assets	**1,160**	1,672	1,628
	4,301	5,285	4,886
Less: Amounts classified as held for sale	**(926)**	(444)	(1,431)
Total	**3,375**	4,841	3,455

1 On insurance and participating investment contracts.
2 On non-participating investment contracts.

The acquired value of in-force (AVIF) business on insurance and investment contracts has reduced in the period primarily due to an amortisation charge of £210 million *(HY17: £232 million charge, 2017: £468 million charge)*, partially offset by the addition of £96 million of AVIF through the acquisition of Friends First (see note B4 (a)(ii)). There was also an impairment of AVIF on investment contracts of £4 million in the period relating to FPIL *(HY17: £nil, 2017: £118 million)* recorded as a remeasurement loss as FPIL is held for sale (see note B4 (c)(i)).

The decrease in intangible assets primarily relates to the disposal of the Avipop business in Italy (see note B4 (b)(i)) and the amortisation charge of £101 million *(HY17: £91 million charge, 2017: £197 million charge)*.

B21 – 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. The amount of UDS at 30 June 2018 has decreased to £7.6 billion *(HY17: £8.5 billion, 2017: £9.1 billion)*, excluding amounts classified as held for sale. The decrease is primarily due to realised and unrealised losses in France and Italy and a distribution by UK Life in anticipation of a special bonus being paid to policyholders.

Where the aggregate amount of participating assets is less than the participating liabilities within a fund then the shortfall may be held as a negative UDS, subject to recoverability testing as part of the liability adequacy requirements of IFRS 4. At 30 June 2018 there are negative UDS balances within one fund in UK Life (£15 million) and three funds in Italy (aggregate of £30 million). These balances were tested for recoverability and considered to be recoverable by comparing the excess of IFRS participating liabilities over the adjusted Solvency II best estimate liabilities. There were no negative UDS balances at 30 June 2017 or 31 December 2017.

B22 – Subsequent events

For details of subsequent events relating to subsidiaries, refer to note B4.

Directors' responsibility statement

The directors confirm that these condensed interim financial statements have been prepared in accordance with IAS Standard 34, *Interim Financial Reporting*, as endorsed by the EU 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: www.aviva.com/investor-relations/corporate-governance/board-of-directors/

By order of the Board

Mark Wilson
Group chief executive officer
1 August 2018

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 financial statements (the "interim financial statements") in the half year report of Aviva plc for the 6 month period ended 30 June 2018. Based on our review, nothing has come to our attention that causes us to believe that the 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 the Disclosure Guidance and Transparency Rules sourcebook of the United Kingdom's Financial Conduct Authority.

What we have reviewed

The interim financial statements comprise:

- the condensed consolidated statement of financial position as at 30 June 2018;
- the condensed consolidated income statement and condensed consolidated 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 interim financial statements.

The 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 Guidance and Transparency Rules sourcebook 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.

Responsibilities for the interim financial statements and the review

Our responsibilities and those of the directors

The half year report, including the 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 Guidance and Transparency Rules sourcebook of the United Kingdom's Financial Conduct Authority.

Our responsibility is to express a conclusion on the 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 Guidance and Transparency Rules sourcebook 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 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, 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 interim financial statements.

PricewaterhouseCoopers LLP
Chartered Accountants
London

1 August 2018

Financial supplement continued

Analysis of assets

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symbol denotes key performance indicators used as a base to determine or modify remuneration.
‡ denotes APMs which are key performance indicators. There have been no changes to the APMs used by the Group during period under review.

As an insurance business, the 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. To support this, we use a variety of hedging and other risk management strategies to mitigate any residual mismatch risk that is outside of our risk appetite.

This section provides an analysis of the Group's assets with a focus on financial investments backing liabilities held by the shareholder fund.

C1 – Summary of total assets by fund

30 June 2018	Policyholder assets £m	Participating fund assets £m	Shareholder assets[1] £m	Total assets analysed £m	Less assets of operations classified as held for sale £m	Balance sheet total £m
Goodwill and acquired value of in-force business and intangible assets	—	—	6,206	6,206	(950)	5,256
Interests in joint ventures and associates	—	1,069	519	1,588	—	1,588
Property and equipment	—	191	345	536	(5)	531
Investment property[2]	6,619	3,991	541	11,151	—	11,151
Loans[2]	9	3,243	24,465	27,717	—	27,717
Financial investments[2]						
Debt securities	31,006	94,765	48,529	174,300	(736)	173,564
Equity securities	72,299	13,970	1,052	87,321	(189)	87,132
Other investments	43,438	8,543	3,548	55,529	(6,822)	48,707
Reinsurance assets	6,490	537	6,850	13,877	(46)	13,831
Deferred tax assets	—	—	156	156	—	156
Current tax assets	—	—	118	118	—	118
Receivables and other financial assets	454	2,216	6,708	9,378	(26)	9,352
Deferred acquisition costs and other assets	51	615	6,072	6,738	(169)	6,569
Prepayments and accrued income	378	1,267	1,499	3,144	(15)	3,129
Cash and cash equivalents	13,940	18,081	13,129	45,150	(707)	44,443
Assets of operations classified as held for sale	—	—	—	—	9,665	9,665
Total	**174,684**	**148,488**	**119,737**	**442,909**	**—**	**442,909**
Total %	**39.5%**	**33.5%**	**27.0%**	**100.0%**	**—**	**100.0%**
FY17 Total	172,635	148,839	121,211	442,685	—	442,685
FY17 Total %	39.0%	33.6%	27.4%	100.0%	—	100.0%

1 Refer to note C2 for a summary of total shareholder assets by valuation base.
2 Refer to note C3 for an analysis of invested assets by type of fund.

C2 – Summary of valuation bases for total shareholders assets

30 June 2018	Fair value £m	Amortised cost £m	Equity accounted/ tax assets £m	Total £m
Goodwill and acquired value of in-force business and intangible assets	—	6,206	—	6,206
Interests in joint ventures and associates	—	—	519	519
Property and equipment	226	119	—	345
Investment property	541	—	—	541
Loans	24,249	216	—	24,465
Financial Investments				
Debt securities	48,529	—	—	48,529
Equity securities	1,052	—	—	1,052
Other investments	3,548	—	—	3,548
Reinsurance assets	5	6,845	—	6,850
Deferred tax assets	—	—	156	156
Current tax assets	—	—	118	118
Receivables and other financial assets	—	6,708	—	6,708
Deferred acquisition costs and other assets	—	6,072	—	6,072
Prepayments and accrued income	—	1,499	—	1,499
Cash and cash equivalents	13,129	—	—	13,129
Total	**91,279**	**27,665**	**793**	**119,737**
Total %	**76.2%**	**23.1%**	**0.7%**	**100.0%**
Assets of operations classified as held for sale	627	1,200	—	1,827
Total (excluding assets held for sale)	**90,652**	**26,465**	**793**	**117,910**
Total % (excluding assets held for sale)	**76.9%**	**22.4%**	**0.7%**	**100.0%**
FY17 Total	92,403	28,061	747	121,211
FY17 Total %	76.2%	23.2%	0.6%	100.0%

Financial supplement continued

C3 – Analysis of financial investments by fund

The asset allocation as at 30 June 2018 across the Group, split according to the type of the liability the assets are backing, is shown in the table below.

	Shareholder business assets				Participating fund assets				
Carrying value in the statement of financial position	General Insurance & health & other[1] £m	Annuity and non-profit £m	Total Shareholder assets £m	Policyholder (unit-linked assets) £m	UK style with-profits £m	Continental European-style Participating funds £m	Total assets analysed £m	Less assets of operation classified as held for sale £m	Carrying value in the statement of financial position £m
Debt securities (note C4)									
Government bonds	**6,328**	**16,752**	**23,080**	**14,311**	**16,284**	**29,321**	**82,996**	**(255)**	**82,741**
Corporate bonds	**3,714**	**19,609**	**23,323**	**14,248**	**15,762**	**26,651**	**79,984**	**(481)**	**79,503**
Other	**255**	**1,871**	**2,126**	**2,447**	**945**	**5,802**	**11,320**	**—**	**11,320**
	10,297	**38,232**	**48,529**	**31,006**	**32,991**	**61,774**	**174,300**	**(736)**	**173,564**
Loans (note C5)									
Mortgage loans	**—**	**19,636**	**19,636**	**—**	**72**	**—**	**19,708**	**—**	**19,708**
Other loans	**200**	**4,629**	**4,829**	**9**	**2,476**	**695**	**8,009**	**—**	**8,009**
	200	**24,265**	**24,465**	**9**	**2,548**	**695**	**27,717**	**—**	**27,717**
Equity securities (note C6)	**867**	**185**	**1,052**	**72,299**	**11,623**	**2,347**	**87,321**	**(189)**	**87,132**
Investment property (note C7)	**365**	**176**	**541**	**6,619**	**2,301**	**1,690**	**11,151**	**—**	**11,151**
Other investments (note C8)	**1,492**	**2,056**	**3,548**	**43,438**	**3,377**	**5,166**	**55,529**	**(6,822)**	**48,707**
Total as at 30 June 2018	**13,221**	**64,914**	**78,135**	**153,371**	**52,840**	**71,672**	**356,018**	**(7,747)**	**348,271**
FY17 Total	13,581	65,576	79,157	153,729	54,813	70,349	358,048	(8,312)	349,736

1 Of the £13.2 billion of assets 7% relates to other shareholder business assets.

C4 – Analysis of shareholder debt securities

Fair value hierarchy

30 June 2018	Fair value hierarchy Level 1 £m	Level 2 £m	Level 3 £m	Total £m
UK Government	9,732	1,367	234	11,333
Non-UK government	3,398	6,983	1,366	11,747
Europe	3,221	3,434	988	7,643
North America	80	3,009	324	3,413
Asia Pacific & Other	97	540	54	691
Corporate bonds – Public utilities	114	4,210	785	5,109
Other corporate bonds	1,040	14,485	2,689	18,214
Other	172	1,693	261	2,126
Total	**14,456**	**28,738**	**5,335**	**48,529**
Total %	**29.8%**	**59.2%**	**11.0%**	**100.0%**
Assets of operations classified as held for sale	393	—	—	393
Total (excluding assets held for sale)	**14,063**	**28,738**	**5,335**	**48,136**
Total % (excluding assets held for sale)	**29.2%**	**59.7%**	**11.1%**	**100.0%**
FY17 Total	14,445	29,438	5,303	49,186
FY17 Total %	29.3%	59.9%	10.8%	100.0%

External ratings

30 June 2018	External ratings AAA £m	AA £m	A £m	BBB £m	Less than BBB £m	Non-rated £m	Total £m
Government							
UK Government	—	10,995	117	28	—	176	11,316
UK local authorities	—	—	—	—	—	17	17
Non-UK Government	4,999	4,312	1,090	986	5	355	11,747
	4,999	15,307	1,207	1,014	5	548	23,080
Corporate							
Public utilities	—	123	2,394	2,164	30	398	5,109
Other corporate bonds	2,048	2,166	7,225	4,703	273	1,799	18,214
	2,048	2,289	9,619	6,867	303	2,197	23,323
Certificates of deposits	—	—	—	—	—	58	58
Structured							
Residential Mortgage Backed Security non-agency prime	—	1	61	4	3	29	98
Residential Mortgage Backed Security agency	2	—	—	—	—	—	2
	2	1	61	4	3	29	100
Commercial Mortgage Backed Security	203	15	155	—	—	1	374
Asset Backed Security	—	357	262	34	44	—	697
	203	372	417	34	44	1	1,071
Wrapped credit	—	11	387	66	42	13	519
Other	3	7	22	117	164	65	378
Total	**7,255**	**17,987**	**11,713**	**8,102**	**561**	**2,911**	**48,529**
Total %	**14.9%**	**37.1%**	**24.1%**	**16.7%**	**1.2%**	**6.0%**	**100.0%**
Assets of operations classified as held for sale	9	9	—	375	—	—	393
Total (excluding assets held for sale)	**7,246**	**17,978**	**11,713**	**7,727**	**561**	**2,911**	**48,136**
Total % (excluding assets held for sale)	**15.1%**	**37.3%**	**24.3%**	**16.1%**	**1.2%**	**6.0%**	**100.0%**
FY17 Total	7,039	17,394	12,932	8,637	526	2,658	49,186
FY17 Total %	14.2%	35.4%	26.3%	17.6%	1.1%	5.4%	100.0%

C5 – Analysis of loans

(a) Overview

The Group's loan portfolio of £27.7 billion *(2017: £27.9 billion)* is principally made up of the following:

- Policy loans of £0.8 billion *(2017: £0.8 billion)*, which are generally collateralised by a lien or charge over the underlying policy;
- Loans and advances to banks of £2.5 billion *(2017: £2.5 billion)*, which primarily relate to loans of cash collateral received in stock lending transactions and are therefore fully collateralised by other securities;
- Mortgage loans collateralised by property assets of £19.8 billion *(2017: £20.3 billion)*; and
- Healthcare, infrastructure and private financial initiative (PFI) loans of £4.1 billion *(2017: £3.6 billion)*.

Loans with fixed maturities, including policy loans 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 *Financial Instruments: Recognition Measurement* 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. These mortgage loans are not traded in active markets and are classified within level 3 of the fair value hierarchy as the significant valuation assumptions and inputs are not deemed to be market observable. Of the Group's total loan portfolio, 71% *(2017: 73%)* is invested in mortgage loans. The shareholder risk relating to these loans is discussed further below.

Primary healthcare, infrastructure and PFI loans included within shareholder assets are £4.1 billion *(2017: £3.6 billion)*. These loans are secured against the income from healthcare and education premises and as such are not considered further in this section.

(b) Analysis of shareholder mortgage loans

Mortgage loans included within shareholder assets are £19.6 billion *(2017: £20.2 billion)* and are almost entirely held in the UK. The narrative below focuses on explaining the risks arising as a result of these exposures.

30 June 2018	Total £m
Non-securitised mortgage loans	
– Residential (Equity release)	**7,053**
– Commercial	**7,271**
– Healthcare, Infrastructure & PFI mortgage loans	**2,899**
	17,223
Securitised mortgage loans	**2,413**
Total	**19,636**
Assets of operations classified as held for sale	—
Total (excluding assets held for sale)	**19,636**
FY17 Total	20,189

Non-securitised mortgage loans

Residential

The UK non-securitised residential mortgage portfolio has a total value as at 30 June 2018 of £7.1 billion *(2017: £6.8 billion)*. The movement in the year is due to £0.4 billion of accrued interest (net of redemptions). Fair value movements were a £0.1 billion decrease from prior year. 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 24.3% *(2017: 24.6%)*.

Commercial

Gross exposure by loan to value and arrears of UK non-securitised commercial mortgages is shown in the table below.

30 June 2018	>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	—	—	—	—	—	—	**328**	**20**	**329**	**6,594**	**7,271**
Total	—	—	—	—	—	—	**328**	**20**	**329**	**6,594**	**7,271**

Of the £7.3 billion *(2017: £7.5 billion)* of mortgage loans in the shareholder fund, £6.7 billion are used to back annuity liabilities and are stated on a fair value basis. The UK loan exposures are calculated on a discounted cash flow basis, and include a risk adjustment through the use of a Credit Risk Adjusted Value (CRAV).

For commercial mortgages, loan service collection ratios, a key indicator of mortgage portfolio performance, improved to 2.3x *(2017: 2.23x)*. Loan Interest Cover (LIC), which is defined as the annual net rental income (including rental deposits less ground rent) divided by the annual loan interest service, also improved to 2.58x *(2017: 2.51x)*. Average mortgage LTV decreased by 1pp compared to 2017 from 56% to 55%. There are no loans in arrears *(2017: nil)*.

Commercial mortgages and Healthcare, Infrastructure & PFI loans are held at fair value on the asset side of the statement of financial position. The related insurance liabilities are valued using a discount rate derived from the gross yield on assets, with adjustments to allow for risk. £12.9 billion of shareholder loan assets are backing annuity liabilities and comprise of commercial mortgage loans (£6.7 billion), Healthcare, Infrastructure and PFI mortgage loans (£3.9 billion) and Primary Healthcare, Infrastructure and PFI other loans (£2.3 billion). The Group carries a valuation allowance within insurance liabilities against the risk of default of commercial mortgages of £0.4 billion which equates to 40 bps at 30 June 2018 *(2017: 40 bps)*.

C5 – Analysis of loans continued

(b) Analysis of shareholder mortgage loans continued

Non-securitised mortgage loans continued

Commercial continued

The total valuation allowance held by Aviva Annuity UK Limited in respect of corporate bonds and mortgages is £1.3 billion *(2017: £1.3 billion)* over the remaining term of the UK corporate bond and mortgage portfolio.

If the LIC cover falls below 1.0x and the borrower defaults then Aviva retains the option of selling the security or restructuring the loans and benefiting 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, Infrastructure and PFI

Primary Healthcare, Infrastructure and PFI mortgage loans included within shareholder assets of £2.9 billion *(2017: £3.4 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 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 73% *(2017: 76%)*, although this is not considered to be a key risk indicator due to the Government support noted above and the social need for these premises. We therefore consider these loans to be lower risk relative to other mortgage loans.

Securitised mortgage loans

As at 30 June 2018, the Group has £2.4 billion *(2017: £2.5 billion)* of securitised mortgage loans within shareholder assets. Funding for the securitised residential mortgage assets was obtained by issuing loan note securities. Of these loan notes approximately £224 million *(2017: £231 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 been redeemed is borne by the loan note holders, the majority of the credit risk of these mortgages is borne by third parties rather than by shareholders.

C6 – Analysis of shareholder equity securities

	30 June 2018				31 December 2017			
	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
Public utilities	6	—	—	6	4	—	—	4
Banks, trusts and insurance companies	33	1	106	140	34	—	106	140
Industrial miscellaneous and all other	692	—	14	706	624	—	15	639
Non-redeemable preferred shares	200	—	—	200	212	—	—	212
Total	931	1	120	1,052	874	—	121	995
Total %	88.5%	0.1%	11.4%	100.0%	87.8%	—	12.2%	100.0%
Assets of operations classified as held for sale	6	—	—	6	6	—	—	6
Total (excluding assets held for sale)	925	1	120	1,046	868	—	121	989
Total % (excluding assets held for sale)	88.4%	0.1%	11.5%	100.0%	87.8%	—	12.2%	100.0%

C7 – Analysis of shareholder investment property

	30 June 2018				31 December 2017			
	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
Lease to third parties under operating leases	—	—	523	523	—	—	561	561
Vacant investment property/held for capital appreciation	—	—	18	18	—	—	14	14
Total	—	—	541	541	—	—	575	575
Total %	—	—	100.0%	100.0%	—	—	100.0%	100.0%
Assets of operations classified as held for sale	—	—	—	—	—	—	—	—
Total (excluding assets held for sale)	—	—	541	541	—	—	575	575
Total % (excluding assets held for sale)	—	—	100.0%	100.0%	—	—	100.0%	100.0%

C8 – Analysis of shareholder other financial investments

	30 June 2018				31 December 2017			
	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
Unit trusts and other investment vehicles	**1,349**	**1**	**64**	**1,414**	1,271	—	45	1,316
Derivative financial instruments	**36**	**1,407**	**398**	**1,841**	46	1,844	373	2,263
Deposits with credit institutions	**16**	**—**	**—**	**16**	4	—	—	4
Minority holdings in property management undertakings	**—**	**28**	**248**	**276**	—	27	205	232
Other	**1**	**—**	**—**	**1**	70	—	1	71
Total	**1,402**	**1,436**	**710**	**3,548**	1,391	1,871	624	3,886
Total %	**39.5%**	**40.5%**	**20.0%**	**100.0%**	35.8%	48.1%	16.1%	100.0%
Assets of operations classified as held for sale	**76**	**—**	**—**	**76**	76	—	4	80
Total (excluding assets held for sale)	**1,326**	**1,436**	**710**	**3,472**	1,315	1,871	620	3,806
Total % (excluding assets held for sale)	**38.2%**	**41.4%**	**20.4%**	**100.0%**	34.5%	49.2%	16.3%	100.0%

C9 – Summary of exposure to peripheral European countries

The Group's direct sovereign exposures to Greece, Ireland, Portugal, Italy and Spain (net of non-controlling interests, excluding policyholder assets) is summarised below:

	Participating		Shareholder		Total	
	30 June 2018 £bn	31 December 2017 £bn	**30 June 2018 £bn**	31 December 2017 £bn	**30 June 2018 £bn**	31 December 2017 £bn
Greece	**—**	—	**—**	—	**—**	—
Ireland	**0.8**	0.7	**0.2**	0.1	**1.0**	0.8
Portugal	**0.1**	0.1	**—**	—	**0.1**	0.1
Italy	**6.1**	6.0	**0.6**	0.6	**6.7**	6.6
Spain	**0.5**	0.3	**0.1**	—	**0.6**	0.3
Total	**7.5**	7.1	**0.9**	0.7	**8.4**	7.8

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. Despite the current market volatility in Italy, shareholder risk is immaterial and continues to be managed through active portfolio management.

Other information

In this section | Page

symbol denotes key performance indicators used as a base to determine or modify remuneration.
‡ denotes APMs which are key performance indicators. There have been no changes to the APMs used by the Group during period under review.

Alternative Performance Measures

In order to fully explain the performance of our business, we discuss and analyse our results in terms of financial measures which include a number of alternative performance measures (APMs). APMs are non-GAAP measures which are used to supplement the disclosures prepared in accordance with other regulations such as International Financial Reporting Standards (IFRS) and Solvency II. We believe these measures provide useful information to enhance the understanding of our financial performance. However, APMs should be viewed as complementary to, rather than as a substitute for, the figures determined according to other regulations.

The APMs utilised by Aviva may not be the same as those used by other insurers and may change over time. These metrics are reviewed annually and updated as appropriate to ensure they remain an effective measurement that underpins the objectives for the Group.

This section includes a definition of each APM and additional information, including a reconciliation to the relevant amounts in the IFRS Financial Statements and, where appropriate, commentary on the material reconciling items.

Annual Premium Equivalent (APE)

Annual Premium Equivalent is a measure of sales in our life insurance businesses. APE is calculated as the sum of new regular premiums plus 10% of new single premiums written in the period. While not a key performance metric of the Group, the APE measure provides useful information on sales and new business when considered alongside other measures such as the present value of new business premiums (PVNBP) or value of new business on an adjusted Solvency II basis (VNB)‡.

Assets under management (AUM)

Assets under management represent all assets managed or administered by or on behalf of the Group, including those assets managed by third parties. AUM include managed assets that are reported within the Group's statement of financial position and those assets belonging to external clients outside the Aviva Group which are therefore not included in the Group's statement of financial position.

Assets under administration (AUA) comprise AUM plus assets managed by third parties on platforms administered by Aviva Investors.

Both AUM and AUA are monitored as they reflect the potential earnings arising from investment returns and fee and commission income and measure the size and scale of the Group's fund management business.

A reconciliation of AUM to amounts appearing in the Group's statement of financial position is shown below.

	30 June 2018 £bn	30 June 2017 £bn	31 Dec[3] 2017 £bn
AUM managed on behalf of Group companies			
Assets included in statement of financial position[1]			
Financial investments	**317**	313	319
Investment properties	**11**	11	11
Loans	**28**	26	28
Cash and cash equivalents	**45**	43	44
Other	**1**	1	1
	402	394	403
Less: third party funds included above	**(19)**	(21)	(19)
	383	373	384
AUM managed on behalf of third parties[2]			
Aviva Investors[3]	**71**	72	72
UK Platform	**23**	16	20
Other	**10**	12	11
	104	100	103
Total AUM	**487**	473	487

1 Includes assets classified as held for sale.
2 AUM managed on behalf of third parties cannot be directly reconciled to the financial statements.
3 Following a review of AUM managed on behalf of third parties, comparative amounts for Aviva Investors have been amended from those previously reported to reflect the fact that certain crossholdings had not been correctly eliminated on consolidation. The effect of this change is to reduce total AUM by £2.5 billion at 31 December 2017.

Cash remittances‡#

Amounts paid by our operating businesses to the Group, comprised of dividends and interest on internal loans. Dividend payments by operating businesses may be subject to insurance regulations that restrict the amount that can be paid. The business monitors total cash remittances at a Group level and in each of its markets.

These amounts eliminate on consolidation and hence are not directly reconcilable to the Group's IFRS consolidated statement of cash flows.

Claims ratio

A financial measure of the performance of our general insurance business which is calculated as incurred claims expressed as a percentage of net earned premiums, which can be derived from the COR table below.

Combined operating ratio (COR)‡

A financial measure of general insurance underwriting profitability calculated as total underwriting costs (as detailed below) expressed as a percentage of net earned premiums. A COR below 100% indicates profitable underwriting.

A reconciliation of the Group reported COR to amounts appearing in the Annual Report and Accounts is shown below.

	6 months 2018 £m	6 months 2017 £m	Full year 2017 £m
Incurred claims	**(2,962)**	(2,786)	(5,856)
Commissions	**(936)**	(945)	(1,912)
Expenses	**(454)**	(436)	(901)
Total underwriting costs	**(4,352)**	(4,167)	(8,669)
Net earned premiums	**4,466**	4,411	8,976
Combined operating ratio	**97.4%**	94.5%	96.6%

\# symbol denotes key performance indicators used as a base to determine or modify remuneration.
‡ denotes APMs which are key performance indicators. There have been no changes to the APMs used by the Group during period under review.

Other information continued

Combined operating ratio (COR)‡ continued

The normalised accident year combined operating ratio is derived from the COR (as defined in this section) with adjustments made to exclude the impact of prior year reserve development and weather claims variations versus expectations, gross of the impact of profit sharing arrangements. These adjustments are made so that the underlying performance of the Group can be assessed excluding factors that might distort the trend in the claims ratio on a year on year basis.

Commission and expense ratio

A financial measure of the performance of our general insurance business which is derived from the sum of earned commissions and expenses expressed as a percentage of net earned premiums from the COR table above.

Group adjusted operating profit ‡#

Group adjusted operating profit is a non-GAAP APM which is reported to the Group chief operating decision maker for the purpose of decision making and internal performance management of the Group's operating segments that incorporates an expected return on investments supporting the life and non-life insurance businesses. The various items excluded from operating profit are:

Investment variances and economic assumption changes

Group adjusted operating profit for the life insurance 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. The expected rate of return is determined using consistent assumptions between operations, having regard to local economic and market forecasts of investment return and asset classification. 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. Where such securities are classified as available for sale the expected return comprises interest or dividend payments and amortisation of the premium or discount at purchase. The expected return on equities and properties is calculated by reference to the opening 10-year swap rate in the relevant currency plus an appropriate risk margin.

Group adjusted operating profit includes the effect of variances in experience for non-economic items, such as mortality, persistency and expenses, and the effect of changes in non-economic assumptions. This would include movements in liabilities due to changes in discount rate arising from management decisions that impact on product profitability over the lifetime of products. Changes due to economic items, such as market value movement 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.

Group adjusted operating profit for the non-life insurance business is based on expected investment returns on financial investments backing shareholder funds over the period. Expected investment returns are calculated for equities and properties by multiplying the opening market value of the investments, adjusted for sales and purchases during the year, by the longer-term rate of return. This rate of return is the same as that applied for the long-term business expected returns. The longer-term return for other investments is the actual income receivable for the period.

Changes due to market value movements and interest rate changes, which give rise to variances between actual and expected investment returns, are disclosed separately outside operating profit. The impact of changes in the discount rate applied to claims provisions is also disclosed outside operating profit.

The exclusion of short-term investment variances from this APM reflects the long-term nature of much of our business. The operating profit which is used in managing the performance of our operating segments excludes the impact of economic factors, to provide a comparable measure year on year.

Impairment, amortisation and profit/loss on disposal

Group adjusted 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; and the profit or loss on disposal and remeasurement of subsidiaries, joint ventures and associates. These items principally relate to merger and acquisition activity which we view as strategic in nature, hence they are excluded from the operating profit APM as this is principally used to manage the performance of our operating segments when reporting to the Group chief operating decision maker.

Other items

These items are, in the Directors' view, required to be separately disclosed by virtue of their nature or incidence to enable a full understanding of the Group's financial performance. Further details on the other items are shown in section A11.

Group adjusted operating profit is presented before and after integration and restructuring costs.

The Group adjusted operating profit APM should be viewed as complementary to IFRS GAAP measures. It is important to consider Group adjusted operating profit and profit before tax together to understand the performance of the business in the period.

Investment sales

This measure comprises retail sales of mutual fund-type products such as unit trusts, individual savings accounts (ISAs) and open-ended investment companies (OEICs).

Net asset value (NAV) per share

Net asset value (NAV) per share is calculated as the equity attributable to shareholders of Aviva plc, less preference share capital (both within the consolidated statement of financial position), divided by the actual number of shares in issue as at the balance sheet date as shown in section 8.ii.

NAV is used to monitor the value generated by the Company in terms of the equity shareholders' face value per share investment and enables comparability.

Net fund flows

Net fund flows is one of the measures of growth used by management and is a component of the movement in the 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.

New business income

New business income represents the impact on Group adjusted operating profit of new business written in the period. New business income comprises income arising from premiums written during the period less initial reserves, expenses and commission. Expense and commission are shown net of deferred acquisition costs. While not a key performance metric of the Group, new business income provides useful information on sales and new business when considered alongside other measures such as PVNBP or VNB.

Other information continued

New business margin
New business margin is calculated as VNB 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. For life business, OCG is split into the impact of new business, earnings from existing business and other OCG, where other OCG includes the effect of non-recurring capital actions, non-economic assumption changes and Group diversification benefit. OCG excludes economic variances, economic assumption changes and integration and restructuring costs which are included in non-operating capital generation. The expected investment returns assumed within earnings from existing business are consistent with the returns used under IFRS (as set out in notes A4 and A5 in the financial supplement), except in UK Life where a risk-free curve plus an allowance for expected real-world returns (less an adjustment for credit risk, where required) is applied.

An analysis of the components of OCG is presented below:

	6 months 2018 £bn	6 months 2017 £bn	Full year 2017 £bn
Adjusted Solvency II VNB (gross of tax and non-controlling interests)	**0.6**	0.6	1.2
Allowance for Solvency II contract boundary rules	**—**	—	—
Differences due to change in business in scope	**(0.1)**	(0.1)	(0.2)
Tax & Other[1]	**(0.1)**	(0.2)	(0.3)
Solvency II Own Funds impact of new business (net of tax and non-controlling interests)	**0.4**	0.3	0.7
Solvency II SCR impact of new business	**(0.5)**	(0.3)	(0.8)
Solvency II surplus impact of new business	**(0.1)**	—	(0.1)
Life earnings from existing business	**0.8**	0.7	1.6
Life Other OCG[2]	**0.2**	0.2	0.9
Life Solvency II OCG	**0.9**	0.9	2.4
GI, Health, FM & Other Solvency II OCG	**—**	0.2	0.2
Total Solvency II OCG	**0.9**	1.1	2.6

1 Other includes the impact of 'look through profits' in service companies (where not included in Solvency II) and the reduction in value when moving to a net of non-controlling interests basis.
2 Other OCG includes the effect of non-recurring capital actions, non-economic assumption changes and Group diversification benefit.

Operating expenses
The day-to-day expenses involved in running the business are classified as operating expenses. A reconciliation of operating expenses to the IFRS consolidated income statement is set out below:

	6 months 2018 £m	6 months 2017 £m	Full year 2017 £m
Other expenses (IFRS income statement)	**1,706**	1,669	3,537
Less: amortisation and impairment	**(311)**	(320)	(678)
Less: foreign exchange gains/(losses)	**7**	(39)	(49)
Other acquisition costs	**414**	431	892
Claims handling costs	**166**	163	330
Integration and restructuring costs	**—**	(52)	(141)
Less other costs[1]	**(53)**	(1)	(113)
Operating expenses	**1,929**	1,851	3,778

1 Other costs represent a reallocation based on management's assessment of ongoing maintenance of business units and includes movements in provisions set aside in respect of ongoing regulatory compliance (included in B14 – Pension deficits and other provisions)

Operating expenses exclude impairment of goodwill, associates and joint ventures; amortisation and impairment of other intangibles; amortisation and impairment of acquired value of in-force business; and the profit or loss on disposal and remeasurement of subsidiaries, joint ventures and associates. These items relate to merger and acquisition activity which we view as strategic in nature, hence they are excluded from the operating expenses APM as this is principally used to manage the performance of our operating segments.

Other acquisition costs and claims handling costs are included as these are considered to be controllable by the operating segments and directly impact their performance.

We have improved our quality of earnings by more strictly applying the criteria to determine whether integration and restructuring costs should be excluded from operating expenses. As these costs are not material in the period to 30 June 2018, they have been absorbed within operating expenses. However, it is possible that significant integration and restructuring activity undertaken in the future may result in the related costs being excluded from operating expenses.

Operating expense ratio
The operating expense ratio expresses operating expenses as a percentage of operating income.

Operating income is calculated as Group adjusted operating profit‡ before Group debt costs and operating expenses.

Operating earnings per share (EPS)
Operating EPS is calculated based on the Group adjusted operating profit attributable to ordinary shareholders net of tax, deducting non-controlling interests, preference dividends and the direct capital instrument (DCI) and tier 1 note coupons divided by the weighted average number of ordinary shares in issue, after deducting treasury shares. Operating EPS is used by management to determine the dividend payout ratio target and hence a useful APM for users of the financial statements.

Other information continued

Present value of new business premiums

The present value of new business premiums (PVNBP) is a financial measure of sales in the Group's life insurance businesses. PVNBP is derived from the present value of new regular premiums expected to be received over the term of the new contracts plus 100% of single premiums from new business written in the financial period and is expressed at the point of sale. The discounted value of regular premiums is calculated using the same methodology as for VNB. PVNBP also includes any changes to existing contracts which were not anticipated at the outset of the contract that generate additional shareholder risk and associated premium income of the nature of a new policy.

The table below presents a reconciliation of sales to IFRS net written premiums.

	6 months 2018 £m	6 months 2017 £m	2017 £m
Present value of new business premiums	**21,509**	20,025	40,795
Investment sales	**2,708**	4,208	7,888
General insurance and health net written premiums	**5,189**	5,224	10,035
Long-term health and collectives business	**(2,084)**	(2,851)	(5,213)
Total sales	**27,322**	26,606	53,505
Effect of capitalisation factor on regular premium long-term business[1]	**(6,401)**	(5,938)	(11,412)
JVs and associates[2]	**(160)**	(354)	(618)
Annualisation impact of regular premium long-term business[3]	**(129)**	(152)	(281)
Deposits[4]	**(5,355)**	(5,132)	(10,953)
Investment sales[5]	**(2,708)**	(4,208)	(7,888)
IFRS gross written premiums from existing long-term business[6]	**2,351**	2,516	4,765
Long-term insurance and savings business premiums ceded to reinsurers	**(836)**	(838)	(1,741)
Total IFRS net written premiums	**14,084**	12,500	25,377
Analysed as:			
Long-term insurance and savings net written premiums	**8,895**	7,276	15,342
General insurance and health net written premiums	**5,189**	5,224	10,035
	14,084	12,500	25,377

1 Discounted value of regular premiums expected to be received over the term of the new contract, adjusted for expected levels of persistency.
2 Total long-term new business sales include our share of sales from joint ventures and associates. Under IFRS, premiums from these sales are excluded.
3 The impact of annualisation is removed in order to reconcile the non-GAAP new business sales to IFRS premiums.
4 Under IFRS, only the margin earned from non-participating investment contracts is recognised in the IFRS income statement.
5 Investment sales included in total sales represent the cash inflows received from customers investing in mutual fund type products such as unit trusts and OEICs.
6 The non-GAAP measure of sales focuses on new business written in the period under review while the IFRS income statement includes premiums received from all business, both new and existing.

Return on capital employed (ROCE)

ROCE indicates the efficiency with which a company uses its assets to generate profits. Usually calculated as pre-tax profit divided by capital employed (total assets minus current liabilities) and expressed as a percentage.

Return on Equity (RoE)

The operating RoE calculation is based on Group adjusted operating profit after tax attributable to ordinary shareholders expressed as a percentage of weighted average ordinary shareholders' equity (excluding non-controlling interests, preference share capital and direct capital instrument and tier 1 notes) as shown in section 8.iii.

Solvency II

Available capital resources determined under Solvency II are referred to as 'own funds'. This includes the excess of assets over liabilities in the Solvency II balance sheet (calculated on best estimate, market consistent assumptions and net of transitional measures on technical provisions (TMTP), subordinated liabilities that qualify as capital under Solvency II, and off-balance sheet own funds.

The Solvency II regime requires insurers to hold own funds in excess of the Solvency Capital Requirement (SCR). The SCR is calculated at Group level using a risk-based capital model which is calibrated to reflect the cost of mitigating the risk of insolvency to a 99.5% confidence level over a one year time horizon – equivalent to a 1 in 200 year event – against financial and non-financial shocks. As a number of subsidiaries utilise the standard formula rather than a risk-based capital model to assess capital requirements, the overall Group SCR is calculated using a partial internal model, and it is shown after the impact of diversification benefit.

A reconciliation from total Group equity on an IFRS basis to Solvency II own funds is presented below.

	30 June 2018 £bn	30 June 2017 £bn	31 December 2017 £bn
Total Group equity on an IFRS basis	**18.3**	19.3	19.1
Elimination of goodwill and other intangible assets[1]	**(9.1)**	(10.1)	(9.8)
Liability valuation differences (net of transitional deductions)[2]	**21.5**	22.5	22.0
Inclusion of risk margin (net of transitional deductions)	**(3.0)**	(4.5)	(3.3)
Net deferred tax[3]	**(1.3)**	(1.5)	(1.3)
Revaluation of subordinated liabilities	**(0.7)**	(0.8)	(0.7)
Estimated Solvency II net assets (gross of non-controlling interests)	**25.7**	24.9	26.0
Difference between Solvency II net assets and own funds[4]	**(2.1)**	(1.2)	(1.3)
Estimated Solvency II own funds[5]	**23.6**	23.7	24.7

1 Includes £1.9 billion *(HY17: £2.0 billion, 2017: £1.9 billion)* of goodwill and £7.2 billion *(HY17: £8.1 billion, 2017 £7.9 billion)* of other intangible assets comprising acquired value of in-force business of £3.1 billion *(HY17: £3.6 billion, 2017: £3.3 billion)*, deferred acquisition costs (net of deferred income) of £2.9 billion *(HY17: £2.8 billion, 2017: £2.9 billion)* and other intangibles of £1.2 billion *(HY17: £1.7 billion, 2017: £1.7 billion)*.
2 Includes the adjustments required to reflect market consistent principles under Solvency II whereby non-insurance assets and liabilities are measured using market value and liabilities arising from insurance contracts are valued on a best estimate basis using market-implied assumptions.
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, the remaining share buy-back of £0.4 billion announced in May 2018 and non-controlling interests.
5 The estimated Solvency II position represents the shareholder view only.

A number of key performance metrics relating to Solvency II are utilised to measure and monitor the Group's performance and financial strength:

- Solvency II shareholder cover ratio‡
- Operating Capital Generation (OCG)#
- Value of new business on an adjusted Solvency II basis (VNB)‡

Definitions and additional evidence in respect of each of these metrics is included within this section.

Other information continued

Solvency II shareholder cover ratio‡

The estimated Solvency II shareholder cover ratio is an indicator of the Group's balance sheet strength which is derived from own funds divided by the SCR using a 'shareholder view'. The shareholder view is considered by management to be more representative of the shareholders' risk-exposure and the Group's ability to cover the SCR with eligible own funds, and aligns with management's approach to dynamically manage its capital position. In arriving at the shareholder position, the following adjustments are made to the Solvency II regulatory position:

- The contribution to the Group's SCR and own funds of fully ring fenced with-profits funds and staff pension schemes in surplus are excluded. These exclusions have no impact on Solvency II surplus as these funds are self-supporting on a Solvency II capital basis with any surplus capital above SCR not recognised.
- The Solvency II position disclosed includes a reset of the TMTP. In periods when the TMTP has not been formally reset, then the TMTP is notionally reset, using the same method as used for formal TMTP resets. This presentation avoids step changes to the Solvency II position that arise only when the formal TMTP reset points are triggered.
- The estimated Solvency II shareholder cover ratio is shown inclusive of pro forma adjustments to align it with the capital information presented to management internally. Pro forma adjustments are made when, in the opinion of the Directors, the cover ratio does not fully reflect the effect of transactions or capital actions that are known as at each reporting date. Such adjustments may be required in respect of planned acquisitions and disposals, Group reorganisations and proposed adjustments to the Solvency II valuation basis arising from changes to the underlying regulations.

A summary of the Group's Solvency II position and movement in the Group surplus during the period is shown in section 8.i.

Spread margin

The spread margin represents the return made on the Group's annuity and other non-linked business, based on the expected investment return, less amounts credited to policyholders. While not a key performance metric of the Group, the spread margin is a useful indicator of the expected investment return arising on this business.

Underwriting margin

The underwriting margin represents the release of reserves held to cover claims, surrenders and administrative expenses less the cost of actual claims and surrenders in the period. While not a key performance metric of the Group, the underwriting margin is a useful measure of the financial performance of our Life insurance business when considered alongside other financial metrics.

Unit-linked margin

The unit-linked margin represents the annual management charges on unit-linked business based on expected investment return. While not a key performance metric of the Group, the unit-linked margin is a useful indicator of the expected investment return arising on this business.

Value of new business on an adjusted Solvency II basis (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, including the impact of interactions between in-force and new business, adjusted to:

i) remove the impact of the contract boundary restrictions under Solvency II;
ii) allow for businesses which are not within the scope of the Solvency II own funds (e.g. UK and Asia Healthcare business, retail fund management business and UK equity release business); and
iii) include the impacts of tax and 'look through profits' in service companies (where not included in Solvency II) and deduct the impacts of non-controlling interests.

These adjustments are considered to reflect a more realistic basis than the prudential Solvency II rules. The VNB is derived from the present value of projected pre-tax distributable profits generated by new business plus a risk margin.

Operating assumptions

The operating assumptions used are derived from an analysis of recent operating experience to give a best estimate of future experience. When these assumptions are updated, the year-to-date VNB will capture the impact of the assumption change on all business sold that year.

Economic assumptions

The VNB is calculated using economic assumptions as 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 repriced more frequently, weekly or monthly economic assumptions have been used. Dealing with each of the principal economic assumptions in turn:

- The risk-free interest rate curves used to calculate VNB reflect the basic risk-free interest rate curves (including the credit risk adjustment) published by EIOPA on their website.
- The volatility adjustment is intended to reflect temporary distortions in spreads on government bonds based on rates prescribed by EIOPA.
- The matching adjustment (MA) is an increase applied to the risk-free rate used to value insurance liabilities where the cash flows are relatively fixed and well matched by assets intended to be held to maturity with relatively fixed cash flows (resulting in additional yield from illiquidity risk).

Matching adjustment (MA)

A MA is applied to certain obligations based on the expected allocation of assets backing new business at each year-end date. This allocation may be different to the MA applied at the portfolio level. Aviva applies a MA to certain obligations in UK Life, using methodology which is set out in the SFCR.

The matching adjustment used for UK new business (where applicable) was 95 bps as at HY18 *(HY17: 123 bps, 2017: 116 bps)*.

Shareholder services

2018 financial year calendar

2018 interim dividend ex-dividend date	16 August 2018
2018 interim dividend record date	17 August 2018
Last day for Dividend Reinvestment Plan and currency election for 2018 interim dividend	3 September 2018
Payment date[1]	24 September 2018
Full year results announcement[2]	7 March 2019

1 Please note that the ADR dividend payment date will be 28 September 2018
2 This date is provisional and subject to change

Dividend payment options

Shareholders are able to receive their dividends in the following ways:

- Directly into a nominated UK bank account
- Directly into a nominated Eurozone bank account
- The Global Payment Service provided by our Registrar, Computershare Investor Services PLC (Computershare). This enables shareholders living outside of the Single Euro Payment Area (SEPA) to elect to receive their dividends or interest payments in a choice of over 60 international currencies
- The Dividend Reinvestment Plan enables eligible shareholders to reinvest their dividends in additional Aviva ordinary shares

You can find further details regarding these payment options at www.aviva.com/dividends and register your choice by contacting Computershare using the contact details opposite, online at www.aviva.com/online or by returning a dividend mandate form. You must register for one of these payment options to receive dividend payments from Aviva.

Manage your shareholding online

www.aviva.com/shareholders:
General information for shareholders

www.aviva.com/online:
You can access Computershare online services directly using your Computershare details to:

- Change your address
- Change your payment options
- Switch to electronic communications
- View your shareholding
- View any outstanding payments

www.aviva.co.uk/myaviva:
If you've already registered for MyAviva you'll be able to view useful shareholder information. You can also check the details of Aviva policies you may have. Our online portal brings all this information together into one safe and secure place at a time that suits you. Just log in as normal using your email address via www.aviva.co.uk/myaviva.

MyAviva also includes a link to the Investor Centre, where you can log in and manage your shareholding as outlined above.

Annual General Meeting (AGM)

The voting results for the 2018 AGM, including proxy votes and votes withheld, can be viewed on our website at www.aviva.com/agm. There, you'll also find a webcast of the formal business of the meeting and information relating to past general meetings.

Shareholder contacts:

Ordinary and preference shares – Contact:
For any queries regarding your shareholding, please contact Computershare:

- **By telephone:** 0371 495 0105
  We're open Monday to Friday, 8.30am to 5.30pm UK time, 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) – Contact:
For any queries regarding Aviva ADRs, please contact Citibank Shareholder Services (Citibank):

- **By telephone:** 1 877 248 4237 (1 877-CITI-ADR),
  We're open Monday to Friday, 8.30am to 5.30pm US Eastern Standard Time, excluding public holidays. Please call +1 781 575 4555 if you are calling from outside the US.
- **By email:** citibank@shareholders-online.com
- **In writing:** Citibank Shareholder Services, PO Box 43077, Providence, Rhode Island 02940-3077 USA

Group company secretary
Shareholders may contact the Group Company Secretary:

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- **In writing:** Kirstine Cooper, Group Company Secretary, St Helen's, 1 Undershaft, London EC3P 3DQ
- **By telephone:** +44 (0)20 7283 2000