

Aviva plc

Annual report and accounts 2017

Foreword

This report differs from the format of previous publications. As we become more digitally focussed we have launched our new www.aviva.com website in Q4 2017. This enables us to give you news and insights into Aviva regularly throughout the year. We have therefore chosen to produce a simpler, more streamlined report for 2017 in line with our values of 'Never Rest' and 'Kill Complexity'. The updated report will also ensure we are ready for guidelines relating to the Financial Reporting Council's Digital Reporting and ESMA European Single Electronic Format.

The enhanced content on www.aviva.com supplements the regulatory disclosures within this report.

The Strategic report on pages 1 to 32, contains information about us, how we create value and how we run our business. It includes our strategy, business model, market outlook and key performance indicators, as well as our approach to sustainability and risk.

The Strategic report is only part of the Annual report and accounts 2017. The Strategic report was approved by the Board on 7 March 2018 and signed on its behalf by Mark Wilson, Chief Executive Officer.

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As a reminder

Reporting currency:

We use £ sterling.

Unless otherwise stated, all figures referenced in this report relate to Group.

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

The Company's registered office is St Helen's, 1 Undershaft, London, EC3P 3DQ

The Company's telephone number is +44 (0)20 7283 2000

[Chairman's statement](#)

Chairman's statement

Businesses need to know why they exist. All businesses need to generate value for their shareholders, of course, but some also have a clear social purpose. Aviva is one of those. Simply put we are here to help our customers Defy Uncertainty.

To ensure we can fulfil our purpose, both today and for the years to come, we depend on getting the fundamentals right. This means having a robust financial position, a clear strategy executed well, and strong values that inform all our decision making as part of a healthy corporate culture.

I am pleased this year's report demonstrates that the fundamentals are in good shape. These results come amidst unprecedented political, economic and technological changes that have an effect on all aspects of our society. Nevertheless, we remain focussed on delivering for our customers, so that they can navigate these uncertain times.

Our culture

I am pleased to report that our overall people engagement score in 2017 has increased to 75%. In 2017 the Board spent a lot of time developing metrics to assess the Company's culture and its ability to accelerate growth, and our focus on delayering, simplifying processes, and increasing the speed of execution all show signs of improvement. These measurements are used as part of a broad dashboard of metrics, providing the Board with a holistic view of the culture in our business and a view on the progress made. You can read more on our culture in the 'Our People' section of this report.

Our community

I am particularly proud of our commitment to act sustainably and responsibly as part of the wider community where we live and work. In 2017, the Aviva Community Fund supported over 800 inspirational projects from Canada to Poland. Our partnership with the British Red Cross has also seen Aviva provide support for those affected by the Manchester and London terrorist attacks and the tragic Grenfell Tower fire in London.

Climate change poses serious risks to our customers and in turn our business. In October 2017 we were awarded the United Nations Momentum for Change award in recognition of a decade of work in reducing the environmental impact of our business and helping inspire action on climate change. More information can be found in the 'Corporate Responsibility' sections of this report.

Our markets

In line with our strategy to focus on those markets and businesses that have the strongest returns and best prospects for growth, we have now finished the process of simplifying the Group.

This means we have focussed our business on eight major markets of the UK, Ireland, France, Poland, Italy, Canada, Singapore and Aviva Investors. We believe that here we are best placed to compete on the strength of our scale, brand and distribution. The Group adjusted operating profit from these markets (excluding divestitures and businesses held for sale) increased by 6%.

In addition, we also have six strategic investments, in China, Hong Kong, Indonesia, Vietnam, Turkey and India. These are markets with enormous potential for us and they represent the prospect of higher long-term growth in the future.

2017 challenges

Of course, the year has not been without its challenges. There is still market uncertainty and volatility to navigate. Although Brexit does not have a significant operational or financial impact on our business there is still a long way to go before the full implications become clear. In addition, performance across the Group has not been as universally strong as we would wish, notably in Canada due to a change in the trend of prior year reserve releases from favourable to unfavourable and increased claims frequency.

We have enjoyed three years of sustained high levels of customer advocacy, but this year's scores have marked a decline. We are working hard to boost customer's loyalty by making things simpler and putting them in control, for example with the launch of our simplified home insurance proposition. The industry is also facing risks around cyber crime and changes in public policy. You can read about these risk factors in the 'Risk and risk management' section of this report.

Our performance

We have grown Group adjusted operating profit¹ and cash remittances² and further strengthened our Solvency II capital position. The benefit from foreign exchange movements is offset by the sale of businesses in Europe. Excluding disposals profit has improved for the ongoing businesses despite experiencing significantly lower prior year reserves releases in general insurance. Profit before tax attributable to shareholders' profit increased to £2,003 million (2016: £1,193 million) reflecting higher Group adjusted operating profit¹, lower integration and restructuring costs and the impact of the Ogden discount rate change in 2016.

Dividend

The Board proposes a final dividend of 19.00 pence per share (2016: 15.88 pence per share) which corresponds to a 50% dividend payout ratio. In line with improved earnings quality and cash flows, in November 2017 we announced we would increase our dividend payout ratio target to a range of 55-60% of operating EPS³ by 2020.

Looking forward

2018 is the year where we will accelerate our plans for growth. At our Capital Markets Day in November 2017 we announced our intention to pay down debt in 2018, while continuing to invest in our future growth.

As disclosed in our 2016 Annual report, the Lord Chancellor announced the decision to lower the Ogden discount rate to -0.75%, from the previous level of 2.5% and we await the final outcome of the Ministry of Justice review. We will continue to monitor developments on this during 2018.

This year's performance is testament to the hard work and dedication of our nearly 30,000 people around the world. I have no doubt there will be more change in the year to come but I am equally confident in the skills and commitment of my colleagues to adapt and deliver for our customers and our shareholders, whatever 2018 has in store.

Sir Adrian Montague

Chairman

7 March 2018

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 2. This is an Alternative Performance Measure (APM) which provides useful information to enhance the understanding of financial performance. Further information on APM's, including a reconciliation to the financial statements (where possible), can be found in the 'Other Information' section of the Annual report and accounts.
 3. This measure is derived from the Group adjusted operating profit APM. Further details of this measure are included in the 'Other information' section.

Group Chief Executive Officer's Review

Overview

In 2017, Aviva delivered growth: in profits, in dividends, in capital and in cash.

Our headline results show broad-based growth. Operating earnings per share (EPS)^{1,2} gained 7% to 54.8 pence (2016: 51.1 pence), operating capital generation¹ remained strong at £2.6 billion (2016: £3.5 billion), Solvency II capital surplus^{1,4} rose to £12.2 billion (2016: £11.3 billion) and business unit cash remittances¹ increased 33% to £2.4 billion (2016: £1.8 billion).

Group adjusted operating profit³ increased 2% to £3,068 million (2016: £3,010 million). Excluding the impact of divestments, our eight major markets delivered a 6% increase in Group adjusted operating profit³, with double-digit growth contributed by the UK, Aviva Investors, France, Poland, Ireland and Singapore. Group adjusted operating profits³ also benefitted from a net positive impact from assumption changes in the UK. However, Canada reported a disappointing result reflecting adverse changes in prior year reserve development and higher current year claims inflation. We have implemented a detailed recovery plan in Canada, raising premium rates and taking actions on underwriting, claims, distribution and expense management.

In light of our results, we have increased our total dividend 18% to 27.4 pence (2016: 23.3 pence). This marks the fourth consecutive year of double-digit growth in the total dividend and we have reached our target of paying out 50% of operating EPS^{1,2}.

Having successfully executed our plan to strengthen the balance sheet and focus Aviva on those businesses with the strongest fundamentals, we have increased our growth ambitions. Our 2017 results provide evidence that we are capable of delivering consistent growth in operating EPS^{1,2} and dividends.

Capital allocation

A key element of Aviva's strategy is allocating capital towards businesses and segments with the strongest returns and growth prospects. We made further progress on this strategic objective in 2017, announcing divestments that will result in our withdrawal from Spain, Taiwan and Friends Provident International.

We have significantly simplified and focussed our geographic footprint over recent years, halving the number of markets in which we have operations. This process is now complete and we are no longer actively seeking to reduce our geographic footprint. As a result, Aviva's core business is now comprised of eight major markets and six strategic investments.

Our major markets are the UK, France, Canada, Poland, Ireland, Italy, Singapore and Aviva Investors. These markets have structural drivers of demand underpinned by economic growth, demographics and regulation. Within these markets, Aviva has competitive strength in distribution, brand, capability and scale efficiency that allows us to deliver consistent growth and attractive returns. The major markets are currently responsible for virtually all of Aviva's Group adjusted operating profit³ and cash remittances¹.

Our strategic investments are businesses where we are targeting long-term growth by working with leading local partners in populous countries with strong growth characteristics. Our strategic investment markets are China, Hong Kong, India, Turkey, Vietnam and Indonesia. While in aggregate these businesses make a modest contribution to Aviva's financial performance today, they are sources of long-term upside for Group adjusted operating profit³, cash-flow and value.

Aviva's capital strength provides us with significant flexibility in terms of future capital allocation. Our Solvency II capital surplus^{1,4} of £12.2 billion equates to a Solvency II cover ratio^{1,4} of 198%, well above our 150% to 180% working range. As a result, we have signalled plans to deploy £3 billion of excess cash in 2018 and 2019.

Our priorities for deployment remain unchanged. Our objective is to use surplus cash to deliver sustainable benefits to our long-term shareholders. For 2018, we have outlined our intent to repay approximately £900 million of expensive hybrid debt, saving more than £60 million in annual pre-tax interest expense. We have allocated approximately £600 million for bolt-on M&A, which includes the €130 million already committed to the Friends First acquisition in Ireland. And we have indicated that in excess of £500 million will be used for capital returns, which may include liability management, share buy-back or special dividends.

Meeting our customers' needs

Aviva has made significant, tangible progress in delivering our True Customer Composite strategy in 2017.

In the UK, Aviva is unique as the only large-scale composite insurer with top three positions across multiple product lines. In 2017, we moved to a unified management structure for our life, general and health insurance businesses under the leadership of Andy Briggs. This change has helped us to increase the collaboration between different product teams and improve our focus on the customer. The strength of our franchises is evident, with large mandate wins driving higher new business volumes across our major product segments. We saw continued success in our partnership channels, expanding our leading position in the bank market and delivering a significant uplift in net flows into our advisor platform. Meanwhile, we made further strong progress in our direct to consumer business, growing net written premiums by 14% and we increased the number of customers in the UK who have more than one product with Aviva by approximately 300,000.

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² This measure is derived from the Group adjusted operating profit APM. Further details of this measure are included in the 'Other information' section.

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⁴ The estimated Solvency II position represents the shareholder view. This excludes the contribution to Group Solvency Capital Requirement (SCR) and Group Own Funds of fully ring fenced with-profits funds of £3.3 billion (2016: £2.9 billion) and staff pension schemes in surplus of £1.5 billion (2016: £1.1 billion). These exclusions have no impact on Solvency II surplus. The estimated Solvency II position includes the pro forma impacts of the disposals of Friends Provident International Limited (£0.1 billion increase to surplus) and the Italian Avipop Assicurazioni S.p.A (£0.1 billion increase to surplus). The 31 December 2016 Solvency II position included pro forma adjustments for the impact of the announced disposal of Antarius and the future impact of changes to UK tax rules announced by the Chancellor of the Exchequer's Autumn statement, which was removed following clarification in the 13 July 2017 Finance Bill. The 31 December 2016 Solvency II position also includes an adverse impact of a notional reset of the transitional provisions (TMTP) to reflect interest rates at 31 December 2016 £0.4 billion decrease to surplus.

Our strength in distribution and manufacturing is also helping to strengthen our composite position in markets outside the UK. In France, our new leadership team intends to align our high quality distribution franchises under a single Aviva brand to deepen customer relationships. In Ireland, we have maintained positive momentum in both sales volume and Group adjusted operating profit³ in 2017 and the acquisition of Friends First will move our market share to mid-teens across both life and general insurance.

Italy has expanded IFA distribution and developed innovative hybrid products, which helped to underpin a doubling of value of new business and strong net fund flows. Singapore is drawing on our digital and distribution expertise to develop the Aviva Financial Advisors network, which has grown to more than 670 advisors.

Digital

Aviva is playing a leading role in the digital revolution of insurance and our intellectual property (IP) has had a significant impact on our business in the past 12 months. Our UK digital and direct business passed the £1 billion premium mark in 2017, delivering growth of 14%. Our digital IP played a pivotal role in helping us to secure long-term relationships with HSBC in the UK and Tencent in Hong Kong.

In 2017, we established Aviva Quantum, our artificial intelligence and global data science group, which now has 550 data scientists. This group has developed our Ask it Never IP, which allows us to reduce the number of questions we ask customers during the underwriting process, significantly improving their quote and buy experience. We are using this IP to develop a new generation of insurance products, called Aviva Plus. This proposition takes the subscription model and applies it to insurance and is expected to be progressively rolled out to our existing UK customers.

In the next few years, we will continue to invest heavily to grow revenue and fully digitise our business. Through this, we are targeting improvements in efficiency and customer experience that we expect to lead to higher sales, better retention, expanding margins and in turn growing profit over the medium to long term.

Outlook

The streamlining of our geographic perimeter is complete and the strength of our franchises is beginning to shine through. As a result, we have upgraded and bought forward our growth ambitions, and are now targeting greater than 5% growth in operating EPS^{1,2} from 2018. Together with our targets of £8 billion of cumulative remittances in 2016-2018 inclusive and increase in dividend payout ratio to 55-60% by 2020, we remain confident that we can continue to deliver cash flow plus growth for our shareholders.

Mark Wilson

Group Chief Executive Officer
7 March 2018

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² This measure is derived from the Group adjusted operating profit APM. Further details of this measure are included in the 'Other information' section.

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Delivering on a clear plan of action

	Financial	Strategic	Cultural
What we achieved	<p>For our key metrics, we have:</p> <ul style="list-style-type: none"> Increased Group adjusted operating profit¹ by 2% to £3,068 million (2016: £3,010 million) Operating earnings per share (EPS)³ increased by 7% to 54.8p (2016: 51.1p) Profit before tax attributable to shareholders' profit increased by 68% to £2,003 million (2016: £1,193 million) and basic EPS increased by 19.7p to 35.0p (2016: 15.3p) Increased cash remittances² to Group by 33% to £2,398 million (2016: £1,805 million) Increased total dividend per share by 18% to 27.40p (2016: 23.30p) delivering four consecutive years of double digit growth Delivered a strong Solvency II capital position with an estimated shareholder Solvency II cover ratio² of 198% (2016: 189%) up 9pp. This includes operating capital generation² surplus movement in the year of £2.6 billion Reported total assets under management² of £490 billion – an increase of £40 billion on last year 	<p>For our customers, we have:</p> <ul style="list-style-type: none"> In October, we launched an effortless home claims trial in the UK, settling home insurance claims by asking just three questions Launched 'The Ideas Hub' where new initiatives are trialled with customers using social media Delivered solutions to help customers 'feel safe again in their homes', for example offering a leak detector, camera or smart battery for customers who have made flood, theft or fire claims Partnered with Neos, inventor of a connected home service, which detects leaks, smoke and intruders and alert you instantly by app Launched the Aviva Wellbeing app to track and improve their overall health and wellbeing <p>In Digital, we have:</p> <ul style="list-style-type: none"> Expanded the reach of MyAviva to include corporate customers and IFAs. It is now available in the UK, Singapore, France, Poland and Canada Invested in Wealthify, a robo investment platform, in October 2017 Launched Aviva Quantum with a 500-strong team of data scientists <p>Not Everywhere:</p> <ul style="list-style-type: none"> During the year we announced the sale of Friends Provident International We also announced the sale of Spanish joint ventures Unicorn Vida, Caja España Vida and Aviva Vida y Pensiones In Taiwan we sold our joint venture, exiting the market 	<p>For our people, we have:</p> <ul style="list-style-type: none"> Continued to build a culture and environment which attracts and retains people with the right capabilities for the future Employee engagement is at 75% with 85% of colleagues seeing how their team's work aligns to Aviva's strategy Introduced CATS (Culture Action Team) globally with over 2,000 members committed to driving change to embed Aviva's values Delivered our Leadership Accelerator programme to 290 of our senior leaders Launched Equal Parental Leave to help build an inclusive workforce <p>For society, we have:</p> <ul style="list-style-type: none"> Supported 2,400 community projects, helping 792,000 people Spearheaded the establishment of the World Benchmarking Alliance and public, transparent and authoritative league tables of companies' contribution to the UN Sustainable Development Goals Awarded the UN Momentum for Change award in recognition of a decade of work reducing the environmental impact of our business and inspiring action on climate change Withdrawn our investment from tobacco manufacturing companies Invested £527.5 million in lower carbon infrastructure as part of our strategic response to climate change
What we plan to do	<ul style="list-style-type: none"> Target higher than 5% increase in operating EPS³ from 2018 onwards Aim to deliver £8 billion of cash remittances² between 2016-2018 inclusive Focus on achieving a 55-60% dividend pay out ratio by 2020 Target a Solvency II cover ratio² working range of between 150%-180% 	<ul style="list-style-type: none"> Build and deepen engagement with our customers on MyAviva Disrupt in digital to do more for our customers Continue to campaign for what's important to our customers Continue to reallocate capital to focus on what we do best and drive higher returns 	<ul style="list-style-type: none"> Continue to develop our leaders across Aviva through greater innovation, agility and accountability Build a culture where we consider our customers in every decision Develop an inclusive workforce that reflects the diversity of our customers Increase the impact of the Aviva Community Fund across the world Build on the success of our existing customer propositions, developing products and services that help our customers Defy Uncertainty in an increasingly sustainable way

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3. This measure is derived from the Group adjusted operating profit APM. Further details of this measure are included in the 'Other Information' section.

[Key performance indicators](#)

Key performance indicators

We use a range of financial and non-financial metrics to measure our performance, financial strength, customer advocacy, employee engagement and impact on society. These include Alternative Performance Measures (APMs) which are non-GAAP measures that are not bound by the requirements of IFRS. These metrics are reviewed annually and updated as appropriate to ensure they remain an effective measure of delivery against our objectives. For 2017, the review of these metrics resulted in the following changes:

- Digital convenience for our customers has been amended to 'Active registrations' instead of 'Registrations'. This change ensures we measure users who are actively engaging with MyAviva and other digital platforms every year.
- Following the introduction of Solvency II, the new prudential regulatory framework that came into force on 1 January 2016, we calculate Value of New Business (VNB) on an adjusted Solvency II basis rather than on an MCEV basis.
- As a result of feedback from the Financial Reporting Council's regular review and assessment of the quality of corporate reporting in the UK, we have relabelled 'Operating Profit' to 'Group Adjusted Operating Profit'.
- We have included profit before tax attributable to shareholders' profit (PBT). While not a metric that is used to measure the Group's ongoing financial performance, it is important to assess it alongside Group adjusted operating profit when evaluating our overall result.
- The estimated shareholder cover ratio is now shown inclusive of pro forma adjustments required to reflect the effect of planned acquisitions and disposals consistent with the metric used internally.

Further guidance in respect of the APMs used by the Group to measure our performance and financial strength is included within the 'Other Information' section of the Annual report and accounts. This guidance includes definitions and, where possible, reconciliations to relevant line items or sub-totals in the financial statements. The financial commentary included in this Strategic report should be read in conjunction with this guidance.

Customer Net Promoter Score® (NPS®) R

NPS® is our measure of customer advocacy and we use it to measure the likelihood of a customer recommending Aviva in ten of our markets¹. Our relationship NPS® survey shows three years of sustained high levels of customer advocacy, but this year's scores have marked a decline. We are working hard to boost customers' loyalty by making things simple for customers and putting them in control, for example with the launch of our simplified home insurance proposition.

Number of markets in 2017:

at or above market average: **7**
2016: 9 2015: 8

below market average: **3**
2016: 1 2015: 2

Engagement R

We give our people the freedom to act in line with our values to create an environment in which they can thrive through collaboration and recognition. We measure this through our annual global 'Voice of Aviva' survey. Engagement is up one percentage point to 75% and is now consistent across the world after significant improvements for France and Singapore, and a solid four percentage point increase for UK Customer teams. Trust in the Group Executive is now at a historic high and 85% of colleagues see how their team's work aligns to Aviva's strategy.

2017:

75%

2016: 74%
2015: 70%

Carbon emissions reduction

Since 2010 we have reduced carbon emissions (CO₂e) from our day-to-day operations by 53% beating our 2020 target of a 50% reduction earlier than planned. We are a carbon neutral company, offsetting the remaining emissions through projects that have benefitted the lives of over one million people since 2012. In 2017 we were awarded the UN Momentum for Change award in recognition of a decade of work reducing the environmental impact of our business and helping inspire action on climate change. CO₂e data includes emissions from our buildings, business travel, water and waste to landfill.

2017:

53%

Reduction since 2010

2016: 46%
2015: 39%

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

¹ All comparators have been rebased as we have reduced the number of markets covered in the survey from 12 to 10 markets as we have combined our UK operations in line with our True Customer Composite strategy and no longer report on Spain.

My Aviva active registrations R

We continue to make progress with our digital transformation and MyAviva remains at its heart. Active registrations are the number of global users of MyAviva and other digital platforms, including customers and guests, who have registered or logged-in at least once during the previous 365 days. Active registrations have increased by 44% to 7.5 million. We will continue to monitor the progress we are making to engage with our customers through digital.

**2017:
7.5 million**

2016: 5.2 million
2015: n/a

Group adjusted operating profit¹ R

Group adjusted operating profit¹ increased by 2% to £3,068 million with the impact of foreign exchange and disposals largely offsetting. The impact of life assumption and modelling changes were higher in 2017 than in 2016, however, this was offset by a decrease in prior year reserve releases in our General Insurance business.

**2017:
£3,068 million**

2016: £3,010 million
2015: £2,688 million

Profit before tax attributable to shareholders' profit (PBT)

In 2016, PBT was heavily impacted by the Odgen discount rate change of £475 million. After adjusting for this one-off change the PBT has increased in line with increased Group adjusted operating profit, which also reflects reduced integration and restructuring costs and gains arising on the disposal of businesses.

**2017:
£2,003 million**

2016: £1,193 million
2015: £1,413 million

Cash remittances² R

Sustainable cash remittances² from our businesses are a key financial priority. Remittances from business units increased 33% to £2,398 million. This was primarily driven by the UK businesses which include an additional £500 million of Friends Life integration remittance (2016: £250 million) and increased remittances from the UK General Insurance business.

**2017:
£2,398 million**

2016: £1,805 million
2015: £1,507 million

Estimated shareholder Solvency II cover ratio²

We continue to maintain our strong financial position. The estimated shareholder Solvency II cover ratio² excludes the contribution from fully ring fenced with-profits funds (£3.3 billion) and staff pension schemes in surplus (£1.5 billion). The impact of the announced sales of FPI and the Italian joint venture Avipop Assicurazioni S.p.A have also been reflected in the estimated Solvency II position as pro forma adjustments. During the period the coverage ratio has strengthened from 189% to 198% primarily due to the positive impact of disposals and Operating Capital Generation (OCG)², a key remuneration metric for the Group, offset by the payment of dividends, share buy-back and redemption of hybrid debt.

**2017:
198%**

2016: 189%
2015: 180%

Solvency II value of new business²

Solvency II Value of New Business (SII VNB)² measures growth and is the source of future cash flows in our life businesses. SII VNB increased by 25% to £1,243 million and includes a £96 million benefit following a clarification to the Solvency II rules on the calculation of transitional measures made by the Prudential Regulation Authority. Excluding this benefit, SII VNB² has increased by 15% reflecting strong double digit growth in all segments and continued discipline on product mix and pricing across our markets.

**2017:
£1,243 million**

2016: £992 million
2015: n/a

Combined operating ratio²

The combined operating ratio (COR)² is a measure of general insurance profitability. The lower the COR is below 100%, the more profitable we are. Excluding the prior year impact of the Odgen discount rate change in the UK, COR deteriorated by 2.4 percentage points on 2016. This was driven by an increase in the claims ratio reflecting lower prior year reserve releases and an increase in claims severity and frequency in Canada. Outside Canada, there has been positive progress, with continued improvement in the underwriting result in the UK and Europe.

**2017:
96.6%**

2016: 100.1% (including Odgen)
2016: 94.2% (excluding Odgen)
2015: 95.0%

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

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Read about where the world is going at www.aviva.com/about-us

[The horizon: where the world is going](#)

The horizon: where the world is going

Our strategic framework responds to and anticipates the nine long-term trends which will impact our industry over the next few years. We acknowledge the risks they present and aim to turn these trends into opportunities for future growth.

My life, my way

Customers will continue to want to be much more in control, expecting self-service and simpler, faster access to products and services.

Expected increase in UK mobile transactions 2017 to 2022

121%

Source: CACI, June 2017

Winning through data & analytics

Those who interpret data quickly and intuitively to inform the development of products and services that provide real value for customers will lead the way.

Insurance customers willing to receive computer-generated advice about the type of insurance coverage to purchase

74%

Source: Accenture June 2017

The power of communities

Government influence is reducing as the role of 'communities' of mutual interests and connected networks, both virtual and local, increases.

Daily active Facebook users on average

1.4 billion

Source: facebook.com, stats, December 2017

Ever-changing planet

Changing climate and extreme weather events will have a significant impact on both society and business.

Economic loss in US dollars caused by global natural disasters in 2018

\$330 billion

Source: Munich Re, catastrophe losses, January 2018

Shifting wealth

Developing markets will have a much larger share of the world's savings and assets pool.

Estimated Global Insurance premium share of growth from emerging economies by 2025

47%

Source: Munich Re, April 2017

Older and healthier

People will live longer and be healthier. Markets will be driven increasingly by attitudes and needs as family structures evolve.

Increase in UK's average life expectancy at birth between 2010 and 2030

3 years

Source: Imperial College, London, February 2017

The age of disruption

New agile competitors will act faster to disrupt established businesses with customers embracing fintech providers.

Customers conducting business with at least one non-traditional firm

50.2%

Source: Cap Gemini world Fintech report 2017

New threats in a connected world

The proliferation of connected devices and the dominant role of social networks in modern life is raising the threat from cyber attacks and infringements to privacy.

Estimated global cost of Cybersecurity breaches by 2021

\$6 trillion

Source EY Global Information Security Survey 2017-2018

Blurring of sector boundaries

The clear boundaries between sectors no longer exist, from technology players offering banking services to telecom providers creating media content.

Payment volumes in China processed by non-bank institutions

54%

Source Global Financial Development Report 2017/2018

Read about where the world is going at www.aviva.com/about-us

Business model

Aviva exists to help our 33 million customers Defy Uncertainty. We give our customers the confidence and control to be ready for life's opportunities and challenges.

We have a distinctive approach. It defines and differentiates us. It helps us meet our customers' needs ...

Values

Our values are at the heart of how we do business. They are how we must operate:

- Care More
- Kill Complexity
- Never Rest
- Create Legacy

Strengths

We have unique strengths as a business that gives us a significant competitive advantage:

- Brand strength
- Financial strength
- Customer understanding
- Multi-distribution
- Multi-product

Skills

We have a great range and blend of skills:

- Digital innovation
- Data science
- Customer experience
- Underwriting
- Risk management
- Claims management
- Asset & liability management
- Capital allocation

Strategy

Our strategic framework focuses on the things that really matter and puts the customer at the heart of what we do:

- True Customer Composite
- Digital First
- Not Everywhere

... through our products, services and markets ...

Life insurance

Retirement income, savings and pensions

General insurance

Home, motor, travel, commercial and pet

Health and protection

Private medical life, critical illness, income protection

Asset management

Investing for external clients and investing for Aviva

... where premiums and cash are reinvested ...

Customers pay insurance premiums which we use to pay claims. Our scale enables us to pool the risks. We maintain capital strength so we can be there for our customers in the future

Customers invest their savings with us. We manage these investments to provide them with an income for a more secure future.

We also invest the insurance premiums we receive to generate income to meet our obligations to customers and to generate value for shareholders.

Making sure that customers stay with us for the long term is important to the future success of our business.

... creating sustainable value for ...

Customers benefit from a range of products to meet their needs, with easy access when and how they want it.

We create value for **shareholders** by using our profits to reinvest and grow the business and pay out dividends.

Our aim is for our **people** to achieve their potential within a diverse, collaborative and customer-focussed organisation.

We play a significant role in our **communities**, including as a major employer and a long-term responsible investor.

£34.6 billion

Paid out in benefits and claims to our customers in 2017

27.40 pence

Total dividend up 18%

75%

Increased our employee engagement score by one percentage point

2,400

Community projects supported in 2017.

Read about our business at www.aviva.com/about-us/our-businesses

Our strategy

Our strategy focuses on the things that really matter, puts the customer at the heart of everything we do and provides clear direction across all our markets for how we run our business. We have classified these in three key areas:

- True Customer Composite
- Digital First
- Not Everywhere

True Customer Composite

We are a True Customer Composite, giving customers the confidence and control to be ready for life's opportunities and challenges.

We can protect what's important to customers through life, general and health insurance and help customers save for the future through life and pension products underpinned by our asset management capability. We are the only composite insurer of scale in the UK.

Why it's important

Customers have a wide range of insurance, protection and savings needs, and can find it challenging to manage them all. They find themselves with multiple products from different providers. This is not what they tell us they want: what they want is a simple way to meet their insurance and savings needs. True Customer Composite means meeting all these needs individually or in tailored combinations in a convenient, easy to understand and timely manner.

True Customer Composite also means valuing and rewarding customers for making the choice to have a deeper, more loyal relationship with us.

For Aviva, this means increased customer engagement and retention, and driving towards more cost effective operations. While our overall global Net Promotor Score® (NPS®) has shown an unwelcome decline, there have been positive improvements in some areas. Customers with more than one Aviva product are far more likely to advocate the brand: multi-product customers have a NPS® of +47pts versus customers with one product.

In a digital world, being a True Customer Composite provides a tangible competitive advantage. Digital allows us to introduce our customers to our composite range of products and offerings in a more effective manner than traditional channels.

In the past, although the financial benefits of our composite model were clear (such as lower capital requirements through diversifying our risk), few customers held more than one Aviva product because our business was distributed almost solely through intermediaries.

How we've progressed

Expanding our range

We are continuing to expand our range of customer propositions to be a True Customer Composite across our geographies, and making it easier and more rewarding for customers to manage multiple products with Aviva through digital.

We have made progress in the strategic partnership market, in particular with expanding the number of insurance products we provide to existing clients, such as HSBC.

Rewarding our customers' loyalty is central to our True Customer Composite strategy. For example, we give multiple-product discounts to customers who purchase products through MyAviva.

We are expanding our offerings to help our customers reduce their risks, for example we have launched a weather app in France which led to lower flood claims in motor compared to other insurers as it provided customers with foresight of weather warnings. We also offer the Wellbeing app in the UK to support a healthier lifestyle beyond just exercise and nutrition advice.

Enhancing My Aviva

With MyAviva, we give our customers access to all their products in one place and let them easily make changes to their policies or get the latest deal. We now have MyAviva in the UK, Canada, Ireland, France, Poland, Singapore and Italy.

We recognise customers often have relationships with Aviva through the companies they work for, through a financial adviser, or directly with us. MyAviva helps to bridge all three channels effortlessly and conveniently. This is particularly important when our customers change jobs or move house.

During 2017, we launched a pilot in the UK to work closely with some of our key corporate clients in order to develop a deeper, broader understanding of their business and objectives. This pilot successfully allowed us to align client objectives to Aviva's solutions.

Acquisitions

In 2017 we announced our acquisition of Friends First in Ireland, which will strengthen our life business in Ireland once the acquisition is completed in 2018. This supports our True Customer Composite model as it strengthens both capabilities and distribution for the Life business in Ireland.

Digital First

We put Digital First. This is how we will capitalise on being a True Customer Composite. With their busy lives, customers and businesses, large and small, are increasingly turning to digital to make things more convenient and quicker.

Why it's important

We want to be a 320+ year old disruptor in an industry dominated by complexity.

Our purpose is to help customers Defy Uncertainty – to face life's uncertainties with confidence. Digital tools allow Aviva to offer the convenience, simplicity and rewards to earn our customers' trust, so that we can help more customers protect what matters to them and save for anything from a comfortable retirement, to a new house or family members.

Aviva's digital investment delivers innovative propositions and a better experience for customers. Stronger digital capability leads to more efficient operational processes so that we can serve customers faster and cheaper.

Technology offers us the opportunity to do far more to help our customers Defy Uncertainty. Aviva will focus increasingly on delivering products and services to customers more in control and allow them to have a more active hand in steering what lies ahead.

In 2018, Aviva will offer more proactive ways for people to manage their health, wealth and safety – giving them the confidence to be ready for life's opportunities as well as its challenges.

How we've progressed

Space to innovate

We've created Digital Garages in London, Singapore and Canada, and digital spaces in our Paris, Warsaw, Bristol and Norwich offices. They are catalysts for digital innovation, where creative minds collaborate to turn ideas into new products and services. Examples of this are:

- Our chatbots help customers in seconds or provide an insurance quote in minutes
- Customers can make most claims online and we settle simple claims within seconds
- We give people a discount for driving safely through our Aviva Drive App
- We help people plan for the life they want in retirement with our Shape my Future tool
- We explain insurance jargon in a simple way through Our Alexa Skill

Quote me happy

Quotemehappy.com was our first success in the Digital First story and it keeps on growing – it now has over one million customers. It offers low-cost car and home insurance in the UK and is only available online. Our fully self-service insurance gives customers the flexibility to manage their policies online, such as downloading documents and making changes to their policy. And because they deal with us digitally, we are able to offer our customers lower prices.

What we are doing differently now and for the future

Working with others to benefit our customers

We're working with some of the brightest companies around the world to innovate so that our customers can benefit.

We invest in cutting edge tech start-ups that shape the future of insurance through Aviva Ventures, our corporate venture capital fund. An example being the investment in Owlstone Medical who developed a device that can read chemicals in breath and detect early stages of cancer.

We're partnering with start-ups to trial innovative customer solutions, including through Founders Factory who help start-ups build and scale.

In the UK we've agreed to make a strategic investment in start-up Wealthify – a robo-investment platform that allows customers to save from as little as £1 with transparent fees.

Ask it Never

Ask it Never is our ambition to make insurance simpler and easier for customers using data and analytics to improve the customer journey. In 2017 we launched a market leading Home Insurance proposition which allows customers to get an instant price in MyAviva and buy in less than two minutes with minimal questions. In 2018 we plan to extend our ambition to create a suite of customer friendly experiences on MyAviva.

How we measure success

We see digital experiences as one of the best ways to drive customer preference for the Aviva brand. While our overall global NPS® declined, digital scores were positive:

- Globally, our digital customers have NPS® that is +24 points higher than non-digital customers
- In the UK, Aviva's digital users are more positive about their customer experience than digital users of our competitors (+27 NPS® score for Aviva versus +19 NPS® for competitors)
- Globally, among our digital customers 69% are likely to consider Aviva for other products, compared to 52% of non-digital customers
- In the UK, 69% of MyAviva registered customers are likely to consider Aviva for other products and services compared to just 53% of those not registered on MyAviva

Reinventing insurance

We want to reinvent insurance for the digital age, to make it simple and accessible for our customers and to challenge traditional distribution and marketing methods. Our new joint venture in Hong Kong aims to do just that. Our partners, Hillhouse and Tencent, have tremendous investment and digital expertise. Together we want to shake up the Hong Kong insurance market, which currently relies on expensive intermediaries, by offering a superior digital solution so that insurance meets our customers' needs. We are planning to launch a joint proposition in the first half of 2018, pending regulatory approval.

Aviva Ventures builds portfolio

Aviva Ventures is our corporate venture capital fund. It looks for and makes investments in start-ups that have an alignment to the future of the insurance market. In 2017 it significantly expanded the portfolio as well as extending its appetite into making fund investments. We have made investments in six new companies: Roost (US), Casalova (Canada), Neos (UK), Owlstone Medical (UK), Savari and Biofourmis (both Singapore) bringing the total direct investments to ten. We have also deployed capital into Anthemis' Fintech fund and Aquiline's Technology Growth fund. By working with these innovative companies, Aviva is able to stay at the forefront of the fast paced world of digital innovation.

Not Everywhere

Not Everywhere means that we deploy our resources where we can be most competitive. We are not interested in planting flags or being in 100 countries. We focus on a select number of markets and business lines where we have scale and profitability or a distinct competitive advantage – where we can win.

Why it's important

It is about focussing our resources where we can be most competitive and doing a relatively small number of things well, rather than casting our net too widely.

Not Everywhere is also about capital allocation. We allocate capital to the markets, businesses and products that offer the most attractive returns, looking at it through three lenses: strategic, financial and execution.

How are we progressing?

In 2017 we largely completed the restructuring of our businesses to narrow our focus on what we can do best.

In 2017, we announced the sale of Friends Provident International, a major part of our Spanish business and our 49% stake in our joint venture in Taiwan.

Major Markets and Strategic Investments

Our Major Markets and Strategic investments categorisation shows how Aviva's markets and business lines contribute to our overall portfolio, either now or in the future.

Our strategy > [Continued](#)

Major markets: solid growth, sustainable cash

We are focussed on eight attractive, growing markets where we are, or have the potential to be the best in class. It is these businesses that will underpin the cash flow plus growth strategy. Our major markets are:

- UK – number one composite insurer providing a core growth engine and high levels of sustainable cash flow
- France – a cash generator underpinned by strong distribution
- Canada – leading general insurance franchise with attractive cross-cycle returns
- Poland – high ROE business with strong distribution and digital credentials
- Italy – rebounding economic opportunity providing strong net flows
- Ireland – a leading brand in a growth economy with accelerated development of the composite model
- Singapore – an innovative strategy to accelerate development of the financial advisory channel in an attractive growth market
- Aviva Investors – a growth engine underpinned by increasing third party assets and delivering rising income and falling costs

Strategic investments: future, fast growth

We have made a number of strategic investments that will accelerate growth and provide increased value over the long term. These investments are:

- Digital – leading intellectual property (IP) being rolled out across our markets
- China – delivering strong growth in sales and adjusted operating profit in one of the world's largest insurance markets
- Hong Kong – joint venture with Tencent and Hillhouse focussed on digital disruption
- Turkey – leading position in the life and pensions market and exposure to a large, young and growing population
- Indonesia – bancassurance venture in an under-penetrated, high growth emerging market
- India – we are reassessing our options given changes in market fundamentals
- Vietnam – leading business in one of the fastest growing Asian economies
- Global Corporate Solutions (GCS) – selective expansion provides a natural extension to our existing strength in retail and commercial lines

Read about our businesses at www.aviva.com/investors/our-strategy

[Our people](#)

Our people

We have a clear purpose. We help our customers Defy Uncertainty; this remains at the core of what our people do. This commitment to customers, high levels of people engagement and skills, and alignment to Aviva's values helped contribute to Aviva's strong financial performance.

The focus for 2017 has been on our culture; we want to be a business which is simple, innovative and customer centric in everything we do.

We employ 30,021 people globally and in the UK, we employ more than 14,600 people.

Our strategy

Our global people strategy sets out how we will accelerate our performance. We will:

- Focus on our customers by connecting the day-to-day activities of our people with our purpose
- Give our people the freedom to act in line with our values
- Make leadership a way of life so all our people contribute to delivering our strategy and think independently. We want leaders who dream big and move fast in everything they do
- Create an inclusive and diverse environment so that everyone can be themselves
- Actively invest in the skills, mind-sets and future capabilities we need to win in a digital age

Our values

Our values guide everything we do and the decisions we take:

Care More

We start with the customer and prioritise delivering a great outcome for them. We do the right thing, making sure we and those around us are acting with positive intent. We don't shrink from the tough conversations. We're in it together.

Kill Complexity

We can list our priorities on one hand, picking a few things to do brilliantly. We make the call with the right information. We join forces and build it once.

Never Rest

We fail fast and learn fast, testing and learning at pace. We embrace digital. We are dissatisfied with the way things are done now. We challenge ourselves to learn about the cutting edge and harness it. We get it done at pace.

Create Legacy

We invest with courage, taking smart risks and making good decisions to ensure we allocate our resources where they can do most. We think like an owner, taking responsibility. We go for more than quick wins. We take the long view.

Changes to business landscape

We continue to strengthen the leadership teams including restructuring the UK business to ensure the management structure reflects the True Customer Composite nature of the business.

During 2017 we have welcomed the employees from RBC General Insurance into Aviva Canada and successfully negotiated with unions to facilitate the sale of our Spanish business with 90% of people transferring across to the new buyer.

Developing our people

Investment in people remains an area of focus for us. In 2017, we:

- Developed a three year people strategy. This defines and sets direction for a simpler, global approach, identifying, assessing and developing our talent to mobilise their potential
- Moved 39% of our high potential senior leaders into new or broader roles to develop core experiences and strengthen our executive pipeline
- Delivered our Leadership Accelerator programme to 290 of our senior leaders. Feedback has been extremely positive and we are seeing a difference in leadership approach and capability. A version of this programme will be rolled out to people leaders from 2018
- Ensured that 83 high potential female leaders from a range of levels have attended 'Accelerate Leadership from the Inside out' (ALIO), our female-only leadership programme. The programme offers a unique opportunity to develop our female leaders, build their confidence and deepen their commitment to Aviva
- Launched our Digital Academy in Poland to help develop the next generation of programmers and future digital talent
- Established the Global Graduate Leadership Programme to create a high performing pipeline of globally mobile graduates, designed to build our long-term leadership capability and meet our future business needs. We currently have graduates located across UK, Singapore, Hong Kong, Vietnam, Canada, USA, France, Poland and Italy

Engaging our people

In 2017 our global Voice of Aviva survey focussed on key areas of insight to drive growth. Engagement is up one percentage point to 75% and is now consistent across all of our markets after significant improvements for France and Singapore, 85% of colleagues see how their team's work aligns to Aviva's strategy.

Our culture journey since 2014 has shown significant shifts towards a culture of more innovation and less bureaucracy. 70% of colleagues feel able to challenge complexity and 69% feel able to try out new and exciting ideas to benefit our customers. Nearly four in five employees believe that Aviva values their health and wellbeing, up nine percentage points in 2017 alone following the launch of a highly successful Health and Wellbeing programme.

Our culture journey will continue in 2018 with on-going focus on colleague engagement, giving people the freedom and room to operate and innovate, developing our leaders to lead for the future and creating the conditions where colleagues can perform at their best. We recognise that we still have more to simplify processes and systems within Aviva and this will be a key focus for 2018.

Within Aviva we take our responsibility to consult very seriously. We have a positive and constructive relationship with the trade union Unite as well as a fully elected all-employee representative body 'Your Forum'. The existence of Your Forum within Aviva is a key way of recognising that we all have a part to play in contributing to the debate on issues and opportunities impacting on our people and our organisation.

The representative bodies meet regularly with the CEO and members of the GEC throughout the year. We believe that by doing so we encourage a culture of trust and open and honest communication that will help us ensure that our organisation is a better place to be.

We continue to provide an employee share scheme and all employees have the opportunity to engage with senior leader through weekly #Uncut episodes 'our global streaming platform', results live and regular town halls. This ensures everyone at Aviva is aware of significant changes in the business and financial and economic factors affecting the business.

Inclusive diversity

Inclusive diversity is at the heart of how we do business and a key requirement for the workforce of the future. If people can be themselves, they'll be happier and contribute their best thinking. They will also be more in tune with our diverse customer base and better able to serve their evolving needs. Our staff engagement survey shows that 87% of our people feel that people from diverse backgrounds can succeed at Aviva and we want to see this reflected in the diversity of talent we attract and develop within the Company.

In 2017 we focussed our attention on gender and age, for the first time setting a 30% target to increase the proportion of women in senior roles across the Group by 2020. We have also published our gender pay gap in the UK and expect to see that close over time too. A key policy change to contribute to our inclusive culture was the launch of our new equal parental leave policy in Canada, UK, France, Ireland and Singapore. It enables any parent employed by Aviva to be eligible to the same amount of paid and unpaid time off, regardless of gender, sexual orientation or how they became a parent (birth, adoption or surrogacy).

We are an equal opportunities employer and ensure a consistent approach to recruitment and all areas of employment policies across all our markets. These policies apply to all Aviva directors and employees, business units, and operations, and it is the responsibility of CEOs (or equivalent) to ensure that their business operates in line with them.

We are committed to ensuring we provide full and fair consideration for job applications from people with disabilities, as well as supporting any of our people who become disabled while working for Aviva. We have a duty of care to make adjustments to roles and responsibilities which will allow a disabled person to work or continue working. For example, we adapt the working environment where we can and offer flexible working practices and appropriate training to take into account their personal circumstances.

As a member of The 'Business Disability Forum' we're committed to ensuring that all candidates for recruitment and employees are treated fairly throughout the employee lifecycle including opportunities for training, promotion and career development.

We continue to build on the existing strengths of our communities and partnerships with the launch of six global employee resource groups focussing on age, gender balance, caring, disability, sexual orientation, race and ethnicity in 2018. We will also be setting targets and tracking progress in these dimensions in our core markets and Group functions through agreed Statements of Intent overseen by our Global Inclusion Council.

To manage employment risk, we conduct pre-employment screening checking and operate regular performance appraisals for all employees at all levels, which are independently calibrated throughout an employee's career. Any exceptions to the policies are reported to line management and escalated via the appropriate channels.

As a financial services regulated entity, we have a compulsory and tailored annual risk-based training and awareness programme to ensure employees and others acting on Aviva's behalf know what is expected of them. Our people are regularly updated by the senior team through several mechanisms, such as our intranet and #Uncut episodes, giving employees equal and timely access to information on financial and economic factors affecting Aviva.

Health and wellbeing

We know our employees are a key factor in making our business successful and as such their wellbeing is key. We launched Wellbeing@Aviva in 2017, an integrated approach to Wellbeing covering mental health, physical health, financial education and social and community. This includes the Aviva Wellbeing app, which allows our people to set personalised action plans to create healthy new habits, link wearables and apps to track all activity in one place, take part in challenges and earn points to exchange for a range of rewards. We have initiatives in place such as leader training for mental health, physical health checks, and free membership to Headspace for mindfulness practice, an enhanced sickness policy and income protection scheme, key focus on nutrition and we also provide additional support via our essentials products for both physio and cancer. In 2017 we launched our new Carers Policy in the UK which offers paid time off for carers and we are shortly launching a new fitness proposition for all our people. 2018 will also see a higher focus on financial education.

Our plans for 2018

Innovation, simplicity, inclusion and developing winning capabilities will be key priorities for us as we continue to transform our business.

We recognise that we are on a journey to accelerate Aviva's transformation into a company that puts the customers at the centre of everything we do and our focus will be on ensuring our people can deliver in an innovative and simple way.

In 2018 we will continue to focus on developing an inclusive workforce which is fit for the future.

At 31 December 2017, we had the following gender split:

Board membership

Male

9

Female

3

Senior management

Male

521

Female

169

Aviva Group employees

Male

14,618

Female

15,403

The average number of employees employed by the Group during 2017 was 30,090.

Read about our approach to responsible and sustainable business in the 'Corporate Responsibility' section of this report and our people strategy at www.aviva.com/about-us/our-people

Chief Financial Officer's Review

Overview

In 2017, Aviva delivered growth in Group adjusted operating profit¹, generated increased cash-flow, further strengthened our Solvency II cover ratio^{2,4} and used excess cash and capital to repay debt and repurchase shares.

Group adjusted operating profit¹ increased 2% to £3,068 million (2016: £3,010 million) while operating earnings per share (EPS)^{2,3} advanced 7% to 54.8 pence (2016: 51.1 pence). The Board of Directors has proposed a final dividend of 19.0 pence per share. This takes the full year dividend per share to 27.4 pence, an increase of 18% and meeting our 2017 dividend payout ratio target of 50% of operating EPS^{2,3}.

IFRS profit after tax attributable to shareholders was £1,646 million and basic earnings per share 35.0 pence (2016: £859 million and 15.3 pence respectively). The year-on-year movement in these measures reflects the one-off exceptional charge of £475 million incurred in 2016 as a result of the change in the Ogden discount rate, a reduction in integration and restructuring expenses and gains on divestitures, offset by a re-measurement loss of £118 million arising from our recent announcement to dispose of Friends Provident International, which has been measured at fair value.

In 2017, Aviva repaid debt of US\$650 million and returned capital to shareholders via a £300 million share repurchase programme. With our Solvency II cover ratio^{2,4} remaining above our working range, we have plans to reduce hybrid debt by a further £900 million in 2018 and will consider other opportunities to deploy surplus capital to strengthen our businesses and enhance long-term shareholder returns.

During 2017, Aviva announced divestments of joint ventures in France, Spain, Taiwan, and Italy as well as the sale of Friends Provident International. Aviva invested in Vietnam, where we acquired 100% ownership of our joint venture with VietinBank, and we announced the acquisition of Friends First in Ireland, strengthening our position in the Irish life insurance market. In Hong Kong, regulatory approval was recently granted for our joint venture with Tencent and Hillhouse.

In 2017, our major markets demonstrated their competitive strength by growing assets, improving net flows and increasing premium volumes. Our priority is to accelerate the performance of our businesses and translate this into attractive and dependable growth in Group adjusted operating profit and dividends.

Operating performance: Major markets

Aviva currently derives virtually all of its Group adjusted operating profit¹ and cash flow from eight major markets: UK, Ireland, France, Poland, Italy, Canada, Singapore and Aviva Investors. This is where Aviva believes it is currently best positioned to compete on the basis of our scale, brand and leading distribution.

The Group adjusted operating profit¹ from these major markets (excluding divestitures) totalled £3,508 million (2016: £3,300 million), an increase of 6%. Growth was supported by higher adjusted operating profit¹ from our businesses in the UK, Aviva Investors, France, Ireland, Poland and Singapore. These more than offset the reduction in adjusted operating profit¹ from Canada.

United Kingdom

Aviva is unique as the only large-scale composite insurer in the UK market with a top three share across multiple product lines. In UK Insurance adjusted operating profit¹ increased 13% to £2,201 million (2016: £1,946 million) due to attractive growth across most of our core product lines together with favourable development of reserves.

In long-term savings, adjusted operating profit¹ rose 30% to £185 million (2016: £142 million) reflecting higher assets under management (AUM)², stable in-force profit margin and strict management of acquisition costs, despite increases in new business sales. Net fund flows almost doubled to £5.6 billion (2016: £2.9 billion) due to mandate wins in workplace pensions together with a sharp increase in net flows into the advisor platform, where AUM² increased by 56% to £20 billion.

Adjusted operating profit¹ from annuities and equity release grew 11% to £725 million (2016: £656 million) due to higher new business volumes and continued progress on optimising assets backing the in-force portfolio. New business volumes increased 58% to £4.3 billion (2016: £2.7 billion), mainly as a result of bulk purchase annuities, where sales more than tripled in 2017 to £2,045 million (2016: £620 million).

Life protection saw a reduction in adjusted operating profit¹ to £227 million (2016: £242 million). While increased volumes and margins supported growth in new business contribution from both the consumer and group protection portfolios, the result from the existing business declined due to unfavourable claims experience in group protection.

General insurance made continued progress in 2017, increasing net written premiums by 4% while further refining product and channel mix. Adjusted operating profit¹ grew 4% to £408 million (2016: £392 million) due to improved underwriting. Excluding the impact of the change in Ogden discount rate in the prior year, the combined operating ratio² was stable at 93.9%, helping to generate underwriting result of £246 million (2016: £232 million). The long term investment return was consistent with the prior year at £163 million (2016: £162 million). In 2017, we announced the extension and expansion of our relationship with HSBC in the UK, which is expected to provide additional impetus for growth in 2018.

Our legacy business of mature savings products maintained adjusted operating profit¹ at £331 million (2016: £332 million). AUM² in the legacy portfolio remained stable, with positive investment markets offsetting net fund outflows as policies matured. We continue to expect adjusted operating profit¹ from the legacy business to decline gradually over the medium term.

¹ Group adjusted operating profit is an Alternative Performance Measure (APM) which is used by the Group to supplement the required disclosures under IFRS. Please refer to note B in the 'Accounting Policies' section, note 4 'Segmental Information' and 'Other Information' within the Annual report and accounts for further information.

² This is an Alternative Performance Measure (APM) which provides useful information to enhance the understanding of financial performance. Further information on APM's, including a reconciliation to the financial statements (where possible), can be found in the 'Other Information' section of the Annual report and accounts.

³ This measure is derived from the Group adjusted operating profit APM. Further details of this measure are included in the other information section.

⁴ The estimated Solvency II position represents the shareholder view. This excludes the contribution to Group Solvency Capital Requirement (SCR) and Group Own Funds of fully ring fenced with-profits funds of £3.3 billion (2016: £2.9 billion) and staff pension schemes in surplus of £1.5 billion (2016: £1.1 billion). These exclusions have no impact on Solvency II surplus. The estimated Solvency II position includes the pro forma impacts of the disposals of Friends Provident International Limited (£0.1 billion increase to surplus) and the Italian Avipop Assicurazioni S.p.A (£0.1 billion increase to surplus). The 31 December 2016 Solvency II position included pro forma adjustments for the impact of the announced disposal of Antarius and the future impact of changes to UK tax rules announced by the Chancellor of the Exchequer's Autumn statement, which was removed following clarification in the 13 July 2017 Finance Bill. The 31 December 2016 Solvency II position also includes an adverse impact of a notional reset of the transitional provisions (TMTP) to reflect interest rates at 31 December 2016 £0.4 billion decrease to surplus.

In addition to the above core product lines, we have made changes to assumptions and methodology in 2017. The net effect of these changes increased to £290 million (2016: £151 million). This included changes in relation to longevity reserves, partially offset by increased provisions in other areas including expenses.

Aviva's UK business has unrivalled strength and depth and provides a blueprint for our digital composite strategy. Looking forward, our priorities are to grow adjusted operating profit¹ while generating significant levels of free cash-flow that can be invested or returned to deliver additional long-term benefits for shareholders.

The UK offers structural growth drivers including the shift in assets and savings flows from defined benefit (DB) pensions into defined contribution (DC), rising auto-enrolment pension contribution rates and the trend for corporates to seek insured solutions to manage (and outsource) their DB pension schemes. By leveraging the strength of our relationships with customers and partners, we are focussed on extending our track record of growth via higher net flows, increases in premium volumes and continued discipline in managing expenses.

Aviva Investors

Aviva Investors is targeting double digit growth by transforming its position and becoming a leading asset manager of both third party and Aviva assets. It is achieving this by focussing on three key areas:

- Providing solutions - where the AIMS range of funds seeks to achieve investors' desired outcomes with reduced volatility.
- Real Assets expertise - where our capability and expertise in real estate and infrastructure origination supports both the growing need of Aviva's annuity portfolio and the requirements of external investors, including defined benefit pension schemes.
- Improving investment performance - where we can capitalise on our strong fund performance track record, the strength of the Aviva brand and the acquisition of additional asset management talent to increase our presence in traditional asset classes.

In 2017, Aviva Investors achieved another year of strong growth, with fund management adjusted operating profit¹ rising 21% to £168 million (2016: £139 million). Revenue grew 14% to £577 million (2016: £506 million) due to higher average AUM², an increase in revenue margin associated with the expansion of the third party business and greater levels of infrastructure asset origination. Operating expenses² rose slower than revenues at 11%, leading to an improvement in the operating margin to 29% (2016: 27%).

AUM² rose to £353 billion (2016: £345 billion). Net inflows of £1.6 billion (2016: £1.0 billion) benefitted from higher inflows into internal core propositions while market and foreign exchange movements added £5.9 billion to AUM².

Looking forward, the priority for Aviva Investors is to continue the targeted shift toward external funds and Aviva core propositions, along with increased origination activity in infrastructure and real estate financing. This should further increase revenue margins and adjusted operating profits¹ and more than offset the net outflow in legacy Aviva life products that are no longer actively marketed.

Ireland

In Ireland, Aviva is a composite insurer with a leading market position in general insurance and a top four position in life insurance. Our strategy in Ireland is to leverage the strong capabilities of the Aviva group, bringing together leading digital propositions and a large-scale composite business model to capitalise on Aviva's strong brand recognition.

In 2017, Aviva Ireland delivered adjusted operating profit¹ of £86 million (2016: £80 million) an increase of 18% after excluding the contribution from the health insurance business divested in 2016. In general insurance, net written premiums increased 8% to £436 million (2016: £378 million) and the combined operating ratio² improved by one percentage point to 91.4%. This underpinned growth in general insurance adjusted operating profit¹ to £53 million (2016: £48 million). In life insurance, adjusted operating profit¹ was £33 million (2016: £32 million) with a modest increase in sales volumes offset by higher investment management charges.

Looking forward, the priority in Ireland is to maintain underwriting discipline and continue to develop our composite, multi-product franchise with brokers, partners and customers. We recently announced the acquisition of Friends First for €130 million (subject to regulatory approval), increasing the scale of our life insurance business.

France

In France, Aviva has strong distribution and a composite footprint, with increased brand recognition providing an opportunity to expand our presence with customers.

France adjusted operating profit¹ was flat in local currency terms at £529 million (2016: £499 million). However, this reflected a partial year contribution from Antarius, which was sold to Societe Generale in April 2017. Excluding Antarius, adjusted operating profit¹ increased 13% in local currency terms to £507 million (2016: £421 million).

In life insurance, adjusted operating profit¹ excluding Antarius increased 8% in local currency to £403 million (2016: £351 million). Fee revenues benefitted from higher average AUM² and our results were further supported by the continued evolution of business mix towards protection and unit linked products.

In general insurance, adjusted operating profit¹ gained 37% to £104 million (2016: £70 million). Net written premiums increased 3% to £1,053 million (2016: £957 million) due to growth in direct personal lines, while lower weather related claims helped the combined operating ratio² improve to 94.5% (2016: 97.0%).

In France, we intend to consolidate our distribution into four key channels under a single Aviva brand. This targets improved alignment and efficiency within the distribution network, strengthening Aviva's ability to develop relationships with customers in the French market across our composite product offering.

Canada

Aviva is a scale player in the Canadian general insurance market, with a circa 10% market share. We have a leading position in the broker channel and, following our recent acquisition of RBC General Insurance (RBCGI), have expanded our presence into the direct and bank channels. Canada has provided attractive returns on capital in most years and our current positioning provides a long-term opportunity to be a leader in the general insurance market while seeking to develop elements of a composite footprint for the benefit of customers.

In 2017, Canada had a very challenging year, with adjusted operating profit¹ falling to £46 million (2016: £269 million). Net written premiums grew 15% to £3,028 million (2016: £2,453 million) due to a full 12 month contribution from RBCGI (acquired in July 2016) and long term investment return rose to £115 million (2016: £105 million). However, the underwriting result deteriorated from a profit of £168 million in 2016 to a loss of £64 million in 2017.

¹ Group adjusted operating profit is an Alternative Performance Measure (APM) which is used by the Group to supplement the required disclosures under IFRS. Please refer to note B in the 'Accounting Policies' section, note 4 'Segmental Information' and 'Other Information' within the Annual report and accounts for further information.

² This is an Alternative Performance Measure (APM) which provides useful information to enhance the understanding of financial performance. Further information on APM's, including a reconciliation to the financial statements (where possible), can be found in the 'Other Information' section of the Annual report and accounts.

The increase in the combined operating ratio² to 102.2% (2016: 93.0%) was attributable to adverse prior year reserve development across auto and property insurance portfolios together with weaker accident year profitability in the auto insurance market, where bodily injury claims inflation rose sharply. In 2016, prior year reserve releases added £130 million to adjusted operating profit¹, while in 2017, reserves were strengthened by £37 million. The underwriting result in Canada also suffered from heightened levels of large losses in the commercial insurance portfolio, while weather and natural catastrophe claims remained at elevated levels.

Looking forward, the priority in Canada is to restore adjusted operating profit¹ to historical levels. We have undertaken a number of remedial actions, including increasing premium rates across a number of product classes. Our medium term objective is to return our combined operating ratio² to a 94-96% target range. However, the impact of these actions may take time to be reflected in our results, and our combined operating ratio² is likely to remain above our target range in 2018 and 2019.

Poland

Aviva is one of the leading composite insurers in Poland, with a number two position in life insurance underpinned by strong multi-channel distribution.

Aviva Poland increased adjusted operating profit¹ by 12% in local currency to £177 million (2016: £140 million). In life insurance, adjusted operating profit¹ rose 8% to £156 million (2016: £132 million) while general insurance adjusted operating profit¹ was £21 million (2016: £8 million).

Growth was supported by higher average AUM² in life insurance helped by improved productivity in our direct sales force and higher retention. In general insurance, increased volumes in direct retail and commercial lines together with lower motor claims frequency helped to support growth. Adjusted operating profit¹ from both the life insurance and general insurance businesses also benefitted from consolidating the joint venture with Bank Zachodni WBK SA for the first time in 2017.

The emphasis in Poland is maintaining positive momentum in the life insurance business and continuing to build scale across the composite.

Italy

Aviva has a composite position in the Italian market supported by joint ventures and distribution relationships with leading banks and a growing franchise among independent financial advisors. We have an opportunity to deploy our digital expertise in Italy to further strengthen our propositions for customers and distribution partners.

Aviva Italy has generated strong growth in life new business volumes and delivered £2.3 billion of net fund inflows reflecting the success of their hybrid product and expansion of the distribution footprint. However, this also gave rise to short term strain in profitability against what was a record result in 2016. As a result adjusted operating profit¹ from Aviva's Italian business was stable in 2017 at £213 million (2016: £212 million), despite a 7% benefit from foreign exchange translation. In life insurance, adjusted operating

profit¹ of £168 million (2016: £170 million) represented an 8% decline in local currency terms. General insurance adjusted operating profit¹ was stable at £45 million (2016: £42 million), reflecting an increase in net written premiums to £412 million (2016: £395 million) and a slight deterioration in combined operating ratio² to 94.2% (2016: 92.5%).

Aviva Italy is a leader in the market in terms of product design and this is translating into attractive new business volumes and net inflows. We remain focussed on strengthening our strategic positioning in Italy by expanding distribution and increasing emphasis on our composite business model.

Singapore

We are a major player in the Singapore life and health insurance market and our strategy is to encourage the evolution of distribution in the market towards financial advisors. We believe this will benefit customers, providing greater convenience, increased choice and superior value for money. Aviva Financial Advisors now has more than 670 financial advisors, to whom we provide technology, compliance and administrative support. Our ambition is the further expand this channel, where Aviva is a leading provider of long term savings and protection products.

In 2017, Singapore delivered adjusted operating profit¹ of £110 million (2016: £100 million), an increase of 5% in local currency terms. Life insurance adjusted operating profit¹ of £118 million (2016: £112 million) was stable in local currency terms. Aviva's financial advisor network began to build momentum in new business production, increasing value of new business² by 24% to £123 million. In general insurance and health, adjusted operating losses¹ narrowed to £8 million (2016: £12 million).

Strategic investments

In addition to its major markets, Aviva has strategic investments which are managed to produce long term growth in adjusted operating profit¹ and value. These strategic investments are in China, Hong Kong, Turkey, India, Vietnam and Indonesia. Within this, we are currently delivering attractive and growing profits in our joint ventures in China and Turkey, however these are offset by losses from less mature businesses in Indonesia and Vietnam, coupled with our acceleration of investment into Digital.

¹ Group adjusted operating profit is an Alternative Performance Measure (APM) which is used by the Group to supplement the required disclosures under IFRS. Please refer to note B in the 'Accounting Policies' section, note 4 'Segmental Information' and 'Other Information' within the Annual report and accounts for further information.

² This is an Alternative Performance Measure (APM) which provides useful information to enhance the understanding of financial performance. Further information on APM's, including a reconciliation to the financial statements (where possible), can be found in the 'Other Information' section of the Annual report and accounts.

³ This measure is derived from the Group adjusted operating profit APM. Further details of this measure are included in the other information section.

⁴ The estimated Solvency II position represents the shareholder view. This excludes the contribution to Group Solvency Capital Requirement (SCR) and Group Own Funds of fully ring fenced with-profits funds of £3.3 billion (2016: £2.9 billion) and staff pension schemes in surplus of £1.5 billion (2016: £1.1 billion). These exclusions have no impact on Solvency II surplus. The estimated Solvency II position includes the pro forma impacts of the disposals of Friends Provident International Limited (£0.1 billion increase to surplus) and the Italian Avipop Assicurazioni S.p.A (£0.1 billion increase to surplus). The 31 December 2016 Solvency II position included pro forma adjustments for the impact of the announced disposal of Antarius and the future impact of changes to UK tax rules announced by the Chancellor of the Exchequer's Autumn statement, which was removed following clarification in the 13 July 2017 Finance Bill. The 31 December 2016 Solvency II position also includes an adverse impact of a notional reset of the transitional provisions (TMTP) to reflect interest rates at 31 December 2016 £0.4 billion decrease to surplus.

Capital & cash

At 31 December 2017, Aviva's Solvency II capital surplus^{2,4} was £12.2 billion (2016: £11.3 billion), equivalent to a cover ratio^{2,4} of 198% (2016: 189%). We increased our Solvency II cover ratio^{2,4} by 9 percentage points, whilst also paying off approximately £500 million of subordinated debt and completing a £300 million share repurchase programme during 2017. Operating capital generation² of £2.6 billion (2016: £3.5 billion) remained well above underlying levels due to benefits associated with merging legal entities in the UK and other actions as we continue to adapt to the Solvency II regime. Underlying capital generation remained stable at £1.7 billion (2016: £1.7 billion), despite higher premium volumes in general insurance, increased new business sales in life insurance, lower profitability from our Canadian business and the impact of divestitures. Cash remittances² from our business units were £2,398 million (2016: £1,805 million). The increase in remittances was mainly attributable to the UK, which contributed £1,800 million (2016: £1,187 million). Remittances from the UK general insurance business increased and special remittances from the life business arising from the Friends Life integration doubled to £500 million. Remittances from Europe of £485 million (2016: £449 million) and Aviva Investors of £58 million (2016: £39 million) both grew in conjunction with adjusted operating profit¹ progression while Canada's weaker results led to a decline in remittances to £55 million (2016: £130 million).

At our Capital Markets Day event in Poland in November 2017, we upgraded our target for total cash remittances² to Group centre over the three year period from 2016 to 2018 inclusive to £8 billion (previously £7 billion). With cumulative remittances inclusive of announced divestiture proceeds at £5.4 billion, we remain on track to deliver this target.

Aviva's Group centre cash resources are £2.0 billion (February 2017: £1.8 billion). Our intention is to maintain this in a range of £1.0 billion to £1.5 billion over time. In view of our surplus capital and liquidity position and expected level of Group centre cash receipts over the coming year, we anticipate having £3 billion available for deployment in 2018 and 2019.

Our priorities for deployment of surplus cash and capital remain unchanged. We prioritise profitable organic growth in our existing businesses. After allowing for this, we will look to reduce debt balances, consider bolt-on acquisitions and provide additional capital returns.

In 2018, we have signalled our intention to reduce hybrid debt by £900 million. We are targeting more than £500 million in additional capital returns, incorporating liability management and returns to shareholders. In this regard, we have the ability to cancel preference shares⁴ at par value through a reduction of capital, subject to shareholder vote and court approval. The preference shares carry high coupons that are not tax-deductible and they will not count as regulatory capital from 2026. As we evaluate the alternatives, one of the things we are considering is how to balance the interests of ordinary and preferred shareholders. We have committed €130 million to acquire Friends First in Ireland and have further appetite for bolt-on acquisitions in our major markets. Any unused M&A budget will be diverted to further reduce debt balances or fund additional returns.

Outlook

Having strengthened our balance sheet and streamlined our business, Aviva is now at a turning point in terms of our capacity for growth. Our eight major markets are Aviva's strongest businesses, with leading distribution, brand strength, scale efficiency and underwriting expertise driving attractive growth potential.

We continue to invest in our businesses to build on Aviva's competitive advantage. We are strengthening our capabilities in data science and digital innovation to deliver leading propositions for customers. This is already providing tangible results in terms of engagement with customers and distribution partners. We have increased our investment in talent to support growth across the group, with notable examples being Aviva Investors, bulk-purchase annuity origination and Global Corporate and Specialty insurance. We also continue to develop our strategic partnerships in emerging markets.

This investment requires us to prioritise and reallocate resources. We are initiating a zero-based budgeting programme and are seeking improvements in efficiency by reorganising functional processes through global shared services. We have also chosen to exit markets or product segments, with proceeds from these divestitures, together with special remittances from UK Insurance, providing capacity for investment.

We have outlined an ambition to maintain higher growth in operating EPS^{2,3}. Aviva is now a more focussed business, with operations in countries that have attractive economic prospects and segments where there are sustainable and growing demand dynamics. Turning specifically to the drivers of our results and other large or notable items, we highlight the following factors for our 2018 results:

- Organic growth – we are targeting greater than 5% growth in Group adjusted operating profit¹ from our major markets;
- Canada – we expect a partial recovery in adjusted operating profit¹ to provide an approximately 1-2% incremental benefit for Group adjusted operating profit¹ in 2018;
- Capital management – the debt retirement and share repurchase undertaken in 2017 are expected to support operating EPS^{2,3} growth by approximately 2% in 2018. Additional actions in 2018, including additional planned debt retirement, are expected to provide a further 1% to 1.5% benefit to operating EPS^{2,3} in 2018.
- Divestitures – the expected completion of disposals in Spain, Italy and Friends Provident International are expected to reduce operating EPS^{2,3} by approximately 4% in 2018 depending upon the timing of completion;
- Tax rate – our operating tax rate, which was 21% in 2017, may be higher in 2018 depending on business mix of actual profitability. This may reduce operating EPS^{2,3} growth by approximately 1-2%.

With positive and negative items largely offsetting, we expect fundamental business performance in our major markets to drive our 2018 results. We are targeting greater than 5% growth in operating EPS^{2,3} subject to the impacts from foreign exchange, weather and other items.

Tom Stoddard
Chief Financial Officer
7 March 2018

1. Group adjusted operating profit is an Alternative Performance Measure (APM) which is used by the Group to supplement the required disclosures under IFRS. Please refer to note B in the 'Accounting Policies' section, note 4 'Segmental Information' and 'Other Information' within the Annual report and accounts for further information.

2. This is an Alternative Performance Measure (APM) which provides useful information to enhance the understanding of financial performance. Further information on APM's, including a reconciliation to the financial statements (where possible), can be found in the 'Other Information' section of the Annual report and accounts.

3. This measure is derived from the Group adjusted operating profit APM. Further details of this measure are included in the other information section.

4. Par value includes accrued interest, arrears and in the case of the General Accident plc preference shares, issue premium.

UK

Overview

Aviva is the UK's largest insurer with a 18%¹ share of the UK life and savings market, a 10%² share of the UK General Insurance and Health market. We offer a market leading range of propositions to individual and corporate customers covering their savings, retirement, insurance and health needs. We also have one of the largest legacy books in the UK life and pensions market.

We look after over £260 billion of assets for our customers, helping people save for their long-term goals, in particular their retirement. A key focus is on helping our customers provide for a more comfortable retirement. We support them with secure income from annuities, paying out over £2.6 billion each year. And we are a leading supplier of equity release (lifetime mortgages), lending over £700 million in 2017³.

Market leading service is at the heart of our business and we insure 2.6 million motor customers and 2.8 million home customers. Customers publicly review their claims experiences with Defaqto ratings of 5.0 for our Motor policies and 4.6 for Home policies. Over 4.5 million people rely on us to protect them and their families financially against death or illness and we keep those promises paying over £900 million in individual protection claims.

We are also a leading supplier of services to the corporate marketplace, servicing 5 million customers, including 21%⁴ of the workplace pensions market. We offer pensions, protection, and bulk annuity propositions to both large and small companies, as well as health and general insurance. Our relationship management teams work hard to ensure they understand our clients' needs so we can bring the best of what we have to offer so our corporate customers can fulfil more of their requirements with Aviva.

We continue to support our corporate clients and the health of their employees with the launch of our low cost 'Health Essentials' products and the Aviva Wellbeing app. Health Essentials enables employers to offer simple top-up cancer and physiotherapy cover to their employees, intended to complement care customers receive through NHS health services. The Wellbeing app helps employees track and improve their overall wellbeing and better manage specific conditions and fitness priorities.

We have access to customers across the UK through our unparalleled distribution network, with a growing Digital Direct offering for sales and service, strong relationships with independent financial advisers, brokers, employee benefit consultants, banks and we have single-tie agreements with three of the largest estate agencies.

Among our many awards, we have won the Insurance Times 'Insurer of the Year' award four years running, 'Health insurer of the year' at the Health Insurance Awards for the eighth year running in 2017, and 'Platform of the year' in 2017 from the LangCat.

Financial performance

£m	2017	2016
Adjusted operating profit ^{5,7}	2,201	1,946
Cash remittances ⁶	1,800	1,187
Operating expenses ⁶	1,493	1,408
Solvency II Value of New Business (VNB) ⁶	527	429
Combined Operating Ratio (COR) ^{6,8}	93.9%	93.9%

UK Insurance was created in 2017 by bringing our UK life, health and general insurance businesses together under a common leadership team to unlock the potential of our unique position as a large scale composite. The business delivered an increase of 13% in adjusted operating profit^{5,7} to £2,201 million (2016: £1,946 million), including a 6% increase from our legacy and core product segments. demonstrating the value of our market leading franchise. Dealing with the main components of UK Insurance in turn:

- UK life adjusted operating profit^{5,7} increased by 15% to £1,758 million (2016: £1,523 million) driven by an improvement in new business profit, continued growth of the long-term savings franchise, further optimisation of the annuity asset mix and an additional £139 million year on year benefit arising from the annual assumptions review, including longevity. Profit before tax attributable to shareholders' profits⁷ is broadly unchanged at £1,619 million (2016: £1,616 million), with the increase in adjusted operating profit^{5,7} primarily offset by more favourable life investment variances and economic assumption changes⁹.
- UK general insurance adjusted operating profit^{5,7} increased by 4% to £408 million (2016: £392 million) owing to an improvement in the underwriting result, reflecting broad-based organic premium growth of 4% and a continued focus on our core underwriting competencies. Adjusted operating profit^{5,7} in the prior year excludes an exceptional charge of £475 million associated with the change in the Odgen discount rate. As the impact of Odgen on our current year results is not material, this has resulted in a profit before tax attributable to shareholders' profits⁷ of £336 million (2016: loss before tax attributable to shareholders' profits⁷ of £246 million).

The Friends Life Part VII transfer was completed on 1 October 2017, delivering further capital benefits, with the final payment towards the £1 billion target to follow in 2018. Special cash remittances⁶ of £500 million (2016: £250 million) were made to Group during 2017 due to the Friends Life integration, taking the total paid to date to £750 million. These remittances were a key driver behind an overall increase in the cash remitted to Group to £1,800 million (2016: £1,187 million). UK general insurance cash remitted increased to £434 million (2016: £91 million), due to cash being used to fund an increase in the internal reinsurance arrangement in 2016.

Operating expenses⁶ increased by 6% to £1,493 million (2016: £1,408 million) as we invested in growth and simplification initiatives in the second half of 2017, and incurred the cost of increased general insurance levies. Excluding these initiatives and levies, UK Insurance operating expenses were broadly flat, reflecting tight control of the direct expense base as we absorb growth.

Solvency II VNB⁶ increased by 23% to £527 million (2016: £429 million) with growth across all segments. Annuities were impacted by a change in product and asset mix, offset by a £96 million benefit to VNB following a clarification to Solvency II transitional rules.

1 Association of British Insurers (ABI) 9 months to end Q3 2017.

2 GlobalData plc online database.

3 Equity Release Council and ABI.

4 PRA returns and Aviva analysis.

5 Adjusted operating profit is an Alternative Performance Measure (APM) which is used by the Group to supplement the required disclosures under IFRS. Please refer to note B in the 'Accounting Policies' section, note 4 'Segmental Information' and 'Other Information' within the Annual report and accounts for further information.

6 This is an Alternative Performance Measure (APM) which provides useful information to enhance the understanding of financial performance. Further information on APM's, including a reconciliation to the financial statements (where possible), can be found in the 'Other Information' section of the Annual report and accounts.

7 The amounts shown above in respect of adjusted operating profit and profit before tax attributable to shareholders' profits do not reconcile to the corresponding amounts in note 4 'Segmental information' within the Annual report and accounts due to i) the inclusion of our Health business within UK general insurance and ii) the reclassification of non-insurance business to Other Group activities.

8 The 2016 Combined Operating Ratio above excludes the impact of Odgen.

9 Further information in respect of life investment variances is included within the APM section in the Annual report and accounts.

UK general insurance COR of 93.9% was stable year on year (excluding the one-off 2016 impact of the change in the Ogden discount rate), reflecting further improvement in the underlying underwriting performance and premium growth, offset by lower levels of prior year reserve releases, with weather experience broadly flat.

Operational highlights

- Combining our life, general insurance and health operations in the UK to form a single UK Insurance division. This is helping us to build deeper relationships with our customers, clients and partners.
- Transferring the Friends Life customers' policies to the Aviva brand and welcoming them to the wide range of Aviva services and products.
- All UK customers who are registered on MyAviva are able to manage their policies online, and we have 5.7 million active registered customers by the end of 2017.
- To support business customers wishing to reduce defined benefit (DB) pension risk from their balance sheets, we have built up our DB de-risking and bulk annuity capabilities from focussing on smaller, sub-£100 million schemes, to winning large schemes, for example the £600 million deal with Pearson covering around 2,400 members.
- We have secured a ten year distribution deal with HSBC to provide home and travel insurance to their customers through HSBC's extensive digital channels, the branch network and over the telephone. This partnership is one of the UK's largest general insurance bancassurance deals and presents us with significant growth opportunities.
- We continued to defend our customers against claims fraud, cancelling over 9,000 fraudulent policies and detecting more than £89 million of suspect and fraudulent claims in 2017.
- We've implemented our 'Ask It Never' technology to some of our products. Ask It Never uses advanced analytics, deep data and customer value to make smarter decisions. We ask fewer underwriting questions, making it as simple as possible for our customers to find the best solution to suit their needs.
- 'Aviva Plus' is an initiative to reward loyal customers and tackle industry wrongs. Customers often get a low first year premium, but see a much higher renewal quote in the second year. We are piloting a project with 50,000 customers to benefit from our industry-first renewal price promise, which means that customers who sign up will pay less than new customers for their home or motor insurance at renewal.

Market context and challenges

Brexit continues to drive uncertainty, but we are well placed to manage with the implications.

We are continuing to prepare for regulatory change in our UK markets, with the Markets in Financial Instruments Directive (MiFID), the Insurance Distribution Directive (IDD) and the General Data Protection Regulation (GDPR) coming into force in 2018.

We continue to support our customers through the wide range of choices they have as they approach and move through their retirement with market leading propositions (investment, drawdown, annuity, equity release), information through our Aviva Retirement Centre, online guides and tools and our in-house advice service, Aviva Financial Advice.

We look forward to further improvements in the market over the next two to three years. We would like to see a fairer pension taxation system and a simpler regulatory environment which allows us to better serve the needs of our customers.

2018 will also see Auto-Enrolment minimum contributions start to increase from the current base of 1% employee contributions to 3% in April 2018, and then to 5% in April 2019. This is a key period in establishing better retirement prospects for all UK workers.

In general insurance, market conditions have remained competitive across our entire product range, and we expect that to continue. In 2017, the UK Government changed the Ogden discount rate, which is used by the courts to calculate awards for cases involving bodily injury. This increased the cost of bodily injury compensation claims significantly. However, the Government has agreed to review the way the rate is calculated. We believe injured claimants should be fully compensated for the injuries they receive, but it is also vital that individuals are not over-compensated to a level which increases the cost of insurance premiums for individuals and businesses, large and small.

We have supported the need for motor insurance reform through our Road to Reform campaign. We will continue to champion Road to Reform until it becomes law and Aviva has promised to pass on 100% of the savings to its customers when it does.

To keep things simple, we're reviewing the number of variations of our products and intend to materially reduce them. We're also publishing guides to explain how an insurance premium is calculated and offering specialist training programmes to help our customer-facing teams recognise the needs of vulnerable customers.

We strongly believe in harnessing Digital capabilities to benefit customers and will continue to be at the forefront of using technology; we have made a strategic investment in start-up Wealthify – a robo-investment platform that allows customers to save from as little as £1 with transparent fees. Our chatbots help customers in seconds or provide an insurance quote in minutes. Customers can make most claims online and we settle simple claims within seconds. And we help people plan for the life they want in retirement with our Shape my Future tool.

Priorities for 2018

- We will deliver growth by leveraging the power of Aviva's breadth of offering within the UK to deliver compelling propositions to meet our customer needs.
- Driving digitisation of the Insurance business through customer services, propositions and ensuring we are easy for customers to do business with us, however they choose.
- Grow our business and deepen customer relationships by expanding our propositions in targeted markets such as corporate multinational, bulk purchase annuities, home, digital SME and wellbeing.
- We will drive simplicity across our operating model for example moving all savings products to a single platform to enable us to serve our customers simply through whichever channel they choose, whether they are employees of a group pension scheme, advised clients or direct customers.
- We will continue to lead the industry on the big customer issues by implementing what they've told us: simplifying our products and customer experience, increasing transparency and launching disruptive solutions to market. We will meet our customers' needs in ways that are easier and more convenient for them.

International

CANADA

Overview

We are the second largest general insurance provider in the market place, providing a range of personal and commercial lines products to over 2.8 million customers with an 10% market share⁴.

Our business is primarily intermediated, sold through a network of 1,100 independent broker partners. We diversified our distribution through the 2016 acquisition of RBC General Insurance (RBC GI) and through affinity partnerships such as Maple Leaf Sports Entertainment.

Our objective is to be the customer-centric leader in Canadian insurance by building on our strong service to customers and distributors, enhancing our digital capabilities and leading product innovation.

Financial performance

£m	2017	2016
Adjusted operating profit ^{1,5}	46	269
Cash remittances ²	55	130
Operating expenses ²	478	396
Combined Operating Ratio (COR) ²	102.2%	93.0%

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

In 2017, adjusted operating profit^{1,5} decreased by 84% to £46 million (2016: £269 million). The lower underwriting result was mainly driven by a change in the trend of prior year reserve development, which deteriorated from £130 million favourable to £37 million unfavourable. This change was the primary factor behind a current year loss before tax attributable to shareholders' profits⁵ of £54 million (2016: profit before tax attributable to shareholders' profit of £165 million).

Cash remittances² have decreased to £55 million (2016: £130 million) due to lower adjusted operating profit¹.

Operating expenses² increased to £478 million (2016: £396 million) mainly due to a full twelve months of RBC GI.

The combined operating ratio² was 102.2% (2016: 93.0%). Excluding prior year development and adverse weather experience, the COR was 3.0pp higher due to increased claims frequency and severity.

Operational highlights

- Integrated RBC GI with the implementation of Guidewire platform in 2017, an automated policy management and billing system.
- Launched an Accident & Health product for Commercial customers.
- Released the Aviva Fraud report, the first of its kind in the industry, raising public awareness on the impact of auto insurance fraud and the need for reforms.

Market context and challenges

During 2017 we experienced a number of challenges in the Canadian market which have impacted on performance. These included a second successive year of weather claims being adverse to the long-term average following numerous storms and the wildfires in British Columbia. We experienced unfavourable changes in claims patterns, predominantly in our motor business, which affected prior year reserve development.

Priorities for 2018

- Our primary focus is to return the business to target levels of profitability. We have a comprehensive plan to improve pricing, risk selection and indemnity management.
- We will continue to work with the regulator, leading the market changes motor product reform so that affordable insurance solutions can be provided to our customers.
- We will invest in innovative digital experiences and propositions to disrupt the market and better serve our customers and our broker partners.

EUROPE

Overview

Aviva has a focussed approach in Europe with insurance operations in France, Italy, Poland, Ireland³ and Turkey.

Our European markets are a major contributor to the Group, providing a valuable source of diversification.

We have over nine million customers and operate a composite model across all of our European businesses with the exception of Turkey where we offer life and savings products.

We are present in attractive markets where we have a competitive advantage and ability to source skills. We believe this offers us clear potential for future profitable growth whilst at the same time benefitting from positive economic outlook and resilient economies.

We remain cognisant of low interest rates and challenging regulatory environments, and believe we are well positioned to succeed.

Financial performance

£m	2017	2016
Adjusted operating profit ^{1,5}	1,096	1,044
Cash remittances ²	485	449
Operating expenses ²	820	765
Solvency II Value of New Business (VNB) ²	533	429
Combined Operating Ratio (COR) ²	93.3%	95.1%

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

At an overall level, adjusted operating profit^{1,5} is down by 2% compared to 2016. However, our continuing businesses have delivered an increase in adjusted operating profit^{1,5} of 7%, demonstrating the strength of our focussed approach. Profit before tax attributable to shareholders' profits⁵ has increased to £1,044 million (2016: £837 million), with the adverse impact of economic assumption changes in France partly offset by the profit of £180 million arising as a result of the disposal of Antarius⁶.

1 Adjusted operating profit is an Alternative Performance Measure (APM) which is used by the Group to supplement the required disclosures under IFRS. Please refer to note B in the 'Accounting Policies' section, note 4 'Segmental Information' and 'Other Information' within the Annual report and accounts for further information.

2 This is an Alternative Performance Measure (APM) which provides useful information to enhance the understanding of financial performance. Further information on APM's, including a reconciliation to the financial statements (where possible), can be found in the 'Other Information' section of the Annual report and accounts.

3 Following the launch of UK insurance which brings 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 have been restated. This realignment was not implemented for cash remitted to Group, as this metric is managed at a legal entity level and Ireland constitutes a branch of the United Kingdom business.

4 Market Security & Analysis Inc. 2016 online database.

5 The amounts shown above in respect of adjusted operating profit and profit before tax attributable to shareholders' profits do not reconcile to the corresponding amounts in note 4 - 'Segmental information' within the Annual report and accounts due to the reclassification of non-insurance business to Other Group activities.

6 Further information in respect of life investment variances is included within the APM section of the Annual report and accounts.

Cash remitted² to the Group increased to £485 million (2016: £449 million) mainly due to an increased dividend in France, partly offset by a reduction in cash remitted from Spain, following disposals.

The Solvency II Value of New Business (SII VNB)² increased by 17%, and by 27% excluding disposed businesses, with strong performance in Italy which was up 102% as a result of higher unit-linked and hybrid product volumes and an improved margin on with-profits products.

Operating expenses² of £820 million (2016: £765 million) were flat in constant currency, despite the significant increase in sales. This includes a decrease due to the disposal of Ireland Health in 2016, offset by the consolidation of the Polish joint ventures and investment in growth in our continuing businesses.

The European COR² has improved by 1.8pp primarily due to France's COR² reducing by 2.5pp due to lower large losses and improved claims experience. Our claims ratio has decreased by 2.9pp to 63.1% (2016: 66.0%) with improvement across all markets except Italy.

FRANCE

We offer a full range of life, general, protection, health insurance and asset management products in France with significant strengths in distribution through large tied-agents, Financial Advisers, broker networks and direct to customers.

France is a mature and stable market with an improved growth outlook and strengthened business confidence as a result of pro-business reforms led by the new government.

Operational and financial highlights in 2017 include:

- Improved the customer experience by making it easier for our direct customers to do business with us and offering a composite set of products in our SME space.
- Completed the sale of our shareholding in Antarius to Crédit du Nord in April 2017.
- Excluding the Antarius disposal, delivered adjusted operating profit^{1,4} of £507 million (2016: £422 million).

In 2018, we aim to digitise across all channels and implement differentiated customer propositions under a single Aviva brand to grow our customer base significantly.

ITALY

We offer life, general and health insurance in Italy. We distribute through two major bancassurance partnerships, multi-agents and Independent Financial Advisers.

Aviva Italy continues to grow in a stable market with good asset flows of £2.3 billion and a positive economic outlook.

Operational and financial highlights in 2017 include:

- Grew volumes of our capital-light 'hybrid product' that combines unit-linked, with-profit and protection characteristics.
- Announced the termination of our distribution agreement with Banco BPM S.p.A.
- Delivered adjusted operating profit^{1,4} of £213 million (2016: £212 million).

In 2018, our priority is to implement a new strategy and increase digital capabilities to further enhance our customers' experience.

POLAND

We are a leading life insurer in Poland and also provides health and general insurance products through the largest direct sales networks, a financial adviser network and bancassurance partners.

Our results in 2017 were driven by a rebound in general insurance profitability. The government has recently announced its intention to launch mandatory pension auto-enrolment providing further impetus to grow our life insurance business.

Operational and financial highlights in 2017 include:

- Introduced innovative products and launched MyAviva, an online customer self-service platform, leveraging group capabilities.
- Delivered adjusted operating profit^{1,4} of £177 million (2016: £140 million).

In 2018, we will start developing a market leading composite insurance proposition via a mobile application while expanding functionalities of implemented digital solutions.

IRELAND³

We are a market leading composite insurer with a multi-distribution network and strong brand presence. With the announcement to acquire the life insurer, Friends First, we will become one of the largest composite insurers with market share of 15% in Life and General Insurance.

The Irish economy shows signs of continued growth¹ and we are well placed to benefit from government reform in general insurance compensation and pension auto-enrolment.

Operational and financial highlights in 2017 include:

- Launched a new composite offering that rewards customer loyalty.
- Delivered adjusted operating profit^{1,4} of £86 million (2016: £80 million).

In 2018, our plan is to integrate Friends First while continuing to deliver differentiated digital products and services.

¹ Adjusted operating profit is an Alternative Performance Measure (APM) which is used by the Group to supplement the required disclosures under IFRS. Please refer to note B in the 'Accounting Policies' section, note 4 'Segmental Information' and 'Other Information' within the Annual report and accounts for further information.

² This is an Alternative Performance Measure (APM) which provides useful information to enhance the understanding of financial performance. Further information on APM's, including a reconciliation to the financial statements (where possible), can be found in the 'Other Information' section of the Annual report and accounts.

³ Following the launch of UK insurance which brings 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 have been restated. This realignment was not implemented for cash remitted to Group, as this metric is managed at a legal entity level and Ireland constitutes a branch of the United Kingdom business.

⁴ The amounts shown above in respect of adjusted operating profit and profit before tax attributable to shareholders' profits do not reconcile to the corresponding amounts in note 4 - 'Segmental information' within the Annual report and accounts due to the reclassification of non-insurance business to Other Group activities.

Asia

Overview and strategy

We have presence in six markets across Asia, from large populous nations like China, India and Indonesia, to advanced regional wealth management centres such as Hong Kong and Singapore. These markets provide an accessible population of around three billion, and most of them have relatively low insurance penetrations compared to more developed Western markets. This offers tremendous growth potential.

We currently provide life and health insurance solutions to around 4.2 million customers across our markets in Asia. We operate a multi-distribution strategy which includes tied agency, financial advisers, bancassurance, digital, telemarketing, direct sales force and group.

Our strategy is to disrupt current market practices by placing a greater emphasis on our customers. We offer products individually or in tailored combinations to meet their needs and create real value in line with our multi-distribution strategy.

Investment in distribution channels, digital and analytics capabilities continued throughout 2017. We are starting to see the benefits of earlier investments in Singapore and China, and the overall repositioning of Asia is now starting to take shape.

Financial performance

£m	2017	2016
Adjusted operating profit ^{1,3}	227	228
Cash remittances ²	–	–
Operating expenses ²	207	177
Solvency II Value of New Business (SII VNB) ²	162	106
Combined Operating Ratio (COR) ²	123.2%	109.9%

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

Adjusted operating profit^{1,3} from our Life and General Insurance and health businesses remained broadly flat at £227 million (2016: £228 million). Excluding Friends Provident International (FPI), life adjusted operating profit^{1,3} increased by 10% to £116 million (2016: £101 million) driven by higher profit generated from existing business in China, coupled with new business growth in Singapore from its financial advisory channel which was partially offset by our continued investments in digital and analytics capabilities. Including FPI, life adjusted operating profit^{1,3} was broadly unchanged at £235 million (2016: £241 million).

The general insurance and health business reported a £8 million loss (2016: £13 million loss) as a result of higher claims experience from our health business in Singapore partly offset by an input tax refund from the local authority.

Our announcement to dispose of FPI and Taiwan resulted in a loss of £125 million as these businesses have been remeasured at fair value. A further charge of £65 million has arisen as a result of an annual impairment review of our investment in India. These charges

have contributed to a loss before tax attributable to shareholders' profits³ of £146 million (2016: profit of £48 million).

No dividends were remitted to Group during the year (2016: £nil) as we continue to reallocate capital to support growth initiatives.

Operating expenses² increased by 13% to £207 million (2016: £177 million) reflecting the additional half year of expenses from Vietnam, higher distribution costs to support volume growth in Singapore and investment in digital and analytics capabilities.

The SII VNB² of our life businesses increased by 47% to £162 million (2016: £106 million) reflecting higher volumes from Singapore's financial advisory channel. In China, SII VNB² increased to £45 million (2016: £19 million) driven by sales growth in agency and broker channels and higher interest rates.

Net written premiums were £13 million (2016: £11 million). COR² deteriorated by 13.3pp to 123.2% (2016: 109.9%) due to unfavourable claims experience and the continued softening of market premium rates for motor insurance in Singapore.

Operational highlights

- We established Asia Digital (located in the Singapore Digital Garage) to accelerate the delivery of our 'Digital First' strategy using global assets such as MyAviva, websites, marketing and analytics systems.
- We continued to work with partners, Hillhouse Capital and Tencent, to create Hong Kong's first truly digital insurer
- We acquired the remaining 50% shareholding from VietinBank to form Aviva Vietnam in April and entered into a long-term distribution agreement with the bank to sell products through its network
- We announced the disposal of FPI which will enable us to focus on allocating capital to areas where we can generate strong returns

Market context and challenges

We believe the long-term favourable trends of the emerging middle-class, increasing awareness in retirement planning and a growing market share in healthcare will persist across the region. We also believe Asia will continue to outperform other markets in insurance growth.

The increased use of digital applications in our daily lives and a heightened sense of fintech development play to our strengths in digital and innovation. We are encouraged by multiple Asian governments' support in this area and we are ever more enthused in seeing consumers' rapid adoption.

Priorities for 2018

- We will continue to execute and accelerate the growth of our financial adviser platforms in Singapore and look to maximise the expertise to capture similar opportunities in other Asian markets
- We will continue to invest in our digital business and distribution channels so that we can improve customer experiences, innovate and respond quickly to the changing needs of our customers and broker partners
- We will accelerate our operational efficiency through digitalisation and optimisation of structures and processes

1 Adjusted operating profit is an Alternative Performance Measure (APM) which is used by the Group to supplement the required disclosures under IFRS. Please refer to note B in the 'Accounting Policies' section, note 4 - 'Segmental Information' and 'Other Information' within the Annual report and accountsAnnual report and accounts for further information.

2 This is an Alternative Performance Measure (APM) which provides useful information to enhance the understanding of financial performance. Further information on APM's, including a reconciliation to the financial statements (where possible), can be found in the 'Other Information' section of the Annual report and accounts.

3 The amounts shown above in respect of adjusted operating profit and profit before tax attributable to shareholders' profits do not reconcile to the corresponding amounts in note 4 - 'Segmental information' within the Annual report and accounts due to the reclassification of non-insurance business to Other Group activities.

Aviva Investors

Overview and strategy

We are Aviva's global asset management business with expertise in multi-asset, fixed income, equity, real estate and alternative investments. We currently invest more than £353 billion on behalf of our customers across a number of major markets. This gives us the size and scale to successfully seek out opportunities that will deliver specific investor outcomes.

Our aim is to be a global leader in outcome-oriented investing, leveraging our international reach and expertise to solve our clients' problems – most notably with the Aviva Investors Multi-Strategy (AIMS) range of funds – and increase investments in real assets such as real estate and infrastructure debt and equity.

In a world of low interest rates and Solvency II, we provide the solutions for the Group to achieve the returns it needs. We offer winning solutions to the Group and external investors alike.

Aviva's development of the digital platform provides us with significant opportunities with direct clients: if these clients select Aviva Investor funds on Aviva's digital platforms, we are confident that they will benefit from a high quality solution and a seamless customer experience.

Financial performance

£m	2017	2016
Fund management adjusted operating profit ¹	168	139
Revenue	577	506
Operating expenses ²	409	367
Cash remittances ²	58	39
Assets under management ²	353bn	345bn

We have made progress in externalising the business and developing higher value outcome-oriented propositions for our clients.

Fund management adjusted operating profit¹ increased by 21% to £168 million driven by growth in revenue, with operating expenses increasing at a slower rate. This led to a 2pp improvement in the adjusted operating profit¹ margin, calculated as fund management adjusted operating profit¹ expressed as a percentage of revenue, to 29% (2016: 27%).

Revenue has increased by 14% to £577 million due to the full year impact of on-boarding £14 billion of Friends Life assets in 2016, a 40% growth in the AIMS assets under management to £12.6 billion (2016: £9.0 billion) and a 24% increase in the origination of infrastructure assets to £4.1 billion (2016: £3.3 billion). The share of revenue from external clients increased to 34% (2016: 32%).

Operating expenses² increased to £409 million (2016: £367 million). Cost increases have been controlled and reflect the investment required to support the growth of the business. Integration and restructuring costs were £3 million (2016: £19 million).

Cash remitted² to Group increased by 49% to £58 million (2016: £39 million) due to growth in the profitability of the business.

Assets under management² increased by 3% to £353.2 billion (2016: £344.5 billion) due to a combination of net fund inflows of £1.6 billion, favourable foreign exchange rate movements of £3.3 billion, favourable liquidity movements of £1.9 billion and the effect of market movements of £2.6 billion offset by the disposal of the Real Estate fund of £0.7 billion.

Operational highlights

- We achieved significant growth in our AIMS range of funds, with the combined assets under management² increasing from £9 billion to £12.6 billion.
- We added to our range of outcome-oriented funds with the launch of our Alternative Investment Solutions aimed at Institutional investors looking for long-term income and can invest in multiple illiquid asset classes.
- We secured significant mandate wins in global high yield, emerging market debt, long income real estate and illiquid alternatives.

Market context and challenges

The uncertainty of Brexit remains a challenge for the asset management industry. Aviva Investors already has a significant presence in France, Luxembourg and Warsaw and have been looking at all outcomes.

The asset management industry is under intense pressure to demonstrate value to customers and in June the Financial Conduct Authority (FCA) announced the findings of its asset management market study, highlighting that there is room for improvement. We believe outcome orientated investing aligns well with these findings and we support the push for greater transparency: it is imperative we can prove our value to society and demonstrate how we can support economic growth and development.

Market conditions have been benign despite considerable economic and geo-political uncertainty. These conditions have rewarded high levels of exposure to market risk, making strategies with good downside protection strategies look less attractive in the short term.

We continue to invest in our Global Responsible Investing credentials, winning the coveted Responsible Investor Innovation and Industry Leadership award. Environmental and social thinking and governance (ESG) is embedded within our investment decision making process across all asset classes. Read more in the 'Corporate responsibility' section later in this report.

Priorities for 2018

- We will improve our already strong investment performance through better research, challenge and debate, higher conviction and improved portfolio construction.
- We will grow and protect our asset base by investing in distribution and creating attractive savings solutions for the rest of the Group.
- We will simplify our business by removing complexity, introducing robotics for routine tasks and leveraging big data to give us better insights.
- We will accelerate our Real Assets business, with a particular emphasis on the origination of illiquid assets to support Aviva's expected growth in bulk purchase annuities.
- We will further embed our risk and control framework to look after customers and shareholders better and protect our reputation.

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² This is an Alternative Performance Measure (APM) which provides useful information to enhance the understanding of financial performance. Further information on APM's, including a reconciliation to the financial statements (where possible), can be found in the 'Other Information' section of the Annual report and accounts.

[Risk and risk management](#)

Risk and risk management

Risk management is key to Aviva's success. We accept the risks inherent to our core business lines of life, accident and health, and general insurance and asset management. We diversify these risks through our scale, geographic spread, the variety of the products and services we offer and the channels through which we sell them.

We receive premiums which we invest in order to maximise risk-adjusted returns, so that we can fulfil our promises to customers while providing a return to our shareholders. In doing so we have a preference for retaining those risks we believe we are capable of managing to generate a return.

Looking forward, these risks may be magnified or dampened by current and emerging external trends which may impact upon our current and longer term profitability and viability, in particular our ability to write profitable new business.

This includes the risk of failing to adapt our business model to take advantage of these trends. The 'Principal risk trends and causal factors' table in this section describe what these trends are, their impact, future outlook and how we manage these risks.

How we manage risk

Rigorous and consistent risk management is embedded across the Group through our Risk Management Framework, comprising our systems of governance, risk management processes and risk appetite framework.

Our governance

This includes risk policies and business standards, risk oversight committees and roles and responsibilities. Line management in the business is accountable for risk management which, together with the risk function and internal audit, form our 'three lines of defence' of risk management. The roles and responsibilities of the Board Governance, Audit and Risk Committees and Management Disclosure, Asset Liability and Operational Risk Committees in the oversight of risk management and internal control is set out in the 'Directors' and corporate governance report' in the Annual report and accounts.

Our process

This comprises the processes we use to identify, measure, manage, monitor and report risks, including the use of our risk models and stress and scenario testing. Having identified and measured the risks of our business, depending on our risk appetite, we either accept these risks or take action to reduce, transfer or mitigate them.

Our risk appetite framework

This refers to the risks that we select in pursuit of return, the risks we accept but seek to minimise and the risks we seek to avoid or transfer, including quantitative expressions of the level of risk we can support (e.g. the amount of capital we are prepared to put at risk).

Types of risk inherent to our business model

Risks customers transfer to us

- Life insurance risk includes longevity risk (annuitants living longer than we expect), mortality risk (customers with life protection), critical illness risk, expense risk (the amount it costs us to administer policies) and persistency risk (customers lapsing or surrendering their policies)
- General insurance risk is the risk arising from loss events (fire, flooding, windstorms, accidents etc)
- Accident and Health insurance risk covers healthcare costs and loss of earnings arising from customers falling ill

Risks arising from our investments

- Credit risks (actual defaults and market expectation of defaults) create uncertainty in our ability to offer a minimum investment return on our investments
- Liquidity risk is the risk of not being able to make payments as they become due because there are insufficient assets in cash form
- Market risks result from fluctuations in asset values, including equity prices, property prices, foreign exchange, inflation and interest rates

Risks from our operations and other business risks

- Operational risk is the risk of direct or indirect loss, arising from inadequate or failed internal processes, people and systems, or external events including changes in the regulatory environment
- Asset management risk is the risk of customers redeeming funds, not investing with us, or switching funds, resulting in reduced fee income

Principal risk types

The types of risk to which the Group is exposed, described in the table below, have not changed significantly over the year. All of the risks below, and in particular operational risks, may have an adverse impact on our brand and reputation.

Risk type	Risk preference	Mitigation
Credit risk <ul style="list-style-type: none">Credit spread¹Credit default	We like credit risk as we believe we have the expertise to manage it and the structural investment advantages conferred to insurers with long-dated, relatively illiquid liabilities enable us to earn superior investment returns.	<ul style="list-style-type: none">Risk appetites set to limit overall level of credit riskCredit limit framework imposes limits on credit concentration by issuer, sector and type of instrumentInvestment restrictions on sovereign and corporate exposure to certain Eurozone countriesCredit risk hedging programmeSpecific asset de-risking
Market risk <ul style="list-style-type: none">Equity price¹PropertyInterest rateForeign exchangeInflation	We actively seek some market risks as part of our investment and product strategy. We have a limited appetite for interest rate, foreign exchange and inflation risks as we do not believe that these are adequately rewarded.	<ul style="list-style-type: none">Risk appetites set to limit exposures to key market risksActive asset management and hedging in business unitsScalable Group-level equity and foreign exchange hedging programmePension fund de-riskingAsset and liability duration matching limits impact of interest rate changes and actions taken to manage guarantee risk, through product design
Life insurance risk <ul style="list-style-type: none">Longevity¹PersistencyMortalityExpenses	We take measured amounts of life insurance risk provided we have the appropriate core skills in underwriting and pricing. We like longevity risk as it diversifies well (i.e. has little/no correlation) against other risks we retain.	<ul style="list-style-type: none">Risk selection and underwriting on acceptance of new businessAviva's staff pension scheme longevity swap covering approximately £5 billion of pensioner in payment scheme liabilitiesProduct design that ensures products and propositions meet customer needsUse of reinsurance to mitigate mortality/morbidity risks
General insurance risk <ul style="list-style-type: none">GI catastropheGI reserving (latent and non-latent)GI underwritingExpenses	We take general insurance risk in measured amounts for explicit reward, in line with our core skills in underwriting and pricing. We have a preference for those risks that we understand well, that are intrinsically well managed and where there is a spread of risks in the same category. GI risk diversifies well with our Life Insurance and other risks.	<ul style="list-style-type: none">Use of reinsurance to reduce the financial impact of a catastrophe and manage earnings volatilityApplication of robust and consistent reserving framework to derive best estimate with results subject to internal and external review, including independent reviews and audit reviewsExtensive use of data, financial models and analysis to improve pricing and risk selectionUnderwriting and claims management disciplinesUnderwriting appetite framework linked to delegations of authority that govern underwriting decisionsProduct development and management framework that ensures products and propositions meet customer needsFormal and documented claims management philosophies and procedures
Liquidity risk²	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.	<ul style="list-style-type: none">Maintaining committed borrowing facilities (£1.65 billion) from banksAsset liability matching methodology develops optimal asset portfolio maturity structures in our businesses to ensure cash flows are sufficient to meet liabilitiesCommercial paper issuanceUse of the limit framework covering minimum liquidity cover ratio and minimum central liquidityContingency Funding Plan in place to address liquidity funding requirements in a significant stress scenario
Asset management risk <ul style="list-style-type: none">Fund performance, liquidity and margin, Product, and Persistency risks	Risks specific to asset management should generally be reduced to as low a level as is commercially sensible, on the basis that taking-on these risks will rarely provide us with an upside.	<ul style="list-style-type: none">Product development and review processInvestment performance and risk management oversight and review processPropositions based on customer needsClient relationship teams managing client retention risk
Operational risk <ul style="list-style-type: none">ConductLegal & regulatoryPeopleProcessData securityTechnology	Operational risk should generally be reduced to as low a level as is commercially sensible, on the basis that taking operational risk will rarely provide us with an upside.	<ul style="list-style-type: none">Application of enhanced business standards covering key processesOur Operational Risk & Control Management Framework which includes the tools, processes and standardised reporting necessary to identify, measure, manage, monitor and report on the operational risks and the controls in place to mitigate those risks within centrally set tolerancesEnhanced scenario based approach to determine appropriate level of capital for operational risksOn-going investment in simplifying our technology estate to improve the resilience and reliability of our systems

¹ Top three risks ranked by diversified Solvency II Solvency Capital Requirement

² Not quantifiable in terms of economic capital

Principal risk trends and causal factors

This table describes the external trends and causal factors impacting our inherent risks, their impact, future outlook and how we take action to manage these risks:

Key trends and movement	Risk management	Outlook
Uncertain interest rate environment – if current low interest rates continue for a prolonged period it will adversely affect the return we earn on our investments, as well as the attractiveness of the returns we can offer to new customers. Trend: Reducing Risks impacted: Credit risk, Market risks, Liquidity risk	Over the last few years we have taken significant steps to reduce the sensitivity of our balance sheet to interest rates. Our exposure to interest rates movements is mitigated by investing in fixed interest securities which closely match the interest rate sensitivity of our liabilities. Actions taken include close asset liability matching, reducing sales of products with guarantees (in particular in Italy and France), and shifting our sales towards protection and unit-linked products.	While interest rates are still well below pre-financial crisis levels, during 2017, the US Fed raised interest rates on three occasions, the Bank of England reversed its 2016 rate reduction and the ECB has begun to reduce its asset purchases. Although rates may remain below pre-2008 financial crisis levels in the EU and UK for some time to come, there is a risk that a rapid increase in rates could result in a collapse in bond prices, widening spreads and reducing asset prices.
UK-EU relations (Brexit uncertainty) – 18 months since the referendum result there remains considerable uncertainty over the UK's future relationship with the EU, economic growth and productivity, as well as the status of EU employees working in the UK and longer term implications for financial services regulation, including Solvency II. Trend: Volatile Risks impacted: Credit risk, Market risks, Operational risk	Brexit does not have a significant operational impact on Aviva. We are actively engaged to ensure the interests of our customers, the company and the industry are appropriately taken into account. Our plans to address the loss of the ability for UK firms to passport business into the EU are currently in progress. Given our corporate structure, this is not a major risk. We are also reviewing our data arrangements to ensure that adequate measures are in place to allow continued uninterrupted flow of personal data. Our Financial Event Response Plan ensures that we will be able to respond swiftly and effectively to any severe adverse financial event.	In December 2017, the UK and EU agreed separation terms, reducing the risk of a sudden departure in March 2019. In 2018, negotiations will begin on transitional arrangements and a future trade agreement. Uncertainty over the ultimate outcome is heightened by the UK Government's lack of parliamentary majority.
Medical advances and healthier life styles – these contribute to an increase in life expectancy of our annuitants and thus future payments over their lifetime may be in excess of the amounts we currently expect. Trend: Stable Risks impacted: Life insurance risk (longevity)	We monitor our own experience carefully and analyse external population data to identify emerging trends. Detailed analysis of the factors that influence mortality informs our pricing and reserving policies. We add qualitative medical expert inputs to our statistical analysis and analyse factors influencing mortality and trends in mortality by cause of death. Aviva's Staff Pension Scheme hedges its longevity risk covering £5 billion of pensioner in payment liabilities. Since 2016 we have used longevity reinsurance for bulk purchase annuities and Aviva guaranteed annuity options. We continue to evaluate emerging reinsurance market solutions.	There is considerable uncertainty over the extent that improvements in life expectancy experienced over the last 40 years will continue into the future e.g. despite continued medical advances emerging, lifestyle changes and strains on public health services may begin to slow or even reverse this trend.
Climate change – potentially resulting in higher than expected weather-related claims (including business continuity claims) and inaccurate pricing of general insurance risk, as well as adversely impacting economic growth and investment markets. Trend: Increasing Risks impacted: General insurance risk, Credit risk, Market risk	We are actively engaged in public policy debate on the risks and impacts of climate change to our business and customers. We use reinsurance to reduce the financial impact of catastrophic weather events. Our flood mapping analytics helps us identify properties most at risk and improve our risk selection. Our responsible investment strategy ensures climate change, as well as other environmental and social issues are integrated into our investment decisions. Read more in respect of the physical, transition and liability risks we face as an asset owner, insurer and asset manager in our 'Climate-related financial disclosure'.	Global average temperatures over the last four years have been the hottest on record. Despite the UNFCCC Paris agreement, the current trend of increasing CO ₂ emissions is expected to continue with global temperatures likely to exceed pre-industrial levels by at least 2°C and weather events (floods, droughts, windstorms) increasing in frequency (with a possibility of more cluster events) and severity. Disclosure of impacts against various climate scenarios and time horizons will become increasingly common for all companies.

Key trends and movement	Risk management	Outlook
<p>Impact of new technologies – failure to understand and react to the impact of new technology and its effect on customer behaviour and how we distribute products could potentially result in our business model becoming obsolete. While failure to keep pace with the use of data to price more accurately and to detect insurance fraud could lead to loss of competitive advantage and underwriting losses.</p>	<p>Aviva's strategy is focussed on transformation into a digital leader by taking a bold and enterprise-wide approach to digital and automation. Four years ago Aviva announced its strategic framework and embarked on a digital strategy using predictive analytics, automation and digital sales channels. We are currently integrating data analytics into our operations, enabling new means of underwriting, personalised customer propositions and operational efficiency now and in the future such as our Ask it Never initiatives. Refer to 'Our strategy' for further information on our digital strategy.</p>	<p>There is expected to be a five-fold growth in digital data between now and 2020. Big data is becoming a critical driver of competitive advantage for insurers.</p>
<p>Trend: Increasing</p>		<p>Artificial intelligence and robotic automation are likely to increasingly transform the efficiency of insurance operations such as underwriting and claims and will transform the customer experience and build deeper customer relationships.</p>
<p>Risks impacted: Operational risk (developing the right strategy)</p>		
<p>Changes in public policy – any change in public policy (government or regulatory) could influence the demand for, and profitability of, our products. In some markets there are (or could be in the future) restrictions and controls on premium rates, rating factors and charges.</p>	<p>We actively engage with governments and regulators in the development of public policy and regulation. We do this to understand how public policy may change and to help ensure better outcomes for our customers and the company. The Group's multi-channel distribution and product strategy and geographic diversification underpin the Group's adaptability to public policy risk, and often provides a hedge to the risk. For example, since the end of compulsory annuitisation in 2015 in the UK we have compensated for falling sales of individual annuities by increasing sales of other life and pension products including bulk purchase annuities.</p>	<p>The UK Government's lack of parliamentary majority increases the possibility of a general election and change of government resulting in a shift in public policy with consequences for the products we sell and our investment strategy. In other markets in which we operate: a general election will be held in Italy in March 2018; in Poland we face heightened uncertainty on public policy on pension reform; and in Ontario, Canada, further regulatory reform focussed on providing affordable motor insurance is required.</p>
<p>Trend: Volatile</p>		
<p>Risks impacted: Operational risk (developing the right strategy, regulatory compliance)</p>		
<p>Cyber crime – criminals may attempt to access our IT systems to steal or utilise company and customer data, or plant malware viruses, in order to access customer or company funds, and/or damage our reputation and brand.</p>	<p>We are not complacent. We continue to invest significantly in IT Security, introducing additional automated controls to protect our data, detect and prevent cyber-attacks. In addition to implementing secure development practices we employ our own 'white hat' hackers to regularly test our IT security defences. We undertake regular activities with our people to promote awareness of cyber and data security, including: employee phishing exercises, computer based training and more regular communications about specific threats as they are identified.</p>	<p>In 2017 there were a number of high profile cyber security incidents for corporates in the UK and elsewhere (most notably the global WannaCry attack), and we expect this to increase in 2018 as cyber criminals and rogue states become ever more sophisticated and given the growing importance of digital automation in business strategy.</p>
<p>Trend: Increasing</p>		
<p>Risks impacted: Operational risk (fraud, business interruption)</p>		
<p>Changes in customer behaviour</p>		
<p>– will impact how customers wish to interact with us and the product offering they expect from us, including the exercise of options embedded in contracts already sold by us.</p>	<p>Not only do we listen to our customers to ensure we meet their needs, we also seek to transform the customer experience through our digital strategy, creating an effortless customer experience. For information on how we are mitigating this risk through the execution of Digital First and True Customer Composite strategies refer to 'Our strategy', with further examples provided in the 'Market review' section.</p>	<p>We expect customers will be much more in control, expecting to self-service and self-solve. They will want to access data and insight and use it to guide their own decisions.</p>
<p>Trend: Stable</p>		
<p>Risks impacted: Operational risk (developing the right strategy, regulatory compliance)</p>		
<p>Outsourcing – we rely on a number of outsourcing providers for business processes, customer servicing, investment operations and IT support. The failure of a critical outsourcing provider could significantly disrupt our operations.</p>	<p>Our businesses are required to identify business critical outsourced functions (internal and external) and for each to have exit and termination plans and business continuity and disaster recovery plans in the event of supplier failure, which are reviewed annually. Business continuity and disaster recovery plans are subject to annual testing. We also carry out supplier financial stability reviews at least annually.</p>	<p>The recent insolvency of Carillion, which was not a direct supplier of services to Aviva, has brought added focus to this risk and we expect regulatory scrutiny of outsourcing arrangements to increase.</p>
<p>Trend: Stable</p>		
<p>Risks impacted: Operational Risk</p>		

Corporate responsibility

Defying uncertainty in uncertain times

At Aviva we have an approach to business that is both responsible and sustainable and which aligns with our values and supports our strategy. With a clear purpose to Defy Uncertainty, we are using our bright ideas to help tackle some of the most important social and environmental challenges of our time, such as ageing populations and climate change, for the good of our customers, our communities and the world.

Meeting our customers' needs

We offer a wide range of insurance and savings products to help our 33 million customers protect what's important to them and save for a comfortable future.

In 2017, globally we paid out £34.6 billion in benefits and claims, supporting our customers when they needed us the most.

In addition, nearly two thirds of our markets offered our customers a product which enabled them to be more environmentally responsible or gave them easier access to the protection they needed for themselves and their families¹. For example, in Poland we funded 300 external air quality sensors which were added to the national network in places selected by local communities. By helping people monitor the air quality where they live, they can take action to protect themselves, their families, and their communities. We are also offering discounts for in-home air quality sensors to life and health insurance customers in Poland.

We continue to improve our processes for the benefit of our customers. For example, Aviva Singapore has implemented e-submission for new business applications for individual life and health customers. This has reduced the need for paper forms and made applications easier for customers and advisers by providing an immediate underwriting decision.

We work hard to offer great customer service and this is reflected in our NPS score[®] which shows that seven out of ten of our businesses are in or above the upper quartile relative to the local market average.

However, we know that we do not always get it right and any complaints and feedback we receive are taken seriously and investigated thoroughly. This commitment is reflected in the customer business standard all our markets abide by (see the policies section of aviva.com/social-purpose).

Ethical practice

We are committed to high standards of ethical behaviour. Our Business Ethics Code outlines our high ethical standards and ensures we operate responsibly and transparently. We require all our people, at every level, to read and sign-up to our Code every year (99% of our employees did so in 2017). In 2017, we also reviewed and improved our business ethics training that accompanies the Code, to reinforce its importance and practical application for our people.

We have a zero tolerance approach to acts of bribery and corruption. To manage bribery and corruption risks, Aviva operates within a risk management framework which sets high-level policies and standards across all markets. These policies and standards

apply to all Aviva directors and employees, business units, and operations, and it is the responsibility of CEOs (or equivalent) to ensure that their business operates in line with them.

The Financial Crime Business Standard guides our risk-based financial crime programmes, which seek to prevent, detect and report financial crime, including any instances of bribery and corruption, while complying fully with relevant legislation and regulation.

We implement a risk-based training and awareness framework to ensure employees and others acting on Aviva's behalf know what is expected of them and how they should manage bribery and corruption risks.

We conduct risk-based due diligence when recruiting and when engaging external partners. This includes background checks and a requirement to align to Aviva's anti-bribery and anti-corruption principles. Managed suppliers are asked to sign-up to our Supplier Code of Behaviour and are also made aware of our Business Ethics Code, both of which also include reference to human rights and modern slavery. In 2017, 81% of Group and UK managed suppliers agreed to our Code of Behaviour (or had their own equivalent code of behaviour) which requires compliance with all applicable financial crime laws and regulations, including bribery and corruption. In 2017, we engaged 88% of our managed suppliers on corporate responsibility issues.

To ensure that anti-bribery and anti-corruption controls are operating effectively we assess relevant management information such as key performance indicators on financial crime risks; compliance oversight; reporting to the appropriate local governance committee; annual attestation to compliance with the Standard; and inclusion in Internal Audit's risk based audit programme. At a Group level, the Chief Risk Officer provides Aviva's Board Governance Committee with regular reporting on financial crime matters, including Aviva's anti-bribery and anti-corruption programme.

Our malpractice helpline, Right Call, makes it easy to report any concerns in confidence, with all reports referred to an independent investigation team. In 2017, 41 cases were reported through Right Call (2016: 25), including one related to bribery and corruption concerns. 35 cases reached conclusion, and 6 remain under investigation. There has been no material litigation arising from any case reported in 2017.

Supporting communities

In 2017, we launched the Aviva Community Fund in more markets, giving hundreds of organisations across ten countries the chance to secure the support they need to make a difference in their local communities. We also increased our community investment by 5%, totalling £11.9 million (2016: £11.3 million) and the number of inspirational local projects we supported by 50%, totalling 2,400 (2016: 1,600). This in turn helped 792,000 people. We harnessed the passion and talent of our people at Aviva, with 13% of our employees contributing 48,400 hours of volunteering time and giving or fundraising over £1.2 million. Our Voice of Aviva results show that 88% of our people believe that Aviva is a good corporate citizen, up 8% since 2015 and 15% above the industry benchmark. These employees are 58% more likely to be proud of Aviva.

We are now two years into our strategic partnership with the British Red Cross (BRC), working together to help communities to be better informed, prepared, and therefore more resilient if disaster strikes. This year we identified and funded four new Red Cross community resilience projects across our markets in Canada, Singapore, Italy and Poland. In the UK we supported the BRC to help those impacted by the Grenfell Tower fire, and the terror

¹ For a definition of these products, please see www.aviva.com/CRreportingcriteria2017.

attacks in Manchester and Westminster. We are also the sponsor of the UK-wide BRC Community Reserve Volunteer project, which will create a network of 10,000 people to help out when disaster strikes their local communities and working together with the BRC during major emergencies such as flooding.

In 2018, we plan to increase the impact of the Aviva Community Fund across the world and aim to support 2.5 million beneficiaries through our community activities by 2020.

Reuniting our customers with their policies

Maintaining contact with our 10.6 million UK life and pension customers is extremely important to us and we work proactively to reunite them with their policies. Our focus in 2017 has been on re-engaging with customers whose policies are administered by our third party partners, or who are members of a Corporate Pension scheme. We have also worked closely with the life and pensions industry and the Association of British Insurers on developing a framework for dealing with 'gone away' customers.

By the end of 2017, we managed to re-establish contact with nearly 118,000 customers. Our work in the early part of 2018 will focus on re-establishing contact with those customers who hold annuity products.

Championing responsible investment

Aviva is committed to responsible investment, using our influence to support more sustainable businesses and ultimately a more sustainable economy and society. As part of our commitment to responsible investment we use Environmental, Social and Governance (ESG) insight to re-orientate capital away from short-term thinking and towards longer term investment decisions.

We actively promote good practice among the companies we invest in. We aim to identify and reduce ESG risks in our portfolios. For example, by understanding the quality of the Board of directors of a company and its strategy on issues, such as climate change or the Living Wage, we can gauge how well prepared they are to deal with current or emerging ESG issues.

As an example of our work in this area, Aviva Investors, Aviva's global asset management company, is focussing on reducing antibiotic resistance at 40 large food producing and retailing companies with high exposure to excessive antibiotic use within their supply chains.

Our investments also support the transition to a low-carbon economy (see below for more details).

Investing with impact

Across the world, we are working with entrepreneurs to nurture their ideas and grow their businesses, with the aim of changing insurance for the better. In 2014 Aviva France launched 'Aviva Impact Investing France', becoming the first financial institution in the country to create an investment fund dedicated to financing socially and environmentally responsible companies. This fund is now endowed with €30 million. With this pioneering initiative, Aviva wants to participate in the development of social entrepreneurship, a particularly innovative sector that creates viable economic solutions to address major social issues. Aviva France also wants to demonstrate that investments can create social good as well as healthy financial earnings.

During 2017, Aviva Ventures, our global capital investment business, also invested in a number of start-ups having a positive social impact on people's lives. This included in the UK, investment in Owlstone Medical Ltd, a medical diagnostics company developing a breathalyser that can detect diseases at a very early stage. The company is currently developing tests for lung and colorectal cancer, two of the most common terminal cancer conditions worldwide.

Shaping markets for sustainability

We believe the UN Sustainable Development Goals (SDGs) can guide us, our customers and society towards a brighter, more sustainable future. However, it is only by changing the rules of capital markets and making finance longer-term and more sustainable that these ambitious goals will be met. We are therefore spearheading the creation of the World Benchmarking Alliance and the establishment of public, transparent and authoritative league tables, ranking companies on their contribution to the SDGs. In September 2017, we jointly launched a global consultation to shape this work and set-up the World Benchmarking Alliance. We continue to engage with a range of governments and wider stakeholders worldwide.

Aviva has been a member of the EU High Level Expert Group on Sustainable Finance, which is making recommendations to the European Commission on policy changes required to make the flows of finance more sustainable. Among these are proposals to consider capital adequacy rules for investments, reviewing European Supervisory Authorities and clarifying fiduciary duty in the EU through regulation. Aviva will continue to advocate for these changes at the global level too.

Starting with ourselves

In 2017, Aviva received a UN Momentum for Change Award recognising our work over the last decade to reduce the environmental impact of our business and help inspire action on climate change. We are a carbon neutral company, and continue to offset 100% of any remaining carbon emissions, with our offsetting projects helping over 1 million people since 2012 live better lives (e.g. through provision of clean cook-stoves in Kenya). We are also driving efficiency in our operations. For example, in 2017 our Canadian head office moved into a Gold LEED certified building and we are currently merging four other locations into one energy efficient office site. To date we have achieved a 53% reduction in CO₂e against the 2010 baseline, meeting our 2020 target (of 50%) early. We continue work towards our ambitious long-term target of a 70% reduction by 2030. Under the Carbon Reduction Commitment Energy Efficiency Scheme, we reported total emissions of 128,185 tonnes of CO₂e in 2017 costing £2.2 million. This mandatory scheme is limited to UK business emissions from building energy, and includes the property portfolio of our investment funds managed by Aviva Investors. We are also looking at ways to further reduce plastic use in our UK offices.

A challenge for today, not tomorrow

Aviva has a long-term commitment to tackle climate change. In 2015, we announced an investment target of £500 million annually for the next five years in low-carbon infrastructure. We also set an associated carbon savings target for this investment of 100,000 tonnes of CO₂e annually. In 2017, Aviva Investors signed £527.5 million of new investment in wind, solar, biomass and energy efficiency.

Aviva continues to manage the impact of our business on the environment. Our Corporate Responsibility, Environment and Climate change business standard focuses on the most material operational environmental impacts, which we have identified as greenhouse gas emissions. We report these as carbon dioxide equivalent emissions (CO₂e) on an operational basis in respect of Aviva's Group-wide operations. See the table below.

More details of our environmental KPI data and our independent assurance process can be found on www.aviva.com/CRkpisandassurance2017

Operational global greenhouse gas emissions data boundaries

Our carbon footprint boundaries show the scope of the data we monitor and the emissions we offset. We report on Greenhouse Gas (GHG) emission sources on a carbon dioxide emissions equivalents basis (CO₂e) as required under the Companies Act 2006 (Strategic report and Directors' reports) 2013 Regulations. We also refer to the GHG Protocol Corporate Accounting and Reporting Standard, and emission factors from the UK Government's GHG Conversion Factors for Company Reporting 2017.

Tonnes CO ₂ e	2017	2016	2015
Scope 1	17,915	19,210	19,112
Scope 2	31,280	41,008	49,595
Scope 3	19,305	19,193	19,991
Absolute CO ₂ e**	68,500	79,410	88,698
Carbon offsetting***	(68,500)	(79,410)	(88,698)
Total net emissions	-	-	-

Scope 1 – natural gas, fugitive emissions, oil, and company owned cars.

Scope 2 – electricity.

Scope 3 – business travel and grey fleet, waste and water.

	CO ₂ e tonnes per employee	CO ₂ e per £m GWP
2017	1.6	2.48
2016	2.0	3.12
2015*	2.2	4.05

* This includes Friends Life business operations for the whole of 2015.

** 2017 Assurance provided by PricewaterhouseCoopers LLP available at aviva.com/CRkpisandassurance2017

*** Carbon offsetting through the acquisition and surrender of emissions units on the voluntary and compliance markets.

Governance and risk management

Our Board Governance Committee oversees our responsible and sustainable business strategy and the policies that underpin it. As a company we are subject to the UK Corporate Governance Code (the Code), which we aim to comply with fully. Details of the Company's compliance with the Code can be found in the Directors' and Corporate Governance Report in the Annual report and accounts and online at www.aviva.com/investors/corporate-governance. The activities of the Board Governance Committee can be found in the Governance Committee Report in the Annual report and accounts.

We have assessed the environmental risks that we face as a business at a global and local level. The most significant of these is the potential impact of climate change on our customers' lives and our company's assets. More detail can be found in this report in the 'Risk and Risk Management' section and in our high level response to the recommendations of the Financial Stability Boards' Taskforce on Climate-related Financial Disclosure, in the 'Aviva's climate-related financial disclosure' section.

We also manage the risks associated with our community investment activities through the controls outlined in our Corporate Responsibility Business Standard. This includes a governance framework for our charitable donations and partnerships and details of how we manage the risks associated with employee volunteering (for example, through robust child safeguarding). This standard is reviewed each year and communicated to all Aviva businesses. We review compliance annually, and all businesses demonstrate how they are complying with the requirements. Where a gap is identified the business is required to produce an action plan to ensure that is rectified.

Respect for human rights

We have a human rights policy that identifies our main stakeholders as well as the most salient human rights issues for our business. The scope of this policy is group-wide and sets out the Group's commitment to respect human rights. It applies to all Aviva business units, operations, functions and staff, including but not limited to legal entities (including joint ventures), acquisitions, disposals, outsourcing arrangements, new products, new asset classes and strategic projects.

Our approach to modern slavery is part of our overall approach to human rights. In 2017, we updated our human rights policy to make explicit mention of modern slavery as an area of focus. In addition, we:

- Engaged with our UK managed suppliers on their work to prevent modern slavery in their operations;
- Worked with our UK procurement teams to further improve their processes, ensuring that new suppliers are required to agree to abide by our Business Code of Behaviour and our Business Ethics Code (both make explicit reference to modern slavery);
- Reviewed the clauses in our supplier contract templates that reference modern slavery, to ensure they remain fit for purpose and continued providing training on modern slavery to employees;
- Created a page on our UK intranet dedicated to human rights and modern slavery to keep employees informed;
- Collaborated with the UN Global Compact as part of the UK working group on modern slavery (which brings together peers from across different industry sectors to share learnings; and information to support our work in tackling modern slavery) and are also a founding member of the Business Against Slavery working group convened by the UK Home Office.

As part of our human rights due diligence, in 2017 we have looked at how our community investment projects include women as beneficiaries. This is in line with our commitment to respect human rights and women empowerment.

We also have a set of internal policies (Business Standards) that support our commitment to respect human rights including:

- People Standard and supporting policies and procedures (covering non-discrimination, freedom of associations, access to grievance mechanisms); and
- Procurement and Outsourcing Standard (covering requirements from suppliers regarding human rights and wider corporate responsibility issues).

We will use the human rights due diligence data, covering all areas identified in our human rights policy, to inform our work on human rights in 2018. For our complete modern slavery statement, please see www.aviva.com/modernslaverystatement.

Corporate responsibility (CR) key performance indicators (including 2015-2017 figures) and the accompanying limited assurance statement by PwC can be found on www.aviva.com/social-purpose, alongside Aviva's 2017 CR Summary and Environmental, Social and Governance Data sheet.

More details of our internal diversity, inclusion and wellbeing approach can be found in the 'Our People' section of this report.

[Our climate-related financial disclosure](#)

Our climate-related financial disclosure

As an international insurance group¹, our sustainability and financial strength is underpinned by an effective risk management system. Our business will be directly impacted by the effects of climate change and therefore we need to build resilience to and mitigate the risk of the impact of climate change for our customers and investors.

We believe unmitigated climate change presents a real threat to financial stability over the coming decades, both at a governmental and corporate level, to the point where it will permanently impair total asset value.

We have been reporting on climate change in our Annual report and accounts since 2004. This disclosure builds on our 2016 initial response and takes into account the final version of the Taskforce on Climate-related Financial Disclosure (TCFD) recommendations published in July 2017.

These pages, along with an expanded version (available at www.aviva.com/TCFD) are Aviva plc's second annual response to the TCFD framework in our multiple roles as an asset owner, insurer, investor and asset manager.

Governing climate-related risks

At the Aviva Plc Board level, the following two Committees oversee our management of climate related risks:

Board risk committee

This Committee met eight times in 2017 and reviews, manages and monitors all aspects of risk management in the Group, including climate risk. Climate change is highlighted as an emerging risk in the 'Risk and risk management' section of this report and it is therefore assessed for its proximity and significance to Aviva via our local markets and group emerging risk processes. The Committee has incorporated emerging risk scenarios into our scenario planning, enabling us to review the most significant risks that would affect the Company's strategy.

Board governance committee

One of this Committee's responsibilities is to oversee the way Aviva meets its corporate and societal obligations. This includes setting the guidance, direction and policies for Aviva's customer and corporate responsibility agenda and advising the Board and management on this. This Committee met six times in 2017 and formally considered Aviva's strategic approach to climate change during the year. The Committee continues to ensure the Board remains informed on the issue.

Strategy

While Aviva's climate change strategy relates to the entire Group, the businesses that form Aviva work to different risk horizons. For example, general insurance (GI) has primarily an 18 month outlook (although recognising there are longer term risks) and focuses on the physical impacts of climate change. As a life insurer and pension provider we also make investments. This is, first and foremost, to

ensure we can cover our future commitments and meet the promises we have made to our customers, so insurance claims and pensions will be honoured. To do this we look very carefully at how different investments meet our risk appetite in the longer term, when transition risks become much more important.

Aviva's strategy to implement the TCFD recommendations includes conducting climate-related scenario analysis consistent with the recommendations, wherever possible using commonly agreed sector/subsector scenarios and time horizons. This will enable us to better anticipate and manage climate risks, as well as identify climate-related opportunities. This work will involve an inter-disciplinary team including Group Risk, Group Capital, Aviva Investors, Group Reinsurance, the General and Life insurance businesses, and the Corporate Responsibility and Public Policy team. We will partner with industry associations and sector peers to drive consistency in scenarios, including one for limiting average temperatures from rising by more than 2°C by the end of the century. We will report on the progress of our work on scenarios to Aviva's relevant board committees and aim to first report against scenarios in our disclosure next year.

We recognise that the increased severity and frequency of weather-related losses has the potential to change events that could benefit our earnings, to ones that will negatively impact our profitability. Consequently, large catastrophic (CAT) losses are already explicitly considered in our economic capital modelling to ensure we are resilient to such CAT scenarios.

We are closely monitoring sectors or subsectors particularly exposed to transition risk and analysing the risk to Aviva of our individual company level investments. In 2017, we worked with 2 Degree Investing Initiative to analyse how close we are as an asset owner to achieving a 2°C future. Using the European Commission's Sustainable Energy Investment metrics, the reports show how our equity and bond portfolios are aligned to the Paris Agreement, both now and in 5 years' time. We have fed them into the investment strategy review of our businesses to help further shape our ongoing response. Further strategic work is ongoing to understand the impacts of our investments through all asset classes and on a more granular basis. Climate change is part of our asset management House View, which outlines the framework we use to analyse the global financial markets. It is updated quarterly to provide key climate-related physical or policy trends and developments.

Over the past few years we have developed insurance products and services that support customers' choices to reduce their environmental impact, such as bespoke electric vehicle policies and a generation of domestic scale renewables. We are also building our support of commercial-level opportunities around environmental goods and services. In 2017, we had 20 such products across our markets.

Risk management – identification, assessment and management

When making investments we need to think long term, since many of our liabilities fall decades in the future. This means we need to be careful and considered in our investments. Within these constraints we have an appetite to invest in low carbon projects around the world.

The ways in which the insurance sector could be impacted by climate change are diverse, complex and uncertain. However, for the purposes of our response we have focussed on the three risk factors that the Prudential Regulation Authority identified in its 2015 report² – Physical, Transition, and Liability.

¹ Aviva is an asset owner with assets to the value of £490 billion and Aviva Investors has assets under management of £353 billion.

² <https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/publication/impact-of-climate-change-on-the-uk-insurance-sector.pdf?la=en&hash=EF9FE0FF9AEC940A2BA722324902FFBA49A5A29>

1. Physical risk

a. Insurance risks

We recognise that weather-related events may become more frequent, severe, clustered and persistent. These single and cumulative losses may impact our ability to write profitable new business over the longer term. This has driven a focus on explicitly considering the impact of climate and weather in financial planning and pricing. Our GI business exposure is limited by being predominantly in Northern Europe and Canada. We require our GI businesses to protect against all large, single catastrophe events in line with local regulatory requirements, or where none exist, to at least a 1 in 250 year event. Factors determining these decisions include: capital efficiency, appetite for GI earnings volatility, predictability of cash flows and dividend paying capability and reinsurance market competitiveness. Canada is moving to 1:500 reinsurance limits in line with government requirements.

We consider our top insurance climate-related risks to be:

- Our actuarial pricing assumptions and projections which may prove incorrect
- The levels of coverage available to make assets insurable
- Financial results volatility resulting from the potentially increasing scale of weather losses.

We purchase reinsurance to protect against the severity and frequency of large CAT events, and review the adequacy of the cover and the programme structure annually at renewal.

A change in climate can mean that disease may spread to new and expanded geographic areas. Therefore Aviva uses external reinsurance for its life business to manage its exposure to life insurance risks such as pandemics, and manages capital in an efficient manner in line with the Aviva Group's risk appetite.

b. Investment risks

When acquiring property, Aviva Investors' strategy is to commission an Environmental Assessment Report. This covers important potential risks, such as flood exposure and historic and potential pollution. Within our real estate portfolio, we use the Global Real Estate Sustainability Benchmark (GRESB) to understand the climate resilience and broader sustainability of individual properties and funds. The majority of our real estate and infrastructure investments are located in Europe.

2. Transition risk

With the Paris agreement to pursue limiting global temperature increases to below 2°C, there will be an increasing number of climate-related policies and regulations to assist this transition, which will impact sectors in different ways. We consider active stewardship to be a fundamental responsibility for us as investors. This includes considered voting at Annual General Meetings (AGMs) and engagement on climate risk, disclosure and performance. We have focussed on in-depth engagement with companies strategically exposed to climate related risks due to their significant carbon impact and exposure to transition risks (and opportunities). We undertake this engagement individually and collaboratively, actively supporting or co-filing shareholder resolutions as appropriate.

We continue to be committed to increasing our investment in low carbon infrastructure and to considering how best we support the financing of the transition to a lower carbon economy.

3. Liability risk

Aviva has negligible exposure to litigation risks on the insurance side through liability contracts such as professional indemnity for Directors and Officers and Pension Trustee Liability insurances. However, we may have holdings in companies that could be subject to regulatory and legal challenges due to their climate-related impacts and level disclosures. The direct impact from legal

challenges and any associated fines are likely to be limited to specific companies.

Metrics and targets

Operational

We have measured, monitored and reduced our operational carbon emissions since 2004, on an absolute and relative basis, and disclose related metrics on an annual basis in our public filings. Although we do not consider these material, we have a long-term reduction target of 70% by 2030, from a baseline of 2010. These figures can be found at www.aviva.com/ESGdatasheet 2017

Investment

We have enhanced our Environmental, Social, and Governance heat map to include proxy climate risk metrics. This heat map is available to our analysts and fund managers and updated on a monthly basis. It includes a composite carbon exposure metric based on the carbon-intensity of business activities, the extent of operations in jurisdictions with stringent carbon emissions regulations and the quality of a company's carbon management.

We targeted a £500 million annual investment in low-carbon infrastructure from 2015-2020, and an associated carbon saving target of 100,000 CO₂e tonnes annually. In 2017, we signed £527.5 million of new investment into wind, solar, biomass and energy efficiency. Aviva holds over £744 million in green bonds.

In 2015, we identified 40 companies with more than 30% of their business revenue associated with thermal coal mining or coal power generation and undertook focussed engagement with them, including 51 in depth conversations. In 2017, we were asked to review our holdings against a list of 120 coal companies. We had beneficial holdings in 26 companies with a total market value of £55.6 million or 0.01% of our total assets. 11 of these companies are also part of the list of 40 companies identified and engaged with since 2015. More details of this engagement can be found on aviva.com/social-purpose.

More broadly, in 2017, we engaged with 989 companies on strategic, social and/or governance (ESG) issues. In the same period we supported 52% of climate change related shareholder resolutions.

Insurance

We build the possibility of extreme weather events into our planning to help us understand the impact and ensure our pricing is adequate. Catastrophic event model results are supplemented by in-house disaster scenarios. A 1:800 CAT event is required in order for Aviva to incur losses (after reinsurance) above £1 billion. Therefore, multiple very large CAT events would have to occur in a year in order to adversely impact Aviva's capital position (estimated pro forma Solvency II capital surplus £12.2 billion).

Each of our GI businesses has a Major Incident Response in place to provide customer service and manage costs of major claim events and service demand surges. We continue to invest in analytical solutions such as flood mapping, predictive analytics and risk mitigation techniques that help us better understand risks being transferred to us from our customers and to respond more rapidly when our customers need us.

Find out more about our approach at www.aviva.com/TCFD

Governance

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[Chairman's Governance Letter](#)

Chairman's Governance Letter

Our governance

A strong system of governance, with effective and prudent controls to assess and manage risk, is central to helping any organisation anticipate and adapt to changing external circumstances. It is very pleasing that this year we ranked second in the FTSE 100 IOD/Cass Business School Good Governance Index 2017. This external recognition is testament to the dedication of the team and all our colleagues who work to ensure high standards of corporate governance throughout our business.

We are not, however, complacent and constantly assess and reassess how we are performing against the risks that we face. For example, in 2018 as we continue to implement our Digital First strategy, we are not only conscious of the benefit of the ever-evolving technological developments but alert to the risks they can represent. We strive to mitigate these risks by ensuring our controls continue to be strong and that we are well equipped to protect our business and customers from whatever new threats emerge. More information on our principal risks can be found in the 'Risk and risk management' section of this report.

Our culture

As Chairman, I am responsible for establishing and embedding the culture of the Board, which in turn sets the tone from the top for the culture for the Company. Culture has remained high on the Board's agenda in 2017 and I support the Financial Reporting Council's (FRC) proposals for the new UK Corporate Governance Code to give more prominence to the Board's role in considering the culture of the Company.

We are proposing to shareholders an updated remuneration policy to help achieve our aim of building a culture that promotes our ambitions for growth in both earnings and revenue, by encouraging innovation and reinforcing our strong values. The Board and I have a strong belief that the way we conduct business and the way we engage with our customers, shareholders and other stakeholders, needs to be aligned to our values and purpose to Defy Uncertainty, and this in turn will ensure our long-term success.

Changes to the Board

In line with our structured approach to succession planning, there have been a number of Board changes during the year. Maurice Tulloch joined as an Executive Director in June 2017, taking the role of Chief Executive Officer of International Insurance. Having worked for Aviva for over 25 years, Maurice's appointment is a great example of our investment in talent from within the Company.

Our succession planning has also been reflected at Non-Executive level. At the 2017 Annual General Meeting, Bob Stein and Sir Malcolm Williamson retired as Non-Executive Director and Senior Independent Director (SID) respectively, with Glyn Barker becoming SID, having been on the Board for five years. Following the 2017 half year results, Glyn stepped down as Chair of the Audit Committee to focus further on his role as SID, and Keith Williams assumed this role as the Chair of the Audit Committee and also joined the Risk Committee. Claudia Arney was appointed as Governance Committee Chair in January 2017 having been a

member of the Committee since June 2016. To further the execution of our Digital First Strategy, Claudia was also appointed as Chair of UK Digital in September 2017.

Our stakeholders

In December 2017 the FRC issued proposals for a refresh of the UK Corporate Governance Code and we are participating in the consultation process and are largely supportive of the planned changes. We recognise the importance of responding to increased scrutiny on how companies are run and the emphasis on the importance of considering the interests of a broad stakeholder group in making business decisions.

During 2017, we began the process of creating an Evolution Council, which will comprise high calibre leaders from across the business with a specific focus on the generation X/Y view of our colleagues, and will be in operation from March 2018. The Council will receive a broad selection of materials ahead of each Board meeting with a focus on digital, brand and marketing, and will be asked to provide insight and comments on the matters covered. This will be an invaluable way of ensuring the views of our employees' are fed back to the Board on our strategic and business matters, and that we have insight from the heart of our operations. At the outset, I will Chair the Council, with a view to rotating this in due course around other Non-Executive Directors.

Additionally, the Board will be developing a programme to receive further input from employee forums, suppliers and the communities in which we operate during the 2018 year. An example of our planned interactions with the employee forum is set out in the Remuneration Committee report.

The Board remains focussed on all our stakeholders be they our people, our customers, our shareholders, and the communities which we are part of. I am proud that we put people at the heart of our business. You can read about the work that we do in these areas in the 'Corporate responsibility' and 'Our people' sections of this report.

Sir Adrian Montague CBE

Chairman

7 March 2018

Board and Group executive diversity

The charts below illustrate the diversity of the Board and senior management as at the date of this report.

Board of Directors		Group Executive	
Non-Executive	Executive	Composition	
Gender			
5	4	Male	7
3	—	Female	3
Experience and Skills*			
4	4	Insurance	9
8	4	Banking	5
3	4	Actuarial	6
8	4	Transformation	5
5	2	Law	3
7	3	Government	4
8	4	Customer	7
5	2	IT/Digital	3
8	4	Strategy	7
International experience*			
8	4	Europe	9
3	2	Asia Pacific	4
1	2	The Americas	3
1	1	Middle East & Africa	2
Tenure			
—	—	>10 years	—
3	1	5-10 years	2
2	1	4 years	3
—	1	3 years	2
2	—	2 years	2
1	—	1 year	—
—	1	<1 year	1
Age			
—	—	30-39	1
1	1	40-49	3
3	3	50-59	5
4	—	60+	1

*individual directors may fall into one or more categories

There has rightly been a continued focus on diversity during the year with the publication of the Hampton-Alexander review and McGregor Smith and Parker reviews during 2017. The Board and I support the increased spotlight on this area and are committed to improving diversity throughout the Company, not just with regards to gender and ethnicity, but in the broader sense to include diversity of thought, tenure, age, experience, skills, geographical expertise, educational and professional background.

We support the target for women to represent a minimum of 33% of Boards, and a minimum of 33% of Executive Committee members and direct reports, by 2020. As at the date of this report our percentage of women on the Board has increased from 23% in 2016 to 25% in 2017. The percentage of female representation on our Group Executive has fallen from 36% in 2016 to 30% in 2017, due to Monique Shivanandan leaving the Group. Future appointments to the Board and Group Executive will be made in line with our Global Inclusive Diversity Strategy, which is described in the Directors' and Corporate Governance report.

We welcome efforts to remove the barriers preventing women advancing into senior roles, and we are proud that we are part of the Future Boards Scheme, and that both myself and the Group Chief Executive Officer (Group CEO) are active members of the FTSE 100 30% Club.

The Board published a Board Diversity and Inclusion Statement in May 2017, to formalise our approach to diversity, and reflect the

continued support for the diversity and inclusiveness programme throughout the business. The statement can be found on our website at www.aviva.com/corporate-governance

The Board also recognise the issue of unconscious bias, which could affect decisions in our workplace. We are committed to increasing awareness throughout the Company and plan to deliver training to all senior leaders throughout the Group during 2018. The Board received training on this during the year, demonstrating our approach to lead from the top down.

[Our Board of Directors: Biographies](#)

Our Board of Directors

Sir Adrian Montague, CBE ▲

Position: Chairman

Nationality: British

Committee Membership: Nomination Committee (Chair)

Tenure: 5 years 2 months. Appointed to the Board as a Non-Executive Director in January 2013, and as Chairman in April 2015

Qualifications: MA, Law (Cambridge); Qualified Solicitor

Skills and Experience: Having held appointments as Chair of Anglian Water Group Ltd, Friends Provident plc, British Energy Group plc, Michael Page International plc and Crossrail Ltd, Sir Adrian brings a wealth of experience as a Chairman. His diverse skill-set and strategic awareness facilitate open discussion and allow for constructive challenge in the Boardroom.

External Appointments: Chairman of The Manchester Airports Group, Cadent Gas Ltd and The Point of Care Foundation.

Mark Wilson ■

Position: Group Chief Executive Officer

Nationality: New Zealander

Committee Membership: N/A

Tenure: 5 years 3 months. Appointed to the Board in December 2012 and as Group Chief Executive Officer (CEO) in January 2013

Qualifications: MSc Management Studies (Waikato University)

Skills and Experience: Mark is a dynamic leader with extensive experience of leading major insurance companies. This included Asian insurance giant (AIA). At Aviva Mark has developed and driven the strategy for Aviva to put Digital First and be a leader in offering convenience to insurance customers. Mark is also a champion of sustainability and as a result of this was invited to speak at the United Nations in New York to further the efforts of companies in achieving the Sustainable Development Goals.

External Appointments: N/A.

Thomas Stoddard ■

Position: Chief Financial Officer

Nationality: American

Committee Membership: N/A

Tenure: 3 years 11 months. Appointed to the Board and as Chief Financial Officer in April 2014

Qualifications: BA Economics (Swarthmore College); Juris Doctor (University of Chicago Law School)

Skills and Experience: Tom's financial expertise and strategic decision-making skills play a fundamental role in driving Aviva to attain its financial goals. As a result of Tom's work Aviva has strengthened its financial position and now has a capital surplus that it can deploy in the years to come. Prior to joining Aviva, Tom worked in senior positions as an investment banker in highly respected US firms, including Blackstone Advisory Partners LP, where he was responsible for successfully driving Blackstone's business advising banks, insurers and other financial institutions globally.

External Appointments: N/A

Andy Briggs ■

Position: Chief Executive Officer, UK Insurance

Nationality: British

Committee Membership: N/A

Tenure: 2 years 11 months. Appointed to the Board as Executive Director in April 2015

Qualifications: Fellow of the Institute of Actuaries

Skills and Experience: Andy is the CEO of UK Insurance and is responsible for all Aviva's insurance businesses in the UK. Previously CEO of the Friends Life business, Andy's knowledge and experience of the UK insurance sector are invaluable to the Board. His role as chairman of the Association of British Insurers gives him a unique perspective of the UK insurance and regulatory environment.

External Appointments: Chairman of the NSPCC's Fundraising Committee and a member of the Board of Trustees. Andy is also the Government's Business Champion for Older Workers.

Maurice Tulloch ■

Position: Chief Executive Officer, International Insurance

Nationality: British/Canadian

Committee Membership: N/A

Tenure: 9 months. Appointed to the Board as an Executive Director in June 2017

Qualifications: Maurice is a Chartered Professional Accountant (CPA,CMA), and he holds a Master's degree in Business Administration (MBA) from Heriot-Watt University, Edinburgh and a BA Economics (University of Waterloo, Ontario)

Skills and Experience: Maurice has more than 25 years experience within Aviva and was appointed as CEO of International Insurance in June 2017. Maurice has responsibility for Aviva's insurance operations in France, Canada, Ireland, Italy, Poland, Spain, Turkey and India. His addition to the Board brings expertise and focus to the Group's International businesses.

External Appointments: Non-Executive Director of Pool Re and a member of the Insurance Development Forum.

Claudia Arney ▲

Position: Independent Non-Executive Director

Nationality: British

Committee Membership: Governance Committee (Chair), Nomination Committee, Remuneration Committee, Risk Committee

Tenure: 2 years 1 month. Appointed to the Board in February 2016

Qualifications: MBA (INSEAD)

Skills and Experience: Claudia has significant experience of building digital businesses, strategy formulation, business transformation and customer strategy. Claudia previously worked for the Financial Times, where she was part of the team that launched FT.com. In addition, Claudia acted as CEO of the internet start up, TheStreet.co.uk.

External Appointments: Non-Executive Director of Derwent London plc, Halfords Group plc and the Premier League.

Our Board of Directors: Biographies > [Continued](#)

Glyn Barker ▲

Position: Senior Independent Non-Executive Director
Nationality: British
Committee Membership: Audit Committee, Nomination Committee, Risk Committee, Governance Committee, Remuneration Committee.
Tenure: 6 years 1 month. Appointed to the Board in February 2012 and became Senior Independent Non-Executive Director in May 2017
Qualifications: Fellow of the Institute of Chartered Accountants of England and Wales; BSc Economics and Accounting (Bristol University)
Skills and Experience: Glyn's knowledge of the Aviva Group brings an in depth understanding of the issues and concerns of shareholders. Glyn's experience enables him to support the Chairman and the Board by instilling the appropriate culture, values and behaviour in the Boardroom. Glyn was previously a vice chairman of PricewaterhouseCoopers LLP (PwC) and was responsible for leading the strategy and business development for Europe, the Middle East, Africa and India.
External Appointments: Chairman of Irwin Mitchell and Interserve plc, and a non-executive director of Berkeley Group Holdings plc and Transocean Ltd.

Patricia Cross ▲

Position: Independent Non-Executive Director
Nationality: Australian
Committee Membership: Remuneration Committee (Chair), Audit Committee, Nomination Committee
Tenure: 4 years 3 months. Appointed to the Board in December 2013
Qualifications: BSc (Hons), International Economics (Georgetown University), Life Fellow of the Australian Institute of Company Directors
Skills and Experience: Patricia is an experienced company Director having served on six ASX-30 Boards, including National Australia Bank, AMP, and Qantas. She followed service in the U.S. Government working in foreign affairs with a long career in senior executive roles in banking and investment management, including large international treasury and markets operations. She has lived and worked in seven countries in Europe, the U.S. and Australia.
External Appointments: Chairman of the Commonwealth Superannuation Corporation, a Non-Executive director of Macquarie Group Ltd and Macquarie Bank Ltd. Chair of the 30% Club in Australia.

Belén Romana García ▲

Position: Independent Non-Executive Director
Nationality: Spanish
Committee Membership: Governance Committee, Nomination Committee, Risk Committee
Tenure: 2 years 8 months. Appointed to the Board in June 2015
Qualifications: BSc, Business and Economics (Universidad Autonomo de Madrid)
Skills and Experience: Belén has governmental and regulatory experience and a detailed knowledge of the financial services industry and European regulation that together makes her an invaluable member of the Board. Belén has held senior positions at the Spanish Treasury and represented the Spanish government at the Organisation for Economic Co-operation and Development.
External Appointments: Independent Non-Executive Director of Banco Santander.

Michael Hawker, AM ▲

Position: Independent Non-Executive Director
Nationality: Australian
Committee Membership: Risk Committee (Chair), Audit Committee, Nomination Committee
Tenure: 8 years 2 months. Appointed to the Board in January 2010
Qualifications: BSc (University of Sydney), Senior Fellow of the Financial Services Institute of Australia
Skills and Experience: Michael brings to the Board experience from his career in both the banking and insurance industries within Europe, Asia and Australia, which included 7 years as CEO of Australia's largest General Insurer (IAG). Michael's tenure at Aviva makes him well placed to determine the nature and extent of the potential risks that could stop Aviva achieving its strategic objectives and maintaining sound risk management and internal controls.
External Appointments: Non-executive director of Macquarie Group Ltd, Macquarie Bank Ltd, Washington H Soul Pattinson Pty and Company Ltd (investment) and Rugby World Cup Ltd. Michael is also Chairman of The George Institute for Global Health.

Michael Mire ▲

Position: Independent Non-Executive Director
Nationality: British
Committee Membership: Governance Committee, Nomination Committee, Remuneration Committee, Risk Committee
Tenure: 4 years 6 months. Appointed to the Board in September 2013
Qualifications: MBA (Harvard)
Skills and Experience: Michael has a detailed understanding of the financial services sector and experience in business transformation. Formerly a senior partner at McKinsey & Company, Michael focussed on developing strategies for retail and financial services companies, which alongside his governmental experience at the Central Policy Review Staff (now the Number 10 Policy Unit), allows Michael to bring a unique perspective and insight to the Board.
External Appointments: Chairman of HM Land Registry, Non-Executive Director of the Department of Health and senior adviser to Lazard (investment bank).

Keith Williams ▲

Position: Independent Non-Executive Director
Nationality: British
Committee Membership: Audit Committee (Chair), Governance Committee, Nomination Committee, Risk Committee
Tenure: 1 year 7 months. Appointed to the Board in August 2016
Qualifications: Associate member of the Institute of Chartered Accountants
Skills and Experience: Keith has significant financial experience including a detailed knowledge of business planning, capital projects and project finance gained in a number of industries. Keith has more than 10 years of executive experience as Chief Financial Officer and CEO at British Airways plc and, during his time, Keith transformed the Company into a customer focussed organisation.
External Appointments: Non-Executive Deputy Chairman of John Lewis, Non-Executive Director of Royal Mail plc and member of the Audit Committee of the British Museum.

Our Board of Directors: Biographies > [Continued](#)

Kirstine Cooper◆

Position: Group General Counsel and Company Secretary

Nationality: British

Committee Membership: N/A

Tenure: 7 years 3 months. Appointed as Company Secretary in December 2010

Qualifications: Bachelor of Laws degree (Glasgow University) and qualified solicitor. Graduate of the General Manager Programme (INSEAD)

Skills and Experience: Kirstine has over 25 years experience at Aviva and is a trusted advisor to the Board. As a qualified solicitor Kirstine is able to execute the role of Company Secretary by advising the Board on governance issues and the regulatory environment. Kirstine established the legal and secretarial function as a global team and is responsible for the provision of legal services to the Group. She also leads the team on public policy and corporate responsibility.

External Appointments: Trustee of the Royal Opera House and Commissioner on the Cabinet Office's Dormant Assets Commission.

The full biographies for all our Board and Group Executive committee members are available online at www.aviva.com.

Key

- Executive
- ▲ Non-Executive
- ◆ Group General Counsel and Company Secretary

Sir Malcolm Williamson and Bob Stein retired from the Board at the Annual General Meeting on 10 May 2017.

Directors' and Corporate Governance report

The UK corporate governance code

As a UK premium listed company, Aviva has adopted a governance structure based on the principles of the 2016 UK Corporate Governance Code (the Code). Details of how we have applied the Code principles and complied with its provisions, are set out in this report and the directors' remuneration report. The Board can confirm that the Company was compliant with the Code throughout the financial year under review. Further information on the Code can be found on the Financial Reporting Council's (FRC's) website www.frc.org.uk.

The Board

Details of the role of the Board and its committees is described on the next page. The duties of the Board and of each of its committees are set out in their respective Terms of Reference. Our committees' Terms of Reference can be found on the Company's website at www.aviva.com/committees and are also available from the Group Company Secretary. The Terms of Reference list both matters that are specifically reserved for decision by our Board and those matters that must be reported to it. The Board delegates clearly defined responsibilities to various committees and reports from the Audit, Governance, Nomination and Risk Committees are contained in this report. A report from the Remuneration Committee is included in the directors' remuneration report.

2017 – 2018 Board changes

As at the date of this report the Board comprised of the Chairman, four Executive Directors and seven Independent Non-Executive Directors (NEDs). Maurice Tulloch was appointed to the Board as an Executive Director on 20 June 2017. Maurice is Chief Executive Officer of International Insurance, with responsibility for Aviva's insurance operations in France, Canada, Ireland, Spain, Italy, Poland, Turkey and India. His appointment gives further focus at Board level to the Group's International businesses, with the UK already being represented at Board level through Andy Briggs.

Sir Malcolm Williamson retired on 10 May 2017, after serving two years on the Board. Bob Stein also retired on 10 May 2017, after serving four years on the Board.

Glyn Barker became Senior Independent Director (SID) on 10 May 2017 and, following announcement of the half year results on 3 August 2017, stepped down as Chair of the Audit Committee (but remained as a member), with Keith Williams becoming the Audit Committee Chair. Claudia Arney became Governance Committee Chair on 1 January 2017, following the retirement of Scott Wheway on 31 December 2016.

Board diversity

In May 2017, the Board adopted a Diversity and Inclusion Statement, which supports the Nomination Committee in its approach to succession planning. The statement can be found on the Company's website at www.aviva.com/corporate-governance.

The statement sets out our beliefs around the importance of diversity and inclusion in the Group, and how these are reflected in our Global Inclusive Diversity Strategy (Diversity Strategy). It also details how we implement the Diversity Strategy, our objectives, and the timelines in which we aim to implement it.

The implementation of our Diversity Strategy is monitored by the Nomination Committee which reviews the balance of skills, knowledge, experience and diversity on the Board; leads succession planning for appointments to the Board and the senior executive team; and oversees the talent development and broader talent pipeline across the Group. The Board's skills matrix supports this approach by enabling us to map the broad diversity of the Board in regard to gender, ethnicity, geographical expertise, and current skills and experiences, and to link these to our strategy.

We recognise that the Board sets the tone for inclusion and diversity across the Group and believe we should have a diverse leadership team to support good decision making. Diversity at Aviva encompasses more than just gender and includes, amongst other things, experience, skills, tenure, age, geographical expertise, professional background, gender, ethnicity, disability and sexual orientation. While our percentage of women on the Board has increased from 23% in 2016 to 25% as of the date of this report, we are committed to achieving the target of 33% of women on the Board by 2020, as evidenced from our participation in initiatives such as Future Boards Scheme and the 30% Club. The diversity charts in the Chairman's Governance Letter show that we have a Board with a broad balance of skills and experience.

The Board is focussed on creating an inclusive culture in line with Aviva's values and the Diversity strategy, which we believe will lead to greater diversity both on our Board and throughout the Company. You can read more on the Board's approach to diversity in the Nomination Committee report.

Activities and allocation of agenda time during 2017

Board strategy and business plans – 31% of agenda time

- Approved the 2018-2020 Group Plan and received presentations and reports from markets in respect of strategy execution and performance against the Group Plan
- Held an annual Board strategy meeting in June 2017 to review and agree the Group's strategy
- Reviewed and constructively challenged reports from the Group Chief Executive Officer (Group CEO) and Chief Financial Officer (CFO), proposals for significant transactions, changes in senior management, regulatory developments, the control environment, and progress against the Group Plan and the Group's strategy
- Received regular updates from the Chairman on Board matters for which he is responsible such as Board composition

Customer – 10% of agenda time

- Received updates on customer metrics and the processes to reduce complaints
- Undertook deep dives into renewal pricing, customer journeys, and customer operations and transformation

Oversight of risk and risk management – 6% of agenda time

- Received reports from the Chief Risk Officer (CRO), and assessed the Group's significant risks and regulatory issues, approved the Group's risk appetite, approved the Group risk policies which provide the risk framework for managing risk across the Group, and received updates on the Group's capital and liquidity position

Corporate governance – 12% of agenda time

- Reviewed regular updates from its committees and management on legislation and proposed consultations that may affect the Group's legal and regulatory obligations
- Received assurance that governance structures remained appropriate for the businesses and the global markets in which we operate, while supporting the overall strategy and culture
- Maintained a continued focus on the governance framework for the Group's subsidiaries and supported the further embedding of the Subsidiary Governance Principles

Significant transactions and expenditure – 11% of agenda time

- Approved financial matters in line with the Group Funding Plan, including a capital return to shareholders via a share buyback programme, which was completed on 20 September 2017, and the redemption of debt
- Approved external and inter-group financing
- Reviewed M&A transactions, including the acquisition of Friends First in Ireland

Financial reporting and controls, capital structure and dividend policy – 15% of agenda time

- Reviewed the Group's financial performance, financial results, and approved dividend payments
- Assessed the Group capital and liquidity requirements, arising from the Group's strategy and Group Plan
- Reviewed reports provided by its committees on key matters of financial reporting, providing the opportunity for the Board to input and challenge where necessary

People, culture, succession planning and Board effectiveness – 15% of agenda time

- Reviewed the succession plan for the Board
- Undertook an external evaluation of the Board's effectiveness, the effectiveness of each committee and individual directors
- Reviewed the results of the 2017 Voice of Aviva survey, and discussed the organisational results in respect of culture

Board and Committee structure**Aviva plc Board**

Collectively responsible for promoting the long-term sustainable success of the Company, generating value for shareholders and contributing to wider society. The Board sets the Group's purpose, strategy and values, and satisfies itself that these are aligned with the overall culture of the Group. The Board sets the Group's risk appetite and satisfies itself that financial controls and risk management systems are robust, while ensuring the Group is adequately resourced. It also ensures there is appropriate dialogue with shareholders on strategy and remuneration. Details of the responsibilities of each of the Board's committees are set out in this report and the directors' remuneration report.

Audit

Governance

Nomination

Remuneration

Risk

■ = Board committee

Board independence

The Nomination Committee, having considered the matter carefully, is of the opinion that the current NEDs remain independent, in line with the definition set out in the Code, and are free from any relationship or circumstances that could affect, or appear to affect, their independent judgement. Over half of the Board members, excluding the Chairman, are independent NEDs.

Mike Hawker has served since his appointment in January 2010. Accordingly, in early 2017 his performance, including his independence, was the subject of a particularly rigorous review pursuant to the recommendations of the Code, having been on the Board for longer than six years. The Board remains satisfied that Mike Hawker is independent and will continue to make a valuable contribution. Due to his tenure, Glyn Barker will be subject to a similar review in 2018. The review of the directors' other interests included the 'cross directorships' of Patricia Cross and Mike Hawker who are both directors at Macquarie Group, Glyn Barker's former position as partner of the Group's current auditors and Bob Stein's Non-Executive Directorship at Resolution Life Holdings Inc. The Nomination Committee was satisfied this did not affect the judgement or independence of Patricia Cross, Mike Hawker, Glyn Barker or Bob Stein. Claudia Arney's Non-Executive Directorship at Halfords Group plc provided an example of the Board's conflicts of interest procedure in practice during the year, as Halfords moved their group insurances to Aviva and this potential conflict of interest was notified to the Board.

Time commitment

Each NED must be able to devote sufficient time to the role in order to discharge his or her responsibilities effectively. The Chairman assesses the time commitment of the NEDs as part of the annual review of their effectiveness, and the SID reviews the time commitment of the Chairman. This assessment takes into account the number of external commitments each director has and that each director has demonstrated they have sufficient time to devote to their present role within Aviva including under potential periods of corporate stress. Under the Board's policy on this matter, executive directors may hold one external directorship and must obtain the prior consent of the Board before accepting a non-executive directorship in any other company. Executive Directors may retain the fees from any external directorship. Maurice Tulloch is a director of Pool Reinsurance Company Ltd and the fees he receives from this role are disclosed in the Directors' Remuneration report. No other Executive Director holds an external directorship.

Independent advice

All directors have access to the advice and services of the Group Company Secretary and directors wishing to do so may take independent professional advice at the Company's expense. No such requests were made during 2017. The Company arranges appropriate insurance cover in respect of legal actions against its directors. The Company has also entered into indemnities with its directors as described in Other Statutory Information.

The Chairman and Group Chief Executive Officer

Consistent with the Board Terms of Reference, and separately the Senior Insurance Managers Regime (SIMR), role profiles are in place

for the Chairman and the Group Chief Executive Officer (Group CEO) which set out the duties of each role. The Chairman's priority is to lead the Board, monitor the Group's culture and ensure its effectiveness and the Group CEO's priority is the management of the Group. The Board has delegated the day-to-day running of the Group to the Group CEO within certain limits, above which matters must be escalated to the Board for determination.

Senior independent director (SID)

The SID's role is to act as a sounding board for the Chairman, to serve as an intermediary for the other directors where necessary and to be available to shareholders should they have concerns they have been unable to resolve through normal channels, or when such channels would be inappropriate. Sir Malcolm Williamson and Glyn Barker met each NED from time to time, providing a forum in which they could raise matters. Role profiles for the Chairman, SID, Group CEO and NEDs are on the Company's website at www.aviva.com/roles

Induction, training and development

The Board believes strongly in the development of the directors and the Group's employees. It is a Company requirement that each director commits to continuing their professional development. During the year, the directors attended a number of internal training sessions on topics including Solvency II (SII) benchmarking and unconscious bias. An independent IT adviser to the Board was retained for a short period to provide additional bespoke support and a holistic view on technological developments and the cyber security environment in the context of the Company's strategic objectives. The Board will keep its IT expertise under review as the Company's IT strategy develops. Training sessions have been built into the Board and committees' plans for 2018 and is scheduled to include directors' duties. The Chairman ensures all new directors receive a comprehensive induction programme over a number of months, tailored to their particular needs. All new directors receive induction materials, which include: the current strategic and operational plan; recent Board and committee minutes and meeting packs; organisation structure charts; role profiles; a history of the Group; and relevant policies, procedures and governance material. Any knowledge or skill enhancements identified during the director's regulatory application process are also addressed through their induction programme. Maurice Tulloch completed his induction programme following his appointment during the year.

Board calendar

During 2017, ten Board meetings were held, of which eight were scheduled meetings and two were additional meetings called at short notice. In addition, the Board delegated responsibility for certain items to specially created Board committees, which met seven times.

The Board visits different markets whenever it can and, during 2017, two Board meetings were held at Aviva offices in France and Bristol. This gave the Board the opportunity to meet the senior management teams and to gain a deeper understanding of the operations and performance of each market. The Board also held a strategy meeting offsite in the UK to set and monitor progress against the Group's strategy. During 2018, it is planned that the Board will continue this pattern and visit Italy in September.

Board and Committee meetings attendance during 2017

Number of meetings held	Board ¹ 10	Audit Committee 7	Governance Committee 6	Nomination Committee 4	Remuneration Committee 8	Risk Committee 6
Chairman						
Sir Adrian Montague	10/10	—	—	4/4	—	—
Executive Directors						
Mark Wilson	10/10	—	—	—	—	—
Tom Stoddard	10/10	—	—	—	—	—
Andy Briggs	10/10	—	—	—	—	—
Maurice Tulloch	5/5	—	—	—	—	—
Non-Executive Directors						
Glyn Barker ^{2,6}	9/10	7/7	3/3	4/4	5/5	6/6
Patricia Cross ²	9/10	7/7	—	4/4	8/8	—
Belén Romana García	10/10	—	6/6	4/4	—	6/6
Michael Hawker ²	9/10	7/7	—	4/4	—	6/6
Michael Mire ²	9/10	—	6/6	4/4	8/8	6/6
Bob Stein ^{2,4,5}	2/4	2/3	—	1/2	2/3	2/3
Sir Malcolm Williamson ^{2,4}	3/4	3/3	3/3	2/2	3/3	—
Claudia Arney	10/10	—	6/6	4/4	8/8	6/6
Keith Williams	10/10	7/7	6/6	4/4	—	3/3

1 During the year there were 10 Board meetings, of which eight were scheduled meetings and two were called at short notice.

2 The Board meeting on 26 January 2017 was called at short notice. Due to this Glyn Barker, Mike Hawker, Bob Stein, Michael Mire, Patricia Cross and Sir Malcolm Williamson were unable to attend due to other prior commitments. Papers were circulated to all directors before the meeting and those unable to attend could raise issues and give comments to the Chairman in advance of the meeting.

3 Maurice Tulloch was appointed as an Executive Director on 20 June 2017.

4 Bob Stein and Sir Malcolm Williamson retired at the AGM on 10 May 2017.

5 Bob Stein missed the Board, Nomination Committee, Remuneration Committee, Audit Committee and Risk Committee meetings on 8 May 2017 and 9 May 2017 respectively, as they fell immediately prior to his retirement date.

6 Glyn Barker was appointed as a member of the Governance Committee on 10 May 2017.

Conflicts of interest

In accordance with the Companies Act 2006, the Company's Articles of Association allow the Board to authorise potential conflicts of interest that may arise and to impose such limits or conditions as it thinks fit. The decision to authorise a conflict of interest can only be made by non-conflicted directors (those who have no interest in the matter being considered) and in making such a decision the directors must act in a way they consider, in good faith, will be most likely to promote the Company's success for the benefit of its shareholders as a whole. The Board's procedure is to review and approve actual and potential conflicts of interest as they arise. This procedure operated effectively during the year.

Board priorities for 2018

The Board has made considerable progress during 2017 on the objectives set at the beginning of the year. This included exiting from Taiwan and Spain, demonstrating that we are delivering on our strategy of Not Everywhere by focusing our resources in markets where we believe we have a clear competitive advantage, and further increasing value for our shareholders by increasing our growth and cash flow.

We continued to make considerable progress on our Digital First ambition to disrupt the insurance industry, and during the year developed market leading digital propositions, while continuing to embed our approach to digital throughout the Group. We have made continued progress on our targets for earnings, growth, cash and dividends, with our capital surplus having tripled over the last four years. We have also focussed on strengthening our relationships with our customers; the Board continuously monitors customer metrics to ensure that we deliver on our purpose to Defy Uncertainty through our product offering, and customer service. These areas of focus were in addition to the Board's routine standing agenda which included financial reporting and strategic planning.

During 2018, the Board's agenda will focus on refining our strategic propositions, pursuing growth in our traditional and newer markets and accelerating the rollout of new products and the Aviva Signature processes. Digital First will remain, and we will continue to monitor our controls around IT and Cyber Security, to protect us against new threats that emerge. Our customer agenda will evolve, and the Board will continue to drive progress with a view to achieving consistently excellent customer service with a product offering that continues to meet customer needs. Offsite strategy days are used to set, and reflect on progress with the Company's strategy. In these sessions the Board discuss the strategic priorities for the year ahead and set the three year strategic plan and these will continue to occur in 2018.

The Audit, Governance and Risk Committees will continue to consider the opportunities and risks associated with each market and the Remuneration Committee will assess any consequential impact on reward decisions. As the culture programme progresses, the Board will remain close to the annual all-employee survey results, 'Voice of Aviva'. Succession planning and the continued development of the talent pipeline will continue to be a focus for the Board and Nomination Committee.

Board evaluation

The effectiveness of the Board is vital to the success of the Group. The Board has undertaken a rigorous evaluation process each year to assess how it, its committees and individual directors are performing. The normal process is for an evaluation to be undertaken by way of an internal questionnaire, supported by discussions with the Chairman, with an external evaluation conducted every third year. The Board decided to conduct an external evaluation a year earlier than required by the Code in 2017, following changes to the Board during the course of the year. The external evaluation was facilitated by Independent Board Evaluation (IBE). IBE is an external Board evaluation facilitator which has no other connection with Aviva.

Interviews were conducted during the year with every Board member, according to a set agenda tailored for the Board, which had been agreed with the Chairman and the Group Company Secretary. In addition, interviews were held with senior managers and advisers together with former Board members. Following the final report, recommendations were considered by the Board and each committee, and an action plan for areas of focus was agreed,

which are outlined in the table below. This will be reviewed during 2018.

In addition, during the year the NEDs, led by the Chairman, met to discuss the executives' performance. The NEDs, led by Sir Malcolm Williamson, and subsequently Glyn Barker, also met without the Chairman present to consider the Chairman's performance.

Outcomes and steps taken in 2017

Focus area	Theme	Feedback/actions
Shareholders	Investors views on the impact of strategic decisions	Investors' views are regularly sought and incorporated into the Board's planning. During the year the Board undertook an independent investor survey in order to gain further insight into shareholder expectations, which will feed into the Board's strategy going forward. The Chair of the Remuneration Committee met with institutional shareholders and advisory groups in respect of the new Remuneration Policy to be put to shareholders for approval at the 2018 AGM.
Succession planning	Board and executive level succession planning	This remains a continued focus as evidenced, at Board level, by the appointment of Maurice Tulloch in 2017. Maurice brings expertise and focus to the Board of the Group's International businesses, with the UK already being represented at Board level through Andy Briggs.
Governance	Developing the relationship between Aviva plc and subsidiary boards	To enhance the relationship between Aviva plc and subsidiary boards, the Chairman's conference was again held in November 2017 allowing the Board to engage with various subsidiary company board members. The 'INED Portal' was launched in 2017 in order to strengthen communication lines between the Aviva plc Board and the Independent Non-Executive Director community and further align the strategy across the Group. We have also appointed Non-Executives from the plc Board to material subsidiaries to continue to strengthen the communications and strategic linkage.
Board Schedule	Time commitment for the Board	The Board's delegations of authority have been refreshed and the Group Company Secretary and Chairman continue to seek opportunities to simplify reporting lines. Board and committee schedules have been reviewed to ensure the number and timing of meetings are appropriate throughout the year.
Strategy	Customer agenda	Given the importance of this area, the strategic direction of the customer experience has become a matter for the Board as a whole. As such, 'customer' is a standing agenda item on the Board and Governance Committee agendas. In addition, the customer dashboard is reviewed at each Board meeting.
Diversity	Diversity and Inclusion Statement	The Board is committed to having a diverse and inclusive leadership team and, as such, in 2017 the Aviva plc Board Diversity and Inclusion Statement was adopted. The statement is in line with the Group's overall values and also supports the Nomination Committee in its approach to succession planning.

Committee effectiveness

As part of the Board effectiveness review process, each committee undertakes a rigorous review of its effectiveness annually. In 2017 the committee reviews were conducted alongside the evaluation of the Board and also facilitated by IBE. The committees will each consider the feedback from the evaluation and responses as appropriate.

Frameworks for risk management and internal control

The Board is responsible for promoting the long-term success of the Company for the benefit of shareholders, as well as taking account of other stakeholders including employees and customers. This includes ensuring that an appropriate system of risk governance is in place throughout the Group. To discharge this responsibility, the Board has established frameworks for risk management and internal control using a 'three lines of defence' model and reserves for itself the setting of the Group's risk appetite. Further details are contained on the following pages.

In-depth monitoring of the establishment and operation of prudent and effective controls in order to assess and manage risks

associated with the Group's operations is delegated to the Risk, Governance and Audit Committees which report regularly to the Board. However, the Board retains ultimate responsibility for the Group's systems of internal control and risk management and has reviewed their effectiveness for the year. The frameworks are designed to identify and manage, rather than eliminate, the risk of the Group failing to achieve its business objectives. These frameworks were in place for the financial year under review and up to the date of this report, and they help to ensure the Group complies with the Financial Reporting Council's (FRC) guidance on Risk Management, Internal Controls and Related Financial and Business Reporting.

A robust assessment was conducted by the Board of the principal risks facing the Company, including those that would threaten its business model, future performance, solvency and liquidity. During 2017 these included geopolitical risks (including Brexit), the elevated prices of assets, the emerging strategic risks posed by technology and market changes, risks posed by climate change, the heightened risk of cyber threats and data security,

ongoing regulatory change and other emerging risks and market uncertainty. Further information is contained in the Risk Committee report.

Risk management framework

The Risk Management Framework (RMF) is designed to identify, measure, manage, monitor and report the principal risks to the Group of achieving its business objectives and is embedded throughout the Group. It is codified through risk policies and business standards which set out the risk strategy, appetite, framework and minimum requirements for the Group's worldwide operations. Further detail is set out in note 56.

Internal controls

Internal controls facilitate effective and efficient operations, the development of robust and reliable internal reporting and compliance with laws and regulations.

Group reporting manuals in relation to IFRS and Solvency II reporting requirements and a Financial Reporting Control Framework (FRCF) are in place across the Group. FRCF relates to the preparation of reliable financial reporting, covering both IFRS and Solvency II reporting activity. The FRCF process follows a risk-based approach, with management identification, assessment (documentation and testing), remediation (as required), reporting and certification over key financial reporting related controls. Management regularly undertakes quality assurance procedures over the application of the FRCF process and controls.

A Major Control Improvement Topic programme is also in place, designed to focus attention on enhancing our control environment around six areas identified by management. Of these, four have been closed during 2017. The areas that have been closed include Outsourcing, Compliance Effectiveness, Fraud Management and Data Governance. Disaster Recovery and Cyber Security are the two remaining areas. Further information can be found in the Audit and Risk Committee reports.

The principal committees that oversee risk management are as follows

The Risk Committee

Assists the Board in its oversight of risk and risk management across the Group and makes recommendations on risk appetite to the Board. Reviews the effectiveness of the Risk Management Framework, and the methodology in determining the Group's capital and liquidity requirements.

Ensures that risk management is properly considered in setting remuneration policy.

The Governance Committee

Works closely with the Risk Committee and is responsible for assisting the Board in its oversight of operational risk across the Group, particularly in respect of the risk of not delivering good customer outcomes.

The Audit Committee

Works closely with the Risk Committee and is responsible for assisting the Board in discharging its responsibilities for the integrity of the Company's financial statements, the effectiveness of the system of internal controls and for monitoring the effectiveness, performance and objectivity of the internal and external auditors.

Board oversight

The Board's delegated responsibilities regarding oversight of risk management and the approach to internal controls are set out on the previous pages. There is a good working practice between each committee and they provide regular reports to the Board on their activities and escalate significant matters where appropriate. The responsibilities and activities of each Board committee are set out in the committee reports.

Assessment of effectiveness of risk management

The Chief Executive Officer and Chief Risk Officer of each market is required to make a declaration that the Group's governance, internal control and risk management requirements are effective and fit for purpose across the business and that they are kept under review through the year.

Any material risks not previously identified, control weaknesses or non-compliance with the Group's risk policies or local delegations of authority must be highlighted as part of this process. This is supplemented by investigations carried out at Group level and a Group CEO and CRO certification for Aviva plc.

The effectiveness assessment also draws on the regular cycle of assurance activity carried out during the year, as well as the results of the certification process. During 2017, this has been enhanced by the application of the Group's improved Operational Risk & Control Management (ORCM) framework. Through ORCM the Group has defined a common system and methodology for the management of operational risks and controls to be deployed throughout the Group. This framework includes tools, processes and standardised reporting necessary to identify, measure, manage, monitor and report on the operational risks to which the Group is, or could be, exposed and the controls in place to mitigate those risks within centrally set tolerances. The details of key failings or weaknesses are reported to the Audit Committee and the Board on a regular basis and are summarised annually to enable them to carry out an effectiveness assessment.

The Audit Committee, working closely with the Risk Committee on behalf of the Board, last carried out a full review of the effectiveness of the systems of internal control and risk management in March 2018 covering all material controls, including financial, operational and compliance controls and the RMF. Through regular reporting and the annual review, a number of areas of improvement have been identified and the required actions have been or are being taken. The committee reports refer to a number of areas where significant control improvement is needed and in progress such as cyber security and disaster recovery, as well as financial crime prevention, data management and preparedness for the EU General Data Protection Regulation. We are investing in improvements in these areas and will continue to monitor them.

The risk management framework of a small number of our joint ventures and strategic equity holdings differs from the RMF outlined in this report. We continue to work with these entities to understand how their risks are managed and to align them, where possible, with our framework.

Communication with shareholders

The Company places considerable importance on communication with shareholders. The Executive Directors have an ongoing dialogue and a programme of meetings with institutional investors, fund managers and analysts which are managed by the Company's Investor Relations function. The Chairman met a number of the Company's major shareholders during 2017. At these meetings a range of issues are discussed including strategy, financial performance, management, remuneration and governance, within the constraints of information already made public, to understand any issues of concern. In November 2017, we held a Capital Markets Day in Warsaw to update investors and analysts on our financial objectives. Shareholders' views are regularly shared with the Board through the Group CEO's and CFO's reports and periodic briefings from the corporate brokers and other specialist advisors, especially around report publications and policy formations. Further details of shareholder engagement regarding our new Remuneration Policy can be found in the Directors' remuneration report. The SID was available to meet with major investors to discuss any concerns that could not be resolved through normal channels.

2018 AGM

The 2018 AGM will be held on Thursday 10 May 2018 and the Notice of AGM and related papers will, unless otherwise noted, be sent to shareholders at least 20 working days before the meeting. The AGM provides a valuable opportunity for the Board to communicate with private shareholders. All directors normally attend the Company's AGM, however, Bob Stein did not attend the 2017 AGM due to his retirement. All serving directors plan to attend the 2018 AGM.

We have an email address, aviva.shareholders@aviva.com, for shareholders to ask questions on the business of the AGM.

A presentation on the Group's performance will be given at the AGM and made available on the Company's website after the meeting at www.aviva.com/agm.

Shareholders are invited to ask questions related to the business of the meeting at the AGM and have an opportunity to meet with the directors following the conclusion of the meeting. Further details on the AGM are provided in the Shareholder Services section.

Nomination Committee report

Committee focus for the 2017 year

I am pleased to present the Nomination Committee's report for the year ended 31 December 2017.

During 2017, the Committee supported the appointment of Maurice Tulloch as an Executive Director of the Board, and the Independent Non Executive Director (NEDs) succession process following the retirement of Bob Stein and Sir Malcolm Williamson at the conclusion of the 2017 Annual General Meeting (AGM) on 10 May 2017.

Committee membership

The members of the Committee are shown in the table below. Details of their experience, qualifications and their attendance at Committee meetings during the year are shown within the Directors' and corporate governance report.

Name	Member Since	Years on the Committee
Sir Adrian Montague*	06/03/2013	5
Claudia Arney	08/02/2016	2
Glyn Barker	01/07/2012	5
Patricia Cross	01/12/2013	4
Belén Romana García	26/06/2015	2
Michael Hawker	01/07/2012	5
Michael Mire	12/09/2013	4
Bob Stein**	06/03/2013	5
Sir Malcolm Williamson**	14/05/2015	2
Keith Williams	01/08/2016	1

* Chair

** Retired from the conclusion of the 2017 Annual General Meeting (10 May 2017)

Committee purpose

The main purpose of the Committee is to monitor the balance of skills, knowledge, experience and diversity on the Board and the succession plans for the Executive Directors. Last year the Committee expanded its responsibility to include the oversight of talent development for the wider Group. This ensures that a holistic approach to talent development and securing a future talent pipeline is taken throughout the Group.

Board and executive succession planning

There have been a number of changes to the Board during the year. In June 2017 it was agreed that Maurice Tulloch, Chief Executive Officer of International Insurance, would join the Board as an Executive Director. Maurice brings significant general insurance and international experience to the Board.

Glyn Barker, who has been a member of the Board for six years, was appointed as Senior Independent Director (SID) following Sir Malcolm's retirement and as a consequence stepped down as Chair of the Audit Committee. He also became a member of the Governance and Remuneration Committees. In line with our approach to succession planning, Keith Williams became Chair of the Audit Committee and a member of the Risk Committee and in January last year, Claudia Arney was appointed Chair of the Governance Committee and a member of the Risk Committee.

A skills matrix for Board members and the Company's executive management has been developed and it supported the Committee's discussions during the Board and committee appointment process. The skills matrix sets out the expertise and experience of each Board member and the Group Executive and assists the Committee in identifying those who possess the desired skills and experience to join the Board and its committees, both now and in the future.

In the year, the skills matrix was used to identify our need to give greater focus to the Group's European and International businesses at Board level and, coupled with the Board's desire to appoint an additional Executive Director, it was agreed that Maurice Tulloch should join the Board. Maurice's promotion demonstrates how we continue to develop our talent in the Group.

Executive and Board succession planning continues to be a priority for the Committee and throughout the year the Committee monitored the future leader pipeline and the available pool of talent in the Company.

With respect to the wider people agenda, the Board is heavily involved in managing and strengthening the talent pipeline across the Group. Members of the Board have been involved in various initiatives including an ongoing programme of talent breakfasts where high potential employees meet the Board at least four times a year. Further information on our people strategy can be found in the Strategic report.

Diversity

The Board is committed to having a diverse and inclusive leadership team which provides a range of perspectives, insights and the challenge needed to support good decision making. Diversity at Aviva includes but is not limited to gender; it comprises an inclusive environment which respects all strands of diversity including skills and experience, geographical expertise, ethnicity, disability and sexual orientation.

In May 2017, the Board adopted a Diversity and Inclusion statement which supports the Committee in its approach to succession planning. The Board's Diversity and Inclusion statement, which is in line with the overall Group Diversity and Inclusion strategy, is available on the Company's website at www.aviva.com/corporate-governance

We are supportive of the recommendations set out in the Hampton-Alexander Review and are committed to raising the representation of women on the Board to 33%. As at the date of this report, 25% of the Board are female, which is an increase from 23% in 2016. In terms of our senior management, 30% of our Group Executive members are female.

We actively support women advancing into senior roles, as evidenced by our participation in initiatives such as the Future Boards Scheme. In addition, the Group Chief Executive Officer (Group CEO) and I are active members of the 30% Club. The Board will continue to monitor Aviva's talent management programmes and practices with a special regard to those designed for women with high potential.

The Board is also supportive of the recommendations set out in the Parker Review and we aim to increase the ethnic diversity of the Board by 2021.

Board effectiveness review

The Board and its committees conduct an evaluation of their performance each year and in accordance with the UK Corporate Governance Code, we conduct external evaluations at least every three years. Our 2017 evaluation was conducted by 'Independent

Board Evaluation', a firm that has no other connection with the Company.

Further information about the 2017 effectiveness review can be found in the Directors' and Corporate Governance Report.

The Committee will review the outcomes of the 2017 effectiveness review, agree any actions and monitor these going forward.

2018 priorities

In 2018 the Committee will continue to focus on succession planning at Board and senior management level, developing our people to ensure we maintain a strong talent pipeline and supporting the leadership programmes that underpin this.

Sir Adrian Montague

Chair of the Nomination Committee

7 March 2018

Committee activities and agenda time during 2017

Evaluation and annual assessment – 15% of agenda time

- Assessment of non-executive directors independence
- Considered and recommended to the Board the election/re-election of each continuing director ahead of their election/re-election by shareholders at the Company's 2017 AGM
- Reviewed and made recommendations to the Board in respect of each directors actual, potential or perceived conflicts of interests

Board composition and diversity – 34% of agenda time

- Reviewed the composition of the Board and its committees and in particular, whether the Board required additional skills and experience which would complement those of the existing members and the Company's risk profile and strategy
- Recommended the appointment of Glyn Barker as Senior Independent Director and various committee changes
- Considered specific steps to be taken in relation to diversity in Board and executive succession planning

Succession planning – 24% of agenda time

- Continued to focus on succession planning arrangements at both Board and executive level, against a specification for the role and capabilities required for the position and the composition of the Board
- Considered plans for succession for each Group Executive member, including talent development below Group Executive level
- Identified and endorsed the appointment of Maurice Tulloch to the Board in June 2017

Talent pipeline – 27% of agenda time

- Reviewed the career and development plans for the Group Executive to ensure that there is an adequate talent pool of potential executive directors
- Oversaw talent development throughout the Group and ensured there is a sufficient pipeline of talent available to achieve the Company's current and future strategy

Risk Committee report

Committee focus for the 2017 year

I am pleased to present the Committee's report for the year ended 31 December 2017.

The Company's approach to risk and risk management together with the principal risks that face the Group are explained within the Risk and risk management section of this report.

During the year the Committee's focus remained on geopolitical risks (including Brexit), the elevated prices of assets, the emerging strategic risks posed by technology and market changes, risks posed by climate change, the heightened risk of cyber threats and data security, ongoing regulatory change and other emerging risks and market uncertainty.

Much work has gone into understanding the emerging risk environment, diversifying the Group's risks and hedging its risk exposures against extreme stresses to provide a more stable capital position. The Committee has incorporated emerging risk scenarios into its scenario planning, enabling it to review the most significant risks that would affect the Company's strategy both now and in the future. Cyber risk continues to be managed through the Company wide systemic programme, the Major Control Improvement Topics (MCIT) programme.

The Committee continues to analyse the impact of Brexit particularly the potential exit scenarios, as well as the emerging regulatory framework for Global Systemically Important Insurers (G-SIIs), which it will continue to do throughout 2018.

The Committee recognises the ongoing risk of operational failings and in particular the potential for subsequent regulatory enforcement or fines. The newly implemented Operational Risk & Control Management (ORCM) framework provides the Committee with ongoing data to monitor the progress being made to improve the Group's operating controls and to upgrade its systems. The Board has undertaken a number of training sessions and deep dives into the risks of the business during the year to support this ongoing oversight at both Board and Committee level.

Committee membership

The members of the Committee are shown in the table below. Details of their experience, qualifications and attendance at Committee meetings during the year are shown within the Directors' and Corporate Governance report.

During the year, Bob Stein retired from the Committee at the conclusion of the 2017 Annual General Meeting on 10 May 2017, and Keith Williams was appointed as a Committee member on 3 August 2017.

	Member Since	Years on the Committee
Michael Hawker*	01/01/2010	8
Glyn Barker	02/05/2012	5
Belén Romana García	26/06/2015	2
Michael Mire	12/09/2013	4
Bob Stein**	06/03/2013	5
Claudia Arney	01/01/2017	1
Keith Williams	03/08/2017	<1

* Chair

** Retired from the conclusion of the 2017 Annual General Meeting (10 May 2017)

Committee purpose

The main purpose of the Committee is to assist the Board in its oversight of risk within the Group, with particular focus on the Group's risk appetite, risk profile in relation to capital, liquidity and franchise value and the effectiveness of the Group's Risk Management Framework. The Committee reviews the methodology used in determining the Group's capital requirements and stress testing and ensures that due diligence appraisals are carried out on strategic or significant transactions. In addition to the risks inherent in the Group's investment portfolio, the Committee reviews the Group's operational risks, and the significant ongoing changes to the regulatory framework while monitoring the prudential regulatory requirements across the Group. The Committee also works with the Remuneration Committee to ensure that risk management is properly considered in setting the Remuneration Policy, and is responsible for promoting a risk awareness culture for the Group.

Financial markets and geopolitical uncertainty

During 2017 financial markets remained relatively buoyant despite heightened geopolitical and national political uncertainty following the inauguration of the new Trump administration in the US, tensions over North Korea and general elections in the UK, Germany and France. The Committee considered that management actions including hedging activities and the Group's balance sheet strength were well positioned against the market volatility experienced during the year.

Credit risk

The Committee continuously monitored the credit environment throughout the year and considered the current economic factors, in particular the unwinding of quantitative easing and the ongoing tightening of monetary policy in many of the major economies, which may cause counterparty credit risks. It also reviewed the level of hedging and protection in place to mitigate these risks and in particular monitored the Group's exposure to interest rates and widening credit spreads.

Capital and liquidity

During the year the Committee reviewed the current and projected capital and liquidity position, risk environment and risk profile, including the estimated impact of the change in Ogden discount rate on the SII capital ratio.

While reviewing the risk profile the Committee oversaw the analysis of the Group's current and projected SII capital and

liquidity position, which included reviewing forecasted operating capital generation over the plan period. The Committee challenged the different levels of risk appetite and capital ranges across the Group and reviewed the capital positions in the Group's subsidiaries and Group surplus sensitivities.

The Committee monitored the ongoing changes to the regulatory framework and prudential regulatory requirements across the Group and will continue to provide an open dialogue with the regulators, particularly in regards to Brexit planning, dividend plans and changes to the internal model.

IT Infrastructure and data security

Given the Group's digital strategy and the increasing external cyber security threat, focus has remained on the transformation of the Group's IT estate, its resilience, and its ability to support the Group's strategy and keep customer data safe. During the year the Committee received regular updates on the cyber security transformation programme in regards to the outcomes, transition plans and timings. A broader assessment of the Company's IT infrastructure was undertaken during the year, ahead of a plan for the upgrade of legacy systems. The Committee also received updates throughout the year and regularly reviewed the risk of service interruption on the business and will continue to receive status reports on global disaster recovery plans and failover tests throughout 2018.

The introduction of the EU General Data Protection Regulation (GDPR) will significantly increase the requirements on Aviva to protect customer data and in particular the responsibility of our outsourced suppliers to meet these standards. The management of data protection has been brought together through the Cyber Security and Data Governance MCIT programmes which will support the Group's readiness.

The Group's ORCM requirements and guidance have provided greater clarity of accountability, with the risk function having specific responsibility for identifying any missing risks and therefore mitigating the risk of further thematic issues developing.

Public policy risk, including Brexit

Although we do not believe that Brexit has a significant operational impact on our business, the influence that it will continue to have on the UK economy will require careful monitoring. During the year the Committee reviewed the potential exit scenarios and their impact on the Group, and the Group's operational planning in response. It also considered the public policy risks that might arise in 2018 if there was another general election in the UK and a change of government, and continues to monitor political and public policy risk in Aviva's other principal markets.

Committee effectiveness review

The Committee undertakes a rigorous review of its effectiveness annually. More information can be found in the Directors' and Corporate Governance report.

2018 priorities

The Committee will continue to monitor the political environment, the exit of Britain from the European Union, and the current global economic cycle, with inflated asset values. It will also focus on managing balance sheet volatility and the operational and economic impacts, with contingency financing available to manage any broad market impact. There will be an ongoing and significant focus on strengthening the control framework, cyber risk reduction

and disaster recovery capabilities of the Group. The Committee's focus will remain on the emerging risks, and the potential benefits that could be derived from them, particularly around advances in technology across financial services, automotive and the medical services.

Michael Hawker

Chair of the Risk Committee

7 March 2018

Committee activities and agenda time during 2017

Risk appetite, risk management and risk reporting – 21% of agenda time

- Reviewed reports from the Chief Risk Officer (CRO) which included updates on significant risks facing the Group, the Group's capital and liquidity position, the control environment, emerging risks and risk profile, liquidity risk appetite and operational, regulatory and conduct risk
- Reviewed and recommended the Group's risk policies for Board approval
- Reviewed reports on the updated audit approach under the Group's Operational Risk and Control Methodology
- Reviewed and recommended for Board approval the Group's SII Capital and Liquidity risk appetite
- Approved the Group's foreign exchange risk appetite and SII capital risk tolerances by risk type

Group capital and liquidity, financial plan and stress testing – 21% of agenda time

- Approved the 2017 Group Capital and Liquidity Plan and subsequent updates
- Reviewed capital and liquidity projections including the Group's shareholder cover ratio and liquidity cover ratio
- Reviewed updates on credit risk and the Company's exposure and reviewed mitigating actions
- Received updates on the asset portfolio; including global economics, assessment of macro economic impacts on the equity release market and investment updates
- Received the scenarios for Group-wide stress testing to support the Recovery Plan, and the results
- Approved the G-SII Plans, including Recovery Plan and Liquidity Risk Management Plan
- Reviewed the 2018-2020 Group Plan

Internal model – 8% of agenda time

- Undertook a review of the internal model components, reviewed internal model validation reports and governance updates

External factors – 18% of agenda time

- Reviewed regular updates on the performance of the Group's investment portfolios and on the external economic environment, and assessed the implications on the Group's asset portfolio
- Monitored the risk of cyber security, the progress against cyber risks and reviewed the results of simulation security attacks against the Group
- Monitored the impact of Brexit, in particular the exit scenarios and regularly reviewed updates regarding the potential impact on capital and liquidity
- Reviewed the most significant emerging risk scenarios affecting the delivery of the Company's strategy, including EU GDPR

Regulatory, governance and internal audit – 32% of agenda time

- Received updates from the UK Business Units
- Reviewed the Group Own Risk and Solvency Assessment Supervisory Report and approved its submission to the regulator
- Received updates on the disaster recovery, IT security, outsourcing and cyber risk MCITs, and monitored and challenged progress by management
- Received quarterly reports from the Chief Audit Officer (CAO) on internal audit which included progress on improving the control environment, progress on MCITs, and the review of the Internal Audit function
- Approved the refresh of certain Group Business Standards
- Approved the annual objectives of the CRO
- Reviewed the effectiveness of the systems of internal control and risk management
- Recommended the 2018 Risk and Control Goal for approval by the Remuneration Committee
- Reviewed the adequacy and quality of the risk management function
- Assessed the performance of all Group Business Units against the 2017 Group Risk and Control Goal

Audit Committee report

Committee focus for the 2017 year

I am pleased to present the Audit Committee's report for the year ended 31 December 2017.

2017 has been a year of continued political and business turbulence. Against this background the Committee has continued to focus on the fundamentals of financial reporting, our system of internal controls and the performance of the internal and external auditors. This has included the potential impact of a number of new International Financial Reporting Standards (IFRSs), including the new insurance accounting standard issued in 2017, for implementation in 2021, on the Company's financial operations and financial reporting.

On 27 February 2017, the Lord Chancellor announced a reduction in the discount rate factor used to adjust large personal injury damages awards for future loss of earnings (the Ogden rate) to -0.75%, the impact of which we reported in the Group's 2016 financial results. The Committee will continue to monitor developments in the Ogden rate, further discussion in Parliament and any proposed rate change in the year ahead.

The Committee continued to provide oversight on behalf of the Board of all the Major Control Improvement Topics (MCITs) on Cyber Security, Compliance Effectiveness, Data Governance, Disaster Recovery, Outsourcing and Fraud Management. The Committee has specific accountability for the Fraud Management MCIT. Four MCITs were closed during the year and are now monitored as part of our business as usual processes. The MCIT programme assists management in providing even greater focus on enhancing our control environment around the six thematic areas identified.

During the third quarter of 2017, Aviva received a comment letter from the Corporate Reporting Review Team (CRRT) of the Financial Reporting Council (FRC) in relation to its regular review and assessment of the quality of corporate reporting in the UK. The comment letter focussed on the disclosures of the Alternative Performance Measures (APMs) in our 2016 Annual report and accounts. The CRRT raised certain questions regarding the composition and labelling of the Operating Profit measure. Aviva responded to the CRRT's questions providing clarifying information and proposing specific enhancements to its 2017 Annual report and accounts that would address the questions and comments raised. These enhancements, including the relabelling of the 'Operating Profit' APM to 'Group Adjusted Operating Profit', have been applied in this annual report. The CRRT subsequently confirmed in writing that it had closed its enquiries.

Committee membership

The members of the Committee are shown in the table below. Details of their experience, qualifications and attendance at Committee meetings during the year are shown in the Directors' Biographies and Directors' and Corporate Governance report.

Sir Malcolm Williamson and Bob Stein retired from the Committee after the conclusion of the Annual General Meeting on 10 May 2017. Glyn Barker stepped down as Committee Chair and became Senior Independent Director, following the announcement of the 2017 half year results on 3 August 2017. Glyn remains as a member of the Committee, and I took over as Committee Chair from that date.

	Member Since	Years on the Committee
Keith Williams*	01/08/2016	1
Glyn Barker**	08/08/2012	5
Patricia Cross	01/12/2013	4
Michael Hawker	01/09/2011	6
Bob Stein***	14/05/2015	2
Sir Malcolm Williamson***	14/05/2015	2

* Chair from 3 August 2017

** Chair until 3 August 2017

*** Retired from the conclusion of the 2017 Annual General Meeting (10 May 2017)

Committee member requirements

The Committee annually reviews how its members meet the expertise criteria set out in the UK Corporate Governance Code 2016 and the Disclosure Guidance and Transparency Rules (DTRs). Following the review undertaken for 2017, a recommendation was made to the Board that I, as Committee Chair, fulfilled each of the requirements for recent and relevant financial experience and competence in accounting and auditing, as did Glyn Barker. Patricia Cross and Mike Hawker confirmed that they meet the Code requirement for recent and relevant financial experience. The Committee as a whole has competence relevant to both the insurance and financial services industry.

Committee purpose

The main purpose of the Committee is to assist the Board in discharging its responsibilities for monitoring the:

- integrity of the Company's financial statements;
- adequacy and effectiveness of our systems of internal control including whistleblowing provisions; and,
- monitoring the effectiveness, performance and objectivity of our internal and external auditors.

The Committee acts independently of management and works closely with the Governance, Remuneration and Risk Committees. There is cross-membership between these Committees to ensure a good understanding and efficient communication of the work of each.

Significant issues

The significant issues that the Committee considered during the year are set out in the table below.

Areas of focus	Actions taken by the Committee
IFRS and Solvency II (SII) key issues and judgements	Challenged estimates and judgements for IFRS and SII reporting bases. IFRS judgements included goodwill and intangible asset impairment reviews, restructuring provisions and reserving for insurance contracts, including provisions for the continuing impact of the 2016 Brexit vote on property values and rental incomes.
Longer Term Viability Statement (the Statement)	Reviewed and challenged the principles underpinning the Statement for 2017, and concluded that the Company and its subsidiaries will be able to continue in operation and meet their liabilities as they become due. The Committee therefore continues to consider it appropriate that the Statement covers a three year period.
SII disclosures	Reviewed the SII judgements, development of the Group Solvency and Financial Condition Report and the Regulatory Supervisory Report, and recommended them to the Board for approval, ahead of filing for the first time on 1 July 2017.
MCITs	Continued to lead the overall progress of the MCIT programme, receiving regular reports from management, particularly on the Fraud Management MCIT, of which the Committee has ownership. Challenged the proposed MCIT closure dates and governance around the closure process for the MCIT programme, as some of the control topics approach satisfying the closure criteria, upon which they will be managed on a business as usual basis. The Fraud Management, Outsourcing, Compliance Effectiveness and Data Governance MCITs were all closed during the 2017 year following satisfaction of these criteria.
IFRS and SII Life technical provisions and reserves	Challenged the assumptions used in the calculation of the Best Estimate Liability component of the technical provisions, the reserves required under SII, and the expense impacts on SII reserves. Reviewed and challenged the longevity, expense and credit default assumptions used for the 2017 half and full year. The challenge around the setting of longevity assumptions was a particularly significant area for review as those judgements could be expected to have a material impact on Aviva's SII and IFRS results. During 2017 a detailed analysis was conducted, and reviewed by the Committee, to validate changes observed in recent mortality experience and the resulting effect on our existing longevity assumptions. In particular the Committee reviewed the rate of annuitant mortality improvement reflecting recent experience in the UK market. The Committee met with the Chair of the UK Life Audit Committee, which had conducted its own 'deep dive' on longevity assumptions, together with the UK Life Chief Financial Officer. This provided an additional opportunity to examine the assumptions in greater detail. Following assessment of the proposed assumption changes the Committee considered the associated release of margins and the timing of recognition of changes in longevity experience in the financial statements.
New IFRSs	Prepared for the implementation of new IFRSs, including IFRS 17, the new insurance accounting standard, IFRS 15, in respect of revenue from contracts, IFRS 9 on financial instruments, and IFRS 16 on leases. The Committee assessed the impact of each on the Group's financial position, processes, systems and data. While the impact of adopting IFRS 17 has yet to be fully assessed it is expected that it will have a significant impact on the measurement and disclosure of insurance contracts. It is not possible to assess the effect of adopting IFRS 9 as the Group has elected to apply the deferral approach permitted by IFRS 4 (with the result that the Standard will be considered alongside IFRS 17). IFRS 15 and IFRS 16 are not expected to have a significant impact on the Group (although all aspects of IFRS 16 are yet to be fully assessed).
IFRS and SII GI reserving issues and judgements	Reviewed and challenged the principal assumptions underpinning the GI reserves, in particular the continued appropriateness of maintaining the provision for Ogden bodily injury claims, which was made in the 2016 financial statements.

External auditor

PricewaterhouseCoopers LLP (PwC) was appointed as the Group's External Auditor (Auditor) in 2012 following a formal tender process. In line with the Company's policy for the external audit contract to be put out to tender at least every ten years, and in conformance with European rules on mandatory audit rotation, the Committee propose that a competitive tender process will next be completed no later than for the 2022 year end. While there is no requirement to rotate audit firms until the current auditor has served a maximum of 20 years, in determining the timing of a tender process the Committee is mindful that it is necessary to allow the selected auditor appropriate time to become independent should the Committee propose that an auditor other than PwC be selected to serve shareholders going forwards. For this reason, it is currently proposed that a tender process be completed in the 2020 financial year for the 2022 year end. The Committee will continue to monitor the effectiveness and independence of PwC, as well as considering whether this proposed timing remains appropriate in light of business developments.

The external audit is led by the PwC audit partner, Marcus Hine who has held the role for three years. The role of audit partner will be rotated after the 2018 year-end.

In addition, during the year, the Financial Reporting Council's Audit Quality Review Team (AQRT) reviewed PwC's audit of the Group's 2016 financial statements as part of their annual inspection of audit firms. The Committee received and reviewed the final report from the FRC which indicated that there were no significant

areas of concern. An annual review of the Auditor was undertaken through completion of a questionnaire by the Committee, senior management, and members of the Group's finance community. Following review of the questionnaire responses received and consideration of the AQRT report, the Committee concluded that PwC continued to perform effectively and is recommended to shareholders for reappointment at the 2018 AGM.

The Company has complied with the Statutory Audit Services for Large Companies Market Investigation (Mandatory Uses of Competitive Tender Process and Audit Committee Responsibilities) Order 2014 for the year ended 31 December 2017.

The Company has an External Auditor Business Standard (Standard) in place which is aimed at safeguarding and supporting the independence and objectivity of the Auditor. The Standard is compliant with all UK and International Federation of Accountants rules and takes into account the FRC's Revised Ethical Standard 2016 and the EU Audit Directive that became applicable to Aviva from 1 January 2017.

Non-audit fees

In 2017 the Group paid PwC £22.3 million (2016: £23.9 million) for audit and audit-related assurance services, with the overall decrease due to Friends Life integration and US SEC delisting savings. In addition, PwC were paid £3.0 million (2016: £9.4 million) for other services, including £2.2 million (2016: £8.1 million) for other assurance services, giving a total fee to PwC of £25.3 million (2016: £33.3 million).

In line with the Standard, our Committee satisfied itself that for all non-audit engagements, robust controls were in place through a quarterly review process for audit related and non-audit services provided, to ensure that PwC's objectivity and independence was safeguarded, and concluded that it was in the interests of the Company to purchase these services from PwC due to their specific expertise. Further details are provided in note 12 of the financial statements.

Internal control

The Committee is responsible for supporting the Board in ensuring a robust system of internal control and risk management in the Group. The Committee receives regular reports on the status of the control environment, reports on our Group's MCITs, and updates on the management of operational risks and controls under the Operational Risk and Control Management framework (ORCM). More information about our system of internal control and risk management can be found in the 'Directors' and Corporate Governance report' in this report.

The Committee also receives quarterly control reports from the Internal Audit function and reviews and challenges management on the actions being taken to improve the quality of the overall control environment and the control culture across the Group.

The Committee reviews and approves the bi-annual Internal Audit Plan. It also conducts an annual review of the Internal Audit Function to assess its effectiveness and to satisfy itself that the quality, experience and expertise of the Internal Audit function is appropriate for the business. This is carried out by reviewing reports issued by Internal Audit and the output of an annual stakeholder effectiveness survey. This formal process is supplemented by regular private discussions with both executive management and the External Auditor. During the 2017 year, the Chief Audit Officer (CAO) role was transitioned to Julian Woodford, who previously held the role of Chief Finance Officer of the UK General Insurance business. The Committee concluded that for 2017 the function performed well and remained effective.

For the financial year under review, the Company met the relevant provisions of the Code relating to internal controls, and the FRC's 2014 'Guidance on Risk Management, Internal Control and Related Financial and Business Reporting'.

The Committee is also supported in its work by the Audit Committees that operate in the Group's regulated subsidiary entities. These subsidiary Audit Committees review the operation of internal controls, and actively challenge judgements made by management, strengthening the overall governance and control framework for the Group.

Whistleblowing

The Committee Chair is the whistleblowers' champion for the Group and has responsibility to oversee the integrity, independence and effectiveness of the Group's policies. The Committee as a whole is responsible for establishing and overseeing the effectiveness of controls put in place in accordance with regulatory requirements in respect of whistleblowing. The Board annually receive a formal report in respect of whistleblowing activity and compliance in line with updated regulatory requirements.

Committee effectiveness review

The Committee undertakes a rigorous review of its effectiveness annually. More information can be found in the 'Directors' and Corporate Governance report' in this report.

2018 priorities

In 2018, in addition to carrying out its principal function, the Committee will monitor the implementation of the new IFRSs, with particular focus on IFRS 17, regarding the accounting treatment of insurance contracts, ahead of it coming into effect on 1 January 2021. The Committee will also monitor the impact of changes in longevity, and other key assumptions and ensure we are prepared for the impact of these changes.

Keith Williams

Chair of the Audit Committee
7 March 2018

Committee activities and agenda time during 2017

Financial statements and accounting policies – 57% of agenda time

- Recommended to the Board for approval the 2017 half and full year results
- Approved the IFRS and SII technical provisions with the 2017 half and full year results
- Recommended to the Board for approval the SII Solvency and Financial Condition Report
- Reviewed and challenged the reserve positions relating to our UK Life and GI operations
- Reviewed and challenged the treatment and recoverability of goodwill and other intangible assets
- Monitored and prepared for the reduction in the Ogden rate in February 2017
- Reviewed the Chief Financial Officer's reports which included: the IFRS and SII key issues and judgements; accounting developments with particular regard to the new IFRS's; and overview of internal control over financial reporting.
- Reviewed and challenged the going concern assumptions for 2017 and the principles underpinning our Longer Term Viability Statement
- Reviewed the Group Risk Actuary's report on significant issues related to the technical provisions of SII and IFRS

External audit, auditor engagement and policy – 16% of agenda time

- Reviewed the effectiveness of the External Auditor and was satisfied that the services it provided remained effective, objective and fit for purpose
- Reviewed the External Auditor's compliance with the independence criteria set out in the Code
- Monitored compliance with our External Auditor Business Standard on a quarterly basis
- Refreshed our External Auditor Business Standard to reflect new regulatory requirements
- Held private meetings with the External Auditor without management present to provide an appropriate forum for issues to be raised
- Reviewed reports from the External Auditor with regard to: the 2017 Audit Plan and progress against plan and reports on the audit of the 2017 half and full year results including key assumptions used and outcomes of the audit

Internal audit – 17% of agenda time

- Reviewed and approved changes to our Internal Audit Charter and Business Standard
- Reviewed and approved our Internal Audit Plan
- Assessed the independence of the CAO
- Held private meetings with the CAO without management present
- Reviewed reports from the CAO

Internal controls, including financial reporting control framework and financial reporting developments – 10% of agenda time

- Received quarterly updates on the effectiveness of our FRCF framework and rectification of controls
- Reviewed management's assessment of the effectiveness of our risk management and control environment
- Oversaw the MCIT programme and monitored and challenged progress by management to address the Fraud Management MCIT, which was closed in September 2017
- Reviewed the Internal Audit function report to ensure adequacy of our systems of internal control and risk management
- Ensured an appropriate whistleblowing framework was in place

Governance Committee report

Committee focus for the 2017 year

I am pleased to present the Governance Committee's report for the year ended 31 December 2017.

During 2017, the Committee considered and monitored a range of matters which included our customers, our corporate responsibility agenda, our reputation, our governance operations, organisational redesign and stakeholder engagement.

Committee membership

The members of the Committee are shown in the table below. Details of their experience, qualifications and attendance at Committee meetings during the year are shown within the Directors' and Corporate Governance report.

There were a number of changes to the Committee membership during the year. I was appointed as Chair of the Committee in January 2017 and Glyn Barker joined the Committee in May 2017. Sir Malcolm Williamson retired from the Board and the Committee after the conclusion of the 2017 Annual General Meeting (AGM) on 10 May 2017.

Name	Member Since	Years on the Committee
Claudia Arney*	01/06/2016	1
Glyn Barker	10/05/2017	<1
Michael Mire	12/09/2013	4
Belén Romana García	26/06/2015	2
Keith Williams	01/08/2016	1
Sir Malcolm Williamson**	14/05/2015	2

* Chair

** Retired from the conclusion of the 2017 Annual General Meeting (10 May 2017)

Committee purpose

The main purpose of the Committee is to assist the Board in overseeing compliance with our corporate governance principles and implementation, shaping the culture and ethical values of the Group through overseeing and advising on business and customer conduct obligations, reputation, community and societal issues, data governance and financial crime matters. In addition, the Committee acts as the conduct committee for Aviva's UK Digital (UKD) business.

Governance changes

Throughout 2017 the Committee focussed on changes in the internal governance of the Group particularly the changes to the governance structure from bringing the UK Insurance (UKI) businesses together to focus more closely on customers' needs.

The Committee has been designated by the Board as the body that provides oversight of governance activities and this work has principally focussed on three areas: changes to the Boards of the Group's regulated entities, the culture action programme and the development of our Aviva Signature processes.

The Committee has reviewed and provided input to the changes to the Board and committee composition of the two regulated subsidiary companies that represent the UKI business.

The Committee has also been updated on the culture action programme which aims to drive delivery of our customer first and operational simplicity goals, and the Aviva Signature which are the processes that differentiate us from our competitors.

Our customers

The Committee has worked with management to enhance how we measure customer and brand metrics and to develop a dashboard to help us better meet the vision of a business that is simple, effortless and easy for our customers to deal with. In addition to these enhancements, the Committee has conducted 'deep dives' into customer complaints when our products and services have not met customer expectation for any reason, and the resulting upskilling of our people and technology improvements to support our customer contact colleagues. The Committee has also reviewed the vulnerable customer support framework that has been implemented during the year.

Data

The Committee has closely engaged with the governance arrangements for preparations for the General Data Protection Regulation (GDPR) which represents one of the largest changes in data management and protection for many years and comes into effect on 25 May 2018. Associated with GDPR the Committee has also reviewed the governance of the broader approach to data privacy and has proactively tested how Aviva could demonstrate that it uses customer information appropriately. The Committee continued to have oversight of the Group's Data Governance and Compliance Effectiveness Major Control Improvement Topics (MCITs) which were closed during the year.

Corporate responsibility

The Committee continued to monitor our approach to corporate responsibility and during the year reviewed Aviva's reporting on modern slavery. Our commitment to respect human rights is guided by the United Nations Guiding Principles on Business and Human Rights and other internationally recognised frameworks and during the year, the Committee also approved updates to our Business Ethics Code to reflect these Principles.

This year, the Aviva Community Fund was launched in three additional markets, giving hundreds of organisations across 10 countries the chance to secure the support they need to make a difference in their local communities.

Aviva is committed to being a responsible corporate citizen and the Committee sets the guidance, direction and policies for the Group's corporate responsibility agenda. Further information on our integrated responsibility and sustainable business approach can be found on the Company's website at www.aviva.com/social-purpose

Conduct agenda

In the past year the Committee has paid particular attention to Aviva's conduct risk agenda.

The Group's Business Units (BU) reassessed their conduct risk performance and conduct risk framework which the Committee reviewed. In the year, the Committee received a deep dive on the conduct risk in our Italian business from the Chief Executive Officer of Aviva Italy.

The Compliance Effectiveness and Data Governance MCITs closed in July 2017 and the Committee receives regular reports from the Compliance function which now provides second line oversight of data governance. The MCITs are also detailed in the Audit Committee report.

The Committee continues to receive updates on the lessons learned from the Financial Conduct Authority's (FCA) Client Assets Sourcebook (CASS) enforcement action in 2016, and reviewed the actions taken and the progress in addressing these actions. An independent review has been conducted following the enforcement action, and significant progress had been made to address the issues raised.

Committee effectiveness review

The Committee undertakes a rigorous review of its effectiveness annually. More information can be found in the Directors' and Corporate Governance report.

2018 priorities

In 2018, the Committee will continue to review the customer agenda concentrating on improving Aviva's customers' experience, embedding the Aviva Signature processes and reviewing customer conduct risk issues. We will also continue to oversee the GDPR programme in order to ensure delivery through 2018.

The Committee will also monitor the wellbeing and engagement of our people through responses to the Voice of Aviva surveys and the embedding of our culture action programme.

Claudia Arney

Chair of the Governance Committee
7 March 2018

Committee activities and agenda time during 2017

Customer, risk and reputation – 22% of agenda time

- Focused on the customer agenda and received regular updates and monitored progress on customer metrics relating to sales, retention, claims experience and complaints
- Regularly reviewed updates from the Chief Audit Officer on any significant control issues
- Received and considered reports detailing ongoing and possible reputational, brand and franchise risks, including media and public policy issues

Corporate responsibility – 7% of agenda time

- Continued to drive the corporate responsibility agenda and monitored compliance with the Group's corporate responsibility strategy
- Reviewed the Group's modern slavery statement, annual corporate responsibility reporting and the Group's Financial Crime, Regulatory Business and Corporate Responsibility, Environment and Climate Change Business Standards
- Received updates on the Group's health and safety performance
- Reviewed the Group's first response to the disclosure recommendations for organisations published by the Financial Stability Board's (FSB) Taskforce on Climate-related Financial Disclosure

Governance – 28% of agenda time

- Considered regular updates from the Group Company Secretary on governance matters, legal and litigation risks which had the potential to impact the reputation of the Group
- Approved the Group's Conflicts of Interest Policy
- Monitored the Group's compliance with the UK Corporate Governance Code and other areas of regulation and guidance
- Reviewed and updated the Committee's Terms of Reference

- Reviewed and where appropriate approved changes to the composition of the material subsidiary boards
- Discussed the outcomes of the 2017 effectiveness review and agreed actions where necessary

People – 9% of agenda time

- Reviewed the results of the Voice of Aviva surveys
- Reviewed and considered the talent development programmes for leadership across the Group
- Approved the Business Ethics Code

Regulatory and financial crime – 23% of agenda time

- Regularly reviewed updates from the Group Compliance Director
- Reviewed potential financial crime risks and any actions required in response
- Monitored the Data Governance and Compliance Effectiveness MCITs closure
- Monitored the Group's relationship and interaction with regulatory bodies and actions taken in respect of regulatory developments
- Reviewed and challenged management's explanations and actions in response to issues/events

UK Digital (UKD) – 11% of agenda time

- Acted as the conduct committee for the UKD business
- Considered UKD's customer agenda and brand proposition
- Received updates on UKD at each Committee meeting and considered the conduct risk framework
- Constructively challenged the UKD Board on matters in relation to conduct, regulatory and financial crime risks and the risk management control framework
- Reviewed the Internal Audit Report on UKD

Other statutory information

The directors submit their Annual report and accounts for Aviva plc, together with the consolidated financial statements of the Aviva group of companies, for the year ended 31 December 2017.

The directors' report required under the Companies Act 2006 comprises this directors' and corporate governance report; the directors' remuneration report and the following disclosures in the Strategic report:

- Environment and climate change for disclosure of our greenhouse gas emissions
- Increasing diversity and inclusion for details of our policy on employment of disabled persons
- Engaging with our people for details of employee involvement
- Likely future developments in the business of the Company
- Important events since the financial year end

Details of significant post balance sheet events that have occurred subsequent to 31 December 2017 are disclosed in notes 3 and 62.

The management report required under Disclosure and Transparency Rule 4.1.5R comprises the Strategic report (which includes the principal risks relating to our business) and details of material acquisitions and disposals made by the Group during the year which are included in note 3. This directors' and corporate governance report fulfils the requirements of the corporate governance statement under Disclosure Guidance and Transparency Rule 7.2.1.

Our policy on hedging

The hedging policy is disclosed in note 57.

Related party transactions

Related party transactions are disclosed in note 59 which is incorporated into this report by reference.

Dividends

Dividends for ordinary shareholders of Aviva plc are as follows:

- Paid interim dividend of 8.4 pence per ordinary share (2016: 7.42 pence)
- Proposed final dividend of 19.00 pence per ordinary share (2016: 15.88 pence)
- Total ordinary dividend of 27.40 pence per ordinary share (2016: 23.30 pence)
- Total cost of ordinary dividends paid in 2017 was £983 million (2016: £871 million)

Subject to shareholder approval at the 2018 AGM, the final dividend for 2017 will become due and payable on 17 May 2018 to all holders of ordinary shares on the Register of Members at the close of business on 6 April 2018 (payment date approximately four business days later for holders of the Company's American Depository Shares (ADS)). In compliance with the rules issued by the Prudential Regulation Authority in relation to the implementation of the Solvency II regime, the dividend is required to remain cancellable at any point prior to becoming due and payable and to be cancelled if, prior to payment, the Group ceases to hold capital resources equal to or in excess of its Solvency Capital Requirement, or if that would

be the case if the dividend was paid. Details of any dividend waivers are disclosed in note 32.

Dividend policy

For the full year dividend for 2017 the Company has applied its policy to pay out 50% of operating earnings per share as a dividend to shareholders. In November 2017, the Company announced its intention to increase its pay-out ratio target to 55-60% of operating EPS by 2020.

Under UK company law, we may only pay dividends if the Company has 'distributable profits' available. 'Distributable profits' are accumulated, realised profits/(losses) not previously distributed or capitalised, less accumulated, unrealised losses not previously written off based on IFRS. Even if distributable profits are available, we pay dividends only if the amount of our net assets is not less than the aggregate of our called-up share capital and undistributable reserves and the payment of the dividend does not reduce the amount of our net assets to less than that aggregate.

As a holding company, the Company is dependent upon dividends and interest from our subsidiaries to pay cash dividends. Many of the Company's subsidiaries are subject to insurance regulations that restrict the amount of dividends that they can pay to us.

Historically, the Company has declared an interim and a final dividend for each year (with the final dividend being paid in the year following the year to which it relates). Subject to the restrictions set out above, the payment of interim dividends on ordinary shares is made at the discretion of the Board, while payment of any final dividend requires the approval of the Company's shareholders at a general meeting. Dividends on preference shares are made at the discretion of the Board.

The Company pays cash dividends in pounds sterling and euros, although the articles of association permit payment of dividends on ordinary shares in any currency and in forms other than cash, such as ordinary shares.

Interim dividends have previously been paid in November of each year. Following feedback from shareholders, to bring Aviva's practice in line with its peers and to reduce the gap between the interim results announcement and dividend payment, from 2018 interim dividends are expected to be paid in September, subject to declaration by the Board. A final dividend is typically proposed by the Company's Board after the end of the relevant year and generally paid in May. The following table shows certain information regarding the dividends that we paid on ordinary shares.

Year	Interim dividend per share (pence)	Interim dividend per share (cents)*	Final dividend per share (pence)	Final dividend per share (cents)*
2013	5.6	N/A	9.40	N/A
2014	5.85	N/A	12.25	N/A
2015	6.75	N/A	14.05	N/A
2016	7.42	N/A	15.88	18.71
2017	8.40	9.50	19.00	—

* Euro dividend rate per share

Distributable reserve

Under UK company law, dividends can only be paid if a company has distributable reserves sufficient to cover the dividend. At 31 December 2017, Aviva plc itself had distributable reserves of greater than £3.5 billion, which would have covered five years of historic dividend payments to our ordinary shareholders. In UK Life, our largest operating subsidiary, distributable reserves, which could be paid to Aviva plc via its intermediate holding company, are based

on the updated Companies Act 2006 (Distributions of Insurance Companies) Regulations 2016 which uses an adjusted Solvency II Own Funds measure in determining profits available for distribution. While the UK insurance regulatory laws applicable to UK Life and our other UK subsidiaries impose no statutory restrictions on an insurer's ability to declare a dividend, the rules require maintenance of each insurance company's solvency margin, which might impact their ability to pay dividends to the parent company. Our other life and general insurance, and fund management subsidiaries' ability to pay dividends and make loans to the parent company is similarly restricted by local corporate or insurance laws and regulations. In all jurisdictions, when paying dividends, the relevant subsidiary must take into account its capital position and must set the level of dividend to maintain sufficient capital to meet minimum solvency requirements and any additional target capital expected by local regulators. These minimum solvency requirements, are discussed in 'Other Information'. We do not believe that the legal and regulatory restrictions constitute a material limitation on the ability of our businesses to meet their obligations or to pay dividends to the parent company, Aviva plc.

Acquisition of own shares

In the Annual report and accounts for the year ending 31 December 2016, we indicated that our strong Solvency II ratio provided capacity to deploy surplus capital. A share re-purchase programme was one method by which we intended to return capital to shareholders allowing a reduction in hybrid debt.

During 2017, the Company re-purchased 57,724,500 ordinary shares of 25 pence each for an average of £5.20 per share and an aggregate amount of £300 million. The purchased shares represent 1.19% of called-up share capital as at 31 December 2017. All shares purchased have been cancelled.

Details of shares purchased, held or disposed by employee share plan trusts on behalf of the Company in 2017 are set out in note 32.

Share class and listing

All the Company's shares in issue are fully paid up and the ordinary and preference shares have a Premium and Standard listing respectively on the London Stock Exchange.

Details of the Company's share capital and shares under option at 31 December 2017 and shares issued during the year are given in notes 30 to 33. The calculation of earnings per share and the impact of the share buy-back is included in note 14.

Share capital

During the year, 57,724,500 ordinary shares were cancelled following repurchase by the Company as outlined above, and 8,867,985 ordinary shares were allotted to satisfy amounts under the Group's employee share and incentive plans. At 31 December 2017 the:

- issued ordinary share capital totalled 4,012,682,691 shares of 25 pence each (83% of total share capital)
- issued preference share capital totalled 200,000,000 shares of £1 each (17% of total share capital)

Further details on the ordinary share capital of the Company are shown in note 30.

Rights and obligations attaching to the Company's ordinary shares and preference shares

Rights and obligations together with the powers of the Company's directors are set out in the Company's articles of association (the Articles), copies of which can be obtained from Companies House

and the Company's website at www.aviva.com/articles, or by writing to the Group Company Secretary. The powers of the Company's directors are subject to relevant legislation and, in certain circumstances (including in relation to the issue or buying back by the Company of its shares), are subject to authority being given to the directors by shareholders in general meeting. At the 2018 AGM, shareholders will be asked to renew the directors' authority to allot new securities. Details are contained in the Notice of 2018 Annual General Meeting (Notice of AGM).

Restrictions on transfer of securities

With the exception of restrictions under the Company's employee share incentive plans, while the shares are subject to the plan rules, there are no restrictions on the voting rights attaching to the Company's ordinary shares or the transfer of securities in the Company.

Where, under an employee share incentive plan operated by the Company, participants are the beneficial owners of shares but not the registered owners, the voting rights are normally exercised at the discretion of the participants. No person holds securities in the Company carrying special rights with regard to control of the Company. The Company is not aware of any agreements between holders of securities that may result in restrictions on the transfer of securities or voting rights.

Significant agreements – change of control

There are a number of agreements that take effect, alter or terminate upon a change of control of the Company following a takeover bid, such as commercial contracts and joint venture agreements. None are considered to be significant in terms of their potential impact on the business of the Group as a whole. All of the Company's employee share incentive plans contain provisions relating to a change of control. Outstanding awards and options would normally vest and become exercisable on a change of control, subject to the satisfaction of any performance conditions and pro rata reduction as may be applicable under the rules of the employee share incentive plans.

Authority to purchase own shares

At the Company's 2017 AGM, shareholders renewed the Company's authorities to make market purchases of up to 406 million ordinary shares, up to 100 million 8 3/4% preference shares and up to 100 million 8% preference shares. Details of shares purchased during 2017 are outlined above. At the 2018 AGM, shareholders will be asked to renew these authorities for another year and the resolution will once again propose a maximum aggregate number of ordinary shares which the Company can purchase of less than 10% of the issued ordinary share capital. Details are contained in the Notice of AGM available at www.aviva.com/agm. The Company held no treasury shares during the year or up to the date of this report.

Disclosure guidance and transparency rule 5 – major shareholders

The table below shows the holdings of major shareholders in the Company's issued ordinary share capital in accordance with the Disclosure Guidance and Transparency Rules as at 31 December 2017 and 7 March 2018.

Shareholding interest

Shareholder	At 31 December 2017		At 7 March 2018	
	Notified holdings	Nature of holding	Notified holdings	Nature of holding
BlackRock, Inc ¹	Above 5%	Indirect	Above 5%	Indirect

¹ Holding includes holdings of subsidiaries.

Directors

The directors as at the date of this report, together with their biographical details and details of Board appointments, resignations and retirements during the year are shown earlier in the report.

The rules regarding the appointment and removal of directors are contained in the Company's Articles. Under the Articles, the Board can appoint additional directors or appoint a director to fill a casual vacancy. The new director must retire at the first AGM following their appointment and can only continue as a director if they are elected by shareholders at the AGM.

At no time during the year did any director hold a material interest in any contract of significance with the Company or any of its subsidiary undertakings other than an indemnity provision between each director and the Company and employment contracts between each executive director and a Group company. The Company has purchased and maintained throughout the year directors' and officers' liability insurance in respect of itself, its directors and others. The Company has also executed deeds of indemnity for the benefit of each director of the Company, and each person who was a director of the Company during the year, in respect of liabilities that may attach to them in their capacity as directors of the Company or of associated companies. The Articles allow such indemnities to be granted. These indemnities were granted at different times according to the law in place at the time and where relevant are qualifying third-party indemnity provisions as defined by section 234 of the Companies Act 2006. These indemnities were in force throughout the year and are currently in force. Details of directors' remuneration, service contracts, employment contracts and interests in the shares of the Company are set out in the directors' remuneration report.

The Company has also granted indemnities by way of a deed poll to the directors of the Group's subsidiary companies, including former directors who retired during the year and directors appointed during the year, which is a 'qualifying third party indemnity' for the purposes of the applicable sections 309A to 309C of the Companies Act 1985. The deed poll indemnity was in force throughout the year and remains in force.

Financial instruments

Group companies use financial instruments to manage certain types of risks, including those relating to credit, foreign currency exchange, cash flow, liquidity, interest rates, and equity and property prices. Details of the objectives and management of these instruments are contained in the risk and capital management section and in note 56 on risk management.

Political donations

Aviva did not make any political donations during 2017.

Disclosure of information to the auditor

In accordance with section 418 of the Companies Act 2006, the directors in office at the date of approval of this report confirm that, so far as they are each aware, there is no relevant audit information of which the Company's External Auditor, PricewaterhouseCoopers (PwC), is unaware and each director has taken all steps that ought to have been taken as a director in order to make themselves aware of any relevant audit information and to establish that PwC is aware of that information.

Annual general meeting

The 2018 AGM of the Company will be held on Thursday, 10 May 2018 at the Queen Elizabeth II Centre, Broad Sanctuary, Westminster, London SW1P 3EE at 11am. The Notice of AGM

convening the meeting describes the business to be conducted thereat. Any proxy voting instruction, whether provided online, by post or via CREST, must be received by our Registrar, Computershare Investor Services PLC, by no later than 11am on Tuesday, 8 May 2018. Further details can be found in the shareholder information section of the Notice of AGM.

Articles of association

Unless expressly stated to the contrary in the Articles, the Company's Articles may only be amended by special resolution of the shareholders. The Company's current articles were adopted on 29 April 2015. A special resolution seeking authority to amend the Company's articles is being put to shareholders at the 2018 AGM.

Going concern

The Group's business activities, together with the factors likely to affect its future development, performance and position are set out in the Strategic report. The performance review includes the Risk and risk management section. In addition, the financial statements sections include notes on the Group's borrowings (note 49); its contingent liabilities and other risk factors (note 52); its capital management (note 54); management of its risks including market, credit and liquidity risk (note 56); and derivative financial instruments (note 57).

The Group has considerable financial resources together with a diversified business model, with a spread of businesses and geographical reach. The directors believe the Group is well placed to manage its business risks successfully.

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 for a period of at least 12 months from the date of approval of the financial statements. For this reason, they continue to adopt, and to consider appropriate, the going concern basis in preparing the financial statements.

Longer-term viability statement

It is fundamental to the Group's longer-term strategy that the directors manage and monitor risk taking into account all key risks the Group faces, including longer-term insurance risks, so that it can continue to meet its obligations to policyholders. The Group is also subject to extensive regulation and supervision including Solvency II from 1 January 2016, and as a result of being designated a Global Systemically Important Insurer by the Financial Stability Board.

Against this background, the directors have assessed the prospects of the Group in accordance with provision C.2.2 of the 2016 UK Corporate Governance Code, with reference to the Group's current position and prospects, its strategy, risk appetite, and the potential impact of the principal risks and how these are managed (as detailed in the 'Risk and risk management' section of the Strategic report as well as note 56 of the IFRS financial statements).

The assessment of the Group's prospects by the directors covers the three years to 2020 and is underpinned by management's 2018-2020 business plan which includes projections of the Group's capital, liquidity and solvency.

The Group's stress and scenario testing considers the Group's capacity to respond to a series of relevant financial, insurance (e.g., catastrophe) or operational shocks should future circumstances or events differ from these current assumptions. The Group addresses the impacts of contingent management actions designed to maintain or restore key capital, liquidity and solvency metrics to within the Group's approved risk appetites over the planning period.

Based on this assessment, the directors have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the three year assessment period.

Fair, balanced and understandable

To support the directors' statement below that the Annual report and accounts, taken as a whole, is fair, balanced and understandable, the Board considered the process followed to draft the Annual report and accounts:

- Each section of the Annual report and accounts is prepared by a member of management with appropriate knowledge, seniority and experience. Each preparer receives guidance on the requirement for content included in the Annual report and accounts to be fair, balanced and understandable
- The overall co-ordination of the production of the Annual report and accounts is overseen by the Chief Accounting Officer to ensure consistency across the document
- An extensive verification process is undertaken to ensure factual accuracy
- Comprehensive reviews of drafts of the Annual report and accounts are undertaken by members of the Group Executive and other members of senior management and, in relation to certain parts of the report external legal advisers and the External Auditor
- An advanced draft is considered and reviewed by the Disclosure Committee
- The final draft is reviewed by the Audit Committee prior to consideration by the Board
- Board members receive drafts of the Annual report and accounts for their review and input. This includes the opportunity to discuss the drafts with both management and the External Auditor, challenging the disclosures where appropriate.

Directors' responsibilities

The directors are responsible for preparing the Annual report and accounts, the directors' remuneration report and the financial statements in accordance with applicable law and regulations. Company law requires the directors to prepare financial statements for each financial year. Under that law the directors have prepared the Group and parent company financial statements in accordance with IFRS as adopted by the EU. In preparing these financial statements, the directors have also elected to comply with IFRSs, issued by the International Accounting Standards Board (IASB). Under company law the directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and Company and of the profit or loss for that period. In preparing these financial statements, the directors are required to:

- select suitable accounting policies and apply them consistently
- make reasonable and prudent judgements and accounting estimates
- state whether applicable IFRSs as adopted by the EU and IFRSs issued by IASB have been followed, subject to any material departures disclosed and explained in the financial statements
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Company and Group will continue in business.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Company's transactions and disclose with reasonable accuracy at any time the financial position of the Company and Group and enable them to ensure that the financial statements and the directors'

remuneration report comply with the Companies Act 2006 and, as regards the Group financial statements, Article 4 of the IAS Regulation. They are also responsible for safeguarding the assets of the Company and Group and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The directors are responsible for making, and continuing to make, the Company's Annual report and accounts available on the Company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

The directors consider that the Annual report and accounts, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's and the Company's position and performance, business model and strategy.

Each of the current directors, whose names and functions are detailed in the 'Our Board of Directors' section in the directors' and corporate governance report confirm that, to the best of their knowledge: the Group financial statements, which have been prepared in accordance with IFRSs as adopted by the EU, give a true and fair view of the assets, liabilities, financial position and profit of the Group; and the Strategic report and the directors' and corporate governance report in this annual report include a fair review of the development and performance of the business and the position of the Group, together with a description of the principal risks and uncertainties that it faces.

Listing requirements

For the purposes of Listing Rule (LR) 9.8.4C R, the information required to be disclosed by LR 9.8.4 R can be found in the following locations:

Section in LR 9.8.4C R	Topic	Location in the Annual report and accounts
4	Details of long-term incentive schemes	DRR
12	Shareholder waivers of dividends	IFRS Financial Statements – note 32
13	Shareholder waivers of future dividends	IFRS Financial Statements – note 32

By order of the Board on 7 March 2018.

Tom Stoddard
Chief Financial Officer

Remuneration Committee report

On behalf of the Remuneration Committee (the Committee), I am pleased to present the Directors' Remuneration Report (DRR), for the year ended 31 December 2017. I also include the details of the proposed changes to the Directors' Remuneration Policy (the Policy) in line with the requirement to obtain our shareholders' approval of our Policy at least every three years.

Aviva has had another strong year of financial results due to our success in engaging customers, employees and the community with our purpose: Defy Uncertainty. The remuneration decisions detailed in the DRR reflect the contributions of our Executive Directors (ED) in delivering Group performance and in embedding for the long-term the culture and practices that will ensure we continue to fulfil our purpose.

Policy renewal

The current Policy was approved at the 2015 Annual General Meeting (AGM), and through our engagement with shareholders over the past three years, we have received clear indications of support for the current remuneration framework, and for the reward outcomes approved under it.

In the last year, the Committee has undertaken an extensive review of the Policy. This has focused on whether the Policy remains fit for purpose and whether changes could be made to improve the link between the progress being achieved on our strategy and reward outcomes. We have also consulted extensively with shareholders and shareholder representatives, and have used this Policy proposal to begin a process of ongoing engagement with our employees as well.

At the end of this review, we are not proposing major structural changes to our Policy as we see it as still being fit for purpose. This has been a strong theme of our shareholder interactions. We are however proposing some changes to elements of the Policy as follows:

- No change of approach on basic salary or annual bonus, although we propose to introduce phased vesting over three years for the deferred bonus while leaving deferral at 67%.
- The maximum quantum of the Long Term Incentive Plan (LTIP) opportunity, and the plan rules used for making LTIP grants will not change; however, it is proposed to make a change to the metrics.
- Pension contributions will be reduced for future ED appointments.
- Shareholding requirements are being increased for EDs other than the Group Chief Executive Officer (Group CEO), who is already required to hold 300% of salary.

Our decision around LTIP metrics has involved the most focus and detailed consultation with shareholders during our engagement on the Policy. We've listened carefully to shareholders' input and we believe the proposal, detailed below, balances some fairly divergent shareholder views while having strong alignment to our announced strategy and plans.

We've adapted our Policy in order to gain maximum alignment with these views and we are now confident this approach will be supported by our major shareholders.

At our Capital Markets Day in November 2017, we updated the market about our strategy and financial targets for the future, specifically:

- Earnings per share growth and improved quality of earnings
- Capital stewardship, strength and deployment
- Sustainable and consistent dividend growth
- Investing in our future operating model

As part of our new Directors' Remuneration Policy, we are proposing therefore to adopt the following metrics framework for the LTIP.

Financial metric – Earnings per share (EPS¹) growth with gateway hurdles (underpins) of Return on Equity (RoE²) and Solvency II (SII) Shareholder Cover Ratio– 50% weighting

It is clear from discussions with shareholders on our strategy that EPS is a key metric. For the 2018 LTIP, 50% of the award will be linked to Operating EPS¹ growth and quality of earnings ambition we shared with our shareholders at our Capital Markets Day.

Vesting of this portion of the LTIP can only commence after two hurdles are met:

- Return on equity – This measure of Operating RoE² is reported as part of the capital and assets summary in our annual results announcement. We will set and disclose a minimum hurdle for 3 years for each grant – in determining vesting, our Operating RoE² (which is calculated consistently with Operating EPS¹) must exceed this hurdle prior to any vesting; and,
- SII Shareholder Cover Ratio – we must maintain solvency above the minimum of our stated working range (currently 150% to 180%) prior to any vesting.

Quality of earnings was a stated ambition at our Capital Markets Day. The Committee has complete discretion to revise any payout on this metric for example in the event there are concerns with quality of earnings. The quality of earnings process that underlies each vesting tranche will be detailed in the DRR each year.

The Operating EPS¹ targets for each LTIP award will be disclosed in advance.

Total Shareholder Return (TSR) – 50% weighting

This will continue to be measured against relevant insurance and financial services peers. The application of this metric will continue to be based on achieving upper quintile TSR for maximum vesting, whilst upper quartile is the normal market benchmark.

¹ This measure is derived from the Group adjusted operating profit APM. Further details of this measure are included in the 'Other information' section.

² This is an Alternative Performance Measure (APM) which provides useful information to enhance the understanding of financial performance. Further information on APM's, including a reconciliation to the financial statements (where possible), can be found in the 'Other Information' section of the Annual report and accounts.

[Directors' remuneration report](#)

No strategic input measure for 2018

Shareholders will note we have decided not to proceed with the proposed inclusion of a strategic category metric for the 2018 LTIP. This was an area where shareholders were split, with some suggesting it is critical to long term value creation, whilst others were opposed and felt that the metrics should remain solely financial return focused. On balance, we did not feel the level of support was sufficient to proceed with this metric in 2018 but have included this as a potential category in our Policy for future LTIPs, subject to full consultation and shareholder support. Such an approach is consistent with the metrics adopted by a number of other insurance and financial services companies in the UK market. It aligns with some clear shareholder views that incentive metrics should include a focus on critical strategic inputs, with progress on digital transformation being a high priority at this stage for the Board in its stewardship role. We believe, therefore, that this warrants future discussion with shareholders given the strength and range of views.

Over the three years of the Policy, we will continue to consider how our metrics can best reflect sustainable achievement of results and long term outcomes for our shareholders.

Setting an appropriate Policy for the next three years is an important enabler for the Group. The Committee intends to continue to offer an appropriately competitive remuneration framework, while achieving the best alignment possible with shareholder outcomes. The Committee considers that the revised Policy achieves this and is seeking approval from shareholders for it to be effective for three years from the conclusion of the 2018 AGM.

Quality of earnings assessments and risk adjustments

As part of the previous Policy approved in 2015, we introduced a rigorous quality of earnings assessment process as the final step in decisions on LTIP vesting, and in determining annual bonus scorecard outcomes.

The Committee reviews the formulaic vesting outcomes against our reward metrics and our bonus scorecard to ensure the reward outcomes are appropriate, taking into account a range of factors including underlying financial performance, capital management and risk. Shareholder feedback on this has been positive, and it is clear that it is viewed as an integral and important part of our approach to reward, and to how we ensure outcomes against targets such as EPS are appropriate. We have provided more detail on how this process operates in setting out the Policy in the next section.

Appointment of new director

Maurice Tulloch was appointed to the Board on 20 June 2017. Maurice brings over 25 years' experience with Aviva and his appointment gives further focus at Board level to the Group's International businesses. Maurice's terms of appointment are consistent with other EDs and are detailed further in this report.

Remuneration decisions for 2017

Basic salary

Increase of 2.5% consistent with the budget applied for average increases in the annual pay review for other Aviva employees in the UK.

2017 Annual bonus

Performance at Group level against the financial targets in our bonus scorecard was again strong in 2017. We have further developed our Digital First approach across our businesses while developing market-leading digital propositions. The Committee has also made its annual assessment of the modifier factors, in determining the overall bonus scorecard outcome.

2015 Long Term Incentive Plan

Vesting of 36.9%, all based on the adjusted RoE performance component and with nothing for the TSR component.

The Committee's decisions on annual bonus and on the vesting of the 2015 LTIP were made after conducting the quality of earnings assessment and risk review for both plans. The risk review takes into account the conduct and control environment across the Group.

Judgement and discretion exercised by the Committee

The Committee has exercised judgement for the 2015 LTIP vesting in respect of performance period 2015 – 2017. The re-measurement loss on Friends Provident International Limited (FPI) and Taiwan has been excluded from the RoE performance outcome and will be recognised in 2018 upon completion of the sale. In addition, the positive impact of the £300m share buyback has been removed from the RoE performance outcome.

Ogden

Last year, we indicated our intention to address the impact of the Ogden rate change on incentive awards once the UK Government established a new methodology for setting the rate. The rate had been adjusted in March 2017 from 2.5% to minus 0.75%, and set with reference to a 'very low risk' investment approach by UK claimants receiving lump sum awards. The new methodology is still not yet in place, but the draft legislation released in September 2017 provided clear guidance as to the direction of travel, in particular that a 'low risk' rather than a 'very low risk' investment approach will be used for setting the rate. The indicative range remains wide at 0.0% to 1.0%; we therefore believe that the approach of deferring this item from the assessment of incentives until the new rate is set continues to be the right one.

Gender Pay Gap Report (GPGR)

Last year, we outlined our commitment to increasing the focus on our diversity agenda at Aviva and our ambition of inclusivity across the Group. This continues to be central to our values and critical to the success of our business. Further to the UK GPGR requirements introduced in the UK in April 2017, we released our initial report in January 2018 along with details of actions we are taking to drive change and bridge the gap. The report can be found at www.aviva.com/gpgr

Our gender pay gap data shows that we need to do more to create opportunities for women to progress. We understand the reasons why we have a gender pay gap and this gives us the best possible chance of doing more to fix it. We have a significant challenge ahead of us but, at Aviva, this is about progression and not equal pay.

We are not proud of the position as it stands and have identified areas of focus that we believe will have a significant positive impact, both in continuing to build an inclusive culture and reducing our gender pay gap.

Forward looking application of policy for 2018**Salary**

Increase of 3% consistent with other Aviva employees in the UK.

These increases are in line with expectations around market movements and inflation in the UK and are consistent with overall increases being applied across our UK-based employees.

Bonus

30% of the annual bonus scorecard will be linked to progress on our Digital First strategy. The measure will focus on growth in customers with multiple product holdings (MPH) and the number of MyAviva active customers.

2018 LTIP

In 2018, maximum awards under the LTIP will be in line with previous years.

300% of salary for the Group CEO and 225% for the Chief Financial Officer (CFO), the Chief Executive Officer UK Insurance (CEO UKI) and the Chief Executive Officer International (CEO International). The performance conditions are detailed in table 22.

Committee changes during the year

Bob Stein and Sir Malcolm Williamson stepped down from the Board and from the Committee during 2017 and I would like to thank them both for their hard work and commitment during their tenures. Glyn Barker joined the Committee in May 2017 and brings with him a deep understanding of accounting and regulatory issues together with in-depth transactional and financial services experience.

Priorities for 2018

Key priorities for 2018 include the publication of the new UK Corporate Governance Code (Code), expected to be in the summer 2018. The draft Code includes proposals to:

- widen the remit of remuneration committees; and
- require companies to report on what engagement has taken place with the workforce to explain how executive remuneration aligns with the wider company policy.

There will also be UK legislation requiring companies to publish pay ratios between the CEO and the average UK employee. We will report on pay ratios in the 2018 DRR, as, by then, the methodology to calculate the pay ratio should have been published. In the meantime, we are reporting the ratio of the Group CEO's pay relative to other members of the Group Executive (GE). Based on this year's pay decisions, the Group CEO earns approximately 2.1 times more than the GE average and 1.8 times more than the average for the other EDs. The percentage change in Group CEO pay for 2017 versus other UK based employees is reported in table 13.

We are committed to ensuring alignment between pay and performance and believe that the outcomes for 2017 and the changes we are proposing to make to the Policy in 2018 support this.

I look forward to seeing shareholders at the 2018 AGM.

Patricia Cross

Chair, Remuneration Committee

7 March 2018

Directors' Remuneration Policy

The Remuneration Policy for directors is set out in accordance with the requirements of the Companies Act 2006 (as amended) and the Large & Medium Sized Companies and Groups (Accounts and Reports) Regulations 2008 (as amended).

Alignment of Group strategy with executive remuneration

The Committee considers that alignment between Group strategy and the remuneration of its EDs is critical. Our Remuneration Policy provides market competitive remuneration, and incentivises EDs to achieve both the annual business plan and the longer-term strategic objectives of the Group. Significant levels of deferral and an aggregate shareholding requirement align EDs' interests with those of shareholders, aid retention of key personnel, and assist in focussing the EDs on long-term enterprise value creation. As well as rewarding the achievement of objectives, variable remuneration can be zero.

The proposed Policy is subject to shareholder approval at the 2018 AGM on 10 May 2018. If approved, it will apply immediately, for up to three years.

Table 1 below provides an overview of the proposed Policy for EDs and highlights the proposed changes from the existing Policy. For an overview of the proposed Policy for Non Executive Directors (NEDs) see table 3.

1 Key aspects of the Remuneration Policy for Executive Directors

Element

Element	Basic salary	Purpose	Maximum opportunity
No changes proposed	To provide core market related pay to attract and retain the required level of talent.	Operation	There is no maximum increase within the Policy. However, basic salary increases take account of the average basic salary increase awarded to the broader employee population. Different levels of increase may be agreed in certain circumstances at the Committee's discretion, such as: <ul style="list-style-type: none"> • An increase in job scope and responsibility • Development of the individual in the role • A significant increase in the size, value or complexity of the Group
Annual Bonus	To reward EDs for achievement against the Company's strategic objectives and for demonstrating the Aviva values and behaviours.	Assessment of performance	Any movement in basic salary takes account of the performance of the individual and the Group.
Changes proposed	Deferral provides alignment with shareholder interests and aids retention of key personnel.	Maximum opportunity	200% of basic salary for Group CEO 150% of basic salary for other EDs
	Operation	Outcome at threshold and on target	Performance is assessed against multiple metrics. Threshold performance against a single metric would result in a bonus payment of no more than 25% of basic salary. 100% of basic salary is payable for on target performance.
	Form & timing of payment	Assessment of performance	Performance is assessed against a range of relevant financial, employee, customer and risk targets designed to incentivise the achievement of our strategy, as well as individual strategic objectives as set by the Committee.
	<ul style="list-style-type: none"> • One-third of any bonus is payable in cash at the end of the year • Two-thirds of any bonus awarded is deferred into shares which vest in three equal annual tranches Additional shares are awarded at vesting in lieu of dividends paid on the deferred shares.		Although financial performance is the major factor in considering overall expenditure on bonuses, performance against non-financial measures including progress towards our strategic priorities and behaviours in line with our values will also be taken into consideration.

Element

	Malus and clawback Cash and deferred awards are subject to malus and clawback. Details of when these may be applied are set out in the notes below.	Discretion The Committee has discretion to amend vesting levels to prevent unreasonable outcomes, which it may use taking into account a range of factors, including the management of risk and good governance, the quality of earnings and, in all cases, the experience of shareholders.
Long-term incentive plan Changes proposed	Purpose To reward EDs for achievement against the Company's longer-term objectives, to align EDs' interests with those of shareholders, to aid the retention of key personnel, and to encourage focus on long-term growth in enterprise value. Operation Shares are awarded annually which vest dependent on the achievement of performance conditions. Vesting is subject to an assessment of quality of earnings, the stewardship of capital and risk review. Performance period Three years. Additional shares are awarded at vesting in lieu of dividends on any shares which vest.	Proposed changes to policy For awards in respect of 2018 onwards, vesting occurs in three equal tranches on the first, second and third anniversaries after grant (rather than at the end of three years as under the previous policy). Maximum opportunity 350% of basic salary. Performance measures Awards will vest based on a combination of financial, strategic and TSR performance metrics. For the 2018 awards the measures and weightings will be: <ul style="list-style-type: none">• 50% Operating EPS¹ growth subject to two gateway hurdles – Operating RoE² and SII Shareholder Cover Ratio• 50% TSR against a comparator group The financial metric combined with TSR will be a minimum of 80% of the total LTIP award. If, in subsequent years, shareholders indicate support for strategic measures, the Policy will allow for up to 20% LTIP to be awarded on the basis of strategic measures and this will be fully disclosed in the DRR. Vesting at threshold 20% of award for each performance measure. Discretion The Committee has discretion to amend vesting levels to prevent unreasonable outcomes, which it may use taking into account a range of factors, including the management of risk and good governance, the quality of earnings, and, in all cases, the experience of shareholders.
Pension Changes proposed	Purpose To give a market competitive level of provision for post-retirement income. Operation EDs are eligible to participate in a defined contribution plan up to the annual limit. Any amounts above annual or lifetime limits are paid in cash.	Proposed changes to policy The performance measures and weightings set out above will replace the previous measures being 50% adjusted performance RoE and 50% TSR against a comparator group. Maximum opportunity If suitable employee contributions are made, the Company contributes: <ul style="list-style-type: none">• 20% of basic salary for new ED appointments• 28% of basic salary for existing EDs (into pension or paid as cash as applicable). Proposed changes to policy Lower limit introduced on pension levels for new ED appointments.
Benefits No changes proposed	Purpose To provide EDs with a suitable but reasonable package of benefits as part of a competitive remuneration package. This involves both core executive benefits, and the	Maximum opportunity Set at a level which the Committee considers appropriate against comparable roles in companies of a similar size and complexity to provide a reasonable level of benefit.

Element

Relocation and mobility No changes proposed	Operation Benefits are provided on a market related basis. The Company reserves the right to deliver benefits to EDs depending on their individual circumstances, which may include a cash car allowance, life insurance, private medical insurance and access to a company car and driver for business use. In the case of non-UK executives, the Committee may consider additional allowances in line with standard relevant market practice. EDs are eligible to participate in the Company's broad based employee share plans on the same basis as other eligible employees.	Maximum opportunity Costs would normally be limited to providing a cash car allowance, private medical insurance, life insurance, and reasonable travel benefits (including the tax cost where applicable). In addition, there may be one-off or exceptional items on a case by case basis, which would be disclosed in the DRR.
Shareholding requirements Changes proposed	Purpose To align EDs' interests with those of shareholders.	Proposed changes to policy Shareholding requirements for other EDs has been increased from 150%.
	Operation A requirement to build a shareholding in the Company equivalent to 300% of basic salary for the Group CEO and 200% of basic salary for other EDs. This shareholding is normally to be built up over a period not exceeding 5 years (subject to the Committee's discretion where personal circumstances dictate).	

¹ This measure is derived from the Group adjusted operating profit APM. Further details of this measure are included in the 'Other information' section of the Annual report and accounts.

² This is an Alternative Performance Measure (APM) which provides useful information to enhance the understanding of financial performance. Further information on APM's, including a reconciliation to the financial statements (where possible), can be found in the 'Other Information' section of the Annual report and accounts.

Notes to the table:**Performance measures**

For the annual bonus, performance measures are chosen to align to some of the Group's key performance indicators and include financial, strategic, risk, employee and customer measures. Achievement against individual strategic objectives is also taken into account.

LTIP performance measures are chosen to provide an indication of both absolute and relative return generated for shareholders. In terms of target setting, a number of reference points are taken into account each year including, but not limited to, the Group's business plan and external market expectations of the Company. Maximum payouts require performance that significantly exceeds expected performance under both the annual bonus and LTIP.

Quality of earnings assessments

Throughout the year, the Committee engages in a regular quality of earnings assessment. A quality of earnings assessment sign-off is the final step in determining annual bonus scorecard outcomes, and in making decisions on LTIP vesting.

This sign-off is undertaken before decisions are made on the modifiers for risk, customer and employee engagement under the annual bonus, and before vesting is determined against financial metrics under the LTIP.

As a minimum, at any Committee meeting where LTIP vesting or annual bonus scorecard decisions are considered, the Chief Accounting Officer prepares a report to the Committee on the quality of earnings reflected in the results being assessed against performance targets. Extensive information from the audited accounts is used to explain the vesting and scorecard outcomes – ranging from movements in reserves, capital management decisions, consistency of accounting treatment and period to period comparability. The Chief Accounting Officer attends the Committee meeting to answer any questions that any member of the Committee may choose to ask. Any vesting decision or confirmation of awards is made after this process has been undertaken.

Malus and Clawback

The circumstances when malus (the forfeiture or reduction of unvested shares awarded under the Annual Bonus Plan (ABP) and LTIP) and clawback (the recovery of cash and share awards after release) may apply include (but are not limited to) where the Committee considers that the employee concerned has been involved in or partially / wholly responsible for:

- A materially adverse misstatement of the Company's financial statements, or a misleading representation of performance;
- A significant failure of risk management and/or controls;
- A scenario or event which causes material reputational damage to the Company;
- Misconduct which, in the opinion of the Committee, ought to result in the complete or partial lapse of an award;
- Conduct which resulted in significant loss(es);
- Failure to meet appropriate standards of fitness and propriety; or
- Any other circumstance required by local regulatory obligations.

The clawback period runs for two years from the date of payment in the case of the cash element of any annual bonus award.

For deferred bonus elements and LTIP awards, the overall malus and clawback period is five years from the date of grant.

Discretions

The discretions the Committee has in relation to the operation of the ABP and LTIP are set out in the plan rules. These include (but are not limited to) the ability to set additional conditions (and the discretion to change or waive those conditions). In relation to the LTIP and in accordance with its terms, the Committee has discretion in relation to vesting and to waive or change a performance condition if anything happens which causes the Committee reasonably to consider it appropriate to do so. Such discretions would only be applied in exceptional circumstances, to ensure that awards properly reflect underlying business performance. Any use of the discretions and how they were exercised will be disclosed, where relevant, in the DRR and, where appropriate, be subject to consultation with Aviva's shareholders.

Change in control

In the event of a change in control, unless a new award is granted in exchange for an existing award, or if there is a significant corporate event like a demerger, awards under the LTIP would normally vest to the extent that the performance conditions have been satisfied as at the date of the change in control, and unless the Committee decides otherwise, would be pro-rated to reflect the time between the start of the performance period and the change in control event. Awards under the ABP would normally vest on the date of the change in control and may vest if there is a significant corporate event.

Consistency of executive Policy across the Group

The Policy for our EDs is designed as part of the remuneration philosophy and principles that underpin remuneration for the wider Group. Remuneration arrangements for employees below the EDs take account of the seniority and nature of the role, individual performance and local market practice. The components and levels of remuneration for different employees may therefore differ from the Policy for EDs. Any such elements are reviewed against market practice and approved in line with internal guidelines and frameworks.

Differentiation in reward outcomes based on performance and behaviour that is consistent with the Aviva values is a feature of how Aviva operates its annual bonus plan for its senior leaders and managers globally. A disciplined approach is taken to moderation across the Company in order to recognise and reward the key contributors. The allocation of LTIP awards also involves strong differentiation, with expected contribution and ability to collaborate effectively in implementation of the strategy driving award levels.

Legacy payments

The Committee reserves the right to make any remuneration payments and payments for loss of office (including exercising any discretions available to it in connection with such payments) notwithstanding that they are not in line with the Policy set out above, where the terms of the payment were agreed (i) before May 2014 (the date the Company's first Policy came into effect), (ii) before the Policy set out above came into effect, provided that the terms of the payment were consistent with the Policy in force at the time they were agreed, or (iii) at a time when the relevant individual was not a director of the Company and, in the opinion of the Committee, the payment was not in consideration for the individual becoming a director of the Company. For these purposes, 'payments' includes the Committee satisfying awards of variable remuneration and, in relation to an award over shares, the terms of the payment are 'agreed' at the time the award is granted.

Approach to recruitment remuneration

On hiring a new ED, the Committee would align the proposed remuneration package with the Policy in place for EDs at the time of the appointment.

In determining the actual remuneration for a new ED, the Committee would consider the package in totality, taking into account elements such as the skills and experience of the individual, local market benchmarks, remuneration practice, and the existing remuneration of other senior executives. The Committee would ensure any arrangements agreed would be in the best interests of Aviva and its shareholders. It would seek not to pay more than necessary to secure the right candidate.

Where considered appropriate, the Committee may make awards on hiring an external candidate to 'buyout' remuneration arrangements forfeited on leaving a previous employer. In doing so, the Committee would take account of relevant factors including any performance conditions attached to these awards, the form in which it was paid (e.g. cash or shares) and the timeframe of awards. Buyout awards would be awarded on a 'like for like' basis compared to remuneration being forfeited, and would be capped to reflect the value being forfeited. The Committee considers that a buyout award is a significant investment in human capital by Aviva, and any buyout decision will involve careful consideration of the contribution that is expected from the individual.

The maximum level of variable pay which could be awarded to a new ED, excluding any buyouts, would be in line with the Policy set out above and would therefore be no more than 550% of basic salary for the Group CEO (200% of basic salary annual bonus opportunity and 350% of basic salary as the face value of a LTIP grant) and 500% of basic salary for other EDs (150% of basic salary annual bonus opportunity and 350% of basic salary as the face value of a LTIP grant).

All other elements of remuneration will also be in line with the Policy set out above.

Should the Company have any prior commitments outside of this Policy in respect of an employee promoted internally to an ED position, the Committee may continue to honour these for a period of time. Where an ED is appointed from within the organisation, the normal policy of the Company is that any legacy arrangements would be honoured in line with the original terms and conditions. Similarly, if an ED is appointed following Aviva's acquisition of, or merger with, another company, legacy terms and conditions may be honoured.

On appointing a new NED, the Committee would align the remuneration package with the Policy for NEDs, outlined in table 3, including fees and travel benefits.

Illustration of the policy

The charts below illustrate how much EDs could earn under different performance scenarios in one financial year:

- Minimum – basic salary, pension or cash in lieu of pension and benefits, no bonus and no vesting of the LTIP
- Target – basic salary, pension or cash in lieu of pension, benefits, and:
 - A bonus of 100% and an LTIP of 300% of basic salary (with notional LTIP vesting at 50% of maximum) for the Group CEO; and
 - A bonus of 100% and an LTIP of 225% of basic salary (with notional LTIP vesting at 50% of maximum) for the CFO, CEO UKI and CEO International.
- Maximum – basic salary, pension or cash in lieu of pension, benefits, and:
 - A bonus of 200% and an LTIP of 300% of basic salary (with notional LTIP vesting at maximum) for the Group CEO; and
 - A bonus of 150% and an LTIP of 225% of basic salary (with notional LTIP vesting at maximum) for the CFO, CEO UKI and CEO International.

Mark Wilson
Potential earnings
by pay element



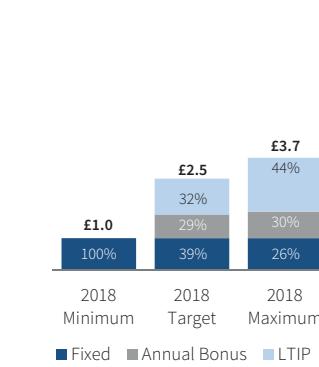
Tom Stoddard
Potential earnings
by pay element



Andy Briggs
Potential earnings
by pay element



Maurice Tulloch
Potential earnings
by pay element



Notes to the charts

Fixed pay consists of basic salary, pension as described in table 1, and estimated value of benefits provided under the Remuneration Policy, excluding any one offs. Actual figures may vary in future years. The value of the LTIP and deferred element of the annual bonus assumes a constant share price and does not include additional shares awarded in lieu of dividends that may have been accrued during the vesting period. LTIP as awarded in 2018.

Employment contracts and letters of appointment

ED employment contracts and NED letters of appointment are available for inspection at the Company's registered office during normal hours of business, and at the place of the Company's 2018 AGM from 10.45am on 10 May 2018 until the close of the meeting.

The key employment terms and conditions of the current EDs, and those who served during the year, as stipulated in their employment contracts, are set out in the table below.

2 Executive Directors' key conditions of employment

Provision	Policy
Notice period	
By the ED	6 months.
By the Company	12 months, rolling. No notice or payment in lieu of notice to be paid where the Company terminates for cause.
Termination Payment	<p>Pay in lieu of notice up to a maximum of 12 months' basic salary.</p> <p>Any payment is subject to phasing and mitigation requirements. An ED would be expected to mitigate the loss of office by seeking alternative employment. Any payments in lieu of notice would be reduced, potentially to zero, by any salary received from such employment.</p>
Remuneration and Benefits	The operation of the annual bonus and LTIP is at the Company's discretion.
Expenses	Reimbursement of expenses reasonably incurred in accordance with their duties.
Car Allowance	A cash car allowance is received, as varied from time to time.
Holiday entitlement	30 working days plus public holidays.
Private medical insurance	Private medical insurance is provided for the ED and their family. The ED can choose to opt out of this benefit or take a lower level of cover. However, no payments are made in lieu of reduced or no cover.
Other benefits	Other benefits include participation in the Company's staff pension scheme, life insurance and, where applicable, access to a Company car and driver for business related use.
Sickness	<p>In the case of Mark, Tom and Andy, 100% of basic salary for 52 weeks, and 75% thereafter for a further 52 weeks.</p> <p>In the case of Maurice, 100% of salary for the first 26 weeks, thereafter long term disability insurance may apply.</p>
Non-compete	During employment and for six months after leaving (less any period of garden leave) without the prior written consent of the Company.
Contract dates	<p>Director:</p> <p>Mark Wilson Tom Stoddard Andy Briggs Maurice Tulloch</p> <p>Date current contract commenced:</p> <p>1 January 2013 28 April 2014 13 April 2015 20 June 2017</p>

Policy on payment for loss of office

There are no pre-determined ED special provisions for compensation for loss of office. The Committee has the ability to exercise its discretion on the final amount actually paid. Any compensation would be based on basic salary, pension entitlement and other contractual benefits during the notice period, or a payment made in lieu of notice, depending on whether the notice is worked.

Where notice of termination of a contract is given, payments to the ED would continue for the period worked during the notice period. Alternatively, the contract may be terminated and phased monthly payments made in lieu of notice for, or for the balance of, the 12 months' notice period. During this period, EDs would be expected to mitigate their loss by seeking alternative employment. Payments in lieu of notice would be reduced by the salary received from any alternative employment, potentially to zero. The Company would typically make a reasonable contribution towards an ED's legal fees in connection with advice on the terms of their departure.

There is no automatic entitlement to an annual bonus for the year in which loss of office occurs. The Committee may determine that an ED may receive a pro-rata bonus in respect of the period of employment during the year loss of office occurs based on an assessment of performance. Where an ED leaves the Company by reason of death, disability or ill health, or any other reason determined by the Committee, there may be a payment of a pro rata bonus for the relevant year at the discretion of the Committee.

The treatment of leavers under the ABP and LTIP is determined by the rules of the relevant plans. Good leaver status under these plans would be granted in the event of, for example, the death of an ED. Good leaver status for other leaving reasons is at the discretion of the Committee, taking into account the circumstances of the individual's departure, but would typically include planned retirement, or their departure on ill health grounds. In circumstances where good leaver status has been granted, awards may still be subject to malus and clawback in the event that inappropriate conduct of the ED is subsequently discovered post departure. If good leaver status is not granted, all outstanding awards will lapse.

In the case of LTIPs, where the Committee determines EDs to be good leavers, vesting is normally based on the extent to which performance conditions have been met at the end of the relevant performance period, and the proportion of the award that vests is pro-rated for the time from the date of grant to final date of service (unless the Committee decides otherwise). Any decision not to apply this would only be made in exceptional circumstances, and would be fully disclosed. It is not the practice to allow such treatment.

Consideration of wider employee pay and shareholder views

When determining the Policy and arrangements for our EDs, the Committee considers:

- Pay and employment conditions elsewhere in the Group to ensure that pay structures are suitably aligned and that levels of remuneration remain appropriate. The Committee reviews levels of basic salary increases for other employees and executives based in their respective locations. It reviews changes in overall bonus pool funding and long-term incentive grants. The Committee considers feedback on pay matters from sources including the employee opinion survey and employee forums. The Committee also takes into account information provided by the people function and external advisers and from 2018, the Committee Chair has commenced a programme of consultation and meetings with employees to discuss remuneration.
- Its ongoing dialogue with shareholders, the Committee seeks shareholder views and takes them into account when any significant changes are being proposed to remuneration arrangements and when formulating and implementing the Policy. For example, there has been detailed engagement with our largest shareholders regarding the proposed Policy during 2017 continuing into 2018.

Non-Executive Directors

The table below sets out details of our Policy for NEDs.

3 Key aspects of the Policy for Non-Executive Directors

Element

Chairman and NEDs' fees

No changes proposed

Purpose

To attract individuals with the required range of skills and experience to serve as a Chairman or as a NED.

Maximum opportunity

The Company's Articles of Association provide that the total aggregate remuneration paid to the Chairman of the Company and NEDs will be determined by the Board within the limits set by shareholders and detailed in the Company's Articles of Association.

Operation

NEDs receive a basic annual fee in respect of their Board duties. Further fees are paid for membership and, where appropriate, chairing Board committees. The Chairman receives a fixed annual fee. Fees are reviewed annually taking into account market data and trends and the scope of specific Board duties. NEDs are able to use up to 100 percent of their post-tax base fees to acquire shares in Aviva plc. The Chairman and NEDs do not participate in any incentive or performance plans or pension arrangements and do not receive an expense allowance.

NEDs are reimbursed for reasonable expenses, and any tax arising on those expenses is settled directly by Aviva. To the extent that these are deemed taxable benefits, they will be included in the DRR, as required.

Chairman's Travel Benefits

No changes proposed

Purpose

To provide the Chairman with suitable travel arrangements for him to discharge his duties effectively.

The Chairman has access to a company car and driver for business use. Where these are deemed a taxable benefit, the tax is paid by the Company.

NED Travel and Accommodation

No changes proposed

Purpose

To reimburse NEDs for appropriate business travel and accommodation, including attending Board and committee meetings.

Operation

Reasonable costs of travel and accommodation for business purposes are reimbursed to NEDs. On the limited occasions when it is appropriate for a NEDs' spouse or partner to attend, such as to a business event, the Company will meet these costs. The Company will meet any tax liabilities that may arise on such expenses.

The NEDs, including the Chairman of the Company, have letters of appointment which set out their duties and responsibilities. The key terms of the appointments are set out in the table below.

4 Non-Executive Directors' key terms of appointment

Provision	Policy
Period	In line with the requirement of the Code, all NEDs, including the Chairman, are subject to annual re-election by shareholders at each AGM.
Termination	By the director or the Company at their discretion without compensation upon giving one months' written notice for NEDs and three months written notice for the Chairman of the Company.
Fees	As set out in table 21.
Expenses	Reimbursement of travel and other expenses reasonably incurred in the performance of their duties.
Time commitment	Each director must be able to devote sufficient time to the role in order to discharge his or her responsibilities effectively.

Director	Nomination	Audit	Governance	Remuneration	Risk	Committee appointments	
						Appointment date ¹	Appointment end date ²
Sir Adrian Montague	C					14 January 2013	AGM 2018
Claudia Arney	✓		C	✓	✓	8 February 2016	AGM 2018
Glyn Barker	✓	✓	✓	✓	✓	27 February 2012	AGM 2018
Patricia Cross	✓	✓		C		1 December 2013	AGM 2018
Belén Romana García	✓		✓		✓	26 June 2015	AGM 2018
Michael Hawker	✓	✓			C	1 January 2010	AGM 2018
Michael Mire	✓		✓	✓	✓	12 September 2013	AGM 2018
Keith Williams	✓	C	✓		✓	1 August 2016	AGM 2018

Key

C Chair of Committee
✓ Committee member

Notes

1 The dates shown above reflect the date the individual was appointed to the Aviva plc Board.

2 Appointment end dates are in accordance with the letter of appointment.

Annual report on remuneration

This section of the report sets out how Aviva has implemented its Policy for EDs during the course of 2017, and how the proposed Policy will be implemented for 2018. This is in accordance with the requirements of the Large & Medium Sized Companies and Groups (Accounts and Reports) Regulations 2008 (as amended).

The full terms of reference for the Committee can be found on the Company's website at www.aviva.com/remuneration-committee and are also available from the Group General Counsel and Company Secretary.

Committee membership

The members of the Committee are shown below.

Sir Malcolm Williamson and Bob Stein retired from the Committee after the conclusion of the AGM on 10 May 2017. Glyn Barker joined the Committee in May 2017.

	Member Since	Years on the Committee
Patricia Cross*	01/12/2013	4
Michael Mire	14/05/2015	3
Claudia Arney	01/06/2016	1
Glyn Barker	10/05/2017	<1
Bob Stein**	06/03/2013	4
Sir Malcolm Williamson**	14/05/2015	3

* Chair

** Retired from the conclusion of the 2017 Annual General Meeting (10 May 2017)

Consideration by the Committee of matters relating to directors' remuneration

The Committee met seven times during 2017, of which five were scheduled meetings and two were additional meetings outside of the normal timetable. Details of attendance at Committee meetings are shown on page 42.

The Group Chairman attended all meetings of the Committee. The Group General Counsel and Company Secretary acted as secretary to the Committee. The Chair of the Committee reported to subsequent meetings of the Board on the Committee's work and the Board received a copy of the agenda and the minutes of each meeting of the Committee.

The Committee received assistance in considering executive remuneration from members of senior management, including:

- the Group CEO;
- the CFO;
- the Chief People Officer;
- the Group Reward Director;
- the Chief Accounting Officer;
- the Chief Audit Officer;
- the Group Chief Risk Officer; and
- the Remuneration Committee Chair of Aviva Investors.

These people attended meetings by invitation during the year. No person was present during any discussion relating to their own remuneration.

During the year, the Committee received advice on executive remuneration matters from Deloitte LLP who were appointed by the

Committee. They are a member of the Remuneration Consultants' Group and adhere to its Code of Conduct. Deloitte LLP also provided advice to the Group on taxation, financial due diligence, crisis management and other consulting services (including advice in relation to corporate and cyber opportunities). Tapestry Compliance LLP, appointed by the Company, provided advice on share incentive plan related matters, including on senior executive remuneration matters and views on shareholder perspectives.

During the year, Deloitte LLP were paid fees totalling £149,800, and Tapestry Compliance LLP were paid fees totalling £51,655 for their advice to the Committee on these matters. Fees were charged on a time plus expenses basis.

The Committee reflects on the quality of the advice provided and whether it properly addresses the issues under consideration as part of its normal deliberations. The Committee is satisfied that the advice received during the year was objective and independent.

The Committee's decisions are taken in the context of the Reward Governance Framework, which sets out the key policies, guidelines and internal controls and is summarised on the next page.

Committee performance and effectiveness

In 2017, the Committee undertook an external evaluation of its effectiveness, alongside the exercise undertaken by the Board. Further details on how this has been carried out and the actions arising are contained in the Directors and Corporate Governance report.

Committee activities and agenda time during 2017

Governance, regulatory issues and reporting policy – 41%

- Engaged external advisors to advise on changes in the regulatory environment and developments in the UK corporate governance framework, and to benchmark the company's remuneration policies and practices against industry best practice.
- Discussed the mandatory GPGR due to come into force in 2018, and agreed the range of reportable metrics and a strategy to make progress against them.
- Formulated and developed a new proposed Policy to be put forward for shareholder approval at the 2018 AGM, taking into account the views of shareholders.
- Focussed on the alignment of the remuneration policy with an appropriate risk culture and to appropriate sustainability metrics including an approach on Ogden.
- Regularly reviewed the results of engagements with key investors, including discussions on the relationship between senior management remuneration policies and the company's strategic objectives.
- Reviewed the implementation of the Group's Remuneration Standard and Policy.
- Approved the 2016 DRR.

Senior management objectives, bonus target setting and pay decisions – 31%

- Using external advisors reviewed and benchmarked Group CEO remuneration in relation to his performance in 2016 and against both a FTSE 50 and a financial services peer group.
- Reviewed and approved the individual remuneration for each member of the GE for 2017 in relation to their performance against personal targets.
- Reviewed the fees payable to independent NEDs on subsidiary boards in relation to the strategic rationale and comparator benchmarks.

- Approved the Aviva Investors 2016 Bonus Deferral Plan and the identification of the Financial Conduct Authority (FCA) Remuneration Code staff/Material Risk Takers.
- Discussed and approved the overall maximum bonus pool available to senior managers for the 2017 performance year, taking into account metrics on culture and risk as well as on financial performance.
- Discussed and approved the ABP targets for 2017 in relation to the financial targets set in the 2017-2019 Group plan.
- Reviewed the strategic ambition targets set for 2017 in relation to the company's Digital First strategy including the number of active digital registrations and the volume of sales made.

Share plan operation and performance testing – 28%

- Reviewed performance testing of all existing LTIP awards, and approved targets for the 2017 LTIP awards.
- Discussed 2018 LTIP targets.
- Approved vesting of the 2014 LTIP and noted the interim testing for 2015 and 2016 awards.
- Reviewed the proposed changes to future LTIP grants.
- Approved the terms of the Aviva Savings Related Share Option Scheme 2017 (SAYE) and the Aviva Ireland Save as You Earn Scheme, the Ireland Profit Share Scheme and the invitation terms for eligible employees.
- Reviewed and approved the Aviva Investors' Carried Interest Plan, Deferred Plan rules and Code Staff list.
- Reviewed and approved any applications of malus/clawback provisions under incentive plans.

Reward governance framework

Terms of reference, policies and guidelines				Control and assurance	
Terms of reference	Remuneration Committee terms of reference			Remuneration business standard	Reward approvals matrix
	Subsidiary Board Remuneration Committee terms of reference				
Overarching policy	Global remuneration policy Approved by the Committee, applies to all employees at entities within Aviva Group		Directors' Remuneration Policy Proposed for approval by shareholders, applies to Directors of Aviva plc	Assurance framework to attest reward operations are conducted within the global remuneration policy, Directors' Remuneration Policy and supporting policies	Approval requirements to ensure reward operations are conducted within the global remuneration policy, Directors' Remuneration Policy and supporting policies
Other key functions and policies	Identification of remuneration regulated staff	Variable compensation and risk adjustment (includes bonus, LTIP, buy-out, retention, recognition awards and funding)	Malus and clawback		
Examples of internal guidelines and policies	New hires & buyouts Retention plans	Terminations Recognition awards	Risk adjustment Global mobility		

Key



Element of the reward governance framework managed as part of the business of the Committee



Element of the reward governance framework managed mainly under delegated authority from the Committee

Single total figures of remuneration for 2017

The table below sets out the total remuneration for 2017 and 2016 for each of our EDs.

5 Total 2017 remuneration – executive directors (audited information)

	Mark Wilson		Tom Stoddard		Andy Briggs		Maurice Tulloch ⁶		Total emoluments of Executive Directors ¹	
	2017 £'000	2016 £'000	2017 £'000	2016 £'000	2017 £'000	2016 £'000	2017 £'000	2016 £'000	2017 £'000	2016 £'000
Basic Salary ¹	1,028	1,002	708	690	726	707	373	—	2,835	2,399
Benefits ²	107	99	86	73	53	51	39	—	285	223
Annual Bonus ³	1,945	1,837	997	939	1,022	926	456	—	4,420	3,702
LTIP ⁴	966	1,304	499	673	511	—	70	—	2,046	1,977
Pension ⁵	288	281	198	193	203	198	104	—	793	672
Total	4,334	4,523	2,488	2,568	2,515	1,882	1,042	—	10,379	8,973

Notes

- 1 Basic salary received during 2017.
- 2 The benefits disclosure includes the cost, where relevant, of private medical insurance, life insurance, accommodation, travel and car benefits. In the case of Mark and Andy this also includes benefits resulting from the UK HMRC tax-advantaged SAYE plan, and for Andy the UK HMRC tax-advantaged (share incentive plan) All Employee Share Ownership Plan (AESOP), in which they participate on the same basis as all eligible employees. All numbers disclosed include the tax charged on the benefits, where applicable.
- 3 Bonus payable in respect of the financial year including any deferred element at the face value at the date of award. The deferred element is made under the ABP.
- 4 The value of the LTIP for 2017 relates to the 2015 award, which had a three-year performance period ending 31 December 2017. 36.9% of the award will vest in March 2018. An assumed share price of 502.19 pence has been used to determine the value of the award based on the average share price over the final quarter of the 2017 financial year. The LTIP amounts shown in last year's report in respect of the LTIPs awarded in 2014 were also calculated with an assumed share price of 456.27 pence. The actual share price at vesting was 525.07 pence, leading to an increase in value. The estimated value of the awards for the EDs was £1,718,000; the actual value was £1,977,000 (increase of £259,000).
- 5 Pension contributions consist of employer defined contribution benefits, excluding salary exchange contributions made by the employees, plus cash payments in lieu of pension. EDs are eligible to participate in a defined contribution plan and receive pension contributions and/or a cash pension allowance from the Company in aggregate totaling 28% of basic salary.
- 6 For Maurice, his 2017 values only relate to his qualifying services as a Director of Aviva from 20 June 2017, when he was appointed as an ED. His basic salary, bonus and benefits are set in Canadian dollars and have been converted to sterling using an average exchange rate for 2017.
- 7 Year on year increase is due to an additional ED and the first payout under the LTIP for Andy.

Additional disclosures in respect of the single total figure of remuneration table**2017 annual bonus outcome**

The Group's financial performance, together with non-financial modifiers and personal performance have been used to determine ED bonuses paid in respect of 2017. We have set out details of performance against the financial and non-financial metrics for 2017 in tables 6 and 7 below. As set out in the tables, the bonuses reflect the fact that the fundamentals around our cash position, strategy and culture are in good shape. The results come amidst unprecedented political, economic and technological changes. We have grown Operating EPS², cash remittances² and further strengthened our estimated SII shareholder position.

In determining the bonus awards, the Committee took into account the wider performance of Aviva and the experience of shareholders during the year, and is satisfied that the bonus awards above are fair in light of those considerations. One-third of the bonus award for all EDs will be delivered in cash, with two-thirds being deferred into shares for three years.

Other items of remuneration

The EDs have not received any items in the nature of remuneration other than those disclosed in table 1.

Malus and Clawback

As part of the annual pay review process, the Committee has considered whether any recovery or withholding under the malus and clawback provisions of Aviva's incentive plans is required by any current circumstances. No incidents concerning the EDs are currently subject to action under Aviva's malus and clawback policy.

2017 Annual bonus – disclosure of performance against targets

The table below sets out performance against targets. The overall scorecard outcome percentage applies to all of the EDs. The individual bonus decisions for the EDs, explained in the notes below table 7, are determined after taking into account this scorecard assessment and their respective personal performance.

6 2017 performance against bonus scorecard for ED bonuses

Financial Metrics	Weighting	Minimum	Target	Maximum	Outcome
Adjusted IFRS EPS ¹	30.0%	40.1p	43.3p	46.5p	48.3p
Net Cash Remittances ²	15.0%	£1,758m	£1,900m	£2,043m	£2,171m
Operating Capital Generation ²	30.0%	£1,472m	£1,672m	£1,872m	£2,576m
Total Financial Metrics	75.0%				150%
Strategic Progress					
UK digital revenues (m)	12.5%	1.3m	1.5m	1.7m	1.5m
MyAviva active registrations (m)	12.5%	5.6m	7.0m	8.4m	7.5m
Score before modifier decision³					178%
Modifier decision					0%
Overall scorecard assessment⁴					178%

Notes

- 1 Adjusted IFRS EPS is calculated based on IFRS profit after tax and non controlling interest but excluding investment variances, economic adjustment changes, AVIF amortisation, profit/loss on disposal of subsidiaries and pension scheme income/charge divided by weighted average number of shares.
- 2 This is an Alternative Performance Measure (APM) which provides useful information to enhance the understanding of financial performance. Further information on APM's, including a reconciliation to the financial statements (where possible), can be found in the 'Other Information' section of the Annual report and accounts.
- 3 Modifier decisions include employee, customer and risk and control.
- 4 This is a key factor in determining individual bonuses for EDs along with personal performance.

Under the ABP, the bonus scorecard outcome can be modified by the performance of the employee, customer and risk and controls modifiers. Typically, adjustments (if made) would be in the range of +/- 15% but for major risk or controls or customer issues (e.g. concerning conduct) a considerably greater adjustment could be made.

For 2017, no adjustment has been made in relation to the modifier factors.

7 2017 non-financial modifiers relating to bonus scorecard

Modifier	Assessment
Employee Employee engagement.	Employee engagement is up one percentage point to 75% after significant improvements for France and Singapore and a four percentage point increase for UK Customer teams. 85% of colleagues see how their team's work aligns with the Group's strategy.
Customer Performance against our Net Promoter Score (NPS®) targets and our overall focus on customer outcomes.	Our relationship NPS® survey shows three years of sustained high levels of customer advocacy, but this year's scores have marked a decline. We are working hard to boost customers' loyalty by making things simple for customers and putting them in control, for example with the launch of our simplified home insurance proposition.
Risk & Controls Aviva's reward strategy includes specific risk and control objectives for senior management and EDs. The aim is to help drive and reward effective risk management and a robust control environment across the Group.	All our businesses/functions were rated as acceptable or above, against their overall goal in relation to risk, conduct and control outcomes. The assessments performed by our Risk and Internal Audit functions looked at the effectiveness and robustness of the risk framework and control environment. The outputs of the assessments were shared with the Risk and Audit Committees ahead of decisions being made on impacts to bonus. It was concluded that no areas had been identified that would warrant bonus pool adjustments as part of determining incentive awards for 2017.

Individual bonus outcomes for EDs

While the modified outcome against the bonus scorecard provides a pool of funding for bonuses, actual bonus decisions are made based on individual contribution and achievements, how the person has assisted the Group achieve progress against its strategic objectives, the leadership they have exhibited and how the individual has demonstrated the Aviva values. Each ED has a target and a maximum opportunity against which this is assessed.

Mark Wilson

The Aviva Group had a strong year under Mark Wilson's leadership:

- Strong financial results in 2017 with Group adjusted operating profit¹ growth up 2%, Operating EPS¹ up 7% and fourth consecutive year of double digit growth in the total dividend. All other key metrics met or exceeded market commitments. Aviva's guidance to the market has been upgraded; higher than mid-single digit Operating EPS¹ growth, increased pay-out target of 55-60% of Operating EPS¹ by 2020; and a cash remittance² target up to £8bn.
- Amid significant uncertainty Aviva have further strengthened the balance sheet and now have £3bn of excess capital to be deployed in 2018-19.
- Completion of our strategy to dispose of FPI, Spain, Taiwan and Banco Popolare (Italy partnership). This signals the business moving from 'fix' in to a 'growth' phase.
- Solid progress made in Digital as Aviva increased active registrations by 44% and launched Ask it Never – providing quotes to UK home insurance customers with no questions asked. Digital intellectual property has contributed to long term, significant partnership announcements with Tencent, Royal Bank of Canada and HSBC.
- Launched a solution to the unsustainable UK market practice of pricing new business below that of renewing business. Once the test pilot is complete, it will reward loyal customers and increase trust in the brand.
- Our UK Life, Health and General Insurance businesses have been brought together under a common leadership. Execution of this change has been effective as the UK business has grown adjusted operating profits² well above its target range as well as growing sales in every major product line.
- Employee engagement remains strong up 1% at 75%. In 2017

Tom Stoddard

Tom Stoddard continued to provide outstanding leadership to the finance function and was instrumental in many initiatives that supported the Group's strategy, including:

- In 2017 we delivered on, or exceeded, market expectations at a Group level. This strong financial performance lead to upgrading external targets on Operating EPS¹ growth, cash remittances² and dividend pay-out ratio, at our Capital Markets Day and in our 2017 Results.
- Strong stewardship of capital - continued to strengthen our balance sheet position, acknowledged by achieving a credit ratings upgrade to double A status.
- As we concluded the fix phase, our balance sheet is well positioned, with a £300 million share repurchase programme and repayment of £500 million of hybrid debt without refinancing completed in 2017.
- We completed announcements on our programme of business exits, allowing stronger focus on major growth markets from 2018 onwards. This included exits of Spain, Taiwan, Antarius, FPI and Banco Popolare.
- We began our bolt-on merger and acquisitions activity with the accretive acquisition of Friends First in Ireland.
- Accelerating change activity to improve the finance function, reduce costs and apply zero based budgeting principles across Aviva.

Mark Wilson

Aviva announced a ground breaking equal parental leave policy, promoting equal opportunities for all.

Bonus award: £1,945,114

Bonus as a % of basic salary: 188%
Bonus as a % of max opportunity: 94%

Andy Briggs

In 2017 Andy Briggs became CEO of Aviva UK Insurance combining our UK based Life, GI and Health businesses. Key results include:

- Strong financial performance in UKI with double digit adjusted operating profit² growth, new business trading growth across all product segments and net cash remittances².
- Above target underlying performance and improved employee engagement delivered despite the integration of our UK franchises in to a single UK Insurance business.
- Progress made via True Customer Composite (TCC) among large corporate customers. Over 70% profit and 75% of new business in the corporate segment is now coming from companies with more than one line of business with Aviva.
- Broad based growth across our major product lines, for example 2 times growth in long term savings net fund flows and greater than 3 times increase in bulk purchase annuities sales.
- Long term distribution agreement with HSBC put in place.
- Strong balance sheet management and progress in improving the control environment.

Tom Stoddard**Bonus award: £996,800**

Bonus as a % of basic salary: 140%
Bonus as a % of max opportunity: 93%

Maurice Tulloch

Maurice Tulloch commenced his new role as CEO International Insurance in 2017, and his key deliveries included:

- Achieving double digit operating profit² growth across France, Poland, Ireland and Turkey.
- Strengthened market leadership in Italy and Canada, demonstrating the strength of talent in our businesses by making new internal appointments to the roles of CEO in Canada and in Italy.
- Growth continued in Ireland and our acquisition of Friends First will improve our life insurance position.
- Energised our Global Corporate & Specialty business, delivering a new strategy, significant top and bottom line growth, and a business rebrand.
- Finalised our disposals in Europe, delivering a total value of €1.3 billion, through selective exits in Spain, France and Italy.
- Maintained robust risk and controls environment across markets, rolling out the Group operational risk control and management framework.

Bonus award: £1,022,000

Bonus as a % of basic salary: 140%
Bonus as a % of max opportunity: 93%

Bonus award: £456,399³

Bonus as a % of basic salary: 120%
Bonus as a % of max opportunity: 80%

1 This measure is derived from the Group adjusted operating profit APM. Further details of this measure are included in the 'Other information' section.

2 This is an Alternative Performance Measure (APM) which provides useful information to enhance the understanding of financial performance. Further information on APM's, including a reconciliation to the financial statements (where possible), can be found in the 'Other Information' section of the Annual report and accounts.

3 The bonus award shown here relates to Maurice's qualifying services as a director of Aviva from 20 June 2017 when he was appointed as an ED.

2015 LTIP vesting in respect of performance period 2015-2017

All references to RoE represent RoE calculated as IFRS profit after tax and non-controlling interest but excluding investment variances, economic assumption changes, pension scheme income/ charge over average IFRS equity (excluding pension scheme net surplus/ deficit). The RoE¹ and TSR outcome for the 2015 LTIP are detailed in the table below. 36.9% of the award will vest in March 2018.

8 2015 LTIP award – performance conditions

	Weighting	Threshold (20% vests)	Maximum (100% Vests)	Outcome	Vesting (% of Maximum)
RoE Performance ¹	50%	24.5%	30%	28.2%	36.9%
Relative TSR Performance	50%	Median	Upper quintile and above	Between rank 13 and 14	0%

¹ 2015 RoE performance outcome has been adjusted to exclude the positive impact of the £300m share buyback which then increases shareholders' equity and further excludes the re-measurement loss on FPI and Taiwan which will be recognised in 2018 upon completion of the sale.

Quality of Earnings Assessment – 2017 Remuneration Decisions

The Committee discussed those items that impacted the overall results in 2017 including foreign exchange, acquisitions and dispositions, life assumption and modelling changes, prior year reserve development, and other items that are one-off in nature. This provides the Committee with an understanding of the core profitability of the business taking these factors into account.

9 Awards granted during the year (audited information)

Share and option awards granted to EDs during the year are set out below.

	Date of Award	Award Type ¹	Face Value (% of basic salary)	Face Value (£) ²	Threshold Performance (% of face value)	Maximum Performance (% of face value)	End of Performance period	End of vesting/ holding period
Mark Wilson	27 Mar 2017	LTIP	300%	£3,028,197	20%	100%	31 Dec 2019	27 Mar 2022
	27 Mar 2017	ABP	121%	£1,224,735	N/A			27 Mar 2020
Tom Stoddard	27 Mar 2017	LTIP	225%	£1,564,311	20%	100%	31 Dec 2019	27 Mar 2022
	27 Mar 2017	ABP	90%	£625,723	N/A			27 Mar 2020
Andy Briggs	27 Mar 2017	LTIP	225%	£1,603,420	20%	100%	31 Dec 2019	27 Mar 2022
	27 Mar 2017	ABP	87%	£617,609	N/A			27 Mar 2020
	14 Oct 2016	AESOP	0.39%	£2,762	N/A			12 Dec 2020
Maurice Tulloch	27 Mar 2017	LTIP	225%	£1,516,282	20%	100%	31 Dec 2019	27 Mar 2022
	27 Mar 2017	ABP	67%	£453,489	N/A			27 Mar 2020

¹ The ABP and LTIP awards have been granted as share awards. LTIP is a conditional right to receive shares based on a three-year performance period, with an additional two-year holding period. ABP represents the portion of the 2016 bonus deferred into shares for three years. AESOP includes partnership, matching and dividend share awards which vest after three years. Further details are provided at tables 17 and 19.

² Face value for the awards granted on 27 March 2017 has been calculated using the average of the middle-market closing price of an Aviva ordinary share on the three consecutive business days immediately preceding the date of grant, on 27 March 2017 (530.00 pence). The AESOP has been calculated using the average price achieved at purchase of the partnership shares throughout 2017 (515.29 pence).

RoE targets for awards made in 2017

RoE targets determine the vesting of 50% of the LTIP award and are set annually within the context of the Company's three-year business plan. Vesting depends upon performance over the three-year period against a target return. The 2017 targets are provided below.

RoE is calculated as the IFRS profit after tax and non-controlling interest, but excluding the impact of amortisation of acquired value of in force business, investment variances, pension scheme income/charge and economic assumption changes, over average IFRS equity (excluding pension scheme net surplus/deficit) attributable to the ordinary shareholders of the Company.

10 2017 LTIP RoE targets

Achievement of RoE ¹ targets over the three-year performance period	Percentage of shares in award that vests based on achievement of RoE ¹ targets
Less than 28.8%	0%
28.8%	10%
Between 28.8% and 35.2%	Pro-rata between 10% and 50% on a straight line basis
35.2% and above	50%

TSR targets for awards made in 2017

Relative TSR determines the vesting of the other 50% of the LTIP award. Performance for the 2017 grant will be assessed against the following companies: Aegon, Allianz, Assicurazioni Generali, AXA, CNP Assurances, Direct Line Group, Legal & General, MetLife, NN Group, Old Mutual, Prudential, RSA Insurance Group, Standard Life Aberdeen and Zurich Financial.

The performance period for the TSR performance condition will be the three years beginning 1 January 2017. For the purposes of measuring the TSR performance condition, the Company's TSR and that of the comparator group will be based on the 90-day average TSR for the period immediately preceding the start and end of the performance period. The vesting schedule is set out in the table below.

11 TSR vesting schedule for the 2017 LTIP award

TSR position over the three-year performance period	Percentage of shares in award that vests based on achievement of TSR targets
Below Median	0%
Median	10%
Between median and upper quintile	Pro-rata between 10% and 50% on a straight line basis
Upper quintile and above	50%

Payments to past directors (audited information)

Russell Walls retired from the Board with effect from 8 May 2013.

- Russell was appointed as a NED of Aviva Italia Holdings S.p.A on 4 December 2014 and on 30 April 2015 was appointed as Chair.
- On 13 April 2015 Russell was appointed as a NED of Aviva Annuity UK Limited, Aviva Life Holdings UK Limited, Aviva Life & Pensions UK Limited, Aviva Life Services UK Limited, Aviva Administration Limited, Friends Life and Pensions Limited and Friends Life Limited each of which are subsidiary companies of Aviva plc. Russell subsequently stepped down from Aviva Life Services UK Limited and Aviva Administration Limited on 29 December 2017.
- On 31 October 2017 Russell was also appointed as a NED of Aviva Insurance Limited, also a subsidiary companies of Aviva plc.
- The emoluments he received in respect of these directorships for the 2017 financial year were £131,837 and €90,000.

Scott Wheway retired from the Board with effect from 31 December 2016.

- Scott was appointed as a NED of Aviva Insurance Limited on 13 April 2015 and stepped down on 30 September 2017.
- The emoluments he received in respect of this directorship for the 2017 financial year were £78,750.

Payments for loss of office (audited information)

There were no payments for loss of office made during the year.

12 Total 2017 remuneration for non-executive directors (audited information)

Table below sets out the total remuneration earned by each NED who served during 2017, for Group-related activities.

	Fees		Benefits ¹		Aviva plc total		Subsidiaries fees		Group total	
	2017 £000	2016 £000	2017 £000	2016 £000	2017 £000	2016 ² £000	2017 £000	2016 £000	2017 £000	2016 £000
Chairman										
Sir Adrian Montague	550	550	67	77	617	627	—	—	617	627
Non-executive directors										
Claudia Arney ⁴	140	84	1	2	141	86	40	—	181	86
Glyn Barker	164	137	3	3	167	140	—	—	167	140
Patricia Cross	128	127	—	2	128	129	53	—	181	129
Belén Romana García	105	105	8	11	113	116	1	—	114	116
Michael Hawker	138	138	—	—	138	138	15	—	153	138
Michael Mire	117	117	1	2	118	119	—	—	118	119
Keith Williams ⁴	124	44	3	1	127	45	—	—	127	45
Former non-executive directors³										
Bob Stein	44	120	5	16	49	136	—	—	49	136
Sir Malcolm Williamson	56	152	2	7	58	159	—	—	58	159
Total emoluments of NEDs	1,566	1,574	90	121	1,656	1,695	109	—	1,765	1,695

1 Benefits include the gross taxable value of expenses relating to accommodation, travel and other expenses incurred on Company business in accordance with our expense policy and may vary year-on-year dependent on the time required to be spent in the UK.

2 The prior year total has been recalculated to show the directors that continued in office during all or part of the current year and excludes remuneration of directors that left in the prior year.

3 Bob Stein and Sir Malcolm Williamson stepped down from the Board at the 2017 AGM.

4 2017 reflects Claudia and Keith's first full year on the Board.

The total amount paid in fees to NEDs in 2017 was £1,656,000, which is within the limits set in the Company's Articles of Association, as previously approved by shareholders.

Subsidiary company board memberships

During the year, the following NEDs were appointed as Directors of subsidiary companies to support and further enhance the flow of information between material subsidiaries and the Group. The additional emoluments received in respect of these roles are detailed below:

- Claudia Arney received an additional fee of £40,000 (2016: nil) in respect of her duties as a Board member of Aviva UK Digital Limited (UKD). Claudia first joined the Board of UKD as a NED on 1 January 2017 and on 14 September 2017 was appointed as Chair.
- Patricia Cross received an additional fee of £52,808 (2016: nil) in respect of her duties as a Board member of Aviva Investors Holdings Limited (AIH). Patricia first joined the Board of AIH as a NED on 1 January 2017 and on 20 September 2017 was appointed as Senior Independent Director.
- Belén Romana García received an additional fee of €1,068 (2016: nil) in respect of her duties as a Board member of Aviva Italia Holding S.p.A. Belén joined the Board on 19 December 2017.
- During 2017, Michael Hawker received an additional fee of £15,000 (2016: nil) in respect of his duties as a Board member of Aviva Life Holdings UK Limited. Michael stepped down from his role on 31 March 2017.

Percentage change in remuneration of Group CEO

The table below sets out the increase in the basic salary, bonus and benefits of the Group CEO and that of the wider workforce. The UK employee workforce was chosen as a suitable comparator group, as the Group CEO and the majority of EDs are based in the UK (albeit with global responsibilities), and pay changes across the Group vary widely depending on local market conditions.

13 Percentage change in remuneration of Group CEO

	% change in basic salary 2016-2017	% change in bonus 2016-2017	% change in benefits 2016-2017
Group CEO	2.5%	5.9%	7.3%
All UK-based employees	3.6%	8.6%	-0.7%

Note: The higher bonus outcomes seen for UK-based employees reflects the stronger performance of the major UK businesses compared to that seen in 2016. The change in the CEO's benefits from £99,000 in 2016 to £107,000 in 2017 includes travel, overnight accommodation and meals which HMRC treats as taxable benefits and not business expenses in the ordinary course of his role.

Historical TSR performance and Group CEO remuneration outcomes

Table 14 compares the TSR performance of the Company over the past nine years against the TSR of the FTSE 100 Return Index. This index has been chosen because it is a recognised equity market index of which Aviva is a member. In addition, median TSR performance for the LTIP comparator group has been shown. The companies which comprise the current LTIP comparator group for TSR purposes are listed in the 'TSR Targets' section on page 77.

14 Aviva plc nine-year TSR performance against the FTSE 100 index and the median of the comparator group

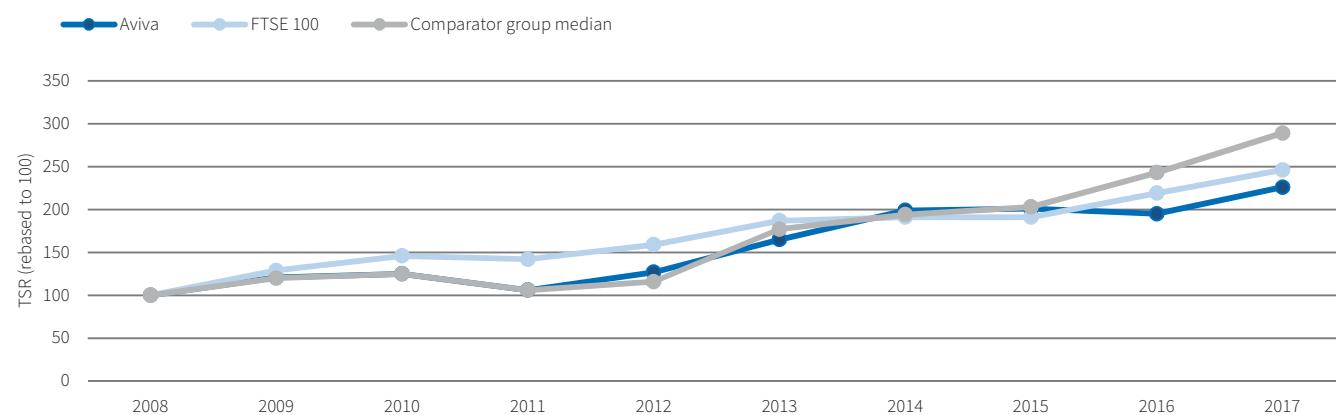


Table 15 summarises the Group CEO single figure for total remuneration, annual bonus pay-out and LTIP vesting as a percentage of maximum opportunity over this period.

15 Historical Group CEO remuneration outcomes

	Group CEO	2009	2010	2011	2012	2013	2014	2015	2016	2017
Annual bonus payout (as a % of maximum opportunity)	Mark Wilson ¹	—	—	—	—	75%	86.7%	91%	91%	94%
	Andrew Moss ²	74.2%	72.3%	81.7%	—	—	—	—	—	—
LTIP vesting (as a % of maximum opportunity)	Mark Wilson	—	—	—	—	—	—	53%	41.3%	36.9%
	Andrew Moss	50.0%	72.3%	81.7%	—	—	—	—	—	—
Group CEO single figure of remuneration (£'000)	Mark Wilson	—	—	—	—	2,615	2,600	5,438	4,523	4,334
	Andrew Moss	2,591	2,748	3,477	554	—	—	—	—	—

1 Mark joined the Board as an ED with effect from 1 December 2012, and became Group CEO on 1 January 2013. He received no emoluments in respect of 2012.

2 Andrew resigned from the Board with effect from 8 May 2012 and left the Company on 31 May 2012.

Relative importance of spend on pay

Table 16 outlines Group adjusted operating profit after integration and restructuring costs, dividends paid to shareholders and buybacks compared to overall spend on pay (in total and per capita). This measure of profit has been chosen as it is used for decision making and the internal performance management of the Group's operating segments.

16 Relative importance of spend on pay

	Year end 31 December 2015 £m	Year end 31 December 2016 £m	Year end 31 December 2017 £m	% change between 2016 & 2017
Group adjusted operating profit ¹	2,309	2,798	2,927	5%
Dividends paid ³	635	871	983	13%
Share buybacks ⁴	—	—	300	—
Total staff costs ⁵	1,628	1,764	1,942	10%

1 Group adjusted operating profit is an Alternative Performance Measure (APM) which is used by the Group to supplement the required disclosures under IFRS. Please refer to note B in the 'Accounting Policies' section and to the 'Other Information' section within the Annual report and accounts for further information

2 After integration and restructuring costs.

3 The total cost of ordinary dividends paid to shareholders.

4 A share buy-back of ordinary shares for an aggregate purchase price of £300 million was undertaken during the year, as described in more detail in note 14. There were no share buy-backs in 2015 or 2016.

5 Total staff costs from continuing operations includes wages and salaries, social security costs, post-retirement obligations, profit sharing and incentive plans, equity compensation plans and termination benefits. The average number of employees in continuing operations was 30,090 (2017) and 29,653 (2016).

External board appointments

- Tom Stoddard was a Trustee of Trout Unlimited (a non-profit conservation organisation) but resigned from this position 30 June 2017.
- Andy Briggs is the Chair of the Association of British Insurers, on the Board of Trustees of the NSPCC and the Government's Business Champion for Older Workers.
- Maurice Tulloch is a Director of Pool Reinsurance Company Limited.

Neither Tom nor Andy received any fees or other compensation for these appointments. Maurice received £41,500 in respect of his directorship during the year.

Statement of directors' shareholdings and share interests**EDs shareholding requirements**

The Company requires the Group CEO to build a shareholding in the Company equivalent to 300% of basic salary and each ED to build a shareholding in the Company equivalent to 150% of basic salary.

- The EDs are required to retain 50% of the net shares released from ABP and LTIP awards until the shareholding requirement is met.
- The shareholding requirement needs to be built up over a five-year period.
- Unvested share awards, including shares held in connection with bonus deferrals, are not taken into account in applying this test.

17 Executive directors – shareholding requirement (audited information)

Executive Directors	Shares held		Options held ⁴			Shareholding requirement (% of salary)	Current Shareholding ⁵ (% of salary)	Requirement met
	Owned Outright ¹	Unvested and subject to performance conditions ²	Unvested and subject to continued employment ³	Unvested and subject to continued employment	Vested but not exercised			
Mark Wilson ⁶	607,429	1,698,819	626,841	6,179	—	300	297	No
Tom Stoddard	199,964	877,578	300,907	—	—	150	142	No
Andy Briggs	241,498	899,518	209,040	5,128	—	150	168	Yes
Maurice Tulloch ⁷	306,710	808,134	192,147	—	—	150	220	Yes

1 Directors' beneficial holdings in the ordinary shares of the Company. This information includes holdings of any connected persons. For Andy Briggs it also includes partnership shares purchased under the AESOP, under which participants can currently contribute up to £150 every month. Shares are purchased on a monthly basis, and have to be held in the AESOP trust for three years. These vest after three years providing the ED does not leave and the related partnership shares are not withdrawn from the AESOP trust.

2 Awards granted under the Aviva LTIP which vest only if the performance conditions are achieved.

3 Awards arising through the ABP. Under this plan, some of the earned bonuses are paid in the form of conditional shares and deferred for three years. The transfer of the shares to the director at the end of the period is not subject to the attainment of performance conditions but the shares can be forfeited if the ED leaves service before the end of the period.

4 Savings-related options (without performance conditions) over shares granted under the SAYE plan.

5 Based on the closing middle-market price of an ordinary share of the Company on 29 December 2017 of 506.5 pence. The closing middle-market price of an ordinary share of the Company during the year ranged from 470.6 pence to 544 pence.

6 Mark will meet his shareholding requirement after the vesting of the 2015 ABP and LTIP awards.

7 Maurice's basic salary and benefits are set in Canadian dollars and have been converted to sterling using an average exchange rate for 2017.

There were no changes to the EDs interests in Aviva shares during the period 1 January 2018 to 6 March 2018, with the exception of Andy Briggs' continued participation in the AESOP.

Directors' remuneration report ➤ [Continued](#)**18 Non-executive directors' shareholdings¹ (audited information)**

	1 January 2017	31 December 2017 ¹
Sir Adrian Montague	33,082	42,385
Claudia Arney	14,000	14,000
Glyn Barker	11,700	22,700
Patricia Cross	7,000	12,383
Belén Romana García	—	790
Michael Hawker	20,000	20,000
Michael Mire	50,000	50,000
Keith Williams	—	10,000
Former non-executive directors²		
Bob Stein	21,000	21,000
Sir Malcolm Williamson	41,421	41,421

¹ This information includes holdings of any connected persons.² Bob Stein and Sir Malcolm Williamson stepped down from the Board at the 2017 AGM.

There were no changes to the NEDs interests in Aviva shares during the period 1 January 2018 to 6 March 2018.

Share awards and share options

Details of the EDs who were in office for any part of the 2017 financial year and hold or held outstanding share awards or options over ordinary shares of the Company pursuant to the Company's share based incentive plans are set out in table 19. EDs are eligible to participate in the Company's broad based employee share plans on the same basis as other eligible employees. Details of awards and options granted to EDs under these plans are also included in tables 5, 9 and 17 (and SAYE options are included in table 19). More information around HMRC tax-advantaged plans can also be found in note 31.

19 LTIP, ABP, CFO award and options over Aviva shares (audited information)

	At 1 January 2017 number	Options/ awards granted during year ¹ number	Options/awards exercised/vesting during year number	Options/awards lapsing during year number	At 31 December 2017 number	Market price at date awards granted ² number	Exercise price (options) pence	Market price at date awards vested/option exercised pence	Normal vesting date/ exercise period ³
Mark Wilson									
LTIP^{3,4}									
2014	601,226	—	282,129 ⁷	352,919	—	476.40	525.50	—	Mar-17
2015	521,276	—	—	—	521,276	535.00	—	—	Mar-18
2016	606,185	—	—	—	606,185	475.20	—	—	Mar-19
2017	—	571,358	—	—	571,358	523.00	—	—	Mar-20
ABP									
2014	150,306	—	170,780 ⁷	—	—	476.40	525.50	—	Mar-17
2015	150,591	—	—	—	150,591	535.00	—	—	Mar-18
2016	245,168	—	—	—	245,168	475.20	—	—	Mar-19
2017	—	231,082	—	—	231,082	523.00	—	—	Mar-20
SAYE⁶									
2014	3,615	—	—	—	3,615	—	419.00	—	Dec 19 – May 20
2016	2,564	—	—	—	2,564	—	351.00	—	Dec 19 – May 20
Tom Stoddard									
LTIP^{3,4}									
2014	310,582	—	142,747 ⁷	182,312	—	564.50	525.50	—	Mar-17
2015	269,281	—	—	—	269,281	535.00	—	—	Mar-18
2016	313,144	—	—	—	313,144	475.20	—	—	Mar-19
2017	—	295,153	—	—	295,153	523.00	—	—	Mar-20
ABP									
2015	62,228	—	—	—	62,228	535.00	—	—	Mar-18
2016	120,618	—	—	—	120,618	475.20	—	—	Mar-19
2017	—	118,061	—	—	118,061	523.00	—	—	Mar-20
Aviva CFO Award									
2014	98,232	—	113,059 ⁷	—	—	564.50	538.50	—	Jul 15 – Jul 17
Andy Briggs									
LTIP^{3,4}									
2015	276,014	—	—	—	276,014	535.00	—	—	Mar-18
2016	320,972	—	—	—	320,972	475.20	—	—	Mar-19
2017	—	302,532	—	—	302,532	523.00	—	—	Mar-20
ABP									
2016	92,510	—	—	—	92,510	475.20	—	—	Mar-19
2017	—	116,530	—	—	116,530	523.00	—	—	Mar-20
SAYE									
2016 ⁵	5,128	—	—	—	5,128	—	351.00	—	Dec-19 – May-20
Maurice Tulloch									
LTIP^{3,4}									
2014	212,167	—	99,560 ⁷	124,542	—	476.40	525.50	—	Mar-17
2015	212,765	—	—	—	212,765	535.00	—	—	Mar-18
2016	309,278	—	—	—	309,278	475.20	—	—	Mar-19
2017	—	286,091	—	—	286,091	523.00	—	—	Mar-20
ABP									
2014	42,433	—	48,213 ⁷	—	—	476.40	525.50	—	Mar-17
2015	43,439	—	—	—	43,439	535.00	—	—	Mar-18
2016	63,144	—	—	—	63,144	475.20	—	—	Mar-19
2017	—	85,564	—	—	85,564	523.00	—	—	Mar-20

¹ The aggregate net value of share awards granted to the EDs in the period was £10.6 million (2016: £8.1 million). The net value has been calculated by reference to the closing middle-market price of an ordinary share of the Company at the date of grant.

² The actual price used to calculate the ABP and LTIP awards is based on a three-day average closing middle-market price of an ordinary share of the Company, prior to grant date. These were in 2014: 489 pence, 2015: 564 pence, 2016: 485 pence and 2017: 530 pence. The actual price used to calculate the CFO Award is based on a three-day average closing middle-market price of an ordinary share of the Company, prior to employment start date, which was 509 pence.

³ For the 2014 LTIP grant, the TSR comparator group consisted of the following companies: Aegon, Allianz, Assicurazioni Generali, Axa, CNP Assurances, Direct Line Group, FLG, Legal & General, Met Life, Old Mutual, Prudential, RSA Insurance Group, Standard Life and Zurich Financial. For the 2015, 2016 and 2017 LTIP grant, the TSR comparator group consisted of the following companies: Aegon, Allianz, Assicurazioni Generali, Axa, CNP Assurances, Direct Line Group, Legal & General, MetLife, NN Group, Old Mutual, Prudential, RSA Insurance Group, Standard Life and Zurich Financial.

⁴ The performance periods for these awards begin at the commencement of the financial year in which the award is granted and run for a three-year period.

⁵ Any unexercised options will lapse at the end of the exercise period.

⁶ Options are not subject to performance conditions. The option price was fixed by reference to a three day average closing middle-market price of an ordinary share of the Company, prior to invitation date, with a discount of 20% as permitted under the SAYE plan. Options granted under the SAYE are normally exercisable during the six-month period following the end of the relevant (3 or 5 year) savings contract.

⁷ The shares comprised in these vested awards include shares issued in lieu of dividends accrued during the deferral period.

Directors' remuneration report

[Continued](#)**Dilution**

Awards granted under Aviva employee share plans are generally met by issuing new shares as agreed by the Board. Shares are still held in employee trusts, details of which are set out in note 32.

The Company monitors the number of shares issued under the Aviva employee share plans and their impact on dilution limits. The Company's usage of shares compared to the relevant dilution limits set by the Investment Association in respect of all share plans (10% in any rolling ten-year period) and executive share plans (5% in any rolling ten-year period) was 1.65% and 2.73% respectively on 31 December 2017.

Governance Regulatory Remuneration Code

Aviva Investors and two small 'firms' (as defined by the Financial Conduct Authority (FCA)) within the UK Insurance business are subject to the Capital Requirements Directive IV (CRD IV) and the FCA Remuneration Code (SYSC 19A). Additionally, there are two Aviva Investors 'firms' in the UK, Friends Life Funds Limited and Aviva Investors UK Funds Limited, subject to the Alternative Investment Fund Management Directive (AIFMD) and the Undertakings for Collective Investments in transferrable securities (UCITS) directive. Remuneration Code requirements include an annual disclosure. For AIFMD and UCITS the disclosure is part of the Financial Statements and/or Annual accounts of the Alternative Investment Funds or UCITS. For CRD IV requirements the Aviva Investors disclosure can be found in Section 5 of the Pillar 3 Disclosure which can be found at www.aviva.com/pillar3 and a link to the disclosure for the UK Insurance firms can be found at www.aviva.com/remuneration-committee.

Solvency II remuneration

Remuneration Requirements (PRA PS22/16 & SS10/16) apply to the Aviva Group. Our remuneration structures have been designed in a way so that they are compliant with these requirements for all senior managers across the Group, not just those identified as being specifically covered by the requirements of the regulation. Such employees at Aviva are termed 'Covered Employees'. We are required to complete a Remuneration Policy Statement, which outlines how we have complied with each of the requirements. This document was approved by the Group Remuneration Committee and submitted to the Prudential Regulatory Authority (PRA).

The Solvency II reporting requirements for the year ended 31 December 2017 necessitate firms to produce the Solvency and Financial Condition Report (SFCR) which contains remuneration information and is publicly available.

Aviva's reward principles and arrangements are designed to incentivise and reward employees for achieving stated business goals in a manner that is consistent with the Company's approach to sound and effective risk management.

Statement of voting at AGM

The result of the shareholder vote at the Company's 2017 AGM in respect of the 2016 Directors' Remuneration Report (DRR) is set out in table 20.

20 Result of the vote at the 2017 AGM

	Percentage of votes cast		Number of votes cast		
	For	Against	For	Against	Votes withheld
Directors' Remuneration Policy ¹	97.46%	2.54%	2,379,508,415	61,947,024	82,821,178
Directors' Remuneration Report	97.70%	2.30%	2,783,050,269	65,392,949	2,480,449

¹ Voting on Remuneration Policy at 2015 AGM.

Following the 2017 AGM, the Committee Chair continued dialogue with major institutional shareholders.

Approach to NED fees for 2018

NED fees are reviewed annually. No changes were made to the current fee levels, as set out in the table below:

21 Non-executive directors' fees

Role	Fee from 1 April 2018	Fee from 1 April 2017
Chairman of the Company ¹	£550,000	£550,000
Board membership fee	£70,000	£70,000
Additional fees are paid as follows:		
Senior Independent Director	£35,000	£35,000
Committee Chair (inclusive of committee membership fee):		
• Audit	£45,000	£45,000
• Governance	£35,000	£35,000
• Remuneration	£35,000	£35,000
• Risk	£45,000	£45,000
Committee membership:		
• Audit	£15,000	£15,000
• Governance	£12,500	£12,500
• Nomination	£7,500	£7,500
• Remuneration	£12,500	£12,500
• Risk	£15,000	£15,000

¹ Inclusive of Board membership fee and any committee membership fees.

22 Implementation of Policy in 2018

The implementation of the Policy will be consistent with that outlined in table 1.

Key Element	Phasing	2018	2019	2020	2021	2022	Implementation in 2018																								
Salary							<ul style="list-style-type: none"> Group CEO – £1,065,674 per annum. CFO – £733,360 per annum. CEO UKI – £751,900 per annum. CEO International – CAD1,231,880 per annum. 																								
Bonus							<ul style="list-style-type: none"> Three financial metrics. One strategic Digital First metric, focusing on two elements: growth in customers with Multiple Product Holding (MPH) and in the number of MyAviva active customers. For the financial element, a quality of earnings assessment will be undertaken by the Committee to provide assurance that bonus payouts appropriately reflect the shareholder experience. Performance against a number of other non-financial measures will be considered when determining bonus payouts (employee engagement, customer and risk). Personal performance during the year will be taken into account. 																								
Performance measures and weightings							<ul style="list-style-type: none"> 15% Cash Remittance 30% progress on strategy – Digital First 																								
LTIP							<ul style="list-style-type: none"> Group CEO – 300% of salary. CFO, CEO UKI and CEO International – 225% of salary. LTIP awards will only be granted subject to shareholder approval of the Policy at the 2018 AGM. Subject to performance against two performance measures, which have been chosen to reflect shareholders' long-term interests, as detailed below. Shares are typically subject to a two-year holding period after vesting. Operating EPS¹ is defined in the other information section and is subject to two gateway hurdles – Operating RoE² and SII Shareholder Cover Ratio. TSR – Measured against a comparator group³. 																								
							<table border="1"> <thead> <tr> <th colspan="2">50% Operating EPS¹ target</th> <th colspan="2">50% TSR target</th> </tr> <tr> <th>Three-year Operating EPS¹ growth</th> <th>Vesting level</th> <th>TSR Ranking</th> <th>Vesting level</th> </tr> </thead> <tbody> <tr> <td>Less than 4.0% p.a.</td> <td>0%</td> <td>Below median</td> <td>0%</td> </tr> <tr> <td>4.0% p.a</td> <td>10%</td> <td>Median</td> <td>10%</td> </tr> <tr> <td>Between 4.0% p.a. and 10.0% p.a.</td> <td>10-50% (straight line)</td> <td>Between median and upper quintile</td> <td>Pro rata between 10% and 50% on a straight line basis</td> </tr> <tr> <td>10.0% p.a and above</td> <td>50%</td> <td>Upper quintile and above</td> <td>50%</td> </tr> </tbody> </table>	50% Operating EPS ¹ target		50% TSR target		Three-year Operating EPS ¹ growth	Vesting level	TSR Ranking	Vesting level	Less than 4.0% p.a.	0%	Below median	0%	4.0% p.a	10%	Median	10%	Between 4.0% p.a. and 10.0% p.a.	10-50% (straight line)	Between median and upper quintile	Pro rata between 10% and 50% on a straight line basis	10.0% p.a and above	50%	Upper quintile and above	50%
50% Operating EPS ¹ target		50% TSR target																													
Three-year Operating EPS ¹ growth	Vesting level	TSR Ranking	Vesting level																												
Less than 4.0% p.a.	0%	Below median	0%																												
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10.0% p.a and above	50%	Upper quintile and above	50%																												

1 This measure is derived from the Group adjusted operating profit APM. Further details of this measure are included in the 'Other information' section.

2 This is an APM which provides useful information to enhance the understanding of financial performance. Further information on APM's, including a reconciliation to the financial statements (where possible), can be found in the 'Other Information' section of the Annual report and accounts.

3 2018 LTIP Comparator Group: Aegon, Allianz, Assicurazioni Generali, Axa, CNP Assurances, Direct Line Group, Legal & General, Lloyds Banking Group, Old Mutual, Phoenix, Prudential, RSA, Standard Life Aberdeen, Zurich Insurance.

LTIP vesting – gateway hurdle conditions for the element linked to Operating EPS¹

Any vesting of the Operating EPS¹ element of the LTIP is subject to two gateway hurdles – Operating RoE² and SII Shareholder Cover Ratio. For 2018, the Operating RoE² hurdle is 12% p.a. and the SII Shareholder Cover Ratio is to meet or exceed the minimum of the stated working range (currently 150% to 180%).

Approval by the Board

This Directors' Remuneration Report was reviewed and approved by the Board on 7 March 2018.

Patricia Cross

Chair, Remuneration Committee

IFRS financial statements

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[Independent auditors' report](#)

Report on the audit of the financial statements

Opinion

In our opinion, Aviva plc's Group financial statements and Company financial statements (the 'financial statements'):

- give a true and fair view of the state of the Group's and of the Company's affairs as at 31 December 2017 and of the Group's and the Company's profit and cash flows for the year then ended;
- have been properly prepared in accordance with International Financial Reporting Standards ('IFRSs') as adopted by the European Union; and
- have been prepared in accordance with the requirements of the Companies Act 2006 and, as regards the Group financial statements, Article 4 of the IAS Regulation.

We have audited the financial statements, included within the Annual report and accounts (the 'Annual report') which comprise:

- the Consolidated and Company statements of financial position as at 31 December 2017;
- the Consolidated and Company income statements and statements of comprehensive income for the year then ended;
- the Reconciliation of Group adjusted operating profit to profit for the year then ended;
- the Consolidated and Company statements of changes in equity and statements of cash flows for the year then ended;
- the principal accounting policies adopted in the preparation of the financial statements; and
- the notes to the financial statements which include other explanatory information.

Our opinion is consistent with our reporting to the Audit Committee.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ('ISAs (UK)') and applicable law. Our responsibilities under ISAs (UK) are further described in the Auditors' responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We remained independent of the Group in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, which includes the FRC's Ethical Standard, as applicable to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

To the best of our knowledge and belief, we declare that non-audit services prohibited by the FRC's Ethical Standard were not provided to the Group or the Company.

Other than those disclosed in Note 12 to the consolidated financial statements, we have provided no non-audit services to the Group or the Company in the period from 1 January 2017 to 31 December 2017.

Our audit approach

Overview

- Overall Group materiality: £147 million (2016: £140 million), based on 5% of Group adjusted operating profit before tax attributable to shareholders' profits after the deduction of integration and restructuring costs.
- Overall Company materiality: £56 million (2016: £69 million), based on 5% of profit before tax from continuing operations.
- Based on the output of our risk assessment, along with our understanding of the Aviva Group structure, we performed full scope audits over the following components; UK Life, UK General Insurance, Canada, Italy Life and France Life.
- We identified a further two components, Aviva Investors and Poland Life, where specific account balances were considered to be significant in size in relation to the Group, and scoped our audit to include detailed testing of those account balances.
- We also performed audit procedures over the head office operations and the consolidation process, as well as over certain UK service companies, including Aviva Employment Services and Aviva Group Holdings.
- Our risk assessment analysis identified the following as areas of focus :
 - Valuation of life insurance contract liabilities (Group).
 - Valuation of non-life insurance contract liabilities (Group).
 - Valuation of hard to value investments (Group).
 - Valuation of investments in subsidiaries and joint ventures (Company).

The scope of our audit

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements. In particular, we looked at where the directors made subjective judgements, for example in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. We gained an understanding of the legal and regulatory framework applicable to the Group and the industry in which it operates, and considered the risk of acts by the Group which were contrary to applicable laws and regulations, including fraud.

We designed audit procedures at Group and significant component level to respond to this risk, recognising that the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations, or through collusion.

We focussed on laws and regulations that could give rise to a material misstatement in the Group financial statements, including but not limited to, the Companies Act 2006, the Listing Rules, the Prudential Regulation Authority's regulations, UK tax legislation and equivalent local laws and regulations applicable to significant components. Our tests included, but were not limited to, review of the financial statement disclosures to underlying supporting documentation, review of correspondence with the regulators, review of correspondence with legal advisors, enquiries of management, review of significant component auditors' work and review of internal audit reports in so far as they related to the financial statements.

There are inherent limitations in the audit procedures described above and the further removed non-compliance with laws and regulations is from the events and transactions reflected in the financial statements, the less likely we would become aware of it.

We did not identify any key audit matters relating to irregularities, including fraud. As in all of our audits, we also addressed the risk of management override of internal controls, including testing journals and evaluating whether there was evidence of bias by the directors that represented a risk of material misstatement due to fraud.

Key audit matters

Key audit matters are those matters that, in the auditors' professional judgement, were of most significance in the audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by the auditors, including those which had the greatest effect on: the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team. These matters, and any comments we make on the results of our procedures thereon, were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. This is not a complete list of all risks identified by our audit.

Key audit matter

How our audit addressed the key audit matter

Valuation of life insurance contract liabilities (Group)

Refer to the Audit Committees' Report, Accounting policy (L) Insurance and participating investment contract liabilities – Long-term business provisions and Note (40) Insurance liabilities (b) Long-term business liabilities.

For UK Life insurance contract liabilities, the Directors' valuation of the provisions for the settlement of future claims, involves complex and subjective judgements about future events, both internal and external to the business, for which small changes in assumptions can result in material impacts to the valuation of these liabilities.

The work to address the valuation of the UK Life insurance contract liabilities included the following procedures:

- We understood the governance process in place to determine the insurance contract liabilities, including testing the associated financial reporting control framework.
- We tested the design and operating effectiveness of controls over the accuracy and completeness of data used.
- Using our actuarial specialist team members, we applied our industry knowledge and experience and we compared the methodology, models and assumptions used against recognised actuarial practices.
- We tested the key judgements and controls over the liability, including the preparation of the manually calculated components. We focussed on the consistency in treatment and methodology period-on-period and with reference to recognised actuarial practice.
- We used the results of an independent PwC annual benchmarking survey of assumptions to further challenge the assumption setting process by comparing certain assumptions used relative to the Group's industry peers.
- We assessed the disclosures in the financial statements.

As part of our consideration of the entire set of assumptions, we focussed particularly on the Annuitant Mortality, Credit Default and Expense assumptions for the UK Life component given their significance to the Group's result and the level of judgement involved. These have been considered in greater detail below.

Based on the work performed and the evidence obtained, we consider the assumptions used to be appropriate.

Refer to the Audit Committees' Report, Accounting policy (L) Insurance and participating investment contract liabilities – Long-term business provisions and Note (40) Insurance liabilities (b) Long-term business liabilities.

Annuitant Mortality Assumptions (Group)

Annuitant mortality assumptions require a high degree of judgement due to the number of factors which may influence mortality experience. The differing factors which affect the assumptions are underlying mortality experience (in the portfolio), industry and management views on the future rate of mortality improvements and external factors arising from developments in the annuity market.

There are two main components to the annuitant mortality assumptions:

- Mortality base assumption: this component is typically less subjective as it is derived using the external Continuous Mortality Investigation (CMI) tables, adjusted for internal experience. However, judgement is required in choosing the appropriate table and fitting internal experience to this table.
- Rate of mortality improvements: this component is more subjective given the lack of data and the uncertainty over how life expectancy will change in the future. Management has adopted the most recent CMI 2016 model and dataset in setting this assumption with specific adjustments to reflect the profile of their portfolio and their views on the rate of mortality improvements.

In addition, a margin for prudence is applied to the annuitant mortality assumptions.

In addition to the procedures above, in respect of the annuitant mortality assumptions:

- We tested the methodology used by management to derive the assumptions with reference to relevant rules and actuarial guidance and by applying our industry knowledge and experience. This included evaluating management's choice of, and fitting to, the CMI base tables and the adoption of the CMI 2016 model and dataset for improvements and the margin for prudence.
- We assessed the results of the experience investigations carried out by UK Life management for the annuity business to determine whether they provided support for the assumptions used by management.
- We compared the mortality assumptions selected by UK Life against those used by their peers.

Based on the work performed and the evidence obtained, we consider the assumptions used for annuitant mortality to be appropriate.

Refer to the Audit Committees' Report, Accounting policy (L) Insurance and participating investment contract liabilities – Long-term business provisions and Note (40) Insurance liabilities (b) Long-term business liabilities.

Key audit matter**Credit default assumptions for illiquid assets, specifically: Commercial mortgages and equity release mortgages (Group)**

UK Life has substantial holdings in asset classes with significant credit risk, notably commercial mortgages and equity release mortgages.

Management use an active approach to setting the assumptions. A long term deduction for credit default is made from the current market yields and a supplementary allowance is also held to cover the risk of higher short term default rates along with a margin for prudence.

How our audit addressed the key audit matter

In addition to the procedures above, in respect of the credit default assumptions:

- We tested the methodology and credit risk pricing models used by management for commercial and equity release mortgages to derive the assumptions with reference to relevant rules and actuarial guidance, including the adoption of an appropriate prudence margin and by applying our industry knowledge and experience.
- We validated significant assumptions used by management by ensuring consistency with the assumptions used for the valuation of the assets, and against market observable data (to the extent available and relevant) and our experience of market practices.

Based on the work performed and the evidence obtained, we consider the assumptions for credit default risk to be appropriate.

Refer to the Audit Committees' Report, Accounting policy (L) Insurance and participating investment contract liabilities – Long-term business provisions and Note (40) Insurance liabilities (b) Long-term business liabilities.

Expense Assumptions (Group)

Future maintenance expenses and expense inflation assumptions are used in the measurement of insurance contract liabilities. The assumptions reflect the expected future expenses that will be required to maintain the in-force policies at the balance sheet date, including an allowance for project costs and a margin for prudence. The assumptions used require significant judgement.

In addition to the procedures above, in respect of the expense assumptions:

- We tested the methodology used by management to derive the assumptions with reference to relevant rules and actuarial guidance and by applying our industry knowledge and experience. This included testing the split of expenses between acquisition and maintenance by agreeing a sample to supporting evidence.
- We validated significant assumptions used by management, including the margin for prudence and the rate of inflation against past experience, market observable data (to the extent available and relevant) and our experience of market practices.
- We have tested that the assumptions appropriately reflect the expected future expenses for maintaining policies in force at the balance sheet date, which includes consideration of the allowance for project costs.

Based on the work performed and the evidence obtained, we consider the assumptions for expense risk to be appropriate.

Valuation of non-life insurance contract liabilities (Group)

Refer to the Audit Committees' Report, Accounting policy (L) Insurance and participating investment contract liabilities-General insurance and health provisions and Note (40) Insurance liabilities (c) General insurance and health liabilities.

The estimation of non-life insurance contract liabilities involves a significant degree of judgement. The liabilities are based on the estimated ultimate cost of all claims incurred but not settled at 31 December 2017, whether reported or not, together with the related claims handling costs.

A range of methods, including stochastic projections, may be used to determine these provisions. Underlying these methods are a number of explicit or implicit assumptions relating to the expected settlement amount and settlement patterns of claims. This includes assumptions relating to the settlement of personal injury lump sum compensation amounts.

Given their size in relation to the consolidated Group and the complexity of the judgements involved, our work focussed on the liabilities in the UK General Insurance and Canada General Insurance components.

In the UK General Insurance and Canada markets, we assessed the Directors' calculation of the non-life insurance liabilities by performing the following procedures:

- We tested the underlying data to source documentation on a sample basis.
- Using our actuarial specialist team members, we applied our industry knowledge and experience and we compared the methodology, models and assumptions used against recognised actuarial practices.
- We understood and tested the governance process in place to determine the insurance contract liabilities, including testing the associated financial reporting control framework.
- Using our actuarial specialist team members, we independently estimated the reserves on selected classes of business, particularly focusing on the largest and most uncertain reserves. For these classes we compared our estimated reserves to those booked by management, and sought to understand any significant differences.
- For the remaining classes we evaluated the methodology and assumptions, or performed a diagnostic check to identify and investigate any anomalies.
- We assessed the disclosures in the financial statements.

Based on the work performed and evidence obtained, we consider the methodology and assumptions used to value the non-life insurance contract liabilities to be appropriate.

Key audit matter**How our audit addressed the key audit matter****Valuation of hard to value investments (Group)**

Refer to Audit Committees' Report, Accounting policies (F), (T) and (U) and Note 22 Fair Value methodology, Note 24 Securitised mortgages and related assets and Note 26 Financial Investments.

The valuation of the investment portfolio involves judgement and continues to be an area of inherent risk. The risk is not uniform for all investment types and is greatest for the following, where the investments are hard to value because quoted prices are not readily available:

- Commercial mortgage loans (UK Life).
- Equity release and UK securitised mortgage loans (UK Life).
- Structured bond-type investments (France Life).
- Collateralised loan obligations and non-recourse loans (UK Life).

We assessed the Directors' approach to valuation for these hard to value investments by performing the following procedures:

- We agreed data inputs to underlying documentation on a sample basis.
- We evaluated the methodology and assumptions used by management, including yield curves, discounted cash flows, property growth rates, longevity and liquidity premiums as relevant to each asset class.
- We tested the operation of data integrity and change management controls for the models, which we baseline every three years.
- Using our valuation experts, we performed independent valuations for a sample of collateralised loans, non-recourse loans and structured bonds.
- We assessed the disclosures in the financial statements.

Based on the work performed and the evidence obtained, we consider the assumptions used by management to be appropriate.

Valuation of investments in subsidiaries and joint venture (Company)

Refer to Financial statements of the Company and Note A-Investment in subsidiaries and joint venture.

In the Company's statement of financial position, subsidiaries and joint venture are reported at fair value estimated using applicable valuation models underpinned by the company's market capitalisation.

The determination of the fair value is a judgemental area and the investments in subsidiaries and joint venture together comprise the largest assets in the parent company's statement of financial position.

In respect to the fair value of investments in subsidiaries and joint venture:

- We understood and tested the methodology in place to determine the fair value of investments in subsidiaries and joint venture.
- We tested adjustments made to the market capitalisation and underlying data inputs on a sample basis.
- Used our valuation experts, to assess and test the appropriateness for inclusion of selected comparable companies used in the multiples based valuation model, on a sample basis.
- We assessed the disclosures in the financial statements.

Based on the work performed and the evidence obtained, we consider the assumptions used by management to value investments in subsidiaries and joint venture to be appropriate.

How we tailored the audit scope

We tailored the scope of our audit to ensure that we performed sufficient work to be able to give an opinion on the financial statements as a whole, taking into account the structure of the Group and the Company, the financial reporting process and controls, and the industry in which they operate.

Using the outputs of our risk assessment, along with our understanding of Aviva, we scoped our audit based on the significance of the results and financial position of individual components relative to the Group result and financial position. In doing so, we also considered qualitative factors and ensured we had obtained sufficient coverage across all financial statement line items in the consolidated financial statements. Our scoping provided us with audit coverage of over 80% for both IFRS profit before tax and Group adjusted operating profit before tax and after the deduction of integration and restructuring costs (2016: 78%). We also obtained audit coverage of 80% for Gross Written Premiums (2016: 80%) and 84% for Total Assets (2016: 84%).

The Group's primary reporting format aggregates individual components into market reporting lines with supplementary information being given by business activity. The operating segments or 'markets' of the Group are 'United Kingdom' (Life and General Insurance), France, Poland, 'Italy, Ireland, Spain and Other', Canada, Asia, Aviva Investors and 'Other Group Activities'. In establishing the overall approach to the Group audit, we determined the type of work that needed to be performed at each of the components by us, as the Group audit team, or auditors of the components within PwC UK or from other PwC network firms operating under our instructions.

As the Group audit team, we determined the level of involvement required at those components to be able to conclude whether sufficient and appropriate audit evidence had been obtained as a basis for our opinion on the financial statements as a whole. In our role as Group auditors, we exercised oversight of work performed by auditors of the components including performing the following procedures:

- Maintained an active dialogue with reporting component audit teams throughout the year, including holding a workshop for those teams in London during the planning phase of the audit;
- Visited all in-scope components and undertook a detailed review of audit working papers;
- Attended meetings with local management; and
- Attended certain component Audit Committee meetings.

Independent auditors' report ➤ [Continued](#)**Materiality**

The scope of our audit was influenced by our application of materiality. We set certain quantitative thresholds for materiality. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures on the individual financial statement line items and disclosures and in evaluating the effect of misstatements, both individually and in aggregate on the financial statements as a whole.

Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

	Group financial statements	Company financial statements
Overall materiality	£147 million (2016: £140 million).	£56 million (2016: £69 million).
How we determined it	5% of Group adjusted operating profit before tax attributable to shareholders' profits after the deduction of integration and restructuring costs (rounded up to the nearest £'million).	5% of IFRS profit before tax from continuing operations (rounded up to the nearest £'million).
Rationale for benchmark applied	<p>In determining our materiality, we considered financial metrics which we believed to be relevant, and concluded, consistent with last year that Group adjusted operating profit before tax and after the deduction of integration and restructuring costs was the most relevant benchmark.</p> <p>Group adjusted operating profit presents a longer-term assessment of the performance of the entity which is more in line with the operations and time horizons of an insurer where insurance contracts and customer relationships span over multiple years.</p> <p>We have concluded that it is appropriate to deduct integration and restructuring costs as Aviva incur a base level of restructuring costs, even outside times of significant restructuring.</p>	<p>In determining our materiality, we considered financial metrics which we believed to be relevant, and concluded, consistent with last year that profit before tax was the most relevant benchmark as the Company is profit-orientated and users of the financial statements will be focussed on this benchmark.</p>

For each component in the scope of our Group audit, we allocated a materiality that is less than our overall Group materiality. The range of materiality allocated across components was between £30 million and £120 million. Certain components were audited to a local statutory audit materiality that was also less than our overall Group materiality.

We agreed with the Audit Committee that we would report to them misstatements identified during our audit above £5 million (Group audit) (2016: £5 million) and £2.8 million (Company audit) (2016: £3.45 million) as well as misstatements below those amounts that, in our view, warranted reporting for qualitative reasons.

Going concern

In accordance with ISAs (UK) we report as follows:

Reporting obligation	Outcome
We are required to report if we have anything material to add or draw attention to in respect of the directors' statement in the financial statements about whether the directors considered it appropriate to adopt the going concern basis of accounting in preparing the financial statements and the directors' identification of any material uncertainties to the Group's and the Company's ability to continue as a going concern over a period of at least twelve months from the date of approval of the financial statements.	We have nothing material to add or to draw attention to. However, because not all future events or conditions can be predicted, this statement is not a guarantee as to the Group's and the Company's ability to continue as a going concern.
We are required to report if the directors' statement relating to Going Concern in accordance with Listing Rule 9.8.6R(3) is materially inconsistent with our knowledge obtained in the audit.	We have nothing to report.

Reporting on other information

The other information comprises all of the information in the Annual report other than the financial statements and our auditors' report thereon. The directors are responsible for the other information. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except to the extent otherwise explicitly stated in this report, any form of assurance thereon.

Independent auditors' report ➤ [Continued](#)

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If we identify an apparent material inconsistency or material misstatement, we are required to perform procedures to conclude whether there is a material misstatement of the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report based on these responsibilities.

With respect to the Strategic report and Directors' and corporate governance report, we also considered whether the disclosures required by the UK Companies Act 2006 have been included.

Based on the responsibilities described above and our work undertaken in the course of the audit, the Companies Act 2006, (CA06), ISAs (UK) and the Listing Rules of the Financial Conduct Authority (FCA) require us also to report certain opinions and matters as described below (required by ISAs (UK) unless otherwise stated).

Strategic report and Directors' and corporate governance report

In our opinion, based on the work undertaken in the course of the audit, the information given in the Strategic report and Directors' and corporate governance report for the year ended 31 December 2017 is consistent with the financial statements and has been prepared in accordance with applicable legal requirements. (CA06)

In light of the knowledge and understanding of the Group and Company and their environment obtained in the course of the audit, we did not identify any material misstatements in the Strategic report and Directors' and corporate governance report. (CA06)

The directors' assessment of the prospects of the Group and of the principal risks that would threaten the solvency or liquidity of the Group

We have nothing material to add or draw attention to regarding:

- The directors' confirmation on page 43 of the Annual report that they have carried out a robust assessment of the principal risks facing the Group, including those that would threaten its business model, future performance, solvency or liquidity.
- The disclosures in the Annual report that describe those risks and explain how they are being managed or mitigated.
- The directors' explanation on page 59 of the Annual report as to how they have assessed the prospects of the Group, over what period they have done so and why they consider that period to be appropriate, and their statement as to whether they have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

We have nothing to report having performed a review of the directors' statement that they have carried out a robust assessment of the principal risks facing the Group and statement in relation to the longer-term viability of the Group. Our review was substantially less in scope than an audit and only consisted of making inquiries and considering the directors' process supporting their statements; checking that the statements are in alignment with the relevant provisions of the UK Corporate Governance Code (the 'Code'); and considering whether the statements are consistent with the knowledge and understanding of the Group and Company and their environment obtained in the course of the audit. (Listing Rules)

Other Code Provisions

We have nothing to report in respect of our responsibility to report when:

- The statement given by the directors, on page 60, that they consider the Annual report taken as a whole to be fair, balanced and understandable, and provides the information necessary for the members to assess the Group's and the Company's position and performance, business model and strategy is materially inconsistent with our knowledge of the Group and the Company obtained in the course of performing our audit.
- The section of the Annual report on page 53 describing the work of the Audit Committee does not appropriately address matters communicated by us to the Audit Committee.
- The directors' statement relating to the Company's compliance with the Code does not properly disclose a departure from a relevant provision of the Code specified, under the Listing Rules, for review by the auditors.

Directors' Remuneration

In our opinion, the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006. (CA06)

Responsibilities for the financial statements and the audit

Responsibilities of the directors for the financial statements

As explained more fully in the Directors' Responsibilities Statement set out on page 60, the directors are responsible for the preparation of the financial statements in accordance with the applicable framework and for being satisfied that they give a true and fair view. The directors are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Group's and the Company's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or the Company or to cease operations, or have no realistic alternative but to do so.

Auditors' responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditors' report.

Independent auditors' report ➤ [Continued](#)

Use of this report

This report, including the opinions, has been prepared for and only for the Company's members as a body in accordance with Chapter 3 of Part 16 of the Companies Act 2006 and for no other purpose. We do not, in giving these opinions, 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.

Other required reporting

Companies Act 2006 exception reporting

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- we have not received all the information and explanations we require for our audit; or
- adequate accounting records have not been kept by the Company, or returns adequate for our audit have not been received from branches not visited by us; or
- certain disclosures of directors' remuneration specified by law are not made; or
- the Company financial statements and the part of the Directors' Remuneration Report to be audited are not in agreement with the accounting records and returns.

We have no exceptions to report arising from this responsibility.

Appointment

Following the recommendation of the audit committee, we were appointed by the members on 3 May 2012 to audit the financial statements for the year ended 31 December 2012 and subsequent financial periods. The period of total uninterrupted engagement is 6 years, covering the years ended 31 December 2012 to 31 December 2017.

Marcus Hine (Senior Statutory Auditor)

for and on behalf of PricewaterhouseCoopers LLP

Chartered Accountants and Statutory Auditors

London

7 March 2018

1 The maintenance and integrity of the Aviva plc website is the responsibility of the directors; the work carried out by the auditors does not involve consideration of these matters and, accordingly the auditors accept no responsibility for any changes that may have occurred to the full annual financial statements since they were initially presented on the website.

2 Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

[Accounting policies](#)

Aviva plc (the 'Company'), a public limited company incorporated and domiciled in the United Kingdom (UK), together with its subsidiaries (collectively, the 'Group' or 'Aviva') transacts life assurance and long-term savings business, fund management and most classes of general insurance and health business through its subsidiaries, joint ventures, associates and branches in the UK, Ireland, continental Europe, Canada, Asia and other countries throughout the world.

The principal accounting policies adopted in the preparation of these financial statements are set out below. These policies have been consistently applied to all years presented, unless otherwise stated.

(A) Basis of preparation

The consolidated financial statements and those of the Company have been prepared and approved by the Directors in accordance with International Financial Reporting Standards (IFRS) as endorsed by the European Union (EU), and those parts of the Companies Act 2006 applicable to those reporting under IFRS. The consolidated financial statements have been prepared under the historical cost convention, as modified by the revaluation of land and buildings, investment property, available-for-sale financial assets, and financial assets and financial liabilities (including derivative instruments) at fair value through profit or loss.

In accordance with IFRS 4 *Insurance Contracts*, the Group has applied existing accounting practices for insurance and participating investment contracts, modified as appropriate to comply with the IFRS framework and applicable standards. Further details are given in accounting policy G.

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 consolidated financial statements are stated in pounds sterling, which is the Company's functional and presentational currency. Unless otherwise noted, the amounts shown in these financial statements are in millions of pounds sterling (£m). The separate financial statements of the Company are on pages 229 to 238.

Comparative figures have been restated for adjustments as detailed in note 1.

New standards, interpretations and amendments to published standards that have been adopted by the Group

The Group has adopted the following amendments to standards which became effective for the annual reporting period beginning on 1 January 2017.

(i) Narrow scope amendments to IAS 12 – Recognition of Deferred Tax Assets for Unrealised Losses

The revisions to IAS 12 *Income Taxes* clarify the accounting for deferred tax assets on unrealised losses and state that deferred tax assets should be recognised when an asset is measured at fair value and that fair value is below the asset's tax base. It also provides further clarification on the estimation of probable future taxable profits that may support the recognition of deferred tax assets.

The adoption of this amendment does not have an impact on the Group's consolidated financial statements as the clarifications are consistent with our existing interpretation.

(ii) Amendments to IAS 7 – Disclosure Initiative

The amendments to IAS 7 *Statement of Cash Flows*, which form part of the IASB's Disclosure Initiative, require disclosure of the movements in liabilities arising from financing activities with cash and non-cash changes presented separately.

The adoption of this amendment does not have an impact on the Group's consolidated financial statements as the Group already voluntarily discloses this information in note 49.

(iii) Amendments to IFRS 12: Disclosure of Interests in Other Entities

The amendments to IFRS 12, which form part of the IASB's annual improvements process for the 2014-2016 cycle, clarify existing guidance. The adoption of these amendments does not have an impact on the Group's consolidated financial statements as the clarifications are consistent with our existing interpretation.

Standards, interpretations and amendments to published standards that are not yet effective and have not been adopted early by the Group or the Company

The following new standards, amendments to existing standards have been issued, are not yet effective and have not been adopted early by the Group or the Company:

(i) IFRS 9, Financial Instruments (including amendments to IFRS 4, Insurance Contracts)

In July 2014, the IASB published IFRS 9 *Financial Instruments* which will replace IAS 39 *Financial Instruments: Recognition and Measurement*. The standard incorporates new classification and measurements requirements for financial assets, the introduction of an expected credit loss impairment model which will replace the incurred loss model of IAS 39, and new hedge accounting requirements. Under IFRS 9, all financial assets will be measured at either amortised cost or fair value. The basis of classification will depend on the business model and the contractual cash flow characteristics of the financial assets. The standard retains most of IAS 39's requirements for financial liabilities except for those designated at fair value through profit or loss whereby that part of the fair value changes attributable to own credit is to be recognised in other comprehensive income instead of the income statement. The hedge accounting requirements are more closely aligned with risk management practices and follow a more principle based approach.

In September 2016, the IASB published amendments to IFRS 4 *Insurance Contracts* that address the accounting consequences of the application of IFRS 9 to insurers prior to implementing the new accounting standard for insurance contracts, IFRS 17, which replaces IFRS 4. The amendments introduce two options for insurers: the deferral approach and the overlay approach. The deferral approach provides an entity, if eligible, with a temporary exemption from applying IFRS 9 until 1 January 2021 at the latest. The overlay approach allows an entity to remove from profit or loss the effects of some of the accounting mismatches that may occur before the new insurance contracts standard is applied.

The Group is eligible to apply the deferral approach as its activities are predominantly connected with insurance, as defined by the amendments to IFRS 4. The Group has opted to apply this deferral from 2018. The impact of the adoption of IFRS 9 on the Group's consolidated financial statements will, to a large extent, have to take into account the interaction with the new insurance contracts standard IFRS 17. As such, it is not possible to fully assess the effect of the adoption of IFRS 9. IFRS 9 has been endorsed by the EU.

IFRS 9 is effective for the Company from 1 January 2018 as it is not eligible to apply the deferral option available to insurers. The adoption of IFRS 9 is not expected to have a significant impact on the Company's balance sheet.

(ii) IFRS 17, Insurance Contracts

In May 2017, the IASB published IFRS 17 *Insurance Contracts*, a comprehensive new accounting standard for insurance contracts covering recognition and measurement, presentation and disclosure. Once effective, IFRS 17 will replace IFRS 4 that was issued in 2005. IFRS 17 applies to all

types of insurance contracts as well as to certain guarantees and financial instruments with discretionary participation features. In contrast to the requirements in IFRS 4, which are largely based on grandfathering of previous local accounting policies, IFRS 17 provides a comprehensive and consistent approach to insurance contracts. The core of IFRS 17 is the general model, supplemented by a specific adaption for contracts with direct participation features (the variable fee approach) and a simplified approach (the premium allocation approach) mainly for short-duration contracts.

The main features of the new accounting model for insurance contracts are, as follows: the measurement of the present value of future cash flows incorporating an explicit risk adjustment and remeasured every reporting period (the fulfilment cash flows); a contractual service margin that is equal and opposite to any day one gain in the fulfilment cash flows of a group of contracts, representing the unearned profit of the insurance contracts to be recognised in profit or loss over the service period (coverage period); the presentation of insurance revenue and insurance service expenses in the statement of comprehensive income based on the concept of insurance services provided during the period; and extensive disclosures to provide information on the recognised amounts from insurance contracts and the nature and extent of risks arising from these contracts.

The impact of the adoption of IFRS 17 has yet to be fully assessed by the Group but it is expected there will be significant impacts relating to the measurement and presentation of the contracts in scope of the standard. This standard applies to annual reporting periods beginning on or after 1 January 2021 and has not yet been endorsed by the EU.

(iii) IFRS 16, Leases

In January 2016, the IASB published IFRS 16 *Leases* which will replace IAS 17 *Leases*. IFRS 16 introduces a definition of a lease with a single lessee accounting model eliminating the classification of either operating or finance leases. Lessees will be required to account for all leases in a similar manner to the current finance lease accounting recognising lease assets and liabilities on the statement of financial position. Lessor accounting remains similar to current practice. The impact of the adoption of IFRS 16 has yet to be fully assessed by the Group. This standard applies to annual reporting periods beginning on or after 1 January 2019 and has been endorsed by the EU.

The following new standards, amendments to existing standards have been issued, are not yet effective and are not expected to have a significant impact on the Group's consolidated financial statements:

(iv) IFRS 15, Revenue from Contracts with Customers

In May 2014, the IASB issued IFRS 15 *Revenue from Contracts with Customers*. This standard applies to annual reporting periods beginning on or after 1 January 2018 and has been endorsed by the EU.

(v) Amendments to IFRS 2: Classification and Measurement of Share-based Payment Transactions

In June 2016, the IASB issued amendments to IFRS 2 *Share-based Payment*. The amendments are effective from 1 January 2018 and have not yet been endorsed by the EU.

(vi) Annual Improvements to IFRSs 2014-2016

These improvements consist of amendments to three IFRSs including IFRS 1 *First-time Adoption of International Financial Reporting Standards*, IFRS 12 *Disclosure of Interests in Other*

Entities and IAS 28 Investments in Associates. The amendments to IFRS 1 and IAS 28 are effective for annual reporting periods beginning on or after 1 January 2018; the amendment to IFRS 12 for annual reporting periods beginning on or after 1 January 2017. These amendments have been endorsed by the EU.

(vii) Amendments to IAS 40 – Transfers of Investment Property

In December 2016, the IASB published amendments to IAS 40 *Investment Property*. The amendments are effective from 1 January 2018 and have not yet been endorsed by the EU.

(viii) IFRIC 22, Foreign Currency Transactions and Advance Consideration

In December 2016, the IASB published IFRIC 22 *Foreign Currency Transactions and Advance Consideration*. The standard is effective for annual reporting beginning on or after 1 January 2018 and has not yet been endorsed by the EU.

(ix) IFRIC 23, Uncertainty over Income Tax Treatments

In June 2017, the IASB published IFRIC 23 *Uncertainty over Income Tax Treatments*. The standard is effective for annual reporting beginning on or after 1 January 2019 and has not yet been endorsed by the EU.

(x) Amendments to IAS 19 – Plan Amendment, Curtailment or Settlement

In February 2018, the IASB published *Plan Amendment, Curtailment or Settlement (Amendments to IAS 19)*. The amendments are effective for annual reporting beginning on or after 1 January 2019 and have not yet been endorsed by the EU.

(B) Group adjusted operating profit

The long-term nature of much of the Group's operations means that, for management's decision-making and internal performance management of our operating segments, the Group focuses on Group adjusted operating profit, a non-GAAP alternative performance measure (APM) which is not bound by IFRS. The APM incorporates the expected return on investments which supports its long-term and non-long-term businesses.

Group adjusted operating profit for long-term business is based on expected investment returns on financial investments backing shareholder and policyholder funds over the reporting period, with allowance for the corresponding expected movements in liabilities. Variances between actual and expected investment returns, and the impact of changes in economic assumptions on liabilities, are disclosed separately outside Group adjusted operating profit. For non-long-term business, the total investment income, including realised and unrealised gains, is analysed between that calculated using a longer-term return and short-term fluctuations from that level. The exclusion of short-term realised and unrealised investment gains and losses from the Group adjusted operating profit APM reflects the long-term nature of much of our business and presents separately the operating profit APM which is used in managing the performance of our operating segments from the impact of economic factors. Further details of this analysis and the assumptions used are given in notes 8 and 9.

Group adjusted operating profit is presented before and after integration and restructuring costs with further details of restructuring costs provided in note 6.

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 mergers 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's chief operating decision maker. 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. Details of these items, including an explanation of the rationale for their exclusion, are provided in the 'Other information' section.

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.

(C) Critical accounting policies and the use of estimates

Critical accounting policies

The preparation of financial statements requires the Group to select accounting policies and make estimates and assumptions that affect items reported in the consolidated income statement, consolidated statement of financial position, other primary statements and notes to the consolidated financial statements.

The Audit Committee reviews the reasonableness of judgements and assumptions applied and the appropriateness of significant accounting policies. The significant issues considered by the Committee in the year are included within the Audit Committee Report on page 52.

The following accounting policies are those that have the most significant impact on the amounts recognised in the financial statements, with those judgements involving estimation summarised there after.

Item	Critical accounting judgement	Accounting policy
Consolidation	Assessment of whether the Group controls the underlying entities including consideration of its decision making authority and rights to the variable returns from the entity	D
Insurance and participating investment contract liabilities	Assessment of the significance of insurance risk transferred to the Group in determining whether a contract should be accounted for as insurance or investment contract	G
Financial investments	Classification of investments including the application of the fair value option	T

All estimates are based on management's knowledge of current facts and circumstances, assumptions based on that knowledge and their predictions of future events and actions. Actual results may differ from those estimates, possibly significantly.

The table below sets out those items considered particularly susceptible to changes in estimates and assumptions, and the relevant accounting policy and note disclosures.

Item	Critical accounting estimates	Accounting policy	Note
Measurement of insurance and participating investment contract liabilities	Principal assumptions used in the calculation of life insurance and participating investment contract liabilities include those in respect of annuitant mortality, expenses, valuation interest rates and credit default allowances on corporate bonds and other non-sovereign credit assets. Principal assumptions used in the calculation of general insurance and health liabilities include the discount rates used in determining our latent claim and structures settlements liabilities, and the assumption that	L	40b

Item	Critical accounting estimates	Accounting policy	Note
	past claims experience can be used as a basis to project future claims (estimated using a range of standard actuarial claims projection techniques).		
Acquired value of in-force business (AVIF) and intangible assets	AVIF is recognised, amortised and tested for impairment by reference to the present value of estimated future profits. Other intangible assets are recognised and tested for impairment using an income approach method. Significant estimates include forecast cash flows, discount rates and determination of useful lives.	O	17
Fair value of financial instruments and investment property	Where quoted market prices are not available, valuation techniques are used to value financial instruments and investment property. These include broker quotes and models using both observable and unobservable market inputs. The valuation techniques involve judgement with regard to the valuation models used and the inputs to these models can lead to a range of plausible valuation for financial investments.	F,T,U	22,26
Deferred acquisition costs	Management use estimation techniques to determine the amortisation profile and impairment test by reference to the present value of estimated future profits. These tests are sensitive to expense and lapse assumptions.	X	28

During the year management reassessed the critical estimates previously provided and, based on their assessment of qualitative and quantitative risk factors, resolved to remove goodwill impairment, impairment of financial assets, provisions and contingent liabilities, pension obligations and deferred income taxes.

(D) Consolidation principles

Subsidiaries

Subsidiaries are those entities over which the Group has control. The Group controls an investee if and only if the Group has all of the following:

- power over the investee,
- exposure, or rights, to variable returns from its involvement with the investee, and
- the ability to use its power over the investee to affect its returns.

The Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including: the purpose and design of an investee, relevant activities, substantive and protective rights, and voting rights and potential voting rights.

The Group reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Subsidiaries are consolidated from the date the Group obtains control and are excluded from consolidation from the date the Group loses control. All intercompany transactions, balances and unrealised surpluses and deficits on transactions between Group companies have been eliminated. Accounting policies of subsidiaries are aligned on acquisition to ensure consistency with Group policies.

The Group is required to use the acquisition method of accounting for business combinations. Under this method, the Group recognises identifiable assets, liabilities and contingent liabilities at fair value, and any non-controlling interest in the

acquiree. For each business combination, the Group has the option to measure the non-controlling interest in the acquiree either at fair value or at the proportionate share of the acquiree's identifiable net assets. The excess of the consideration transferred over the fair value of the net assets of the subsidiary acquired is recorded as goodwill (see accounting policy O below). Acquisition-related costs are expensed as incurred.

Transactions with non-controlling interests that lead to changes in the ownership interests in a subsidiary but do not result in a loss of control are treated as equity transactions.

Merger accounting and the merger reserve

Prior to 1 January 2004, the date of first time adoption of IFRS, certain significant business combinations were accounted for using the 'pooling of interests method' (or merger accounting), which treats the merged groups as if they had been combined throughout the current and comparative accounting periods. Merger accounting principles for these combinations gave rise to a merger reserve in the consolidated statement of financial position, being the difference between the nominal value of new shares issued by the Parent Company for the acquisition of the shares of the subsidiary and the subsidiary's own share capital and share premium account. These transactions have not been restated, as permitted by the IFRS 1 transitional arrangements.

The merger reserve is also used where more than 90% of the shares in a subsidiary are acquired and the consideration includes the issue of new shares by the Company, thereby attracting merger relief under the Companies Act 1985 and, from 1 October 2009, the Companies Act 2006.

Investment vehicles

In several countries, the Group has invested in a number of specialised investment vehicles such as Open-ended Investment Companies (OEICs) and unit trusts. These invest mainly in equities, bonds, cash and cash equivalents, and properties, and distribute most of their income. The Group's percentage ownership in these vehicles can fluctuate from day to day according to the Group's and third-party participation in them. When assessing control over investment vehicles, along with the factors determining control outlined above, the Group considers the scope of its decision-making authority including its ability to direct the relevant activities of the fund and exposure to variability of returns from the perspective of an investor in the fund and of the asset manager. In addition, the Group assesses rights held by other parties including substantive removal rights that may affect the Group's ability to direct the relevant activities and indicate that the Group does not have power. Where the Group is deemed to control such vehicles, they are consolidated, with the interests of parties other than Aviva being classified as liabilities. These appear as 'Net asset value attributable to unitholders' in the consolidated statement of financial position.

Where the Group does not control such vehicles, and these investments are held by its insurance or investment funds, they are carried at fair value through profit or loss within financial investments in the consolidated statement of financial position, in accordance with IAS 39 *Financial Instruments: Recognition and Measurement*.

As part of their investment strategy, long-term business policyholder funds have invested in a number of property limited partnerships (PLPs), either directly or via property unit trusts (PUTs), through a mix of capital and loans. The PLPs are managed by general partners (GPs), in which the long-term business shareholder companies hold equity stakes and which themselves hold nominal stakes in the PLPs. The PUTs are managed by a Group subsidiary.

Accounting for the PUTs and PLPs as subsidiaries, joint ventures, associates or other financial investments depends on whether the Group is deemed to have control or joint control over the PUTs and PLPs' shareholdings in the GPs and the terms of each partnership

agreement are considered along with other factors that determine control, as outlined above. Where the Group exerts control over a PUT or a PLP, it has been treated as a subsidiary and its results, assets and liabilities have been consolidated. Where the partnership is managed by an agreement such that there is joint control between the parties, notwithstanding that the Group's partnership share in the PLP (including its indirect stake via the relevant PUT and GP) may be lower or higher than 50%, such PUTs and PLPs have been classified as joint ventures (see below). Where the Group has significant influence over the PUT or PLP, as defined in the following section, the PUT or PLP is classified as an associate. Where the Group holds non-controlling interests in PLPs, with no significant influence or control over their associated GPs, the relevant investments are carried at fair value through profit or loss within financial investments.

Associates and joint ventures

Associates are entities over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not control or joint control. Generally, it is presumed that the Group has significant influence if it has between 20% and 50% of voting rights. Joint ventures are joint arrangements whereby the Group and other parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control. In a number of these, the Group's share of the underlying assets and liabilities may be greater or less than 50% but the terms of the relevant agreements make it clear that control is not exercised. Such jointly controlled entities are referred to as joint ventures in these financial statements.

Gains on transactions between the Group and its associates and joint ventures are eliminated to the extent of the Group's interest in the associates and joint ventures. Losses are also eliminated, unless the transaction provides evidence of an impairment of the asset transferred between entities.

Other than investments in investment vehicles which are carried at fair value through profit or loss, investments in associates and joint ventures are accounted for using the equity method of accounting. Under this method, the cost of the investment in a given associate or joint venture, together with the Group's share of that entity's post-acquisition changes to shareholders' funds, is included as an asset in the consolidated statement of financial position. As explained in accounting policy O, the cost includes goodwill recognised on acquisition. The Group's share of their post-acquisition profits or losses is recognised in the income statement and its share of post-acquisition movements in reserves is recognised in reserves. Equity accounting is discontinued when the Group no longer has significant influence or joint control over the investment.

If the Group's share of losses in an associate or joint venture equals or exceeds its interest in the undertaking, the Group does not recognise further losses unless it has incurred obligations or made payments on behalf of the entity.

The Company's investments

In the Company's statement of financial position, subsidiaries, associates and joint ventures are stated at their fair values, estimated using applicable valuation models underpinned by the Company's market capitalisation. These investments are classified as available for sale (AFS) financial assets, with changes in their fair value being recognised in other comprehensive income and recorded in a separate investment valuation reserve within equity.

(E) Foreign currency translation

Income statements and cash flows of foreign entities are translated into the Group's presentation currency at average exchange rates for the year while their statements of financial position are translated at the year-end exchange rates. Exchange differences arising from the translation of the net investment in foreign subsidiaries, associates and joint ventures, and of borrowings and other currency instruments designated as hedges of such investments, are recognised in other comprehensive income and taken to the currency translation reserve within equity. On disposal of a foreign entity, such exchange differences are transferred out of this reserve and are recognised in the income statement as part of the gain or loss on sale. The cumulative translation differences were deemed to be zero at the transition date to IFRS.

Foreign currency transactions are accounted for at the exchange rates prevailing at the date of the transactions. Gains and losses resulting from the settlement of such transactions, and from the translation of monetary assets and liabilities denominated in foreign currencies, are recognised in the income statement.

Translation differences on debt securities and other monetary financial assets measured at fair value and designated as held at fair value through profit or loss (FVTPL) (see accounting policy T) are included in foreign exchange gains and losses in the income statement. For monetary financial assets designated as AFS, translation differences are calculated as if they were carried at amortised cost and so are recognised in the income statement, while foreign exchange differences arising from fair value gains and losses are recognised in other comprehensive income and included in the investment valuation reserve within equity. Translation differences on non-monetary items, such as equities which are designated as FVTPL, are reported as part of the fair value gain or loss, whereas such differences on AFS equities are included in the investment valuation reserve.

(F) Fair value measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. This presumes that the transaction takes place in the principal (or most advantageous) market under current market conditions. Fair value is a market-based measure and in the absence of observable market prices in an active market, it is measured using the assumptions that market participants would use when pricing the asset or liability.

The fair value of a non-financial asset is determined based on its highest and best use from a market participant's perspective. When using this approach, the Group takes into account the asset's use that is physically possible, legally permissible and financially feasible.

The best evidence of the fair value of a financial instrument at initial recognition is normally the transaction price i.e. the fair value of the consideration given or received. In certain circumstances, the fair value at initial recognition may differ from the transaction price. If the fair value is evidenced by comparison with other observable current market transactions in the same instrument (i.e. without modification or repackaging), or is based on a valuation technique whose variables include only data from observable markets, then the difference between the fair value at initial recognition and the transaction price is recognised as a gain or loss in the income statement. When unobservable market data has a significant impact on the valuation of financial instruments, the difference between the fair value at initial recognition and the transaction price is not recognised immediately in the income statement, but deferred and recognised in the income statement on an appropriate basis over the life of the instrument but no later than when the valuation is

supported wholly by observable market data or the transaction is closed out or otherwise matured.

If an asset or a liability measured at fair value has a bid price and an ask price, the price within the bid-ask spread that is most representative of fair value in the circumstances is used to measure fair value.

(G) Product classification

Insurance contracts are defined as those containing significant insurance risk if, and only if, an insured event could cause an insurer to make significant additional payments in any scenario, excluding scenarios that lack commercial substance, at the inception of the contract. Such contracts remain insurance contracts until all rights and obligations are extinguished or expire. Contracts can be reclassified as insurance contracts after inception if insurance risk becomes significant. Any contracts not considered to be insurance contracts under IFRS are classified as investment contracts. Some insurance and investment contracts contain a discretionary participation feature, which is a contractual right to receive additional benefits as a supplement to guaranteed benefits. These are referred to as participating contracts.

As noted in accounting policy A, insurance contracts and participating investment contracts in general continue to be measured and accounted for under existing accounting practices at the later of the date of transition to IFRS ('grandfathered') or the date of the acquisition of the entity, in accordance with IFRS 4. IFRS accounting for insurance contracts in UK companies was grandfathered at the date of transition to IFRS and determined in accordance with the Statement of Recommended Practice issued by the Association of British Insurers (subsequently withdrawn by the ABI in 2015).

In certain businesses, the accounting policies or accounting estimates have been changed, as permitted by IFRS 4 and IAS 8 respectively, to remeasure designated insurance liabilities to reflect current market interest rates and changes to regulatory capital requirements. When accounting policies or accounting estimates have been changed, and adjustments to the measurement basis have occurred, the financial statements of that year will have disclosed the impacts accordingly. One such example is our adoption of Financial Reporting Standard 27 *Life Assurance* (FRS 27) which was issued by the UK's Accounting Standards Board (ASB) in December 2004 (subsequently withdrawn by the ASB in 2015).

(H) Premiums earned

Premiums on long-term insurance contracts and participating investment contracts are recognised as income when receivable, except for investment-linked premiums which are accounted for when the corresponding liabilities are recognised. For single premium business, this is the date from which the policy is effective. For regular premium contracts, receivables are recognised at the date when payments are due. Premiums are shown before deduction of commission and before any sales-based taxes or duties. Where policies lapse due to non-receipt of premiums, then all the related premium income accrued but not received from the date they are deemed to have lapsed is offset against premiums.

General insurance and health premiums written reflect business inception during the year, and exclude any sales-based taxes or duties. Unearned premiums are those proportions of the premiums written in a year that relate to periods of risk after the statement of financial position date. Unearned premiums are calculated on either a daily or monthly pro rata basis. Premiums collected by intermediaries, but not yet received, are assessed based on estimates from underwriting or past experience, and are included in premiums written.

Deposits collected under investment contracts without a discretionary participation feature (non-participating contracts) are not accounted for through the income statement, except for the fee

income (covered in accounting policy I) and the investment income attributable to those contracts, but are accounted for directly through the statement of financial position as an adjustment to the investment contract liability.

(I) Other investment contract fee revenue

Investment contract policyholders are charged fees for policy administration, investment management, surrenders or other contract services. The fees may be for fixed amounts or vary with the amounts being managed, and will generally be charged as an adjustment to the policyholder's balance. The fees are recognised as revenue in the period in which they are collected unless they relate to services to be provided in future periods, in which case they are deferred and recognised as the service is provided.

Initiation and other 'front-end' fees (fees that are assessed against the policyholder balance as consideration for origination of the contract) are charged on some non-participating investment and investment fund management contracts. Where the investment contract is recorded at amortised cost, these fees are deferred and recognised over the expected term of the policy by an adjustment to the effective yield. Where the investment contract is measured at fair value, the front-end fees that relate to the provision of investment management services are deferred and recognised as the services are provided.

(J) Other fee and commission income

Other fee and commission income consists primarily of fund management fees, distribution fees from mutual funds, commissions on reinsurance ceded, commission revenue from the sale of mutual fund shares and transfer agent fees for shareholder record keeping. Reinsurance commissions receivable are deferred in the same way as acquisition costs, as described in accounting policy X. All other fee and commission income is recognised as the services are provided.

(K) Net investment income

Investment income consists of dividends, interest and rents receivable for the year, movements in amortised cost on debt securities, realised gains and losses, and unrealised gains and losses on FVTPL investments (as defined in accounting policy T). Dividends on equity securities are recorded as revenue on the ex-dividend date. Interest income is recognised as it accrues, taking into account the effective yield on the investment. It includes the interest rate differential on forward foreign exchange contracts. Rental income is recognised on an accruals basis, and is recognised on a straight line basis unless there is compelling evidence that benefits do not accrue evenly over the period of the lease.

A gain or loss on a financial investment is only realised on disposal or transfer, and is the difference between the proceeds received, net of transaction costs, and its original cost or amortised cost, as appropriate.

Unrealised gains and losses, arising on investments which have not been derecognised as a result of disposal or transfer, represent the difference between the carrying value at the year end and the carrying value at the previous year end or purchase value during the year, less the reversal of previously recognised unrealised gains and losses in respect of disposals made during the year. Realised gains or losses on investment property represent the difference between the net disposal proceeds and the carrying amount of the property.

(L) Insurance and participating investment contract liabilities

Claims

Long-term business claims reflect the cost of all claims arising during the year, including claims handling costs, as well as policyholder bonuses accrued in anticipation of bonus declarations.

General insurance and health claims incurred include all losses occurring during the year, whether reported or not, related handling costs, a reduction for the value of salvage and other recoveries, and any adjustments to claims outstanding from previous years.

Claims handling costs include internal and external costs incurred in connection with the negotiation and settlement of claims. Internal costs include all direct expenses of the claims department and any part of the general administrative costs directly attributable to the claims function.

Long-term business provisions

Under current IFRS requirements, insurance and participating investment contract liabilities are measured using accounting policies consistent with those adopted previously under existing accounting practices, with the exception of liabilities remeasured to reflect current market interest rates to be consistent with the value of the backing assets, and those relating to UK with-profits and non-profit contracts.

The long-term business provisions are calculated separately for each life operation, based either on local regulatory requirements or existing local GAAP (at the later of the date of transition to IFRS or the date of the acquisition of the entity); and actuarial principles consistent with those applied in each local market. Each calculation represents a determination within a range of possible outcomes, where the assumptions used in the calculations depend on the circumstances prevailing in each life operation. The principal assumptions are disclosed in note 40(b). For the UK with-profit funds, FRS 27 required liabilities to be calculated on the realistic basis adjusted to remove the shareholders' share of future bonuses. FRS 27 was grandfathered from UK regulatory requirements prior to the adoption of Solvency II. For UK non-profit insurance contracts, the liabilities are calculated using the gross premium valuation method. This method uses the amount of contractual premiums payable and includes explicit assumptions for interest and discount rates, mortality and morbidity, persistency and future expenses. These assumptions are set on a prudent basis and can vary by contract type and reflect current and expected future experience. These estimates depend upon the outcome of future events and may need to be revised as circumstances change. The liabilities are based on the UK regulatory requirements prior to the adoption of Solvency II, adjusted to remove certain regulatory reserves and margins in assumptions, notably for annuity business.

Unallocated divisible surplus

In certain participating long-term insurance and investment business, the nature of the policy benefits is such that the division between shareholder reserves and policyholder liabilities is uncertain. Amounts whose allocation to either policyholders or shareholders has not been determined by the end of the financial year are held within liabilities as an unallocated divisible surplus.

If the aggregate carrying value of liabilities for a particular participating business fund is in excess of the aggregate carrying value of its assets, then the difference is held as a negative unallocated divisible surplus balance, subject to recoverability from margins in that fund's participating business. Any excess of this difference over the recoverable amount is charged to net income in the reporting period.

Embedded derivatives

Embedded derivatives that meet the definition of an insurance contract or correspond to options to surrender insurance contracts for a set amount (or based on a fixed amount and an interest rate) are not separately measured. All other embedded derivatives are separated and measured at fair value if they are not considered closely related to the host insurance contract or do not meet the definition of an insurance contract. Fair value reflects own credit risk to the extent the embedded derivative is not fully collateralised.

Liability adequacy

At each reporting date, an assessment is made of whether the recognised long-term business provisions are adequate, using current estimates of future cash flows. If that assessment shows that the carrying amount of the liabilities (less related assets) is insufficient in light of the estimated future cash flows, the deficiency is recognised in the income statement by setting up an additional provision in the statement of financial position.

General insurance and health provisions

Outstanding claims provisions

General insurance and health outstanding claims provisions are based on the estimated ultimate cost of all claims incurred but not settled at the statement of financial position date, whether reported or not, together with related claims handling costs. Significant delays are experienced in the notification and settlement of certain types of general insurance claims, particularly in respect of liability business, including environmental and pollution exposures, the ultimate cost of which cannot be known with certainty at the statement of financial position date. As such, booked claim provisions for general insurance and health insurance are based on the best estimate of the cost of future claim payments plus an explicit allowance for risk and uncertainty. Any estimate represents a determination within a range of possible outcomes. Further details of estimation techniques are given in note 40(c).

Provisions for latent claims and claims that are settled on an annuity type basis such as structured settlements are discounted, in the relevant currency at the reporting date, having regard to the expected settlement dates of the claims and the nature of the liabilities. The discount rate is set at the start of the accounting period with any change in rates between the start and end of the accounting period being reflected below operating profit as an economic assumption change. The range of discount rates used is described in note 40(c)(ii). Outstanding claims provisions are valued net of an allowance for expected future recoveries. Recoveries include non-insurance assets that have been acquired by exercising rights to salvage and subrogation under the terms of insurance contracts. Where material, anticipated recoveries are disclosed under receivables and not deducted from outstanding claims provisions.

Provision for unearned premiums

The proportion of written premiums, gross of commission payable to intermediaries, attributable to subsequent periods is deferred as a provision for unearned premiums. The change in this provision is taken to the income statement as recognition of revenue over the period of risk.

Liability adequacy

At each reporting date, the Group reviews its unexpired risks and carries out a liability adequacy test for any overall excess of expected claims and deferred acquisition costs over unearned premiums, using the current estimates of future cash flows under its contracts after taking account of the investment return expected to arise on assets relating to the relevant general business provisions. If these estimates show that the carrying amount of its insurance liabilities (less related deferred acquisition costs) is insufficient in light of the estimated future cash flows, the deficiency is recognised in the income statement by setting up a provision in the statement of financial position.

Other assessments and levies

The Group is subject to various periodic insurance-related assessments or guarantee fund levies. Related provisions are established where there is a present obligation (legal or constructive) as a result of a past event. Such amounts are not included in insurance liabilities but are included under 'Pension deficits and other provisions' in the statement of financial position.

(M) Non-participating investment contract liabilities

Claims

For non-participating investment contracts with an account balance, claims reflect the excess of amounts paid over the account balance released.

Contract liabilities

Deposits collected under non-participating investment contracts are not accounted for through the income statement, except for the investment income attributable to those contracts, but are accounted for directly through the statement of financial position as an adjustment to the investment contract liability.

The majority of the Group's contracts classified as non-participating investment contracts are unit-linked contracts and are measured at fair value. Certain liabilities for non-linked non-participating contracts are measured at amortised cost.

The liability's fair value is determined using a valuation technique to provide a reliable estimate of the amount for which the liability could be transferred in an orderly transaction between market participants at the measurement date, subject to a minimum equal to the surrender value. For unit-linked contracts, the fair value liability is equal to the current unit fund value, including any unfunded units. In addition, if required, non-unit reserves are held based on a discounted cash flow analysis. For non-linked contracts, the fair value liability is based on a discounted cash flow analysis, with allowance for risk calibrated to match the market price for risk.

Amortised cost is calculated as the fair value of consideration received at the date of initial recognition, less the net effect of payments such as transaction costs and front-end fees, plus or minus the cumulative amortisation (using the effective interest rate method) of any difference between that initial amount and the maturity value, and less any write-down for surrender payments. The effective interest rate is the one that equates the discounted cash payments to the initial amount. At each reporting date, the amortised cost liability is determined as the value of future best estimate cash flows discounted at the effective interest rate.

(N) Reinsurance

The Group assumes and cedes reinsurance in the normal course of business, with retention limits varying by line of business. Premiums on reinsurance assumed are recognised as revenue in the same manner as they would be if the reinsurance were considered direct business, taking into account the product classification of the reinsured business. The cost of reinsurance related to long-duration contracts is accounted for over the life of the underlying reinsured policies, using assumptions consistent with those used to account for these policies.

Where general insurance liabilities are discounted, any corresponding reinsurance assets are also discounted using consistent assumptions.

Gains or losses on buying retroactive reinsurance are recognised in the income statement immediately at the date of purchase and are not amortised. Premiums ceded and claims reimbursed are presented on a gross basis in the consolidated income statement and statement of financial position as appropriate.

Reinsurance assets primarily include balances due from both insurance and reinsurance companies for ceded insurance and investment contract liabilities. This includes balances in respect of investment contracts which are legally reinsurance contracts but do not meet the definition of a reinsurance contract under IFRS. Amounts recoverable from reinsurers are estimated in a manner consistent with the underlying contract liabilities, outstanding claims provisions or settled claims associated with the reinsured policies and in accordance with the relevant reinsurance contract.

Reinsurance of non-participating investment contracts and reinsurance contracts that principally transfer financial risk are

accounted for directly through the statement of financial position. A deposit asset or liability is recognised, based on the consideration paid or received less any explicitly identified premiums or fees to be retained by the reinsured. These deposit assets or liabilities are shown within reinsurance assets in the consolidated statement of financial position.

If a reinsurance asset is impaired, the Group reduces the carrying amount accordingly and recognises that impairment loss in the income statement. A reinsurance asset is impaired if there is objective evidence, as a result of an event that occurred after initial recognition of the reinsurance asset, that the Group may not receive all amounts due to it under the terms of the contract, and the event has a reliably measurable impact on the amounts that the Group will receive from the reinsurer.

(O) Goodwill, AVIF and intangible assets

Goodwill

Goodwill represents the excess of the cost of an acquisition over the fair value of the Group's share of the net assets of the acquired subsidiary, associate or joint venture at the date of acquisition. Goodwill arising on the Group's investments in subsidiaries is shown as a separate asset, while that on associates and joint ventures is included within the carrying value of those investments.

Goodwill on acquisitions prior to 1 January 2004 (the date of transition to IFRS) is carried at its book value (original cost less cumulative amortisation) on that date, less any impairment subsequently incurred. Goodwill arising before 1 January 1998 was eliminated against reserves and has not been reinstated.

Acquired value of in-force business (AVIF)

The present value of future profits on a portfolio of long-term insurance and investment contracts, acquired either directly or through the purchase of a subsidiary, is recognised as an asset.

If the AVIF results from the acquisition of an investment in a joint venture or an associate, it is held within the carrying amount of that investment. In all cases, the AVIF is amortised over the useful lifetime of the related contracts in the portfolio on a systematic basis. The rate of amortisation is chosen by considering the profile of the additional value of in-force business acquired and the expected depletion in its value.

Non-participating investment contract AVIF is reviewed for evidence of impairment, consistent with reviews conducted for other finite life intangible assets. Insurance and participating investment contract AVIF is reviewed for impairment at each reporting date as part of the liability adequacy requirements of IFRS 4 (see accounting policy L). AVIF is reviewed for evidence of impairment and impairment tested at product portfolio level by reference to a projection of future profits arising from the portfolio.

Intangible assets

Intangible assets consist primarily of contractual relationships such as access to distribution networks, customer lists and software. The economic lives of these are determined by considering relevant factors such as usage of the asset, typical product life cycles, potential obsolescence, maintenance costs, the stability of the industry, competitive position and the period of control over the assets. These intangibles are amortised over their useful lives, which range from three to 30 years, using the straight-line method.

The amortisation charge for the year is included in the income statement under 'Other expenses'. For intangibles with finite lives, impairment charges will be recognised in the income statement where evidence of such impairment is observed. Intangibles with indefinite lives are subject to regular impairment testing, as described below.

Impairment testing

For impairment testing, goodwill and intangible assets with indefinite useful lives have been allocated to cash-generating units.

The carrying amount of goodwill and intangible assets with indefinite useful lives is reviewed at least annually or when circumstances or events indicate there may be uncertainty over this value. Goodwill and indefinite life intangibles are written down for impairment where the recoverable amount is insufficient to support its carrying value. Further details on goodwill allocation and impairment testing are given in note 16. Any impairments are charged as expenses in the income statement.

(P) Property and equipment

Owner-occupied properties are carried at their revalued amounts, and movements are recognised in other comprehensive income and taken to a separate reserve within equity. When such properties are sold, the accumulated revaluation surpluses are transferred from this reserve to retained earnings. These properties are depreciated down to their estimated residual values over their useful lives. All other items classed as property and equipment within the statement of financial position are carried at historical cost less accumulated depreciation.

Investment properties under construction are included within property and equipment until completion, and are stated at cost less any provision for impairment in their values until construction is completed or fair value becomes reliably measurable.

Depreciation is calculated on the straight-line method to write down the cost of other assets to their residual values over their estimated useful lives as follows:

• Properties under construction	No depreciation
• Owner-occupied properties, and related mechanical and electrical equipment	25 years
• Motor vehicles	Three years, or lease term (up to useful life) if longer
• Computer equipment	Three to five years
• Other assets	Three to five years

The assets' residual values, useful lives and method of depreciation are reviewed regularly, and at least at each financial year end, and adjusted if appropriate. Where the carrying amount of an asset is greater than its estimated recoverable amount, it is written down immediately to its recoverable amount. Gains and losses on disposal of property and equipment are determined by reference to their carrying amount.

Borrowing costs directly attributable to the acquisition and construction of property and equipment are capitalised. All repair and maintenance costs are charged to the income statement during the financial period in which they are incurred. The cost of major renovations is included in the carrying amount of the asset when it is probable that future economic benefits in excess of the most recently assessed standard of performance of the existing asset will flow to the Group and the renovation replaces an identifiable part of the asset. Major renovations are depreciated over the remaining useful life of the related asset.

(Q) Investment property

Investment property is held for long-term rental yields and is not occupied by the Group. Completed investment property is stated at its fair value, as assessed by qualified external valuers or by local qualified staff of the Group. Changes in fair values are recorded in the income statement in net investment income.

As described in accounting policy P above, investment properties under construction are included within property and equipment, and are stated at cost less any impairment in their values until construction is completed or fair value becomes reliably measurable.

(R) Impairment of non-financial assets

Property and equipment and other non-financial assets are reviewed for impairment losses whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised in the income statement for the amount by which the carrying amount of the asset exceeds its recoverable amount, which is the higher of an asset's fair value less costs of disposal and value in use. For the purposes of assessing impairment, assets are grouped at the lowest level for which there are separately identifiable cash flows. Non-financial assets except goodwill which have suffered an impairment are reviewed for possible reversal of the impairment at each reporting date.

(S) Derecognition and offset of financial assets and financial liabilities

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is derecognised where:

- The rights to receive cash flows from the asset have expired;
- The Group retains the right to receive cash flows from the asset, but has assumed an obligation to pay them in full without material delay to a third party under a 'pass-through' arrangement; or
- The Group has transferred its rights to receive cash flows from the asset and has either transferred substantially all the risks and rewards of the asset, or has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires.

Financial assets and liabilities are offset and the net amount reported in the statement of financial position when there is a currently enforceable legal right to set off the recognised amounts and there is the ability and intention to settle on a net basis, or realise the asset and settle the liability simultaneously.

(T) Financial investments

The Group classifies its investments as either FVTPL or AFS. The classification depends on the purpose for which the investments were acquired, and is determined by local management at initial recognition. The FVTPL category has two subcategories – those that meet the definition as being held for trading and those the Group chooses to designate as FVTPL (referred to in this accounting policy as 'other than trading') upon initial recognition.

In general, the other than trading category is used as, in most cases, the Group's investment or risk management strategy is to manage its financial investments on a fair value basis. Debt securities and equity securities, which the Group acquires with the intention to resell in the short term, are classified as trading, as are non-hedge derivatives (see accounting policy U below). The AFS category is used where the relevant long-term business liability (including shareholders' funds) is passively managed, as well as in certain fund management and non-insurance operations.

Purchases and sales of investments are recognised on the trade date, which is the date that the Group commits to purchase or sell the assets, at their fair values. Debt securities are initially recorded at their fair value, which is taken to be amortised cost, with amortisation credited or charged to the income statement. Investments classified as trading, other than trading and AFS, are subsequently carried at fair value. Changes in the fair value of trading and other than trading investments are included in the income statement in the period in which they arise.

Changes in the fair value of securities classified as AFS are recognised in other comprehensive income and recorded in a separate investment valuation reserve within equity. When securities classified as AFS are sold or impaired, the accumulated

fair value adjustments are transferred out of the investment valuation reserve to the income statement with a corresponding movement through other comprehensive income.

Impairment

The Group reviews the carrying value of its AFS investments on a regular basis. If the carrying value of an AFS investment is greater than the recoverable amount, the carrying value is reduced through a charge to the income statement in the period of impairment. The following policies are used to determine the level of any impairment, some of which involve considerable judgement:

AFS debt securities

An AFS debt security is impaired if there is objective evidence that a loss event has occurred which has impaired the expected cash flows, i.e. where all amounts due according to the contractual terms of the security are not considered collectible. An impairment charge, measured as the difference between the security's fair value and amortised cost, is recognised when the issuer is known to be either in default or in financial difficulty. Determining when an issuer is in financial difficulty requires the use of judgement, and we consider a number of factors including industry risk factors, financial condition, liquidity position and near-term prospects of the issuer, credit rating declines and a breach of contract. A decline in fair value below amortised cost due to changes in risk-free interest rates does not necessarily represent objective evidence of a loss event.

For securities identified as being impaired, the cumulative unrealised loss previously recognised within the investment valuation reserve is transferred to realised losses for the year, with a corresponding movement through other comprehensive income. Any subsequent increase in fair value of these impaired securities is recognised in other comprehensive income and recorded in the investment valuation reserve unless this increase represents a decrease in the impairment loss that can be objectively related to an event occurring after the impairment loss was recognised in the income statement. In such an event, the reversal of the impairment loss is recognised as a gain in the income statement.

AFS equity securities

An AFS equity security is considered impaired if there is objective evidence that the cost may not be recovered. In addition to qualitative impairment criteria, such evidence includes a significant or prolonged decline in fair value below cost. Unless there is evidence to the contrary, an equity security is considered impaired if the decline in fair value relative to cost has been either at least 20% for a continuous six-month period or more than 40% at the end of the reporting period, or been in an unrealised loss position for a continuous period of more than 12 months at the end of the reporting period. We also review our largest equity holdings for evidence of impairment, as well as individual equity holdings in industry sectors known to be in difficulty. Where there is objective evidence that impairment exists, the security is written down regardless of the size of the unrealised loss.

For securities identified as being impaired, the cumulative unrealised loss previously recognised within the investment valuation reserve is transferred to realised losses for the year with a corresponding movement through other comprehensive income. Any subsequent increase in fair value of these impaired securities is recognised in other comprehensive income and recorded in the investment valuation reserve.

Reversals of impairments on any of these assets are only recognised where the decrease in the impairment can be objectively related to an event occurring after the write-down (such as an improvement in the debtor's credit rating), and are not recognised in respect of equity instruments.

(U) Derivative financial instruments and hedging

Derivative financial instruments include foreign exchange contracts, interest rate futures, currency and interest rate swaps, currency and interest rate options (both written and purchased) and other financial instruments that derive their value mainly from underlying interest rates, foreign exchange rates, credit or equity indices, commodity values or equity instruments.

All derivatives are initially recognised in the statement of financial position at their fair value, which usually represents their cost. They are subsequently remeasured at their fair value, with the method of recognising movements in this value depending on whether they are designated as hedging instruments and, if so, the nature of the item being hedged. Fair values are obtained from quoted market prices or, if these are not available, by using valuation techniques such as discounted cash flow models or option pricing models. All derivatives are carried as assets when the fair values are positive and as liabilities when the fair values are negative. Premiums paid for derivatives are recorded as an asset on the statement of financial position at the date of purchase, representing their fair value at that date.

Derivative contracts may be traded on an exchange or over-the-counter (OTC). Exchange-traded derivatives are standardised and include certain futures and option contracts. OTC derivative contracts are individually negotiated between contracting parties and include forwards, swaps, caps and floors. Derivatives are subject to various risks including market, liquidity and credit risk, similar to those related to the underlying financial instruments. Many OTC transactions are contracted and documented under International Swaps and Derivatives Association master agreements or their equivalent, which are designed to provide legally enforceable set-off in the event of default, reducing the Group's exposure to credit risk.

The notional or contractual amounts associated with derivative financial instruments are not recorded as assets or liabilities on the statement of financial position as they do not represent the fair value of these transactions. These amounts are disclosed in note 57(b).

The Group has collateral agreements in place between the individual Group entities and relevant counterparties. Accounting policy W covers collateral, both received and pledged, in respect of these derivatives.

Interest rate and currency swaps

Interest rate swaps are contractual agreements between two parties to exchange fixed rate and floating rate interest by means of periodic payments, calculated on a specified notional amount and defined interest rates. Most interest rate swap payments are netted against each other, with the difference between the fixed and floating rate interest payments paid by one party. Currency swaps, in their simplest form, are contractual agreements that involve the exchange of both periodic and final amounts in two different currencies. Both types of swap contracts may include the net exchange of principal. Exposure to gain or loss on these contracts will increase or decrease over their respective lives as a function of maturity dates, interest and foreign exchange rates, and the timing of payments.

Interest rate futures, forwards and options contracts

Interest rate futures are exchange-traded instruments and represent commitments to purchase or sell a designated security or money market instrument at a specified future date and price. Interest rate forward agreements are OTC contracts in which two parties agree on an interest rate and other terms that will become a reference point in determining, in concert with an agreed notional principal amount, a net payment to be made by one party to the other, depending upon what rate prevails at a future point in time. Interest rate options, which consist primarily of caps and floors, are interest rate protection instruments that involve the potential obligation of

the seller to pay the buyer an interest rate differential in exchange for a premium paid by the buyer. This differential represents the difference between current rate and an agreed rate applied to a notional amount. Exposure to gain or loss on all interest rate contracts will increase or decrease over their respective lives as interest rates fluctuate. Certain contracts, known as swaptions, contain features which can act as swaps or options.

Foreign exchange contracts

Foreign exchange contracts, which include spot, forward and futures contracts, represent agreements to exchange the currency of one country for the currency of another country at an agreed price and settlement date. Foreign exchange option contracts are similar to interest rate option contracts, except that they are based on currencies, rather than interest rates.

Derivative instruments for hedging

On the date a derivative contract is entered into, the Group designates certain derivatives as either:

- (i) a hedge of the fair value of a recognised asset or liability (fair value hedge);
- (ii) a hedge of a future cash flow attributable to a recognised asset or liability, a highly probable forecast transaction or a firm commitment (cash flow hedge); or
- (iii) a hedge of a net investment in a foreign operation (net investment hedge).

Hedge accounting is used for derivatives designated in this way, provided certain criteria are met. At the inception of the transaction, the Group documents the relationship between the hedging instrument and the hedged item, as well as the risk management objective and the strategy for undertaking the hedge transaction. The Group also documents its assessment of whether the hedge is expected to be, and has been, highly effective in offsetting the risk in the hedged item, both at inception and on an ongoing basis.

Changes in the fair value of derivatives that are designated and qualify as net investment or cash flow hedges, and that prove to be highly effective in relation to the hedged risk, are recognised in other comprehensive income and a separate reserve within equity. Gains and losses accumulated in this reserve are included in the income statement on disposal of the relevant investment or occurrence of the cash flow as appropriate.

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recognised in the income statement. The gain or loss on the hedged item that is attributable to the hedged risk is recognised in the income statement. This applies even if the hedged item is an available for sale financial asset or is measured at amortised cost. If a hedging relationship no longer meets the criteria for hedge accounting, the cumulative adjustment made to the carrying amount of the hedged item is amortised to the income statement, based on a recalculated effective interest rate over the residual period to maturity. In cases where the hedged item has been derecognised, the cumulative adjustment is released to the income statement immediately.

For a variety of reasons, certain derivative transactions, while providing effective economic hedges under the Group's risk management positions, do not qualify for hedge accounting under the specific IFRS rules and are therefore treated as derivatives held for trading. Their fair value gains and losses are recognised immediately in net investment income.

(V) Loans

Loans with fixed maturities, including policyholder loans, mortgage loans on investment property, securitised mortgages and collateral loans, are recognised when cash is advanced to borrowers. Certain 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 as an adjustment to loan yield using the effective interest rate method.

However, for the majority of mortgage loans, the Group has taken advantage of the fair value option under IAS 39 to present the mortgages, associated borrowings and derivative financial instruments at fair value, since they are managed as a portfolio on a fair value basis. This presentation provides more relevant information and eliminates any accounting mismatch that would otherwise arise from using different measurement bases for these three items. The fair values of these mortgages are estimated using discounted cash flow models, based on a risk-adjusted discount rate which reflects the risks associated with these products. They are revalued at each period end, with movements in their fair values being taken to the income statement.

At each reporting date, we review loans carried at amortised cost for objective evidence that they are impaired and uncollectable, either at the level of an individual security or collectively within a group of loans with similar credit risk characteristics. To the extent that a loan is uncollectable, it is written down as impaired to its recoverable amount, measured as the present value of expected future cash flows discounted at the original effective interest rate of the loan, taking into account the fair value of the underlying collateral through an impairment provision account. Subsequent recoveries in excess of the loan's written-down carrying value are credited to the income statement.

(W) Collateral

The Group receives and pledges collateral in the form of cash or non-cash assets in respect of stock lending transactions, certain derivative contracts and loans, in order to reduce the credit risk of these transactions. Collateral is also pledged as security for bank letters of credit. The amount and type of collateral required depends on an assessment of the credit risk of the counterparty.

Collateral received in the form of cash, which is not legally segregated from the Group, is recognised as an asset in the statement of financial position with a corresponding liability for the repayment in financial liabilities (note 58). However, where the Group has a currently enforceable legal right of set-off and the ability and intent to net settle, the collateral liability and associated derivative balances are shown net. Non-cash collateral received is not recognised in the statement of financial position unless the transfer of the collateral meets the derecognition criteria from the perspective of the transferor. Such collateral is typically recognised when the Group either (a) sells or repledges these assets in the absence of default, at which point the obligation to return this collateral is recognised as a liability; or (b) the counterparty to the arrangement defaults, at which point the collateral is seized and recognised as an asset.

Collateral pledged in the form of cash, which is legally segregated from the Group, is derecognised from the statement of financial position with a corresponding receivable recognised for its return. Non-cash collateral pledged is not derecognised from the statement of financial position unless the Group defaults on its obligations under the relevant agreement, and therefore continues to be recognised in the statement of financial position within the appropriate asset classification.

(X) Deferred acquisition costs and other assets

Costs relating to the acquisition of new business for insurance and participating investment contracts are deferred in line with existing local accounting practices, to the extent that they are expected to be recovered out of future margins in revenues on these contracts. For participating contracts written in the UK, acquisition costs are generally not deferred as the liability for these contracts is calculated on a realistic basis which was grandfathered from UK regulatory requirements prior to the adoption of Solvency II (see

accounting policy L). For non-participating investment and investment fund management contracts, incremental acquisition costs and sales enhancements that are directly attributable to securing an investment management service are also deferred.

Where such business is reinsured, an appropriate proportion of the deferred acquisition costs is attributed to the reinsurer.

Long-term business deferred acquisition costs are amortised systematically over a period no longer than that in which they are expected to be recoverable out of these future margins. Deferred acquisition costs for non-participating investment and investment fund management contracts are amortised over the period in which the service is provided. General insurance and health deferred acquisition costs are amortised over the period in which the related revenues are earned. The reinsurers' share of deferred acquisition costs is amortised in the same manner as the underlying asset.

Deferred acquisition costs are reviewed by category of business at the end of each reporting period and are written-off where they are no longer considered to be recoverable.

Other receivables and payables are initially recognised at cost, being fair value. Subsequent to initial measurement they are measured at amortised cost.

(Y) Statement of cash flows

Cash and cash equivalents

Cash and cash equivalents consist of cash at bank and in hand, deposits held at call with banks, treasury bills and other short-term highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of change in value. Such investments are those with less than three months' maturity from the date of acquisition, or which are redeemable on demand with only an insignificant change in their fair values.

For the purposes of the statement of cash flows, cash and cash equivalents also include bank overdrafts, which are included in payables and other financial liabilities on the statement of financial position.

Operating cash flows

Purchases and sales of investment property, loans and financial investments are included within operating cash flows as the purchases are funded from cash flows associated with the origination of insurance and investment contracts, net of payments of related benefits and claims.

(Z) Leases

Leases, where a significant portion of the risks and rewards of ownership is retained by the lessor, are classified as operating leases. Where the Group is the lessee, payments made under operating leases (net of any incentives received from the lessor) are charged to the income statement on a straight-line basis over the term of the relevant leases.

Where the Group is the lessor, lease income from operating leases is recognised in the income statement on a straight-line basis over the lease term.

When assets are subject to finance leases, the present value of the lease payments, together with any unguaranteed residual value, is recognised as a receivable. The Group has not entered into any material finance lease arrangements either as lessor or lessee.

(AA) Provisions and contingent liabilities

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, it is more probable than not that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate of the amount of the obligation can be made. Restructuring provisions include lease termination penalties and employee termination payments. They comprise only the direct expenditures arising from

the restructuring, which are those that are necessarily entailed by the restructuring; and not associated with the ongoing activities of the entity. The amount recorded as a provision is the best estimate of the expenditure required to settle the present obligation at the balance sheet date. Where the effect of the time value of money is material, the provision is the present value of the expected expenditure. Provisions are not recognised for future operating losses.

Where the Group expects a provision to be reimbursed, for example under an insurance contract, the reimbursement is recognised as a separate asset but only when the reimbursement is virtually certain.

The Group recognises a provision for onerous contracts when the expected benefits to be derived from a contract are less than the unavoidable costs of meeting the obligations under the contract. Contingent liabilities are disclosed if there is a possible future obligation as a result of a past event, or if there is a present obligation as a result of a past event but either a payment is not probable or the amount cannot be reasonably estimated.

(AB) Employee benefits

Pension obligations

The Group operates a number of pension schemes, whose members receive benefits on either a defined benefit or defined contribution basis. Under a defined contribution plan, the Group's legal or constructive obligation is limited to the amount it agrees to contribute to a fund and there is no obligation to pay further contributions if the fund does not hold sufficient assets to pay benefits. A defined benefit pension plan is a pension plan that is not a defined contribution plan and typically defines the amount of pension benefit that an employee will receive on retirement.

The defined benefit obligation is calculated by independent actuaries using the projected unit credit method. The pension obligation is measured as the present value of the estimated future cash outflows, using a discount rate based on market yields for high-quality corporate bonds that are denominated in the currency in which the benefits will be paid and that have terms to maturity approximating to the terms of the related pension liability. The resultant net surplus or deficit recognised as an asset or liability on the statement of financial position is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets.

Plan assets exclude unpaid contributions due from Group entities to the schemes, and any non-transferrable financial instruments issued by a Group entity and held by the schemes. If the fair value of plan assets exceeds the present value of the defined benefit obligation, the resultant asset is limited to the asset ceiling defined as present value of economic benefits available in the form of future refunds from the plan or reductions in contributions to the plan. In order to calculate the present value of economic benefits, consideration is given to any minimum funding requirements that apply to any plan in the Group.

Remeasurements of defined benefit plans comprise actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions, the return on plan assets (excluding net interest) and the effect of the asset ceiling (if any). The Group recognises remeasurements immediately in other comprehensive income and does not reclassify them to the income statement in subsequent periods.

Service costs comprising current service costs, past service costs, gains and losses on curtailments and net interest expense/(income) are charged or credited to the income statement.

Past service costs are recognised at the earlier of the date the plan amendment or curtailment occurs or when related restructuring costs are recognised.

The Group determines the net interest expense/(income) on the net defined benefit liability/(asset) for the period by applying the

discount rate used to measure the defined benefit obligation at the beginning of the year to the net defined benefit liability/(asset). Net interest expense is charged to finance costs, whereas, net interest income is credited to investment income.

For defined contribution plans, the Group pays contributions to publicly or privately administered pension plans. Once the contributions have been paid, the Group, as employer, has no further payment obligations. The Group's contributions are charged to the income statement in the year to which they relate and are included in staff costs.

Equity compensation plans

The Group offers share award and option plans over the Company's ordinary shares for certain employees, including a Save As You Earn plan (SAYE plan), details of which are given in the Directors' Remuneration Report and in note 31.

The Group accounts for options and awards under equity compensation plans, which were granted after 7 November 2002, until such time as they are fully vested, using the fair value based method of accounting (the 'fair value method'). Under this method, the cost of providing equity compensation plans is based on the fair value of the share awards or option plans at date of grant, which is recognised in the income statement over the expected vesting period of the related employees and credited to the equity compensation reserve, part of shareholders' funds. In certain jurisdictions, awards must be settled in cash instead of shares, and the credit is taken to liabilities rather than reserves. The fair value of these cash-settled awards is recalculated each year, with the income statement charge and liability being adjusted accordingly.

Shares purchased by employee share trusts to fund these awards are shown as deduction from shareholders' equity at their weighted average cost.

When the options are exercised and new shares are issued, the proceeds received, net of any transaction costs, are credited to share capital (par value) and the balance to share premium. Where the shares are already held by employee trusts, the net proceeds are credited against the cost of these shares, with the difference between cost and proceeds being taken to retained earnings. In both cases, the relevant amount in the equity compensation reserve is then credited to retained earnings.

(AC) Income taxes

The current tax expense is based on the taxable profits for the year, after any adjustments in respect of prior years. Tax, including tax relief for losses if applicable, is allocated over profits before taxation and amounts charged or credited to components of other comprehensive income and equity, as appropriate.

Provision is made for deferred tax liabilities, or credit taken for deferred tax assets, using the liability method, on all material temporary differences between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements.

The principal temporary differences arise from depreciation of property and equipment, revaluation of certain financial assets and liabilities including derivative contracts, technical provisions and other insurance items, provisions for pensions and other post-retirement benefits and tax losses carried forward; and, in relation to acquisitions, on the difference between the fair values of the net assets acquired and their tax base. The rates enacted or substantively enacted at the statement of financial position date are used to value the deferred tax assets and liabilities.

Deferred tax assets are recognised to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised. In countries where there is a history of tax losses, deferred tax assets are only recognised in excess of deferred tax liabilities if there is convincing evidence that future profits will be available.

Deferred tax is provided on temporary differences arising from investments in subsidiaries, associates and joint ventures, except where the timing of the reversal of the temporary difference can be controlled and it is probable that the difference will not reverse in the foreseeable future.

Deferred taxes are not provided in respect of temporary differences arising from the initial recognition of goodwill, or from the initial recognition of an asset or liability in a transaction which is not a business combination and affects neither accounting profit nor taxable profit or loss at the time of the transaction.

Current and deferred tax relating to items recognised in other comprehensive income and directly in equity are similarly recognised in other comprehensive income and directly in equity respectively. Deferred tax related to fair value re-measurement of available for sale investments, pensions and other post-retirement obligations and other amounts charged or credited directly to other comprehensive income is recognised in the statement of financial position as a deferred tax asset or liability. Current tax on interest paid on the direct capital instrument and tier 1 notes is credited directly in equity.

In addition to paying tax on shareholders' profits ('shareholder tax'), the Group's life businesses in the UK, Ireland and Singapore pay tax on policyholders' investment returns ('policyholder tax') on certain products at policyholder tax rates. The incremental tax borne by the Group represents income tax on policyholder's investment return. In jurisdictions where policyholder tax is applicable, the total tax charge in the income statement is allocated between shareholder tax and policyholder tax. The shareholder tax is calculated by applying the corporate tax rate to the shareholder profit. The difference between the total tax charge and shareholder tax is allocated to policyholder tax. This calculation methodology is consistent with the legislation relating to the calculation of tax on shareholder profits. The Group has decided to show separately the amounts of policyholder tax to provide a meaningful measure of the tax the Group pays on its profit. In the pro forma reconciliations, the Group adjusted operating profit has been calculated after charging policyholder tax.

(AD) Borrowings

Borrowings are classified as being for either core structural or operational purposes. They are recognised initially at their issue proceeds less transaction costs incurred. Subsequently, most borrowings are stated at amortised cost, and any difference between net proceeds and the redemption value is recognised in the income statement over the period of the borrowings using the effective interest rate method. All borrowing costs are expensed as they are incurred except where they are directly attributable to the acquisition or construction of property and equipment as described in accounting policy P.

Where loan notes have been issued in connection with certain securitised mortgage loans, the Group has taken advantage of the fair value option under IAS 39 to present the mortgages, associated liabilities and derivative financial instruments at fair value, since they are managed as a portfolio on a fair value basis. This presentation provides more relevant information and eliminates any accounting mismatch which would otherwise arise from using different measurement bases for these three items.

(AE) Share capital and treasury shares

Equity instruments

An equity instrument is a contract that evidences a residual interest in the assets of an entity after deducting all its liabilities.

Accordingly, a financial instrument is treated as equity if:

- (i) there is no contractual obligation to deliver cash or other financial assets or to exchange financial assets or liabilities on terms that may be unfavourable; and

- (ii) the instrument is a non-derivative that contains no contractual obligation to deliver a variable number of shares or is a derivative that will be settled only by the Group exchanging a fixed amount of cash or other assets for a fixed number of the Group's own equity instruments.

Share issue costs

Incremental external costs directly attributable to the issue of new shares are shown in equity as a deduction, net of tax, from the proceeds of the issue and disclosed where material.

Dividends

Interim dividends on ordinary shares are recognised in equity in the period in which they are paid. Final dividends on these shares are recognised when they have been approved by shareholders. Dividends on preference shares are recognised in the period in which they are declared and appropriately approved.

Treasury shares

Where the Company or its subsidiaries purchase the Company's share capital or obtain rights to purchase its share capital, the consideration paid (including any attributable transaction costs net of income taxes) is shown as a deduction from total shareholders' equity. Gains and losses on own shares are charged or credited to the treasury share account in equity.

(AF) Fiduciary activities

Assets and income arising from fiduciary activities, together with related undertakings to return such assets to customers, are excluded from these financial statements where the Group has no contractual rights in the assets and acts in a fiduciary capacity such as nominee, trustee or agent.

(AG) Earnings per share

Basic earnings per share is calculated by dividing net income available to ordinary shareholders by the weighted average number of ordinary shares in issue during the year, excluding the weighted average number of treasury shares.

Earnings per share has also been calculated on Group adjusted operating profit attributable to ordinary shareholders, net of tax, non-controlling interests, preference dividends, the direct capital instrument (the DCI) and tier one notes as the directors believe this figure provides a better indication of operating performance. Details are given in note 14.

For the diluted earnings per share, the weighted average number of ordinary shares in issue is adjusted to assume conversion of all dilutive potential ordinary shares, such as convertible debt and share options granted to employees.

Potential or contingent share issuances are treated as dilutive when their conversion to shares would decrease net earnings per share.

(AH) Operations held for sale

Assets and liabilities held for disposal as part of operations which are held for sale are shown separately in the consolidated statement of financial position. Operations held for sale are recorded at the lower of their carrying amount and their fair value less the estimated selling costs.

Consolidated financial statements**Consolidated income statement**

For the year ended 31 December 2017

	Note	2017 £m	2016 £m
Income			
Gross written premiums	5	27,606	25,442
Premiums ceded to reinsurers		(2,229)	(2,364)
Premiums written net of reinsurance		25,377	23,078
Net change in provision for unearned premiums		(153)	(210)
Net earned premiums	H	25,224	22,868
Fee and commission income	I&J	2,187	1,962
Net investment income	K	22,066	30,257
Share of profit after tax of joint ventures and associates		41	216
Profit/(loss) on the disposal and remeasurement of subsidiaries, joint ventures and associates	3b	135	(11)
		49,653	55,292
Expenses			
Claims and benefits paid, net of recoveries from reinsurers	6	(24,113)	(23,782)
Change in insurance liabilities, net of reinsurance	40a(ii)	(1,074)	(6,893)
Change in investment contract provisions		(13,837)	(14,039)
Change in unallocated divisible surplus	45	294	(381)
Fee and commission expense		(4,329)	(3,885)
Other expenses		(3,537)	(3,853)
Finance costs	7	(683)	(626)
		(47,279)	(53,459)
Profit before tax		2,374	1,833
Tax attributable to policyholders' returns	13d	(371)	(640)
Profit before tax attributable to shareholders' profits		2,003	1,193
Tax expense	AC & 13	(728)	(974)
Less: tax attributable to policyholders' returns	13d	371	640
Tax attributable to shareholders' profits	13d	(357)	(334)
Profit for the year		1,646	859
Attributable to:			
Equity holders of Aviva plc		1,497	703
Non-controlling interests	38	149	156
Profit for the year		1,646	859
Earnings per share	AG & 14		
Basic (pence per share)		35.0p	15.3p
Diluted (pence per share)		34.6p	15.1p

The accounting policies (identified alphabetically) on pages 93 to 105 and notes (identified numerically) on pages 113 to 228 are an integral part of the financial statements.

Consolidated statement of comprehensive income

For the year ended 31 December 2017

	Note	2017 £m	2016 £m
Profit for the year		1,646	859
Other comprehensive income:			
<i>Items that may be reclassified subsequently to income statement</i>			
Investments classified as available for sale			
Fair value (losses)/gains	36	(7)	12
Fair value gains transferred to profit on disposals	36	(2)	(2)
Share of other comprehensive income of joint ventures and associates	36	6	(6)
Foreign exchange rate movements	36, 38	68	1,128
Aggregate tax effect – shareholder tax on items that may be reclassified subsequently to income statement	13b	5	(34)
<i>Items that will not be reclassified to income statement</i>			
Owner-occupied properties – fair value (losses)/gains	36	(1)	4
Remeasurements of pension schemes	37, 48b(i)	(5)	311
Aggregate tax effect – shareholder tax on items that will not be reclassified subsequently to income statement	13b	5	(70)
Total other comprehensive income, net of tax		69	1,343
Total comprehensive income for the year		1,715	2,202
Attributable to:			
Equity holders of Aviva plc		1,523	1,901
Non-controlling interests		192	301
		1,715	2,202

The accounting policies (identified alphabetically) on pages 93 to 105 and notes (identified numerically) on pages 113 to 228 are an integral part of the financial statements.

Reconciliation of Group adjusted operating profit to profit for the year

For the year ended 31 December 2017

	Note	2017 £m	2016 £m
Group adjusted operating profit before tax attributable to shareholders' profits			
Life business		2,882	2,642
General insurance and health		700	833
Fund management		164	138
Other:			
Other operations		(169)	(94)
Corporate centre		(184)	(184)
Group debt costs and other interest		(325)	(325)
Group adjusted operating profit before tax attributable to shareholders' profits	6	3,068	3,010
Integration and restructuring costs	6	(141)	(212)
Group adjusted operating profit before tax attributable to shareholders' profits after integration and restructuring costs		2,927	2,798
Adjusted for the following:			
Investment return variances and economic assumption changes on long-term business	8	34	379
Short-term fluctuation in return on investments on non-long-term business	9a	(345)	(518)
Economic assumption changes on general insurance and health business	9a	(7)	(242)
Impairment of goodwill, associates and joint ventures and other amounts expensed	16a, 19b	(49)	—
Amortisation and impairment of intangibles		(197)	(175)
Amortisation and impairment of acquired value of in-force business	17, 18(a), 19(b)	(495)	(540)
Profit/(loss) on the disposal and remeasurement of subsidiaries, joint ventures and associates	3b	135	(11)
Other ¹		—	(498)
Adjusting items before tax		(924)	(1,605)
Profit before tax attributable to shareholders' profits		2,003	1,193
Tax on Group adjusted operating profit	14ai(i)	(639)	(706)
Tax on other activities	14ai(i)	282	372
Profit for the year		(357)	(334)
		1,646	859

¹ Other items include an exceptional charge of £nil (2016: £475 million) relating to the impact of the change in the Ogden discount rate from 2.5% set in 2001 to minus 0.75% announced by the Lord Chancellor on 27 February 2017. Other items also include a charge of £nil (2016: £23 million), which represents the recognition of the loss upon the completion of an outwards reinsurance contract, written in 2015 by the UK General Insurance business, which provides significant protection against claims volatility from mesothelioma, industrial deafness and other long tail risks. The £23 million loss comprises £107 million in premiums ceded, less £78 million in reinsurance recoverables recognised and £6 million claims handling provisions released.

The accounting policies (identified alphabetically) on pages 93 to 105 and notes (identified numerically) on pages 113 to 228 are an integral part of the financial statements.

Reconciliation of Group adjusted operating profit to profit for the year continued

Group adjusted operating profit can be further analysed into the following segments (details of segments can be found in note 4):

Year ended 31 December 2017	Long-term business £m	General insurance and health £m	Fund management £m	Other operations £m	Total £m
United Kingdom	1,758	443	—	(26)	2,175
Canada	—	46	—	—	46
France	425	104	—	(29)	500
Poland	156	21	—	6	183
Italy, Ireland, Spain and Other	292	98	—	(14)	376
Asia	235	(8)	(4)	(32)	191
Aviva Investors	1	—	168	32	201
Other Group activities	15	(4)	—	(106)	(95)
	2,882	700	164	(169)	3,577
Corporate Centre					(184)
Group debt costs and other interest					(325)
Total					3,068

Year ended 31 December 2016 – restated ¹	Long-term business £m	General insurance and health £m	Fund management £m	Other operations £m	Total £m
United Kingdom	1,523	423	—	2	1,948
Canada	—	269	—	1	270
France	429	70	—	(18)	481
Poland	132	8	—	6	146
Italy, Ireland, Spain and Other	315	90	—	(13)	392
Asia	241	(13)	(1)	(26)	201
Aviva Investors	2	—	139	19	160
Other Group activities	—	(14)	—	(65)	(79)
	2,642	833	138	(94)	3,519
Corporate Centre					(184)
Group debt costs and other interest					(325)
Total					3,010

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.

The accounting policies (identified alphabetically) on pages 93 to 105 and notes (identified numerically) on pages 113 to 228 are an integral part of the financial statements.

Consolidated statement of changes in equity

For the year ended 31 December 2017

	Ordinary share capital Note 30 £m	Preference share capital Note 33 £m	Capital reserves ¹ Note 30b, 35 £m	Treasury shares Note 32 £m	Currency translation reserve Note 36 £m	Other reserves Note 36 £m	Retained earnings Note 37 £m	DCI and tier 1 notes Note 34 £m	Total equity excluding non-controlling interest £m	Non-controlling interests Note 38 £m	Total equity £m
Balance at 1 January	1,015	200	10,171	(15)	1,146	(349)	4,835	1,123	18,126	1,425	19,551
Profit for the year	—	—	—	—	—	—	1,497	—	1,497	149	1,646
Other comprehensive income	—	—	—	—	121	(93)	(2)	—	26	43	69
Total comprehensive income for the year	—	—	—	—	121	(93)	1,495	—	1,523	192	1,715
Owner-occupied properties fair value gains transferred to retained earnings on disposals	—	—	—	—	—	(2)	2	—	—	—	—
Dividends and appropriations	—	—	—	—	—	—	(1,081)	—	(1,081)	—	(1,081)
Non-controlling interests share of dividends declared in the year	—	—	—	—	—	—	—	—	—	(103)	(103)
Transfer to profit on disposal of subsidiaries, joint ventures and associates	—	—	—	—	(126)	137	1	—	12	—	12
Capital contributions from non-controlling interests	—	—	—	—	—	—	—	—	—	36	36
Changes in non-controlling interests in subsidiaries	—	—	—	—	—	—	—	—	—	(315)	(315)
Treasury shares held by subsidiary companies	—	—	—	1	—	—	—	—	1	—	1
Reserves credit for equity compensation plans	—	—	—	—	—	77	—	—	77	—	77
Shares issued under equity compensation plans	2	—	10	—	—	(44)	42	—	10	—	10
Shares purchased in buy-back	(14)	—	14	—	—	(300)	—	(300)	—	(300)	—
Reclassification of tier 1 notes to financial liabilities ²	—	—	—	—	—	(92)	(392)	(484)	—	(484)	—
Aggregate tax effect – shareholder tax	—	—	—	—	—	16	—	16	—	16	—
Balance at 31 December	1,003	200	10,195	(14)	1,141	(274)	4,918	731	17,900	1,235	19,135

1 Capital reserves consist of share premium of £1,207 million, a capital redemption reserve of £14 million arising as a result of the shares purchased in buy-back and a merger reserve of £8,974 million. See note 30 for further details of the shares purchased in buy-back.

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 has been charged to retained earnings. See note 34 for further details.

For the year ended 31 December 2016

	Ordinary share capital Note 30 £m	Preference share capital Note 33 £m	Capital reserves ¹ Note 30b, 35 £m	Treasury shares Note 32 £m	Currency translation reserve Note 36 £m	Other reserves Note 36 £m	Retained earnings Note 37 £m	DCI and tier 1 notes Note 34 £m	Total equity excluding non-controlling interest £m	Non-controlling interests Note 38 £m	Total equity £m
Balance at 1 January	1,012	200	10,159	(29)	165	(279)	4,774	1,123	17,125	1,145	18,270
Profit for the year	—	—	—	—	—	—	703	—	703	156	859
Other comprehensive income	—	—	—	—	988	(32)	242	—	1,198	145	1,343
Total comprehensive income for the year	—	—	—	—	988	(32)	945	—	1,901	301	2,202
Owner-occupied properties fair value gains transferred to retained earnings on disposals	—	—	—	—	—	(46)	46	—	—	—	—
Dividends and appropriations	—	—	—	—	—	—	(973)	—	(973)	—	(973)
Non-controlling interests share of dividends declared in the year	—	—	—	—	—	—	—	—	—	(135)	(135)
Transfer to profit on disposal of subsidiaries, joint ventures and associates	—	—	—	—	(7)	—	—	—	(7)	—	(7)
Capital contributions from non-controlling interests	—	—	—	—	—	—	—	—	—	9	9
Changes in non-controlling interests in subsidiaries	—	—	—	—	—	—	—	—	—	105	105
Treasury shares held by subsidiary companies	—	—	—	13	—	—	—	—	13	—	13
Reserves credit for equity compensation plans	—	—	—	—	—	38	—	—	38	—	38
Shares issued under equity compensation plans	3	—	12	1	—	(30)	26	—	12	—	12
Aggregate tax effect – shareholder tax	—	—	—	—	—	—	17	—	17	—	17
Balance at 31 December	1,015	200	10,171	(15)	1,146	(349)	4,835	1,123	18,126	1,425	19,551

1 Capital reserves consists of share premium of £1,197 million and a merger reserve of £8,974 million.

The accounting policies (identified alphabetically) on pages 93 to 105 and notes (identified numerically) on pages 113 to 228 are an integral part of the financial statements.

Consolidated statement of financial position

As at 31 December 2017

	Note	2017 £m	2016 £m
Assets			
Goodwill	O & 16	1,876	2,045
Acquired value of in-force business and intangible assets	O & 17	3,455	5,468
Interests in, and loans to, joint ventures	D & 18	1,221	1,604
Interests in, and loans to, associates	D & 19	421	481
Property and equipment	P & 20	509	487
Investment property	Q & 21	10,797	10,768
Loans	V & 23	27,857	24,784
Financial investments	S, T, U & 26	311,082	299,835
Reinsurance assets	N & 43	13,492	26,343
Deferred tax assets	AC & 46	144	180
Current tax assets		94	119
Receivables		27	7,794
Deferred acquisition costs, pension surpluses and other assets	X & 28	6,374	5,893
Prepayments and accrued income	X & 28c	2,860	2,882
Cash and cash equivalents	Y & 55d	43,347	38,708
Assets of operations classified as held for sale	AH & 3c	10,871	13,028
Total assets		442,685	440,419
Equity			
Capital	AE		
Ordinary share capital	30	1,003	1,015
Preference share capital	33	200	200
		1,203	1,215
Capital reserves	30b	1,207	1,197
Share premium	30b	14	—
Capital redemption reserve	D & 35	8,974	8,974
Merger reserve		10,195	10,171
Treasury shares	32	(14)	(15)
Currency translation reserve	36	1,141	1,146
Other reserves	36	(274)	(349)
Retained earnings	37	4,918	4,835
Equity attributable to shareholders of Aviva plc		17,169	17,003
Direct capital instrument and tier 1 notes	34	731	1,123
Equity excluding non-controlling interests		17,900	18,126
Non-controlling interests	38	1,235	1,425
Total equity		19,135	19,551
Liabilities			
Gross insurance liabilities	L & 40	148,650	151,183
Gross liabilities for investment contracts	M & 41	203,986	197,095
Unallocated divisible surplus	L & 45	9,082	9,349
Net asset value attributable to unitholders	D	18,327	15,638
Pension deficits and other provisions	AA, AB & 47	1,429	1,510
Deferred tax liabilities	AC & 46	2,377	2,413
Current tax liabilities		290	421
Borrowings	AD & 49	10,286	10,295
Payables and other financial liabilities	S & 50	16,459	17,751
Other liabilities	51	2,791	2,719
Liabilities of operations classified as held for sale	AH & 3c	9,873	12,494
Total liabilities		423,550	420,868
Total equity and liabilities		442,685	440,419

Approved by the Board on 7 March 2018

Thomas D. Stoddard
Chief Financial Officer

Company number: 2468686

The accounting policies (identified alphabetically) on pages 93 to 105 and notes (identified numerically) on pages 113 to 228 are an integral part of the financial statements.

Consolidated statement of cash flows

For the year ended 31 December 2017

The cash flows presented in this statement cover all the Group's activities and include flows from both policyholder and shareholder activities. All cash and cash equivalents are available for use by the Group.

	Note	2017 £m	2016 £m
Cash flows from operating activities¹			
Cash generated from operating activities	55a	8,361	5,394
Tax paid		(620)	(647)
Total net cash from operating activities		7,741	4,747
Cash flows from investing activities			
Acquisitions of, and additions to, subsidiaries, joint ventures and associates, net of cash acquired	55b	25	(432)
Disposals of subsidiaries, joint ventures and associates, net of cash transferred	55c	(49)	42
New loans to joint ventures and associates	18	—	(3)
Repayment of loans to joint ventures and associates	18	—	97
Net repayment of loans to joint ventures and associates		—	94
Purchases of property and equipment	20	(69)	(67)
Proceeds on sale of property and equipment		5	75
Purchases of intangible assets		(107)	(119)
Total net cash (used in)/from investing activities		(195)	(407)
Cash flows from financing activities			
Proceeds from issue of ordinary shares	30	12	15
Shares purchased in buy-back	30	(300)	—
Treasury shares distributed from employee trusts	32	—	—
New borrowings drawn down, net of expenses		1,320	3,526
Repayment of borrowings ²		(1,904)	(2,340)
Net (repayment)/drawdown of borrowings	49	(584)	1,186
Interest paid on borrowings		(610)	(595)
Preference dividends paid	15	(17)	(17)
Ordinary dividends paid	15	(983)	(871)
Coupon payments on direct capital instrument and tier 1 notes	15	(81)	(85)
Capital contributions from non-controlling interests of subsidiaries	38	36	9
Dividends paid to non-controlling interests of subsidiaries	38	(103)	(135)
Changes in controlling interest in subsidiaries	38	—	105
Total net cash (used in)/from financing activities		(2,630)	(388)
Total net increase in cash and cash equivalents		4,916	3,952
Cash and cash equivalents at 1 January		38,405	33,170
Effect of exchange rate changes on cash and cash equivalents		266	1,283
Cash and cash equivalents at 31 December	55d	43,587	38,405

1 Cash flows from operating activities include interest received of £5,302 million (2016: £5,642 million) and dividends received of £2,606 million (2016: £2,536 million).

2 Includes redemption of 8.25% US \$650 million fixed rate tier 1 notes of £488 million.

The accounting policies (identified alphabetically) on pages 93 to 105 and notes (identified numerically) on pages 113 to 228 are an integral part of the financial statements.

[Notes to the consolidated financial statements](#)

Notes to the consolidated financial statements

1 – Prior period adjustments

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 & 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 in the Reconciliation of Group adjusted operating profit to profit for the year, note 4 Segmental information and note 10 Employee information have been restated. There is no impact on the consolidated income statement, consolidated statement of comprehensive income, consolidated statement of financial position, consolidated statement of changes in equity or consolidated statement of cash flows.

2 – Exchange rates

The Group's principal overseas operations during the year 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 year and the assets and liabilities have been translated at the year end rates as follows:

	2017	2016
Eurozone		
Average rate (€1 equals)	£0.88	£0.82
Period end rate (€1 equals)	£0.89	£0.85
Canada		
Average rate (\$CAD1 equals)	£0.60	£0.56
Period end rate (\$CAD1 equals)	£0.59	£0.60
Poland		
Average rate (PLN1 equals)	£0.21	£0.19
Period end rate (PLN1 equals)	£0.21	£0.19

3 – Subsidiaries

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

(a) Acquisitions

(i) Poland

As a result of changes agreed by Aviva and Santander to the shareholders' agreement, Aviva now controls the two joint venture companies and consolidates them with an effective date of 1 January 2017. The change from equity accounted joint ventures to consolidated subsidiaries resulted in a fair value remeasurement gain of £16 million on the previous equity interests of £48 million and recognition of a distribution agreement within intangible assets.

(ii) Aviva Vietnam

On 21 April 2017, Aviva plc announced the acquisition of VietinBank's entire 50% shareholding in its life insurance joint venture VietinBank Aviva Life Insurance Company Limited ('Aviva Vietnam') for a consideration of £20 million and signing of a new life insurance distribution agreement. Following completion of the transaction on 22 May 2017, Aviva Vietnam is now a wholly owned subsidiary, with a change in the legal entity name to Aviva Vietnam Life Insurance Company Limited. The change from an equity accounted joint venture to consolidated subsidiary resulted in a fair value remeasurement gain of £7 million on the previous equity interest of £2 million and recognition of £18 million of goodwill and intangible assets.

(iii) Wealthify

On 5 October 2017, Aviva announced an agreement to acquire a majority shareholding in Wealthify Group Limited, the holding company of Wealthify. 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. The transaction completed on 8 February 2018.

(iv) Friends First

On 13 November 2017, Aviva announced that it has reached an agreement to acquire Irish insurer Friends First Life Assurance Company dac ('Friends First') for a cash consideration of €130 million (approximately £116 million). As a result of this acquisition, Aviva will become one of the largest composite insurers in Ireland, with its market share in life insurance increasing to 15%, alongside its existing leading 15% market share in general insurance. The transaction is subject to regulatory approval and is expected to complete in the first quarter of 2018.

3 – Subsidiaries continued

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

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

	2017 £m	2016 £m
Remeasurements due to change in control status		
Poland (see (a) (i) above)	16	—
Asia – Vietnam (see (a) (ii) above)	7	—
Disposals		
France – Antarius (see (b) (i) below)	180	—
France – health (see (b) (ii) below)	36	—
Spain (see (b) (iii) below)	28	—
Ireland – health	—	(8)
Other small operations	(7)	(3)
Held for sale remeasurements		
Asia – FPI (see (c) (ii) below)	(118)	—
Asia – Taiwan (see (c) (iii) below)	(7)	—
Total profit/(loss) on disposal and remeasurement	135	(11)

This consists of £23 million of remeasurement gains in respect of the joint venture operations in Poland (see note 3 (a)(i) above) and Aviva Vietnam (see note 3 (a)(ii) above); £237 million profit on the disposals of Antarius, France health, three businesses in Spain (see note 3 (b)(i), (ii) and (iii) below for further details respectively) and other small operations; offset by £125 million of remeasurement losses in relation to FPI and Taiwan (see note 3 (c)(ii) and (c)(iii) for further details respectively).

(i) Antarius

On 5 April 2017, Aviva announced that it had completed the sale of its entire 50% shareholding in Antarius to Sogecap, a subsidiary of Société Générale, for a consideration of €500 million (approximately £433 million). Antarius was owned jointly by Aviva and Crédit du Nord, a separate subsidiary of Société Générale. The transaction resulted in a profit on disposal of £180 million, calculated as follows:

	£m
Assets	
Goodwill, AVIF and other intangibles	12
Investment property	49
Loans	78
Financial investments	10,873
Reinsurance assets	408
Other assets	1,499
Cash and cash equivalents	468
Total assets	13,387
Liabilities	
Insurance liabilities	4,720
Liability for investment contracts	7,247
Unallocated divisible surplus	832
Other liabilities	34
Total liabilities	12,833
Net assets	554
Non-controlling interests before disposal	(277)
Group's share of net assets disposed of	277
Cash consideration	433
Less: transaction costs	(2)
Net consideration	431
Currency translation reserve and other reserves recycled to the income statement	26
Profits on disposal	180

(ii) France – health

On 1 November 2017, Aviva France disposed of a broker distributed individual health insurance portfolio to Malakoff Médéric (MM), a leading French mutual health insurer for cash consideration of €41 million (approximately £36 million), after transaction costs. Net assets disposed of were £nil, primarily relating to intangible assets not recognised by the Group under IFRS, resulting in a profit on disposal of approximately £36 million.

3 – Subsidiaries continued

(iii) Spain

On 15 September 2017, Aviva announced that it had completed the sale of its 50% shareholding in life insurance and pension partnerships Unicorp Vida and Caja España Vida, as well as its wholly owned retail life business Aviva Vida y Pensiones, to Santalucía for a total consideration of €475 million (approximately £400 million). The transaction resulted in a profit on disposal of £28 million, calculated as follows:

	£m
Assets	
Goodwill, AVIF and other intangibles	161
Financial investments	4,402
Other assets	154
Cash and cash equivalents	440
Total assets	5,157
Liabilities	
Insurance liabilities	3,777
Unallocated divisible surplus	244
Net asset value attributable to unitholders	551
Other liabilities	149
Total liabilities	4,721
Net assets	436
Non-controlling interests before disposal	(116)
Group's share of net assets disposed of	320
Cash consideration ¹	400
Less: transaction costs	(10)
Net consideration	390
Currency translation reserve and other reserves recycled to the income statement	(42)
Profits on disposal	28

1 Cash consideration of £400 million above includes a loss of £22 million related to hedging the currency exposure on expected proceeds of the sale.

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

The assets and liabilities of operations classified as held for sale as at 31 December 2017 are as follows:

	2017 £m	2016 £m
Assets		
Goodwill, AVIF and other intangibles	1,467	12
Property and equipment	5	—
Investment property	—	48
Loans	6	75
Financial investments	8,306	10,706
Reinsurance assets	123	411
Other assets	225	1,521
Cash and cash equivalents	739	255
Total assets	10,871	13,028
Liabilities		
Insurance liabilities	(914)	(4,448)
Liability for investment contracts	(8,663)	(7,175)
Unallocated divisible surplus	(19)	(859)
Other liabilities	(277)	(12)
Total liabilities	(9,873)	(12,494)
Net assets	998	534

Assets and liabilities of operations classified as held for sale as at 31 December 2017 relate to the expected disposal of two businesses in Italy, the international operations of Friends Life ('FPI'), Aviva Taiwan and the remaining life insurance businesses in Spain. See below for further details. Assets and liabilities of operations classified as held for sale during 2016 relate to Antarius (see note 3 (b)(i) for further details) disposed of during 2017.

3 – Subsidiaries continued

(i) Italy

On 29 September 2017, Aviva announced that it had agreed the sale of its entire shareholding of Avipop Assicurazioni S.p.A and Avipop Vita S.p.A to Banco BPM for a consideration of €265 million (approximately £233 million) payable in cash upon completion. This agreement follows a notification received by Aviva on 29 June 2017 of Banco BPM's intention to not renew its distribution agreement with Aviva and Aviva's subsequent decision, announced on 25 August 2017, to exercise its put option. The transaction is subject to regulatory approval and is expected to complete in 2018. In accordance with IFRS 5, these businesses have been classified as held for sale from June 2017. These businesses are measured at their carrying amount and remain consolidated subsidiaries of Aviva at the balance sheet date.

(ii) FPI

On 19 July 2017, Aviva announced the sale of Friends Provident International Limited ('FPI') to RL360 Holding Company Limited, a subsidiary of International Financial Group Limited, for a total consideration of £340 million. The transaction is subject to regulatory approvals and is expected to complete in the first half of 2018. In accordance with IFRS 5, the subsidiary has been classified as held for sale from July 2017 and has been re-measured at fair value based on the expected sales price less costs to sell, calculated as £334 million, after deducting a £6 million reinsurance recapture fee between FPI and Aviva Re Limited which is embedded in the sale agreement. This resulted in a total loss on re-measurement of £118 million in 2017. The business remains a consolidated subsidiary of Aviva at the balance sheet date.

(iii) Taiwan

On 13 October 2017, Aviva announced that it has agreed to sell 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'). In accordance with IFRS 5, the joint venture has been classified as held for sale from October 2017 and has been re-measured at fair value based on the expected sales prices less costs to sell resulting in a total loss on re-measurement of £7 million in the second half of 2017 following its classification as held for sale. The business remains a joint venture of Aviva at the balance sheet date and was subsequently disposed of on 19 January 2018 following completion of the transaction.

(iv) Spain

On 23 February 2018, Aviva announced that it has agreed to sell its entire shareholding in the life insurance and pensions joint ventures Cajamurcia Vida and Caja Granada Vida to Bankia, for a total consideration of €202 million. The transaction is subject to regulatory and anti-trust approvals and is expected to complete in the second quarter of 2018. Following completion of the transaction, Aviva will retain a shareholding in a small life insurance operation, Pelayo Vida, and a residual support centre in Spain. In accordance with IFRS 5, these businesses have been classified as held for sale from December 2017, when management were committed to a plan to sell the businesses. The businesses are measured at their carrying amount and remain consolidated subsidiaries of Aviva at the balance sheet date.

(d) Subsequent events

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 has been approved by the Hong Kong Insurance Authority and is expected to start operating under its new corporate structure during the first half of 2018. This follows the announcement on 20 January 2017 by which Hillhouse and Tencent have acquired a combined 60% shareholding in Aviva Life Insurance Company Limited ('Aviva Hong Kong').

(e) Significant restrictions

In certain jurisdictions the ability of subsidiaries to transfer funds to the Group in the form of cash dividends or to repay loans and advances is subject to local corporate or insurance laws and regulations and solvency requirements. There are no protective rights of non-controlling interests which significantly restrict the Group's ability to access or use the assets and settle the liabilities of the Group.

4 – 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

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 1 for further details). The revised segments are set out below. Results for prior years have been restated to facilitate comparison with this new structure.

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 the Canadian operation is general insurance. In particular it provides personal and commercial lines insurance products principally distributed through insurance brokers. Canada includes the operations of RBC General Insurance Company following its acquisition on 1 July 2016.

France

The principal activities of our French operations are long-term business and general insurance. The long-term business offers a range of long-term insurance and savings products, primarily for individuals, with a focus on the unit-linked market. The general insurance business predominantly sells personal and small commercial lines insurance products through agents and a direct insurer. As set out in note 3(b), the results of Antarius are included up to the date of disposal on 5 April 2017.

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. The principal activities of our Italian and Irish operations are long-term business and general insurance. Ireland also includes the results of our Ireland Health business, up to the date of disposal on 1 August 2016. The principal activity of our Spanish operation is the sale of long-term business, accident and health insurance and a selection of savings products. Our 'Other' operations include our life operations in Turkey. As set out in note 3(b), the results of certain entities within our Spanish business are included up to the date of disposal on 15 September 2017 and as set out in note 3(c), certain entities within our Italian business and the remaining entities within our Spanish business are classified as held for sale as at 31 December 2017.

Asia

Our activities in Asia principally comprise our long-term business operations in China, India, Singapore, Hong Kong, Vietnam, Indonesia, Taiwan and the international operations of Friends Life. This segment also includes general insurance and health operations in Singapore and health operations in Indonesia. As set out in note 3(c), Taiwan and the international operations of Friends Life are classified as held for sale as at 31 December 2017.

Aviva Investors

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

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 internal reinsurance operations are also included in this segment, as are the elimination entries for certain inter-segment transactions.

4 – 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 items outside the segment management's control, including investment market performance and fiscal policy changes.

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

	United Kingdom			Europe					Aviva Investors ² £m	Other Group activities ³ £m	Total £m
	Life £m	GI £m	Canada £m	France £m	Poland £m	Italy, Ireland, Spain and Other £m	Asia £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	
Net investment income	6,247	4,136	2,968	5,953	669	5,933	1,077	407	21	27,411	
16,202	138	86	2,613	292	811	1,465	136	323	323	22,066	
Inter-segment revenue	—	—	—	—	—	—	—	239	—	—	239
Share of profit 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 income¹	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 return variances and economic assumption changes on long-term business	(323)	—	—	249	(7)	12	38	—	(3)	(34)	
Short-term fluctuation in return on investments backing non-long-term business	—	56	7	(26)	(3)	27	—	—	284	345	
Economic assumption changes on general insurance and health business	—	18	(2)	(9)	—	—	—	—	—	7	
Impairment of goodwill, joint ventures and 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 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 were written.

² Aviva Investors group adjusted operating profit includes £1 million profit relating to Aviva Investors Pooled Pensions business.

³ Other Group activities include Group Reinsurance.

4 – Segmental information continued**(a) (ii) Segmental income statement for the year ended 31 December 2016 – restated¹**

	United Kingdom				Europe					Other Group activities ⁴ £m	Total £m
	Life £m	Gl £m	Canada £m	France £m	Poland £m	Italy, Ireland, Spain and Other £m	Asia £m	Aviva Investors ³ £m			
Gross written premiums	5,264	4,219	2,542	6,624	496	5,377	920	—	—	—	25,442
Premiums ceded to reinsurers	(1,469)	(394)	(89)	(86)	(9)	(183)	(134)	—	—	—	(2,364)
Internal reinsurance revenue	—	(2)	—	—	—	(10)	(11)	—	23	—	—
Premiums written net of reinsurance	3,795	3,823	2,453	6,538	487	5,184	775	—	23	23,078	
Net change in provision for unearned premiums	(2)	(109)	(33)	(8)	(16)	(34)	(8)	—	—	(210)	
Net earned premiums	3,793	3,714	2,420	6,530	471	5,150	767	—	23	22,868	
Fee and commission income	841	117	17	258	60	148	198	326	(3)	1,962	
Net investment income	4,634	3,831	2,437	6,788	531	5,298	965	326	20	24,830	
Inter-segment revenue	24,661	242	50	2,951	141	816	1,240	83	73	30,257	
Share of profit of joint ventures and associates	—	—	—	—	—	—	—	234	—	234	
(Loss)/profit on the disposal and remeasurement of subsidiaries, joint ventures and associates	172	—	1	16	7	3	17	—	—	—	216
Segmental income²	29,464	4,073	2,488	9,755	679	6,109	2,222	643	93	55,526	
Claims and benefits paid, net of recoveries from reinsurers	(10,996)	(2,409)	(1,521)	(5,397)	(315)	(2,705)	(399)	—	(40)	(23,782)	
Change in insurance liabilities, net of reinsurance	(3,362)	(560)	(16)	(1,221)	(79)	(1,312)	(349)	—	6	(6,893)	
Change in investment contract provisions	(9,968)	—	—	(1,636)	—	(1,281)	(1,069)	(85)	—	(14,039)	
Change in unallocated divisible surplus	(294)	—	—	(276)	2	167	20	—	—	(381)	
Fee and commission expense	(815)	(1,204)	(628)	(632)	(77)	(395)	(108)	(35)	9	(3,885)	
Other expenses	(1,396)	(162)	(150)	(266)	(64)	(238)	(289)	(393)	(895)	(3,853)	
Inter-segment expenses	(204)	(7)	(5)	(1)	(5)	(9)	—	—	(3)	(234)	
Finance costs	(191)	(2)	(4)	(1)	—	(7)	(3)	—	(418)	(626)	
Segmental expenses	(27,226)	(4,344)	(2,324)	(9,430)	(538)	(5,780)	(2,197)	(513)	(1,341)	(53,693)	
Profit/(loss) before tax	2,238	(271)	164	325	141	329	25	130	(1,248)	1,833	
Tax attributable to policyholders' returns	(633)	—	—	—	—	(5)	(2)	—	—	(640)	
Profit/(loss) before tax attributable to shareholders' profits	1,605	(271)	164	325	141	324	23	130	(1,248)	1,193	
Adjusting items:											
Reclassification of corporate costs and unallocated interest	—	(5)	17	46	—	—	—	5	(63)	—	
Investment return variances and economic assumption changes on long-term business	(497)	—	—	86	1	21	10	—	—	(379)	
Short-term fluctuation in return on investments backing non-long-term business	(135)	(95)	42	(2)	(1)	29	—	—	680	518	
Economic assumption changes on general insurance and health business	—	229	—	13	—	—	—	—	—	242	
Impairment of goodwill, joint ventures and associates and other amounts expensed	—	—	—	—	—	—	—	—	—	—	
Amortisation and impairment of intangibles	71	24	29	2	3	7	9	6	24	175	
Amortisation and impairment of AVIF	387	—	—	3	2	2	142	—	4	540	
Loss/(profit) on the disposal and remeasurement of subsidiaries, joint ventures and associates	3	—	—	—	—	8	—	—	—	11	
Other ⁵	—	498	—	—	—	—	—	—	—	498	
Group adjusted operating profit before tax attributable to shareholders' profits after integration and restructuring costs	1,434	380	252	473	146	391	184	141	(603)	2,798	
Integration and restructuring costs	119	15	18	8	—	1	17	19	15	212	
Group adjusted operating profit/(loss) before tax attributable to shareholders' profits	1,553	395	270	481	146	392	201	160	(588)	3,010	

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 have been restated.

2 Total reported income, excluding inter-segment revenue, includes £33,784 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 were written.

3 Aviva Investors group adjusted operating profit includes £2 million profit relating to the Aviva Investors Pooled Pensions business.

4 Other Group activities include Group Reinsurance.

5 Other items include exceptional charge of £475 million relating to the impact of the change in the Ogden discount rate from 2.5% set in 2001 to minus 0.75% announced by the Lord Chancellor on 27 February 2017. Other items also include a loss upon the completion of an outwards reinsurance contract by the UK General Insurance business, which provides significant protection against claims volatility from mesothelioma, industrial deafness and other long tail risks. The £23 million loss comprises £107 million in premiums ceded less £78 million in reinsurance recoverables recognised and £6 million claims handling provisions.

4 – Segmental information continued

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

	United Kingdom				Europe					Other Group activities £m	Total £m
	Life £m	GI £m	Canada £m	France £m	Poland £m	Italy, Ireland, Spain and Other £m	Asia £m	Aviva Investors £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	100,178	5,305	3,325	17,162	3,275	10,103	4,056	—	9	143,413	
Unearned premiums	228	2,003	1,578	458	119	520	74	—	—	—	4,980
Other insurance liabilities	5	68	124	51	—	7	—	—	2	257	
Liability 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

4 – Segmental information continued

(a) (iv) Segmental statement of financial position as at 31 December 2016 – restated¹

	United Kingdom			Europe				Aviva Investors £m	Other Group activities £m	Total £m
	Life £m	GI £m	Canada £m	France £m	Poland £m	Italy, Ireland, Spain and Other £m	Asia £m			
Goodwill	663	924	88	—	26	293	51	—	—	2,045
Acquired value of in-force business and intangible assets	3,152	160	292	86	12	619	1,062	9	76	5,468
Interests in, and loans to, joint ventures and associates	1,257	—	13	169	48	71	527	—	—	2,085
Property and equipment	78	27	24	240	4	5	12	5	92	487
Investment property	6,304	208	—	2,878	—	201	—	951	226	10,768
Loans	23,693	5	170	757	—	122	37	—	—	24,784
Financial investments	168,273	3,961	4,670	68,427	3,015	29,267	11,460	574	10,188	299,835
Deferred acquisition costs	1,122	478	360	280	45	213	113	3	—	2,614
Other assets	51,489	5,499	1,372	7,716	237	3,585	1,479	961	6,967	79,305
Assets of operations classified as held for sale	—	—	—	13,028	—	—	—	—	—	13,028
Total assets	256,031	11,262	6,989	93,581	3,387	34,376	14,741	2,503	17,549	440,419
Insurance liabilities										
Long-term business and outstanding claims provisions	101,906	5,461	3,248	15,932	2,698	13,166	3,750	—	12	146,173
Unearned premiums	227	1,925	1,527	463	68	492	64	—	—	4,766
Other insurance liabilities	—	66	118	51	—	6	—	—	3	244
Liability for investment contracts	121,508	—	—	49,929	2	15,690	8,395	1,571	—	197,095
Unallocated divisible surplus	2,709	—	—	5,151	60	1,223	206	—	—	9,349
Net asset value attributable to unitholders	76	—	—	2,349	—	509	—	—	12,704	15,638
External borrowings	1,793	—	—	1	—	46	—	—	8,455	10,295
Other liabilities, including inter-segment liabilities	15,239	(472)	1,107	4,694	139	1,288	645	396	1,778	24,814
Liabilities of operations classified as held for sale	—	—	—	12,494	—	—	—	—	—	12,494
Total liabilities	243,458	6,980	6,000	91,064	2,967	32,420	13,060	1,967	22,952	420,868
Total equity										19,551
Total equity and liabilities										440,419

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 have been restated.

(b) Further analysis by products and services

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

Long-term business

Our long-term business comprises life insurance, long-term health and accident insurance, savings, pensions and annuity business written by our life insurance subsidiaries, including managed pension fund business. 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 and provides investment management services for institutional pension fund mandates. It manages a range of retail investment products, including investment funds, unit trusts, OEICs and ISAs. Clients include Aviva Group businesses and third-party financial institutions, pension funds, public sector organisations, investment professionals and private investors.

Other

Other includes service companies, head office expenses such as Group treasury and finance functions, and certain financing costs and taxes not allocated to business segments and elimination entries for certain inter-segment transactions.

4 – Segmental information continued

(b) (i) Segmental income statement – products and services for the year ended 31 December 2017

	Long-term business £m	General insurance and health ² £m	Fund management £m	Other £m	Total £m
Gross written premiums ¹	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	1,334	23	369	461	2,187
Net investment income/(expense)	16,676	9,905	369	461	27,411
Inter-segment revenue	21,468	331	(1)	268	22,066
Share of profit of joint ventures and associates	—	—	244	—	244
Profit/(loss) on the disposal and remeasurement of subsidiaries, joint ventures and associates	41	—	—	—	41
Segmental income	38,285	10,278	612	722	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	(1,140)	(2,615)	(36)	(538)	(4,329)
Other expenses	(1,807)	(572)	(425)	(733)	(3,537)
Inter-segment expenses	(226)	(15)	—	(3)	(244)
Finance costs	(240)	(6)	—	(437)	(683)
Segmental expenses	(35,610)	(9,741)	(461)	(1,711)	(47,523)
Profit/(loss) before tax	2,675	537	151	(989)	2,374
Tax attributable to policyholders' returns	(371)	—	—	—	(371)
Profit/(loss) before tax attributable to shareholders' profits	2,304	537	151	(989)	2,003
Adjusting items	578	163	13	311	1,065
Group adjusted operating profit/(loss) before tax attributable to shareholders' profits	2,882	700	164	(678)	3,068

1 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.

2 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) (ii) Segmental income statement – products and services for the year ended 31 December 2016

	Long-term business £m	General insurance and health ² £m	Fund management £m	Other £m	Total £m
Gross written premiums ¹	15,748	9,694	—	—	25,442
Premiums ceded to reinsurers	(1,697)	(667)	—	—	(2,364)
Premiums written net of reinsurance	14,051	9,027	—	—	23,078
Net change in provision for unearned premiums	—	(210)	—	—	(210)
Net earned premiums	14,051	8,817	—	—	22,868
Fee and commission income	1,234	26	300	402	1,962
Net investment income/(expense)	15,285	8,843	300	402	24,830
Inter-segment revenue	29,695	383	(2)	181	30,257
Share of profit of joint ventures and associates	—	—	239	—	239
(Loss)/profit on the disposal and remeasurement of subsidiaries, joint ventures and associates	213	3	—	—	216
Segmental income	45,190	9,221	537	583	55,531
Claims and benefits paid, net of recoveries from reinsurers	(18,026)	(5,756)	—	—	(23,782)
Change in insurance liabilities, net of reinsurance	(6,249)	(644)	—	—	(6,893)
Change in investment contract provisions	(14,039)	—	—	—	(14,039)
Change in unallocated divisible surplus	(381)	—	—	—	(381)
Fee and commission expense	(1,369)	(2,299)	(33)	(184)	(3,885)
Other expenses	(1,887)	(521)	(396)	(1,049)	(3,853)
Inter-segment expenses	(222)	(12)	—	(5)	(239)
Finance costs	(183)	(5)	—	(438)	(626)
Segmental expenses	(42,356)	(9,237)	(429)	(1,676)	(53,698)
Profit/(loss) before tax	2,834	(16)	108	(1,093)	1,833
Tax attributable to policyholders' returns	(640)	—	—	—	(640)
Profit/(loss) before tax attributable to shareholders' profits	2,194	(16)	108	(1,093)	1,193
Adjusting items	448	849	30	490	1,817
Group adjusted operating profit/(loss) before tax attributable to shareholders' profits	2,642	833	138	(603)	3,010

1 Gross written premiums include inward reinsurance premiums assumed from other companies amounting to £138 million, of which £54 million relates to property and liability insurance and £84 million relates to long-term business.

2 General insurance and health business segment includes gross written premiums of £1,030 million relating to health business. The remaining business relates to property and liability insurance.

4 – Segmental information continued**(b) (iii) Segmental statement of financial position – products and services as at 31 December 2017**

	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	49,054	9,075	905	12,656	71,690
Assets of operations classified as held for sale	10,552	319	—	—	10,871
Total assets	395,812	24,781	972	21,120	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	18,740	1,369	376	2,861	23,346
Liabilities of operations classified as held for sale	9,694	179	—	—	9,873
Total liabilities	377,619	18,211	376	27,344	423,550
Total equity					19,135
Total equity and liabilities					442,685

(b) (iv) Segmental statement of financial position – products and services as at 31 December 2016

	Long-term business £m	General insurance and health £m	Fund management £m	Other £m	Total £m
Goodwill	889	1,086	3	67	2,045
Acquired value of in-force business and intangible assets	4,845	571	9	43	5,468
Interests in, and loans to, joint ventures and associates	2,030	42	—	13	2,085
Property and equipment	264	109	5	109	487
Investment property	10,202	341	—	225	10,768
Loans	24,607	177	—	—	24,784
Financial investments	277,889	11,699	51	10,196	299,835
Deferred acquisition costs	1,574	1,037	3	—	2,614
Other assets	61,780	8,995	835	7,695	79,305
Assets of operations classified as held for sale	13,028	—	—	—	13,028
Total assets	397,108	24,057	906	18,348	440,419
Gross insurance liabilities	134,695	16,488	—	—	151,183
Gross liabilities for investment contracts	197,095	—	—	—	197,095
Unallocated divisible surplus	9,349	—	—	—	9,349
Net asset value attributable to unitholders	2,934	—	—	12,704	15,638
External borrowings	1,718	—	—	8,577	10,295
Other liabilities, including inter-segment liabilities	19,930	1,215	371	3,298	24,814
Liabilities of operations classified as held for sale	12,494	—	—	—	12,494
Total liabilities	378,215	17,703	371	24,579	420,868
Total equity					19,551
Total equity and liabilities					440,419

5 – Details of income

This note gives further detail on the items appearing in the income section of the consolidated income statement.

	2017 £m	2016 £m
Gross written premiums (note 4a and 4b)		
Long-term:		
Insurance contracts	11,192	9,915
Participating investment contracts	5,891	5,833
General insurance and health	10,523	9,694
Less: premiums ceded to reinsurers (note 4a and 4b)	27,606	25,442
Gross change in provision for unearned premiums (note 40)	(2,229)	(2,364)
Reinsurers' share of change in provision for unearned premiums (note 43ciii)	(158)	(191)
Net change in provision for unearned premiums	5	(19)
Net earned premiums	(153)	(210)
	25,224	22,868
Fee and commission income		
Fee income from investment contract business	1,062	1,021
Fund management fee income	512	403
Other fee income	422	330
Reinsurance commissions receivable	33	47
Other commission income	161	150
Net change in deferred revenue	(3)	11
	2,187	1,962
Total revenue	27,411	24,830
Net investment income		
Interest and similar income		
From financial instruments designated as trading and other than trading	4,994	5,392
From AFS investments and financial instruments at amortised cost	42	35
Dividend income	5,036	5,427
Other income from investments designated as trading	2,542	2,544
Realised gains/(losses)on disposals	511	66
Unrealised gains and losses (policy K)	436	(204)
Gains/(losses) arising in the year	(511)	(66)
Gains recognised now realised	(75)	(270)
	436	(204)
Other income from investments designated as other than trading		
Realised gains on disposals	6,198	1,457
Unrealised gains and losses (see policy K)	13,153	21,179
Gains arising in the year	(6,198)	(1,457)
Gains recognised now realised	6,955	19,722
	13,153	21,179
Realised gains on AFS investments	2	2
Gains recognised in prior periods as unrealised in equity		
Net income from investment properties		
Rent	574	604
Expenses relating to these properties	(101)	(66)
Realised gains on disposal	30	56
Fair value gains/(losses) on investment properties (note 21)	481	(129)
	984	465
Foreign exchange (losses) and gains on investments other than trading	(12)	979
Other investment expenses	(75)	(135)
Net investment income	22,066	30,257
Share of profit after tax of joint ventures (note 18)	89	170
Share of profit after tax of associates (note 19a)	(48)	46
Share of profit after tax of joint ventures and associates	41	216
Profit/(loss) on disposal and remeasurement of subsidiaries, joint ventures and associates (note 3b)	135	(11)
Total income	49,653	55,292

6 – Details of expenses

This note gives further detail on the items appearing in the expenses section of the consolidated income statement.

	2017 £m	2016 £m
Claims and benefits paid		
Claims and benefits paid to policyholders on long-term business		
Insurance contracts	13,547	12,875
Participating investment contracts	5,694	6,552
Non-participating investment contracts	20	26
Claims and benefits paid to policyholders on general insurance and health business	6,647	6,164
	25,908	25,617
Less: Claim recoveries from reinsurers		
Insurance contracts	(1,772)	(1,481)
Participating investment contracts	(23)	(354)
Claims and benefits paid, net of recoveries from reinsurers	24,113	23,782
Change in insurance liabilities		
Change in insurance liabilities (note 40 (a)(ii))	623	8,111
Change in reinsurance asset for insurance provisions (note 40(a)(ii))	451	(1,218)
Change in insurance liabilities, net of reinsurance	1,074	6,893
Change in investment contract provisions		
Investment income allocated to investment contracts	9,899	9,695
Other changes in provisions		
Participating investment contracts (note 41(c)(i))	2,684	2,914
Non-participating investment contracts	1,247	1,438
Change in reinsurance asset for investment contract provisions	7	(8)
Change in investment contract provisions	13,837	14,039
Change in unallocated divisible surplus (note 45)	(294)	381
Fee and commission expense		
Acquisition costs		
Commission expenses for insurance and participating investment contracts	2,776	2,567
Change in deferred acquisition costs for insurance and participating investment contracts	(182)	(195)
Deferrable costs for non-participating investment contracts	33	24
Other acquisition costs	958	846
Change in deferred acquisition costs for non-participating investment contracts	(206)	98
Investment income attributable to unitholders	496	96
Reinsurance commissions and other fee and commission expense	454	449
	4,329	3,885
Other expenses		
Other operating expenses		
Staff costs (note 10b)	1,115	1,059
Central costs and share save schemes	184	186
Depreciation	35	25
Impairment of goodwill on subsidiaries (note 16)	2	—
Amortisation of acquired value of in-force business on insurance/investment contracts (note 17)	468	539
Amortisation of intangible assets (note 17)	186	155
Net impairment of acquired value of in-force business (note 17)	8	—
Impairment of intangible assets (note 17)	7	14
Integration and restructuring costs (see below)	141	212
Other expenses	1,335	1,089
	3,481	3,279
Impairments		
Net impairment on loans	2	1
Net impairment on financial investments (note 26 (c))	—	(9)
Net impairment on receivables and other financial assets	4	8
Net impairment on non-financial assets	1	—
	7	—
Other net foreign exchange losses	49	574
Finance costs (note 7)	683	626
Total expenses	47,279	53,459

Prior year comparatives have been revised to reflect an alignment in the classification of UK Life expenses following the Friends Life Part VII transfer. This resulted in a £522 million reclassification of claims and benefits paid from non-participating to participating investment contracts, a £4,495 million increase in investment income allocated to investment contracts, a £8,411 million decrease in other changes in provisions and a £3,916 million increase in the change in reinsurance asset for investment contract provisions. These adjustments have no impact on the total expenses incurred by the Group.

Integration and restructuring costs were £141 million (2016: £212 million), which has decreased mainly due to lower integration spend following the Friends Life acquisition and lower Solvency II project costs, partially offset by costs related to the integration of RBC and restructuring costs in France.

7 – Finance costs

This note analyses the interest costs on our borrowings (which are described in note 49) and similar charges. Finance costs comprise:

	2017 £m	2016 £m
Interest expense on core structural borrowings		
Subordinated debt	391	387
Long term senior debt	4	1
Commercial paper	(2)	—
	393	388
Interest expense on operational borrowings		
Amounts owed to financial institutions	34	39
Securitised mortgage loan notes at fair value	83	84
	117	123
Interest on collateral received	9	10
Net finance charge on pension schemes (note 48(b)(i))	24	29
Unwind of discount on GI reserves	2	2
Extinguishment of debt	47	—
Other similar charges	91	74
Total finance costs	683	626

8 – Long-term business economic volatility

The long-term nature of much of the Group's operations means that, for management's decision-making and internal performance management, the effects of short-term economic volatility are treated as adjusting items. The Group focuses instead on a Group adjusted operating profit measure that incorporates an expected return on investments supporting its long-term business, as described below.

(a) Definitions

Group adjusted operating profit for long-term business is based on expected investment returns on financial investments backing shareholder and policyholder funds over the reporting period, with consistent allowance for the corresponding expected movements in liabilities. Group adjusted operating profit includes the effect of variance in experience for non-economic items, such as mortality, persistency and expenses, and the effect of changes in non-economic assumptions, where not treated as other items. 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 long-term business Group adjusted operating profit are as follows:

Life business	2017 £m	2016 £m
Investment variances and economic assumptions	34	379

Investment variances and economic assumption changes were £34 million positive (2016: £379 million positive). The variance in 2017 is driven by positive variances in the UK, which are partially offset by negative variances in France.

Positive variances in the UK are mainly due to economic modelling developments implemented in 2017. These include a one-off development to align the approach to calculating the valuation interest rate across the heritage Aviva and Friends Life portfolios and also a development to the approach to calculating the valuation interest rate for certain deferred annuity business. Positive variances also reflect fewer than expected defaults and downgrades on corporate bonds, better than expected experience on equity release mortgages (in terms of losses related to no negative equity guarantees) and a reduction in the default allowances for commercial mortgages.

The negative variance in France is primarily due to an increase in life annuity pension reserves, resulting from a reduction to the discount rate cap used in the calculation of these reserves. This economic assumption change reflects the current environment of prolonged low interest rates. A further negative variance stems from losses realised in 2017 on derivative-based funds.

During 2017 the Group has kept 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. The aim has been to maintain the same allowance in these assumptions in 2017 as was included in 2016, as the impact of the Brexit process on the UK economy remains uncertain.

In 2016, investment variances and economic assumption changes were £379 million positive. Positive variances in the UK reflected lower interest rates and narrowing credit spreads, which increased asset values more than liabilities. In the first half of 2016 the Group revised its expectation of future property prices and rental income in light of the UK referendum vote for the UK to leave the European Union. The adverse impact of this adjustment on the Group's equity release and commercial mortgage portfolios was broadly offset in the second half of the year as expectations for future property price and rental growth have increased. In addition, in the UK the investment variance reflected a refined approach of assuming best estimate expected credit defaults on corporate bonds, with a resulting increase in Group adjusted operating profit in the period. The positive variance in the UK was partially offset by negative variances in France and Italy. The negative variance in France reflected losses on equity hedges managed on an economic basis rather than an IFRS basis and falling interest rates, while the negative variance in Italy reflected widening credit spreads.

8 – Long-term business economic volatility continued

(c) Methodology

The expected investment returns and corresponding expected movements in long-term business liabilities are calculated separately for each principal long-term business unit.

The expected return on investments for both policyholders' and shareholders' funds is based on opening economic assumptions applied to the expected funds under management over the reporting period. Expected investment return assumptions are derived actively, based on market yields on risk-free fixed interest assets at the end of each financial year. The same margins are applied on a consistent basis across the Group to gross risk-free yields, to obtain investment return assumptions for equities and properties. Expected funds under management are equal to the opening value of funds under management, adjusted for sales and purchases during the period arising from expected operating experience.

The actual investment return is affected by differences between the actual and expected funds under management and changes in asset mix, as well as movements in interest rates. To the extent that these differences arise from the operating experience of the long-term business, or management decisions to change asset mix, the effect is included in the Group adjusted operating profit. The residual difference between actual and expected investment return is included in investment variances, outside Group adjusted operating profit but included in profit before tax.

The movement in liabilities included in Group adjusted operating profit reflects both the change in liabilities due to the expected return on investments and the impact of experience variances and assumption changes for non-economic items. This would include movements in liabilities due to changes in the discount rate arising from discretionary management decisions that impact on product profitability over the lifetime of products.

The effect of differences between actual and expected economic experience on liabilities, and changes to economic assumptions used to value liabilities, are taken outside Group adjusted operating profit. For many types of long-term business, including unit-linked and with-profits funds, movements in asset values are offset by corresponding changes in liabilities, limiting the net impact on profit. The profit impact of economic volatility on other long-term business depends on the degree of matching of assets and liabilities, and exposure to financial options and guarantees.

(d) Assumptions

The expected rate of investment return is determined using consistent assumptions 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	
	2017 %	2016 %	2017 %	2016 %
United Kingdom	4.8	5.5	3.3	4.0
Eurozone	4.2	4.5	2.7	3.0

The expected return on equities and properties has been calculated by reference to the ten 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:

	2017 %	2016 %
All territories		
Equity risk premium	3.5	3.5
Property risk premium	2.0	2.0

The ten year mid-price swap rates as at the start of the period are set out in the table below:

	2017 %	2016 %
Territories		
United Kingdom	1.3	2.0
Eurozone	0.7	1.0

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 risks (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.

9 – Longer-term investment return and economic assumption changes for non-long-term business

For non-long-term business, the total investment income, including realised and unrealised gains, is split between a calculated longer-term return, which is included in Group adjusted operating profit, and short-term fluctuations from this, which are disclosed outside Group adjusted operating profit but are included in profit before tax. This note gives details of the longer-term return calculation and the relevant assumptions, as well as the economic assumption changes on our general insurance and health business.

(a) The short-term fluctuations in investment return and economic assumption changes attributable to the non-long-term business result and reported outside operating profit were as follows:

Non-long-term business	2017 £m	2016 £m
Short-term fluctuations in investment return (see (b) below)	(345)	(518)
Economic assumption changes (see (g) below)	(7)	(242)
	(352)	(760)

(b) The longer-term investment return and short-term fluctuation are as follows:

Non-long-term business	2017 £m	2016 £m
Analysis of investment income:		
Net investment income/expenses	49	(136)
Foreign exchange gains/losses and other charges	(24)	(35)
	25	(171)
Analysed between:		
Longer-term investment return, reported within operating profit	370	347
Short-term fluctuation in investment return, reported outside operating profit		
General insurance and health	(57)	5
Other operations ¹	(288)	(523)
	(345)	(518)
	25	(171)

¹ Represents short-term fluctuations on assets backing non-long-term business in Group centre investments, including the centre hedging programme and Group external borrowings.

(c) The longer-term investment return is calculated separately for each principal non-long-term business unit. In respect of equities and properties, the return is calculated by multiplying the opening market value of the investments, adjusted for sales and purchases during the year, by the longer-term rate of investment return.

The longer-term rate of investment return is determined using consistent assumptions between operations, having regard to local economic and market forecasts of investment return. The allocated longer-term return for other investments (including debt securities) is the actual income receivable for the year. Actual income and longer-term investment return both contain the amortisation of the discounts/premium arising on the acquisition of fixed income securities. For other operations, the longer-term return reflects assets backing non-long-term business held in Group centre investments.

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

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

The adverse short-term fluctuations during 2017 are mainly due to foreign exchange losses and adverse market movements on Group centre holdings, including the centre hedging programme.

9 – Longer-term investment return and economic assumption changes for non-long-term business continued

(d) The total assets supporting the general insurance and health business, which contribute towards the longer-term return, are:

	2017 £m	2016 £m
Debt securities	10,054	10,799
Equity securities	772	267
Properties	499	341
Cash and cash equivalents	1,115	1,162
Other ¹	2,498	2,032
Assets supporting general insurance and health business	14,938	14,601
Assets supporting other non-long-term business ²	685	724
Total assets supporting non-long-term business	15,623	15,325

1 Includes the internal loan to Group from UKI.

2 Represents assets backing non-long-term 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 Equities		Longer-term rates of return Properties	
	2017 %	2016 %	2017 %	2016 %
United Kingdom	4.8	5.5	3.3	4.0
Eurozone	4.2	4.5	2.7	3.0
Canada	5.5	5.4	4.0	3.9

The longer-term rates of return on equities and properties have been calculated by reference to the ten 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 8.

(e) The table below compares the actual return on investments attributable to the non-long-term business, after deducting investment management expenses and charges, with the aggregate longer-term return over a five year period.

	2013-2017 £m	2012-2016 £m
Actual return attributable to shareholders	1,148	1,853
Longer-term return credited to operating results	(2,170)	(2,523)
Excess of longer-term returns over actual returns	(1,022)	(670)

Management continues to view the excess of longer-term returns over actual returns as short-term fluctuations. The principal assumptions underlying the calculation of the longer-term investment returns are reviewed on a regular basis, having regard to local economic and market forecasts, and are considered appropriate for the purpose of decision making and internal performance management by the Group chief operating decision maker.

(f) The table below shows the sensitivity of the Group's adjusted non-long-term business Group adjusted operating profit before tax to changes in the longer-term rates of return:

Movement in investment return for	By	Change in	2017 £m	2016 £m
Equities	1% higher/lower	Group adjusted operating profit before tax	3	2
Properties	1% higher/lower	Group adjusted operating profit before tax	3	3

(g) The economic assumption changes arise as a result of a slight decrease in the estimated future inflation rate used to value periodic payment orders offset by a slight decrease in the interest rates used to discount claim reserves for periodic payment orders and latent claims.

As explained in accounting policy L, provisions for latent claims are discounted, using rates based on the relevant swap curve, in the relevant currency at the reporting date, having regard to the duration of the expected settlement of the claims. The discount rate is set at the start of the accounting period, with any change in rates between the start and end of the accounting period being reflected below Group adjusted operating profit as an economic assumption change. The range of discount rates used is disclosed in note 40.

10 – Employee information

This note shows where our staff are employed throughout the world, excluding staff employed by our joint ventures and associates, and analyses the total staff costs.

(a) Employee numbers

The number of persons employed by the Group, including directors under a service contract, was:

	At 31 December		Average for the year ²	
	2017 Number	Restated 2016 Number ¹	2017 Number	Restated 2016 Number ¹
United Kingdom	14,639	14,283	14,785	14,942
Canada	4,259	4,232	4,242	3,937
France	3,959	4,154	3,962	4,144
Poland	1,718	1,542	1,715	1,544
Italy, Ireland, Spain and Other	1,687	1,850	1,723	1,841
Asia	1,558	1,533	1,565	1,483
Aviva Investors	1,437	1,316	1,350	1,238
Other Group activities	764	620	748	524
Total employee numbers	30,021	29,530	30,090	29,653

1 Following the launch of UK Insurance which brings together UK Life, UK General Insurance and UK Health into a combined business, the Group's operating segments were changed to align them with the new management structure. Employee numbers for 2016 have been restated to facilitate comparison with this new structure.

2 Average employee numbers have been calculated using a monthly average that takes into account recruitment, leavers, transfers, acquisitions and disposals of businesses during the year.

(b) Staff costs

	2017 £m	2016 £m
Wages and salaries	1,241	1,123
Social security costs	224	215
Post-retirement obligations		
Defined benefit schemes (note 48d)	23	17
Defined contribution schemes (note 48d)	146	138
Profit sharing and incentive plans	208	214
Equity compensation plans (note 31d)	77	37
Termination benefits	23	20
Total staff costs	1,942	1,764

Staff costs are charged within:

	2017 £m	2016 £m
Acquisition costs	526	433
Claims handling expenses	164	145
Central costs and sharesave schemes	100	90
Other operating expenses (note 6)	1,115	1,059
Integration and restructuring costs	37	37
Total staff costs	1,942	1,764

11 – Directors

Information concerning individual directors' emoluments, interests and transactions is given in the Directors' Remuneration Report in the 'Corporate governance' section of this report. For the purposes of the disclosure required by Schedule 5 to the Companies Act 2006, the total aggregate emoluments of the directors in respect of 2017 was £12 million (2016: £10.8 million). Employer contributions to pensions for executive directors for qualifying periods were £50,336 (2016: £14,168). The aggregate net value of share awards granted to the directors in the period was £10.6 million (2016: £8.1 million). The net value has been calculated by reference to the closing middle market price of an ordinary share at the date of grant. During the year, no share options were exercised by directors (2016: no share options).

12 – Auditors' remuneration

This note shows the total remuneration payable by the Group, excluding VAT and any overseas equivalent thereof, to our principal auditors, PricewaterhouseCoopers LLP.

	2017 £m	2016 £m
Fees payable to PwC LLP and its associates for the statutory audit of the Aviva Group and Company financial statements	2.6	2.8
Fees payable to PwC LLP and its associates for other services		
Audit of Group subsidiaries	14.1	14.1
Additional fees related to the prior year audit of Group subsidiaries	0.9	0.7
Total audit fees	17.6	17.6
Audit related assurance	4.7	6.3
Other assurance services	2.2	8.1
Total audit and assurance fees	24.5	32.0
Tax compliance services	—	0.1
Tax advisory services	—	0.1
Services relating to corporate finance transactions	—	0.1
Other non-audit services not covered above	0.8	1.0
Fees payable to PwC LLP and its associates for services to Group companies	25.3	33.3
Group occupational pensions scheme audits	0.3	0.3

The table above reflects the disclosure requirements of SI2011/2198 – The Companies (Disclosure of Auditor Remuneration and Liability Limitation Agreements) (Amendment) Regulations 2011.

Fees payable for the audit of the Group's subsidiaries include fees for the statutory audit of the subsidiaries, both inside and outside the UK, and for the work performed by the principal auditors in respect of the subsidiaries for the purpose of the consolidated financial statements of the Group.

Audit related assurance comprises services in relation to statutory and regulatory filings. These include fees for the audit of the Group's Solvency II regulatory returns from 2017, services for the audit of other regulatory returns of the Group's subsidiaries and review of interim financial information under the Listing Rules of the UK Listing Authority. Total audit fees (excluding additional fees relating to the prior year audits of Group subsidiaries) and audit-related assurance fees were £21.5 million (2016: £23.2 million).

Other assurance services in 2017 of £2.2 million (2016: £8.1 million) mainly include fees relating to the independent review of internal model valuation that the Company believes is most appropriately performed by the principal auditors.

The 2017 fees for other non-audit services of £0.8 million include a number of individually smaller services.

Details of the Group's process for safeguarding and supporting the independence and objectivity of the external auditors are given in the Audit Committee report.

13 – Tax

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

(a) Tax charged to the income statement

(i) The total tax charge comprises:

	2017 £m	2016 £m
Current tax		
For the period	651	930
Prior period adjustments	(46)	1
Total current tax	605	931
Deferred tax		
Origination and reversal of temporary differences	134	72
Changes in tax rates or tax laws	(8)	(14)
Write down/(back) of deferred tax assets	(3)	(15)
Total deferred tax	123	43
Total tax charged to income statement	728	974

(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, Irish and Singapore life insurance policyholder returns is included in the tax charge. The tax charge attributable to policyholder returns included in the charge above is £371 million (2016: charge of £640 million).

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

	2017 £m	2016 £m
UK tax	528	688
Overseas tax	200	286
Total	728	974

(iv) Unrecognised tax losses and temporary differences of previous years were used to reduce the current tax expense and deferred tax expense by £13 million and £nil million (2016: £10 million and £8 million), respectively.

(v) Deferred tax charged/(credited) to the income statement represents movements on the following items:

	2017 £m	2016 £m
Long-term business technical provisions and other insurance items	37	(147)
Deferred acquisition costs	(2)	(12)
Unrealised gains/(losses) on investments	(33)	144
Pensions and other post-retirement obligations	19	21
Unused losses and tax credits	19	39
Subsidiaries, associates and joint ventures	(4)	4
Intangibles and additional value of in-force long-term business	(85)	(99)
Provisions and other temporary differences	172	93
Total deferred tax charged /(credited) to income statement	123	43

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

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

	2017 £m	2016 £m
Current tax		
In respect of pensions and other post-retirement obligations	(45)	(25)
In respect of foreign exchange movements	4	31
	(41)	6
Deferred tax		
In respect of pensions and other post-retirement obligations	42	94
In respect of fair value (losses)/gains on owner-occupied properties	(2)	1
In respect of unrealised (losses)/gains on investments	(9)	3
	31	98
Total tax (credited)/ charged to other comprehensive income	(10)	104

(ii) The tax charge attributable to policyholders' returns included above is £nil (2016: £nil).

13 – Tax continued

(c) Tax credited to equity

Tax credited directly to equity in the year in respect of coupon payments on the direct capital instrument and tier 1 notes amounted to £16 million (2016: £17 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	2017 £m	Shareholder £m	Policyholder £m	2016 £m
Total profit before tax	2,003	371	2,374	1,193	640	1,833
Tax calculated at standard UK corporation tax rate of 19.25% (2016: 20.00%)	386	71	457	239	128	367
Reconciling items						
Different basis of tax – policyholders	—	301	301	—	513	513
Adjustment to tax charge in respect of prior periods	(44)	—	(44)	(34)	—	(34)
Non-assessable income and items not taxed at the full statutory rate	(47)	—	(47)	39	—	39
Non-taxable (profit)/loss on sale of subsidiaries and associates	(27)	—	(27)	1	—	1
Disallowable expenses	47	—	47	49	—	49
Different local basis of tax on overseas profits	82	(1)	81	97	(1)	96
Change in future local statutory tax rates	(36)	—	(36)	(36)	—	(36)
Movement in deferred tax not recognised	(3)	—	(3)	(13)	—	(13)
Tax effect of profit from joint ventures and associates	(3)	—	(3)	(6)	—	(6)
Other	2	—	2	(2)	—	(2)
Total tax charged to income statement	357	371	728	334	640	974

The tax charge/(credit) attributable to policyholder 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 profits 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/(credit) attributable to policyholders included in the total tax charge.

Finance (No 2) Act 2015 introduced legislation reducing the UK rate of corporation tax from 20% at 1 April 2016 to 19% from 1 April 2017 and to 18% from 1 April 2020. Finance Act 2016 further reduced the corporation tax rate from 1 April 2020 to 17%. In addition, in France, the rate of corporation tax was reduced from 34.43% to 28.92% with effect from 1 January 2020. These reduced rates were used in the calculation of the Group's deferred tax assets and liabilities as at 31 December 2016.

In 2017 further changes were made in France to reduce the corporation tax rate to 32.02% from 1 January 2019 and to 27.37% from 1 January 2021 and 25.83% from 1 January 2022. These reduced rates have been incorporated in the calculation of France's deferred tax assets and liabilities as at 31 December 2017 and results in a reduction in the Group's net deferred tax liabilities of £15 million, comprising of a £8 million credit to the Income Statement and £7 million credit to the Statement of Comprehensive Income.

14 – Earnings per share

This note shows how we calculate earnings per share on profit attributable to ordinary shareholders, based both on the present shares in issue (the basic earnings per share) and the potential future shares in issue, including conversion of share options granted to employees (the diluted earnings per share). We have also shown the same calculations based on our Group adjusted operating profit as we believe this gives a better indication of operating performance. Consideration of both these measures gives a full picture of the performance of the business in the period.

(a) Basic earnings per share

(i) The profit attributable to ordinary shareholders is:

	2017			2016		
	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	3,068	(1,065)	2,003	3,010	(1,817)	1,193
Tax attributable to shareholders' profit	(639)	282	(357)	(706)	372	(334)
Profit for the year	2,429	(783)	1,646	2,304	(1,445)	859
Amount attributable to non-controlling interests	(134)	(15)	(149)	(147)	(9)	(156)
Cumulative preference dividends for the year	(17)	—	(17)	(17)	—	(17)
Coupon payments in respect of the direct capital instrument (DCI) and tier 1 notes (net of tax)	(65)	—	(65)	(68)	—	(68)
Profit attributable to ordinary shareholders	2,213	(798)	1,415	2,072	(1,454)	618

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

	2017			2016		
	Before tax £m	Net of tax, non-controlling interests, preference dividends and DCI ¹ £m	Per share p	Before tax £m	Net of tax, non-controlling interests, preference dividends and DCI ¹ £m	Per share p
Group adjusted operating profit attributable to ordinary shareholders	3,068	2,213	54.8	3,010	2,072	51.1
Integration and restructuring costs	(141)	(111)	(2.8)	(212)	(170)	(4.2)
Group adjusted operating profit attributable to ordinary shareholders after integration and restructuring costs	2,927	2,102	52.0	2,798	1,902	46.9
Adjusting items:						
Investment return variances and economic assumption changes on long-term business	34	86	2.1	379	313	7.8
Short-term fluctuation in return on investments backing non-long-term business	(345)	(250)	(6.3)	(518)	(398)	(9.8)
Economic assumption changes on general insurance and health business	(7)	(6)	(0.1)	(242)	(193)	(4.8)
Impairment of goodwill, joint ventures and associates and other amounts expensed	(49)	(49)	(1.2)	—	—	—
Amortisation and impairment of intangibles	(197)	(151)	(3.7)	(175)	(137)	(3.4)
Amortisation and impairment of acquired value of in-force business	(495)	(430)	(10.6)	(540)	(455)	(11.2)
Profit/(loss) on disposal and remeasurement of subsidiaries, joint ventures and associates	135	113	2.8	(11)	(16)	(0.4)
Other ²	—	—	—	(498)	(398)	(9.8)
Profit attributable to ordinary shareholders	2,003	1,415	35.0	1,193	618	15.3

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

2 Other items include an exceptional charge of £nil (2016: £475 million), £nil net of tax (2016: £380 million), relating to the impact of the change in the Ogden discount rate from 2.5% set in 2001 to minus 0.75% announced by the Lord Chancellor on 27 February 2017.

(iii) The calculation of basic earnings per share uses a weighted average of 4,041 million (2016: 4,051 million) ordinary shares in issue, after deducting treasury shares. The actual number of shares in issue at 31 December 2017 was 4,013 million (2016: 4,062 million) and 4,010 million (2016: 4,058 million) excluding treasury shares.

(iv) On 25 May 2017 Aviva announced a share buy-back of ordinary shares for an aggregate purchase price of up to £300 million, which was carried out in full during the period from 25 May 2017 to 19 September 2017. The number of shares in issue has reduced by 58 million as at 31 December 2017 in respect of shares acquired and cancelled under the buy-back programme. Net of new shares issued during the period, the number of shares in issue reduced by 49 million.

14 – Earnings per share continued

(b) Diluted earnings per share

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

	2017			2016		
	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	1,415	4,041	35.0	618	4,051	15.3
Dilutive effect of share awards and options	—	48	(0.4)	—	38	(0.2)
Diluted earnings per share	1,415	4,089	34.6	618	4,089	15.1

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

	2017			2016		
	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	2,213	4,041	54.8	2,072	4,051	51.1
Dilutive effect of share awards and options	—	48	(0.7)	—	38	(0.4)
Diluted Group adjusted operating profit per share	2,213	4,089	54.1	2,072	4,089	50.7

15 – Dividends and appropriations

This note analyses the total dividends and other appropriations we paid during the year. The table below does not include the final dividend proposed after the year end because it is not accrued in these financial statements.

	2017 £m	2016 £m
Ordinary dividends declared and charged to equity in the year		
Final 2016 – 15.88 pence per share, paid on 17 May 2017	646	—
Final 2015 – 14.05 pence per share, paid on 17 May 2016	—	570
Interim 2017 – 8.40 pence per share, paid on 17 November 2017	337	—
Interim 2016 – 7.42 pence per share, paid on 17 November 2016	—	301
	983	871
Preference dividends declared and charged to equity in the year	17	17
Coupon payments on direct capital instrument and tier 1 notes	81	85
	1,081	973

Subsequent to 31 December 2017, the directors proposed a final dividend for 2017 of 19.00 pence per ordinary share (2016: 15.88 pence), amounting to £763 million (2016: £646 million) in total. Subject to approval by shareholders at the AGM, the dividend will be paid on 17 May 2018 and will be accounted for as an appropriation of retained earnings in the year ending 31 December 2018.

Interest on the direct capital instrument and tier 1 notes is treated as an appropriation of retained profits and, accordingly, is accounted for when paid. Tax relief is obtained at a rate of 19.25% (2016: 20.00%).

16 – Goodwill

This note analyses the changes to the carrying amount of goodwill during the year, and details the results of our impairment testing on both goodwill and intangible assets with indefinite lives.

(a) Carrying amount

	2017 £m	2016 £m
Gross amount		
At 1 January	2,292	2,170
Acquisitions and additions	11	59
Disposals	(241)	(28)
Foreign exchange rate movements	18	91
At 31 December	2,080	2,292
Accumulated impairment		
At 1 January	(247)	(215)
Impairment charges ¹	(10)	—
Disposals	96	—
Foreign exchange rate movements	(7)	(32)
At 31 December	(168)	(247)
Carrying amount at 1 January	2,045	1,955
Carrying amount at 31 December	1,912	2,045
Less: Assets classified as held for sale	(36)	—
Carrying amount at 31 December	1,876	2,045

1 Impairment charges comprise £2 million of goodwill impairment in Elite Insurance Company of Canada recognised within other expenses (see note 6) and £8 million of goodwill impairment in FPI recognised within profit/(loss) on the disposal and remeasurement of subsidiaries, joint ventures and associates following FPI's classification as held for sale (see note 3).

Goodwill from acquisitions and additions in 2017 arose on the acquisition of VietinBank's 50% shareholding in VietinBank Aviva Life Insurance Company Limited ('Aviva Vietnam') which resulted in Aviva Vietnam becoming a wholly owned subsidiary of the Group (see note 3(a)). Goodwill from acquisitions and additions in 2016 primarily arose on the acquisition of RBC General Insurance Company.

Disposals in 2017 include the disposal of the Group's 50% shareholdings in its Spanish life insurance and pension partnerships as well as its wholly owned retail life business in Spain (see note 3(b)(iii)).

The total impairment of goodwill in 2017 is a charge of £10 million following management's assessment that goodwill of £8 million in Friends Provident International Limited ('FPI') and £2 million in Elite Insurance Company of Canada was impaired. There was no impairment of goodwill in 2016. Impairment tests on goodwill were conducted as described in note 16(b).

(b) Goodwill allocation and impairment testing

A summary of the goodwill and intangibles with indefinite useful lives allocated to groups of cash generating units is presented below.

	Carrying amount of intangibles with indefinite useful lives (detailed in note 17)					Total 2016 £m
	2017 £m	2016 £m	2017 £m	2016 £m	2017 £m	
United Kingdom – long-term business	663	663	—	—	663	663
United Kingdom – general insurance and health	924	924	—	—	924	924
Canada	84	88	—	—	84	88
France – long-term business	—	—	55	53	55	53
Poland	29	26	7	6	36	32
Italy – general insurance and health	29	28	—	—	29	28
Italy – long-term business	8	8	—	—	8	8
Ireland – general insurance and health	98	94	—	—	98	94
Spain – long-term business	25	163	190	183	215	346
Asia	52	51	—	—	52	51
	1,912	2,045	252	242	2,164	2,287

Goodwill in all business units is tested for impairment by comparing the carrying value of the cash generating unit to which the goodwill relates, to the recoverable value of that cash generating unit. The recoverable amount is the value in use of the cash generating unit unless otherwise stated. In 2017, following the classification of the Group's two businesses in Italy, its remaining life insurance businesses in Spain, and FPI in Asia as held for sale (see note 3(c)), the Group measured the recoverable amount of those business units at their estimated fair value less costs to sell.

Long-term business

Following the cessation of full MCEV reporting from 1 January 2016, value in use has been calculated based on a shareholder value of the business calculated in accordance with Solvency II principles, adjusted where Solvency II does not represent a best estimate of shareholders' interests. The principal adjustments relate to the exclusion of the benefit of transitional measures on technical provisions and the volatility adjustment under Solvency II, modification of the Solvency II risk margin to an economic view and removal of restrictions on contract boundaries or business scope.

16 – Goodwill continued

The present value of expected profits arising from future new business may be included within the shareholder value and is calculated on an adjusted Solvency II basis, using profit projections based on the most recent three year business plans approved by management. These plans reflect management's best estimate of future profits based on both historical experience and expected growth rates for the relevant cash generating unit. The underlying assumptions of these projections include market share, customer numbers, mortality, morbidity and persistency.

Future new business profits beyond the initial three years are extrapolated using a steady growth rate. Growth rates and expected future profits are set with regards to management estimates, past experience and relevant available market statistics.

Expected profits from future new business are discounted using a risk adjusted discount rate. The discount rate is a combination of a risk-free rate and a risk margin to make prudent allowance for the risk that experience in future years for new business may differ from that assumed.

Key Assumptions

The Solvency II non-economic assumptions in relation to mortality, morbidity, persistency and expenses and other items are derived actively, based on management's best estimate assumptions. Economic assumptions are based on market data as at the end of each reporting period. The basic risk-free rate curves used to value the technical provisions reflect the curves, credit risk adjustment and fundamental spread for the matching adjustment published by EIOPA on their website. For the purposes of calculating value in use, the Solvency II risk margin has been modified to an economic view, with a cost of capital rate of 2%.

For the goodwill in the UK Life long-term business that arose on the Friends Life acquisition, the value of the business was sufficient to demonstrate goodwill recoverability on its own. As such it was not necessary to estimate the present value of expected profits from future new business.

For the goodwill in the Italian long-term business and the goodwill and indefinite life intangible asset of the remaining Spanish long-term business, the recoverable amount of the related cash generating units in 2017 was based on their fair value less costs to sell. The basis for the estimate of the fair value less costs to sell was the agreed consideration between the bancassurance partners (see note 3(c)(i) and (iv) for more information). In 2016 the recoverable amount for the aforementioned businesses was based on a value in use calculation as explained above with the key underlying assumptions presented in the table that follows.

	Shareholder value basis		Future new business profits growth rate		Future new business profits discount rate	
	2017	2016	2017 %	2016 %	2017 (Pre-tax) %	2016 (Pre-tax) %
Italy long-term business	N/A	Adjusted Solvency II	N/A	1.2	N/A	11.0
Spain long-term business	N/A	Adjusted Solvency II	N/A	1.5	N/A	13.3

General insurance, health, fund management and other businesses

Value in use is calculated as the discounted value of expected future profits of each business. The calculation uses cash flow projections based on business plans approved by management covering a three year period. These plans reflect management's best estimate of future profits based on both historical experience and expected growth rates for the relevant cash generating unit. The underlying assumptions of these projections include market share, customer numbers, premium rate and fee income changes, claims inflation and commission rates.

Cash flows beyond that three year period are extrapolated using a steady growth rate. Growth rates and expected future profits are set with regards to past experience and relevant available market statistics.

Future profits are discounted using a risk adjusted discount rate.

Key assumptions

	Extrapolated future profits growth rate		Future profits discount rate	
	2017 %	2016 %	2017 (Pre-tax) %	2016 (Pre-tax) %
United Kingdom general insurance and health	1	1	5.8	7.7
Ireland general insurance and health	Nil	Nil	6.2	6.7
Italy general insurance and health	1	1 – 1.2	11.2	9.0 – 11.8
Canada general insurance	4	N/A	7.0	N/A

Indefinite life intangible asset

France

The recoverable amount of the indefinite life intangible asset has been assessed based on the fair value less costs to sell of the cash generating unit to which it relates. The fair value less costs to sell was determined based on the quoted market value of Aviva's share of the subsidiary to which it relates.

Spain

The recoverable amount of the indefinite life intangible asset relating to the remaining Spanish business has been assessed using consistent assumptions with those for Spain long-term business goodwill impairment testing as explained above for the years 2017 and 2016 respectively.

16 – Goodwill continued

Results of impairment testing

As a result of the announced sale of the Group's entire shareholding in FPI, the recoverable amount of FPI within the wider Asian cash generating unit was determined based on the agreed consideration less costs to sell. This indicated an impairment of goodwill and AVIF related to non-participating investment contracts of £8 million and £110 million (see also note 17) respectively as a result of the shortfall of £118 million between FPI's carrying amount and its fair value less costs to sell of £334 million. Our estimate of fair value less costs to sell was calculated on the basis of the agreed sales consideration of £340 million (see note 3(c)(ii)) after deducting a £6 million reinsurance recapture fee between FPI and Aviva Re Limited which is embedded in the sale agreement.

Management's impairment review in relation to the goodwill allocated to the Canadian cash generating unit, Quebec personal lines, indicated the need to write-down a remaining balance of £2 million of goodwill allocated to Elite Insurance Company, resulting from the continued deterioration of the financial position of the cash generating unit.

Other than for the cash generating units noted above, the recoverable amount exceeds the carrying value of the cash generating units including goodwill, and there is no impairment of goodwill in 2017. For these cash generating units, a reasonably possible change in assumptions would not cause the carrying amount to exceed its recoverable amount.

17 – Acquired value of in-force business (AVIF) and intangible assets

This note shows the movements in cost, amortisation and impairment of the acquired value of in-force business and intangible assets during the year.

	AVIF on insurance contracts ¹ (a) £m	AVIF on investment contracts ² (a) £m	Other intangible assets with finite useful lives (b) £m	Intangible assets with indefinite useful lives (c) £m	Total £m
Gross amount					
At 1 January 2016	2,631	2,703	1,734	325	7,393
Additions and transfers	—	—	337	—	337
Disposals	(43)	—	(216)	—	(259)
Foreign exchange rate movements	51	1	121	42	215
At 31 December 2016	2,639	2,704	1,976	367	7,686
Additions	8	—	184	—	192
Disposals	(40)	(7)	(208)	—	(255)
Foreign exchange rate movements	13	—	14	13	40
At 31 December 2017	2,620	2,697	1,966	380	7,663
Accumulated amortisation					
At 1 January 2016	(586)	(298)	(517)	(57)	(1,458)
Amortisation for the year	(255)	(284)	(155)	—	(694)
Disposals and transfers	43	—	211	—	254
Foreign exchange rate movements	(72)	(1)	(43)	—	(116)
At 31 December 2016	(870)	(583)	(504)	(57)	(2,014)
Amortisation for the year	(206)	(262)	(186)	—	(654)
Disposals	28	7	146	—	181
Foreign exchange rate movements	(12)	—	—	—	(12)
At 31 December 2017	(1,060)	(838)	(544)	(57)	(2,499)
Accumulated Impairment					
At 1 January 2016	(43)	(24)	(78)	(59)	(204)
Impairment losses charged to expenses	—	—	(14)	—	(14)
Disposals	—	—	—	—	—
Foreign exchange rate movements	24	—	11	(9)	26
At 31 December 2016	(19)	(24)	(81)	(68)	(192)
Impairment charges ³	(8)	(110)	(7)	—	(125)
Disposals	—	—	43	—	43
Foreign exchange rate movements	—	—	(1)	(3)	(4)
At 31 December 2017	(27)	(134)	(46)	(71)	(278)
Carrying amount					
At 1 January 2016	2,002	2,381	1,139	209	5,731
At 31 December 2016	1,750	2,097	1,391	242	5,480
At 31 December 2017	1,533	1,725	1,376	252	4,886
Less: Assets classified as held for sale	(5)	(793)	(633)	—	(1,431)
	1,528	932	743	252	3,455

1 On insurance and participating investment contracts.

2 On non-participating investment contracts.

3 Impairment charges comprise £8 million of AVIF impairment in Aviva Re Limited recognised within other expenses (see note 6) and £110 million of AVIF impairment in FPI recognised within profit/(loss) on the disposal and remeasurement of subsidiaries, joint ventures and associates following FPI's classification as held for sale (see note 3 and 16(b)).

(a) AVIF on insurance and investment contracts is generally recoverable in more than one year. Of the total AVIF of £3,258 million (£1,533 million on insurance contracts, £1,725 million on investment contracts), £2,142 million (2016: 3,368 million) is expected to be recovered more than one year after the statement of financial position date. In 2017, the additions relate to the full consolidation of Aviva Vietnam which was previously accounted under the equity method as a joint venture (see note 3(a)(ii)), and the disposals relate to the sale of Antarius in France (see note 3(b)(i)).

17 – Acquired value of in-force business (AVIF) and intangible assets continued

Non-participating investment contract AVIF is reviewed for evidence of impairment, consistent with reviews conducted for other finite life intangible assets. Insurance and participating investment contract AVIF is reviewed for impairment at each reporting date as part of the liability adequacy requirements of IFRS 4. AVIF is reviewed for evidence of impairment and impairment tested at product portfolio level by reference to the value of future profits in accordance with Solvency II principles, adjusted where Solvency II does not represent a best estimate of shareholders' interests, consistent with the impairment test for goodwill for long-term business (see note 16 (b)). In 2017, an impairment charge of £110 million was recognised in relation to the AVIF on non-participating investment contracts at our subsidiary Friends Provident International Limited ('FPI') to write down the related AVIF balance to its recoverable amount as explained in note 16(b). In addition, £8 million of AVIF on insurance contracts in relation to the book of business reinsured by FPI to Aviva Re Limited was also considered to be non-recoverable and was written-off.

(b) Other intangible assets with finite useful lives consist mainly of the value of bancassurance and other distribution agreements and capitalised software. Additions of intangibles with finite lives in 2017 relate to capitalisation of software costs in relation to the Group's digital initiatives primarily undertaken by the Group's digital company Aviva UK Digital Limited as well as additions of finite life intangibles on the Group balance sheet following the full consolidation of the Group's previously equity accounted joint ventures in Poland (see note 3(a)(i)).

Additions of intangibles with finite lives in 2016 primarily relate to RBC Insurance's distribution network and customer relationships acquired as part of the acquisition of RBC General Insurance Company and capitalised software in the UK.

Disposals in 2017 relate to the derecognition of intangible assets with finite useful lives in relation to the disposal of part of the Group's Spanish business (see note 3(b)(iii)). Disposals in 2016 primarily comprise the derecognition of exhausted assets which are fully amortised or impaired with nil carrying value.

Impairment losses of £7 million in 2017 and £14 million in 2016 on intangible assets with finite lives arose on capitalised software in other group activities.

(c) Intangible assets with indefinite useful lives primarily comprise the value of distribution channels, Union Financière de France Banque in France and Banco Mare Nostrum (BMN) in Spain, where the existing lives of the assets support this classification. Impairment testing of these intangible assets is covered in note 16(b).

18 – Interests in, and loans to, joint ventures

In several businesses, Group companies and other parties jointly control certain entities. This note analyses these interests and describes the principal joint ventures in which we are involved.

(a) Carrying amount and details of joint ventures

(i) The movements in the carrying amount comprised:

	Goodwill and intangibles £m	Equity interests £m	Loans £m	2017		2016		
				Total £m	Goodwill and intangibles £m	Equity interests £m	Loans £m	Total £m
At 1 January	92	1,512	—	1,604	90	1,406	94	1,590
Share of results before tax	—	99	—	99	—	182	—	182
Share of tax	—	(3)	—	(3)	—	(4)	—	(4)
Share of results after tax	—	96	—	96	—	178	—	178
Amortisation of intangibles ¹	(7)	—	—	(7)	(8)	—	—	(8)
Loss on remeasurement of joint venture	—	(7)	—	(7)	—	—	—	—
Share of (loss)/profit after tax	(7)	89	—	82	(8)	178	—	170
Reclassification to subsidiary	(23)	(34)	—	(57)	—	—	—	—
Additions	—	55	—	55	—	307	3	310
Disposals	—	(409)	—	(409)	—	(346)	—	(346)
Share of gains/(losses) taken to other comprehensive income	—	6	—	6	—	(6)	—	(6)
Loans repaid	—	—	—	—	—	—	(97)	(97)
Dividends received from joint ventures	—	(38)	—	(38)	—	(53)	—	(53)
Foreign exchange rate movements	(5)	(17)	—	(22)	10	26	—	36
At 31 December	57	1,164	—	1,221	92	1,512	—	1,604

¹ Comprises amortisation of AVIF on insurance contracts of £1 million (2016: £1 million) and other intangibles of £6 million (2016: £7 million).

Additions and disposals during the year relate to the Group's holdings in property management undertakings.

Reclassification to subsidiary reflects changes in the Group's holdings in its Poland and Vietnam undertakings, as described in note 3(a).

During the year, the Group's joint venture in Taiwan, First Aviva Life Insurance Co. Limited, was classified as held for sale following the Group's agreement to sell its shareholding to its joint venture partner First Financial Holding Co. Limited. On classification as held for sale, the business was re-measured at fair value less costs to sell, which resulted in a full write-down of its carrying amount of £7 million as explained in note 3(c) (iii).

The Group's share of total comprehensive income related to joint venture entities is £88 million (2016: £164 million).

18 – Interests in, and loans to, joint ventures continued

(ii) The carrying amount at 31 December comprised:

	2017				2016			
	Goodwill and intangibles £m	Equity interests £m	Loans £m	Total £m	Goodwill and intangibles £m	Equity interests £m	Loans £m	Total £m
Property management undertakings	—	820	—	820	—	1,146	—	1,146
Long-term business undertakings	57	335	—	392	78	338	—	416
General insurance and health undertakings	—	9	—	9	14	28	—	42
Total	57	1,164	—	1,221	92	1,512	—	1,604

The property management undertakings perform property ownership and management activities, and are incorporated and operate in the UK. All such investments are held by subsidiary entities.

The long-term business undertakings perform life insurance activities. All investments in such undertakings are unlisted with the exception of Aviva SA Emkılık ve Hayat A.S. which has issued publicly a minority portion of shares. All investments in such undertakings are held by subsidiaries, except for the shares in the Chinese joint venture, Aviva-COFCO Life Insurance Co. Limited, which are held by Aviva plc. The Group's share of net assets of that company is £274 million (2016: £251 million) and has a fair value of £547 million (2016: £511 million).

The investment in general insurance and health undertakings relates to the health insurance operations in our Indonesian joint venture.

(iii) No joint ventures are considered to be material from a Group perspective (2016: none). The Group's principal joint ventures are as follows:

Name	Nature of activities	Principal place of business	Proportion of ownership interest	
			2017	2016
Ascot Real Estate Investments LP	Property management	UK	50.00%	50.00%
2-10 Mortimer Street Limited Partnership	Property management	UK	50.00%	50.00%
Aviva-COFCO Life Insurance Co. Ltd	Life insurance	China	50.00%	50.00%
PT Astra Aviva Life	Life and Health insurance	Indonesia	50.00%	50.00%
AvivaSA Emkılık ve Hayat A.S	Life insurance	Turkey	40.00%	40.00%

The Group has no joint ventures whose non-controlling interest (NCI) is material on the basis of their share of profit/(loss).

(iv) The joint ventures have no significant contingent liabilities to which the Group is exposed. The Group has commitments to provide funding to property management joint ventures of £6 million (2016: £6 million).

In certain jurisdictions the ability of joint ventures to transfer funds in the form of cash dividends or to repay loans and advances made by the Group is subject to local corporate or insurance laws and regulations and solvency requirements.

(b) Impairment testing

Interests in joint ventures are tested for impairment when there is an indicator of impairment. They are tested for impairment by comparing the carrying value of the cash generating unit to which the goodwill or intangible relates to the recoverable value of that cash generating unit. Recoverable amount for long-term and general insurance businesses is calculated on a consistent basis with that used for impairment testing of goodwill, as set out in note 16 (b). The recoverable amount of property management undertakings is the fair value less costs to sell of the joint venture, measured in accordance with the Group's accounting policy for investment property (see accounting policy Q).

19 – Interests in, and loans to, associates

This note analyses our interests in entities which we do not control but where we have significant influence.

(a) Carrying amount and details of associates

(i) The movements in the carrying amount comprised:

	2017			2016		
	Goodwill and intangibles £m	Equity interests £m	Total £m	Goodwill and intangibles £m	Equity interests £m	Total £m
At 1 January	65	416	481	26	303	329
Share of results before tax	—	22	22	—	57	57
Share of tax	—	(5)	(5)	—	(11)	(11)
Share of results after tax	—	17	17	—	46	46
Impairment	(65)	—	(65)	—	—	—
Share of (loss)/profit after tax	(65)	17	(48)	—	46	46
Additions	—	2	2	39	44	83
Reduction in Group interest	—	(5)	(5)	—	(4)	(4)
Dividends received from associates	—	(13)	(13)	—	(13)	(13)
Foreign exchange rate movements	—	4	4	—	40	40
Movements in carrying amount	(65)	5	(60)	39	113	152
At 31 December	—	421	421	65	416	481

The Group's share of total comprehensive losses related to associates is £48 million (2016: £46 million income).

19 – Interests in, and loans to, associates continued

(ii) No associates are considered to be material from a Group perspective (2016: *none*). All investments in principal associates are held by subsidiaries. The Group's principal associates are as follows:

Name	Nature of activities	Principal place of business	Proportion of ownership interest	
			2017	2016
Aviva Life Insurance Company India Limited	Life insurance	India	49.00%	49.00%
SCPI Ufirance Immobilier	Property Management	France	20.40%	20.40%
SCPI Selectipierre 2	Property Management	France	28.67%	28.85%
SCPI Logipierre 1	Property Management	France	44.46%	44.46%
AI UK Commercial Real Estate Debt Fund ¹	Property Management	UK	15.90%	16.20%
Encore+ ¹	Property Management	UK	4.80%	7.00%

¹ The Group has significant influence over AI UK Commercial Real Estate Debt Fund and Encore+ so they are therefore accounted for as associates.

(iii) The associates have no significant contingent liabilities to which the Group is exposed. The Group has commitments to provide funding to property management associates of £2 million (2016: £3 million).

In certain jurisdictions the ability of associates to transfer funds in the form of cash dividends or to repay loans and advances made by the Group is subject to local corporate or insurance laws and regulations and solvency requirements.

(b) Impairment testing

The recoverable amount of property management undertakings is the fair value less costs to sell of the associate, measured in accordance with the Group's accounting policy for investment property (see accounting policy Q).

In 2017 the Group determined that the goodwill of £47 million and AVIF of £18 million of its investment in Aviva Life Insurance Company India Limited ('Aviva India') were fully impaired following management's annual impairment review. The total impairment of £65 million was recognised within the income statement as a component of share of profit after tax of joint ventures and associates.

The recoverable amount of Aviva India was determined based on its value in use which was calculated on an embedded value ('EV') basis in line with Actuarial Practice Standard 10 ('APS 10') as defined by the Institute of Actuaries of India. The EV cash flow projections, based on business plans covering a three year period, were adjusted to reflect a more prudent view of the value of the in-force business by applying higher expense overruns over an extended 7 year period on a run-off rate of 14% and pre-tax discount rate of 12%.

The recoverable amount determined based on this adjusted embedded value calculation and allocated to Aviva's 49% shareholding was £93 million which upon comparison with Aviva India's carrying amount at the time of the impairment assessment indicated that its goodwill and AVIF balances were fully impaired.

20 – Property and equipment

This note analyses our property and equipment, which are primarily properties occupied by Group companies.

	Properties under construction £m	Owner-occupied properties £m	Motor vehicles £m	Computer equipment £m	Other assets £m	Total £m
Cost or valuation						
At 1 January 2016	3	360	3	267	236	869
Additions	2	3	—	14	48	67
Disposals	—	(77)	—	(13)	(20)	(110)
Transfers from investment property (note 21)	—	39	—	—	—	39
Fair value losses	—	(18)	—	—	—	(18)
Foreign exchange rate movements	—	34	—	2	13	49
At 31 December 2016	5	341	3	270	277	896
Additions	1	3	—	18	47	69
Disposals ¹	—	(20)	—	(134)	(61)	(215)
Transfers (to)/from investment property (note 21)	(5)	11	—	—	—	6
Fair value losses	—	(4)	—	—	—	(4)
Foreign exchange rate movements	—	9	—	1	2	12
At 31 December 2017	1	340	3	155	265	764
Depreciation and impairment						
At 1 January 2016	—	(23)	(2)	(248)	(147)	(420)
Charge for the year	—	—	(1)	(11)	(13)	(25)
Disposals	—	3	1	12	19	35
Impairment charge	—	—	—	—	—	—
Foreign exchange rate movements	—	—	—	1	—	1
At 31 December 2016	—	(20)	(2)	(246)	(141)	(409)
Charge for the year	—	—	—	(13)	(22)	(35)
Disposals ¹	—	15	—	134	54	203
Impairment charge	—	2	—	—	(8)	(6)
Foreign exchange rate movements	—	—	—	—	(3)	(3)
At 31 December 2017	—	(3)	(2)	(125)	(120)	(250)
Carrying amount						
At 31 December 2016	5	321	1	24	136	487
At 31 December 2017	1	337	1	30	145	514
Less: Amounts classified as held for sale	—	(4)	—	—	(1)	(5)
At 31 December 2017	1	333	1	30	144	509

¹ Disposals of computer equipment primarily comprise exhausted assets within Aviva Central Services.

Total net fair value losses of £4 million on owner occupied properties consist of £6 million of losses in the year (2016 £23 million losses) which have been taken to the income statement and £3 million reversal of losses (2016: £1 million reversal) taken to the income statement in previous years and £1 million losses (2016: £4 million gains) which have been taken to other comprehensive income.

Owner-occupied properties are stated at their revalued amounts, as assessed by qualified external valuers. These values are assessed in accordance with the relevant parts of the current Royal Institute of Chartered Surveyors Appraisal and Valuation Standards in the UK, and with current local valuation practices in other countries. This assessment is in accordance with UK Valuations Standards ('Red book'), and is the estimated amount for which a property should exchange on the date of valuation between a willing buyer and a willing seller in an arm's-length transaction, after proper marketing wherein the parties had acted knowledgeably and without compulsion, on the basis of the highest and best use of asset that is physically possible, legally permissible and financially feasible. The valuation assessment adopts market-based evidence and is in line with guidance from the International Valuation Standards Committee and the requirements of IAS 16, Property, Plant and Equipment.

Similar considerations apply to properties under construction, where an estimate is made of valuation when complete, adjusted for anticipated costs to completion, profit and risk, reflecting market conditions at the valuation date.

If owner-occupied properties were stated on a historical cost basis, the carrying amount would be £349 million (2016: £341 million).

The Group has no material finance leases for property and equipment.

21 – Investment property

This note gives details of the properties we hold for long-term rental yields or capital appreciation.

	Freehold £m	Leasehold £m	Total £m	Freehold £m	Leasehold £m	Total £m
Carrying value						
At 1 January	9,169	1,647	10,816	9,372	1,929	11,301
Additions	530	12	542	566	1	567
Capitalised expenditure on existing properties	99	31	130	119	36	155
Fair value gains/(losses)	440	41	481	(77)	(52)	(129)
Disposals	(1,216)	(85)	(1,301)	(1,133)	(307)	(1,440)
Transfers to property and equipment (note 20)	(6)	—	(6)	(39)	—	(39)
Foreign exchange rate movements	131	4	135	361	40	401
At 31 December	9,147	1,650	10,797	9,169	1,647	10,816
Less: Assets classified as held for sale	—	—	—	(48)	—	(48)
	9,147	1,650	10,797	9,121	1,647	10,768

Please refer to note 22 'Fair value methodology' for further information on the fair value measurement and valuation techniques of investment property.

The fair value of investment properties leased to third parties under operating leases at 31 December 2017 was £10,513 million (2016: £10,754 million). Future contractual aggregate minimum lease rentals receivable under the non-cancellable portion of these leases are given in note 53(b)(i).

22 – Fair value methodology

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. 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.

22 – Fair value methodology continued

The majority of the Group's assets and liabilities measured at fair value are based on quoted market information or observable market data. Of the total assets and liabilities measured at fair value 15.7% (2016: 15.8%) of assets and 3.2% (2016: 4.4%) of liabilities 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 techniques

There were no changes in the valuation techniques during the year compared to those described in the 2016 annual consolidated financial statements.

(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 assets or liabilities are carried on a measurement basis other than fair value, e.g. amortised cost.

	2017		2016 ¹	
	Fair value £m	Carrying amount £m	Fair value £m	Carrying amount £m
Financial assets				
Loans ² (note 23 (a))	27,796	27,857	24,705	24,784
Financial Investments (note 26 (a))	311,082	311,082	299,835	299,835
Fixed maturity securities	174,808	174,808	178,970	178,970
Equity securities	89,968	89,968	72,042	72,042
Other investments (including derivatives)	46,306	46,306	48,823	48,823
Financial liabilities				
Non-participating investment contracts (note 41 (a))	116,332	116,332	114,527	114,527
Net asset value attributable to unitholders	18,327	18,327	15,638	15,638
Borrowings ² (note 49 (a))	11,538	10,286	10,926	10,295
Derivative liabilities (note 57 (b))	5,751	5,751	6,795	6,795

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 note 26 for further details of this adjustment and the financial impact arising.

2 Within the fair value total, the estimated fair value has been provided for the portion of loans and borrowings that are carried at amortised cost as disclosed in note 22 (h).

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

- Receivables
- Cash and cash equivalents
- Payables and other financial liabilities

(d) Fair value hierarchy analysis

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

2017	Fair value hierarchy					
	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 (note 21)	—	—	10,797	10,797	—	10,797
Loans (note 23 (a))	—	443	23,949	24,392	3,465	27,857
Financial investments measured at fair value (note 26 (a))						
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 (note 41 (a))	116,123	209	—	116,332	—	116,332
Net asset value attributable to unit holders	18,314	—	13	18,327	—	18,327
Borrowings (note 49 (a))	—	—	1,180	1,180	9,106	10,286
Derivative liabilities (note 57 (b))	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 financial position and note 43 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.

22 – Fair value methodology continued

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

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. The value of owner-occupied properties measured on a non-recurring basis at 31 December was £333 million (2016: £321 million), stated at their revalued amounts in line with the requirements of IAS16 Property, Plant and Equipment.

2016 ¹	Fair value hierarchy						Total carrying value £m
	Level 1 £m	Level 2 £m	Level 3 £m	Sub-total Fair value £m	Amortised cost £m		
Recurring fair value measurements							
Investment Property (note 21)	—	—	10,768	10,768	—	10,768	
Loans (note 23 (a))	—	360	20,923	21,283	3,501	24,784	
Financial investments measured at fair value (note 26 (a))							
Fixed maturity securities	96,102	66,421	16,447	178,970	—	178,970	
Equity securities	71,129	—	913	72,042	—	72,042	
Other investments (including derivatives)	38,582	6,240	4,001	48,823	—	48,823	
Financial assets of operations classified as held for sale	9,408	366	980	10,754	75	10,829	
Total	215,221	73,387	54,032	342,640	3,576	346,216	
Financial liabilities measured at fair value							
Non-participating investment contracts ² (note 41 (a))	110,900	219	3,408	114,527	—	114,527	
Net asset value attributable to unit holders	15,618	—	20	15,638	—	15,638	
Borrowings (note 49 (a))	—	—	1,110	1,110	9,185	10,295	
Derivative liabilities (note 57 (b))	401	4,794	1,600	6,795	—	6,795	
Financial liabilities of operations classified as held for sale	—	4	—	4	—	4	
Total	126,919	5,017	6,138	138,074	9,185	147,259	

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 note 26 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 financial position and note 43 are £18,366 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

2016	Fair value hierarchy				Total fair value £m
	Level 1 £m	Level 2 £m	Level 3 £m		
Non-recurring fair value measurement					
Properties occupied by Group companies	—	—	321	321	321
Total	—	—	321	321	321

(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 during the year.

Transfers to/from Level 3

£1.0 billion of assets transferred into Level 3 and £1.6 billion of assets transferred out of Level 3 relate principally to debt securities held by our businesses in the UK and France. These are transferred between levels 2 and 3 depending on the availability of observable inputs and whether the counterparty and broker quotes are corroborated using valuation models with observable inputs.

Transfers of liabilities out of Level 3 amounting to £1.5 billion primarily relate to RPI swaps held by the UK business included within derivative liabilities. The levelling review conducted during the period suggested that the market for these is liquid and deep, the inputs are now deemed to be observable and as a result these were transferred to Level 2.

22 – Fair value methodology continued

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

Please see note 22(a) for a description of typical Level 2 inputs.

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

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

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

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

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

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)	—	(165)
Total net gains/(losses) recognised in the income statement ¹	511	643	(795)	(179)	55	162	—	7	(105)	(97)	—	—
Total net gains/(losses) recognised in other comprehensive income	—	—	—	—	—	—	—	—	—	—	—	—
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.

2016	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 2016	11,301	18,129	14,603	936	4,153	—	(3,421)	(22)	(1,093)	(527)	—	—
Total net gains/(losses) recognised in the income statement ¹	(75)	483	586	55	161	13	(111)	2	(575)	217	—	—
Purchases	721	116	1,587	94	718	228	(184)	—	(302)	—	—	—
Issuances	—	2,612	—	—	—	—	(41)	—	—	—	—	—
Disposals	(1,534)	(1,140)	(1,528)	(194)	(1,144)	(75)	358	—	196	—	—	—
Settlements ²	—	—	67	—	—	—	21	—	—	17	—	—
Transfers into Level 3	—	718	1,893	—	40	50	(40)	—	—	(817)	—	—
Transfers out of Level 3	—	—	(1,284)	(1)	(111)	(15)	81	—	179	—	—	—
Reclassification to held for sale	(40)	—	(590)	—	(36)	666	—	—	—	—	—	—
Foreign exchange rate movements	395	5	1,113	23	220	113	(71)	—	(5)	—	—	—
Balance at 31 December 2016	10,768	20,923	16,447	913	4,001	980	(3,408)	(20)	(1,600)	(1,110)	—	

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

² Settlements include effective settlements of Group holdings.

22 – Fair value methodology continued

Total net gains recognised in the income statement in the year ended 31 December 2017 in respect of Level 3 assets measured at fair value amounted to £397 million (2016: *net gains of £1,223 million*) with net losses in respect of liabilities of £360 million (2016: *net losses of £467 million*). Net gains of £200 million (2016: *net gains of £833 million*) attributable to assets and net losses of £212 million (2016: *net losses of £333 million*) attributable to liabilities relate to those still held at the end of the year.

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

(i) Investment property

- Investment property amounting to £10.8 billion (2016: *£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 options 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 £12.2 billion (2016: *£11.2 billion*), are valued using a Portfolio Credit Risk Model. This model calculates a Credit Risk Adjusted Value 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 75 bps to 245 bps.
- Equity release mortgage loans held by our UK Life business amounting to £9.3 billion (2016: *£8.0 billion*) are valued using risk-adjusted cash flows for defaults discounted at a risk-free rate plus a market-determined liquidity premium. 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. The liquidity premium used in the discount rate during the reporting period ranges from 195 bps to 250 bps.
- Infrastructure and Private Finance Initiative (PFI) loans held by our UK Life business amounting to £1.8 billion (2016: *£1.1 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.
- Non-recourse loans of £0.6 billion (2016: *£0.6 billion*) have been valued using internally developed discounted cash flow models incorporating a significant number of modelling assumptions and unobservable market data including a probability of default and illiquidity premium.

(iii) Debt securities

- Structured bond-type and non-standard debt products held by our business in France amounting to £5.9 billion (2016: *£7.4 billion*) and bonds held by our UK business of £1.2 billion (2016: *£2.6 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 includes a significant unobservable liquidity adjustment, or (ii) differences between the valuation provided by the counterparty and broker quotes and the validation model are sufficiently significant to result in a Level 3 classification.
- Debt securities held by our French business of £2.7 billion (2016: *£1.5 billion*) and by our UK and Asia businesses of £3.0 billion (2016: *£1.4 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.
- Privately placed notes held by our UK Life business of £1.5 billion (2016: *£3.1 billion*) have been valued using broker quotes or a discounted cash flow model using discount factors based on swap curves of similar maturity, plus internally derived spreads for credit risk. As these spreads have been deemed to be unobservable these notes have been classified as Level 3.
- Collateralised loan obligations of £0.4 billion (2016: *£0.4 billion*) have been valued using internally developed discounted cash flow models incorporating a significant number of modelling assumptions and unobservable market data including assumptions regarding correlation among the underlying loans, a probability of default and liquidity premium.

(iv) Equity securities

- Equity securities which primarily comprise private equity holdings of £0.8 billion (2015: *£0.8 billion*) held in the UK are valued by a number of third party specialists. These are valued using a range of techniques, including earnings multiples, forecast cash flows and price/earnings ratios which are deemed to be unobservable.

(v) Other investments

- The following Other investments are valued based on external valuation reports received from fund managers:
 - Private equity investment funds amounting to £0.6 billion (2016: *£0.8 billion*);
 - Other investment funds including property funds amounting to £1.8 billion (2016: *£0.8 billion*); and
 - External hedge funds held principally by businesses in the UK and France amounting to £0.4 billion (2016: *£0.5 billion*).

(vi) Financial assets of operations classified as held for sale

- Financial assets of operations classified as held for sale are held by our Asia business and consist primarily of discretionary managed funds of £1.6 billion (2016: *£1.7 billion included within Other investments*) and debt securities which are not traded in an active market and have been valued using third party or counterparty valuations of £0.4 billion (2016: *£0.2 billion included within Debt securities*).

22 – Fair value methodology continued

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

Remaining Level 3 investments amount to £0.6 billion (2016: £0.3 billion) within debt securities, equity securities and other investments held by a number of businesses throughout the Group.

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 (2016: £54 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 ± £2.5 billion (2016: ± £2.5 billion).

(vi) Liabilities

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

- £3.3 billion (2016: £3.4 billion) of non-participating investment contract liabilities which are included within financial liabilities of operations classified as held for sale. These are classified as Level 3, either because the underlying unit funds are classified as Level 3 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.
- £1.3 billion (2016: £1.1 billion) of securitised mortgage loan notes, presented within Borrowings, are valued using a similar technique to the related Level 3 securitised mortgage assets.
- Derivative liabilities of £0.4 billion (2016: £1.6 billion) comprising over-the-counter derivatives being primarily RPI swaps and index linked asset swaps. These swaps are valued using either discounted cash flow models. Cash flows within these models may be adjusted based on assumptions reflecting the underlying credit risk and liquidity risk and these assumptions are deemed to be non-market observable.

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

On the basis of the methodology outlined above, the Group is able to perform sensitivity analysis for £5 billion (2016: £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 ± £0.5 billion (2016: ± £0.7 billion).

(h) Assets and liabilities not carried at fair value for which fair value is disclosed

The table below shows the fair value and fair value hierarchy for those assets and liabilities not carried at fair value.

	Fair value hierarchy			Total fair value £m
	Level 1 £m	Level 2 £m	Level 3 £m	
2017				
Assets and liabilities not carried at fair value				
Loans	—	1,280	2,124	3,404
Borrowings	9,779	205	374	10,358
2016				
Assets and liabilities not carried at fair value				
Loans	—	1,300	2,122	3,422
Borrowings	9,113	300	403	9,816

23 – Loans

This note analyses the loans our Group companies have made, the majority of which are mortgage loans.

(a) Carrying amounts

The carrying amounts of loans at 31 December 2017 and 2016 were as follows:

	2017			2016	
	At fair value through profit or loss other than trading £m	At amortised cost £m	Total £m	At fair value through profit or loss other than trading £m	At amortised cost £m
Policy loans	1	792	793	1	881
Loans to banks	554	1,970	2,524	569	2,010
Healthcare, infrastructure & PFI other loans	3,563	—	3,563	2,460	—
UK securitised mortgage loans (see note 24) ¹	2,463	—	2,463	2,424	—
Non-securitised mortgage loans ¹	17,817	—	17,817	15,829	1
Loans to brokers and other intermediaries	—	180	180	—	170
Other loans	—	523	523	—	514
Total	24,398	3,465	27,863	21,283	3,576
Less: Amounts classified as held for sale	(6)	—	(6)	—	(75)
	24,392	3,465	27,857	21,283	3,501
					24,784

¹ Following a review of the classification of mortgage loans, £4,992 million has been transferred from securitised to non-securitised mortgage loans in 2016. The net impact on total loans is nil.

Of the above total loans, £26,206 million (2016: £23,432 million) are due to be recovered in more than one year after the statement of financial position date.

Loans at fair value

Fair values have been calculated by using cash flow models appropriate for each portfolio of mortgages. Further details of the fair value methodology and models utilised are given in note 22 (g).

The cumulative change in fair value of loans attributable to changes in credit risk to 31 December 2017 was a £1,090 million loss (2016: £1,735 million loss).

Non-securitised mortgage loans include £3.4 billion (2016: £3.3 billion) relating to UK primary healthcare and PFI businesses which are secured against General Practitioner premises, other primary health-related premises or other emergency services related premises. For all such loans, government support is provided through either direct funding or reimbursement of rental payments to the tenants to meet income service and provide for the debt to be reduced substantially over the term of the loan. Although the loan principal is not government-guaranteed, the nature of these businesses and premises provides considerable comfort of an ongoing business model and low risk of default.

Healthcare, Infrastructure and PFI other loans of £3.6 billion (2016: £2.5 billion) are secured against the income from healthcare and educational premises.

Loans at amortised cost

The fair value of these loans at 31 December 2017 was £3,404 million (2016: £3,497 million).

(b) Analysis of loans carried at amortised cost

	Amortised Cost £m	Impairment £m	Carrying Value £m	Amortised Cost £m	Impairment £m	Carrying Value £m
Policy loans	792	—	792	881	—	881
Loans to banks	1,970	—	1,970	2,010	—	2,010
Non-securitised mortgage loans	9	(9)	—	8	(7)	1
Loans to brokers and other intermediaries	180	—	180	170	—	170
Other loans	523	—	523	514	—	514
Total	3,474	(9)	3,465	3,583	(7)	3,576

The movements in the impairment provisions on these loans for the years ended 31 December 2017 and 2016 were as follows:

	2017 £m	2016 £m
At 1 January		(7)
Increase during the year	(2)	(1)
At 31 December	(9)	(7)

23 – Loans continued

(c) Collateral

Loans to banks include cash collateral received under stock lending arrangements (see note 58 for further discussion regarding these collateral positions). The obligation to repay this collateral is included in payables and other financial liabilities (note 50).

The Group holds collateral in respect of loans where it is considered appropriate in order to reduce the risk of non-recovery. This collateral generally takes the form of liens or charges over properties and, in the case of policy loans, the underlying policy for the majority of the loan balances above. In all other situations, the collateral must be in a readily realisable form, such as listed securities, and is held in segregated accounts.

24 – Securitised mortgages and related assets

The Group, in its UK Life business has loans receivable, secured by mortgages, which have then been securitised through non-recourse borrowings. This note gives details of the relevant transactions.

(a) Description of current arrangements

In a UK long-term business subsidiary, Aviva Equity Release UK Limited (AER), the beneficial interest in certain portfolios of lifetime mortgages has been transferred to five special purpose securitisation companies (the ERF companies), in return for initial consideration and, at later dates, deferred consideration. The deferred consideration represents receipts accrued within the ERF companies after meeting all their obligations to the note holders, loan providers and other third parties in the priority of payments. The purchases of the mortgages were funded by the issue of fixed and floating rate notes by the ERF companies.

All the shares in the ERF companies are held by independent companies, whose shares are held on trust. Although AER does not own, directly or indirectly, any of the share capital of the ERF companies or their parent companies, it has control of the securitisation companies, and they have therefore been treated as subsidiaries in the consolidated financial statements. AER has no right to repurchase the benefit of any of the securitised mortgage loans, other than in certain circumstances where AER is in breach of warranty or loans are substituted in order to effect a further advance.

AER has purchased subordinated notes and granted subordinated loans to some of the ERF companies. In addition, Group companies have invested £231 million (2016: £217 million) in loan notes issued by the ERF companies. These have been eliminated on consolidation through offset against the borrowings of the ERF companies in the consolidated statement of financial position.

In all of the above transactions, the Company and its subsidiaries are not obliged to support any losses that may be suffered by the note holders and do not intend to provide such support. Additionally, the notes were issued on the basis that note holders are only entitled to obtain payment, of both principal and interest, to the extent that the available resources of the respective special purpose securitisation companies, including funds due from customers in respect of the securitised loans, are sufficient and that note holders have no recourse whatsoever to other companies in the Aviva Group.

(b) Carrying values

The following table summarises the securitisation arrangements:

	2017	2016		
	Securitised assets £m	Securitised borrowings £m	Securitised assets £m	Securitised borrowings £m
Securitised mortgage loans				
At fair value (note 23) ¹	2,463	(1,411)	2,424	(1,327)
Other securitisation assets/(liabilities)	265	(1,317)	253	(1,350)
	2,728	(2,728)	2,677	(2,677)

¹ Following a review of the classification of mortgage loans, £4,992 million has been transferred from securitised to non-securitised mortgage loans in 2016. The net impact on total loans is nil.

Loan notes held by third parties are as follows:

	2017 £m	2016 £m
Total loan notes issued, as above	1,411	1,327
Less: Loan notes held by Group companies	(231)	(217)
Loan notes held by third parties (note 49(c)(i))	1,180	1,110

25 – Interests in structured entities

A structured entity is defined as an entity that has been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity, such as when any voting rights relate to administrative tasks only, or when the relevant activities are directed by means of contractual arrangements. The Group has interests in both consolidated and unconsolidated structured entities as described below.

The Group holds redeemable shares or units in investment vehicles, which consist of:

- Debt securities comprising securitisation vehicles that Aviva does not originate. These investments are comprised of a variety of debt instruments, including asset-backed securities and other structured securities.
- Investment funds which include: hedge funds, liquidity funds, private equity funds, unit trusts, mutual funds and Private Finance Initiatives (PFI).
- Specialised investment vehicles include Open Ended Investment Companies (OEICs), Property Limited Partnerships (PLPs), Sociétés d'Investissement à Capital Variable (SICAVs), Tax Transparent Funds (TTFs) and other investment vehicles.

The Group's holdings in investment vehicles are subject to the terms and conditions of the respective investment vehicle's offering documentation and are susceptible to market price risk arising from uncertainties about future values of those investment vehicles. The investment manager makes investment decisions after extensive due diligence of the underlying investment vehicle including consideration of its strategy and the overall quality of the underlying investment vehicle's manager.

All of the investment vehicles in the investment portfolio are managed by portfolio managers who are compensated by the respective investment vehicles for their services. Such compensation generally consists of an asset-based fee and a performance-based incentive fee, and is reflected in the valuation of the investment vehicles.

(a) Interests in consolidated structured entities

The Group has determined that where it has control over investment vehicles, these investments are consolidated structured entities. As at 31 December 2017 the Group has granted loans to consolidated PLPs for a total of £82 million (2016: £114 million). The purpose of these loans is to assist the consolidated PLPs to purchase or construct properties. The Group has also provided support, without having a contractual obligation to do so, to certain consolidated PLPs via letters of support amounting to £72 million (2016: £167 million). The Group has no commitments to provide funding to consolidated structured entities (2016: £10 million).

The Group has also given support to five special purpose securitisation companies (the ERF companies) that are consolidated structured entities. As set out in note 24, at the inception of the securitisation vehicles, the UK subsidiary, Aviva Equity Release UK Limited (AER), has granted subordinated loan facilities to some of the ERF companies. AER receives various fees in return for the services provided to the entities. AER receives cash management fees based on the outstanding loan balance at the start of each quarter for the administration of the loan note liabilities. AER receives portfolio administration fees as compensation for managing the mortgage assets. Refer to note 24 for details of securitised mortgages and related assets as at 31 December 2017.

As at the reporting date, the Group has no intentions to provide financial or other support in relation to any other investment vehicles.

25 – Interests in structured entities continued

(b) Interests in unconsolidated structured entities

As part of its investment activities, the Group invests in unconsolidated structured entities. As at 31 December 2017, the Group's total interest in unconsolidated structured entities was £57.1 billion (2016: £52.7 billion) on the Group's statement of financial position. The Group's total interest in unconsolidated structured entities is classified as 'Interests in and loans to joint ventures and associates' and 'financial investments held at fair value through profit or loss'. The Group does not sponsor any of the unconsolidated structured entities.

As at 31 December 2017, a summary of the Group's interest in unconsolidated structured entities is as follows:

	2017 £m					2016 £m ¹				
	Interest in, and loans to, joint ventures	Interest in, and loans to, associates	Financial investments	Loans	Total assets	Interest in, and loans to, joint ventures	Interest in, and loans to, associates	Financial investments	Loans	Total assets
Structured debt securities ²	—	—	3,058	—	3,058	—	—	3,923	—	3,923
Other investments and equity securities	820	326	47,609	—	48,755	1,146	305	44,856	—	46,307
Analysed as:										
Unit trust and other investment vehicles	—	—	45,666	—	45,666	—	—	43,062	—	43,062
PLPs and property funds	820	326	1,435	—	2,581	1,146	305	1,186	—	2,637
Other (Including other funds and equity securities)	—	—	508	—	508	—	—	608	—	608
Loans ³	—	—	—	5,283	5,283	—	—	—	2,460	2,460
Total	820	326	50,667	5,283	57,096	1,146	305	48,779	2,460	52,690

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 note 26 for further details of this adjustment and the financial statement impact arising.

2 Reported within 'other debt securities' in note 26a.

3 Loans include Healthcare, infrastructure & PFI other loans along with certain non-securitised mortgage loans.

The Group's maximum exposure to loss related to the interests in unconsolidated structured entities is £57.1 billion (2016: £52.7 billion).

The majority of debt securities above are investment grade securities held by the UK business. In some cases, the Group may be required to absorb losses from an unconsolidated structured entity before other parties when and if Aviva's interest is more subordinated with respect to other owners of the same security.

For commitments to property management joint ventures and associates, please refer to Notes 18 and 19, respectively. The Group has not provided any other financial or other support in addition to that described above as at the reporting date, and there are no intentions to provide support in relation to any other unconsolidated structured entities in the foreseeable future.

In relation to risk management, disclosures on debt securities and investment vehicles are given in note 56(b)(iii) 'Risk management'. In relation to other guarantees and commitments that the Group provides in the course of its business, please refer to Note 52(f) 'Contingent liabilities and other risk factors'.

Aviva's interest in unconsolidated structured entities that it also manages at 31 December 2017 is £1.9 billion (2016: £2.1 billion) and the total funds under management relating to these investments at 31 December 2017 is £16.2 billion (2016: £14.5 billion).

(c) Other interests in unconsolidated structured entities

The Group receives management fees and other fees in respect of its asset management businesses. The Group does not sponsor any of the funds or investment vehicles from which it receives fees. Management fees received for investments that the Group manages but does not have a holding in also represent an interest in unconsolidated structured entities. As these investments are not held by the Group, the investment risk is borne by the external investors and therefore the Group's maximum exposure to loss relates to future management fees. The table below shows the assets under management of entities that the Group manages but does not have a holding in and the fees earned from those entities.

	2017		2016	
	Assets Under Management £m	Investment Management Fees £m	Assets Under Management £m	Investment Management Fees £m
Investment funds¹	9,411	67	9,281	63
Specialised investment vehicles:	3,877	12	3,726	14
Analysed as:				
OEICs	1,177	3	1,536	5
PLPs	2,666	9	2,155	9
SICAVs	34	0	35	—
Total	13,288	79	13,007	77

1 Investment funds relate primarily to the Group's Polish pension funds.

26 – Financial investments

This note analyses our financial investments by type and shows their cost and fair value. These will change from one period to the next as a result of new business written, claims paid and market movements.

(a) Carrying amount

Financial investments comprise:

	2017					2016				
	At fair value through profit or loss		Available for sale £m	Total £m	At fair value through profit or loss		Available for sale £m			
	Trading £m	Other than trading £m			Trading £m	Other than trading £m				
Fixed maturity securities										
<i>Debt securities</i>										
UK government	—	30,242	—	30,242	—	31,143	—			
UK local authorities	—	19	—	19	—	19	—			
Non-UK government (note 26e)	—	51,399	1,342	52,741	—	53,026	842			
Corporate bonds										
Public utilities	—	11,105	24	11,129	—	12,041	21			
Other corporate	—	69,700	281	69,981	—	75,951	229			
Convertibles and bonds with warrants attached	—	9	—	9	—	180	—			
Other	—	10,801	—	10,801	—	12,224	—			
	—	173,275	1,647	174,922	—	184,584	1,092			
<i>Certificates of deposit</i>	—	947	79	1,026	—	1,032	—			
	—	174,222	1,726	175,948	—	185,616	1,092			
	—				—		186,708			
<i>Equity securities</i>										
<i>Ordinary shares</i>										
Public utilities	—	2,402	—	2,402	—	2,188	—			
Banks, trusts and insurance companies	—	24,295	1	24,296	—	16,351	1			
Industrial miscellaneous and all other	—	63,213	8	63,221	—	53,855	6			
	—	89,910	9	89,919	—	72,394	7			
<i>Non-redeemable preference shares</i>	—	244	—	244	—	305	—			
	—	90,154	9	90,163	—	72,699	7			
	—				—		72,706			
Other investments										
Unit trusts and other investment vehicles	—	45,665	1	45,666	—	43,061	1			
Derivative financial instruments (note 57)	5,507	—	—	5,507	6,119	—	6,119			
Deposits with credit institutions	—	161	—	161	—	325	—			
Minority holdings in property management undertakings	—	1,435	—	1,435	—	1,186	—			
Other investments – long-term	—	507	—	507	—	434	—			
Other investments – short-term	—	1	—	1	—	1	—			
	5,507	47,769	1	53,277	6,119	45,007	1			
Total financial investments	5,507	312,145	1,736	319,388	6,119	303,322	1,100			
Less: assets classified as held for sale										
Fixed maturity securities	—	(1,140)	—	(1,140)	—	(7,738)	—			
Equity securities	—	(195)	—	(195)	—	(664)	—			
Other investments	(8)	(6,963)	—	(6,971)	—	(2,304)	—			
	(8)	(8,298)	—	(8,306)	—	(10,706)	—			
	5,499	303,847	1,736	311,082	6,119	292,616	1,100			
							299,835			

Of the above total, £154,835 million (2016: £197,734 million) is due to be recovered in more than one year after the statement of financial position date.

Other debt securities of £10,801 million (2016: £12,224 million) include residential and commercial mortgage-backed securities, as well as other structured credit securities.

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 in 2016 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 is to increase equity and debt securities by £3,434 million and £3,694 million and decrease unit trusts and other investment vehicles within other investments by £7,128 million.

In addition, assets classified as held for sale of £10,706 million have been revised from available for sale to other than trading.

26 – Financial investments continued

(b) Cost, unrealised gains and fair value

The following is a summary of the cost/amortised cost, gross unrealised gains and losses and fair value of financial investments:

	2017					2016 ¹		
	Cost/ amortised cost £m	Unrealised gains £m	Unrealised losses and impairments £m	Fair value £m	Cost amortised cost £m	Unrealised gains £m	Unrealised losses and impairments £m	Fair value £m
Fixed maturity securities	162,092	20,244	(6,388)	175,948	172,007	16,014	(1,313)	186,708
Equity securities	75,060	16,819	(1,716)	90,163	60,194	14,152	(1,640)	72,706
Other investments								
Unit trusts and other investment vehicles	34,271	11,120	275	45,666	39,144	2,940	978	43,062
Derivative financial instruments	1,328	4,569	(390)	5,507	1,313	5,381	(575)	6,119
Deposits with credit institutions	161	—	—	161	325	—	—	325
Minority holdings in property management undertakings	1,332	180	(77)	1,435	1,126	138	(78)	1,186
Other investments – long-term	477	61	(31)	507	432	32	(30)	434
Other investments – short-term	1	—	—	1	1	—	—	1
	274,722	52,993	(8,327)	319,388	274,542	38,657	(2,658)	310,541
These are further analysed as follows:								
At fair value through profit or loss	273,087	52,891	(8,326)	317,652	273,548	38,550	(2,657)	309,441
Available for sale	1,635	102	(1)	1,736	994	107	(1)	1,100
	274,722	52,993	(8,327)	319,388	274,542	38,657	(2,658)	310,541

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 note 26 (a) for further details of this adjustment and the financial statement impact arising.

All unrealised gains and losses and impairments on financial investments classified as fair value through profit or loss have been recognised in the income statement.

Unrealised gains and losses on financial investments classified as at fair value through profit or loss, recognised in the income statement in the year, were a net gain of £6,880 million (2016: £19,452 million net gain). Of this net gain, £6,955 million net gain (2016: £19,722 million net gain) related to investments designated as other than trading and £75 million net loss (2016: £270 million net loss) related to financial investments designated as trading.

The movement in the unrealised gain/loss position reported in the statement of financial position during the year, shown in the table above, includes foreign exchange movements on the translation of unrealised gains and losses on financial investments held by foreign subsidiaries, which are recognised in other comprehensive income, as well as transfers due to the realisation of gains and losses on disposal and the recognition of impairment losses.

(c) Impairment of financial investments

There are no impairments in 2017. The previously recognised impairment on other investments of £9 million in respect of financial investments classified as available-for-sale was recovered through sale during 2016.

(d) Financial investment arrangements

(i) Stock lending arrangements

The Group has entered into stock lending arrangements in the UK and overseas in accordance with established market conventions. The majority of the Group's stock lending transactions occur in the UK, where investments are lent to EEA-regulated, locally domiciled counterparties and governed by agreements written under English law.

The Group receives collateral in order to reduce the credit risk of these arrangements, either in the form of securities or cash. See note 58 for further discussion regarding collateral positions held by the Group.

(ii) Other arrangements

In carrying on its bulk purchase annuity business, the Group's UK Life operation is required to place certain investments in trust on behalf of the policyholders. Amounts become payable from the trust funds to the trustees if the Group were to be in breach of its payment obligations in respect of policyholder benefits. At 31 December 2017, £2,402 million (2016: £1,777 million) of financial investments were restricted in this way.

Certain financial investments are also required to be deposited under local laws in various overseas countries as security for the holders of policies issued in those countries. Other investments are pledged as security collateral for bank letters of credit.

26 – Financial investments continued

(e) Non-UK Government Debt Securities (gross of non-controlling interests)

The following is a summary of non-UK government debt by issuer as at 31 December 2017, analysed by policyholder, participating and shareholder funds.

	Policyholder		Participating		Shareholder		Total 2016 ¹ £m
	2017 £m	2016 ¹ £m	2017 £m	2016 ¹ £m	2017 £m	2016 ¹ £m	
Non-UK Government Debt Securities							
Austria	5	11	550	715	127	138	682
Belgium	22	21	967	1,273	314	357	1,303
France	133	115	13,454	13,285	2,093	1,859	15,680
Germany	127	142	1,437	1,629	615	606	2,179
Greece	—	—	—	—	—	—	—
Ireland	3	3	679	662	84	130	766
Italy	183	223	8,223	7,500	823	556	9,229
Netherlands	43	47	88	976	322	329	453
Poland	845	807	790	769	598	384	2,233
Portugal	2	2	136	118	—	—	138
Spain	87	88	314	1,386	233	659	634
European Supranational debt	213	174	1,841	2,404	1,777	1,821	3,831
Other European countries	176	272	2,104	1,029	917	642	3,197
Europe	1,839	1,905	30,583	31,746	7,903	7,481	40,325
Canada	23	16	53	174	2,512	2,397	2,588
United States	1,443	1,424	661	871	531	1,022	2,635
North America	1,466	1,440	714	1,045	3,043	3,419	5,223
Singapore	14	2	558	904	297	330	869
Other	2,396	2,634	3,520	2,819	408	143	6,324
Asia Pacific and other	2,410	2,636	4,078	3,723	705	473	7,193
Total	5,715	5,981	35,375	36,514	11,651	11,373	52,741
Assets of operations classified as held for sale	1	—	—	2,325	531	—	532
Total (excluding assets held for sale)	5,714	5,981	35,375	34,189	11,120	11,373	52,209
							51,543

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 note 26 (a) for further details of this adjustment and the financial statement impact arising.

At 31 December 2017, the Group's total government (non-UK) debt securities stood at £52.7 billion (2016: £53.9 billion). The significant majority of these holdings are within our participating funds where the risk to our shareholders is governed by the nature and extent of our participation within those funds.

Our direct shareholder asset exposure to government (non-UK) debt securities amounts to £11.7 billion (2016: £11.4 billion). The primary exposures, relative to total shareholder (non-UK) government debt exposure, are to Canadian (22%), French (18%), Italian (7%), German (5%), Polish (5%), and US (5%) government debt securities.

The participating funds exposure to (non-UK) government debt amounts to £35.4 billion (2016: £36.5 billion). The primary exposures, relative to total (non-UK) government debt exposures included within our participating funds, are to the (non-UK) government debt securities of France (38%), Italy (23%), Germany (4%), Belgium (3%), Poland (2%), and Ireland (2%).

26 – Financial investments continued

(f) Exposure to worldwide banks – debt securities

Direct shareholder and participating fund assets exposures to worldwide bank debt securities (net of non-controlling interests, excluding policyholder assets)

	Shareholder assets			Participating fund assets		
	Total senior debt £bn	Total subordinated debt £bn	Total debt £bn	Total senior debt £bn	Total subordinated debt £bn	Total debt £bn
2017						
Australia	0.2	—	0.2	0.6	0.2	0.8
Denmark	—	—	—	0.6	—	0.6
France	0.5	0.1	0.6	2.6	0.6	3.2
Germany	—	—	—	0.5	0.3	0.8
Ireland	—	—	—	—	—	—
Italy	—	—	—	0.1	—	0.1
Netherlands	0.4	0.2	0.6	1.4	0.2	1.6
Spain	0.4	—	0.4	0.3	0.1	0.4
Sweden	0.2	—	0.2	0.4	0.1	0.5
Switzerland	—	—	—	1.3	—	1.3
United Kingdom	1.3	0.4	1.7	1.4	0.8	2.2
United States	1.0	0.2	1.2	1.7	0.1	1.8
Other	0.4	0.1	0.5	1.2	0.1	1.3
Total	4.4	1.0	5.4	12.1	2.5	14.6
Assets of operations classified as held for sale	—	—	—	—	—	—
Total (excluding assets held for sale)	4.4	1.0	5.4	12.1	2.5	14.6
2016 Total	5.4	1.2	6.6	14.8	3.1	17.9

Net of non-controlling interests, our direct shareholder assets exposure to worldwide bank debt securities is £5.4 billion (2016: £6.6 billion). The majority of our holding (81%) is in senior debt. The primary exposures are to UK (31%), US (22%), Dutch (11%), and French (11%) banks.

Net of non-controlling interests, the participating fund exposures to worldwide bank debt securities, where the risk to our shareholders is governed by the nature and extent of our participation within those funds, is £14.6 billion (2016: £17.9 billion). The majority of the exposure (83%) is in senior debt. Participating funds are the most exposed to French (22%), UK (15%) and US (12%) banks.

Direct shareholder and participating fund assets exposures to worldwide bank debt securities (gross of non-controlling interests, excluding policyholder assets)

	Shareholder assets			Participating fund assets		
	Total senior debt £bn	Total subordinated debt £bn	Total debt £bn	Total senior debt £bn	Total subordinated debt £bn	Total debt £bn
2017						
Australia	0.2	—	0.2	0.6	0.2	0.8
Denmark	—	—	—	0.6	—	0.6
France	0.5	0.1	0.6	2.7	0.6	3.3
Germany	—	—	—	0.6	0.3	0.9
Ireland	—	—	—	—	—	—
Italy	—	—	—	0.2	—	0.2
Netherlands	0.4	0.2	0.6	1.4	0.2	1.6
Spain	0.4	—	0.4	0.3	0.1	0.4
Sweden	0.2	—	0.2	0.4	0.1	0.5
Switzerland	—	—	—	1.3	—	1.3
United Kingdom	1.3	0.4	1.7	1.5	0.8	2.3
United States	1.0	0.2	1.2	1.7	0.1	1.8
Other	0.4	0.1	0.5	1.2	0.1	1.3
Total	4.4	1.0	5.4	12.5	2.5	15.0
Assets of operations classified as held for sale	—	—	—	—	—	—
Total (excluding assets held for sale)	4.4	1.0	5.4	12.5	2.5	15.0
2016 Total	5.5	1.2	6.7	16.2	3.3	19.5

Gross of non-controlling interests, our direct shareholder assets exposure to worldwide bank debt securities is £5.4 billion (2016: £6.7 billion). The majority of our holding (81%) is in senior debt. The primary exposures are to UK (31%), US (22%), Dutch (11%), and French (11%) banks.

Gross of non-controlling interests, the participating fund exposures to worldwide bank debt securities, where the risk to our shareholders is governed by the nature and extent of our participation within those funds, is £15.0 billion (2016: £19.5 billion). The majority of the exposure (83%) is in senior debt. Participating funds are most exposed to French (22%), UK (15%) and US (12%) banks.

27 – Receivables

This note analyses our total receivables.

	2017 £m	2016 £m
Amounts owed by contract holders	2,154	2,012
Amounts owed by intermediaries	1,235	1,202
Deposits with ceding undertakings	103	1,430
Amounts due from reinsurers	348	400
Amounts due from brokers for investment sales	206	93
Amounts receivable for cash collateral pledged	2,515	2,410
Amounts due from government, social security and taxes	744	532
Other receivables	1,018	1,119
Total	8,323	9,198
Less: Amounts classified as held for sale	(38)	(1,404)
	8,285	7,794
Expected to be recovered in less than one year	8,278	9,132
Expected to be recovered in more than one year	45	66
	8,323	9,198

Concentrations of credit risk with respect to receivables are limited due to the size and spread of the Group's trading base. No further credit risk provision is therefore required in excess of provisions already recognised for doubtful receivables.

28 – Deferred acquisition costs, pension surpluses, other assets, prepayments and accrued income

(a) Deferred acquisition costs and other assets – carrying amount

The carrying amount comprises:

	2017 £m	2016 £m
Deferred acquisition costs in respect of:		
Insurance contracts – Long-term business	858	694
Insurance contracts – General insurance and health business	1,110	1,037
Participating investment contracts – Long-term business	33	19
Non-participating investment contracts – Long-term business	1,071	861
Retail fund management business	2	3
Total deferred acquisition costs	3,074	2,614
Surpluses in the staff pension schemes (note 48(a))	3,399	3,190
Other assets	71	89
Total	6,544	5,893
Less: Amounts classified as held for sale ¹	(170)	—
	6,374	5,893

¹ £(168)m is DAC related and £(2)m other assets.

Deferred acquisition costs (DAC) on long-term business are generally recoverable in more than one year whereas such costs on general insurance and health business are generally recoverable within one year. Of the above total, £1,521 million (2016: £1,262 million) is expected to be recovered more than one year after the statement of financial position date. For long-term business where amortisation of the DAC balance depends on projected profits, the amount expected to be recovered is estimated and actual experience will differ.

Surpluses in the staff pension schemes and £9 million (2016: £1 million) of other assets are recoverable more than one year after the statement of financial position date.

(b) Deferred acquisition costs – movements in the year

The movements in deferred acquisition costs (DAC) during the year were:

	2017	2016						
	Long-term business £m	General insurance and health business £m	Retail fund management business £m	Total £m	Long-term business £m	General insurance and health business £m	Retail fund management business £m	Total £m
Carrying amount at 1 January	1,574	1,037	3	2,614	1,604	812	5	2,421
Acquisition costs deferred during the year	306	2,418	—	2,724	283	2,264	—	2,547
Amortisation ¹	(154)	(2,369)	(1)	(2,524)	(377)	(2,118)	(2)	(2,497)
Impact of assumption changes	192	—	—	192	40	—	—	40
Effect of portfolio transfers, acquisitions and disposals	26	25	—	51	(29)	(8)	—	(37)
Foreign exchange rate movements	18	1	—	19	53	87	—	140
Other movements	—	(2)	—	(2)	—	—	—	—
Carrying amount at 31 December	1,962	1,110	2	3,074	1,574	1,037	3	2,614
Less: Amounts classified as held for sale	(158)	(10)	—	(168)	—	—	—	—
	1,804	1,100	2	2,906	1,574	1,037	3	2,614

¹ 2016 amortisation includes an additional charge of £183 million to reflect a reduction in projected future profits following a change in the allocation of fixed costs between UK Life product lines.

28 – Deferred acquisition costs, pension surpluses, other assets, prepayments and accrued income continued

The balance of deferred acquisition costs for long-term business increased over 2017 mainly due to reductions in per policy costs on unit-linked pensions increasing the level of DAC that can be supported in UK Life business. The balance of deferred acquisition costs for general insurance and health business increased over 2017 mainly due to increased new business sales.

Where amortisation of the DAC balance depends on projected profits, changes to economic conditions may lead to a movement in the DAC balance and a corresponding impact on profit. It is estimated that the movement in the DAC balance would reduce profit by £38 million (2016: £19 million) if market yields on fixed income investments were to increase by 1% and increase profit by £29 million (2016: reduce profit by £1 million) if yields were to reduce by 1%. At both 31 December 2017 and 31 December 2016 the DAC balance has been restricted by the value of projected future profits and hence is more sensitive to changes in the value of those projected profits. Furthermore, the profile of this restriction across product lines has changed leading to a directional switch in the sensitivity year-on-year.

(c) Prepayments and accrued income

Prepayments and accrued income of £2,876 million (2016: £2,996 million) include assets classified as held for sale of £16 million (2016: £114 million) and includes £7 million (2016: £8 million) that is expected to be recovered more than one year after the statement of financial position date.

29 – Assets held to cover linked liabilities

Certain unit-linked products have been classified as investment contracts, while some are included within the definition of an insurance contract. The assets backing these unit-linked liabilities are included within the relevant balances in the consolidated statement of financial position, while the liabilities are included within insurance and investment contract provisions. This note analyses the carrying values of assets backing these liabilities.

	2017 £m	2016 ¹ £m
Loans	8	1,027
Debt securities	30,987	29,517
Equity securities	74,110	55,651
Reinsurance assets	6,103	18,525
Cash and cash equivalents	12,000	8,874
Units trusts and other investment vehicles	42,368	40,081
Other	7,059	7,453
Total	172,635	161,128
Less: Assets classified as held for sale	(8,013)	(2,489)
	164,622	158,639

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 note 26 (a) for further details of this adjustment and the financial statement impact arising.

The reinsurance assets balance in the table above includes £6,094 million (2016: £18,366 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.

At 31 December 2017, the exposure on these reinsurance assets has reduced significantly as a result of action taken to restructure agreements with the Group's largest reinsurance counterparty, BlackRock Life Limited, and reduce counterparty risk. As a consequence of this £14,353 million of funds previously reported with BlackRock Life Limited have been transferred to debt and equity securities.

30 – Ordinary share capital

This note gives details of Aviva plc's ordinary share capital and shows the movements during the year.

(a) Details of the Company's ordinary share capital are as follows:

	2017 £m	2016 £m
The allotted, called up and fully paid share capital of the Company at 31 December 2017 was: 4,012,682,691 (2016: 4,061,539,206) ordinary shares of 25 pence each	1,003	1,015

At the 2017 Annual General Meeting, the Company was authorised to allot up to a further maximum nominal amount of:

- £677,082,434 of which £338,541,217 can be in connection with an offer by way of a rights issue
- £100 million of new ordinary shares in relation to any issue of Solvency II instruments

(b) During 2017, a total of 57,724,500 ordinary shares of 25 pence each were cancelled and 8,867,985 were allotted and issued by the Company as follows:

	2017				2016			
	Number of shares	Share capital £m	Capital redemption reserve £m	Share premium £m	Number of shares	Share capital £m	Capital redemption reserve £m	Share premium £m
At 1 January	4,061,539,206	1,015	—	1,197	4,048,465,173	1,012	—	1,185
Shares issued under the Group's Employee and Executive Share Option Schemes	8,867,985	2	—	10	13,074,033	3	—	12
Shares cancelled through buy-back	(57,724,500)	(14)	14	—	—	—	—	—
At 31 December	4,012,682,691	1,003	14	1,207	4,061,539,206	1,015	—	1,197

Ordinary shares in issue in the Company rank pari passu with any new ordinary shares issued in the Company. All the ordinary shares in issue carry the same right to receive all dividends and other distributions declared, made or paid by the Company.

On 20 September 2017, the Company announced that it had successfully completed the share buy-back programme (the programme) which was notified to the market on 25 May 2017. As a result of the programme, Aviva acquired 57,724,500 shares at an average price of £5.20 per share. These shares with a nominal value of £14 million were bought back and subsequently cancelled during the year, giving rise to a capital redemption reserve of an equivalent amount as required by the Companies Act 2006. The aggregate consideration paid was £300 million which is reflected in retained earnings (see note 37).

31 – Group's share plans

This note describes various equity compensation plans operated by the Group, and shows how the Group values the options and awards of shares in the Company.

(a) Description of the plans

The Group maintains a number of active share option and award plans and schemes (the Group's share plans). These are as follows:

(i) Savings-related options

These are options granted under the tax-advantaged Save As You Earn (SAYE) share option scheme in the UK and Irish revenue-approved SAYE share option scheme in Ireland. The SAYE allows eligible employees to acquire options over the Company's shares at a discount of up to 20% of their market value at the date of grant.

Options are normally exercisable during the six-month period following either the 3rd or 5th anniversary of the start of the relevant savings contract. 7 year contracts were offered prior to 2012. Savings contracts are subject to the statutory savings limits of £500 per month in the UK and €500 per month in Ireland. A limit of £250 per month was applied to contracts in the UK prior to 2016.

(ii) Aviva long-term incentive plan awards

These awards have been made under the Aviva Long-Term Incentive Plan 2011 (LTIP), and are described in section (b) below and in the directors' remuneration report.

(iii) Aviva annual bonus plan awards

These awards have been made under the Aviva Annual Bonus Plan 2011 (ABP), and are described in section (b) below and in the directors' remuneration report.

(iv) Aviva recruitment and retention share plan awards

These are conditional awards granted under the Aviva Recruitment and Retention Share Award plan (RRSAP) in relation to the recruitment or retention of senior managers excluding executive directors. The awards vest in tranches on various dates and vesting is conditional upon the participant being employed by the Group on the vesting date and not having served notice of resignation. Some awards can be subject to performance conditions. If a participant's employment is terminated due to resignation or dismissal, any tranche of the award which has vested within the 12 months prior to the termination date will be subject to clawback and any unvested tranches of the award will lapse in full.

(v) Aviva Investors deferred share award plan awards

These awards have been made under the Aviva Investors Deferred Share Award Plan (AI DSAP), where employees can choose to have the deferred element of their bonus deferred into awards over Aviva shares. The awards vest in three equal tranches on the 2nd, 3rd and 4th year following the year of grant.

(vi) Various all employee share plans

The Company maintains a number of active stock option and share award voluntary schemes:

- The global matching share plan
- Aviva Group employee share ownership scheme
- Aviva France employee profit sharing scheme.

No new Aviva plc ordinary shares will be issued to satisfy awards made under plans iv, v, vi b) or vi c).

(b) Outstanding options and awards

(i) Share options

At 31 December 2017, options to subscribe for ordinary shares of 25 pence each in the Company were outstanding as follows:

Aviva savings related share option scheme	Option price p	Number of shares	Normally exercisable	Option price p	Number of shares	Normally exercisable
	310	38,340	2017	419	994,075	2017 or 2019
	266	279,721	2017	380	4,818,109	2018 or 2020
	268	221,659	2018	351	11,732,597	2019 or 2021
	312	402,478	2018	409	5,644,448	2020 or 2022

Aviva Ireland savings related share option scheme (in euros)	Option price c	Number of shares	Normally exercisable	Option price c	Number of shares	Normally exercisable
	336	5,499	2017	518	124,402	2018 or 2020
	369	12,681	2018	418	494,845	2019 or 2021
	527	34,749	2017 or 2019	447	292,975	2020 or 2022

31 – Group's share plans continued

The following table summarises information about options outstanding at 31 December 2017:

Range of exercise prices	Outstanding options Number	Weighted average remaining contractual life Years	Weighted average exercise price p
£2.66 – £3.16	960,378	1	288.10
£3.17 – £3.67	12,227,442	3	351.00
£3.68 – £4.19	11,908,758	3	397.83

The comparative figures as at 31 December 2016 were:

Range of exercise prices	Outstanding options Number	Weighted average remaining contractual life Years	Weighted average exercise price p
£2.66 – £3.16	2,977,769	1	282.62
£3.17 – £3.67	13,566,466	4	351.00
£3.68 – £4.19	7,708,974	3	390.25

(ii) Share awards

At 31 December 2017, awards issued under the Company's executive incentive plans over ordinary shares of 25 pence each in the Company were outstanding as follows:

Aviva long-term incentive plan 2011	Number of shares	Year of vesting
	7,672,991	2018
	9,601,220	2019
	7,079,121	2020
Aviva annual bonus plan 2011	Number of shares	Year of vesting
	3,523,971	2018
	4,740,088	2019
	1,857,252	2020
Aviva recruitment and retention share award plan	Number of shares	Year of vesting
	410,413	2018
	279,316	2019
	31,575	2020
	8,731	2021
	5,138	2022
Aviva Investors deferred share award plan	Number of shares	Year of vesting
	68,468	2018
	55,082	2019
	37,645	2020

The vesting of awards under the LTIP is subject to the attainment of performance conditions as described in the directors' remuneration report.

No performance conditions are attached to the awards under the ABP, AI DSAP or some of the awards under the RRSAP except as outlined below. There are no performance conditions attached to LTIP awards granted since 2017, with the exception of grants made to the Group Executive.

Under the RRSAP, some shares are subject to the attainment of the same performance conditions that apply to the LTIP grants as follows.

- Shares which vest in 2018:
 - 154,296 are subject to the same performance conditions that apply to the 2015 LTIP grant
 - 35,264 subject to the performance conditions relating to the performance of the participant's previous employer
- Shares which vest in 2019:
 - 102,602 are subject to the same performance conditions that apply to the 2016 LTIP grant
 - 5,305 are subject to the performance conditions relating to the performance of the participant's previous employer
- Shares which vest in 2020:
 - 5,305 are subject to the performance conditions relating to the performance of the participant's previous employer
- Shares which vest in 2021:
 - 5,305 are subject to the performance conditions relating to the performance of the participant's previous employer

These performance conditions are as outlined in the relevant year's directors' remuneration report. Shares which do not vest will lapse.

(iii) Shares to satisfy awards and options

New issue shares are now generally used to satisfy all awards and options granted under plans that have received shareholder approval and where local regulations permit. Further details are given in note 32.

31 – Group's share plans continued

(c) Movements in the year

A summary of the status of the option plans as at 31 December 2016 and 2017, and changes during the years ended on those dates, is shown below.

	2017		2016	
	Number of options	Weighted average exercise price p	Number of options	Weighted average exercise price p
Outstanding at 1 January	24,253,209	355.08	18,152,399	338.00
Granted during the year	5,998,098	409.00	13,679,774	351.00
Exercised during the year	(3,094,372)	327.04	(4,709,978))	286.71
Forfeited during the year	(944,431)	364.03	(591,727)	370.87
Cancelled during the year	(1,004,017)	361.90	(2,038,503)	383.14
Expired during the year	(111,909)	355.32	(238,756)	368.09
Outstanding at 31 December	25,096,578	370.81	24,253,209	355.08
Exercisable at 31 December	911,019	366.51	1,366,584	284.51

(d) Expense charged to the income statement

The total expense recognised for the year arising from equity compensation plans were as follows:

	2017	2016
	£m	£m
Equity-settled expense	77	38
Cash-settled expense	—	(1)
Total (note 10b)	77	37

(e) Fair value of options and awards granted after 7 November 2002

The weighted average fair values of options and awards granted during the year, estimated by using the Binomial option pricing model and Monte Carlo Simulation model, were £1.00 and £4.94 (2016: £0.96 and £3.72) respectively.

(i) Share options

The fair value of the options was estimated on the date of grant, based on the following weighted average assumptions:

Weighted average assumption	2017	2016
Share price	506p	448p
Exercise price	409p	351p
Expected volatility	26.04%	28.29%
Expected life	3.70 years	3.79 years
Expected dividend yield	4.61%	4.65%
Risk-free interest rate	0.55%	0.15%

The expected volatility used was based on the historical volatility of the share price over a period equivalent to the expected life of the option prior to its date of grant. The risk-free interest rate was based on the yields available on UK government bonds as at the date of grant. The bonds chosen were those with a similar remaining term to the expected life of the options. 3,094,372 options granted after 7 November 2002 were exercised during the year (2016: 4,709,978).

(ii) Share awards

The fair value of the awards was estimated on the date of grant based on the following weighted average assumptions:

Weighted average assumption	2017	2016
Share price	523p	472p
Expected volatility ¹	28%	25%
Expected volatility of comparator companies' share price ¹	26%	24%
Correlation between Aviva and comparator competitors' share price ¹	59%	53%
Expected life ¹	2.76 years	2.66 years
Expected dividend yield ²	0.00%	4.00%
Risk-free interest rate ¹	0.59%	0.59%

¹ For awards with market-based performance conditions only.

² Expected dividend yield assumption was only used to fair value LTIP awards issued in France. In 2017, LTIP awards with no market performance conditions were issued in France therefore this assumption was not used in the year.

The expected volatility used was based on the historical volatility of the share price over a period equivalent to the expected life of the share award prior to its date of grant. The risk-free interest rate was based on the yields available on UK government bonds as at the date of grant. The bonds chosen were those with a similar remaining term to the expected life of the share awards.

32 – Treasury shares

The following table summarises information about treasury shares at 31 December 2017:

	2017		2016	
	Number	£m	Number	£m
Shares held by employee trusts	295,906	1	1,127,473	1
Shares held by subsidiary companies	2,471,599	13	2,577,362	14
	2,767,505	14	3,704,835	15

(a) Shares held by employee trusts

Prior to 2014, we satisfied awards and options granted under the Group's share plans primarily through shares purchased in the market and held by employee share trusts. From 2014 we primarily issue new shares except where it is necessary to use shares held by an employee share trust. In 2015 however, new shares were issued to the trust, in order to facilitate the release of shares. This note gives details of the shares held in these trusts. Movements in the carrying value of shares held by employee trusts comprise:

	2017		2016	
	Number	£m	Number	£m
Cost debited to shareholders' funds				
At 1 January	1,127,473	1	1,918,088	2
Acquired in the year	236,585	1	—	—
Distributed in the year	(1,068,152)	(1)	(790,615)	(1)
Balance at 31 December	295,906	1	1,127,473	1

The shares are owned by employee share trusts with an undertaking to satisfy awards of shares in the Company under the Company's share plans and schemes. Details of the features of the plans can be found in the directors' remuneration report and/or in note 31.

These shares were either purchased in the market or, in 2015, new shares were issued to the trust and are carried at weighted average cost. At 31 December 2017, they had an aggregate nominal value of £73,977 (2016: £281,868) and a market value of £1,498,764 (2016: £5,484,028). The trustees have waived their rights to dividends on the shares held in the trusts.

(b) Shares held by subsidiary companies

At 31 December 2017, the balance of shares 2,471,599 (2016: 2,577,362 shares) had an aggregate nominal value of £617,900 (2016: £644,340) and a market value of £13,295,284 (2016: £12,536,289).

33 – Preference share capital

This note gives details of Aviva plc's preference share capital.

The preference share capital of the Company at 31 December was:

	2017		2016	
	£m	£m	£m	£m
Issued and paid up				
100,000,000 8.375% cumulative irredeemable preference shares of £1 each	100	100	100	100
100,000,000 8.75% cumulative irredeemable preference shares of £1 each	100	100	100	100
	200	200	200	200

The issued preference shares are non-voting except where their dividends are in arrears, on a winding up or where their rights are altered.

On a winding up, they carry a preferential right of return of capital ahead of the ordinary shares. Holders are entitled to receive dividends out of the profits available for distribution and resolved to be distributed in priority to the payment of dividends to holders of ordinary shares. The Company does not have a contractual obligation to deliver cash or other financial assets to the preference shareholders and therefore the directors may make dividend payments at their discretion.

At the end of 2017 the fair value of Aviva plc's preference share capital was £348 million (2016: £280 million).

At the 2015 Annual General Meeting, the Company was authorised to allot the following:

- Sterling new preference shares, as defined in the Company's articles of association, up to a maximum nominal value of £500 million; and
- Additional dollar preference shares, as defined in the 2015 Notice of Annual General Meeting, up to a maximum nominal value of US\$650 million.

34 – Direct capital instrument and tier 1 notes

Notional amount	2017 £m	2016 £m
5.9021% £500 million direct capital instrument – Issued November 2004	500	500
8.25% \$650 million fixed rate tier 1 notes – Issued May 2012	—	392
6.875% £210 million STICS – Issued November 2003	231	231
Total	731	1,123

The direct capital instrument (the DCI) was issued on 25 November 2004. The DCI has no fixed redemption date but the Company may, at its sole option, redeem all (but not part) of the principal amount on 27 July 2020, at which date the interest rate changes to a variable rate, or on any respective coupon payment date thereafter. The variable rate will be the six month sterling deposit rate plus margin.

The \$650 million fixed rate tier 1 notes (the FxdRNs) were issued on 3 May 2012. On 28 September 2017 notification was given that the Group would redeem the FxdRNs at first call date on 3 November 2017. At the notification date the instrument was reclassified as a financial liability of £484 million, representing its fair value on translation into sterling at that date. The resulting foreign exchange loss of £92 million has been charged to retained earnings. The FxdRNs were redeemed in full on 3 November 2017 at a cost of £488 million, including an additional £4 million of exchange losses subsequent to the reclassification which are included within other expenses within the income statement.

The Step-up Tier one Insurance Capital Securities ('STICS') were issued on 21 November 2003 by Friends Life Holdings plc, substituted as issuer by Aviva plc on 1 October 2015. The STICS are irrevocably guaranteed on a subordinated basis by Aviva Life & Pensions Limited. Prior to the Part VII transfer of the Friends Life business into UK Life on 1 October 2017 the guarantor for the STICS was Friends Life Limited. The STICS have no fixed redemption date but the Company may, at its sole option, redeem the instrument (in whole or in part) on 21 November 2019, or on the coupon payment date falling on successive fifth anniversaries from this date. For each coupon period beginning 21 November 2019, the STICS will bear interest reset every five years at the rate per annum which is the aggregate of 2.97% and the Gross Redemption Yield of the Benchmark Gilt.

The Company has the option to defer coupon payments on the DCI and the STICS on any relevant payment date.

In relation to the DCI, deferred coupons shall only be satisfied should the Company exercise its sole option to redeem the instruments.

In relation to the STICS, deferred coupons may be satisfied at any time, at the sole option of the Company. The Company is required to satisfy deferred coupons upon the earliest of the following:

- Resumption of payment of coupons on the STICS; or
- Redemption; or
- The commencement of winding up of the issuer.

No interest will accrue on any deferred coupon on the DCI. Interest will accrue on deferred coupons on the STICS at the then current rate of interest on the STICS.

Deferred coupons on the DCI and the STICS will be satisfied by the issue and sale of ordinary shares in the Company at their prevailing market value, to a sum as near as practicable to (and at least equal to) the relevant deferred coupons. In the event of any coupon deferral, the Company will not declare or pay any dividend on its ordinary or preference share capital. These instruments have been treated as equity. Please refer to accounting policy AE.

At the end of 2017 the fair value of the DCI and the STICS was £778 million (2016: £736 million).

35 – Merger reserve

Prior to 1 January 2004, certain significant business combinations were accounted for using the ‘pooling of interests method’ (or merger accounting), which treats the merged groups as if they had been combined throughout the current and comparative accounting periods. Merger accounting principles for these combinations gave rise to a merger reserve in the consolidated statement of financial position, being the difference between the nominal value of new shares issued by the Parent Company for the acquisition of the shares of the subsidiary and the subsidiary’s own share capital and share premium account.

The merger reserve is also used where more than 90% of the shares in a subsidiary are acquired and the consideration includes the issue of new shares by the Company, thereby attracting merger relief under the Companies Act 1985 and, from 1 October 2009, the Companies Act 2006.

The balance of the merger reserve at 31 December 2017 is £8,974 million (2016: £8,974 million).

36 – Currency translation and other reserves

This note gives details of the currency translation and other reserves forming part of the Group’s consolidated equity and shows the movements during the year net of non-controlling interests:

	Currency translation reserve (see accounting policy E) £m	Owner occupied properties reserve (see accounting policy P) £m	Investment valuation reserve (see accounting policy T) £m	Hedging instruments reserve (see accounting policy U) £m	Equity compensation reserve (see accounting policy AB) £m	Other reserves Total £m
Balance at 1 January 2016	165	71	58	(478)	70	(279)
Arising in the year through other comprehensive income:						
Fair value gains	—	4	12	—	—	16
Fair value gains transferred to profit on disposals	—	—	(2)	—	—	(2)
Share of other comprehensive income of joint ventures and associates	—	—	(6)	—	—	(6)
Foreign exchange rate movements ¹	1,019	—	—	(36)	—	(36)
Aggregate tax effect – shareholders’ tax	(31)	(1)	(3)	—	—	(4)
Total other comprehensive income for the year	988	3	1	(36)	—	(32)
Fair value gains transferred to retained earnings on disposals	—	(46)	—	—	—	(46)
Transfer to profit on disposal of subsidiaries, joint ventures and associates	(7)	—	—	—	—	—
Reserves credit for equity compensation plans	—	—	—	—	38	38
Shares issued under equity compensation plans	—	—	—	—	(30)	(30)
Balance at 31 December 2016	1,146	28	59	(514)	78	(349)
Arising in the year through other comprehensive income:						
Fair value gains	—	(1)	(7)	—	—	(8)
Fair value gains transferred to profit on disposals	—	—	(2)	—	—	(2)
Share of other comprehensive income of joint ventures and associates	—	—	6	—	—	6
Foreign exchange rate movements ¹	125	—	—	(100)	—	(100)
Aggregate tax effect – shareholders’ tax	(4)	2	9	—	—	11
Total other comprehensive income for the year	121	1	6	(100)	—	(93)
Fair value gains transferred to retained earnings on disposals	—	(2)	—	—	—	(2)
Transfer to profit on disposal of subsidiaries, joint ventures and associates	(126)	(1)	—	138	—	137
Reserves credit for equity compensation plans	—	—	—	—	77	77
Shares issued under equity compensation plans	—	—	—	—	(44)	(44)
Balance at 31 December 2017	1,141	26	65	(476)	111	(274)

¹ Foreign exchange rate movements recorded in the consolidated statement of comprehensive income of £68 million (2016: £1,128 million) relate to the currency translation reserve of £125 million (2016: £1,019 million), the hedging instruments reserve of £(100) million (2016: £(36) million) and non-controlling interests (refer to note 38) of £43 million (2016: £145 million).

37 – Retained earnings

This note analyses the movements in the consolidated retained earnings during the year.

	2017 £m	2016 £m
Balance at 1 January	4,835	4,774
Profit for the year attributable to equity shareholders	1,497	703
Remeasurements of pension schemes (note 48)	(5)	311
Dividends and appropriations (note 15)	(1,081)	(973)
Net shares issued under equity compensation plans	42	26
Shares purchased in buy-back (note 30)	(300)	—
Reclassification of tier 1 notes to financial liabilities (note 34)	(92)	—
Fair value gains realised from other reserves (note 36)	2	46
Transfer from other reserves on disposal of subsidiaries, joint ventures and associates (note 36)	1	—
Aggregate tax effect	19	(52)
Balance at 31 December	4,918	4,835

The Group’s regulated subsidiaries are required to hold sufficient capital to meet acceptable solvency levels based on applicable local regulations. Their ability to transfer retained earnings to the UK parent companies is therefore restricted to the extent these earnings form part of local regulatory capital.

38 – Non-controlling interests

This note gives details of the Group's non-controlling interests and shows the movements during the year.

Non-controlling interests at 31 December comprised:

	2017 £m	2016 £m
Equity shares in subsidiaries	423	519
Share of earnings	288	392
Share of other reserves	274	264
	985	1,175
Preference shares in General Accident plc	250	250
	1,235	1,425

Movements in the year comprised:

	2017 £m	2016 £m
Balance at 1 January	1,425	1,145
Profit for the year attributable to non-controlling interests	149	156
Foreign exchange rate movements	43	145
Total comprehensive income attributable to non-controlling interests	192	301
Capital contributions from non-controlling interests	36	9
Non-controlling interests share of dividends declared in the year	(103)	(135)
Changes in non-controlling interests in subsidiaries ¹	(315)	105
Balance at 31 December	1,235	1,425

1 Changes in non-controlling interests in 2017 primarily relate to Aviva's sale of its 50% shareholding in Antarius (France), the sale of its 50% shareholding in life insurance and pension partnerships Unicorp Vida and Caja España Vida (Spain) and the consolidation of joint venture insurance operations in Poland, effective 1 January 2017, as a result of changes to the shareholders' agreement. Refer to note 3 for more information. Changes in non-controlling interests in 2016 primarily relate to a newly consolidated subsidiary in Aviva France.

The Group has no subsidiaries whose non-controlling interest is material on the basis of their share of profit or loss

39 – Contract liabilities and associated reinsurance

The following notes explain how the Group calculates its liabilities to policyholders for insurance and investment products it has sold to them. Notes 40 and 41 cover these liabilities and note 42 details the financial guarantees and options given for some of these products. Note 43 details the reinsurance recoverables on these liabilities while note 44 shows the effects of changes in the assumptions.

The following is a summary of the contract provisions and related reinsurance assets as at 31 December.

	Gross provisions £m	Reinsurance assets £m	Net £m	Gross provisions £m	Reinsurance assets ¹ £m	Net £m
Long-term business						
Insurance contracts	(130,972)	5,469	(125,503)	(137,218)	6,186	(131,032)
Participating investment contracts	(87,654)	2	(87,652)	(89,739)	2	(89,737)
Non-participating investment contracts	(124,995)	6,094	(118,901)	(114,531)	18,366	(96,165)
	(343,621)	11,565	(332,056)	(341,488)	24,554	(316,934)
Outstanding claims provisions						
Long-term business	(1,798)	64	(1,734)	(1,925)	65	(1,860)
General insurance and health	(8,964)	845	(8,119)	(8,749)	1,090	(7,659)
	(10,762)	909	(9,853)	(10,674)	1,155	(9,519)
Provisions for claims incurred but not reported	(2,837)	884	(1,953)	(2,960)	795	(2,165)
	(357,220)	13,358	(343,862)	(355,122)	26,504	(328,618)
Provision for unearned premiums	(4,980)	257	(4,723)	(4,766)	250	(4,516)
Provision arising from liability adequacy tests ²	(13)	—	(13)	(13)	—	(13)
Total	(362,213)	13,615	(348,598)	(359,901)	26,754	(333,147)
Less: Amounts classified as held for sale	9,577	(123)	9,454	11,623	(411)	11,212
	(352,636)	13,492	(339,144)	(348,278)	26,343	(321,935)

1 Reinsurance assets at 31 December 2016 for General insurance and health business include the impact of the £78 million reinsurance asset relating to an outwards reinsurance contract completed by the UK General Insurance business and the remaining recoveries expected in respect of the Alberta fires in Canada.

2 Provision arising from liability adequacy tests relates to general insurance business only. Liability adequacy test provisions for life operations are included in other line items.

40 – Insurance liabilities

This note analyses the Group insurance contract liabilities by type of product and describes how the Group calculates these liabilities and the assumptions used.

(a) Carrying amount

(i) Insurance liabilities (gross of reinsurance) at 31 December comprised:

	2017			2016		
	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	49,928	—	49,928	56,760	—	56,760
Unit-linked non-participating	16,040	—	16,040	16,026	—	16,026
Other non-participating	65,004	—	65,004	64,432	—	64,432
	130,972	—	130,972	137,218	—	137,218
Outstanding claims provisions	1,798	8,964	10,762	1,925	8,749	10,674
Provision for claims incurred but not reported	—	2,837	2,837	—	2,960	2,960
	1,798	11,801	13,599	1,925	11,709	13,634
Provision for unearned premiums	—	4,980	4,980	—	4,766	4,766
Provision arising from liability adequacy tests ¹	—	13	13	—	13	13
Total	132,770	16,794	149,564	139,143	16,488	155,631
Less: Amounts classified as held for sale	(783)	(131)	(914)	(4,448)	—	(4,448)
	131,987	16,663	148,650	134,695	16,488	151,183

¹ Provision arising from liability adequacy tests relates to general insurance business only. Liability adequacy test provisions for life operations are included in other line items.

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

2017	Gross £m	Reinsurance £m	Net £m
Long-term business			
Change in long-term business provisions (note 40b(iv))	624	315	939
Change in provision for outstanding claims	(65)	(11)	(76)
	559	304	863
General insurance and health			
Change in insurance liabilities (note 40c(iv) and 43c(ii))	73	138	211
Less: Unwind of discount on GI reserves and other	(9)	9	—
	64	147	211
Total change in insurance liabilities (note 6)	623	451	1,074

2016	Gross £m	Reinsurance ¹ £m	Net £m
Long-term business			
Change in long-term business provisions (note 40b(iv))	7,164	(993)	6,171
Change in provision for outstanding claims	91	(13)	78
	7,255	(1,006)	6,249
General insurance and health			
Change in insurance liabilities (note 40c(iv) and 43c(ii)) ²	867	(222)	645
Less: Unwind of discount on GI reserves and other	(11)	10	(1)
	856	(212)	644
Total change in insurance liabilities (note 6)	8,111	(1,218)	6,893

¹ Reinsurance assets at 31 December 2016 for General Insurance and health business include the impact of the £78 million reinsurance asset relating to an outwards reinsurance contract completed by the UK General Insurance business.

² Includes £475 million in the UK General Insurance business relating to the impact of the change in the Ogden discount rate.

40 – Insurance liabilities continued

(b) Long-term business liabilities

(i) Business description

The Group underwrites long-term business in a number of countries as follows:

- In the UK, in Aviva Life & Pensions UK (UKLAP) mainly in:
 - New With-Profits Sub-Fund (NWPSF) where the with-profits policyholders are entitled to at least 90% of the distributed profits, with the shareholders receiving the balance. Any surplus or deficit emerging in NWPSF that is not distributed as bonus will be transferred from this sub-fund to the Reattributed Inherited Estate External Support Account (RIEESA) (see below).
 - Old With-Profits Sub-Fund (OWPSF), UKLAP With-Profits Sub-Fund (UKLAP WPSF) and Provident Mutual Sub-Fund (PMSF) of UKLAP, where the with-profits policyholders are entitled to at least 90% of the distributed profits, with the shareholders receiving the balance.
 - The FP With-Profits Sub-Fund (FP WPSF), which was formally closed to new business during 2017 and where shareholders are entitled to 10% of the distributed profits, plus 60% of the surplus arising on pre-demutualisation non-profit and unitised business and non-investment sources of surplus on policies held by post-demutualisation policyholders. The Friends Provident demutualisation occurred in 2001.
 - The FLC New With-Profits Sub-Fund (FLC New WPSF), the FLC Old With-Profits Sub-Fund (FLC Old WPSF), the WL With-Profits Sub-Fund (WL WPSF) and FLAS With-Profits Sub-Fund (FLAS WPSF) which are closed to new business and where policyholders are entitled to 90% of the distributed profits aside from certain policies in the FLC New WPSF and the FLC Old WPSF with guaranteed bonus rates, and certain policies in the WL WPSF which are reinsured into the fund where the shareholders do not receive one-ninth of the bonus.
 - FPLAL With-Profits Sub-Fund (FPLAL WPSF) and Secure Growth Fund (SGF), which are closed to new business and where policyholders are entitled to 100% of the distributed profits.
 - The ‘Non-profit’ fund, where shareholders are entitled to 100% of the distributed profits. Shareholder profits on unitised with-profits business written in UKLAP WPSF and on stakeholder unitised with-profits business written in NWPSF and OWPSF are derived from management fees and policy charges, and emerge in the non-profit funds.
 - RIEESA is a non-profit fund where shareholders are entitled to 100% of the distributed profits, but these cannot be distributed until the ‘lock-in’ criteria set by the Reatribution Scheme have been met. RIEESA is used to provide capital support to NWPSF, and has been used in the past to write non-participating business.
- In France, the majority of policyholders’ benefits are determined by investment performance, subject to certain guarantees, and shareholders’ profits are derived largely from management fees. In addition, a substantial number of policies participate in investment returns, with the balance being attributable to shareholders.
- In other operations in Europe and Asia, a range of long-term insurance and savings products are written.

(ii) Group practice

The long-term business provision is calculated separately for each of the Group’s life operations. The provisions for overseas subsidiaries have generally been included on the basis of local regulatory requirements, modified where necessary to reflect the requirements of the Companies Act 2006.

Material judgement is required in calculating the provisions and is exercised particularly through the choice of assumptions where discretion is permitted. In turn, the assumptions used depend on the circumstances prevailing in each of the life operations. Provisions are most sensitive to assumptions regarding discount rates and mortality/morbidity rates. Where discount rate assumptions are based on current market yields on fixed interest securities, allowance is made for default risk implicit in the yields on the underlying assets.

Bonuses paid during the year are reflected in claims paid, whereas those allocated as part of the bonus declaration are included in the movements in the long-term business provision.

For UK with-profits life funds falling within the scope of FRS 27, which was grandfathered from UK regulatory requirements under IFRS 4 prior to the adoption of Solvency II, an amount may be recognised for the present value of future profits (PVFP) on non-participating business written in a with-profits fund where the determination of the realistic value of liabilities in that with-profits fund takes account, directly or indirectly, of this value. For NWPSF, OWPSF, UKLAP WPSF and PMSF no adjustment for this value is made to the participating insurance and investment contract liabilities or the unallocated divisible surplus. For FP WPSF, FPLAL WPSF, FLC New WPSF, FLC Old WPSF, FLAS WPSF, WL WPSF and SGF the non-participating liabilities are measured on a realistic basis with implicit recognition of the present value of future profits and hence no additional explicit adjustment is required for this value.

(iii) Methodology and assumptions

The main method of actuarial valuation of liabilities arising under long-term insurance contracts is the gross premium method which involves the discounting of projected premiums and claims.

The gross premium method uses the amount of contractual premiums payable and includes explicit assumptions for interest and discount rates, mortality and morbidity, persistency and future expenses. These assumptions can vary by contract type and reflect current and expected future experience.

40 – Insurance liabilities continued

(a) UK

With-profits business

The Group's UK with-profit liabilities are evaluated by reference to FRS27, which was grandfathered under IFRS 4, prior to the adoption of Solvency II. Under these rules, provision for guarantees and options within realistic liabilities are measured using market-consistent stochastic models. A stochastic approach includes measuring the time value of guarantees and options, which represents the additional cost arising from uncertainty surrounding future economic conditions.

The key elements of the realistic liabilities are the with-profits benefit reserve (WPBR) and the present value of the expected cost of any payments in excess of the WPBR (referred to as the cost of future policy-related liabilities). The realistic liability for any contract is equal to the sum of the WPBR and the cost of future policy-related liabilities, which includes the value of any 'planned enhancements' to benefits agreed by the Company.

The WPBR for an individual contract is generally calculated on a retrospective basis, and represents the accumulation of the premiums paid on the contract, allowing for investment return, taxation, expenses and any other charges levied on the contract. For a small proportion of business, a prospective valuation approach is used, including allowance for anticipated future regular and final bonuses.

The cost of future policy-related liabilities include:

- Maturity Guarantees;
- Guarantees on surrender, including no-MVR (Market Value Reduction) Guarantees and Guarantees linked to inflation;
- Guaranteed Annuity Options;
- GMP (Guaranteed Minimum Pension) underpin on Section 32 transfers; and
- Expected payments under Mortgage Endowment Promise.

The cost of future policy-related liabilities is determined using a market-consistent approach and, in the main, this is based on a stochastic model calibrated to market conditions at the end of the reporting period. Non-market-related assumptions (for example, persistency, mortality and expenses) are assessed on a best estimate basis with reference to Company and wider industry experience, adjusted to take into account future trends.

On 1 January 2016 the Solvency I Pillar 1 regulatory regime was replaced with Solvency II, under which realistic liabilities were replaced with Best Estimate Liabilities (BEL). Key differences between the realistic liabilities and the Solvency II BEL are that BEL excludes the shareholder's share of future bonuses, excludes certain planned and approved enhancements to benefits (part of Solvency II surplus funds) and uses a higher yield (EIOPA specified) for future investment returns and discounting. Adjusting the yield used in the calculation of the BEL by removing the volatility and credit risk adjustments, including planned enhancements that are part of Solvency II surplus funds and making other less significant adjustments, results in a valuation in accordance with FRS 27.

For periods subsequent to 31 December 2015, the with-profits business is valued based on an adjusted Solvency II BEL assessment.

The principal assumptions underlying the cost of future policy-related liabilities are as follows:

Future investment return

A 'risk-free' rate equal to the spot yield on UK swaps is used for the valuation of with-profits business. The rates vary according to the outstanding term of the policy, with a typical rate as at 31 December 2017 of 1.29% (2016: 1.25%) for a policy with ten years outstanding.

Volatility of investment return

Volatility assumptions are set with reference to implied volatility data on traded market instruments, where available, or on a best estimate basis where not.

	2017	2016
Volatility		
Equity returns	20.9%	23.9%
Property returns	16.4%	16.4%

The equity volatility used depends on term, money-ness and region. The figure shown is for a sample UK equity, at the money, with a ten-year term.

Future regular bonuses

Annual bonus assumptions for 2018 have been set consistently with the year-end 2017 declaration. Future annual bonus rates reflect the principles and practices of each fund. In particular, the level is set with regard to the projected margin for final bonus and the change from one year to the next is limited to a level consistent with past practice.

Mortality

Mortality assumptions for with-profits business are set with regard to recent Company experience and general industry trends. The mortality tables used in the valuation are summarised below:

Mortality table used	2017	2016
Assurances, pure endowments and deferred annuities before vesting	Nil or Axx00 adjusted	Nil or Axx00 adjusted
Pensions business after vesting and pensions annuities in payment	PCMA00/PCFA00 adjusted plus allowance for future mortality improvement	PCMA00/PCFA00 adjusted plus allowance for future mortality improvement

Allowance for future mortality improvement is in line with the rates shown for non-profit business below.

40 – Insurance liabilities continued

Expenses

Maintenance charge assumptions for with-profits business are generally expressed as a fixed 'per policy' charge in line with agreements between Aviva Life Services UK (UKLS) and Aviva Life & Pensions UK (UKLAP). The assumptions increase by future charge inflation over the lifetime of each contract, which is 50% RPI, 100% RPI or 100% RPI + 1% depending on product type. Any excess of expenses charged by UKLS to UKLAP over the charges specified by the agreements is borne by the non-profits business.

Non-profit business

The valuation of non-profit business is based on grandfathered regulatory requirements under IFRS 4 prior to the adoption of Solvency II, adjusted to remove certain regulatory reserves and margins in assumptions, notably for annuity business. Conventional non-profit contracts, including those written in the with-profits funds, are valued using gross premium methods which discount projected future cash flows. The cash flows are calculated using the amount of contractual premiums payable, together with explicit assumptions for investment returns, inflation, discount rates, mortality, morbidity, persistency and future expenses. These assumptions vary by contract type and reflect current and expected future experience with an allowance for prudence. For FP WPSF, FPLAL WPSF, FLC New WPSF, FLC Old WPSF, FLAS WPSF, WL WPSF and SGF the non-participating liabilities are measured on a realistic basis with implicit recognition of the present value of future profits.

For unit-linked and some unitised with-profits business, the provisions are valued by adding a prospective non-unit reserve to the bid value of units. The prospective non-unit reserve is calculated by projecting the future non-unit cash flows using prudent assumptions and on the assumption that future premiums cease, unless it is more onerous to assume that they continue. Where appropriate, allowance for persistency is based on actual experience.

Valuation discount rate assumptions are set with regard to yields on the supporting assets and the general level of long-term interest rates as measured by gilt yields. An explicit allowance for risk is included by making an explicit deduction from the yields on corporate bonds, mortgages and deposits, based on historical default experience of each asset class. A further margin for risk is then deducted for all asset classes.

The provisions held in respect of guaranteed annuity options are a prudent assessment of the additional liability incurred under the option on a basis and method consistent with that used to value basic policy liabilities, and includes a prudent assessment of the proportion of policyholders who will choose to exercise the option.

Maintenance expense assumptions for non-profit business are generally expressed as a 'per policy' charge set with regards to an allocation of current year expense levels by broad category of business and using the policy counts for in-force business. The assumptions also include an allowance for prudence and increase by future expense inflation over the lifetime of each contract. Expense inflation is assumed to be in line with RPI. An additional liability is held if projected per-policy expenses in future years are expected to exceed current assumptions. Further, explicit project expense liabilities are held for non-discretionary project costs that typically relate to mandatory regulatory requirements. Expense-related liabilities are only held where expenses are not covered by anticipated future profits in the liability methodology, notably for unit-linked contracts.

Valuation discount rates for business in the non-profit funds are as follows:

Valuation discount rates (Gross of investment expenses)	2017	2016
Assurances		
Life conventional non-profit	0.8% to 2.5%	0.5% to 2.6%
Pensions conventional non-profit	1.0% to 2.4%	0.8% to 2.1%
Annuities		
Conventional immediate and deferred annuities	1.0% to 2.8%	0.6% to 2.8%
Non-unit reserves on Unit Linked business		
Life	0.8% to 1.2%	0.7% to 1.3%
Pensions	0.8% to 1.5%	0.7% to 1.6%
Income Protection¹		
Active lives	1.0% to 2.5%	1.0 to 2.6%
Claims in payment (level and index linked)	1.0% to 1.5%	(0.2)% to 1.6%

¹ Income protection business (pre-existing UKLAP) now uses a nominal swaps curve for all sub-classes and has been shown as an equivalent flat rate in the table above. Previously, a real interest rate was used for the index linked claims in payment.

The above valuation discount rates are after reduction for risk, but before allowance for investment expenses. For conventional immediate annuity business the allowance for risk comprises long-term assumptions for defaults or (in the case of equity release assets) expected losses arising from the No-Negative-Equity guarantee. These allowances vary by asset category and for some asset classes by rating. The risk allowances made for corporate bonds, mortgages (including healthcare mortgages, commercial mortgages and infrastructure assets), and Equity Release for business transferred in from Aviva Annuity UK Ltd in 2017 equated to 48 bps, 40 bps, and 102 bps respectively at 31 December 2017 (2016: 47 bps, 48 bps, and 102 bps respectively). The risk allowances made for corporate bonds and mortgages for business transferred in from Friends Life Limited in 2017 equated to 47 bps and 33 bps respectively at 31 December 2017 (2016: 37 bps and 42 bps respectively).

For corporate bonds, the allowance represented approximately 37% and 39% respectively of the average credit spread for the portfolios transferred in from Aviva Annuity UK Limited and from Friends Life Limited (2016: 31% and 31% respectively).

The total valuation allowance for business transferred from Aviva Annuity UK Limited in respect of corporate bonds and mortgages, including healthcare mortgages but excluding equity release, was £1.3 billion (2016: £1.3 billion) over the remaining term of the portfolio while for Friends Life Limited it was £0.5 billion (2016: £0.5 billion). The total valuation allowance for business transferred from Aviva Annuity UK Limited in respect of equity release assets was £1.2 billion (2016: £1.1 billion). Total liabilities for the annuity business were £52 billion at 31 December 2017 (2016: £50 billion).

40 – Insurance liabilities continued

Mortality assumptions for non-profit business are set with regard to recent Company experience and general industry trends. The mortality tables used in the valuation are summarised below:

Mortality tables used	2017	2016
Assurances		
Non-profit	AM00/AF00 or TM08/TF08 adjusted for smoker status and age/sex specific factors	AM00/AF00 or TM00/TF00 adjusted for smoker status and age/sex specific factors
Pure endowments and deferred annuities before vesting	AM00/AF00 adjusted	AM00/AF00 adjusted
Annuities in payment		
Pensions business and general annuity business	PCMA00/PCFA00 adjusted plus allowance for future mortality improvement	PCMA00/PCFA00 adjusted plus allowance for future mortality improvement

For the largest portfolio of pensions annuity business transferred from Aviva Annuity UK Limited, the underlying mortality assumptions for Males are 104.0% of PCMA00 (2016: 98.0% of PCMA00) with base year 2000; for Females the underlying mortality assumptions are 94.5% of PCFA00 (2016: 91.0% of PCFA00) with base year 2000. A negative provision of £0.1billion is also held to allow for higher mortality at old ages being experienced in our portfolio relative to the above assumptions. For the largest portfolio of pensions annuity business transferred from Friends Life Limited, the underlying mortality assumptions for Males are 103.4% of PCMA00 (2016: 98.5% of PCMA00) with base year 2000; for Females the underlying mortality assumptions are 104.4% of PCFA00 (2016: 98.5% of PCFA00) with base year 2000.

For all the main portfolios of annuities, improvements are based on 'CMI_2016 (S=7.5) Advanced with adjustments' (2016: CMI_2015) with a long-term improvement rate of 1.75% (2016: 1.75%) for males and 1.5% (2016: 1.5%) for females, both with an addition for prudence of 0.5% (2016: 0.5%) to all future annual improvement adjustments. The CMI_2016 tables have been adjusted by adding 0.25% and 0.35% to the initial rate of mortality improvements for males and females respectively (to allow for greater mortality improvements in the annuitant population relative to the general population on which CMI_2016 is based), and uses the advanced parameters to taper the long-term improvement rates to zero between ages 90 and 115 (the 'core' parameters taper the long-term improvement rates to zero between ages 85 and 110). For pension annuity business transferred from Aviva Annuity UK limited, year-specific adjustments are made to allow for potential selection effects due to the development of the Enhanced Annuity market and covering possible selection effects from pension freedom reforms.

(b) France

The majority of reserves arise from single premium savings products and are based on the accumulated fund values, adjusted to maintain consistency with the value of the assets backing the policyholder liabilities. For traditional business, the net premium method is used for prospective valuations, in accordance with local regulation, where the valuation assumptions depend on the date of issue of the contract. The valuation discount rate also depends on the original duration of the contract and mortality rates are based on industry tables.

	Valuation discount rates		Mortality tables used
	2017	2016	2017 and 2016
Life assurances	TD73-77, TD88-90, TH00-02 TF00-02, H_AVDBS, F_AVDBS		
Annuities	0% to 4.5% 0% to 2.0%	0% to 4.5% 0% to 4.5%	H_SSDBS, F_SSDBS TGF05/TGH05

(c) Other countries

In all other countries, local generally accepted interest rates and published standard mortality tables are used for different categories of business as appropriate. The tables are based on relevant experience and show mortality rates, by age, for specific groupings of people.

(iv) Movements

The following movements have occurred in the gross long-term business provisions during the year

	2017 £m	2016 £m
Carrying amount at 1 January	137,218	125,348
Provisions in respect of new business	5,731	5,224
Expected change in existing business provisions	(7,747)	(8,235)
Variance between actual and expected experience	1,520	4,752
Impact of non-economic assumption changes	(1,175)	(536)
Impact of economic assumption changes	2,115	5,930
Other movements recognised as an expense ¹	180	29
Change in liability recognised as an expense (note 40a(ii))	624	7,164
Effect of portfolio transfers, acquisitions and disposals ²	(8,124)	—
Foreign exchange rate movements	1,252	4,761
Other movements	2	(55)
Carrying amount at 31 December	130,972	137,218

¹ Other movements during 2017 primarily relates to a special bonus distribution to with-profits policyholders (UK Life).

² The movement during 2017 primarily relates to the disposal of Antarius in France and a major share of the business in Spain offset by the consolidation of the Poland and Vietnam joint ventures.

40 – Insurance liabilities continued

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 £1.5 billion impact of variance between actual and expected experience in 2017 is mainly due to higher than expected equity returns in the UK increasing with-profits and unit-linked liabilities.

The impact of non-economic assumption changes of £(1.2) billion in 2017 reduces the carrying value of insurance liabilities and relates mainly to release of reserves for longevity which is partially offset by increase in expense and persistency reserves for the UK business (with the impact on profit partially offset by a corresponding reduction in reinsurance assets).

The £2.1 billion impact of economic assumption changes in 2017 reflects a decrease in valuation interest rates in response to increasing interest rates and narrowing spreads, primarily in respect of immediate annuity and participating insurance contracts in the UK.

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. Where assumption changes do impact on profit, these are included in the effect of changes in assumptions and estimates during the year shown in note 44, together with the impact of movements in related non-financial assets.

(c) General insurance and health liabilities

(i) Provisions for outstanding claims

Delays occur in the notification and settlement of claims and a substantial measure of experience and judgement is involved in assessing outstanding liabilities, the ultimate cost of which cannot be known with certainty at the statement of financial position date. The reserves for general insurance and health business are based on information currently available. However, it is inherent in the nature of the business written that the ultimate liabilities may vary as a result of subsequent developments.

Provisions for outstanding claims are established to cover the outstanding expected ultimate liability for losses and loss adjustment expenses (LAE) in respect of all claims that have already occurred. The provisions established cover reported claims and associated LAE, as well as claims incurred but not yet reported and associated LAE.

The Group only establishes loss reserves for losses that have already occurred. The Group therefore does not establish catastrophe equalisation reserves that defer a share of income in respect of certain lines of business from years in which a catastrophe does not occur to future periods in which catastrophes may occur. When calculating reserves, the Group takes into account estimated future recoveries from salvage and subrogation, and a separate asset is recorded for expected future recoveries from reinsurers after considering their collectability.

The table below shows the split of total general insurance and health outstanding claim provisions and IBNR provisions, gross of reinsurance, by major line of business.

	As at 31 December 2017			As at 31 December 2016		
	Outstanding claim provisions £m	IBNR provisions £m	Total claim provisions £m	Outstanding claim provisions £m	IBNR provisions £m	Total claim provisions £m
Motor	5,039	1,339	6,378	4,690	1,623	6,313
Property	1,734	114	1,848	1,711	57	1,768
Liability	1,814	1,270	3,084	1,907	1,257	3,164
Creditor	24	11	35	23	20	43
Other	353	103	456	418	3	421
	8,964	2,837	11,801	8,749	2,960	11,709

(ii) Discounting

Outstanding claims provisions are based on undiscounted estimates of future claim payments, except for the following classes of business for which discounted provisions are held:

Class	Rate		Mean term of liabilities	
	2017	2016	2017	2016
Reinsured London Market business	0.7% to 2.6%	2.0%	9 years	9 years
Latent claims	0.7% to 1.9%	0.00% to 2.31%	8 to 17 years	6 to 15 years
Structured settlements	0.5% to 3.0%	0.15% to 2.98%	7 to 39 years	13 to 39 years

The gross outstanding claims provision before discounting was £11,346 million (2016: £12,196 million). The period of time which will elapse before the liabilities are settled has been estimated by modelling the settlement patterns of the underlying claims.

The discount rate that has been applied to latent claims reserves and reinsured London Market business is based on the relevant swap curve in the relevant currency having regard to the expected settlement dates of the claims. The range of discount rates used depends on the duration of the claims and is given in the table above. The duration of the claims span over 35 years, with the average duration being between 6 and 15 years depending on the geographical region.

Any change in discount rates between the start and the end of the accounting period is reflected outside of Group adjusted Operating profit as an economic assumption change.

(iii) Assumptions

Outstanding claims provisions are estimated based on known facts at the date of estimation. Case estimates are set by skilled claims technicians and established case setting procedures. Claims technicians apply their experience and knowledge to the circumstances of individual claims. They take into account all available information and correspondence regarding the circumstances of the claim, such as medical reports, investigations and inspections. Claims technicians set case estimates according to documented claims department policies and specialise in setting estimates for certain lines of business or types of claim. Claims above certain limits are referred to senior claims handlers for estimate authorisation.

40 – Insurance liabilities continued

No adjustments are made to the claims technicians' case estimates included in booked claim provisions, except for rare occasions when the estimated ultimate cost of individual large or unusual claims may be adjusted, subject to internal reserve committee approval, to allow for uncertainty regarding, for example, the outcome of a court case. The ultimate cost of outstanding claims is then estimated by using a range of standard actuarial claims projection techniques, such as the Chain Ladder and Bornhuetter-Ferguson methods. The main assumption underlying these techniques is that a company's past claims development experience can be used to project future claims development and hence ultimate claims costs. As such, these methods extrapolate the development of paid and incurred losses, average costs per claim and claim numbers based on the observed development of earlier years and expected loss ratios. Historical claims development is mainly analysed by accident period, although underwriting or notification period is also used where this is considered appropriate.

Claim development is separately analysed for each geographic area, as well as by each line of business. Certain lines of business are also further analysed by claim type or type of coverage. In addition, large claims are usually separately addressed, either by being reserved at the face value of loss adjuster estimates or separately projected in order to reflect their future development.

The assumptions used in most non-life actuarial projection techniques, including future rates of claims inflation or loss ratio assumptions, are implicit in the historical claims development data on which the projections are based. Additional qualitative judgement is used to assess the extent to which past trends may not apply in the future, for example, to reflect one-off occurrences, changes in external or market factors such as public attitudes to claiming, economic conditions, levels of claims inflation, judicial decisions and legislation, as well as internal factors such as portfolio mix, policy conditions and claims handling procedures in order to arrive at a point estimate for the ultimate cost of claims that represents the likely outcome, from a range of possible outcomes, taking account of all the uncertainties involved. The range of possible outcomes does not, however, result in the quantification of a reserve range. The following explicit assumptions are made which could materially impact the level of booked net reserves:

(a) UK mesothelioma claims

The level of uncertainty associated with latent claims is considerable due to the relatively small number of claims and the long-tail nature of the liabilities. UK mesothelioma claims account for a large proportion of the Group's latent claims. The key assumptions underlying the estimation of these claims include claim numbers, the base average cost per claim, future inflation in the average cost of claims and legal fees.

The best estimate of the liabilities reflects the latest available market information and studies. Many different scenarios can be derived by flexing these key assumptions and applying different combinations of the different assumptions. An upper and lower scenario can be derived by making reasonably likely changes to these assumptions, resulting in an estimate of £35 million (2016: £25 million) greater than the best estimate, or £40 million (2016: £45 million) lower than the best estimate. These scenarios do not, however, constitute an upper or lower bound on these liabilities.

(b) Interest rates used to discount latent claim liabilities and structured settlements

The discount rates used in determining our latent claim liabilities and structured settlements are based on the relevant swap curve in the relevant currency at the reporting date, having regard to the duration of the expected settlement of claims. The range of discount rates used is shown in section (ii) above and depends on the duration of the claim and the reporting date. At 31 December 2017, it is estimated that a 1% fall in the discount rates used would increase net claim reserves by approximately £110 million (2016: £220 million), excluding the offsetting effect on asset values as assets are not hypothecated across classes of business. The impact has fallen during 2017 due to a reduction in bodily injury claims in the UK settled by periodic payment orders (PPOs) or structured settlements as a result of a reduction in the Ogden rate from 2.5% to -0.75% making them less attractive compared to a lump sum settlement. The impact of a 1% fall in interest rates across all assets and liabilities of our general insurance and health businesses is shown in note 56.

(c) Allowance for risk and uncertainty

The uncertainties involved in estimating loss reserves are allowed for in the reserving process and by the estimation of explicit reserve uncertainty distributions. The reserve estimation basis for non-life claims requires all non-life businesses to calculate booked claim provisions as the best estimate of the cost of future claim payments, plus an explicit allowance for risk and uncertainty. The allowance for risk and uncertainty is calculated by each business unit in accordance with the requirements of the Group non-life reserving policy, taking into account the risks and uncertainties specific to each line of business and type of claim in that territory. The requirements of the Group non-life reserving policy also seek to ensure that the allowance for risk and uncertainty is set consistently across both business units and reporting periods.

Changes to claims development patterns can materially impact the results of actuarial projection techniques. However, allowance for the inherent uncertainty in the assumptions underlying reserving projections is automatically allowed for in the explicit allowance for risk and uncertainty included when setting booked reserves.

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 last year. However, the discount rate used in the Ogden Tables is currently being reviewed by the Lord Chancellor and draft legislation has been proposed (but not yet enacted) which, at the time it was published, indicated a discount rate in the range of 0% to 1%. 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 positive impact on profit before tax.

40 – Insurance liabilities continued

(iv) Movements

The following changes have occurred in the general insurance and health claims provisions during the year:

	2017 £m	2016 £m
Carrying amount at 1 January	11,709	9,446
Impact of changes in assumptions	(7)	324
Claim losses and expenses incurred in the current year	6,890	6,703
Decrease in estimated claim losses and expenses incurred in prior periods	(172)	(7)
Incurred claims losses and expenses	6,711	7,020
Less:		
Payments made on claims incurred in the current year	(3,642)	(3,505)
Payments made on claims incurred in prior periods	(3,283)	(2,893)
Recoveries on claim payments	278	234
Claims payments made in the period, net of recoveries	(6,647)	(6,164)
Unwind of discounting	9	11
Changes in claims reserve recognised as an expense (note 40a(ii))	73	867
Effect of portfolio transfers, acquisitions and disposals	3	430
Foreign exchange rate movements	16	966
Carrying amount at 31 December	11,801	11,709

The effect of changes in the main assumptions is given in note 44 and the economic assumption changes are explained in note 9.

40 – Insurance liabilities continued

(d) Loss development tables

(i) Description of tables

The tables that follow present the development of claim payments and the estimated ultimate cost of claims for the accident years 2008 to 2017. The upper half of the tables shows the cumulative amounts paid during successive years related to each accident year. For example, with respect to the accident year 2008, by the end of 2017 £9,033 million had actually been paid in settlement of claims. In addition, as reflected in the lower section of the table, the original estimated ultimate cost of claims of £9,508 million was re-estimated to be £9,195 million at 31 December 2017.

The original estimates will be increased or decreased, as more information becomes known about the individual claims and overall claim frequency and severity.

The Group aims to maintain reserves in respect of its general insurance and health business that protect against adverse future claims experience and development. The Group establishes reserves in respect of the current accident year (2017), where the development of claims is less mature, that allow for the greater uncertainty attaching to the ultimate cost of current accident year claims. As claims develop and the ultimate cost of claims become more certain, the absence of adverse claims experience will result in a release of reserves from earlier accident years, as shown in the loss development tables and movements table (c)(iv) above. Releases from prior accident year reserves are also due to an improvement in the estimated cost of claims.

Key elements of the release from prior accident year general insurance and health net provisions during 2017 were:

- £107 million release from UK due to favourable claims experience in Personal Motor offset by the less favourable experience in 2017 of Commercial Liability claims and large claims in Personal and Commercial Property.
- £2 million strengthening from Canada due to the better than expected claims experience following the 2010 Ontario auto reforms tailing off, unfavourable development in the Ontario Accident Benefits coverage in the RBC book in 2017, deterioration of experience in Alberta Auto Bodily Injury and Newfoundland Auto Bodily Injury.
- £79 million release from Europe (including Ireland) mainly due to continued favourable development in France and Italy.

Key elements of the release from prior accident year general insurance and health net provisions during 2016 were:

- £208 million strengthening from UK & Ireland due to the impact of the change in the Ogden discount rate in the UK partly offset by other favourable developments on personal motor and commercial liability claims.
- £154 million release from Canada mainly due to continued favourable experience on motor, following the legislative changes in Ontario.
- £90 million release from Europe mainly due to favourable development in France and Italy.

There was also a £78 million reduction in net claim reserves relating to an outwards reinsurance contract completed by the UK General Insurance business.

(ii) Gross figures

Before the effect of reinsurance, the loss development table is:

Accident year	All prior years £m	2008 £m	2009 £m	2010 £m	2011 £m	2012 £m	2013 £m	2014 £m	2015 £m	2016 £m	2017 £m	Total £m
Gross cumulative claim payments												
At end of accident year	(4,915)	(3,780)	(3,502)	(3,420)	(3,055)	(3,068)	(3,102)	(2,991)	(3,534)	(3,517)		
One year later	(7,350)	(5,464)	(5,466)	(4,765)	(4,373)	(4,476)	(4,295)	(4,285)	(4,972)			
Two years later	(7,828)	(6,102)	(5,875)	(5,150)	(4,812)	(4,916)	(4,681)	(4,710)				
Three years later	(8,304)	(6,393)	(6,163)	(5,457)	(5,118)	(5,221)	(4,974)					
Four years later	(8,607)	(6,672)	(6,405)	(5,712)	(5,376)	(5,467)						
Five years later	(8,781)	(6,836)	(6,564)	(5,864)	(5,556)							
Six years later	(8,906)	(6,958)	(6,649)	(5,978)								
Seven years later	(8,986)	(7,043)	(6,690)									
Eight years later	(9,012)	(7,078)										
Nine years later	(9,033)											
Estimate of gross ultimate claims												
At end of accident year	9,508	7,364	6,911	6,428	6,201	6,122	5,896	5,851	6,947	6,894		
One year later	9,322	7,297	7,006	6,330	6,028	6,039	5,833	5,930	6,931			
Two years later	9,277	7,281	6,950	6,315	6,002	6,029	5,865	5,912				
Three years later	9,272	7,215	6,914	6,292	5,952	6,067	5,842					
Four years later	9,235	7,204	6,912	6,262	6,002	6,034						
Five years later	9,252	7,239	6,906	6,265	5,979							
Six years later	9,213	7,217	6,926	6,265								
Seven years later	9,207	7,256	6,913									
Eight years later	9,202	7,228										
Nine years later	9,195											
Estimate of gross ultimate claims	9,195	7,228	6,913	6,265	5,979	6,034	5,842	5,912	6,931	6,894		
Cumulative payments	(9,033)	(7,078)	(6,690)	(5,978)	(5,556)	(5,467)	(4,974)	(4,710)	(4,972)	(3,517)		
Effect of discounting	2,516 (397)	162 (14)	150 (14)	223 (25)	287 (2)	423 —	567 (1)	868 —	1,202 —	1,959 —	3,377 —	11,734 (453)
Present value	2,119	148	136	198	285	423	566	868	1,202	1,959	3,377	11,281
Cumulative effect of foreign exchange movements	—	(4)	—	(1)	3	8	18	48	145	2	—	219
Effect of acquisitions	13	1	3	5	19	22	31	55	78	74	—	301
Present value recognised in the statement of financial position	2,132	145	139	202	307	453	615	971	1,425	2,035	3,377	11,801

40 – Insurance liabilities continued

(iii) Net of reinsurance

After the effect of reinsurance, the loss development table is:

Accident year	All prior years £m	2008 £m	2009 £m	2010 £m	2011 £m	2012 £m	2013 £m	2014 £m	2015 £m	2016 £m	2017 £m	Total £m
Net cumulative claim payments												
At end of accident year	(4,808)	(3,650)	(3,386)	(3,300)	(2,925)	(2,905)	(2,972)	(2,867)	(3,309)	(3,483)		
One year later	(7,165)	(5,286)	(5,242)	(4,578)	(4,166)	(4,240)	(4,079)	(4,061)	(4,591)			
Two years later	(7,638)	(5,885)	(5,637)	(4,963)	(4,575)	(4,649)	(4,432)	(4,452)				
Three years later	(8,094)	(6,177)	(5,905)	(5,263)	(4,870)	(4,918)	(4,720)					
Four years later	(8,356)	(6,410)	(6,137)	(5,485)	(5,110)	(5,159)						
Five years later	(8,515)	(6,568)	(6,278)	(5,626)	(5,289)							
Six years later	(8,626)	(6,657)	(6,361)	(5,740)								
Seven years later	(8,682)	(6,708)	(6,411)									
Eight years later	(8,714)	(6,744)										
Nine years later	(8,735)											
Estimate of net ultimate claims												
At end of accident year	9,262	7,115	6,650	6,202	5,941	5,838	5,613	5,548	6,489	6,714		
One year later	9,104	7,067	6,751	6,103	5,765	5,745	5,575	5,635	6,458			
Two years later	9,028	7,036	6,685	6,095	5,728	5,752	5,591	5,608				
Three years later	9,007	6,978	6,644	6,077	5,683	5,733	5,559					
Four years later	8,962	6,940	6,634	6,034	5,717	5,689						
Five years later	8,949	6,977	6,614	6,005	5,680							
Six years later	8,926	6,908	6,624	6,003								
Seven years later	8,894	6,897	6,615									
Eight years later	8,898	6,896										
Nine years later	8,886											
Estimate of net ultimate claims	8,886	6,896	6,615	6,003	5,680	5,689	5,559	5,608	6,458	6,714		
Cumulative payments	(8,735)	(6,744)	(6,411)	(5,740)	(5,289)	(5,159)	(4,720)	(4,452)	(4,591)	(3,483)		
Effect of discounting	954	151	152	204	263	391	530	839	1,156	1,867	3,231	9,738
	(150)	(10)	(12)	(21)	3	—	5	—	—	—	—	(185)
Present value	804	141	140	183	266	391	535	839	1,156	1,867	3,231	9,553
Cumulative effect of foreign exchange movements	—	(4)	—	(1)	2	7	18	47	141	3	—	213
Effect of acquisitions	17	1	3	5	19	22	31	56	79	73	—	306
Present value recognised in the statement of financial position	821	138	143	187	287	420	584	942	1,376	1,943	3,231	10,072

In the loss development tables shown above, the cumulative claim payments and estimates of cumulative claims for each accident year are translated into sterling at the exchange rates that applied at the end of that accident year. The impact of using varying exchange rates is shown at the bottom of each table. Disposals are dealt with by treating all outstanding and IBNR claims of the disposed entity as 'paid' at the date of disposal.

The loss development tables above include information on asbestos and environmental pollution claims provisions from business written before 2008. The undiscounted claim provisions, net of reinsurance, in respect of this business at 31 December 2017 were £95 million (2016: £134 million). The movement in the year reflects a reduction of £14 million due to favourable claims development, claim payments net of reinsurance recoveries and foreign exchange rate movements.

(e) Provision for unearned premiums

Movements

The following changes have occurred in the provision for unearned premiums (UPR) during the year:

	2017 £m	2016 £m
Carrying amount at 1 January	4,766	4,048
Premiums written during the year	10,523	9,694
Less: Premiums earned during the year	(10,365)	(9,503)
Changes in UPR recognised as an (income)/expense	158	191
Gross portfolio transfers and acquisitions ¹	46	124
Foreign exchange rate movements	10	403
Carrying amount at 31 December	4,980	4,766

¹ The £46 million in respect of 2017 relates to the full consolidation of the Poland Joint Venture. The £124 million in respect of 2016 relates to the acquisition of Royal Bank of Canada General Insurance Company.

41 – Liability for investment contracts

This note analyses our investment contract liabilities by type of product and describes how the Group calculates these liabilities and the assumptions used.

(a) Carrying amount

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

	2017 £m	2016 £m
Long-term business		
Participating contracts	87,654	89,739
Non-participating contracts at fair value	124,995	114,531
Total	212,649	204,270
Less: Amounts classified as held for sale	(8,663)	(7,175)
	203,986	197,095

(b) Long-term business investment liabilities

Investment contracts are those that do not transfer significant insurance risk from the contract holder to the issuer, and are therefore treated as financial instruments under IFRS.

Many investment contracts contain a discretionary participation feature in which the contract holder has a contractual right to receive additional benefits as a supplement to guaranteed benefits. These are referred to as participating contracts and are measured according to the methodology and Group practice for long-term business liabilities as described in note 40. They are not measured at fair value as there is currently no agreed definition of fair valuation for discretionary participation features under IFRS. In the absence of such a definition, it is not possible to provide a range of estimates within which a fair value is likely to fall. The IASB deferred consideration of participating contracts to Phase II of its insurance contracts project. This is addressed in the insurance contract standard (i.e. IFRS 17).

For participating business, the discretionary participation feature is recognised separately from the guaranteed element and is classified as a liability, referred to as unallocated divisible surplus. Guarantees on long-term investment products are discussed in note 42.

Investment contracts that do not contain a discretionary participation feature are referred to as non-participating contracts and the liability is measured at either fair value or amortised cost. We currently have no non-participating investment contracts measured at amortised cost.

Of the non-participating investment contracts measured at fair value, £123,916 million in 2017 are unit-linked in structure and the fair value liability is equal to the current unit fund value, including any unfunded units, plus if required, additional non-unit reserves based on a discounted cash flow analysis. These contracts are generally classified as 'Level 1' in the fair value hierarchy, as the unit reserve is calculated as the publicly quoted unit price multiplied by the number of units in issue, and any non-unit reserve is insignificant.

For unit-linked business, a deferred acquisition cost asset and deferred income reserve liability are recognised in respect of transaction costs and front-end fees respectively, that relate to the provision of investment management services, and which are amortised on a systematic basis over the contract term. The amount of the related deferred acquisition cost asset is shown in note 28 and the deferred income liability is shown in note 51.

For non-participating investment contracts acquired in a business combination, an acquired value of in-force business asset is recognised in respect of the fair value of the investment management services component of the contracts, which is amortised on a systematic basis over the useful lifetime of the related contracts. The amount of the acquired value of in-force business asset is shown in note 17, which relates primarily to the acquisition of Friends Life in 2015.

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

(c) Movements in the year

The following movements have occurred in the gross provisions for investment contracts in the year:

(i) Participating investment contracts

	2017 £m	2016 £m
Carrying amount at 1 January	89,739	78,048
Provisions in respect of new business	5,193	4,584
Expected change in existing business provisions	(4,986)	(4,893)
Variance between actual and expected experience	2,072	3,084
Impact of non-economic assumption changes	10	36
Impact of economic assumption changes	411	450
Other movements recognised as an expense ¹	(16)	(347)
Change in liability recognised as an expense ²	2,684	2,914
Effect of portfolio transfers, acquisitions and disposals ³	(7,243)	—
Foreign exchange rate movements	2,452	8,721
Other movements	22	56
Carrying amount at 31 December	87,654	89,739

1 Other movements during 2017 primarily relates to a special bonus distribution to UK with-profits policyholders.

2 Total interest expense for participating investment contracts recognised in profit or loss is £2,489 million (2016: £3,111 million).

3 The movement during 2017 relates to the disposal of Antarius in France.

41 – Liability for investment contracts continued

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 in 2017 of £2.1 billion is primarily driven by favourable equity returns in the UK.

The impact of assumption changes in the analysis shows the resulting movement in the carrying value of participating investment contract liabilities. For participating business, a movement in liabilities is generally offset by a corresponding adjustment to the unallocated divisible surplus and does not impact profit. Where assumption changes do impact profit, these are included in the effect of changes in assumptions and estimates during the year shown in note 44, together with the impact of movements in related non-financial assets.

(ii) Non-participating investment contracts

	2017 £m	2016 £m
Carrying amount at 1 January	114,531	103,034
Provisions in respect of new business	4,484	3,222
Expected change in existing business provisions	(4,427)	(3,481)
Variance between actual and expected experience	10,115	11,105
Impact of non-economic assumption changes	2	17
Impact of economic assumption changes	(1)	2
Other changes in liabilities	10	334
Change in liability	10,183	11,199
Effect of portfolio transfers, acquisitions and disposals ¹	(4)	(757)
Foreign exchange rate movements	277	1,065
Other movements	8	(10)
Carrying amount at 31 December	124,995	114,531

1 The movement during 2017 relates to the disposal of Antarius in France. The movement during 2016 relates to the disposal of a closed book of offshore bonds business.

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 in 2017 of £10 billion is primarily driven by the impact 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 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 shown in note 44, which combines participating and non-participating investment contracts together with the impact of movements in related non-financial assets.

42 – Financial guarantees and options

This note details the financial guarantees and options that the Group has given for some of our insurance and investment products.

As a normal part of their operating activities, various Group companies have given guarantees and options, including investment return guarantees, in respect of certain long-term insurance and fund management products. Further information on assumptions is given in notes 40 and 41.

(a) UK Life with-profits business

The Group's UK with-profits liabilities are evaluated by reference to FRS27, which was grandfathered under IFRS 4, prior to the adoption of Solvency II. Under the PRA's rules, provision for guarantees and options within realistic liabilities are measured using market-consistent stochastic models. A stochastic approach includes measuring the time value of guarantees and options, which represents the additional cost arising from uncertainty surrounding future economic conditions.

The material guarantees and options to which this provision relates are:

(i) Maturity value and death benefit guarantees

Substantially all of the conventional with-profits business and a significant proportion of unitised with-profits business have minimum maturity (and in some cases death benefit) values reflecting the sums assured plus declared annual bonus. In addition, the guarantee fund has offered maturity value guarantees on certain unit-linked products. For some unitised with-profits life contracts the amount paid after the fifth policy anniversary is guaranteed to be at least as high as the premium paid increased in line with the rise in RPI/CPI.

(ii) No market valuation reduction (MVR) guarantees

For unitised business, there are a number of circumstances where a 'no MVR' guarantee is applied, for example on certain policy anniversaries, guaranteeing that no market value reduction will be applied to reflect the difference between the accumulated value of units and the market value of the underlying assets.

42 – Financial guarantees and options continued

(iii) Guaranteed annuity options

The Group's UK with-profits funds have written individual and group pension contracts which contain guaranteed annuity rate options (GAOs), where the policyholder has the option to take the benefits from a policy in the form of an annuity based on guaranteed conversion rates. The Group also has exposure to GAOs and similar options on deferred annuities.

Realistic liabilities for GAOs in the UK with-profits funds were £2,186 million at 31 December 2017 (2016: £2,456 million). With the exception of the New With-profits Sub Fund (NWPSF), movements in the realistic liabilities in the with-profits funds are offset by a corresponding movement in the unallocated divisible surplus, with no net impact on IFRS profit. Realistic liabilities for GAOs in the NWPSF were £206 million at 31 December 2017 (2016: £225 million).

(iv) Guaranteed minimum pension

The Group's UK with-profits funds also have certain policies that contain a guaranteed minimum level of pension as part of the condition of the original transfer from state benefits to the policy.

(v) Guaranteed minimum maturity payments on mortgage endowments

In addition, the with-profits fund companies have made promises to certain policyholders in relation to their with-profits mortgage endowments. Top-up payments will be made on these policies at maturity to meet the mortgage value up to a maximum of the 31 December 1999 illustrated shortfall.

(b) UK Life non-profit business

The Group's UK non-profit funds are evaluated by reference to statutory reserving rules, which are based on the UK regulatory requirements (grandfathered under IFRS 4), prior to the adoption of Solvency II, adjusted to remove certain regulatory reserves and margins in assumptions, notably for annuity business.

(i) Guaranteed annuity options

Similar options to those written on with-profits business have been written in relation to non-profit products. Provision for these guarantees does not materially differ from a provision based on a market-consistent stochastic model, and amounts to £100 million at 31 December 2017 (2016: £121 million).

(ii) Guaranteed unit price on certain products

Certain unit-linked pension products linked to long-term life insurance funds provide policyholders with guaranteed benefits at retirement or death. No additional provision is made for this guarantee as the investment management strategy for these funds is designed to ensure that the guarantee can be met from the fund, mitigating the impact of large falls in investment values and interest rates.

(iii) Return of Premium guarantees

German pension products sold in Friends Life between 2006 and 2014 are subject to a Return of Premium guarantee whereby the product guarantees to return the maximum of the unit fund value or total premiums paid (before deductions). Provisions for this guarantee are calculated using a market-consistent stochastic model and amount to £132 million at 31 December 2017 (2016: £145 million).

(c) Overseas life businesses

In addition to guarantees written in the Group's UK life businesses, our overseas businesses have also written contracts containing guarantees and options. Details of the significant guarantees and options provided by overseas life businesses are set out below.

(i) France

Guaranteed surrender value and guaranteed minimum bonuses

Aviva France has written a number of contracts with such guarantees. The guaranteed surrender value is the accumulated value of the contract including accrued bonuses. Bonuses are based on accounting income from amortised bond portfolios, where the duration of bond portfolios is set in relation to the expected duration of the policies, plus income and releases from realised gains on equity-type investments. Policy reserves are equal to guaranteed surrender values. Local statutory accounting envisages the establishment of a reserve, 'Provision pour Aléas Financiers' (PAF), when accounting income is less than 125% of guaranteed minimum credited returns. No PAF was established at full year 2017.

The most significant of these contracts is the AFER Eurofund which has total liabilities of £38 billion at 31 December 2017 (2016: £37 billion). The guaranteed minimum bonus is agreed between Aviva France and the AFER association at the end of each year, in respect of the following year. The bonus was 2.40% for 2017 (2016: 2.65%) compared with an accounting income from the fund of 2.89% (2016: 3.14%).

Non-AFER contracts with guaranteed surrender values had liabilities of £11 billion at 31 December 2017 (2016: £19 billion) and all guaranteed annual bonus rates are between 0% and 4.5%. The decrease in Non-AFER contracts is mainly due to the sale of Antarius during the year. For non-AFER business the accounting income return exceeded guaranteed bonus rates in 2017.

42 – Financial guarantees and options continued

Guaranteed death and maturity benefits

In France, the Group has also sold unit-linked policies where the death and/or maturity benefit is guaranteed to be at least equal to the premiums paid. The reserve held in the Group's consolidated statement of financial position at the end of 2017 for this guarantee is £20 million (2016: £59 million). The reserve is calculated on a prudent basis and is in excess of the economic liability. At the end of 2017, total sums at risk for these contracts were £28 million (2016: £38 million) out of total unit-linked funds of £19 billion (2016: £19 billion). The decrease is mainly due to the sale of Antarius during the year. It is estimated that this liability would increase by £28 million (2016: £51 million) if yields were to decrease by 1% per annum and by £6 million (2016: £10 million) if equity markets were to decline by 10% from year end 2017 levels. For interest rate sensitivities if the resulting interest rates are negative, a floor of zero is not applied. These figures do not reflect our ability to review the tariff for this option.

(ii) Italy

Guaranteed investment returns and guaranteed surrender values

The Group has written contracts containing guaranteed investment returns and guaranteed surrender values in Italy. Traditional profit-sharing products receive an appropriate share of the investment return, assessed on a book value basis, subject to a guaranteed minimum annual return of up to 4% on existing business, while on new business the maximum guaranteed rate is lower. Liabilities are generally taken as the face value of the contract plus, if required, an explicit provision for guarantees calculated in accordance with local regulations.

At 31 December 2017 total liabilities were £21 billion (2016: £18 billion), with a further provision of £48 million (2016: £47 million) for guarantees. Liabilities are most sensitive to changes in the level of interest rates. It is estimated that provisions for guarantees would need to decrease by £1 million (2016: £5 million decrease) if interest rates fell by 1% from the end of 2017 values. For the interest rate sensitivities, if the resulting interest rates are negative, a floor of zero is not applied. In the local valuation there is no allowance for stochastic modelling of guarantees and options.

(d) Sensitivity

In providing these guarantees and options, the Group's capital position is sensitive to fluctuations in financial variables including foreign currency exchange rates, interest rates, real estate prices and equity prices. Interest rate guaranteed returns, such as those available on GAOs, are sensitive to interest rates falling below the guaranteed level. Other guarantees, such as maturity value guarantees and guarantees in relation to minimum rates of return, are sensitive to fluctuations in the investment return below the level assumed when the guarantee was made.

43 – Reinsurance assets

This note details the reinsurance recoverables on our insurance and investment contract liabilities.

(a) Carrying amounts

The reinsurance assets at 31 December comprised:

	2017 £m	2016 £m
Long-term business		
Insurance contracts	5,469	6,186
Participating investment contracts	2	2
Non-participating investment contracts ¹	6,094	18,366
	11,565	24,554
Outstanding claims provisions	64	65
	11,629	24,619
General insurance and health		
Outstanding claims provisions ²	845	1,090
Provisions for claims incurred but not reported ²	884	795
	1,729	1,885
Provisions for unearned premiums	257	250
	1,986	2,135
Less: Amounts classified as held for sale	13,615	26,754
	(123)	(411)
Total	13,492	26,343

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 2017, £14,353 million of reinsurance assets (UK Life) have been reclassified as collective investments in unit-linked funds following a restructure of a reinsurance treaty.

2 Reinsurance assets at 31 December 2016 for General insurance and health business include the impact of the £78 million reinsurance asset relating to an outwards reinsurance contract completed by the UK General Insurance business and the remaining recoveries expected in respect of the Alberta fires in Canada.

Of the above total, £12,302 million (2016: £22,919 million) is expected to be recovered more than one year after the statement of financial position date.

(b) Assumptions

The assumptions, including discount rates, used for reinsurance contracts follow those used for insurance contracts. Reinsurance assets are valued net of an allowance for their recoverability.

43 – Reinsurance assets continued

(c) Movements

The following movements have occurred in the reinsurance assets during the year:

(i) In respect of long-term business provisions

	2017 £m	2016 £m
Carrying amount at 1 January	24,554	18,996
Assets in respect of new business	1,004	941
Expected change in existing business assets	(786)	300
Variance between actual and expected experience	2,264	3,149
Impact of non-economic assumption changes	(634)	(182)
Impact of economic assumption changes	94	171
Other movements ¹	(14,529)	1,003
Change in assets ²	(12,587)	5,382
Effect of portfolio transfers, acquisitions and disposals ³	(410)	8
Foreign exchange rate movements	8	168
Carrying amount at 31 December	11,565	24,554

1 The movement during 2016 includes the reclassification of UK Life investments in certain life insurance funds from unit trusts and other investment vehicles (financial instruments) to reinsurance assets. The movement during 2017 includes £14,353 million of reinsurance assets (UK Life) being reclassified as collective investments in unit-linked funds following a restructure of a reinsurance treaty.

2 Change in assets does not reconcile with values in Note 40(a)(ii) due to the inclusion of reinsurance assets classified as non-participating investment contracts, where, for such contracts, deposit accounting is applied on the income statement.

3 The movement during 2016 relates to the recognition of a reinsurance asset following disposal of a closed book of offshore bonds business. The movement during 2017 primarily relates to Antarius in France. The impact of assumption changes in the above analysis shows the resulting movement in the carrying value of reinsurance assets and mainly relates to business in the UK, with corresponding movements in gross insurance contract liabilities. For participating businesses, a movement in reinsurance assets is generally offset by a corresponding adjustment to the unallocated divisible surplus and does not impact profit. Where assumption changes do impact profit, these are included in the effect of changes in assumptions and estimates during the year shown in note 44, together with the impact of movements in related liabilities and other non-financial assets.

(ii) In respect of general insurance and health outstanding claims provisions and IBNR

	2017 £m	2016 £m
Carrying amount at 1 January	1,885	1,595
Impact of changes in assumptions	(15)	80
Reinsurers' share of claim losses and expenses		
Incurred in current year	179	433
Incurred in prior years ⁴	15	109
Reinsurers' share of incurred claim losses and expenses	194	542
Less:		
Reinsurance recoveries received on claims		
Incurred in current year	(32)	(195)
Incurred in prior years	(293)	(214)
Reinsurance recoveries received in the year	(325)	(409)
Unwind of discounting	8	9
Change in reinsurance asset recognised as income (note 40a(ii))	(138)	222
Effect of portfolio transfers, acquisitions and disposals	—	(25)
Foreign exchange rate movements	(18)	97
Other movements	—	(4)
Carrying amount at 31 December	1,729	1,885

1 The change in reinsurance assets for 2016 includes the impact of the £78 million reinsurance asset relating to an outwards reinsurance contract completed by the UK General Insurance business.

(iii) Reinsurers' share of the provision for UPR

	2017 £m	2016 £m
Carrying amount at 1 January	250	289
Premiums ceded to reinsurers in the year ¹	489	668
Less: Reinsurers' share of premiums earned during the year ¹	(484)	(687)
Changes in reinsurance asset recognised as income	5	(19)
Reinsurers' share of portfolio transfers and acquisitions	—	(38)
Foreign exchange rate movements	2	18
Other movements	—	—
Carrying amount at 31 December	257	250

1 For 2016 includes £107 million of ceded premiums relating to an outwards reinsurance contract completed by the UK General Insurance business.

44 – Effect of changes in assumptions and estimates during the year

Certain estimates and assumptions used in determining our liabilities for insurance and investment contract business were changed from 2016 to 2017, affecting the profit recognised for the year with an equivalent effect on liabilities. This note analyses the effect of the changes. This note only allows for the impact on liabilities and related assets, such as unallocated divisible surplus, reinsurance, deferred acquisition costs and AVIF, and does not allow for offsetting movements in the value of backing financial assets.

	Effect on profit 2017 £m	Effect on profit 2016 £m
Assumptions		
Long-term insurance business		
Interest rates	(1,720)	(4,490)
Expenses	(128)	48
Persistency rates	(79)	(80)
Mortality and morbidity for assurance contracts	113	(11)
Mortality for annuity contracts	779	294
Tax and other assumptions	2	97
Investment contracts		
Expenses	—	—
General insurance and health business		
Change in discount rate assumptions	(7)	(242)
Change in expense ratio and other assumptions	—	—
Total	(1,040)	(4,384)

The impact of interest rates on long-term business relates primarily to annuities in the UK (including any change in credit default and reinvestment risk provisions), where a decrease in the valuation interest rate, in response to narrowing of credit spreads is partially offset by increasing risk-free rates, has increased liabilities. Within the UK there were also two modelling changes which resulted in a reduction in reserves: an alignment of approach in calculating the valuation interest rate across the Life portfolios of £153 million and a refinement to the approach in calculating the valuation interest rate for certain deferred annuity business of £136 million. Outside of the UK, there was a one-off impact in France due to an increase in life annuity pension reserves, resulting from a reduction to the discount rate cap used in the calculation of these reserves of £138 million. The overall impact on profit also depends on movements in the value of assets backing the liabilities, which is not included in this disclosure.

The impact of expenses on long-term business has resulted in an increase in reserves, following a review of recent experience. In the UK this includes a strengthening of maintenance expense reserves from harmonising the UK expense basis following the Friends Life Part VII transfer in 2017 of £89 million (2016: £nil); recognition of future project expense reserves of £125 million (2016: £nil); partly offset by a release due to updating the charging structure in place with Aviva Investors following the Friends Life integration of £70 million (2016: £42 million) (*and other less significant adverse movements of £13 million in 2016*). Across Europe and Asia, expense reserves have reduced by £16 million (2016: £19 million).

The impact of persistency rates on long-term business has resulted in an increase in reserves following a review of recent experience in the UK.

The impact of mortality and morbidity for assurance contracts on long-term business has resulted in a reduction in reserves following a review of recent experience, most notably for critical illness in the UK.

The impact of mortality for annuitant contracts on long-term business relates primarily to the UK. In 2017, this has resulted in a reduction in reserves due to recognition of benefits from changes in longevity assumptions including: the impact of completing our review of the allowance for anti-selection risk of £170 million, updates reflecting our recent experience of £200 million, updates to the rate of historic and future mortality improvements, including the adoption of CMI 2016, of £340 million, and other less significant movements of £31 million. In Ireland there was a reduction of £38 million following a review of recent experience.

In 2016 there was a release of annuitant reserves in the UK following a review of recent experience (including the exposure to anti-selection risk) of £130 million, the adoption of the CMI 2015 mortality improvement assumptions of £153 million and other less significant movements of £11 million.

In the general insurance and health business, an adverse impact of £7 million (2016: £242 million adverse) mainly arises as a result of a slight decrease in the estimated future inflation rate used to value periodic payment orders, offset by a slight decrease in the interest rates used to discount claim reserves for periodic payment orders and latent claims. During 2016 market interest rates used to discount periodic payment orders and latent claims reduced and the estimated future inflation rate used to value periodic payment orders was increased to be consistent with market expectations. This was, in part, offset by a change in estimate for the interest rate used to discount periodic payment orders to allow for the illiquid nature of these liabilities.

45 – Unallocated divisible surplus

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

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

	2017 £m	2016 £m
Carrying amount at 1 January	10,208	8,811
Change in participating fund assets	406	4,977
Change in participating fund liabilities	(710)	(4,596)
Other movements	10	—
Change in liability recognised as an expense	(294)	381
Effect of portfolio transfers, acquisition and disposals ¹	(1,076)	—
Foreign exchange rate movements	263	1,016
Carrying amount at 31 December	9,101	10,208
Less: Amounts classified as held for sale	(19)	(859)
	9,082	9,349

¹ The movement during 2017 relates to the disposal of Antarius (£832 million) and majority of Spanish business (£244 million).

The amount of UDS at 31 December 2017 has decreased to £9.1 billion (2016: £10.2 billion) including amounts classified as held for sale, and £9.1 billion (2016: £9.3 billion) excluding amounts classified as held for sale. The decrease is mainly due to the sale of both Antarius and the majority of Spanish business and a distribution of assets out of UK Life's UDS in anticipation of a special bonus to policyholders, partly offset by the weakening of sterling against the euro.

The participating assets and liabilities have offsetting impacts across the UK and Europe in 2017. In Europe they have increased mainly driven by an increase in new business and in the UK they have reduced, mainly driven by an increase in bond yields and the distribution of assets. In 2016, the impacts did not offset. The participating assets and liabilities increased across all the markets mainly driven by an increase in new business in Europe and a decrease in bond yields in the UK.

Where the aggregate amount of participating assets is less than the participating liabilities within a fund then the shortfall may be held as negative UDS, subject to recoverability testing as part of the liability adequacy requirements of IFRS 4. There are no material negative UDS balances at the participating fund-level within each life entity in the current and comparative periods, with the exception of one fund in UK Life in the comparative period (2016: a negative UDS of £16 million). This negative UDS balance was tested for recoverability and considered to be recoverable by comparing the excess of IFRS participating liabilities over the adjusted Solvency II best estimate liabilities for the relevant contracts. The Solvency II best estimate liabilities were adjusted where Solvency II does not represent a best estimate of shareholders' interests consistent with the impairment test for goodwill for long-term business (see note 16) and for AVIF on insurance contracts (see note 17).

46 – Tax assets and liabilities

This note analyses the tax assets and liabilities that appear in the statement of financial position and explains the movements in these balances in the year.

(a) Current tax

Current tax assets recoverable and liabilities payable in more than one year are £19 million and £14 million (2016: £29 million and £7 million), respectively.

(b) Deferred tax

(i) The balances at 31 December comprise:

	2017 £m	2016 £m
Deferred tax assets	146	183
Deferred tax liabilities	(2,562)	(2,414)
Net deferred tax liability	(2,416)	(2,231)
Less: Amounts classified as held for sale	183	(2)
	(2,233)	(2,233)

Amounts classified as held for sale include £2 million of deferred tax assets (2016: £3 million) and £185 million of deferred tax liabilities (2016: £1 million).

(ii) The net deferred tax liability arises on the following items:

	2017 £m	2016 £m
Long-term business technical provisions and other insurance items	1,582	1,852
Deferred acquisition costs	(199)	(195)
Unrealised gains on investments	(2,899)	(3,157)
Pensions and other post-retirement obligations	(502)	(456)
Unused losses and tax credits	166	203
Subsidiaries, associates and joint ventures	(16)	(20)
Intangibles and additional value of in-force long-term business	(721)	(795)
Provisions and other temporary differences	173	337
Net deferred tax liability	(2,416)	(2,231)
Less: Amounts classified as held for sale	183	(2)
	(2,233)	(2,233)

(iii) The movement in the net deferred tax liability was as follows:

	2017 £m	2016 £m
Net liability at 1 January	(2,231)	(1,953)
Acquisition and disposal of subsidiaries ¹	(6)	(50)
Amounts (charged)/credited to income statement (note 13a)	(123)	(43)
Amounts (charged)/credited to other comprehensive income (note 13b)	(31)	(98)
Foreign exchange rate movements	(18)	(83)
Other movements	(7)	(4)
Net liability at 31 December	(2,416)	(2,231)

¹ The movement during 2016 relates mainly to the acquisition of RBC General Insurance Company.

Deferred tax assets are recognised to the extent that it is probable that future taxable profits will be available against which the temporary differences can be utilised. In countries where there is a history of tax losses, deferred tax assets are only recognised in excess of deferred tax liabilities if there is convincing evidence that future taxable profits will be available. Where this is the case, the directors have relied on business plans supporting future profits.

The Group has unrecognised gross tax losses (excluding capital losses) and other temporary differences of £787 million (2016: £796 million) to carry forward against future taxable income of the necessary category in the companies concerned. Of these, trading losses of £92 million will expire within the next 20 years. The remaining losses have no expiry date.

In addition, the Group has unrecognised gross capital losses of £443 million (2016: £503 million). These have no expiry date.

There are no temporary differences in respect of unremitted overseas retained earnings for which deferred tax liabilities have not been recognised at 31 December 2017 (2016: £nil).

47 – Pension deficits and other provisions

This note details the non-insurance provisions that the Group holds, and shows the movements in these during the year.

(a) Carrying amounts

	2017 £m	2016 £m
Total IAS 19 obligations to main staff pension schemes (note 48(a))	764	843
Deficits in other staff pension schemes	64	56
Total IAS 19 obligations to staff pension schemes	828	899
Restructuring provisions	92	111
Other provisions	515	501
Total provisions	1,435	1,511
Less: Amounts classified as held for sale	(6)	(1)
	1,429	1,510

Other provisions primarily include amounts set aside throughout the Group for costs of compensation, litigation and staff entitlements.

(b) Movements on restructuring and other provisions

	2017	2016				
	Restructuring provisions £m	Other provisions £m	Total £m	Restructuring provisions £m	Other provisions £m	Total £m
At 1 January	111	501	612	166	518	684
Additional provisions	31	161	192	60	143	203
Unused amounts reversed	(1)	(37)	(38)	(2)	(126)	(128)
Change in the discounted amount arising from passage of time	2	—	2	2	—	2
Charge/(release) to income statement	32	124	156	60	17	77
Utilised during the year	(53)	(98)	(151)	(118)	(63)	(181)
Acquisition/(disposal) of subsidiaries	—	(3)	(3)	—	—	—
Foreign exchange rate movements	2	(9)	(7)	3	29	32
At 31 December	92	515	607	111	501	612

Of the total restructuring and other provisions, £182 million (2016: £188 million) is expected to be settled more than one year after the statement of financial position date.

48 – Pension obligations

(a) Introduction

The Group operates a number of defined benefit and defined contribution pension schemes. The material defined benefit schemes are in the UK, Ireland and Canada with the main UK scheme being the largest. The assets and liabilities of these defined benefit schemes as at 31 December 2017 are shown below.

	2017				2016			
	UK £m	Ireland £m	Canada £m	Total £m	UK £m	Ireland £m	Canada £m	Total £m
Total fair value of scheme assets (see b(ii) below)	17,744	658	276	18,678	18,803	610	281	19,694
Present value of defined benefit obligation	(14,824)	(847)	(372)	(16,043)	(16,131)	(848)	(368)	(17,347)
Net IAS 19 surpluses/(deficits) in the schemes	2,920	(189)	(96)	2,635	2,672	(238)	(87)	2,347
Surpluses included in other assets (note 28)	3,399	—	—	3,399	3,190	—	—	3,190
Deficits included in provisions (note 47)	(479)	(189)	(96)	(764)	(518)	(238)	(87)	(843)
Net IAS 19 surpluses/(deficits) in the schemes	2,920	(189)	(96)	2,635	2,672	(238)	(87)	2,347

This note gives full IAS 19, Employee Benefits, disclosures for the above material schemes. The smaller ones, while still measured under IAS 19, are included as one total within Provisions (see note 47). Similarly, while the charges to the income statement for the main schemes are shown in section (b)(i) below, the total charges for all pension schemes are disclosed in section (d) below.

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 ASPS via a reduction to future employer contributions for DC members, which could theoretically be paid from the surplus funds in the ASPS. In the RAC and 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 assets of the UK, Irish and Canadian schemes are held in separate trustee-administered funds to meet long-term pension liabilities to past and present employees. In all schemes, the appointment of trustees of the funds is determined by their trust documentation, and they are required to act in the best interests of the schemes' beneficiaries. The long-term investment objectives of the trustees and the employers are to limit the risk of the assets failing to meet the liabilities of the schemes over the long term, and to maximise returns consistent with an acceptable level of risk so as to control the long-term costs of these schemes.

A full actuarial valuation of each of the defined benefit schemes is carried out at least every three years for the benefit of scheme trustees and members. Actuarial reports have been submitted for each scheme within this period, using appropriate methods for the respective countries on local funding bases.

The number of scheme members was as follows:

	United Kingdom		Ireland		Canada	
	2017 Number	2016 Number	2017 Number	2016 Number	2017 Number	2016 Number
Deferred members	50,737	56,740	1,855	1,904	581	616
Pensioners	37,840	37,131	801	780	1,334	1,344
Total members	88,577	93,871	2,656	2,684	1,915	1,960

All schemes are closed to future accrual. Closure of the schemes has removed the volatility associated with additional future accrual for active members.

(i) UK schemes

In the UK, the Group operates three main pension schemes, the Aviva Staff Pension Scheme (ASPS), the smaller RAC (2003) Pension Scheme which was retained after the sale of RAC Limited in September 2011 and the Friends Provident Pension Scheme (FPPS) which was acquired as part of the Friends Life acquisition in 2015. As the defined benefit section of the UK schemes is now closed to both new members and future accrual, existing deferred members in active service and new entrants participate in the defined contribution section of the ASPS. The UK schemes operate within the UK pensions' regulatory framework.

(ii) Other schemes

Future accruals for the Irish and Canadian defined benefit schemes ceased with effect from 30 April 2013 and 31 December 2011 respectively. The Irish scheme is regulated by the Pensions Authority in Ireland. The main Canadian plan is a Registered Pension Plan in Canada and as such is registered with the Canada Revenue Agency and Financial Services Commission of Ontario and is required to comply with the Income Tax of Canada and the various provincial Pension Acts within Canada.

48 – Pension obligations continued

(b) IAS 19 disclosures

Disclosures under IAS 19 for the material defined benefit schemes in the UK, Ireland and Canada, are given below. Where schemes provide both defined benefit and defined contribution pensions, the assets and liabilities shown exclude those relating to defined contribution pensions.

(i) Movements in the scheme surpluses and deficits

Movements in the pension schemes' surpluses and deficits comprise:

	Fair Value of Scheme Assets £m	Present Value of defined benefit obligation £m	IAS 19 Pensions net surplus/(deficits) £m
2017			
Net IAS 19 surplus in the schemes at 1 January	19,694	(17,347)	2,347
Past service costs – amendments	—	(1)	(1)
Administrative expenses ¹	—	(18)	(18)
Total pension cost charged to net operating expenses	—	(19)	(19)
Net interest credited/(charged) to investment income /(finance costs) ²	470	(407)	63
Total recognised in income	470	(426)	44
Remeasurements:			
Actual return on these assets	740	—	740
Less: Interest income on scheme assets	(470)	—	(470)
Return on scheme assets excluding amounts in interest income	270	—	270
Losses from change in financial assumptions	—	(182)	(182)
Losses from change in demographic assumptions	—	(30)	(30)
Experience losses	—	(63)	(63)
Total recognised in other comprehensive income	270	(275)	(5)
Employer contributions	259	—	259
Plan participant contributions	9	(9)	—
Benefits paid	(2,021)	2,021	—
Administrative expenses paid from scheme assets ¹	(21)	18	(3)
Foreign exchange rate movements	18	(25)	(7)
Net IAS 19 surplus in the schemes at 31 December	18,678	(16,043)	2,635

1 Administrative expenses are expensed as incurred.

2 Net interest income of £87 million has been credited to investment income and net interest expense of £24 million has been charged to finance costs (see note 7).

The present value of unfunded post-retirement benefit obligations included in the table above is £129 million at 31 December 2017 (2016: £126 million).

The increase in the surplus during the period is primarily due to employer contributions paid into the schemes.

	Fair Value of Scheme Assets £m	Present Value of defined benefit obligation £m	IAS 19 Pensions net surplus/(deficits) £m
2016			
Net IAS 19 surplus in the schemes at 1 January	16,161	(14,324)	1,837
Past service costs – amendments	—	(1)	(1)
Administrative expenses ¹	—	(13)	(13)
Total pension cost charged to net operating expenses	—	(14)	(14)
Net interest credited/(charged) to investment income /(finance costs) ²	590	(517)	73
Total recognised in income	590	(531)	59
Remeasurements:			
Actual return on these assets	4,044	—	4,044
Less: Interest income on scheme assets	(590)	—	(590)
Return on scheme assets excluding amounts in interest income	3,454	—	3,454
Losses from change in financial assumptions	—	(3,944)	(3,944)
Gains from change in demographic assumptions	—	363	363
Experience gains	—	438	438
Total recognised in other comprehensive income	3,454	(3,143)	311
Employer contributions	190	—	190
Plan participant contributions	6	(6)	—
Benefits paid	(825)	825	—
Administrative expenses paid from scheme assets ¹	(15)	13	(2)
Foreign exchange rate movements	133	(181)	(48)
Net IAS 19 surplus in the schemes at 31 December	19,694	(17,347)	2,347

1 Administrative expenses are expensed as incurred.

2 Net interest income of £102 million has been credited to investment income and net interest expense of £29 million has been charged to finance costs (see note 7).

48 – Pension obligations continued

(ii) Scheme assets

Scheme assets are stated at their fair values at 31 December 2017.

Total scheme assets are comprised by scheme as follows:

	UK £m	Ireland £m	Canada £m	Total £m	UK £m	Ireland £m	Canada £m	Total £m
Bonds								
Fixed interest	6,925	408	163	7,496	7,085	249	151	7,485
Index-linked	11,744	292	—	12,036	11,469	157	—	11,626
Equities	129	—	—	129	71	—	—	71
Property	365	—	—	365	338	—	—	338
Pooled investment vehicles	4,955	238	107	5,300	3,433	200	96	3,729
Derivatives	(34)	4	—	(30)	86	1	—	87
Cash and other ¹	(5,710)	(284)	6	(5,988)	(3,046)	3	34	(3,009)
Total fair value of scheme assets	18,374	658	276	19,308	19,436	610	281	20,327
Less: consolidation elimination for non-transferable Group insurance policy ²	(630)	—	—	(630)	(633)	—	—	(633)
Total IAS 19 fair value of scheme assets	17,744	658	276	18,678	18,803	610	281	19,694

1 Cash and other assets comprise cash at bank, insurance policies, receivables, payables and repos. At 31 December 2017, cash and other assets primarily consist of repos of £5,386 million (2016: £4,666 million).

2 As at 31 December 2017, the FPPS's cash and other balances include an insurance policy of £630 million (2016: £633 million) issued by a Group company that is not transferable under IAS 19 and is consequently eliminated from the Group's IAS 19 scheme assets.

Total scheme assets are analysed by those that have a quoted market price in an active market and other as follows:

	Total Quoted £m	Total Unquoted £m	Total £m	Total Quoted £m	Total Unquoted £m	Total £m
Bonds						
Fixed interest	4,334	3,162	7,496	3,697	3,788	7,485
Index-linked	11,627	409	12,036	11,141	485	11,626
Equities	35	94	129	71	—	71
Property	—	365	365	—	338	338
Pooled investment vehicles	167	5,133	5,300	189	3,540	3,729
Derivatives	4	(34)	(30)	70	17	87
Cash and other ¹	(1,801)	(4,187)	(5,988)	714	(3,723)	(3,009)
Total fair value of scheme assets	14,366	4,942	19,308	15,882	4,445	20,327
Less: consolidation elimination for non-transferable Group insurance policy ²	—	(630)	(630)	—	(633)	(633)
Total IAS 19 fair value of scheme assets	14,366	4,312	18,678	15,882	3,812	19,694

1 Cash and other assets comprise cash at bank, insurance policies, receivables, payables and repos. At 31 December 2017, cash and other assets primarily consist of repos of £5,386 million (2016: £4,666 million).

2 As at 31 December 2017, the FPPS's cash and other balances includes an insurance policy of £630 million (2016: £633 million) issued by a Group company that is not transferable under IAS 19 and is consequently eliminated from the Group's IAS 19 scheme assets.

IAS 19 plan assets include investments in Group-managed funds in the consolidated statement of financial position of £2,091 million (2016: £1,428 million) and transferable insurance policies with other Group companies of £172 million (2016: £174 million) in the ASPS. Where the investment and insurance policies are in segregated funds with specific asset allocations, they are included in the appropriate line in the table above, otherwise they appear in 'Cash and other'. There are no significant judgements involved in the valuation of the scheme assets.

(iii) Assumptions on scheme liabilities

The valuations used for accounting under IAS 19 have been based on the most recent full actuarial valuations, updated to take account of the standard's requirements in order to assess the liabilities of the material schemes at 31 December 2017.

The projected unit credit method

The inherent uncertainties affecting the measurement of scheme liabilities require these to be measured on an actuarial basis. This involves discounting the best estimate of future cash flows to be paid out by the scheme using the projected unit credit method. This is an accrued benefits valuation method which calculates the past service liability to members and makes allowance for their projected future earnings. It is based on a number of actuarial assumptions, which vary according to the economic conditions of the countries in which the relevant businesses are situated, and changes in these assumptions can materially affect the measurement of the pension obligations.

48 – Pension obligations continued

Financial assumptions

The main financial assumptions used to calculate scheme liabilities under IAS 19 are:

	UK	Ireland		Canada		
	2017	2016	2017	2016	2016	
Inflation rate ¹	3.2%/2.1%	3.3%/2.2%	1.7%	1.7%	2.0%	
General salary increases ²	5.0%	5.1%	3.2%	3.2%	2.5%	
Pension increases ³	3.2%/2.1%	3.3%/2.2%	0.4%	0.4%	1.25%	
Deferred pension increases ³	3.2%/2.1%	3.3%/2.2%	1.7%	1.7%	—	
Discount rate ⁴	2.4% 2.4% (pensioners)/ (deferred)	2.5%/ 2.6% (pensioners)/ (deferred)	1.9%	1.8%	3.25%	
Basis of discount rate	AA-rated corporate bonds		AA-rated corporate bonds		AA-rated corporate bonds	

1 For the UK schemes, assumptions provided for RPI/CPI. In the UK, the assumptions for the ASPS and RAC schemes are single rates for RPI/CPI; for FPPS, relevant RPI/CPI swap curves are used, which are broadly equivalent to these single rates.

2 In the UK, the only remaining linkage between pension benefits and general salary increases is in respect of a small amount of Guaranteed Minimum Pension benefits, in line with National Average Earnings.

3 For the UK schemes, assumptions provided for RPI/CPI. In the UK, the assumptions for the ASPS and RAC schemes are single rates for RPI/CPI; for FPPS, relevant RPI/CPI swap curves are used, which are broadly equivalent to these single rates. The assumptions are also adjusted to reflect the relevant caps/floors and the inflation volatility.

4 To calculate scheme liabilities in the UK, a single discount rate is used in ASPS/RAC, whereas in FPPS, separate discount rates are used for the defined benefit obligation for pensioners and deferred.

The discount rate and pension increase rate are the two assumptions that have the largest impact on the value of the liabilities, with the difference between them being known as the net discount rate. For each country, the discount rate is based on current average yields of high-quality debt instruments taking account of the maturities of the defined benefit obligations.

Mortality assumptions

Mortality assumptions are significant in measuring the Group's obligations under its defined benefit schemes, particularly given the maturity of these obligations in the material schemes. The assumptions used are summarised in the table below and have been selected to reflect the characteristics and experience of the membership of these schemes.

The mortality tables, average life expectancy and pension duration used at 31 December 2017 for scheme members are as follows:

Mortality table			Life expectancy/(pension duration) at NRA of a male		Life expectancy/(pension duration) at NRA of a female	
			Normal retirement age (NRA)	Currently aged NRA	20 years younger than NRA	Currently aged NRA
UK– ASPS	Club Vita pooled experience, including an allowance for future improvements	60	88.9 (28.9)	91.1 (31.1)	90.3 (30.3)	92.5 (32.5)
– RAC	SAPS, including allowances for future improvement	65	87.6 (22.6)	89.4 (24.4)	89.3 (24.3)	91.0 (26.0)
– FPPS	SAPS, including allowances for future improvement	60	89.1 (29.1)	91.0 (31.0)	89.9 (29.9)	91.9 (31.9)
Ireland	89% PNA00 with allowance for future improvements	61	88.4 (27.4)	91.7 (30.7)	91.3 (30.3)	94.5 (33.5)
Canada	Canadian Pensioners' Mortality 2014 Private Table, including allowance for future improvements	65	86.8 (21.8)	88.3 (23.3)	89.3 (24.3)	90.7 (25.7)

The assumptions above are based on commonly used mortality tables. The tables make allowance for observed variations in such factors as age, gender, pension amount, salary and postcode-based lifestyle group, and have been adjusted to reflect recent research into mortality experience. However, the extent of future improvements in longevity is subject to considerable uncertainty and judgement is required in setting this assumption. In ASPS, which is the most material to the Group, the allowance for mortality improvement is per the actuarial profession's 'CMI_2016 (S=7.5) Advanced with adjustments' model (2016: CMI 2015 model), with assumed long-term rates of improvement of 1.75% p.a. for males (2016: 1.75% p.a.), and 1.50% p.a. for females (2016: 1.50% p.a.). The CMI 2016 tables have been adjusted to reflect the socio-economic profile of the pension scheme membership relative to the general population (on which CMI 2016 is based). These adjustments are in line with those adopted in respect of the UK Life annuitant population (see note 40 for details) and reflect the similar socio-economic profiles of the pension scheme membership and the annuitant population. The projections also use the advanced parameters to taper the long term improvement rates to zero between ages 90 and 115 (the 'core' parameters taper the long term improvement rates to zero between ages 85 and 110) in line with the approach adopted for the UK Life annuitant population (see note 40 for details).

48 – Pension obligations continued

Sensitivity analysis

Significant actuarial assumptions for the determination of the defined benefit obligation are discount rate, inflation rate and mortality. The sensitivities analyses below have been determined based on reasonably possible changes of the respective assumptions, holding all other assumptions constant. The following table summarises how the defined benefit obligation would have increased/(decreased) as a result of the change in the respective assumptions:

Impact on present value of defined benefit obligation

	Increase in discount rate +1% £m	Decrease in discount rate -1% £m	Increase in inflation rate +1% £m	Decrease in inflation rate -1% £m	1 year younger ¹ £m
Impact on present value of defined benefit obligation at 31 December 2017	(2,680)	3,576	2,526	(1,929)	565
Impact on present value of defined benefit obligation at 31 December 2016	(3,225)	4,362	3,344	(2,601)	606

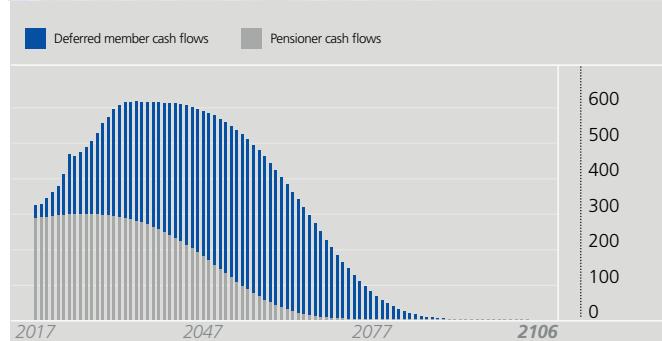
1 The effect of assuming all members in the schemes were one year younger.

The sensitivity analysis presented above may not be representative as in practice it is unlikely that the changes in assumptions would occur in isolation of one another as some of the assumptions may be correlated. Furthermore, the present value of the defined benefit obligation has been calculated using the projected unit credit method, which is the same as that applied in calculating the defined benefit obligation recognised within the consolidated statement of financial position. In addition, the sensitivities shown are for liabilities only and ignore the impact on assets, which would significantly mitigate the net interest rate and inflation sensitivity impact on the net surplus.

Maturity profile of the defined benefit obligation

The discounted scheme liabilities have an average duration of 20 years in ASPS, 21 years in FPPS, 21 years in the RAC scheme, 19 years in the Irish scheme and 12 years in the Canadian scheme. The expected undiscounted benefits payable from the main UK defined benefit scheme, ASPS, is shown in the chart below:

Undiscounted benefit payments (£m)



(iv) Risk management and asset allocation strategy

As noted above, the long-term investment objectives of the trustees and the employers are to limit the risk of the assets failing to meet the liabilities of the schemes over the long-term, and to maximise returns consistent with an acceptable level of risk so as to control the long-term costs of these schemes. To meet these objectives, the schemes' assets are invested in a portfolio, consisting primarily of debt securities as detailed in section (b)(ii). The investment strategy will continue to evolve over time and is expected to match the liability profile increasingly closely with swap overlays to improve interest rate and inflation matching. The schemes are generally matched to interest rate risk relative to the funding bases.

Main UK scheme

The Company works closely with the trustee, who is required to consult with the Company on the investment strategy.

Interest rate and inflation rate risks are managed using a combination of liability-matching assets and swaps. Exposure to equity risk has been reducing over time and credit risk is managed within risk appetite. Currency risk is relatively small and is largely hedged. The other principal risk is longevity risk. This risk has reduced due to the Aviva Staff Pension Scheme entering into a longevity swap in 2014 covering approximately £5 billion of pensioner in payment scheme liabilities.

Other schemes

The other schemes are considerably less material but their risks are managed in a similar way to those in the main UK scheme. In 2015, the RAC pension scheme entered into a longevity swap covering approximately £600 million of pensioner in payment scheme liabilities.

(v) Funding

Formal actuarial valuations normally take place every three years and where there is a deficit, the Group and the trustees would agree a deficit recovery plan. The assumptions adopted for triennial actuarial valuations are determined by the trustees and agreed with the Group and are normally more prudent than the assumptions adopted for IAS19 purposes, which are best estimate.

For ASPS, following the latest formal actuarial valuation (with an effective date of 31 March 2015) a deficit recovery plan was agreed, to make good the deficit over a period of time, consistent with the requirements of the UK pension regulations. As at 31 December 2017, the ASPS was fully funded.

Total employer contributions for all schemes in 2018 are currently expected to be £0.2 billion.

48 – Pension obligations continued

(c) Defined contribution (money purchase) section of the ASPS

The trustees have responsibility for selecting a range of suitable funds in which the members can choose to invest and for monitoring the performance of the available investment funds. Members are responsible for reviewing the level of contributions they pay and the choice of investment fund to ensure these are appropriate to their attitude to risk and their retirement plans. Members of this section contribute at least 2% of their pensionable salaries, and depending on the percentage chosen, the Group contributes up to a maximum 14%, together with the cost of the death-in-service benefits. These contribution rates remained unchanged until June 2017. From 1 July 2017, for every 1% additional employee contribution, the Group will contribute an additional 0.1% employer contribution. The amount recognised as an expense for defined contribution schemes is shown section (d) below.

(d) Charge to staff costs in the income statement

The total pension charge to staff costs for all of the Group's defined benefit and defined contribution schemes were:

	2017 £m	2016 £m
Continuing operations		
UK defined benefit schemes	22	16
Overseas defined benefit schemes	1	1
Total defined benefit schemes (note 10b)	23	17
UK defined contribution schemes	121	117
Overseas defined contribution schemes	25	21
Total defined contribution schemes (note 10b)	146	138
Total charge for pension schemes	169	155

There were no significant contributions payable or prepaid in the consolidated statement of financial position as at either 31 December 2017 or 2016.

49 – 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 and contractual maturity amounts of each type, and explains their main features and movements during the year.

(a) Analysis of total borrowings

Total borrowings comprise:

	2017 £m	2016 £m
Core structural borrowings, at amortised cost	8,640	8,577
Operational borrowings, at amortised cost	466	608
Operational borrowings, at fair value	1,180	1,110
	1,646	1,718
	10,286	10,295

(b) Core structural borrowings

(i) The carrying amounts of these borrowings are:

	2017 £m	2016 £m
Subordinated debt		
6.125% £700 million subordinated notes 2036	694	694
6.125% £800 million undated subordinated notes	796	795
6.875% £600 million subordinated notes 2058	594	594
6.875% €500 million subordinated notes 2038	444	427
12.000% £162 million subordinated notes 2021	202	213
8.250% £500 million subordinated notes 2022	581	598
6.625% £450 million subordinated notes 2041	448	448
7.875% \$575 million undated subordinated notes	437	494
6.125% €650 million subordinated notes 2043	575	552
3.875% €700 million subordinated notes 2044	618	593
5.125% £400 million subordinated notes 2050	394	394
3.375% €900 million subordinated notes 2045	789	758
4.500% C\$450 million subordinated notes 2021	264	269
4.375% £400 million subordinated notes 2049	394	393
	7,230	7,222
Senior notes		
0.100% €350 million senior notes 2018	310	298
0.625% €500 million senior notes 2023	441	424
	751	722
Commercial paper	668	642
	8,649	8,586
Less: Amount held by Group companies	(9)	(9)
Total	8,640	8,577

All the above borrowings are stated at amortised cost.

(ii) The contractual maturity dates of undiscounted cash flows for these borrowings are:

	2017	2016				
	Principal £m	Interest £m	Total £m	Principal £m	Interest £m	Total £m
Within one year	978	427	1,405	642	426	1,068
1 to 5 years	928	1,627	2,555	733	1,683	2,416
5 to 10 years	444	1,759	2,203	927	1,769	2,696
10 to 15 years ¹	-	1,756	1,756	-	1,750	1,750
Over 15 years ¹	6,216	3,282	9,498	6,163	3,499	9,662
Total contractual undiscounted cash flows	8,566	8,851	17,417	8,465	9,127	17,592

¹ Following a review of the treatment of undated subordinated debt we have reallocated £1,265 million of such instruments from the 10 to 15 years category to the Over 15 years category. As a result of this change prior year comparatives have been restated.

Borrowings are considered current if the contractual maturity dates are within a year. Where subordinated debt is undated or loan notes are perpetual, the interest payments have not been included beyond 15 years. Annual interest payments in future years for these borrowings are £82 million (2016: £82 million).

Contractual undiscounted interest payments are calculated based on underlying fixed interest rates or prevailing market floating rates as applicable. Year-end exchange rates have been used for interest projections on loans in foreign currencies.

49 – Borrowings continued

(c) Operational borrowings

(i) The carrying amounts of these borrowings are:

	2017 £m	2016 £m
Amounts owed to financial institutions		
Loans	466	608
Securitised mortgage loan notes		
UK lifetime mortgage business (note 24(b))	1,180	1,110
Total	1,646	1,718

All the above borrowings are stated at amortised cost, except for the loan notes issued in connection with the UK lifetime mortgage business of £1,180 million (2016: £1,110 million). These loan notes are carried at fair value, their values are modelled on risk-adjusted cash flows for defaults discounted at a risk-free rate plus a market-determined liquidity premium, and are therefore classified as 'Level 3' in the fair value hierarchy. These have been designated at fair value through profit and loss in order to present the relevant mortgages, borrowings and derivative financial instruments at fair value, since they are managed as a portfolio on a fair value basis. This presentation provides more relevant information and eliminates any accounting mismatch.

The securitised mortgage loan notes are at various fixed, floating and index-linked rates. Further details about these notes are given in note 24.

(ii) The contractual maturity dates of undiscounted cash flows for these borrowings are:

	Principal £m	Interest £m	Total £m	Principal £m	Interest £m	Total £m
Within one year	174	52	226	45	60	105
1 to 5 years	547	202	749	469	246	715
5 to 10 years	548	178	726	555	269	824
10 to 15 years	325	140	465	666	128	794
Over 15 years	208	144	352	448	113	561
Total contractual undiscounted cash flows	1,802	716	2,518	2,183	816	2,999

Contractual undiscounted interest payments are calculated based on underlying fixed interest rates or prevailing market floating rates as applicable. Year-end exchange rates have been used for interest projections on loans in foreign currencies.

(d) Description and features

(i) Subordinated debt

A description of each of the subordinated notes is set out in the table below:

Notional amount	Issue date	Redemption date	Callable at par at option of the Company from	In the event the Company does not call the notes, the coupon will reset at each applicable reset date to
£700 million	14 Nov 2001	14 Nov 2036	16 Nov 2026	5 year Benchmark Gilt + 2.85%
£800 million	29 Sep 2003	Undated	29 Sep 2022	5 year Benchmark Gilt + 2.40%
£600 million	20 May 2008	20 May 2058	20 May 2038	3 month LIBOR + 3.26%
€500 million	20 May 2008	22 May 2038	22 May 2018	3 month Euribor + 3.35%
£162 million	21 May 2009	21 May 2021	N/A	N/A
£500 million	21 April 2011	21 April 2022	N/A	N/A
£450 million	26 May 2011	3 June 2041	3 June 2021	6 Month LIBOR + 4.136%
\$575 million	8 November 2012	Undated	8 November 2018	6 year USD mid-swaps + 6.828%
€650 million	5 July 2013	5 July 2043	5 July 2023	5 year EUR mid-swaps + 5.13%
€700 million	3 July 2014	3 July 2044	3 July 2024	5 year EUR mid-swaps + 3.48%
£400 million	4 June 2015	4 June 2050	4 December 2030	3 month Euribor + 4.022%
€900 million	4 June 2015	4 December 2045	4 December 2025	3 month Euribor + 3.55%
C\$450 million	9 May 2016	10 May 2021	N/A	N/A
£400 million	12 September 2016	12 September 2049	12 September 2029	3 month LIBOR + 4.721%

Subordinated notes issued by the Company rank below its senior obligations and ahead of its preference shares and ordinary share capital. The dated subordinated notes rank ahead of the undated subordinated notes. The fair value of notes at 31 December 2017 was £8,348 million (2016: £7,731 million), calculated with reference to quoted prices.

(ii) Senior notes

All senior notes are at fixed rates and their total fair value at 31 December 2017 was £756 million (2016: £720 million).

(iii) Commercial paper

The commercial paper consists of £668 million issued by the Company (2016: £642 million) and is considered core structural funding.

The fair value of the commercial paper is considered to be the same as its carrying value and all issuances are repayable within one year.

49 – Borrowings continued

(iv) Loans

Loans comprise:

	2017 £m	2016 £m
Non-recourse		
Loans to property partnerships (see (a) below)	61	66
UK Life reinsurance (see (b) below)	111	131
Other non-recourse loans (see (c) below)	58	193
	230	390
Other loans (see (d) below)	236	218
	466	608

(a) As explained in accounting policy D, the UK long-term business policyholder funds have invested in a number of property funds and structures (the ‘Property Funds’), some of which have raised external debt, secured on the relevant Property Fund’s property portfolio. The lenders are only entitled to obtain payment of interest and principal to the extent there are sufficient resources in the relevant Property Fund and they have no recourse whatsoever to the policyholder or shareholders’ funds of any companies in the Group. Loans of £61 million (2016: £66 million) included in the table relate to those Property Funds which have been consolidated as subsidiaries.

(b) The UK long-term business entered into a financial reinsurance agreement with Swiss Re in 2008, under which up-front payments are received from Swiss Re in return for 90% of future surpluses arising. The loan will be repaid as profits emerge on the business.

(c) Other non-recourse loans primarily include external debt raised by special purpose vehicles in the UK long-term business. The lenders have no recourse whatsoever to the shareholders’ funds of any companies in the Group.

(d) Other loans include external debt raised by overseas long-term businesses to fund operations.

(v) Securitised mortgage loan notes

Loan notes have been issued by special purpose securitisation companies in the UK. Details are given in note 24.

(e) Movements during the year

Movements in borrowings during the year were:

	2017	2016				
	Core Structural £m	Operational £m	Total £m	Core Structural £m	Operational £m	Total £m
New borrowings drawn down, excluding commercial paper, net of expenses	—	55	55	1,372	148	1,520
Repayment of borrowings, excluding commercial paper ¹	(488)	(151)	(639)	(320)	(56)	(376)
Movement in commercial paper ²	—	—	—	42	—	42
Net cash inflow/(outflow)	(488)	(96)	(584)	1,094	92	1,186
Foreign exchange rate movements	104	(17)	87	574	33	607
Borrowings reclassified/(loans repaid) for non-cash consideration ¹	484	(13)	471	—	—	—
Fair value movements	—	108	108	—	(220)	(220)
Amortisation of discounts and other non-cash items	(37)	(16)	(53)	(34)	(16)	(50)
Movements in debt held by Group companies ³	—	(38)	(38)	31	(29)	2
Movements in the year	63	(72)	(9)	1,665	(140)	1,525
Balance at 1 January	8,577	1,718	10,295	6,912	1,858	8,770
Balance at 31 December	8,640	1,646	10,286	8,577	1,718	10,295

1 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 at that date. On 3 November 2017 the instrument was redeemed in full at a cost of £488 million. See note 34 for further details.

2 Gross issuances of commercial paper were £1,265 million in 2017 (2016: £2,006 million), offset by repayments of £1,265 million (2016: £1,964 million).

3 Certain subsidiary companies have purchased issued subordinated notes and securitised loan notes as part of their investment portfolios. In the consolidated statement of financial position, borrowings are shown net of these holdings but movements in such holdings over the year are reflected in the tables above.

All movements in fair value in 2016 and 2017 on securitised mortgage loan notes designated as fair value through profit or loss were attributable to changes in market conditions.

(f) Undrawn borrowings

The Group has the following undrawn committed central borrowing facilities available to them, which are used to support the commercial paper programme:

	2017 £m	2016 £m
Epiring within one year	—	—
Epiring beyond one year	1,650	1,650
	1,650	1,650

50 – Payables and other financial liabilities

This note analyses our payables and other financial liabilities at the end of the year.

	2017 £m	2016 £m
Payables arising out of direct insurance	1,276	1,201
Payables arising out of reinsurance operations	304	263
Deposits and advances received from reinsurers	129	150
Bank overdrafts (see below)	499	558
Derivative liabilities (note 57)	5,766	6,795
Amounts due to brokers for investment purchases	112	64
Obligations for repayment of cash collateral received	6,817	7,433
Other financial liabilities	1,598	1,296
Total	16,501	17,760
Less: Amounts classified as held for sale	(42)	(9)
	16,459	17,751
Expected to be settled within one year	11,460	12,016
Expected to be settled in more than one year	5,041	5,744
	16,501	17,760

Bank overdrafts amount to £115 million (2016: £69 million) in life business operations and £384 million (2016: £489 million) in general insurance business and other operations.

All payables and other financial liabilities are carried at cost, which approximates to fair value, except for derivative liabilities, which are carried at their fair values.

51 – Other liabilities

This note analyses our other liabilities at the end of the year.

	2017 £m	2016 £m
Deferred income	133	131
Reinsurers' share of deferred acquisition costs	17	14
Accruals	1,236	1,144
Other liabilities	1,440	1,431
Total	2,826	2,720
Less: Amounts classified as held for sale	(35)	(1)
	2,791	2,719
Expected to be settled within one year	2,276	2,015
Expected to be settled in more than one year	550	705
	2,826	2,720

52 – Contingent liabilities and other risk factors

This note sets out the main areas of uncertainty over the calculation of our liabilities.

(a) Uncertainty over claims provisions

Note 40 gives details of the estimation techniques used by the Group to determine the general insurance business outstanding claims provisions and of the methodology and assumptions used in determining the long-term business provisions. These approaches are designed to allow for the appropriate cost of policy-related liabilities, with a degree of prudence, to give a result within the normal range of outcomes. However, the actual cost of settling these liabilities may differ, for example because experience may be worse than that assumed, or future general insurance business claims inflation may differ from that expected, and hence there is uncertainty in respect of these liabilities.

(b) Asbestos, pollution and social environmental hazards

In the course of conducting insurance business, various companies within the Group receive general insurance liability claims, and become involved in actual or threatened related litigation arising therefrom, including claims in respect of pollution and other environmental hazards. Amongst these are claims in respect of asbestos production and handling in various jurisdictions, including Europe, Canada and Australia. Given the significant delays that are experienced in the notification of these claims, the potential number of incidents they cover and the uncertainties associated with establishing liability, the ultimate cost cannot be determined with certainty. However, on the basis of current information having regard to the level of provisions made for general insurance claims and substantial reinsurance cover now in place, the directors consider that any additional costs arising are not likely to have a material impact on the financial position of the Group.

52 – Contingent liabilities and other risk factors continued

(c) Guarantees on long-term savings products

As a normal part of their operating activities, various Group companies have given guarantees and options, including interest rate guarantees, in respect of certain long-term insurance and investment products. Note 42 gives details of these guarantees and options. In providing these guarantees and options, the Group's capital position is sensitive to fluctuations in financial variables including foreign currency exchange rates, interest rates, property values and equity prices. Interest rate guaranteed returns, such as those available on guaranteed annuity options, are sensitive to interest rates falling below the guaranteed level. Other guarantees, such as maturity value guarantees and guarantees in relation to minimum rates of return, are sensitive to fluctuations in the investment return below the level assumed when the guarantee was made. The directors continue to believe that the existing provisions for such guarantees and options are sufficient.

(d) Regulatory compliance

The Group's insurance and investment business is subject to local regulation in each of the countries in which it operates. A number of the Group's UK subsidiaries are dual regulated (directly authorised by both the PRA (for prudential regulation) and the FCA (for conduct regulation) while others are solo regulated (regulated solely by the FCA for both prudential and conduct regulation). Between them, the PRA and FCA have broad powers including the authority to grant, vary the terms of, or cancel a regulated firm's authorisation; to investigate marketing and sales practices; and to require the maintenance of adequate financial resources. The Group's regulators outside the UK typically have similar powers, but in some cases they also operate a system of 'prior product approval'.

The Group's regulated businesses have compliance resources to respond to regulatory enquiries in a constructive way, and take corrective action when warranted. However, all regulated financial services companies face the risk that their regulator could find that they have failed to comply with applicable regulations or have not undertaken corrective action as required.

The impact of any such finding (whether in the UK or overseas) could have a negative impact on the Group's reported results or on its relations with current and potential customers. Regulatory action against a member of the Group could result in adverse publicity for, or negative perceptions regarding, the Group, or could have a material adverse effect on the business of the Group, its results, operations and/or financial condition and divert management's attention from the day-to-day management of the business.

(e) Structured settlements

The Company has purchased annuities from licensed Canadian life insurers to provide for fixed and recurring payments to claimants. As a result of these arrangements, the Company is exposed to credit risk to the extent that any of the life insurers fail to fulfill their obligations. The Company's maximum exposure to credit risk for these types of arrangements is approximately CAD\$1,213 million as at 31 December 2017 (2016: CAD\$1,181 million). Credit risk is managed by acquiring annuities from a diverse portfolio of life insurers with proven financial stability. This risk is reduced to the extent of coverage provided by Assuris, the Canadian life insurance industry compensation plan. As at 31 December 2017, no information has come to the Company's attention that would suggest any weakness or failure in life insurers from which it has purchased annuities and consequently no provision for credit risk is required.

(f) Other

In the course of conducting insurance and investment business, various Group companies receive liability claims, and become involved in actual or threatened related litigation. In the opinion of the directors, adequate provisions have been established for such claims and no material loss will arise in this respect.

In addition, in line with standard business practice, various Group companies have given guarantees, indemnities and warranties in connection with disposals in recent years of subsidiaries and associates to parties outside the Aviva Group. In the opinion of the directors, no material unprovided loss will arise in respect of these guarantees, indemnities and warranties.

There are a number of charges registered over the assets of Group companies in favour of other Group companies or third parties. In addition, certain of the Company's assets are charged in favour of certain of its subsidiaries as security for intra-Group loans.

The Group's insurance subsidiaries pay contributions to levy schemes in several countries in which we operate. Given the economic environment, there is a heightened risk that the levy contributions will need to be increased to protect policyholders if an insurance company falls into financial difficulties. The directors continue to monitor the situation but are not aware of any need to increase provisions at the statement of financial position date.

53 – Commitments

This note gives details of our commitments to capital expenditure and under operating leases.

(a) Capital commitments

Contractual commitments for acquisitions or capital expenditures of infrastructure loans, equity funds, investment property and property and equipment, which have not been recognised in the financial statements, are as follows:

	2017 £m	2016 £m
Infrastructure loan advances ¹	782	516
Investment property	42	46
Property and equipment	53	37
Other investment vehicles ²	265	202
	1,142	801

¹ Additional capital commitments in relation to infrastructure loans of £516 million were identified in UK Life at 31 December 2016, prior year comparatives have been restated.

² Represents commitments for further investment in certain private equity vehicles. Such commitments do not expose the Group to the risk of future losses in excess of its investment.

Contractual obligations for future repairs and maintenance on investment properties are £nil (2016: £nil). Notes 18 and 19 set out the commitments the Group has to its joint ventures and associates.

(b) Operating lease commitments

(i) Future contractual aggregate minimum lease rentals receivable under non-cancellable operating leases are as follows:

	2017 £m	2016 £m
Within 1 year	317	335
Later than 1 year and not later than 5 years	980	1,027
Later than 5 years	1,408	1,326
	2,705	2,688

(ii) Future contractual aggregate minimum lease payments under non-cancellable operating leases are as follows:

	2017 £m	2016 £m
Within 1 year	101	103
Later than 1 year and not later than 5 years	339	336
Later than 5 years	413	423
	853	862
Total future minimum sub-lease payments expected to be received under non-cancellable sub-leases	44	44

54 – Group capital management

(a) Introduction

Group capital is represented by Solvency II Own Funds¹. At 31 December 2017, the estimated Solvency II Own Funds (shareholder view) amounts to £24.7 billion (31 December 2016: £24.0 billion). This excludes the contribution to Group Own Funds of fully ring fenced with-profits funds of £3.3 billion (31 December 2016: £2.9 billion) and staff pension schemes in surplus of £1.5 billion (31 December 2016: £1.1 billion). These exclusions have no impact on Solvency II surplus. The most material fully ring fenced with-profit funds and staff pension schemes are self-supporting on a Solvency II capital basis with any surplus capital above Solvency Capital Requirements ('SCR') not recognised in the Group position. 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.

The Solvency II Own Funds is shown inclusive of pro forma adjustments to align it with the capital information presented to management internally. This represents a change from the prior year presentation when such adjustments were excluded. 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 adjustments to the Solvency II valuation basis arising from changes to the underlying Regulations or updated interpretations provided by EIOPA.

The 31 December 2017 Solvency II Own Funds position includes the net pro forma impact arising from the disposals of Friends Provident International Limited and the Italian joint venture Avipop Assicurazioni S.p.A, which is £nil.

The 31 December 2016 Solvency II Own Funds position includes the pro forma impacts of £0.1 billion in relation to the disposal of Aviva's 50% shareholding in Antarius to Sogecap, which completed on 5 April 2017, and a then anticipated future change to UK tax rules restricting the tax relief that could be claimed in respect of tax losses announced in the Chancellor of the Exchequer's Autumn statement of 23 November 2016, which has been removed in 2017 following a clarification in the 13 July 2017 Finance Bill.

The Solvency II risk margin is highly sensitive to movements in interest rates, which can be offset by a rest in the transitional measure on technical provisions ('TMTP'). The 31 December 2016 Solvency II position disclosed includes a notional reset of the TMTP to reflect interest rates at 31 December 2016 of £0.4 billion. This presentation is consistent with the Group's approach to manage its capital position assuming a dynamic TMTP in respect of interest rate movements on the risk margin, as this avoids step changes to the Solvency II position that arise only when the formal TMTP reset points are triggered. The estimated 31 December 2017 Solvency II position includes an estimated reset of the TMTP in line with the regulatory requirement to reset the TMTP every two years. The TMTP is amortised on a straight-line basis over 16 years from 1 January 2016 in line with the Solvency II rules.

Own Funds are comprised of a combination of shareholders' funds, preference share capital, direct capital instrument, tier 1 notes, subordinated debt, and deferred tax assets measured on a Solvency II basis. Refer to note 54(b) for further details on Solvency II.

Management also considers a capital employed metric prepared on an IFRS basis in managing capital and measuring business unit performance. The total capital employed comprises of similar items to Own Funds but measured in accordance with IFRS and includes senior debt. In particular, analysis of return on equity calculated based on the capital employed has been used as one of the inputs to Management's decision making process for capital allocation purposes.

The primary objective of capital management is to maintain an efficient capital structure, in a manner consistent with our risk profile and the regulatory and market requirements of our business.

Capital is a primary consideration across a wide range of business activities, including product development, pricing, business planning, merger and acquisition transactions and asset & liability management. A Capital Management Standard, applicable group-wide, sets out minimum standards and guidelines over responsibility for capital management including considerations for capital management decisions and requirements for management information, capital monitoring, reporting, forecasting, planning and overall governance.

¹ Own funds is capital available to cover the Solvency capital requirement (SCR) and Minimum Capital Requirement (MCR) under Solvency II.

54 – Group capital management continued

The Group manages capital in conjunction with solvency capital requirements, and seeks to; on a consistent basis:

- Match the profile of our assets and liabilities, taking into account the risks inherent in each business;
- Maintain sufficient, but not excessive, financial strength in accordance with risk appetite, to support new business growth and satisfy the requirements of our regulators and other stakeholders giving both our customers and shareholders assurance of our financial strength. Refer to note 56 for more information about the Group's risk management approach;
- Retain financial flexibility by maintaining strong liquidity, access to a range of capital markets and significant unutilised committed credit lines;
- Allocate capital rigorously to support value adding growth and repatriate excess capital where appropriate; and
- Declare dividends with reference to factors including growth in cash flow and earnings.

(b) IFRS basis

In 2017, the Group maintained a strong capital position through a combination of increased profits and management actions contributing to operating capital generation offset by hybrid debt repayment, share buy-back and dividend distributions.

At 31 December 2017, total capital employed prepared on an IFRS basis amounted to £27.7 billion (2016: £28.1 billion). This comprises:

	2017 Capital employed £m	2016 Capital employed £m
Equity shareholders' funds	16,969	16,803
Non-controlling interests	1,235	1,425
Direct capital instrument & tier 1 notes	731	1,123
Preference shares	200	200
Subordinated debt ¹	7,221	7,213
Senior debt	1,419	1,364
Total capital employed²	27,775	28,128

1 Subordinated debt excludes amounts held by Group companies of £9 million (2016: £9 million).

2 Goodwill, AVIF and other intangibles are maintained within the capital base. Goodwill includes goodwill in subsidiaries of £1,876 million (2016: £2,045 million), goodwill in joint ventures of £17 million (2016: £20 million) and goodwill in associates of £nil (2016: £47 million). AVIF and other intangibles comprise £3,456 million (2016: £5,468 million) of intangibles in subsidiaries, £40 million (2016: £72 million) of intangibles in joint ventures and £nil million (2016: £18 million) of intangibles in associates, net of deferred tax liabilities of £(721) million (2016: £(783) million) and the non-controlling interest share of intangibles of £(222) million (2016: £(226) million).

The decrease in the capital employed is primarily driven by the decrease in direct capital instrument & tier 1 notes as a result of the redemption of the Group's \$650 million tier 1 notes in full at the first call date on 3 November 2017 and the decrease in non-controlling interests mainly resulting from the sale of Antarius in April 2017 and Spanish operations in September 2017 (see note 3(b)(i) and (iii)).

To support value adding growth by efficient capital allocation, the Group continued to reallocate capital from businesses where the capital returns were low; for example the Group withdrew capital from France and Spain (see note 3(b)(i) and (iii)).

(c) Solvency II basis

Solvency II is the Europe-wide prudential regulatory framework that came into force on 1 January 2016 and put in place a consistent solvency framework for insurers across Europe. This capital regime requires insurers to calculate regulatory capital adequacy at both individual regulated subsidiaries and an aggregate Group level. Non-EEA entities have been included in Group solvency in line with Solvency II requirements. Other financial sector entities (including fund management) are included at their proportional share of the capital requirement according to the relevant sectoral values.

Solvency II surplus at the Group level represents the excess of the aggregate value of capital employed in our business over the aggregate solvency capital requirements calculated in accordance with Solvency II requirements. The Group maintained capital in excess of the Solvency Capital Requirement (SCR) at all times during 2017. Further information on the Group's Solvency II position, including details of available capital resources and solvency surplus, determined using the shareholder's view of Solvency II and including pro forma adjustments, can be found in other information section. This information is estimated and is therefore subject to change. It is also unaudited.

In addition, non-EEA businesses including Canada, Hong Kong and Singapore, are subject to the locally applicable capital requirements in the jurisdictions in which they operate.

All regulated subsidiaries complied with their capital requirements throughout the year.

55 – Statement of cash flows

This note gives further detail behind the figures in the statement of cash flows.

(a) The reconciliation of profit before tax to the net cash inflow from operating activities is:

	2017 £m	2016 £m
Profit before tax	2,374	1,833
Adjustments for:		
Share of profits of joint ventures and associates	(41)	(216)
Dividends received from joint ventures and associates	51	66
(Profit)/loss on sale of:		
Investment property	(30)	(56)
Property and equipment	—	—
Subsidiaries, joint ventures and associates	(135)	11
Investments	(6,711)	(1,525)
	(6,876)	(1,570)
Fair value (gains)/losses on:		
Investment property	(481)	129
Investments	(6,983)	(19,209)
Borrowings	108	(220)
	(7,356)	(19,300)
Depreciation of property and equipment	35	25
Equity compensation plans, equity settled expense	77	38
Impairment and expensing of:		
Goodwill on subsidiaries	2	—
Financial investments, loans and other assets	6	—
Acquired value of in-force business and intangibles	15	14
Non-financial assets	7	—
	30	14
Amortisation of:		
Premium/discount on debt securities	720	648
Premium/discount on borrowings	(53)	(50)
Premium/discount on non-participating investment contracts	262	284
Financial instruments	26	25
Acquired value of in-force business and intangibles	392	410
	1,347	1,317
Change in unallocated divisible surplus	(294)	381
Interest expense on borrowings	610	593
Net finance income on pension schemes	(63)	(73)
Foreign currency exchange gains	61	(405)
Changes in working capital		
(Increase)/decrease in reinsurance assets	12,707	(4,736)
(Increase)/decrease in deferred acquisition costs	(389)	(96)
Increase/(decrease) in insurance liabilities and investment contracts	13,658	22,434
Decrease/(increase) in other assets	2,174	3,643
	28,150	21,245
Net sales/(purchases) of operating assets		
Net (purchases) of investment property	(672)	(722)
Net proceeds on sale of investment property	1,065	1,460
Net (purchases)/sales of financial investments	(10,137)	708
	(9,744)	1,446
Total cash generated from operating activities	8,361	5,394

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

During the year the net operating cash inflow reflects a number of factors, including the level of premium income, payments of claims, creditors and surrenders and purchases and sales of operating assets including financial investments. It also includes changes in the size and value of consolidated cash investment funds and changes in the Group participation in these funds.

(b) Cash flows in respect of, and additions to, the acquisition of subsidiaries, joint ventures and associates comprised:

	2017 £m	2016 £m
Cash consideration for subsidiaries, joint ventures and associates acquired and additions	32	458
Less: Cash and cash equivalents acquired with subsidiaries	(57)	(26)
Total cash flow on acquisitions and additions	(25)	432

55 – Statement of cash flows continued**(c) Cash flows in respect of the disposal of subsidiaries, joint ventures and associates comprised:**

	2017 £m	2016 £m
Cash proceeds from disposal of subsidiaries, joint ventures and associates	861	94
Less: Net cash and cash equivalents divested with subsidiaries	(910)	(52)
Total cash flow on disposals	(49)	42

The above figures form part of cash flows from investing activities.

(d) Cash and cash equivalents in the statement of cash flows at 31 December comprised:

	2017 £m	2016 £m
Cash at bank and in hand	6,293	5,049
Cash equivalents	37,793	33,914
Bank overdrafts	44,086	38,963
	(499)	(558)
	43,587	38,405

Cash and cash equivalents reconciles to the statement of financial position as follows:

	2017 £m	2016 £m
Cash and cash equivalents (excluding bank overdrafts)	44,086	38,963
Less: Assets classified as held for sale	(739)	(255)
	43,347	38,708

56 – Risk management

This note sets out the major risks our businesses and our shareholders face and describes the Group's approach to managing these. It also gives sensitivity analyses around the major economic and non-economic assumptions that can cause volatility in the Group's earnings and capital position.

(a) Risk management framework

The risk management framework in Aviva forms an integral part of the management and Board processes and decision-making framework across the Group. The key elements of our risk management framework comprise 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.

For the purposes of risk identification and measurement, and aligned to Aviva's risk policies, risks are usually grouped by risk type: credit, market, liquidity, life insurance (including long-term health), general insurance (including short-term health), asset management and operational risk. Risks falling within these types may affect a number of metrics including those relating to balance sheet strength, liquidity and profit. They may also affect the performance of the products we deliver to our customers and the service to our customers and distributors, which can be categorised as risks to our brand and reputation or as conduct risk.

To promote a consistent and rigorous approach to risk management across all businesses we have a set of risk policies and business standards which set out the risk strategy, appetite, framework and minimum requirements for the Group's worldwide operations. The business chief executive officers make an annual declaration supported by an opinion from the business chief risk officers that the system of governance and internal controls was effective and fit for purpose for their business throughout the year.

A regular top-down key risk identification and assessment process is carried out by the risk function. This includes the consideration of emerging risks and is supported by deeper thematic reviews. This process is replicated at the business unit level. The risk assessment processes are used to generate risk reports which are shared with the relevant risk committees.

Risk models are an important tool in our measurement of risks and are used to support the monitoring and reporting of the risk profile and in the consideration of the risk management actions available. We carry out a range of stress (where one risk factor, such as equity returns, is assumed to vary) and scenario (where combinations of risk factors are assumed to vary) tests to evaluate their impact on the business and the management actions available to respond to the conditions envisaged. For those risk types managed through the holding of capital, being our principal risk types except for liquidity risk, we measure and monitor our risk profile on the basis of the Solvency II solvency capital requirement.

Roles and responsibilities for risk management in Aviva are based around the 'three lines of defence model' where ownership for risk is taken at all levels in the Group. Line management in the business is accountable for risk management, including the implementation of the risk management framework and embedding of the risk culture. The risk function is accountable for quantitative and qualitative oversight and challenge of the risk identification, measurement, monitoring, management and reporting processes and for developing the risk management framework. Internal Audit provides an independent assessment of the risk framework and internal control processes.

Board oversight of risk and risk management across the Group is maintained on a regular basis through its Risk Committee and Governance Committee. The Board has overall responsibility for determining risk appetite, which is an expression of the risk the business is willing to take. Risk appetites are set relative to capital and liquidity at Group and in the business units.

56 – Risk management continued

Risk appetites, requiring management action if breached, are also set for interest rate and foreign exchange risk (calculated on the basis of the Solvency II solvency capital requirement), and liquidity risk (based on stressing forecast central liquid assets and cash inflows and outflows over a specified time horizon). For other risk types the Group sets Solvency II capital tolerances. The Group's position against risk appetite and capital tolerances is monitored and reported to the Board on a regular basis. Long-term sustainability depends upon the protection of franchise value and good customer relationships. As such, Aviva has a risk preference that we will not accept risks that materially impair the reputation of the Group and requires that customers are always treated with integrity. The oversight of risk and risk management at the Group level is supported by the Asset Liability Committee, which focuses on business and financial risks, and the Operational Risk Committee which focuses on operational and reputational risks. Similar committee structures with equivalent terms of reference exist in the business units.

The risk management framework of a small number of our joint ventures and strategic equity holdings differs from the Aviva framework outlined in this note. We work with these entities to understand how their risks are managed and to align them, where possible, with Aviva's framework.

Further information on the types and management of specific risk types is given in sections (b) to (j) below.

(b) Credit risk

Credit risk is the risk of financial loss as a result of the default or failure of third parties to meet their payment obligations to Aviva, or variations in market values as a result of changes in expectations related to these risks. Credit risk is taken so that we can provide the returns required to satisfy policyholder liabilities and to generate returns for our shareholders. In general we prefer to take credit risk over equity and property risks, due to the better expected risk adjusted return, our credit risk analysis capability and the structural investment advantages conferred to insurers with long-dated, relatively illiquid liabilities.

Our approach to managing credit risk recognises that there is a risk of adverse financial impact resulting from fluctuations in credit quality of third parties including default, rating transition and credit spread movements. Our credit risks arise principally through exposures to debt security investments, structured asset investments, bank deposits, derivative counterparties, mortgage lending and reinsurance counterparties.

The Group manages its credit risk at business unit and Group level. All business units are required to implement credit risk management processes (including limits frameworks), operate specific risk management committees, and ensure detailed reporting and monitoring of their exposures against pre-established risk criteria. At Group level, we manage and monitor all exposures across our business units on a consolidated basis, and operate a Group limit framework that must be adhered to by all.

A detailed breakdown of the Group's current credit exposure by credit quality is shown below.

(i) Financial exposures by credit ratings

Financial assets are graded according to current external credit ratings issued. AAA is the highest possible rating. Investment grade financial assets are classified within the range of AAA to BBB ratings. Financial assets which fall outside this range are classified as sub-investment grade. The following table provides information regarding the aggregated credit risk exposure of the Group for financial assets with external credit ratings. 'Not rated' assets capture assets not rated by external ratings agencies.

As at 31 December 2017	AAA	AA	A	BBB	Below BBB	Not rated	Carrying value including held for sale £m	Less: Amounts classified as held for sale £m	Carrying value £m
Debt securities	10.6%	32.5%	20.0%	23.3%	7.8%	5.8%	175,948	(1,140)	174,808
Reinsurance assets	—	87.3%	8.2%	1.9%	—	2.6%	13,615	(123)	13,492
Other investments	—	0.2%	0.3%	0.1%	—	99.4%	53,277	(6,971)	46,306
Loans	—	7.1%	—	—	—	92.9%	27,863	(6)	27,857
Total							270,703	(8,240)	262,463

As at 31 December 2016 ¹	AAA	AA	A	BBB	Below BBB	Not rated	Carrying value including held for sale £m	Less: Amounts classified as held for sale £m	Carrying value £m
Debt securities	11.8%	33.4%	19.0%	23.9%	6.0%	5.9%	186,708	(7,738)	178,970
Reinsurance assets	—	92.0%	6.3%	0.1%	—	1.6%	26,754	(411)	26,343
Other investments	—	0.2%	0.6%	—	—	99.2%	51,127	(2,304)	48,823
Loans	—	8.0%	—	0.1%	—	91.9%	24,859	(75)	24,784
Total							289,448	(10,528)	278,920

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 note 26 for further details of this adjustment and the financial statement impact arising.

The majority of non-rated debt securities within shareholder assets are held by our businesses in the UK. Of these securities most are allocated an internal rating using a methodology largely consistent with that adopted by an external rating agency, and are considered to be of investment grade credit quality; these include £2.0 billion (2016: £2.3 billion) of debt securities held in our UK Life business, predominantly made up of private placements and other corporate bonds, which have been internally rated as investment grade.

The Group continues to hold a series of macro credit hedges to reduce the overall credit risk exposure. The Group's maximum exposure to credit risk of financial assets, without taking collateral or these hedges into account, is represented by the carrying value of the financial instruments in the statement of financial position. These comprise debt securities, reinsurance assets, derivative assets, loans and receivables. The carrying values of these assets are disclosed in the relevant notes: financial investments (note 26), reinsurance assets (note 43), loans (note 23) and receivables (note 27). The collateral in place for these credit exposures is disclosed in note 58; Financial assets and liabilities subject to offsetting, enforceable master netting arrangements and similar agreements.

To the extent that collateral held is greater than the amount receivable that it is securing, the table above shows only an amount equal to the latter. In the event of default, any over-collateralised security would be returned to the relevant counterparty.

56 – Risk management continued

(ii) Financial exposures to peripheral European countries and worldwide banks

Included in our debt securities and other financial assets are exposures to peripheral European countries and worldwide banks. We continued in 2017 to limit our direct shareholder and participating assets exposure to the governments (including local authorities and agencies) and banks of Greece, Portugal, Italy and Spain. Information on our exposures to peripheral European sovereigns and banks is provided in notes 26(e) and 26(f). We continue to review whether the restrictions on investment in place since late 2009 can be relaxed, given the improved economic situation in these economies.

(iii) Other investments

Other investments (including assets of operations classified as held for sale) include unit trusts and other investment vehicles; derivative financial instruments, representing positions to mitigate the impact of adverse market movements; and other assets includes deposits with credit institutions and minority holdings in property management undertakings.

The credit quality of the underlying debt securities within investment vehicles is managed by the safeguards built into the investment mandates for these funds which determine the funds' risk profiles. At the Group level, we also monitor the asset quality of unit trusts and other investment vehicles against Group set limits.

A proportion of the assets underlying these investments are represented by equities and so credit ratings are not generally applicable. Equity exposures are managed against agreed benchmarks that are set with reference to overall appetite for market risk.

(iv) Loans

The Group loan portfolio principally comprises:

- Policy loans which are generally collateralised by a lien or charge over the underlying policy;
- Loans and advances to banks which primarily relate to loans of cash collateral received in stock lending transactions. These loans are fully collateralised by other securities;
- Healthcare, infrastructure and PFI loans secured against healthcare, education, social housing and emergency services related premises; and
- Mortgage loans collateralised by property assets.

We use loan to value; interest and debt service cover; and diversity and quality of the tenant base metrics to internally monitor our exposures to mortgage loans. We use credit quality, based on dynamic market measures, and collateralisation rules to manage our stock lending activities. Policy loans are loans and advances made to policyholders, and are collateralised by the underlying policies.

(v) Credit concentration risk

The long-term and general insurance businesses are generally not individually exposed to significant concentrations of credit risk due to the regulations applicable in most markets and the Group credit policy and limits framework, which limit investments in individual assets and asset classes. Credit concentrations are monitored as part of the regular credit monitoring process and are reported to Group ALCO. With the exception of government bonds the largest aggregated counterparty exposure within shareholder assets (i.e. excluding potential exposures arising from reinsurance of unit-linked funds) is to the Swiss Reinsurance Company Limited (including subsidiaries), representing approximately 2.3% of the total shareholder assets.

(vi) Reinsurance credit exposures

The Group is exposed to concentrations of risk with individual reinsurers due to the nature of the reinsurance market and the restricted range of reinsurers that have acceptable credit ratings. The Group operates a policy to manage its reinsurance counterparty exposures, by limiting the reinsurers that may be used and applying strict limits to each reinsurer. Reinsurance exposures are aggregated with other exposures to ensure that the overall risk is within appetite. The Group Capital and Group Risk teams have an active monitoring role with escalation to the Chief Financial Officer (CFO), Chief Risk Officer (CRO), Group ALCO and the Board Risk Committee as appropriate.

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. At 31 December 2017, the reinsurance asset recoverable, including debtor balances, from BlackRock Life Ltd was £5,307 million (2016: £17,087 million), a significant reduction in exposure as a result of action taken to restructure the agreements with BlackRock Life Ltd, and will be further significantly reduced during 2018.

(vii) Securities finance

The Group has significant securities financing operations within the UK and smaller operations in some other businesses. The risks within this activity are mitigated by collateralisation and minimum counterparty credit quality requirements.

(viii) Derivative credit exposures

The Group is exposed to counterparty credit risk through derivative trades. This risk is generally mitigated through holding collateral for most trades. Residual exposures are captured within the Group's credit management framework.

(ix) Unit-linked business

In unit-linked business the policyholder bears the direct market risk and credit risk on investment assets in the unit funds and the shareholders' exposure to credit risk is limited to the extent of the income arising from asset management charges based on the value of assets in the fund.

(x) Impairment of financial assets

In assessing whether financial assets carried at amortised cost or classified as available for sale are impaired, due consideration is given to the factors outlined in accounting policies (T) and (V). The following table provides information regarding the carrying value of financial assets subject to impairment testing that have been impaired and the ageing of those assets that are past due but not impaired. The table excludes assets carried at fair value through profit or loss and held for sale.

56 – Risk management continued

	Financial assets that are past due but not impaired					Financial assets that have been impaired £m	Carrying value £m
	Neither past due nor impaired £m	0-3 months £m	3-6 months £m	6 months-1 year £m	Greater than 1 year £m		
At 31 December 2017							
Debt securities	1,726	—	—	—	—	—	1,726
Reinsurance assets	7,521	—	—	—	—	—	7,521
Other investments	1	—	—	—	—	—	1
Loans	3,465	—	—	—	—	—	3,465
Receivables and other financial assets	8,185	78	12	5	5	—	8,285

	Financial assets that are past due but not impaired					Financial assets that have been impaired £m	Carrying value £m
	Neither past due nor impaired £m	0-3 months £m	3-6 months £m	6 months-1 year £m	Greater than 1 year £m		
At 31 December 2016							
Debt securities	1,092	—	—	—	—	—	1,092
Reinsurance assets	8,388	—	—	—	—	—	8,388
Other investments	1	—	—	—	—	—	1
Loans	3,501	—	—	—	—	—	3,501
Receivables and other financial assets	7,717	61	7	8	1	—	7,794

Excluded from the tables above are financial and reinsurance assets carried at fair value through profit or loss that are not subject to impairment testing, as follows: £174.2 billion of debt securities (2016: £185.6 billion), £53.3 billion of other investments (2016: £51.1 billion), £24.4 billion of loans (2016: £21.3 billion) and £6.1 billion of reinsurance assets (2016: £18.4 billion).

Where assets have been classed as 'past due and impaired', an analysis is made of the risk of default and a decision is made whether to seek to mitigate the risk. There were no material financial assets that would have been past due or impaired had the terms not been renegotiated.

(c) Market risk

Market risk is the risk of adverse financial impact resulting, directly or indirectly from fluctuations in interest rates, inflation, foreign currency exchange rates, equity and property prices. Market risk arises in business units due to fluctuations in both the value of liabilities and the value of investments held. At Group level, it also arises in relation to the overall portfolio of international businesses and in the value of investment assets owned directly by the shareholders. We actively seek some market risks as part of our investment and product strategy. However, we have limited appetite for interest rate risk as we do not believe it is adequately rewarded.

The management of market risk is undertaken at business unit and at Group level. Businesses manage market risks locally using the Group market risk framework and within local regulatory constraints. Group Capital is responsible for monitoring and managing market risk at Group level and has established criteria for matching assets and liabilities to limit the impact of mismatches due to market movements.

In addition, where the Group's long-term savings businesses have written insurance and investment products where the majority of investment risks are borne by its policyholders, these risks are managed in line with local regulations and marketing literature, in order to satisfy the policyholders' risk and reward objectives. The Group writes unit-linked business in a number of its operations. The shareholders' exposure to market risk on this business is limited to the extent that income arising from asset management charges is based on the value of assets in the fund.

The most material types of market risk that the Group is exposed to are described below.

(i) Equity price risk

The Group is subject to direct equity price risk arising from changes in the market values of its equity securities portfolio. Our most material indirect equity price risk exposures are to policyholder unit-linked funds, which are exposed to a fall in the value of the fund thereby reducing the fees we earn on those funds, and participating contracts, which are exposed to a fall in the value of the funds thereby increasing our costs for policyholder guarantees. We also have some equity exposure in shareholder funds through equities held to match inflation-linked liabilities.

We continue to limit our direct equity exposure in line with our risk preferences. At a business unit level, investment limits and local investment regulations require that business units hold diversified portfolios of assets thereby reducing exposure to individual equities. The Group does not have material holdings of unquoted equity securities.

Equity risk is also managed using a variety of derivative instruments, including futures and options. Businesses actively model the performance of equities through the use of risk models, in particular to understand the impact of equity performance on guarantees, options and bonus rates. An equity hedging strategy remains in place to help control the Group's overall direct and indirect exposure to equities. At 31 December 2017 the Group continues to hold a series of macro equity hedges to reduce the overall shareholder equity risk exposure.

Sensitivity to changes in equity prices is given in section '(j) risk and capital management' below.

(ii) Property price risk

The Group is subject to property price risk directly due to holdings of investment properties in a variety of locations worldwide and indirectly through investments in mortgages and mortgage backed securities. Investment in property is managed at business unit level, and is subject to local regulations on investments, liquidity requirements and the expectations of policyholders.

As at 31 December 2017, no material derivative contracts had been entered into to mitigate the effects of changes in property prices.

Sensitivity to changes in property prices is given in section '(j) risk and capital management' below.

56 – Risk management continued

(iii) Interest rate risk

Interest rate risk arises primarily from the Group's investments in long-term debt and fixed income securities and their movement relative to the value placed on the insurance liabilities. A number of policyholder product features have an influence on the Group's interest rate risk. The major features include guaranteed surrender values, guaranteed annuity options, and minimum surrender and maturity values. Details of material guarantees and options are given in note 42.

Exposure to interest rate risk is monitored through several measures that include duration, capital modelling, sensitivity testing and stress and scenario testing. The impact of exposure to sustained low interest rates is considered within our scenario testing.

The Group typically manages interest rate risk by investing in fixed interest securities which closely match the interest rate sensitivity of the liabilities where such investments are available. In particular, a key objective is to at least match the duration of our annuity liabilities with assets of the same duration, and in some cases where appropriate cash flow matching has been used. 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 risk is also managed in some business units using a variety of derivative instruments, including futures, options, swaps, caps and floors.

Some of the Group's products, principally participating contracts, expose us to the risk that changes in interest rates will impact on profits through a change in the interest spread (the difference between the amounts that we are required to pay under the contracts and the investment income we are able to earn on the investments supporting our obligations under those contracts). The primary markets where Aviva is exposed to this risk are the UK, France and Italy.

Despite a pick up in market interest rates from the historical lows experienced in 2016, the continued low interest rate environment in a number of markets around the world has resulted in our current reinvestment yields being lower than the overall current portfolio yield, primarily for our investments in fixed income securities and commercial mortgage loans. As long as market yields remain below the current portfolio level, the portfolio yield, and as a result net investment income, will continue to decline. While we anticipate interest rates may remain below historical averages before the 2008 financial crisis for some time to come, it is also possible that further future increases in interest rates or market anticipation of such increases, if larger and more rapid than expected, could adversely impact market values of our portfolio of fixed income securities and increase the risk of credit defaults and downgrades.

Other product lines of the Group, such as protection, are not significantly sensitive to interest rate or market movements. For unit-linked business, the shareholder margins emerging are typically a mixture of annual management fees and risk/expense charges. Risk and expense margins will be largely unaffected by low interest rates. Annual management fees may increase in the short term as the move towards low interest rates increases the value of unit funds. However, in the medium term, unit funds will grow at a lower rate which will reduce fund charges. For the UK annuities business interest rate exposure is mitigated by closely matching the duration of liabilities with assets of the same duration.

The UK participating business includes contracts with features such as guaranteed surrender values, guaranteed annuity options, and minimum surrender and maturity values. These liabilities are managed through duration matching of assets and liabilities and the use of derivatives, including swaptions. As a result, the Group's exposure to sustained low interest rates on this portfolio is not material. The Group's key exposure to low interest rates arises through its other participating contracts, principally in Italy and France. Some of these contracts also include features such as guaranteed minimum bonuses, guaranteed investment returns and guaranteed surrender values. In a low interest rate environment there is a risk that the yield on assets might not be sufficient to cover these obligations. For certain of its participating contracts the Group is able to amend guaranteed crediting rates. Our ability to lower crediting rates may be limited by competition, bonus mechanisms and contractual arrangements.

Details of material guarantees and options are given in note 42. In addition, the following table summarises the weighted average minimum guaranteed crediting rates and weighted average book value yields on assets as at 31 December 2017 for our Italian and French participating contracts, where the Group's key exposure to sustained low interest rates arises.

	Weighted average minimum guaranteed crediting rate	Weighted average book value yield on assets	Participating contract liabilities £m
France	0.64%	3.02%	67,689
Italy	0.69%	3.56%	15,237
Other ¹	N/A	N/A	54,656
Total	N/A	N/A	137,582

¹ 'Other' includes UK participating business

Profit before tax on General Insurance and Health Insurance business is generally a mixture of insurance, expense and investment returns. The asset portfolio is invested primarily in fixed income securities and the reduction in interest rates in recent years has reduced the investment component of profit. The portfolio investment yield and average total invested assets in our general insurance and health business are set out in the table below.

	Portfolio investment yield ¹	Average assets £m
2015	2.58%	15,268
2016	2.47%	14,369
2017	2.07%	14,770

¹ Before realised and unrealised gains and losses and investment expenses

56 – Risk management continued

The nature of the business means that prices in certain circumstances can be increased to maintain overall profitability. This is subject to the competitive environment in each market. To the extent that there are further falls in interest rates the investment yield would be expected to decrease further in future periods.

Sensitivity to changes in interest rates is given in section '(j) risk and capital management' below.

(iv) Inflation risk

Inflation risk arises primarily from the Group's exposure to general insurance claims inflation, to inflation linked benefits within the defined benefit staff pension schemes and within the UK annuity portfolio and to expense inflation. Increases in long-term inflation expectations are closely linked to long-term interest rates and so are frequently considered with interest rate risk. Exposure to inflation risk is monitored through capital modelling, sensitivity testing and stress and scenario testing. The Group typically manages inflation risk through its investment strategy and, in particular, by investing in inflation linked securities and through a variety of derivative instruments, including inflation linked swaps.

(v) Currency risk

The Group has minimal exposure to currency risk from financial instruments held by business units in currencies other than their functional currencies, as nearly all such holdings are backing either unit-linked or with-profits contract liabilities or hedging. As a result the foreign exchange and losses on investments (see note 5) are largely offset by changes in unit-linked and with-profits liabilities and fair value changes in derivatives attributable to changes in foreign exchange rates recognised in the income statement.

The Group operates internationally and as a result is exposed to foreign currency exchange risk arising from fluctuations in exchange rates of various currencies. Approximately 59% of the Group's premium income arises in currencies other than sterling and the Group's net assets are denominated in a variety of currencies, of which the largest are sterling, euro and Canadian dollars. The Group does not hedge foreign currency revenues as these are substantially retained locally to support the growth of the Group's business and meet local regulatory and market requirements. However, the Group does use foreign currency forward contracts to hedge planned dividends from its subsidiaries.

Businesses aim to maintain sufficient assets in local currency to meet local currency liabilities, however movements may impact the value of the Group's consolidated shareholders' equity which is expressed in sterling. This aspect of foreign exchange risk is monitored and managed centrally, against pre-determined limits. These exposures are managed by aligning the deployment of regulatory capital by currency with the Group's regulatory capital requirements by currency. Currency borrowings and derivatives are used to manage exposures within the limits that have been set. Except where the Group has applied net investment hedge accounting (see note 57(a)(i)), foreign exchange gains and losses on foreign currency borrowings (see note 6) are recognised in the income statement, whereas foreign exchange gains and losses arising on consolidation from the translation of assets and liabilities of foreign subsidiaries are recognised in other comprehensive income. At 31 December 2017 and 2016, the Group's total equity deployment by currency including assets 'held for sale' was:

	Sterling £m	Euro £m	CAD\$ £m	Other £m	Total £m
Capital 31 December 2017	16,776	444	309	1,606	19,135
Capital 31 December 2016	15,813	923	627	2,188	19,551

A 10% change in sterling to euro/Canada\$ (CAD\$) period-end foreign exchange rates would have had the following impact on total equity.

	10% increase in sterling/ euro rate £m	10% decrease in sterling/ euro rate £m	10% increase in sterling/ CAD\$ rate £m	10% decrease in sterling/ CAD\$ rate £m
Net assets at 31 December 2017	(44)	44	(31)	31
Net assets at 31 December 2016	(92)	92	(63)	20

A 10% change in sterling to euro/Canada\$ (CAD\$) average foreign exchange rates applied to translate foreign currency profits would have had the following impact on profit before tax, including resulting gains and losses on foreign exchange hedges.

	10% increase in sterling/ euro rate £m	10% decrease in sterling/ euro rate £m	10% increase in sterling/ CAD\$ rate £m	10% decrease in sterling/ CAD\$ rate £m
Impact on profit before tax 31 December 2017	(78)	95	6	(7)
Impact on profit before tax 31 December 2016	(55)	67	(15)	(9)

The balance sheet changes arise from retranslation of business unit statements of financial position from their functional currencies into sterling, with above movements being taken through the currency translation reserve. These balance sheet movements in exchange rates therefore have no impact on profit. Net asset and profit before tax figures are stated after taking account of the effect of currency hedging activities.

(vi) Derivatives risk

Derivatives are used by a number of the businesses. Derivatives are primarily used for efficient investment management, risk hedging purposes, or to structure specific retail savings products. Activity is overseen by the Group Capital and Group Risk teams, which monitor exposure levels and approve large or complex transactions.

The Group applies strict requirements to the administration and valuation processes it uses, and has a control framework that is consistent with market and industry practice for the activity that is undertaken.

56 – Risk management continued

(vii) Correlation risk

The Group recognises that lapse behaviour and potential increases in consumer expectations are sensitive to and interdependent with market movements and interest rates. These interdependencies are taken into consideration in the internal capital model and in scenario analysis.

(d) 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. 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 financial resources to meet its obligations as they fall due through the application of a Group liquidity risk policy and business standard and through the development of its liquidity risk management plan. 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. In addition to the existing liquid resources and expected inflows, the Group maintains significant undrawn committed borrowing facilities (£1,650 million) from a range of leading international banks to further mitigate this risk.

Maturity analyses

The following tables show the maturities of our insurance and investment contract liabilities, and of the financial and reinsurance assets held to meet them. A maturity analysis of the contractual amounts payable for borrowings and derivatives is given in notes 49 and 57, respectively. Contractual obligations under operating leases and capital commitments are given in note 53.

(i) Analysis of maturity of insurance and investment contract liabilities

For non-linked insurance business, the following table shows the gross liability at 31 December 2017 and 2016 analysed by remaining duration. The total liability is split by remaining duration in proportion to the cash-flows expected to arise during that period, as permitted under IFRS 4, Insurance Contracts.

Almost all linked business and non-linked investment contracts may be surrendered or transferred on demand. For such contracts, the earliest contractual maturity date is therefore the current statement of financial position date, for a surrender amount approximately equal to the current statement of financial position liability. However, we expect surrenders, transfers and maturities to occur over many years, and therefore the tables below reflect the expected cash flows for these contracts, rather than their contractual maturity date. This table includes assets held for sale.

At 31 December 2017	Total £m	On demand or within 1 year £m	1-5 years £m	5-15 years £m	Over 15 years £m
Long-term business					
Insurance contracts – non-linked	109,900	10,105	27,278	41,720	30,797
Investment contracts – non-linked	71,948	5,370	17,088	26,300	23,190
Linked business	163,571	17,609	27,632	55,519	62,811
General insurance and health	16,794	6,877	6,838	2,462	617
Total contract liabilities	362,213	39,961	78,836	126,001	117,415

At 31 December 2016 ¹	Total £m	On demand or within 1 year £m	1-5 years £m	5-15 years £m	Over 15 years £m
Long-term business					
Insurance contracts – non-linked	116,400	9,757	31,423	44,791	30,429
Investment contracts – non-linked	73,112	5,358	17,050	27,568	23,136
Linked business	153,901	17,374	27,234	51,454	57,839
General insurance and health	16,488	6,761	6,594	2,448	685
Total contract liabilities	359,901	39,250	82,301	126,261	112,089

¹ Following a review of the Group's analysis of maturity of insurance and investment contract liabilities, comparative amounts have been amended from those previously reported. This has resulted in a reclassification of £2,363 million from liabilities held in connection with linked business to investment contracts – linked business and an increase in the proportion of linked business contract liabilities with a maturity date which is excess of 15 years. This reclassification has no impact on total contract liabilities reported at 31 December 2016.

56 – Risk management continued

(ii) Analysis of maturity of financial assets

The following table provides an analysis, by maturity date of the principal, of the carrying value of financial assets which are available to fund the repayment of liabilities as they crystallise. This table excludes assets held for sale.

	Total £m	On demand or within 1 year £m	1-5 years £m	Over 5 years £m	No fixed term (perpetual) £m
At 31 December 2017					
Debt securities	174,808	28,037	47,289	99,078	404
Equity securities	89,968	—	—	—	89,968
Other investments	46,306	40,500	364	4,680	762
Loans	27,857	1,651	5,053	21,149	4
Cash and cash equivalents	43,347	43,347	—	—	—
	382,286	113,535	52,706	124,907	91,138
 At 31 December 2016¹					
Debt securities	178,970	24,293	49,061	105,448	168
Equity securities	72,042	—	—	—	72,042
Other investments	48,823	45,889	1,112	275	1,547
Loans	24,784	1,352	5,609	17,819	4
Cash and cash equivalents	38,708	38,708	—	—	—
	363,327	110,242	55,782	123,542	73,761

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 note 26 for further details of this adjustment and the financial statement impact arising.

The assets above are analysed in accordance with the earliest possible redemption date of the instrument at the initiation of the Group. Where an instrument is transferable back to the issuer on demand, such as most unit trusts or similar types of investment vehicle, it is included in the 'On demand or within 1 year' column. Debt securities with no fixed contractual maturity date are generally callable at the option of the issuer at the date the coupon rate is reset under the contractual terms of the instrument. The terms for resetting the coupon are such that we expect the securities to be redeemed at this date, as it would be uneconomic for the issuer not to do so, and for liquidity management purposes we manage these securities on this basis. The first repricing and call date is normally ten years or more after the date of issuance. Most of the Group's investments in equity securities and fixed maturity securities are market traded and therefore, if required, can be liquidated for cash at short notice.

(e) Life and health insurance risk

Life insurance risk in the Group arises through its exposure to mortality risk and exposure to worse than anticipated operating experience on factors such as persistency levels, exercising of policy holder options and management and administration expenses. 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. The Group chooses to take measured amounts of life and health insurance risk provided that the relevant business has the appropriate core skills to assess and price the risk and adequate returns are available. The Group's underwriting strategy and appetite is communicated via specific policy statements, related business standards and guidelines. Life insurance risk is managed primarily at business unit level with oversight at the Group level.

The underlying risk profile of our life and health insurance risks, primarily persistency, longevity, mortality and expense risk, has remained stable during 2017, although the current continued relatively low levels of interest rates have increased our sensitivity to longevity shocks compared to historical norms. 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. Longevity risk remains the Group's most significant life insurance risk, while persistency risk remains significant and continues to have a volatile outlook with underlying performance linked to some degree to economic conditions. However, businesses across the Group have continued to make progress with a range of customer retention activities. The Group has continued to write considerable volumes of life protection business, and to utilise reinsurance to reduce exposure to potential losses. More generally, life insurance risks are believed to provide a significant diversification against other risks in the portfolio. Life insurance risks are modelled within the internal capital model and subject to sensitivity and stress and scenario testing. The assumption and management of life and health insurance risks is governed by the Group-wide business standards covering underwriting, pricing, product design and management, in-force management, claims handling, and reinsurance. The individual life and health insurance risks are managed as follows:

- Mortality and morbidity risks are mitigated by use of reinsurance. The Group allows businesses to select reinsurers, from those approved by the Group, based on local factors, but retains oversight of the overall exposures and monitors that the aggregation of risk ceded is within credit risk appetite.
- Longevity risk and internal experience analysis are monitored against the latest external industry data and emerging trends. Whilst individual businesses are responsible for reserving and pricing for annuity business, the Group monitors the exposure to this risk and any associated capital implications. The Group has used reinsurance solutions to reduce the risks from longevity and continually monitors and evaluates emerging market solutions to mitigate this risk further.
- Persistency risk is managed at a business unit level through frequent monitoring of company experience, and benchmarked against local market information. Generally, persistency risk arises from customers lapsing their policies earlier than has been assumed. Where possible the financial impact of lapses is reduced through appropriate product design. Businesses also implement specific initiatives to improve the retention of policies which may otherwise lapse. The Group has developed guidelines on persistency management.
- Expense risk is primarily managed by the business units through the assessment of business unit profitability and frequent monitoring of expense levels.

56 – Risk management continued

Embedded derivatives

The Group is exposed to the risk of changes in policyholder behaviour due to the exercise of options, guarantees and other product features embedded in its long-term savings products. These product features offer policyholders varying degrees of guaranteed benefits at maturity or on early surrender, along with options to convert their benefits into different products on pre-agreed terms. The extent of the impact of these embedded derivatives differs considerably between business units and exposes Aviva to changes in policyholder behaviour in the exercise of options as well as market risk.

Examples of each type of embedded derivative affecting the Group are:

- Options: call, put, surrender and maturity options, guaranteed annuity options, options to cease premium payment, options for withdrawals free of market value adjustment, annuity options, and guaranteed insurability options.
- Guarantees: embedded floor (guaranteed return), maturity guarantee, guaranteed death benefit, and guaranteed minimum rate of annuity payment.
- Other: indexed interest or principal payments, maturity value, loyalty bonus.

The impact of these is reflected in the capital model and managed as part of the asset liability framework. Further disclosure on financial guarantees and options embedded in contracts and their inclusion in insurance and investment contract liabilities is provided in note 42.

(f) General insurance risk

Types of risk

General insurance risk in the Group arises from:

- Fluctuations in the timing, frequency and severity of claims and claim settlements relative to expectations;
- Unexpected claims arising from a single source or cause;
- Inaccurate pricing of risks or inappropriate underwriting of risks when underwritten; and
- Inadequate reinsurance protection or other risk transfer techniques.

Aviva has a preference for general insurance risk in measured amounts for explicit reward, in line with our core skills in underwriting and pricing. The majority of the general insurance business underwritten by the Group continues to be short tail in nature such as motor, household and commercial property insurances. The Group's underwriting strategy and appetite is communicated via specific policy statements, related business standards and guidelines. General insurance risk is managed primarily at business unit level with oversight at the Group level. Claims reserving is undertaken by local actuaries in the various general insurance businesses and is also subject to periodic external reviews. Reserving processes are further detailed in note 40 'insurance liabilities'.

The vast majority of the Group's general insurance business is managed and priced in the same country as the domicile of the customer.

Management of general insurance risks

Significant insurance risks will be reported under the risk management framework. Additionally, the capital model is used to assess the risks that each general insurance business unit, and the Group as a whole, is exposed to, quantifying their impact and calculating appropriate capital requirements.

Business units have developed mechanisms that identify, quantify and manage accumulated exposures to contain them within the limits of the appetite of the Group. The business units are assisted by the General Insurance Council which provides technical input for major decisions which fall outside individual delegated limits or escalations outside group risk preferences, group risk accumulation, concentration and profitability limits.

Reinsurance strategy

Significant reinsurance purchases are reviewed annually at both business unit and Group level to verify that the levels of protection being bought reflect any developments in exposure and the risk appetite of the Group. The basis of these purchases is underpinned by analysis of capital, earnings and capital volatility, cash flow and liquidity and the Group's franchise value.

Detailed actuarial analysis is used to calculate the Group's extreme risk profile and then design cost and capital efficient reinsurance programmes to mitigate these risks to within agreed appetites. For businesses writing general insurance we analyse the natural catastrophe exposure using our own internal probabilistic catastrophe model which is benchmarked against external catastrophe models widely used by the rest of the (re)insurance industry.

The Group cedes much of its worldwide catastrophe risk to third-party reinsurers through excess of loss and aggregate excess of loss structures. The Group purchases a group-wide catastrophe reinsurance programme to protect against catastrophe losses exceeding a 1 in 200 year return period. The total Group potential retained loss from its most concentrated catastrophe exposure peril (Northern Europe Windstorm) is approximately £150 million on a per occurrence basis and £175 million on an annual aggregate basis. Any losses above these levels are covered by the group-wide catastrophe reinsurance programme to a level in excess of a 1 in 200 year return period. In addition the Group purchases a number of GI business line specific reinsurance programmes with various retention levels to protect both capital and earnings, and has reinsurance 100% of its latent exposures to its historic UK employers' liability and public liability business written prior to 31 December 2000.

(g) Asset management risk

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 derived from investment performance, specialist investment professionals and leadership, product development capabilities, fund liquidity, margin, client retention, regulatory developments, fiduciary and contractual responsibilities. Funds invested in illiquid assets such as commercial property are particularly exposed to liquidity risk. The risk profile is regularly monitored.

56 – Risk management continued

A client relationship team is in place to manage client retention risk, while all new asset management products undergo a review and approval process at each stage of the product development process, including approvals from legal, compliance and risk functions. Investment performance against client objectives relative to agreed benchmarks is monitored as part of our investment performance and risk management process, and subject to further independent oversight and challenge by a specialist risk team, reporting directly to the Aviva Investors' Chief Risk Officer.

(h) Operational risk

Operational risk is the risk of direct or indirect loss, arising from inadequate or failed internal processes, people and systems, or external events including changes in the regulatory environment. We have limited appetite for operational risk and aim to reduce these risks as far as is commercially sensible.

Our business units are primarily responsible for identifying and managing operational risks within their businesses, within the group-wide operational risk framework including the risk and control self-assessment process. Businesses must be satisfied that all material risks falling outside our risk tolerances are being mitigated, monitored and reported to an appropriate level. Any risks with a high potential impact are monitored centrally on a regular basis. Businesses use key indicator data to help monitor the status of the risk and control environment. They also identify and capture loss events, taking appropriate action to address actual control breakdowns and promote internal learning.

(i) Brand and reputation risk

We are exposed to the risk that litigation, employee misconduct, operational failures, the outcome of regulatory investigations, media speculation and negative publicity, disclosure of confidential client information, inadequate services, whether or not founded, could impact our brands or reputation. Any of our brands or our reputation could also be affected if products or services recommended by us (or any of our intermediaries) do not perform as expected (whether or not the expectations are founded) or customers' expectations for the product change. We seek to reduce this risk to as low a level as commercially sensible.

The FCA regularly considers whether we are meeting the requirement to treat our customers fairly and we make use of various metrics to assess our own performance, including customer advocacy, retention and complaints. Failure to meet these requirements could also impact our brands or reputation.

If we do not manage the perception of our brands and reputation successfully, it could cause existing customers or agents to withdraw from our business and potential customers or agents to choose not to do business with us.

(j) Risk and capital management

(i) Sensitivity test analysis

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

(ii) Life insurance and investment contracts

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

(iii) General insurance and health business

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

(iv) Sensitivity test results

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

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

56 – Risk management continued

Long-term business

Sensitivities as at 31 December 2017

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)

Sensitivities as at 31 December 2016

31 December 2016 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	(50)	30	(10)	(130)	65	(30)	(5)	(15)
Insurance non-participating	(190)	20	(775)	(35)	10	(190)	(90)	(920)
Investment participating	(10)	5	(5)	—	—	(5)	—	—
Investment non-participating	10	(15)	—	50	(70)	(65)	—	—
Assets backing life shareholders' funds	(115)	190	10	(85)	85	—	—	—
Total	(355)	230	(780)	(200)	90	(290)	(95)	(935)

31 December 2016 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	(50)	30	(10)	(130)	65	(30)	(5)	(15)
Insurance non-participating	(190)	20	(775)	(35)	10	(190)	(90)	(920)
Investment participating	(10)	5	(5)	—	—	(5)	—	—
Investment non-participating	10	(15)	—	50	(70)	(65)	—	—
Assets backing life shareholders' funds	(155)	230	5	(85)	85	—	—	—
Total	(395)	270	(785)	(200)	90	(290)	(95)	(935)

Changes in sensitivities between 2017 and 2016 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 as at 31 December 2017

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)

Sensitivities as at 31 December 2016

31 December 2016 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	(315)	320	(145)	85	(85)	(115)	(340)
Net of reinsurance	(385)	375	(145)	85	(85)	(115)	(320)
31 December 2016 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	(315)	320	(145)	85	(85)	(25)	(340)
Net of reinsurance	(385)	375	(145)	85	(85)	(25)	(320)

56 – Risk management 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 as at 31 December 2017

	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%
31 December 2017 Impact on profit before tax £m					
Total	(30)	30	80	(10)	20
31 December 2017 Impact on shareholders' equity before tax £m					
Total	(25)	25	80	(10)	15

Sensitivities as at 31 December 2016

	Interest rates +1%	Interest rates -1%	Credit spreads +0.5% ¹	Equity/ property +10%	Equity/ property -10%
31 December 2016 Impact on profit before tax £m					
Total	—	—	30	(10)	15
1 Revised from £10 million to £30 million to include Aviva International Insurance.					
31 December 2016 Impact on shareholders' equity before tax £m					
Total	—	—	30	(10)	15
1 Revised from £10 million to £30 million to include Aviva International Insurance.					

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.

57 – Derivative financial instruments and hedging

This note gives details of the various financial instruments we use to mitigate risk.

The Group uses a variety of derivative financial instruments, including both exchange traded and over-the-counter instruments, in line with our overall risk management strategy. The objectives include managing exposure to market, foreign currency and/or interest rate risk on existing assets or liabilities, as well as planned or anticipated investment purchases.

In the narrative and tables below, figures are given for both the notional amounts and fair values of these instruments. The notional amounts reflect the aggregate of individual derivative positions on a gross basis and so give an indication of the overall scale of the derivative transaction. They do not reflect current market values of the open positions. The fair values represent the gross carrying values at the year end for each class of derivative contract held (or issued) by the Group.

The fair values do not provide an indication of credit risk, as many over-the-counter transactions are contracted and documented under ISDA (International Swaps and Derivatives Association, Inc.) master agreements or their equivalent. Such agreements are designed to provide a legally enforceable set-off in the event of default, which reduces credit exposure. In addition, the Group has collateral agreements in place between the individual Group entities and relevant counterparties. Refer to note 58 for further information on collateral and net credit risk of derivative instruments.

(a) Instruments qualifying for hedge accounting

The Group has formally assessed and documented the hedge effectiveness in accordance with IAS 39, Financial Instruments: Recognition and Measurement.

(i) Net investment hedges

To reduce its exposure to foreign currency risk, the Group has designated a portion of its euro denominated debt as hedge instruments to hedge a net investment in its European subsidiaries. In 2016 additional euro denominated loans were designated as hedging instruments.

57 – Derivative financial instruments and hedging continued

The carrying value of the debt at 31 December 2017 was £2,885 million (2016: £2,774 million) and its fair value at that date was £3,202 million (2016: £2,918 million).

Foreign exchange losses of £98 million (2016: loss of £34 million) on translation of the debt to sterling at the statement of financial position date in respect of the effective portion have been recognised in the hedging instruments reserve in shareholders' equity. A loss of £13 million has been recognised in the income statement due to the termination of a net investment hedge. This hedge was fully effective throughout the prior year.

(ii) Cash flow hedges

There were no cash flow hedges designated in the year. In 2016 gains of £2 million in respect of a cash flow hedge terminated during the year were reclassified from shareholders' equity into the income statement.

(iii) Fair value hedges

There were no fair value hedges designated in the year.

(b) Derivatives not qualifying for hedge accounting

Certain derivatives either do not qualify for hedge accounting under IAS 39 or the option to designate them as hedge instruments has not been taken. These are referred to below as non-hedge derivatives.

(i) The Group's non-hedge derivatives at 31 December 2017 and 2016 were as follows:

	2017			2016		
	Contract/ notional amount £m	Fair value asset £m	Fair value liability £m	Contract/ notional amount £m	Fair value asset £m	Fair value liability £m
Foreign exchange contracts						
OTC						
Forwards	10,281	87	(34)	11,976	96	(120)
Interest rate and currency swaps	7,336	176	(568)	7,441	148	(982)
Options	—	—	—	300	—	(23)
Total	17,617	263	(602)	19,717	244	(1,125)
Interest rate contracts						
OTC						
Forwards	280	4	(2)	—	—	—
Swaps	52,464	4,370	(2,539)	53,700	4,289	(3,148)
Options	178	15	(11)	164	3	(20)
Swaptions	1,220	143	(7)	1,090	189	(9)
Exchange traded						
Futures	4,577	11	(17)	5,384	47	(35)
Total	58,719	4,543	(2,576)	60,338	4,528	(3,212)
Equity/Index contracts						
OTC						
Options	593	29	(2)	1,714	33	(38)
Exchange traded						
Futures	16,279	254	(249)	9,618	94	(107)
Options	2,560	175	(5)	4,678	568	(9)
Total	19,432	458	(256)	16,010	695	(154)
Credit contracts						
Other	9,920	15	(261)	13,353	6	(260)
Total at 31 December	15,395	228	(2,071)	28,614	646	(2,044)
Total at 31 December	121,083	5,507	(5,766)	138,032	6,119	(6,795)

Fair value assets of £5,507 million (2016: £6,119 million) are recognised as 'Derivative financial instruments' in note 26(a), while fair value liabilities of £5,766 million (2016: £6,795 million) are recognised as 'Derivative liabilities' in note 50.

The Group's derivative risk management policies are outlined in note 56.

(ii) The contractual undiscounted cash flows in relation to non-hedge derivative liabilities have the following maturities:

	2017 £m	2016 £m
Within 1 year	1,071	1,075
Between 1 and 2 years	597	601
Between 2 and 3 years	503	578
Between 3 and 4 years	404	558
Between 4 and 5 years	328	406
After 5 years	3,461	4,154
Total	6,364	7,372

(c) Collateral

Certain derivative contracts, primarily interest rate and currency swaps, involve the receipt or pledging of cash and non-cash collateral. The amounts of cash collateral receivable or repayable are included in notes 27 and 50 respectively. Collateral received and pledged by the Group is detailed in note 58.

58 – Financial assets and liabilities subject to offsetting, enforceable master netting agreements and similar arrangements

(a) Offsetting arrangements

Financial assets and liabilities are offset in the statement of financial position when the Group has a legally enforceable right to offset and has the intention to settle the asset and liability on a net basis, or to realise the asset and settle the liability simultaneously.

Aviva mitigates credit risk in derivative contracts by entering into collateral agreements, where practical, and into ISDA master netting agreements for each of the legal entities to facilitate its right to offset credit risk exposure. The credit support agreement will normally dictate the threshold over which collateral needs to be pledged by Aviva or its counterparty.

Derivative transactions requiring Aviva or its counterparty to post collateral are typically the result of over-the-counter derivative trades, comprised mostly of interest rate swaps, currency swaps and credit default swaps. These transactions are conducted under terms that are usual and customary to standard long-term borrowing, derivative, securities lending and securities borrowing activities. The derivative assets and liabilities in the table below are made up of the contracts described in detail in note 57.

Aviva participates in a number of stock lending and repurchase arrangements. In some of these arrangements cash is exchanged by Aviva for securities and a related receivable is recognised within ‘Loans to banks’ (note 23). These arrangements are reflected in the tables below. In instances where the collateral is recognised on the statement of financial position, the obligation for its return is included within ‘Payables and other financial liabilities’.

In other arrangements, securities are exchanged for other securities. The collateral received must be in a readily realisable form such as listed securities and is held in segregated accounts. Transfer of title always occurs for the collateral received. In many instances, however, no market risk or economic benefit is exchanged and these transactions are not recognised on the statement of financial position in accordance with our accounting policies, and accordingly not included in the tables below.

2017		Amounts subject to enforceable netting arrangements					
		Offset under IAS 32			Amounts under a master netting agreement but not offset under IAS 32		
		Gross amounts £m	Amounts offset £m	Net amounts reported in the statement of financial position £m	Financial instruments £m	Cash collateral £m	Securities collateral received / pledged £m
Financial assets							
Derivative financial assets	4,605	—	4,605	(3,162)	(830)	(291)	322
Loans to banks and repurchase arrangements	2,524	—	2,524	—	—	(2,502)	22
Total financial assets	7,129	—	7,129	(3,162)	(830)	(2,793)	344
Financial liabilities							
Derivative financial liabilities	(4,790)	—	(4,790)	3,233	17	1,120	(420)
Other financial liabilities	(2,961)	—	(2,961)	—	—	2,961	—
Total financial liabilities	(7,751)	—	(7,751)	3,233	17	4,081	(420)

2016		Amounts subject to enforceable netting arrangements					
		Offset under IAS 32			Amounts under a master netting agreement but not offset under IAS 32		
		Gross amounts £m	Amounts offset £m	Net amounts reported in the statement of financial position £m	Financial instruments £m	Cash collateral £m	Securities collateral received / pledged £m
Financial assets							
Derivative financial assets	6,194	(827)	5,367	(3,577)	(921)	(336)	533
Loans to banks and repurchase arrangements	2,579	—	2,579	—	—	(2,579)	—
Total financial assets	8,773	(827)	7,946	(3,577)	(921)	(2,915)	533
Financial liabilities							
Derivative financial liabilities	(6,762)	827	(5,935)	3,649	474	1,360	(452)
Other financial liabilities	(2,779)	—	(2,779)	—	—	2,779	—
Total financial liabilities	(9,541)	827	(8,714)	3,649	474	4,139	(452)

Derivative assets are recognised as ‘Derivative financial instruments’ in note 26(a), while fair value liabilities are recognised as ‘Derivative liabilities’ in note 50. £902 million (2016: £752 million) of derivative assets and £976 million (2016: £860 million) of derivative liabilities are not subject to master netting agreements and are therefore excluded from the table above.

Amounts receivable related to securities lending and reverse-repurchase arrangements totalling £2,524 million (2016: £2,579 million) are recognised within ‘Loans to banks’ in note 23.

Other financial liabilities presented above represent liabilities related to repurchase arrangements recognised within ‘Obligations for repayment of cash collateral received’ in note 50.

58 – Financial assets and liabilities subject to offsetting, enforceable master netting arrangements and similar agreements continued

(b) Collateral

In the tables above, the amounts of assets or liabilities presented in the consolidated statement of financial position are offset first by financial instruments that have the right of offset under master netting or similar arrangements with any remaining amount reduced by the amount of cash and securities collateral. The actual amount of collateral may be greater than amounts presented in the tables above in the case of over collateralisation.

The total amount of collateral received which the Group is permitted to sell or repledge in the absence of default, excluding collateral related to balances recognised within Loans to banks disclosed in note 23, was £22,978 million (2016: £22,559 million), all of which other than £4,780 million (2016: £5,764 million) is related to securities lending arrangements. Collateral of £2,697 million (2016: £2,764 million) has been received related to balances recognised within ‘Loans to banks’ (refer to note 23). The value of collateral that was actually sold or repledged in the absence of default was £nil (2016: £nil).

The level of collateral held is monitored regularly, with further collateral obtained where this is considered necessary to manage the Group’s risk exposure.

59 – Related party transactions

This note gives details of the transactions between Group companies and related parties which comprise our joint ventures, associates and staff pension schemes.

The Group undertakes transactions with related parties in the normal course of business. Loans to related parties are made on normal arm’s-length commercial terms.

Services provided to, and by related parties

	2017				2016			
	Income earned in the year £m	Expenses incurred in the year £m	Payable at year end £m	Receivable at year end £m	Income earned in the year £m	Expenses incurred in the year £m	Payable at year end £m	Receivable at year end £m
Associates	4	(4)	—	—	4	(3)	—	—
Joint ventures	49	—	—	2	46	—	—	2
Employee pension schemes	12	—	—	14	16	—	—	5
	65	(4)	—	16	66	(3)	—	7

Transactions with joint ventures in the UK relate to the property management undertakings, the most material of which are listed in note 18(a)(iii). The Group has equity interests in these joint ventures, together with the provision of administration services and financial management to many of them. Our fund management companies also charge fees to these joint ventures for administration services and for arranging external finance.

Key management personnel of the Company may from time to time purchase insurance, savings, asset management or annuity products marketed by group companies on equivalent terms to those available to all employees of the Group. In 2017, other transactions with key management personnel were not deemed to be significant either by size or in the context of their individual financial positions.

Our UK fund management companies manage most of the assets held by the Group’s main UK staff pension scheme, for which they charge fees based on the level of funds under management. The main UK scheme holds investments in Group-managed funds and insurance policies with other group companies, as explained in note 48(b)(ii). As at 31 December 2017, the Friends Provident Pension Scheme (‘FPPS’), acquired in 2015 as part of the acquisition of the Friends Life business, held an insurance policy of £630 million (2016: £633 million) issued by a group company, which eliminates on consolidation.

The related parties’ receivables are not secured and no guarantees were received in respect thereof. The receivables will be settled in accordance with normal credit terms.

Key management compensation

The total compensation to those employees classified as key management, being those having authority and responsibility for planning, directing and controlling the activities of the Group, including the executive and non-executive directors is as follows:

	2017 £m	2016 £m
Salary and other short-term benefits	12.5	14.6
Other long-term benefits	5.4	5.3
Post-employment benefits	1.5	1.5
Equity compensation plans	16.4	9.3
Termination benefits	0.4	—
Total	36.2	30.7

Information concerning individual directors’ emoluments, interests and transactions is given in the Directors’ Remuneration Report.

60 – Organisational structure

The following chart shows, in simplified form, the organisational structure of the Group as at 31 December 2017. Aviva plc is the holding company of the Group.

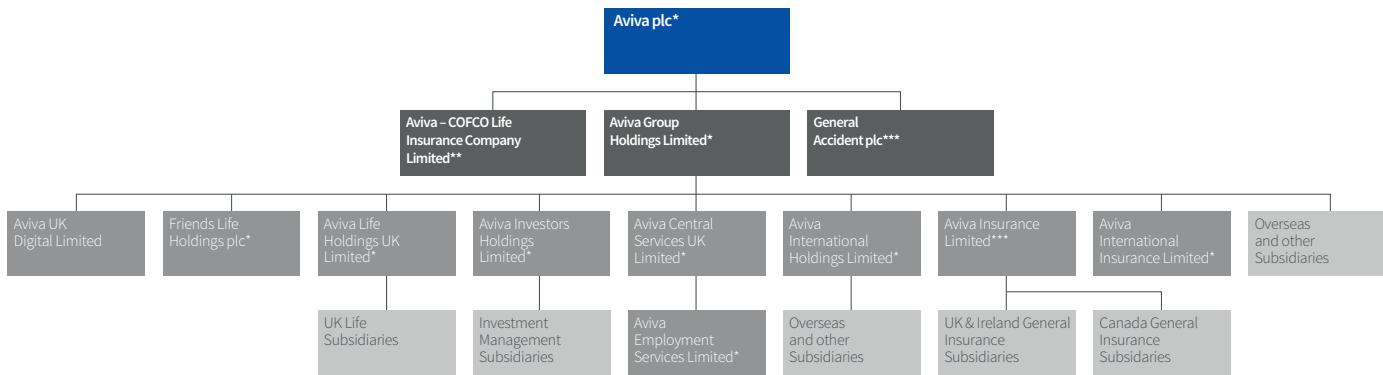
Parent company

Aviva plc

Subsidiaries

The principal subsidiaries of the Company at 31 December 2017 are listed below by country of incorporation.

A complete list of the Group's related undertakings comprising of subsidiaries, joint ventures, associates and other significant holdings is contained within note 61.



* Incorporated in England and Wales

** Incorporated in People's Republic of China.

*** Incorporated in Scotland

United Kingdom

Aviva Central Services UK Limited
 Aviva Employment Services Limited
 Aviva Equity Release UK Limited
 Aviva Health UK Limited
 Aviva Insurance Limited
 Aviva International Insurance Limited
 Aviva Investors Global Services Limited
 Aviva Investors Pensions Limited
 Aviva Investors UK Fund Services Limited
 Aviva Life & Pensions UK Limited
 Aviva Life Services UK Limited
 Aviva Pension Trustees UK Limited
 Aviva UK Digital Limited
 Aviva Wrap UK Limited
 Gresham Insurance Company Limited
 The Ocean Marine Insurance Company Limited
 Aviva Management Services UK Limited
 Aviva Administration Limited
 Friends Provident International Limited¹

Barbados

Victoria Reinsurance Company Ltd

Bermuda

Aviva Re Limited

Canada

Aviva Canada Inc. and its principal subsidiaries:
 Aviva Insurance Company of Canada
 Aviva General Insurance Company
 Elite Insurance Company
 Pilot Insurance Company
 Scottish & York Insurance Co. Limited
 S&Y Insurance Company
 Traders General Insurance Company

France

Aviva France SA (99.99%) and its principal subsidiaries:
 Aviva Assurances S.A. (99.9%)
 Aviva Investors France S.A. (99.9%)
 Aviva Vie SA (99.9%)
 Aviva Epargne Retraite (99.9%)
 Union Financière de France Banque (Banking) (74.3%)

Hong Kong

Aviva Life Insurance Company Limited

¹ Refer to Note 3(c) for further details in respect of operations classified as held for sale

60 – Organisational structure continued

Italy

Aviva Italia Holding S.p.A and its principal subsidiaries:

- Avipop Assicurazioni S.p.A (50%)¹
- Avipop Vita S.p.A (50%)¹
- Aviva S.p.A (51%)
- Aviva Italia S.p.A
- Aviva Life S.p.A
- Aviva Vita S.p.A (80%)

Lithuania

Uždaroji akcinė gyvybės draudimo ir pensijų bendrovė 'Aviva Lietuva' (90%)

Poland

Aviva Powszechnie Towarzystwo Emerytalne Aviva BZ WBK S.A. (81%)

- Aviva Towarzystwo Ubezpieczen na Zycie SA (90%)
- Aviva Towarzystwo Ubezpieczen Ogolnych SA (90%)
- BZ WBK – Aviva Towarzystwo Ubezpieczen Ogolnych S.A. (51%)
- BZ WBK-Aviva Towarzystwo Ubezpieczeń na Życie Spółka Akcyjna (51%)

Singapore

Aviva Ltd
Navigator Investment Services Limited

Spain

Caja Granada Vida, de Seguros y Reaseguros, S.A. (25%)¹
Caja Murcia Vida y Pensiones, de Seguros y Reaseguros S.A. (50%)¹
Pelayo Vida Seguros Y Reaseguros Sociedad Anonima (50%)¹

Vietnam

Aviva Vietnam Life Insurance Company Limited

Branches

The Group also operates through branches, the most significant of which is based in Ireland.

Associates and joint ventures

The Group has ongoing interests in the following operations that are classified as joint ventures or associates. Further details of those operations that were most significant in 2017 are set out in notes 18 and 19 to the financial statements.

United Kingdom

The Group has interests in several property limited partnerships. Further details are provided in notes 18, 19 and 25 to the financial statements.

China

Aviva-COFCO Life Insurance Co. Limited (50%)

India

Aviva Life Insurance Company India Limited (49%)

Indonesia

PT Astra Aviva Life (50%)

Taiwan

First-Aviva Life Insurance Co. Limited (49%)¹

Turkey

Aviva SA Emeklilik Ve HayatA.S (40%)

61 – Related Undertakings

The Companies Act 2006 requires disclosure of certain information about the Group's related undertakings which is set out in this note. Related undertakings comprise subsidiaries, joint ventures, associates and other significant holdings. Significant holdings are where the Group either has a shareholding greater than or equal to 20% of the nominal value of any share class, or a book value greater than 20% of the Group's assets.

The definition of a subsidiary undertaking in accordance with the Companies Act 2006 is different from the definition under IFRS. As a result, the related undertakings included within the list below may not be the same as the undertakings consolidated in the Group IFRS financial statements. Refer to accounting policies (D) Consolidation principles for further detail on principles of consolidation and definition of joint ventures.

The Group's related undertakings along with the country of incorporation, the registered address, the classes of shares held and the effective percentage of equity owned at 31 December 2017 are disclosed below.

The direct related undertakings of the Company as at 31 December 2017 are listed below.

Name of undertaking	Country of incorporation	Registered address	Share class ¹	% held
Aviva-COFCO Life Insurance Company Ltd ²	China	12/F, Block A, Landgent Centre, 20 East Third Ring Middle Road, Beijing, 100022	Ordinary shares	50
General Accident plc	United Kingdom	Pitheavlis, Perth, Perthshire, PH2 0NH	Ordinary shares	100
Aviva Group Holdings Limited	United Kingdom	St Helen's, 1 Undershaft, London, EC3P 3DQ	Ordinary shares	100

The indirect related undertakings of the Company as at 31 December 2017 are listed below:

Company name	Share Class ¹	% held	Company name	Share Class ¹	% held
Australia			On L3R 5K3		
c/o TMF Corporate Services (Aust) Pty Ltd, L16, 201 Elizabeth Street, Sydney 2000			Westmount Guarantee Services Inc.	Common A Shares	33
Aviva Investors Pacific Pty Ltd	Ordinary Shares	100	Cayman Islands		
Barbados			115 East 57th Street, Suite 1019, New York NY 10022		
c/o USA Risk Group (Barbados) Ltd., 6th Floor, CGI Tower, Warrens, St. Michael, BB22026			Belmont Global Trend Fund Ltd	Mutual Fund	27
Victoria Reinsurance Company Ltd.	Common Shares	100	China		
Belgium			Units 1805-1807, 18th Floor, Block H Office Building, Phoenix Land Plaza, No. A5 Yard, Shuguangxili, Chaoyang District, Beijing		
Avenue Louise 326, Boîte 30, 1050 Ixelles			Aviva-Cofco Yi Li Asset Management Co Ltd ²	Ordinary Shares	21
Parnasse Square Invest	Ordinary Shares	100	Czech Republic		
Bermuda			1, Praha, Olívova 2069/4, PSC 110 00		
Canon's Court, 22 Victoria Street, Hamilton, HM 12			SachsenFonds Asset Management Czech s.r.o.	Ordinary Shares	98
Aviva Re Limited	Ordinary Shares	100	5/482, Ve Svalu, Prague 4, 14700		
Mintflower Place, 3rd Floor, 8 Par-la-Ville Road, Hamilton , Bermuda, HM 08			AIEREF Renewable Energy s.r.o.	Ordinary Shares	99
ORN Capital Management (Bermuda) Ltd.	Ordinary Shares	100	Rohankse, Nablezi, 678/25, Prague 8-Karlin, PC 186 00		
Trinity Hall, 43 Cedar Avenue, Hamilton HM 12			Riga Office East s.r.o.	Ordinary Shares	100
Lend Lease JEM Partners Fund Limited	Ordinary Shares	23	France		
Canada			1 rue la Boétie, 75008 Paris		
10 Aviva Way, Suite 100, Markham On L6G 0G1			SCI Trilogy	Ordinary Shares	5
9543864 Canada Inc.	Common Shares	100	1, boulevard Haussmann, 75009, Paris		
Aviva Canada Inc.	Voting Interest	100	Afer Actions Pme-Cl (Bpaapci)	FCP	100
Aviva General Insurance Company	Common Shares	100	102 C Rue Amelot, 75011, Paris		
Aviva Insurance Company of Canada	Common Shares	100	Aviva Impact Investing France	Ordinary Shares	100
Aviva Warranty Services Inc.	Common Shares	100	11 rue la Boétie, 75008 Paris		
Elite Insurance Company	Common Shares	100	SAS Fontenay	Ordinary Shares	5
Insurance Agent Service Inc.	Common Shares	100	11, Cours Valmy, 92800, Puteaux		
National Home Warranty Group Inc.	Common Shares	100	Helios Al	Mutual Fund	100
OIS Ontario Insurance Service Limited	Common Shares	100	112 Avenue Kleber, 75784, Paris		
Pilot Insurance Company	Common Shares	100	Encore+French OPCI	Ordinary Shares	5
S&Y Insurance Company	Common Shares	100	SCI 69 Haussmann	Ordinary Shares	5
Scottish & York Insurance Co. Limited	Common Shares	100	SCI Strasbourg	Ordinary Shares	5
Traders General Insurance Company	Common Shares	100	115 Rue Montmartre, 75002, Paris 2		
Wayfarer Insurance Brokers Limited	Common Shares	100	Vega Monétaire	FCP	20
100 King Street West, Suite 4900, Toronto On M5X 2A2			128 boulevard Raspail, 75006, Paris		
Aviva Investors Canada Inc.	Common Shares	100	Lfam-UFFoblig2-5A (Lafllalb)	FCP	88
100, 10325 Bonaventure Drive S.E., Calgary T2J 7E4			UFF Oblicontext 2021-A (UFFo21A)	FCP	98
A-Win Insurance Ltd.	Ordinary Shares	100	UFF Oblicontext 2023 A (UFFo23A)	FCP	99
328 Mill Street, Unit 11, Beaverton L0K 1A0			UFF Petrocontext C.	FCP	99
Bay-Mill Specialty Insurance Adjusters Inc.	Common Shares	100	13 Avenue le Brun, 92160, Antony		
480 University Avenue, Suite 800, Toronto On M5G 1V2			SCPI Pierrevenus	Ordinary Shares	75
LMS ProLink Limited ²	Common A Shares	34	13 Rue du Moulin Bailly, 92270, Bois Colombes		
555 Chabanel Ouest, Bureau 900, Montreal QC H2N 2H8			11 Rue De L'Echelle	Ordinary Shares	100
Aviva Agency Services Inc.	Common A Shares	100	Agents 3A	Ordinary Shares	50
600 Cochrane Drive, Suite 205, Markham			Aviva Assurances, Société Anonyme d'Assurances Incendie, Accidents et Risques		
			Divers	Ordinary Shares	100
			13, Avenue Lebrun, 92188, Antony Cedex		
			Pierrevenus	Ordinary Shares	75
			14 Rue Roqueline, 75008, Paris		
			Aviva Investors France S.A.	Ordinary Shares	100

Company name	Share Class ¹	% held	Company name	Share Class ¹	% held
153, Boulevard Haussmann, 75008, Paris			Aviva Valeure Francaises	SICAV	98
Selectus	FCP	95	Aviva Valeurs Immobilieres	SICAV	75
17 Rue du Cirque, 75008, Paris			Aviva Valorisation Opportunité	FCP	99
Financiere Du Carrousel	Ordinary Shares	74	Aviva Valorisation Patrimoine	FCP	99
19, Avenue de Suffren, 75007, Paris			Diversifie 0-70 M	FCP	86
OPCI Preim Retail 1	OPCI	23	Fpe Aviva Eur Corp Senior Db2	Mutual Fund	32
20 Place Vendôme, 75001, Paris			Obligations 5-7 M	FCP	75
AXA Lbo Fund IV Feeder	Private Equity Fund	41	FPE Aviva Small & Midcap ASAM	Mutual Funds	100
AXA UK Infrastructure Investment SAS	Ordinary Shares	100	Rendement Diversifie M	FCP	96
Croissance Pme A.C.	Mutual Fund	100	Uff Cap Defensif	FCP	100
24 Rue de la Pépinière, 75008 Paris			Uff Diversifie 0-70 A	FCP	100
Aviva Investors Euro Crédit Bonds 1-3 HD R	FCP	27	Uff Eu-Val 0-100 A.C.	FCP	99
Afer Actions Amerique Fcp	FCP	100	Uff Obligations 5-7 A	FCP	99
Aviva Actions Europe	FCP	100	Uff Rendement Diversifie A	FCP	100
Afer Actions Euro A	FCP	100	242, Rue de Rivoli, 75001, Paris		
Afer Actions Monde	FCP	100	Capza Priv Debt 2 A.C.	UCITS	100
Afer Convertibles C.	FCP	100	24-26 Rue De La Pépinière, 75008, Paris		
Afer Diversifie Durable	FCP	100	100 Courcelles	Ordinary Shares	100
Afer Marches Emergents Fcp	FCP	100	AFER Immo	Ordinary Shares	100
Afer Obl Md Ent C.	FCP	100	AFER Immo 2	Ordinary Shares	100
Afer Patrimoine	FCP	100	Aviva Commerce Europe	Ordinary Shares	100
Afer-Flore	FCP	98	Aviva Immo Selection	Ordinary Shares	100
Afer-Sfer	SICAV	100	Aviva Investors Real Estate France S.A.	Ordinary Shares	100
Aviva Diversifie	SICAV	95	Aviva Investors Real Estate France SGP	Ordinary Shares	100
Aviva Actions Croissance	FCP	100	Aviva Patrimoine Immobilier	Ordinary Shares	100
Aviva Actions Euro	FCP	98	Logiprime Europe	Ordinary A Shares	100
Aviva Actions France	FCP	81	Primotel Europe	Ordinary Shares	100
Aviva Amerique	FCP	97	SCI La Coupole Des Halles	Ordinary Shares	98
Aviva Asie	FCP	100	SCI Pergola	Ordinary Shares	100
Aviva Convertibles	SICAV	92	Société Civile Immobilière Thomas Edison	Ordinary Shares	50
Aviva Conviction Opportunités	FCP	100	Sapphire Ile de France SCI	Ordinary Euro 1 Each Shares	100
Aviva Conviction Patrimoine	FCP	100	Afer Avenir Senior	SICAV	100
Aviva Developpement	SICAV	100	AFER Actions Euro 1	FCP	100
Aviva Eur Corp Senior Debts	FCT	100	Aviva Investors Inflation Euro Hd Fcp	FCP	44
Aviva Europe	SICAV	96	Aviva Investors Small & Mid Ca	FCP	100
Aviva Flexible C.	Mutual Fund	100	Aviva Investors Small & Mid Caps Europe I	FCP	100
Aviva Flexible Emergents A FCP	FCP	100	4D	FCP	100
Aviva Flexible Emergents I FCP	FCP	100	Aviva Investors Valorisation	FCP	100
Aviva France Opportunités	FCP	94	Aviva Investors Yield Curve Abs Ret	FCP	100
Aviva Grdes Marq A.C.	FCP	100	Aviva Japan	FCP	100
Aviva Interoblig	FCP	100	Aviva Messine 5	FCP	100
Aviva Investors Actions Euro	FCP	83	Aviva Performance Divers.Fcp	FCP	100
Aviva Investors Alpha Taux A	FCP	100	Aviva Valeurs Responsable A	FCP	100
Aviva Investors Alpha Yield	FCP	95	32, avenue d'Iéna, 75116 Paris		
Aviva Investors Britannia (D)	SICAV	100	Aviva Capital Planete (Avicapa)	FCP	100
Aviva Investors Conviction	FCP	100	CGP Entrepreneurs	Ordinary Shares	74
Aviva Investors Credit Europe(C)	FCP	56	Myria Asset Management	Ordinary Shares	74
Aviva Investors Credit Europe(D)	FCP	74	UFF Selection Alpha-A (Ufsela)	FCP	98
Aviva Investors Eu Aggr A.C.	FCP	77	UFF Actions France-Aeur (Uffacfa)	FCP	100
Aviva Inv.E.Aagr.I	FCP	99	UFF Avenir Euro Valeur (Uaeuro)	FCP	100
Aviva Investors Eur Cre Bd	FCP	81	UFF Cap Diversifie (Ucapdiv)	FCP	50
Aviva Investors Euro Com R E D	FCP	100	UFF Capital Planete A (Aviufcp)	FCP	98
Aviva Investors Euro Crédit Bonds 1-3 HD	FCP	51	UFF Croissance Pme A (Ucapcro)	FCP	100
Aviva Investors Japan	FCP	99	UFF Emergence-A (Uffemga)	FCP	99
Aviva Investors Monetaire (C)	FCP	59	UFF Emergence-I (Aviemi)	FCP	100
Aviva Investors Monetaire (D)	FCP	96	UFF Europe Opportunités-Aeur (Uffgeua)	FCP	99
Aviva Investors Monetaire (P)	FCP	100	UFF Global Foncieres-A (Ufgf70a)	FCP	99
Aviva Investors Portefeuille	FCP	100	UFF Global Multi-Strategie-A (Ufglmsa)	FCP	99
Aviva Investors Reference Div	FCP	100	UFF Global Obligations-A (Ufgf30a)	FCP	97
Aviva Investors Selection	FCP	100	UFF Global Reactif-A (Ufgf10a)	FCP	96
Aviva Investors Small & Mid Caps Europe			UFF Liberty-A (Uffliba)	FCP	100
14D	FCP	100	UFF Selection Premium A (Uavran)	FCP	98
Aviva Investors Valeurs	FCP	100	Ufifrance Gestion	Ordinary Shares	74
Aviva Investors Valeurs Europe	FCP	91	Ufifrance Patrimoine	Ordinary Shares	74
Aviva Investors Yield Curve Abs Rt R	FCP	100	Union Financière de France Banque	Ordinary Shares	74
Aviva Monetaire Irl (A)	FCP	97	36 Rue De Naples 75008 Paris		
Aviva Monetaire Irl (I)	FCP	79	SCPI UFI France Immobilier	SCPI	20
Aviva Multigestion	FCP	98	Ufifrance Immobilier	Ordinary Shares	20
Aviva Oblig International	SICAV	88	Cybele Am - Bellatrix-C (THIPATC)	SICAV	78
Aviva Oblirea	SICAV	97	Cybele Am Betelgeuse (BETGUSV)	SICAV	92
Aviva Patrimoine	SICAV	96	Cybele Am Sirius (VICSIRS)	SICAV	97
Aviva Performance	FCP	100	Cybele Eur Israel Croissance (FRAISCR)	SICAV	85
Aviva Rebond Part A	FCP	83	37 Avenue des Champs Elysées, 75008, Paris		
Aviva Rendement Europe	SICAV	95			
Aviva Repo Fcp	FCP	100	Société Française de Gestion et d'Investissement	Ordinary B Shares	57
Aviva Selection Opportunités	FCP	99	39 Rue Saint-Simon , Greenopolis, 69009, Lyon		
Aviva Selection Patrimoine	FCP	99			
Aviva Signatures Europe	FCP	99	ALTIA	Ordinary Shares	100
Aviva Structure Ixd 1 C.	FCP	100	Infinitis	Ordinary Shares	74
Aviva Structure Index 2	FCP	100	4 Rue Marivaux, 75002, Paris		
Aviva Structure Index 4 C.	FCP	100	7-13 Boulevard Paul Emile Victor S.a.r.l	Ordinary Shares	100
Aviva Structure Index3	Mutual Fund	100			

Company name	Share Class ¹	% held	Company name	Share Class ¹	% held
French Core + Two S.a.r.l	Ordinary Shares	5	Reschop Carré Marketing GmbH	Ordinary Shares	100
SAS Core + Metz	Ordinary Shares	5	Max-Planck-Strasse, 3,85609 Aschheim-Dornach		
SAS Core + Tour Franklin	Ordinary Shares	5	ASF German Retail GmbH & Co. KG	Ordinary Shares	98
SAS Core + Tour Franklin 2	Ordinary Shares	5	German Retail Associate Properties Sarl	Ordinary Shares	98
SCI Aix en Provence	Ordinary Shares	5	German Retail I GmbH	Ordinary Shares	98
SCI Bondy Nord	Ordinary Shares	5	German Retail II GmbH	Ordinary Shares	98
SCI Buchelay 78	Ordinary Shares	5	German Retail IV GmbH	Ordinary Shares	98
SCI Cormontreuil	Ordinary Shares	5	German Retail IX GmbH	Ordinary Shares	98
41 Rue Capitaine Guynemer, 92400, Courbevoie			German Retail V GmbH	Ordinary Shares	98
Logipierre 1	Ordinary Shares	44	German Retail VII GmbH	Ordinary Shares	98
Selectipierre 2	Ordinary Shares	29	German Retail VIII GmbH	Ordinary Shares	98
SCPI Logipierre 1	Ordinary Shares	44	SachsenFonds Asset Management GmbH	Ordinary Shares	98
SCPI Sélectipierre 2	Ordinary Shares	29	Speditionstraße 23, 40221 Düsseldorf		
47 rue du Faubourg Saint-Honoré, 75008, Paris 8			Projektgesellschaft Hafenspitze mbH	Ordinary Shares	95
Aviva Selection (Edmasio)	FCP	100	Guernsey		
CGU Equilibre	FCP	89	Dorey Court Admiral Park, St Peter Port, Guernsey, GY1 2HT		
Diapason 1	FCP	86	First Meridian Cautious Balanced Fund GBP	OEIC	30
L'Antenne-U (Edmlanu)	FCP	97	First Meridian Cautious Balanced Fund USD	OEIC	22
UFF Global Convertibles A	FCP	100	The Fincrest Global Equity Fund	OEIC	36
53 avenue d'Iéna			PO Box 25, Regency Court, Glategny Esplanade, St Peter Port, GY1 3AP		
UFF Valeurs Prme-A (Fintrma)	FCP	99	Friends Life Group Limited	Ordinary Shares	100
62 Rue de la Chaussee d'Antin, 75009 Paris			PO Box 255, Trafalgar Court, Les Banques, St. Peter Port, GY1 3QL		
GEBPF Marseille (France) SARL	Ordinary Shares	50	AXA Property Trust Ltd	OEIC	28
Vauban Developpement SARL	Ordinary Shares	100	F&C Commercial Property Trust Limited	OEIC	20
7 Rue Auber, 75009, Paris			PO Box 287, 4th Floor, West Wing, Trafalgar Court, Admiral Park, WSF Asian Pacific Fund		
Vip Conseils	Ordinary Shares	34	St Martin's House, Le Bordage, St Peter Port		
70 Avenue De L'Europe, 92270 Bois-Colombes			Paragon Insurance Company Guernsey Limited	Ordinary Shares	47
Aviva Epargne Retraite	Ordinary Shares	100	Hong Kong		
Aviva Investissements	Ordinary Shares	100	21st Floor, Chater House, 8 Connaught Road Central		
Aviva Vie, Société Anonyme d'Assurances			JPMorgan Indonesia Fund	SICAV	30
Vie et de Capitalisation	Ordinary Shares	100	6th Floor, Alexandra House, 18 Chater Road, Central		
Epargne Actuelle	Ordinary Shares	100	Aviva Life Insurance Company Limited	Ordinary Shares	100
Innov'Now	Ordinary Shares	100	India		
Newco 2	Ordinary Shares	100	2nd Floor, Prakash Deep Building 7,, Tolstoy Marg, New Delhi, Delhi, 110001		
Newco 3	Ordinary Shares	100	CGU Project Services Private Limited	Rs.10 Shares	100
Newco 4	Ordinary Shares	100	Aviva Life Insurance Company India Limited ²	Ordinary Shares	49
SCI Pesaro	Ordinary Shares	79	A-47 (L.G.F), Hauz Khas, New Delhi, Delhi		
Société Civile Immobilière Carpe Diem	Ordinary Shares	50	Sesame Group India Private Limited	Ordinary Shares	100
Societe Civile Immobiliere Charles Hermite	Ordinary Shares	100	Pune Office Addresses 103/P3, Pentagon, Magarpatta City, Hadapsar, Pune - 411013		
Societe Civile Immobiliere Montaigne	Ordinary Shares	100	A.G.S. Customer Services (India) Private Limited	Ordinary Shares	100
80 Avenue De L'Europe, 92270 Bois-Colombes			Indonesia		
Aviva France	Ordinary Shares	100	Pondok Indah Office Tower 3, 1st Floor, Jl. Sultan Iskandar Muda Kav. V-TA, Pondok Indah, Jakarta Selatan, Jakarta, 12310		
Aviva Solutions	Ordinary Shares	100	PT Astra Aviva Life ²	Ordinary Shares	50
Croissance Pierre II	Ordinary Shares	100	Ireland		
Groupement D'Interet Economique du Groupe Aviva France	Ordinary Shares	100	24/26 City Quay, Dublin 2		
Locamat SAS	Ordinary Shares	100	Aviva Life Holdings Ireland Limited	Ordinary Shares	100
Newco	Ordinary Shares	100	Aviva Services Payment Limited	Ordinary Shares	100
Selectinvie – Societe Civile Immobiliere	Ordinary Shares	100	Aviva Undershift Five Limited	Ordinary Shares	70
Selectipierre – Société Civile	Ordinary Shares	100	Aviva Undershift One Se	Ordinary Shares	100
Societe Concessionnaire des Immeubles de la Pepiniere	Ordinary Shares	100	Aviva Undershift Three Se	Ordinary Shares	100
Victoire Immo 1- Société Civile	Ordinary Shares	100	25/28 North Wall Quay, Dublin		
Voltaire S.A.S	Ordinary Shares	100	CGWM Select Affinity Fund	OEIC	24
83-85 Avenue Marceau, 75016, Paris			CGWM Select Global Affinity Fund	OEIC	64
Primonial Real Estate Investment Management	Ordinary Shares	25	CGWM Select Global Diversity Fund	OEIC	37
9 Rue Jadin, 75017, Paris			CGWM Select Global Opportunity Fund	OEIC	57
Opci Résidial	OPCI	35	CGWM Select Opportunity Fund	OEIC	41
90 Boulevard Pasteur, 75015, Paris			European Wealth Global Managed Strategy Fund	OEIC	22
Aviva Actions S2 C.	FCP	100	Anna Livia Properties Limited	Ordinary Shares	100
Aviva Couv Actions C.	FCP	100	Aviva Investors Euro Liquidity Fund	ICVC	96
91-93 Boulevard Pasteur, 75015, Paris			Aviva Investors Sterling Government Liquidity Fund	ICVC	94
SCI Campus Medicis St Denis	Ordinary Shares	30	Aviva Investors Sterling Liquidity Fund	ICVC	86
SCI Campus Rimbaud St Denis	Ordinary Shares	30			
Avenue du general Leclerc, 92340 Bourg-La-Reine					
Kroknet S.A.R.L.	Ordinary Shares	75			
Tour Majunga – La Défense 9, 6 place de la Pyramide					
Premiere Categorie-(CAXPRCAC)	SICAV	85			
Germany					
c/o Wswp Weinert GmbH, Theatinerstr. 31, 80333, Munich					
FPB Holdings GmbH	Series A Shares, Series B Shares	100			
Eschenheimer Anlage 1, 60316, Frankfurt					
Reschop Carré Hattingen GmbH	Ordinary Shares	100			

Company name	Share Class ¹	% held	Company name	Share Class ¹	% held
Aviva Investors Sterling Strategic Liquidity Fund	ICVC	80	W Nine UT ²	Unit Trust	50
GA Life Property Ireland Limited	Ordinary Shares	100	3rd Floor Walker House, 28-34 Hill Street, St Helier, JE4 8PN		
2nd Floor IFSC House, Int'l Financial Services Centre, Custom House Docks			1 Fitzroy Place Jersey Unit Trust ²	Unit Trust	50
Baring Korea Feeder Fund	Unit Trust	22	2 Fitzroy Place Jersey Unit Trust ²	Unit Trust	50
33 Sir John Rogerson's Quay, Dublin 2			Citco Jersey Limited, Second Floor, No. 4 The Forum, Grenville Street, St Helier, JE2 4UF		
L&G Multi-Index Eur III-NEA (LG3IEA)	ICAV	100	Yatra Capital	Ordinary Shares	100
L&G Multi-Index Eur IV-NEA (LG4IEA)	ICAV	100	Gapse House, 66-72 Esplanade, St Helier, JE2 3QT		
L&G Multi-Index Eur V-NEA (LG5IEA)	ICAV	100	Aviva Investors European Property Fund of Funds	Ordinary Shares	0
LG World Equity-N EUR ACC (LGWEIEA)	ICAV	39	Aviva Investors Global Real Estate Fund of Funds	Ordinary Shares	0
Central Quay, Riverside IV4, Sir John Rogerson's Quay, Dublin 2			Le Masurier House, La Rue Le Masurier, St Helier, JE2 4YE		
Invesco Emerging Markets Equity Fund	Unit Trust	30	Yatra – (Saffron)	Ordinary Shares	100
Invesco Funds Series – Invesco UK Equity Fund	Unit Trust	28	Lime Grove House, Green Street, St Helier, JE1 2ST		
Invesco Global Health Care Fund	Unit Trust	28	20 Gracechurch Unit Trust	Unit Trust	100
Invesco Global Select Equity Fund	Unit Trust	32	COW Real Estate Associate Unit Trust	Unit Trust	100
Invesco Global Technology Fund	Unit Trust	27	Designer Retail Outlet Centres (Livingston) Unit Trust	Unit Trust	50
Georges Court, 54-62 Townsend Street, Dublin 2			Designer Retail Outlet Centres (Mansfield) Unit Trust	Unit Trust	50
	Shares Of No Par Value Shares, 1 Subscriber Euro €1		Designer Retail Outlet Centres (York) Unit Trust	Unit Trust	50
FPPE Fund Public Limited Company	Shares	100	Designer Retail Outlet Centres Unit Trust	Unit Trust	50
GAM Star Growth	OEIC	22	Quantum Property Unit Trust ²	Unit Trust	50
Guild House, Guild Street, IFRS, Dublin 1			Serviced Offices UK Unit Trust ²	Unit Trust	50
Aviva Irl Merrion Investment Trust	Unit Trust	44	Southgate Unit Trust	Unit Trust	50
One Park Place, Hatch Street, Dublin 2			Lithuania		
Area Life International Assurance dac	A Shares, B Shares	100	Lvovo g. 25, Vilnius, LT-09320		
Aviva Direct Ireland Limited	Ordinary Shares	100	Uždaroji akcinė gyvybės draudimo ir pensijų bendrovė 'Aviva Lietuva' (Joint Stock Limited Life Insurance and Pension Company Aviva Lietuva)	Ordinary Shares	90
Aviva Driving School Ireland Limited	Ordinary Shares	100	Luxembourg		
Aviva Group Ireland Limited	Ordinary Shares	100	10 rue du Fort Bourbon, L-1249		
Aviva Group Services Ireland Limited	Ordinary Shares	92	VH German Mandate	Ordinary Shares	100
Aviva Investors Ireland Holdings Limited	Ordinary Shares	100	11 rue Aldringen, L-1118		
Aviva Investors Ireland Limited	Ordinary Shares	100	KMG Sicav – SIF Devere Global Frontier Markets Fund	SICAV	25
Aviva Life Services Ireland Limited	Ordinary Shares	92	11 rue du Fort Bourbon, L-1249		
Aviva OPP One Designated Activity Company	Ordinary Shares	100	Centaurus Sarl	Ordinary Shares	100
Aviva Trustee Company Ireland Designated Activity Company	Ordinary Shares	92	12 rue du Fort Bourbon, L-1249		
Aviva Undershaft Four Limited	Ordinary Shares	100	Victor Hugo	Ordinary Shares	100
Peak Re Designated Activity Company	Ordinary Shares	100	14 rue du Fort Bourbon, L-1249		
Isle of Man			Aviva Investors European Renewable Energy S.A.	Ordinary Shares	100
Royal Court, Castletown, IM9 1RA			15 rue du Fort Bourbon, L-1249		
Friends Provident International Limited	Ordinary B Shares, Ordinary Shares	100	Aviva Investors European Secondary Infrastructure Credit Fund	Ordinary Shares	100
Friends Provident International Services Limited	Ordinary Shares	100	16 Avenue de la Gare, 1610		
Knox House, 16-18 Finch Road, Douglas, IM1 2PT			Aviva Investors Luxembourg Services S.à r.l.	Ordinary Shares	100
KHG Balanced Portfolio Fund	OEIC	68	Aviva Investors Polish Retail S.à r.l.	Ordinary Shares	100
Italy			16 rue Jean-Pierre Brasseur, L-1258		
c/o State Street Bank, via Nizza 262/57, 10126 Torino			VAM Funds (Lux) – International Real Estate Equity Fund	SICAV	31
Fondo Armilla – Fondo Immobiliare Chiuso A Distr	FCP	58	VAM Managed Funds (Lux) – Close Brothers Balanced Fund	SICAV	27
Piazzetta Guastalla 1, 20122, Milan			VAM Managed Funds (Lux) – Close Brothers Growth Fund	SICAV	22
Banca Network Investimenti SPA	Ordinary Shares	25	19 rue du Fort Bourbon, L-1249		
Via Scarsellini 14, 20161, Milan			Lend Lease Retail Partners	Ordinary Shares	100
Agenzia Aviva Srl	Ordinary Shares	100	1c rue Gabriel Lippmann		
Avipop Assicurazioni SpA	Ordinary Shares	50	Patriarch Classic B&W Global Freestyle	FCP	27
Avipop Vita SpA	Ordinary Shares	50	2 Boulevard de la Foire, L-1528		
Aviva Italia Holding S.p.A	Ordinary Shares	100	Coral Student Portfolio	SICAV	20
Aviva Italia S.p.A	Ordinary Shares	100	Pramerica Pan-European Real Estate Fund	Ordinary Shares	62
Aviva Italia Servizi Scarl	Ordinary Shares	80	2 Rue de Bitbourg, L-1273		
Aviva Life SPA	Ordinary Shares	100	Henderson Horizon – European Growth Fund	SICAV	33
Aviva SPA	Ordinary Shares	51	2 Rue du Fort Bourbon, L-1249		
Aviva Vita S.p.A	Ordinary Shares	80	AFRP S.à r.l.	Ordinary Shares	100
Petunia Spa	Ordinary A Shares	51	AIEREF Holding 1 S.à.r.l.	Equity Shares	44
Jersey			AIEREF Holding 2 S.à.r.l.	Equity Shares	100
19-21 Broad Street, St Helier, JE1 3PB			Aviva Inv Continental European Long Lease Strategy Fund	Ordinary Shares	48
11-12 Hanover Square UT ²	Unit Trust	50	Aviva Investors Alternative Income Solutions General Partner S.à.r.l.	Ordinary Shares	100
130 Fenchurch Street UT ²	Unit Trust	50	Aviva Investors Alternative Income Limited Partnership	Limited Partnership	100
30 Warwick Street UT ²	Unit Trust	50			
30-31 Golden Square UT ²	Unit Trust	50			
Aviva Investors Jersey Unit Trusts Management Limited	Ordinary Shares	100			
Barratt House UT ²	Unit Trust	50			
Chancery House London UT ²	Unit Trust	50			
Irongate House UT ²	Unit Trust	50			
New Broad Street House UT ²	Unit Trust	50			
Pegasus House and Nuffield House UT ²	Unit Trust	50			

Company name	Share Class ¹	% held	Company name	Share Class ¹	% held
Solutions Limited Partnership			Encore Plus Lux Co Metzanine II S.à r.l.	Ordinary Shares	5
Aviva Investors Asian Equity Income Fund	SICAV	77	Encore Plus Properties I S.à r.l.	Ordinary Shares	5
Aviva Investors Associate Solutions			Encore Plus Properties II S.à r.l.	Ordinary Shares	5
Emerging Markets Debt Fund	SICAV	100	Encore Plus Properties III S.à r.l.	Ordinary Shares	5
Aviva Investors Associate Solutions			Encore Plus Real Estate Bad Cannstatt S.à r.l.	Ordinary Shares	5
Perspective 2024	SICAV	100	Encore+ Kirchberg S.à r.l.	FCP	5
Aviva Investors Associate Solutions			Hexagone S.à r.l.	Ordinary Shares	100
Perspective 2026	SICAV	100	Project Lion Vitus Group	Ordinary Shares	100
Aviva Investors Associate Solutions			Sapphire Ile de France 1 S.à.r.l.	Ordinary Shares	100
Perspective 2028	SICAV	100	Sapphire Ile de France 2 S.à.r.l.	Ordinary Shares	100
Aviva Investors Associate Solutions			VH German Mandate	Ordinary Shares	100
Perspective 2030	SICAV	100	Victor Hugo 1 S.à r.l.	Ordinary Each Eur 25 Shares	100
Aviva Investors Associate Solutions			2 Rue du Fort Bourbon, L-1249		
Perspective 2032	SICAV	100	Aviva Investors Cells Fund	FCP	50
Aviva Investors Associate Solutions			26 Avenue De La Liberte, L-1930		
Perspective 2034	SICAV	100	Vam Managed Funds (Lux) Driehaus UK £ Fund	SICAV	44
Aviva Investors Associate Solutions			3 rue des Labours, L-1912		
Perspective 2036	SICAV	100	Haspa Trendkonzept	FCP	37
Aviva Investors Cells (GP) S.à r.l.	Ordinary Shares	48	37/A Avenue JF Kennedy, L-1855		
Aviva Investors CELLS Holding Sarl	Ordinary Shares	48	Ubi Sicav Euro Fixed Income CI I	SICAV	25
Aviva Investors CELLS SCSp	Limited Partnership	48	Ubi Sicav Short Term Eur Sicav CI I	SICAV	29
Aviva Investors CELLS Stern Sarl	Ordinary Shares	48	4 rue du Fort Bourbon, L-1249		
Aviva Investors Debt Europe Fund	Ordinary Shares	100	Vitus	Ordinary Shares	100
Aviva Investors Dynamic Master Fund	SICAV	100	42 rue de la Vallée, L-2661		
Aviva Investors EBC S.à r.l.	Ordinary Shares	100	World Investment Opportunities Funds – China Performance Fund	SICAV	26
Aviva Investors Emerging Europe Equity Fund	SICAV	6	47 avenue John F Kennedy		
Aviva Investors Emerging Markets Bond Fund	SICAV	76	Goodman European Business Park Fund (Lux) S.à.r.l.	Ordinary Shares	100
Aviva Investors Emerging Markets Corporate Bond Fund	SICAV	84	49 Avenue J.F. Kennedy, L-1855		
Aviva Investors Emerging Markets Debt Opportunities Fund	SICAV	100	AXA IM Cash Sterling Strategic Fund	FCP	21
Aviva Investors Emerging Markets Equity Income Fund	SICAV	98	db x-trackers II Eurozone Government Bond	SICAV	35
Aviva Investors Emerging Markets Equity Small Cap Fund	SICAV	91	15+ UCITS ETF (DR)	SICAV	100
Aviva Investors Emerging Markets Local Currency Bond Fund	SICAV	96	F&C European Growth & Income Fund	SICAV	70
Aviva Investors European Corporate Bond Fund	SICAV	66	F&C Portfolios Fund – F&C Diversified Growth	SICAV	22
Aviva Investors European Equity Fund	SICAV	60	6 Route de Treves Senningerberg, L-2633		
Aviva Investors European Equity Income Fund	SICAV	99	JPMorgan US Dollar Money Market Fund	SICAV	0
Aviva Investors European Real Estate Securities Fund	SICAV	73	Jupiter Global Fund – Jupiter Global Financials	SICAV	98
Aviva Investors Global Aggregate Bond Fund	SICAV	94	Jupiter Global Fund – Jupiter New Europe	SICAV	53
Aviva Investors Global Associate Grade Corporate Bond Fund	SICAV	97	Momentum Global Funds Harmony Portfolios US Dollar Balanced Fund	SICAV	21
Aviva Investors Global Convertibles Absolute Return Fund	SICAV	70	Momentum Global Funds Harmony Portfolios US Dollar Growth	SICAV	23
Aviva Investors Global Convertibles Fund	SICAV	54	6 rue du Fort Bourbon, L-1249		
Aviva Investors Global Emerging Markets Index Fund	SICAV	100	German Retail Associate Property Fund		
Aviva Investors Global Equity Endurance Fund	SICAV	100	FCP-SIF	FCP	98
Aviva Investors Global High Yield Bond Fund	SICAV	61	German Retail III GmbH	Ordinary Shares	98
Aviva Investors Long Term European Bond Fund	SICAV	74	Sachsenfonds GmbH	Ordinary Shares	98
Aviva Investors Luxembourg	Nominal Par Value Shares	100	7 rue du Fort Bourbon, L-1249		
Aviva Investors Multi-Strategy Fixed Income Fund	SICAV	100	LogAxe Investment Properties S.à.r.l.	Ordinary Shares	85
Aviva Investors Multi-Strategy Target Income Fund	SICAV	79	Logaxes Fund, FCP-SIF	FCP	85
Aviva Investors Multi-Strategy Target Return Fund	SICAV	58	8-10 rue Jean Monnet, L-2180		
Aviva Investors Short Duration Global High Yield Bond Fund	SICAV	71	Pioneer Fund Solutions Conservative	SICAV	25
Aviva Investors Short Term European Bond Fund	SICAV	93	9 rue du Fort Bourbon, L-1249		
Aviva Investors Strategic Multi Asset Fund	SICAV	100	EPI NU Sarl	Ordinary Shares	100
Aviva Investors UK Equity Focus Fund	SICAV	76	Boulevard Konrad Adenauer		
Aviva Investors US Equity Income Fund	SICAV	67	Deutsche European Property Fund	Ordinary Shares	28
Centaurus CER (Aviva Investors) Sarl	Ordinary Shares	100	c/o CACEIS BANK Lux, 5, Allée Scheffer, L-2520		
Encore + Bedburg S.à r.l.	Ordinary Shares	5	Tikehau Italy Retail Fund II Scsp-Area12	FCP	34
Encore + Bergkirchen S.à.r.l.	Ordinary Shares	5	SARL2, rue du Fort Bourbon, L-1249		
Encore + Gravity S.à r.l.	Ordinary Shares	5	Encore+ Gallus S.à r.l.	Ordinary Shares	5
Encore + Rheinfelden S.à r.l.	Ordinary Shares	5	Malta		
Encore Plus Lombardia Sàrl	Ordinary Shares	5	184 St. Lucia Street, Valletta, VLT 1189		
Encore Plus Lux Co Diamants II S.à r.l.	Ordinary Shares	5	Herakles	SICAV	50
Encore Plus Lux Co Franklin II S.à r.l.	Ordinary Shares	5	Mauritius		
Encore Plus Lux Co Ile de la Jatte II S.à.r.l.	Ordinary Shares	5	4th Floor, Raffles Tower, 19 Cybercity, Ebene		
		5	Reliance Emergent India Fund	OEIC	30
		5	Les Cascades, Edith Cavell Street, Port Louis		
		5	Actis China Investment Company Limited	Us\$ A Shares	50
		5	Netherlands		
		5	BVSimon Carmiggelstraat 12, 1011 DJ, Amsterdam		
		5	Encore+ Kennedy BV	Ordinary Shares	5
		5	Simon Cannigelaat, 12, 1D11 DJ, Amsterdam		

Company name	Share Class ¹	% held	Company name	Share Class ¹	% held
Encore + Eurocenter II BV	Ordinary Shares	5	Professional Advisory Holdings Ltd.	Ordinary A Shares	92
Encore + Logistics Spain B.V.	Ordinary Shares	5	Professional Investment Advisory Services Pte Ltd	Ordinary A Shares	92
Encore + Netherlands BV	Ordinary Shares	5	6 Temasek Boulevard, #29-00, Suntec Tower 4, 038986		
Encore + Spain I BV	Ordinary Shares	5	Aviva Asia Digital Pte. Ltd.	Ordinary Shares	100
Poland			Aviva Asia Pte Ltd	Ordinary Shares	100
Pl. Władysława Andersa 5, 61-894 Poznań	UCITS	26	Aviva Financial Advisers Pte. Ltd	Ordinary Shares	100
arka Prestiż Obligacji Skarbowych			Aviva Global Services (Management Services) Private Ltd.	Ordinary Shares	100
Al. Aleje Jerozolimskie, nr 56C 00-803, Warszawa					
Durhy Associates Sp. z o.o.	Ordinary Shares	5			
Al. Jana Pawła II 25, 00-854 , Warszawa					
Focus Park Piotrków Trybunalski sp.z o.o	Ordinary Shares	100	Spain		
Lodz BC Sp. z o.o	Ordinary Shares	100	2 Plaza de la Fuensanta, Murcia		
Wroclaw BC sp. z.o.o	Ordinary Shares	100	CajaMurcia Vida y Pensiones de Seguros y Reaseguros SA	Ordinary Shares	50
Inflancka 4b, 00-189 Warsaw					
Aviva Investors FIO Aktywnej Alokacji	UCITS	33	28-30 Ronda General Mitre, 08017, Barcelona		
Aviva Investors Fio Depozyt Plus	UCITS	40	Catalina Islands, SLU	Ordinary Shares	5
Aviva Investors Fio Malych Spolek	UCITS	52	Encore Plus Logistica S.L.	Ordinary Shares	5
Aviva Investors Fio Nowoczesnych Technologii	UCITS	69	Encore Plus Vaguada SL	Ordinary Shares	5
Aviva Investors Fio Nowych Spolek	UCITS	82	9 Camino Fuent de la Mora, Madrid		
Aviva Investors Fio Obligacji	UCITS	81	Aviva Grupo Corporativo S.L.	Ordinary Shares	92
Aviva Investors Fio Polskich Akcji	UCITS	49	Avda Andalucía, 10-12, Malaga		
Aviva Investors Sfio Akcyjny	UCITS	100	Ahorro Andaluz, S.A	Ordinary Shares	50
Aviva Investors Sfio Aviva Lokacyjny	UCITS	69	Avda de Bruselas – Numero 13, Edificio, America, Piso 1, Puerta d,Alcobendas 28- Madrid		
Aviva Investors Sfio Dluzny	UCITS	100	Eólica Almatret S.L.	Ordinary Shares	100
Aviva Investors Sfio Pap Nieskarbowych	UCITS	100	Avenida Fernando de los Rios, 6, Granada		
Aviva Investors Sfio Pieniezny	UCITS	100	Caja Granada Vida, Compañía de Seguros y Reaseguros Sociedad Anonima	Ordinary Shares	25
Aviva Investors Sfio Spolek Dywidend	UCITS	100	Calle Hermosilla 11, 4a Planta, 28001 Madrid		
Aviva Sfio Subfundusz Aviva Oszczędnościowy	UCITS	72	Tayasi ITG SL	Ordinary Shares	5
Pl. Andersa 5, 61-894 Poznań			Paseo della Castellana 202, 28046 Madrid		
BZ WBK - Aviva Towarzystwo Ubezpieczen Ogolnych S.A.	Ordinary Shares	51	RPFI Tormes SL	Ordinary Shares	5
BZ WBK-Aviva Towarzystwo Ubezpieczeń na Życie Spółka Akcyjna	Ordinary Shares	51	Santa Engracia 67		
Ul. Burakowska 5/7, 01-066 , Warszawa			Pelayo Vida Seguros Y Reaseguros Sociedad Anonima	Ordinary Shares	50
Berkley Investments S.A.	Ordinary A Shares	90	Calle Nanclares de Ora, numero 1-B, Madrid, 28022		
Porowneo.Pi Sp. Z O.O	Ordinary Shares	75	To do real Estate Investment	Ordinary Shares	100
Ul. Prosta 69, 00-838 Warsaw, 00-838, Warsaw			Avda del Fuerte, S/N, Hotel el Fuerte, Marbella, Málaga		
AdRate Sp. z o.o.	Ordinary Shares	90	San Ramon Hoteles	Ordinary Shares	100
Expander Advisors Sp. z o.o.	Ordinary Shares	90	Sri Lanka		
Life Plus Sp. z o.o.	Ordinary Shares	90	216 De Saram Place, Colombo 10		
Ul.Inflancka 4B, 00-189, Warsaw			A.G.S Lanka (Private) Limited	6 Pence Shares	100
Aviva Investors Poland Towarzystwo Funduszy Inwestycyjnych S.A.	Ordinary D shares	95	Sweden		
Aviva Powszechnie Towarzystwo Emerytalne			Box 239, 72106,Västeras		
Aviva BZ WBK S.A.	Ordinary A Shares	81	Fastighets AB Lagomstansen	Ordinary Shares	100
Aviva Services Spółka z ograniczoną odpowiedzialnością	Ordinary 1,000 Pln Shares	100	Switzerland		
Aviva Spółka z ograniczoną odpowiedzialnością			Stockerstrasse, 38 8002 , Zurich		
Aviva Towarzystwo Ubezpieczen Na Zycie S.A.	Ordinary Shares	90	Aviva Investors Schweiz GmbH	Interest Shares	100
Aviva Towarzystwo Ubezpieczen Ogolnych S.A.	Parent Interest	90	Taiwan		
Zelazna, 28/30 00832 Warsaw			13F, No.456 Section 4, Xin Yi Road, Taipei 110		
Encore+ Futura Sp. Z o.o.	Ordinary Shares	90	First-Aviva Life Insurance Co., Ltd. ²	Parent Company Holdings	49
Saudi Arabia			Rm D-1, 24F, No.7, Sec.5, Xin Yi Road, Taipei, 110		
Riyad Capital, 6775 Takhassusi Street – Olaya, Riyadh 12331 - 3712			Aviva Investors Securities Investment Consulting Company Limited	Ordinary Shares	100
Al Hadi Sharia Compliant Fund	Mutual Fund	93	Turkey		
Al Mokdam Sharia Compliant Fund	Mutual Fund	93	Saray Mah., Adnan Büyükdelen Cad. No:12 34768 Umraniye, İstanbul		
Al Shamekh Fund	Mutual Fund	86	Aviva SA Emeklilik ve Hayat ²	Ordinary Shares	40
Al Shuja'a Sharia Compliant Fund	Mutual Fund	95	United Kingdom		
Singapore			1 Dorset Street, Southampton, Hampshire, SO15 2DP		
1 Raffles Quay, #27-13, South Tower, Singapore, 048583			Building a Future (Newham Schools) Limited	Ordinary Shares	100
Aviva Investors Asia Pte. Limited	Ordinary Shares	100	Mill NU Properties Limited	Ordinary A Shares	100
12 Marina View, #18-02 Asia Square Tower 2, 018961			NU Developments (Brighton) Limited	Ordinary Shares	100
Nikko AM Shenton Asia Pacific Fund	Unit Trust	66	NU Local Care Centres (Bradford) Limited	Ordinary Shares	100
Nikko AM Shenton Income Fund	Unit Trust	65	NU Local Care Centres (Chichester No.1)	Ordinary Shares	100
Nikko AM Shenton World Bank Green Bond Fund	Unit Trust	53	Limited	Ordinary Shares	100
4 Shenton Way, #01-01 SGX Centre 2, Singapore, 068807			NU Local Care Centres (Chichester No.2)	Ordinary Shares	100
Aviva Ltd	Ordinary Shares	100	Limited	Ordinary Shares	100
Navigator Investment Services Limited	Ordinary Shares	100	NU Local Care Centres (Chichester No.3)	Ordinary Shares	100
6 Shenton Way, #09-08, OUE Downtown, 068809			Limited	Ordinary Shares	100
			NU Local Care Centres (Chichester No.4)	Ordinary Shares	100
			Limited	Ordinary Shares	100

Company name	Share Class ¹	% held	Company name	Share Class ¹	% held
NU Local Care Centres (Chichester No.5) Limited	Ordinary Shares	100	Aviva UKGI Investments Limited	Ordinary Shares	100
NU Local Care Centres (Chichester No.6) Limited	Ordinary Shares	100	Gresham Insurance Company Limited	Ordinary Shares	100
NU Local Care Centres (Farnham) Limited	Ordinary Shares	100	Healthcare Purchasing Alliance Limited ²	Ordinary A Shares	50
1020 Eskdale Road, Winnersh, Wokingham, Berkshire, RG41 5TS			London and Edinburgh Insurance Company Limited	Ordinary Shares	100
Friends Life Investments Limited	Ordinary Shares	100	RAC Pension Trustees Limited	Ordinary Shares	100
Friends Life Marketing Limited	Ordinary Shares	100	Solus (London) Limited	Ordinary Shares	100
Friends Life Staff Schemes Limited	Ordinary Shares	100	Synergy Sunrise (Broadlands) Limited	Ordinary Shares	100
IFA Network Limited	Ordinary Shares	100	Argyll House, All Saints Passage, London, SW18 1EP		
1st Floor, 45 Grosvenor Road, St. Albans, Hertfordshire, AL1 3AW			Freetricity Southeast Limited	Ordinary Shares	100
Opal (UK) Holdings Limited	Ordinary Shares	29	Beaufort Court, Egg Farm Lane, Kings Langley, Hertfordshire, WD4 8LR		
Opal Information Systems Limited	Ordinary Shares	29	Jacks Lane Energy Limited	Ordinary Shares	100
Outsourced Professional Administration Limited	Ordinary Shares	29	c/o Anesco Limited, The Green Easter Park, Benyon Road, Reading, RG7 2PQ		
Synergy Financial Products Limited	Ordinary Shares	57	Homesun 2 Limited	Ordinary Shares	100
201 Bishopsgate, London, EC2M 3AE			Homesun 3 Limited	Ordinary Shares	100
Optimum Investment Management Limited	Ordinary B Shares	50	Homesun 4 Limited	Ordinary Shares	100
24 Birch Street, Wolverhampton, WV1 4HY			Homesun 5 Limited	Ordinary Shares	100
Maling Street Management Company Limited ²	Ordinary Shares	100	Homesun Limited	Ordinary Shares	100
29 Queen Anne's Gate, London SW1H 9BU			Aviva Investors GR SPV 1 Limited	Ordinary Shares	100
CF Bentley Global Growth	OEIC	33	Aviva Investors GR SPV 2 Limited	Ordinary Shares	100
30 Finsbury Square, London, EC2P 2YU			Aviva Investors GR SPV 3 Limited	Ordinary Shares	100
Defined Returns Limited	Ordinary Shares	29	Aviva Investors GR SPV 4 Limited	Ordinary Shares	100
NDF Administration Limited	Ordinary Shares, Non Voting	29	Aviva Investors GR SPV 5 Limited	Ordinary Shares	100
United Kingdom Temperance and General Provident Institution	B Shares	33	Aviva Investors GR SPV 6 Limited	Ordinary Shares	100
31 Gresham Street, London, EC2V 7QA			Aviva Investors GR SPV 7 Limited	Ordinary Shares	100
Schroder Qep Us Core Fund	Unit Trust	40	Aviva Investors GR SPV 8 Limited	Ordinary Shares	100
42 Dingwall Road, Croydon, Surrey, CR0 2NE			Aviva Investors GR SPV 9 Limited	Ordinary Shares	100
Ballard Investment Company Limited	Ordinary Shares	25	Aviva Investors GR SPV 10 Limited	Ordinary Shares	100
43-45 Portman Square, London, W1H 6LY			Aviva Investors GR SPV 11 Limited	Ordinary Shares	100
Quantum Property Partnership (General Partner) Limited ²	Ordinary Shares	50	Aviva Investors GR SPV 12 Limited	Ordinary Shares	100
Quantum Property Partnership (Nominee) Limited ²	Ordinary Shares	50	Aviva Investors GR SPV 13 Limited	Ordinary Shares	100
4th Floor, New London House, 6 London Street, London, EC3R 7LP			Aviva Investors GR SPV 14 Limited	Ordinary Shares	100
Polaris U.K. Limited	Ordinary Shares	39	Aviva Investors GR SPV 15 Limited	Ordinary Shares	100
5 Lister Hill, Horsforth, Leeds, LS18 5AZ			Aviva Investors GR SPV 16 Limited	Ordinary Shares	100
Aspire Financial Management Limited	Ordinary Shares	47	c/o Scottish Canals Canal House, 1 Applecross Street, Glasgow, G4 9SP		
Living in Retirement Limited	Ordinary Shares	47	BIGG Regeneration (General Partner) Limited ²	Ordinary Shares	25
Sinfonia Asset Management Limited	Ordinary Shares	47	Bigg Regeneration Partnership ²	Limited Partnership	25
Tenet Business Solutions Limited	Ordinary Shares	47	Carillion House, 84 Salop Street, Wolverhampton, WV3 0SR		
Tenet Client Services Limited	Ordinary Shares	47	Carillion-Igloo Limited ²	Ordinary Shares	25
Tenet Group Limited	Ordinary B Shares	47	Carillion-Igloo Limited Partnership ²	Limited Partnership	25
Tenet Limited	Ordinary Shares	47	Carillion-Igloo Nominees Limited ²	Ordinary Shares	25
Tenet Platform Services Limited	Ordinary A Shares	47	Cunard House, 15 Regent Street, London, SW1Y 4LR		
TenetConnect Limited	Ordinary Shares	47	Voyager Park South Management Company Limited	Ordinary Shares	100
TenetConnect Services Limited	Ordinary Shares	47	East Farmhouse, Cams Hall Estate, Fareham, PO16 8UT		
TenetFinancial Solutions Limited	Ordinary Shares	47	IQUO Limited	Ordinary A Shares	67
TenetLime Limited	Ordinary Shares	47	Excel House, 30 Semple Street, Edinburgh EH3 8BL		
TenetSelect Limited	Ordinary Shares	47	Liontrust Sustainable Future ICVC – European Growth Fund	OEIC	64
The Employee Benefits Corporation Limited	Ordinary A Shares, Redeemable Ordinary Shares	37	Liontrust Sustainable Future ICVC – Global Growth Fund	OEIC	62
5 Old Broad Street, London EC2N 1AD			Liontrust Sustainable Future ICVC – Managed Fund	OEIC	86
Architas Multi Asset Active Growth Fund	OEIC	20	Liontrust Sustainable Future ICVC – UK Ethical Fund	OEIC	81
Architas Multi-Manager Diversified Protector 70	OEIC	48	Liontrust Sustainable Future ICVC – UK Growth Fund	OEIC	57
Architas Multi-Manager Diversified Protector 80	OEIC	35	Liontrust Sustainable Future ICVC – Absolute Growth Fund	OEIC	74
50 Stratton Street, London, W1J 8LL			Liontrust Sustainable Future ICVC – Corporate Bond Fund	OEIC	44
Lazard Multicap UK Income Fund	OEIC	50	Exchange House, Primrose Street, EC2A 2HS		
7 Lochside View, Edinburgh, EH12 9DH			F&C Global Bond Fund	OEIC	37
Origo Services Limited	Ordinary Shares	22	F&C Instl Uk Eq	OEIC	68
7 Newgate Street, EC1A 7NX			F&C Mm Navigator Progressive Fund	OEIC	23
AXA Rosenberg American	OEIC	92	F&C North American Fund	OEIC	28
AXA Rosenberg Asia Pacific Ex Japan	OEIC	92	F&C Strategic Bond Fund	OEIC	55
AXA Rosenberg Global	OEIC	92	First Floor Office Suite, 48-50 St Mary's Gate, Lace Market, Nottingham, NG1 1QA		
AXA Rosenberg Japan	OEIC	97	Blueprint (General Partner) Limited ²	Ordinary Shares	25
8 Surrey Street, Norwich, Norfolk, NR1 3NG					
Aviva Central Services UK Limited	Ordinary Shares	100			
Aviva Consumer Products UK Limited	Ordinary Shares	100			
Aviva Health UK Limited	Ordinary Shares	100			
Aviva Insurance UK Limited	Ordinary Shares	100			

Company name	Share Class ¹	% held	Company name	Share Class ¹	% held
Blueprint (Nominees) Limited ²	Ordinary Shares	25	Sesame General Insurance Services Limited	Ordinary Shares	100
Blueprint Limited Partnership ²	Limited Partnership	25	Sesame Limited	Ordinary Shares	100
Marlborough House, 59 Chorley New Road, Bolton, BL1 4QP			Sesame Regulatory Services Limited	Ordinary Shares	100
IFSL Tilney Bestinvest Global Income Portfolio	OEIC	23	Sesame Services Limited	Ordinary A Shares	100
Melrose House, 42 Dingwall Road, Croydon, CR0 2NE			Suntrust Limited	Ordinary Shares	100
Health & Care Management Limited	Ordinary Shares, Preference Shares	25	Undershaft FAL Limited	Ordinary Shares	100
Monument House, 58 Coinagehall Street, Helston, Cornwall, TR13 8EL			Undershaft FPLLA Limited	Ordinary Shares	100
ADO6 PEP Limited	Ordinary Shares	40	Undershaft SLPM Limited	Ordinary Shares	100
CEO1 Pep Limited	Ordinary Shares	100	Wealth Limited	Ordinary Shares	100
CEO7 PEP Limited	Ordinary Shares	100	St Helen's, 1 Undershaft, London, EC3P 3DQ		
SE06 PEP Limited	Ordinary Shares	100	1 Fitzroy Place Limited Partnership ²	Limited Partnership	50
Murray House, 1 Royal Mint Court, London, EC3N 4HH			10-11 GNS Limited	Ordinary Shares	100
Undry Aquila Cnt CcyH Glb Eq108010 2L	OEIC	22	11-12 Hanover Square LP ²	Limited Partnership	50
Nations House, 3rd Floor, 103 Wigmore Street, London, W1U 1WH			11-12 Hanover Square Nominee 1 Limited ²	Ordinary Shares	50
Cannock Consortium LLP	Limited Liability Partnership	100	11-12 Hanover Square Nominee 2 Limited ²	Ordinary Shares	50
Cannock Designer Outlet (GP Holdings) Limited	Ordinary Shares	100	130 Fenchurch Street LP ²	Limited Partnership	50
Cannock Designer Outlet (GP) Limited	Ordinary Shares	100	130 Fenchurch Street Nominee 1 Limited ²	Ordinary Shares	50
Cannock Designer Outlet (Nominee 1) Limited	Ordinary Shares	100	130 Fenchurch Street Nominee 2 Limited ²	Ordinary Shares	50
Cannock Designer Outlet (Nominee 2) Limited	Ordinary Shares	100	1-5 Lowndes Square Management Company Limited	A Shares, B Shares	76
Pitheavlis, Perth, Perthshire, PH2 0NH			2 Fitzroy Place Limited Partnership ²	Limited Partnership	50
Aviva (Peak No.1) UK Limited	Ordinary Shares	100	20 Gracechurch (General Partner) Limited	General Partner	100
Aviva Insurance Limited	Ordinary Shares	100	20 Gracechurch Limited Partnership	Limited Partnership	100
Aviva Investors (FP) Limited	Ordinary Shares	100	20 Lowndes Square Management Company Limited	A Shares, B Shares	77
Aviva Investors (GP) Scotland Limited	Ordinary Shares	100	2015 Sunbeam Limited	Ordinary Shares	100
Ili (Garelwood) Limited	Ordinary Shares	100	2-10 Mortimer Street (GP No 1) Limited ²	Ordinary Shares	50
Ili (Haywoodhead) Limited	Ordinary Shares	100	2-10 Mortimer Street GP Limited ²	Ordinary Shares	50
Ili (Letham) Limited	Ordinary Shares	100	2-10 Mortimer Street Limited Partnership ²	Limited Partnership	50
Ili (Neilstonside) Limited	Ordinary Shares	100	30 Warwick Street LP ²	Limited Partnership	50
Ili (West Strathore Farm) Limited	Ordinary Shares	100	30 Warwick Street Nominee 1 Limited ²	Ordinary Shares	50
London & Cambridge Energy Limited	Ordinary Shares	100	30 Warwick Street Nominee 2 Limited ²	Ordinary Shares	50
Saunton Wind Limited	Ordinary Shares	5	30-31 Golden Square LP ²	Limited Partnership	50
Sunnyside 1 Wind Turbine 1 Limited	Ordinary Shares	100	30-31 Golden Square Nominee 1 Limited ²	Ordinary Shares	50
Pixham End, Dorking, Surrey, RH4 1QA			30-31 Golden Square Nominee 2 Limited ²	Ordinary Shares	50
Aviva Administration Limited	Ordinary Shares	100	400 Caledonian Road Management Company Limited ²	Company Limited by Guarantee	25
Aviva Investment Solutions UK Limited	Ordinary Shares	100	41-42 Lowndes Square Management Company Limited	A Shares, B Shares	78
Aviva Management Services UK Limited	Ordinary Shares	100	43 Lowndes Square Management Company Limited	A Shares, B Shares	77
Bankhall Investment Management Limited	Ordinary Shares	100	44-49 Lowndes Square Management Company Limited	A Shares, B Shares	76
Bankhall Support Services Limited	Ordinary Shares	100	6-10 Lowndes Square Management Company Limited	A Shares, B Shares	76
Cumberland Place Management Company Limited	Ordinary Shares	100	AI Special PFI SPV Limited	Ordinary Shares	0
DBS Financial Management Limited	Ordinary Shares	100	Ascot Real Estate Associate LP ²	Limited Partnership	50
DBS Management Limited	Ordinary Shares	100	Ascot Real Estate Associates GP LLP ²	Limited Partnership	50
Friends AEL Trustees Limited	Ordinary Shares	100	Atlas Park Management Company Limited	Limited By Guarantee	100
Friends AELLAS Limited	Ordinary Shares	100	Aviva (Hayes Road) Limited	Ordinary Shares	100
Friends AELRIS Limited	£1 Stock Shares	100	Aviva Brands Limited	Ordinary Shares	100
Friends Life and Pensions Limited	Ordinary Shares	100	Aviva Commercial Finance Limited	Ordinary Shares	100
Friends Life Assurance Society Limited	Ordinary Shares	100	Aviva Company Secretarial Services Limited	Ordinary Shares	100
Friends Life Company Limited	Ordinary Shares	100	Aviva Credit Services UK Limited	Ordinary Shares	100
Friends Life Distribution Limited	Ordinary Shares	100	Aviva Employment Services Limited	Ordinary Shares	100
Friends Life FPG Limited	Ordinary Shares	100	Aviva Europe SE	Ordinary Shares	92
Friends Life FPL Limited	Ordinary Shares	100	Aviva Insurance Services UK Limited	Ordinary Shares	100
Friends Life FPLMA Limited	Ordinary Shares	100	Aviva International Holdings Limited	Ordinary Shares	100
Friends Life Holdings plc	Ordinary Shares	100	Aviva International Insurance Limited	Ordinary Shares	100
Friends Life Limited	Ordinary Shares	100	Aviva Investors 30 70 Global Eq Ccy Hedged Fund	ACS	100
Friends Life WL Limited	Ordinary Shares	100	Aviva Investors 40 60 Global Equity Index Fund	ACS	100
Friends Provident Distribution Holdings Limited	Ordinary Shares	100	Aviva Investors 50 50 Global Equity Index Fund	ACS	100
Friends Provident Investment Holdings Limited	Ordinary Shares	100	Aviva Investors 60 40 Global Equity Index Fund	ACS	100
Friends Provident Life Assurance Limited	Ordinary A Shares	100	Aviva Investors Asia Pacific ex Japan Fund	ACS	100
Friends Provident Managed Pension Funds Limited	Ordinary Shares	100	Aviva Investors Asia Pacific Property Fund	OEIC	80
Friends SL Nominees Limited	Ordinary Shares	100	Aviva Investors Balanced Life Fund	ACS	100
Friends SLUA Limited	Ordinary Shares	100	Aviva Investors Balanced Pension Fund	ACS	100
Gateway Specialist Advice Services Limited	Ordinary Shares	100	Aviva Investors Cash Fund	OEIC	60
Hengrove Park Bristol (Phase I) Management Company Limited	Ordinary Shares	100	Aviva Investors Cautious Pension Fund	ACS	100
London and Manchester Group Limited	Ordinary Shares	100	Aviva Investors Commercial Assets GP Limited	Ordinary Shares	100
Premier Mortgage Service Limited	Ordinary Shares	100	Aviva Investors Continental Euro Equity Index Fund	ACS	100
SB Loan Administration Limited	Ordinary Shares	100	Aviva Investors Continental European Eq Alpha Fund	ACS	100
Sesame Bankhall Group Limited	Ordinary Shares	100	Aviva Investors Corporate Bond Fund	OEIC	93
Sesame Bankhall Valuation Services Limited	Ordinary A Shares	75	Aviva Investors Dev Asia Pacific Ex Japan Eq Ind Fund	ACS	100

Company name	Share Class ¹	% held	Company name	Share Class ¹	% held
Aviva Investors Dev Euro Ex UK Equity Index Fund	ACS	100	Aviva Investors Realm Infrastructure No.1 Limited	Ordinary Shares	100
Aviva Investors Dev World Ex UK Equity Index Fund	ACS	100	Aviva Investors Realm Infrastructure No.2 Limited	Ordinary Shares	100
Aviva Investors Developd Overseas Gov Bd Ex UK Ind Fd	ACS	100	Aviva Investors Realm Infrastructure No.3 Limited	Ordinary Shares	100
Aviva Investors Distribution Life Fund	ACS	100	Aviva Investors Realm Infrastructure No.4A Limited	Ordinary Shares	100
Aviva Investors EBC GP Limited	Ordinary Shares	100	Aviva Investors Realm Infrastructure No.4B Limited	Ordinary Shares	100
Aviva Investors EBC Limited Partnership	Limited Partnership	100	Aviva Investors Realm Infrastructure No.5 Limited	Ordinary Shares	100
Aviva Investors Employment Services Limited	Ordinary Shares	100	Aviva Investors Secure Income REIT Limited	Ordinary Shares	100
Aviva Investors Energy Centres No.1 GP Limited	Ordinary Shares	100	Aviva Investors Social Housing GP Limited	Ordinary Shares	100
Aviva Investors Europe Equity ex UK Fund	ACS	100	Aviva Investors Social Housing Limited	Company Limited by Guarantee	100
Aviva Investors European Property Fund	OEIC	77	Aviva Investors Sterling Corporate Bond Fund	ACS	100
Aviva Investors Global Equity Alpha Fund	ACS	100	Aviva Investors Sterling Gilt Fund	ACS	100
Aviva Investors Global Equity Endurance Fund	OEIC	100	Aviva Investors Stewardship Fixed Interest Fund	ACS	100
Aviva Investors Global Equity Fund	ACS	100	Aviva Investors Stewardship International Equity Fund	ACS	100
Aviva Investors Global Equity Income Fund	OEIC	85	Aviva Investors Stewardship UK Equity Fund	ACS	100
Aviva Investors Global Services Limited	Ordinary Shares	100	Aviva Investors Stewardship UK Equity Income Fund	ACS	100
Aviva Investors Ground Rent GP Limited	Ordinary Shares	100	Aviva Investors Strategic Bond Fund	OEIC	30
Aviva Investors Ground Rent Holdco Limited	Ordinary Shares	100	Aviva Investors Strategic Global Equity Fund	ACS	100
Aviva Investors High Yield Bond Fund	OEIC	24	Aviva Investors UK Commercial Real Estate Senior Debt LP	Limited Partnership	100
Aviva Investors Holdings Limited	Ordinary Shares	100	Aviva Investors UK CRES GP Limited	Ordinary Shares	100
Aviva Investors Idx-Lkd Giltz Ovr 5 Yrs Idx Fd	ACS	100	Aviva Investors UK Eq Ex Aviva Inv Trusts Index Fund	ACS	100
Aviva Investors Index Linked Gilt Fund	ACS	100	Aviva Investors UK Equity Alpha Fund	ACS	100
Aviva Investors Infrastructure GP Limited	Ordinary Shares	100	Aviva Investors UK Equity Dividend Fund	ACS	100
Aviva Investors Infrastructure Income Limited Partnership	Limited Partnership	100	Aviva Investors UK Equity Fund	ACS	100
Aviva Investors Infrastructure Income No.2B Limited	Ordinary Shares	100	Aviva Investors UK Equity Income Fund	ACS	100
Aviva Investors Infrastructure Income No.6 Limited	Ordinary Shares	100	Aviva Investors UK Equity Income Fund	OEIC	57
Aviva Investors International Index Tracking Fund	OEIC	43	Aviva Investors UK Equity Index Fund	ACS	100
Aviva Investors Japan Equity Fund	ACS	100	Aviva Investors UK Equity MoM 1 Fund	OEIC	86
Aviva Investors Japan Equity MoM 1 Fund	OEIC	75	Aviva Investors UK Fund Services Limited	Ordinary Shares	100
Aviva Investors Japanese Equity Index Fund	ACS	100	Aviva Investors UK Funds Limited	Ordinary Shares	100
Aviva Investors London Limited	Ordinary Shares	100	Aviva Investors UK Gilts All Stocks Index Fund	ACS	100
Aviva Investors Managed High Income Fund	OEIC	62	Aviva Investors UK Gilts Over 15 Years Index Fund	ACS	100
Aviva Investors Money Market VNAV Fund	ACS	100	Aviva Investors UK Index Tracking Fund	OEIC	73
Aviva Investors Multi-Asset 40 85 Shares Index Fund	ACS	100	Aviva Investors UK Nominees Limited	Ordinary Shares	100
Aviva Investors Multi-Asset I Fund	OEIC	44	Aviva Investors UK Opportunities Fund	OEIC	99
Aviva Investors Multi-Asset II Fund	OEIC	40	Aviva Investors UK Real Estate Recovery (General Partner) Limited	Ordinary Shares	100
Aviva Investors Multi-Asset III Fund	OEIC	51	Aviva Investors US Equity Index Fund	ACS	100
Aviva Investors Multi-Asset IV Fund	OEIC	39	Aviva Investors US Large Cap Equity Fund	ACS	100
Aviva Investors Multi-Asset V Fund	OEIC	41	Aviva Overseas Holdings Limited	Ordinary Shares	100
Aviva Investors Multi-Manager 20-60% Shares Fund	OEIC	74	Aviva Public Private Finance Limited	Ordinary Shares	100
Aviva Investors Multi-Manager 40-85% Shares Fund	OEIC	71	Aviva Special PFI GP Limited	Ordinary Shares	100
Aviva Investors Multi-Manager Flexible Fund	OEIC	80	Aviva Special PFI LP	Limited Partnership	100
Aviva Investors Multi-Strategy Target Income Fund	OEIC	58	Aviva Staff Pension Trustee Limited	Ordinary Shares	100
Aviva Investors Multi-Strategy Target Return Fund	OEIC	42	Aviva UK Digital Limited	Ordinary Shares	100
Aviva Investors Non-Gilt Bond All Stocks Index Fund	ACS	100	Aviva UKLAP De-risking Limited	Ordinary Shares	100
Aviva Investors Non-Gilt Bond Over 15 Yrs Index Fund	ACS	100	Avon Solar Energy Limited	Ordinary Shares	100
Aviva Investors North American Equity Fund	ACS	100	Axcess 10 Management Company Limited	Limited By Guarantee	100
Aviva Investors North American Equity Index Fund	ACS	100	Barratt House LP ²	Limited Partnership	50
Aviva Investors Pensions Limited	Ordinary Shares	100	Barratt House Nominee 1 Limited ²	Ordinary Shares	50
Aviva Investors PIP Solar PV (General Partner) Limited ²	Ordinary Shares	100	Barratt House Nominee 2 Limited ²	Ordinary Shares	50
Aviva Investors PIP Solar PV Limited Partnership ²	Limited Partnership	0	Barwell Business Park Nominee Limited	Ordinary Shares	100
Aviva Investors PIP Solar PV NO.1 Limited ²	Ordinary Shares	100	BIOMASS UK NO. 3 Limited	Deferred Shares	100
Aviva Investors Polish Retail GP Limited	Ordinary Shares	100	Biomass UK NO.1 LLP	Limited Liability Partnership	100
Aviva Investors Polish Retail Limited Partnership	Limited Partnership	100	Biomass UK No.2 Limited	'A Shares	100
Aviva Investors Pre-Annuity Fixed Interest Fund	ACS	100	Boston Biomass Limited	B Shares	100
Aviva Investors Private Equity Programme 2008 Partnership	Limited Partnership	40	Boston Wood Recovery Limited	C Shares	100
Aviva Investors Property Fund Management Limited	Ordinary Shares	100	Capital Residential Fund	Deferred Shares'	100
Aviva Investors Real Estate Finance Limited	Ordinary Shares	100	Cardiff Bay Gp Limited	Ordinary Shares	100
Aviva Investors Real Estate Limited	Ordinary Shares	100	Cardiff Bay Limited Partnership	Limited Partnership	100
Aviva Investors Realm Energy Centres GP Limited	Ordinary Shares	100	CGU International Holdings BV	Ordinary Shares	100
			Chancery House London LP ²	Limited Partnership	50
			Chancery House London Nominee 1 Limited ²	Ordinary Shares	50
			Chancery House London Nominee 2 Limited ²	Ordinary Shares	50
				Ordinary Shares	50

Company name	Share Class ¹	% held	Company name	Share Class ¹	% held
Chesterford Park ²	Limited Partnership	50	NU Library For Brighton Limited	Ordinary Shares	100
Chesterford Park (General Partner) Limited ²	Ordinary Shares	50	NU Offices for Redcar Limited	Ordinary Shares	100
Chesterford Park (Nominee) Limited ²	Ordinary Shares	50	NU Schools for Redbridge Limited	Ordinary Shares	100
Chichester Health (Holdings) Limited	Ordinary Shares	100	NU Technology and Learning Centres (Hackney) Limited	Ordinary Shares	100
Chichester Health plc	Ordinary Shares	100	NUPPP (Care Technology and Learning Centres) Limited	Ordinary Shares	100
Coalville Wind Limited	Private limited Company	100	NUPPP (GP) Limited	Ordinary Shares	100
Commercial Union Corporate Member Limited	Ordinary Shares	100	NUPPP Nominees Limited	Ordinary Shares	100
Commercial Union Life Assurance Company Limited	Ordinary Shares	100	Opus Park Management Limited	Limited By Guarantee	100
Commercial Union Trustees Limited	Ordinary Shares	100	Opus Park Management Limited	Limited Partnership	100
Cornerford Limited	Ordinary Shares	50	ORN Capital Services Limited	Ordinary Shares	100
COW Real Estate Associate General Partner Limited	Ordinary Shares	100	Paddington Central III GP Ltd	Ordinary Shares	100
COW Real Estate Associate Limited Partnership	Limited Partnership	100	Paddington Central III Limited Partnership	Limited Partnership	100
COW Real Estate Associate Nominee Limited	Ordinary Shares	100	Pegasus House and Nuffield House LP ²	Limited Partnership	50
Den Brook Energy Limited	Ordinary Shares	100	Paddington Central 3 Unit Trust	Unit Trust	100
Ebisu Associates Limited	Ordinary Shares	100	Pegasus House and Nuffield House Nominee 1 Limited ²	Ordinary Shares	50
EES Operations 1 Limited	Ordinary Shares	100	Pegasus House and Nuffield House Nominee 2 Limited ²	Ordinary Shares	50
Electric Avenue Limited ²	Ordinary Shares	5	Percussion Properties Limited	Ordinary Shares	100
Fitzroy Place GP 2 Limited ²	Ordinary Shares	50	Porth Teigr Management Company Limited ²	Ordinary Shares	50
Fitzroy Place Management Co Limited ²	Ordinary Shares	50	Pre (Whitehill) Limited	Ordinary Shares	100
Fitzroy Place Residential Limited ²	Ordinary Shares	50	Property Management Company (Croydon) Ltd	Ordinary Shares	100
Free Solar (Stage 2) Limited	Ordinary Shares	100	Quantum Property Partnership ²	Limited Partnership	50
Free Solar Holdco Limited	Ordinary Shares	100	Quarryvale One Limited	Ordinary Shares	100
Friends Life Funds Limited	Ordinary Shares	100	Quarryvale Three Limited	Ordinary Shares	100
Friends SLPM Limited	Ordinary Shares	5	Redan Power Limited ²	Ordinary Shares	100
General Accident Executor and Trustee Company Limited	Ordinary Shares	100	Renewable Clean Energy 2 Limited ²	Ordinary Shares	100
Glasgow Airport Business Park Management Company Limited	Limited By Guarantee	100	Renewable Clean Energy 3 Limited ²	Ordinary Shares	100
Glasgow Airport Business Park Management Company Limited	Ordinary Shares	100	Renewable Clean Energy Limited	Ordinary Shares	100
Gobafoss General Partner Limited	Ordinary Shares	100	Rugby Radio Station (General Partner) Limited ²	Ordinary B Shares	50
Gobafoss Partnership Nominee No 1 Ltd	Ordinary Shares	100	Rugby Radio Station (Nominee) Limited ²	Ordinary Shares	50
Hemel Hempstead Estate Management Limited	Ordinary Shares	100	Rugby Radio Station Limited Partnership ²	Limited Partnership	50
Hillswood Management Limited	Ordinary Shares	100	SE11 PEP Limited	Ordinary Shares	100
Houlton Commercial Management Company Limited	Limited by Guarantee	100	Serviced Offices UK (Services) Limited ²	Ordinary Shares	50
Igloo Regeneration (Butcher Street) Limited ²	Ordinary Shares	50	Serviced Offices UK GP Limited ²	Ordinary Shares	50
Igloo Regeneration (General Partner) Limited ²	Ordinary Shares	50	Serviced Offices UK Limited Partnership ²	Limited Partnership	50
Igloo Regeneration (Nominee) Limited ²	Ordinary Shares	50	Serviced Offices UK Nominee Limited ²	Ordinary Shares	50
Igloo Regeneration Developments (General Partner) Limited ²	Ordinary Shares	50	Solar Clean Energy Limited	Ordinary Shares	100
Igloo Regeneration Developments (Nominees) Limited ²	Ordinary Shares	50	Southgate General Partner Limited	Ordinary A Shares	50
Igloo Regeneration Developments LP ²	Limited Partnership	50	Southgate Limited Partnership	Limited Partnership	50
Igloo Regeneration Partnership ²	Limited Partnership	40	Southgate LP (Nominee 1) Limited	Ordinary Shares	50
Igloo Regeneration Property Unit Trust ²	Unit Trust	50	Southgate LP (Nominee 2) Limited	Ordinary Shares	50
IPE BV	Ordinary Shares	100	Spire Energy Limited ²	Ordinary Shares	50
Irongate House LP ²	Limited Partnership	50	Stafford Wind Limited	Ordinary Shares	0
Irongate House Nominee 1 Limited ²	Ordinary Shares	50	Stonebridge Cross Management Company Limited	Limited by Guarantee	100
Irongate House Nominee 2 Limited ²	Ordinary Shares	50	Stonebridge Cross Management Limited	Limited By Guarantee	100
Lime Property Fund (General Partner) Limited	Ordinary Shares	3	SUE Developments Limited Partnership ²	Limited Partnership	50
Lime Property Fund (Nominee) Limited	Ordinary Shares	3	SUE GP LLP ²	Ordinary Shares	50
Lombard (London) 1 Limited	Ordinary Shares	100	SUE GP Nominee Limited ²	Ordinary Shares	50
Lombard (London) 2 Limited	Ordinary Shares	100	Sunnyside 2 Wind Turbine 1 Limited	Ordinary Shares	100
LUC Holdings Limited	Ordinary Shares	20	Sunrise Renewables (Barry) Limited	Ordinary Shares	100
Matthew Parker Street (Nominee No 1) Limited	Ordinary Shares	100	Swan Valley Management Limited	Ordinary Shares	100
Matthew Parker Street (Nominee No 2) Limited	Ordinary Shares	100	The Designer Retail Outlet Centres (General Partner) Limited	Ordinary A Shares	50
Medium Scale Wind No.1 Limited	Ordinary Shares	100	The Designer Retail Outlet Centres (Livingston) LP	Limited Partnership	50
Minnygap Energy Limited	Ordinary Shares	100	The Designer Retail Outlet Centres (Mansfield) General Partner Limited	Ordinary Shares	50
Mortimer Street Associated Co 1 Limited ²	Ordinary Shares	50	The Designer Retail Outlet Centres (Mansfield) LP	Limited Partnership	50
Mortimer Street Associated Co 2 Limited ²	Ordinary Shares	50	The Designer Retail Outlet Centres (York) General Partner Limited	Ordinary Shares	50
Mortimer Street Nominee 1 Limited ²	Ordinary Shares	50	The Designer Retail Outlet Centres (York) LP	Limited Partnership	50
Mortimer Street Nominee 2 Limited ²	Ordinary Shares	50	The Gobafoss Partnership	Limited Partnership	100
Mortimer Street Nominee 3 Limited ²	Ordinary Shares	50	The Ocean Marine Insurance Company Limited	Ordinary Shares	100
New Broad Street House LP ²	Limited Partnership	50	The Square Brighton Limited	Ordinary Shares	100
New Broad Street House Nominee 1 Limited ²	Ordinary Shares	50	Turncole Wind Farm Limited	Ordinary Shares	100
New Broad Street House Nominee 2 Limited ²	Ordinary Shares	50	Tyne Assets (No 2) Limited	Ordinary Shares	100
Norwich Union (Shareholder GP) Limited	Ordinary Shares	100	Tyne Assets Limited	Ordinary Shares	100
Norwich Union Public Private Partnership Fund	Limited Partnership	100	Undershift Limited	Ordinary Shares	100
NU 3PS Limited	Ordinary Shares	100	W Nine LP ²	Limited Partnership	50
			W Nine Nominee 1 Limited ²	Ordinary Shares	50
			W Nine Nominee 2 Limited ²	Ordinary Shares	50
			The Welsh Insurance Corporation Limited	Ordinary Shares	100
			Westcountry Solar Solutions Limited	Ordinary Shares	100
			Whitgift Shopping Centre Unit Trust Closed	Unit Trust	100
			Windlend (Leicestershire) Limited	Ordinary Shares	100

Company name	Share Class ¹	% held	Company name	Share Class ¹	% held
Windlend (Southrigg) Limited	Ordinary Shares	100	Limited		
Woolley Hill Electrical Energy Limited	Ordinary Shares	100	Synergy Sunrise (Sentinel House) Limited	Ordinary Shares	100
The Yorkshire Insurance Company Limited	Ordinary Shares	100	Undershaft (NULLA) Limited	Ordinary Shares	100
Swan Court Waterman's Business Park, Kingsbury Crescent, Staines, Surrey, TW18 3BA			Whittington Hall, Whittington Road, Worcester, Worcestershire, WR5 2ZX		
Healthcode Limited	Ordinary C Shares, Ordinary E Shares	20	Aviva Investors GR SPV17 Limited	Ordinary Shares	100
The Green, Easter Park, Benyon Road, Reading, Berkshire, RG7 2PQ			Woolgate Exchange, 25 Basinghall Street, EC2V 5HA		
Anesco Mid Devon Limited	Ordinary Shares	100	Investec American Fund	OEIC	24
Anesco South West Limited	Ordinary Shares	100	61 Conduit Street London W1S 2GB		
Free Solar (Stage 1) Limited	Ordinary Shares	100	AKO Global UCITS-BF (AKOGBUF)	Mutual Fund	73
New Energy Residential Solar Limited	Ordinary Shares	100	United States		
Norton Energy SLS Limited	Ordinary Shares	100	1209 Orange Street, City of Wilmington DE, 19801		
TGHC Limited	Ordinary Shares	100	Ai-Recci GP, LLC	Sole Member	100
Wakefield House , 67 Bewsey Street, Warrington , England, WA2 7JQ			Aviva Investors Americas LLC	Sole Member	100
Sunrise Renewables (Hull) Limited	Ordinary Shares	100	2222 Grand Avenue, Des Moines IA 50312		
Wellington Row, York, YO90 1WR			Aviva Investors North America Holdings, Inc	Common Stock Of No Par Value Shares	100
Aviva (Peak No.2) UK Limited	Ordinary Shares	100	2711 Centreville Road, Suite 400, Wilmington, New Castle, DE, 19808		
Aviva Annuity UK Limited	Ordinary Shares	100	UKP Holdings Inc.	Common Stock Shares	100
Aviva Client Nominees UK Limited	Ordinary Shares	100	Ai-Recap Carry I, Lp	Limited Partnership	100
Aviva Equity Release UK Limited	Ordinary Shares	100	AI-RECAP GP I, LLC	Limited Partnership	100
Aviva ERFA 15 UK Limited	Ordinary Shares	100	National Corporate Research Limited, 850 New Burton Road, Suite 201, Dover, Delaware Kent County 19904		
Aviva Life & Pensions UK Limited	Ordinary Shares	100	Exeter Properties Inc.	Common Stock Wpv Shares	95
Aviva Life Holdings UK Limited	Ordinary Shares	100	Winslade Investments Inc.	Common Stock Wpv Shares	100
Aviva Life Services UK Limited	Ordinary Shares	100	Vietnam		
Aviva Pension Trustees UK Limited	Ordinary Shares	100	10th Floor, Handi Resco Building, No. 521 Kim Ma, Ba Dinh, Hanoi		
Aviva Trustees UK Limited	Ordinary Shares	100	Aviva Vietnam Life Insurance Company Limited	Non-Listed Shares	100
Aviva Wrap UK Limited	Ordinary Shares	100			
CGNU Life Assurance Limited	Ordinary Shares	100			
Friends Provident Pension Scheme Trustees Limited	Ordinary Shares	100			
The Lancashire and Yorkshire Reversionary Interest Company Limited	Ordinary Shares	100			
The Norwich Union Life Insurance Company	Ordinary Shares	100			

1 Investment Company with Variable Capital ('ICVC')

Fond Common de Placement ('FCP')

Open Ended Investment Fund ('OEIC')

Société d'Investissement à Capital Variable ('SICAV')

Undertaking for Collective Investment in Transferable Securities ('UCITS')

Irish Collective Asset Management Vehicle ('ICAV')

Authorised Contractual Scheme ('ACS')

Organisme de Placement Collectif Immobilier ('OPCI')

Sociétés Civiles de Placement Immobilier ('SCPI')

2 Please refer to accounting policies (D) Consolidation principles, for further details on Joint Ventures and the factors on which joint management is based.

62 – Subsequent events

For details of subsequent events relating to:

- subsidiaries – refer to note 3a (iii)
- joint ventures – refer to note 3c (iii)
- joint ventures – refer to note 3c (iv)
- joint ventures – refer to note 3d

[Financial statements of the Company](#)**Income statement**

For the year ended 31 December 2017

	Note	2017 £m	2016 £m
Income			
Dividends received from subsidiaries	I	1,740	2,510
Interest receivable from group companies	I	116	56
Net investment income		—	28
		1,856	2,594
Expenses			
Operating expenses	B	(217)	(603)
Interest payable to group companies	I	(175)	(182)
Interest payable on borrowings		(352)	(345)
		(744)	(1,130)
Profit for the year before tax			
Tax credit	C	1,112	1,464
		113	95
Profit for the year after tax		1,225	1,559

Statement of comprehensive income

For the year ended 31 December 2017

	Note	2017 £m	2016 £m
Profit for the year		1,225	1,559
<i>Other comprehensive income/(loss)</i>			
<i>Items that may be reclassified subsequently to income statement</i>			
Fair value gains/(losses) on investments in subsidiaries and joint ventures	E	707	(1,742)
<i>Items that will not be reclassified to income statement</i>			
Remeasurements of pension schemes	E	(2)	(6)
Other comprehensive income/(loss), net of tax		705	(1,748)
Total comprehensive income/(loss) for the year		1,930	(189)

Statement of changes in equity

For the year ended 31 December 2017

	Ordinary share capital £m <small>Note</small>	Preference share capital £m	Share premium £m	Capital redemption Reserve £m	Merger reserve £m	Investment valuation reserve £m	Equity compensation reserve £m	Retained earnings £m	Direct capital instrument and fixed rate tier 1 notes £m	Total equity £m
Balance at 1 January	1,015	200	1,197	—	6,438	9,121	78	3,747	1,116	22,912
Profit for the year	—	—	—	—	—	—	—	1,225	—	1,225
Other comprehensive income	—	—	—	—	—	707	—	(2)	—	705
Total comprehensive income for the year	—	—	—	—	—	707	—	1,223	—	1,930
Dividends and appropriations	15	—	—	—	—	—	—	(1,081)	—	(1,081)
Reserves credit for equity compensation plans	31	—	—	—	—	—	77	—	—	77
Shares issued under equity compensation plans	30	2	—	10	—	—	(44)	42	—	10
Shares purchased in buy-back	30	(14)	—	14	—	—	—	(300)	—	(300)
Redemption of fixed rate tier 1 notes	34,E	—	—	—	—	—	—	(92)	(392)	(484)
Aggregate tax effect	C	—	—	—	—	—	—	16	—	16
Balance at 31 December	1,003	200	1,207	14	6,438	9,828	111	3,555	724	23,080

For the year ended 31 December 2016

	Ordinary share capital £m <small>Note</small>	Preference share capital £m	Share premium £m	Capital redemption Reserve £m	Merger reserve £m	Investment valuation reserve £m	Equity compensation reserve £m	Retained earnings £m	Direct capital instrument and fixed rate tier 1 notes £m	Total equity £m
Balance at 1 January	1,012	200	1,185	—	6,438	10,863	70	3,124	1,116	24,008
Profit for the year	—	—	—	—	—	—	—	1,559	—	1,559
Other comprehensive loss	—	—	—	—	—	(1,742)	—	(6)	—	(1,748)
Total comprehensive loss for the year	—	—	—	—	—	(1,742)	—	1,553	—	(189)
Dividends and appropriations	15	—	—	—	—	—	—	(973)	—	(973)
Reserves credit for equity compensation plans	—	—	—	—	—	—	38	—	—	38
Shares issued under equity compensation plans	3	—	12	—	—	—	(30)	26	—	11
Shares purchased in buy-back	30	—	—	—	—	—	—	—	—	—
Redemption of fixed rate tier 1 notes	E	—	—	—	—	—	—	—	—	—
Aggregate tax effect	C	—	—	—	—	—	—	17	—	17
Balance at 31 December	1,015	200	1,197	—	6,438	9,121	78	3,747	1,116	22,912

Where applicable, the accounting policies of the Company are the same as those of the Group on pages 93 to 105. The notes identified alphabetically on pages 233 to 238 are an integral part of these separate financial statements. Where the same items appear in the Group financial statements, reference is made to the notes (identified numerically) on pages 113 to 228.

Statement of financial position

As at 31 December 2017

	Note	2017 £m	2016 £m
Assets			
Non-current assets			
Investments in subsidiaries	A	41,192	40,521
Investment in joint venture	18a	547	511
Loans owed by subsidiaries	I	3,680	5,941
Deferred tax assets	C	9	156
Current tax assets	C	255	135
		45,683	47,264
Current assets			
Other amounts owed by subsidiaries	I	298	321
Loans owed by subsidiaries	I	1,730	—
Other assets		9	11
Cash and cash equivalents		87	82
Total assets		47,807	47,678
Equity			
Ordinary share capital	30	1,003	1,015
Preference share capital	33	200	200
Called up capital		1,203	1,215
Share premium	30b	1,207	1,197
Capital redemption reserve	30b	14	—
Merger reserve	E	6,438	6,438
Investment valuation reserve	E	9,828	9,121
Equity compensation reserve	E	111	78
Retained earnings	E	3,555	3,747
Direct capital instrument and tier 1 notes	D, 34	724	1,116
Total equity		23,080	22,912
Liabilities			
Non-current liabilities			
Borrowings	F	6,450	6,638
Loans owed to subsidiaries	I	9,900	13,098
Deferred tax liabilities	C	—	4
Provisions		53	47
		16,403	19,787
Current liabilities			
Borrowings	F	978	642
Loans owed to subsidiaries	I	3,108	156
Other amounts owed to subsidiaries	I	4,084	4,042
Other creditors		154	139
Total liabilities		24,727	24,766
Total equity and liabilities		47,807	47,678

Approved by the Board on 7 March 2018.

Thomas D. Stoddard
Chief Financial Officer

Company number: 2468686

Where applicable, the accounting policies of the Company are the same as those of the Group on pages 93 to 105. The notes identified alphabetically on pages 233 to 238 are an integral part of these separate financial statements. Where the same items appear in the Group financial statements, reference is made to the notes (identified numerically) on pages 113 to 228.

Statement of cash flows

For the year ended 31 December 2017

All the Company's operating cash requirements are met by subsidiary companies and settled through intercompany loan accounts. As the direct method of presentation has been adopted for these activities, no further disclosure is required. In respect of financing and investing activities, the following items pass through the Company's own bank accounts.

	2017 £m	2016 £m
Cash flows from investing activities		
(Purchase)/sale of financial investments	—	29
Net cash (used in)/generated from investing activities	—	29
Cash flows from financing activities		
Shares purchased in buy-back	(300)	—
Funding provided from subsidiaries	2,365	11
Repayment of loans owed to subsidiaries	(156)	—
New borrowings drawn down, net of expenses	1,265	3,378
Repayment of borrowings	(1,753)	(2,285)
Net (repayment)/drawdown of borrowings ¹	(488)	1,093
Preference dividends paid	(17)	(17)
Ordinary dividends paid	(983)	(871)
Coupon payments on direct capital instrument and tier 1 notes	(81)	(85)
Interest paid on borrowings	(346)	(330)
Proceeds from issue of ordinary shares	10	13
Net cash generated from/(used in) financing activities	4	(186)
Net increase/(decrease) in cash and cash equivalents	4	(157)
Cash and cash equivalents at 1 January	82	188
Exchange gains on cash and cash equivalents	1	51
Cash and cash equivalents at 31 December	87	82

¹ On 28 September 2017, notification was given that the Group would redeem the 8.25% US \$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 at that date. The instrument was redeemed in full on 3 November 2017 at a cost of £488 million. This included £4 million exchange losses subsequent to the reclassification which are included within other operating costs within the income statement. See note 34 for further details.

Where applicable, the accounting policies of the Company are the same as those of the Group on pages 93 to 105. The notes identified alphabetically on pages 233 to 238 are an integral part of these separate financial statements. Where the same items appear in the Group financial statements, reference is made to the notes (identified numerically) on pages 113 to 228.

Notes to the financial statements of the Company

A – Investments in subsidiaries and joint venture

(i) Subsidiaries

Movements in the Company's investments in its subsidiaries are as follows:

	2017 £m	2016 £m
Fair value as at 1 January	40,521	42,452
Movement in fair value	671	(1,931)
At 31 December	41,192	40,521

Fair values are estimated using applicable valuation models underpinned by the Company's market capitalisation, and are classified as Level 2 in the fair value hierarchy described in note 22 to the Group consolidated financial statements.

At 31 December 2017, the Company has two wholly owned subsidiaries, both incorporated in the UK. These are General Accident plc and Aviva Group Holdings Limited. Aviva Group Holdings Limited is an intermediate holding company, while General Accident plc has preference shares listed on the London Stock Exchange. The principal subsidiaries of the Aviva Group at 31 December 2017 are set out in note 60 to the Group consolidated financial statements.

(ii) Joint venture

At 31 December 2017, the Company's investment in the joint venture, Aviva-COFCO Life Insurance Co. Limited has a fair value of £547 million (2016: £511 million). This is classified as Level 3 in the fair value hierarchy. The definition of the fair value hierarchy is included in note 22 to the Group consolidated financial statements.

B – Operating expenses

(i) Operating expenses

Operating expenses comprise:

	2017 £m	2016 £m
Staff costs and other employee related expenditure (see below)	107	97
Other operating costs	105	127
Net foreign exchange losses/(gains)	5	379
Total	217	603

(ii) Staff costs

Total staff costs were:

	2017 £m	2016 £m
Wages and salaries	54	57
Social security costs	7	8
Defined contribution schemes	8	8
Equity compensation plans (see (iii) below)	30	19
Termination benefits	8	5
Total	107	97

(iii) Employee numbers

The staff costs recognised by the Company represent recharges of employee related expenses attributable to the Company. The number of persons employed by the Company was nil (2016: nil).

(iv) Equity compensation plans

All transactions in the Group's equity compensation plans involve options and awards for ordinary shares of the Company. Full disclosure of these plans is given in the Group consolidated financial statements, note 31. The cost of such options and awards is borne by all participating businesses and, where relevant, the Company bears an appropriate charge. As the majority of the charge to the Company relates to directors' options and awards, for which full disclosure is made in the Directors' Remuneration Report, no further disclosure is given here.

C – Tax**(i) Tax credited to the income statement**

The total tax credit comprises:

	2017 £m	2016 £m
Current tax		
For this year	(253)	(131)
Prior year adjustments	(3)	(1)
Total current tax	(256)	(132)
Deferred tax		
Origination and reversal of temporary differences	143	26
Changes in tax rates or tax laws	—	11
Total deferred tax	143	37
Total tax credited to income statement	(113)	(95)

Unrecognised tax losses and temporary differences of previous years were used to reduce the deferred tax expense by £nil (2016: £nil)

(ii) Tax credited to other comprehensive income

Tax credited directly to other comprehensive income is £nil (2016: £1 million). This is in respect of deferred tax on the remeasurement of the pension scheme.

(iii) Tax credited to equity

Tax credited directly to equity in the year, in respect of coupon payments on the direct capital instrument and fixed rate tier 1 notes, amounted to £16 million (2016: £17 million).

(iv) Tax reconciliation

The tax on the Company'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:

	2017 £m	2016 £m
Profit before tax	1,112	1,464
Tax calculated at standard UK corporation tax rate of 19.25% (2016: 20%)	214	293
Adjustment to tax charge in respect of prior years	(3)	(1)
Non-assessable dividend income	(335)	(502)
Disallowable expenses	8	8
Different local basis of tax on overseas profits	(4)	1
Change in future local statutory tax rates	(19)	6
Losses surrendered intra-group for nil value	26	100
Total tax credited to income statement	(113)	(95)

Finance (No 2) Act 2015 introduced legislation reducing the rate of corporation tax from 20% at 1 April 2016 to 19% from 1 April 2017 and to 18% from 1 April 2020. The Finance Act 2016 reduced the corporation tax rate further to 17% from 1 April 2020.

The reductions in rate from 20% to 19% and then to 17% have been used in the calculation of the UK's deferred tax assets and liabilities as at 31 December 2017.

The majority of the 2016 deferred tax asset was utilised during 2017 as a corporation tax deduction giving rise to a credit of £19 million.

(v) Deferred tax

A deferred tax asset of £9 million (2016: £156 million), arises in respect of expected future pension contributions and other post retirement obligations. In 2017 the majority of the deferred tax asset brought forward has been realised and offset against taxable profits in the UK.

In addition, a deferred tax liability from 2016 of £4 million in respect of anticipated future income was written down to £nil in 2017.

Deferred tax is recognised at 17% (2016: 17%). The Company does not have any unrecognised temporary differences (2016: £nil).

(vi) Current tax assets

Current tax assets recoverable in more than one year are £255 million (2016: £135 million).

D – Direct capital instrument and tier 1 notes

Details of the Direct Capital instrument and tier 1 notes are given in the Group consolidated financial statements, note 34. The 6.875% £210 million STICS are reflected in the Company financial statements at a value of £224 million (2016: £224 million) following the transfer at fair value from Friends Life Holdings plc on 1 October 2015.

E – Reserves

	Merger Reserve £m	Investment valuation reserve £m	Equity- compensation reserve ¹ £m	Retained earnings £m
Balance at 1 January 2016	6,438	10,863	70	3,124
Arising in the year:				
Profit for the year	—	—	—	1,559
Fair value losses on investments in subsidiaries and joint venture	—	(1,742)	—	—
Remeasurements of pension schemes	—	—	—	(6)
Dividends and appropriations	—	—	—	(973)
Reserves credit for equity compensation plans	—	—	38	—
Issue of share capital under equity compensation scheme	—	—	(30)	26
Aggregate tax effect	—	—	—	17
Balance at 31 December 2016	6,438	9,121	78	3,747
Arising in the year:				
Profit for the year	—	—	—	1,225
Fair value gains on investments in subsidiaries and joint venture	—	707	—	—
Remeasurements of pension schemes	—	—	—	(2)
Dividends and appropriations	—	—	—	(1,081)
Reserves credit for equity compensation plans	—	—	77	—
Issue of share capital under equity compensation scheme	—	—	(44)	42
Shares purchased in buy-back	—	—	—	(300)
Redemption of fixed rate tier 1 notes ²	—	—	—	(92)
Aggregate tax effect	—	—	—	16
Balance at 31 December 2017	6,438	9,828	111	3,555

1 Refer to notes 31d and 36 for further details of balances included in Equity-compensation reserve.

2 On 28 September 2017, notification was given that the Group would redeem the 8.25% US \$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 at that date. The resulting foreign exchange loss of £92 million has been charged to retained earnings. See note 34 for further details.

The tax effect of £16 million (2016: £17 million) is recognised in respect of coupon payments of £81 million (2016: £85 million) on the direct capital instrument and tier 1 notes.

F – Borrowings

The Company's borrowings comprise:

	2017 £m	2016 £m
Subordinated debt	6,009	5,916
Senior notes	751	722
Commercial paper	668	642
	7,428	7,280

Maturity analysis of contractual undiscounted cash flows:

	2017			2016		
	Principal £m	Interest £m	Total £m	Principal £m	Interest £m	Total £m
Within 1 year	978	333	1,311	642	328	970
1 – 5 years	266	1,311	1,577	570	1,305	1,875
5 – 10 years	444	1,591	2,035	427	1,572	1,999
10 – 15 years ¹	-	1,589	1,589	-	1,567	1,567
Over 15 years ¹	5,791	3,282	9,073	5,698	3,499	9,197
Total contractual undiscounted cash flows	7,479	8,106	15,585	7,337	8,271	15,608

1 Following a review of the treatment of undated subordinated debt we have reallocated £800 million of such instruments from the 10 to 15 years category to the Over 15 years category. As a result of this change prior year comparatives have been restated.

Where subordinated debt is undated, the interest payments have not been included beyond 15 years. Annual interest payments in future years for these borrowings are £49 million (2016: £49 million).

The fair value of the subordinated debt at 31 December 2017 was £7,046 million (2016: £6,385 million), calculated with reference to quoted prices. The fair value of the senior debt at 31 December 2017 was £756 million (2016: £720 million), calculated with reference to quoted prices. The fair value of the commercial paper is considered to be the same as its carrying value.

Further details of these borrowings and undrawn committed facilities can be found in the Group consolidated financial statements, note 49, with details of the fair value hierarchy in relation to these borrowings in note 22.

G – Contingent liabilities

Details of the Company's contingent liabilities are given in the Group consolidated financial statements, note 52.

H – Risk management

Risk management in the context of the Group is considered in the Group consolidated financial statements, note 56.

The business of the Company is managing its investments in subsidiaries and joint venture operations. Its risks are considered to be the same as those in the operations themselves and full details of the major risks and the Group's approach to managing these are given in the Group consolidated financial statements, note 56. Such investments are held by the Company at fair value in accordance with accounting policy D.

The fair values of the subsidiaries and joint ventures are estimated using applicable valuation models, underpinned by the Company's market capitalisation. This uses the Company's closing share price at year end. Given that the key input into the valuation model is based on an observable current share price, and therefore sensitive to movements in that price, the valuation process is not sensitive to non-observable market assumptions.

Financial assets, other than investments in subsidiaries and the joint ventures, largely consist of amounts due from subsidiaries. As at the balance sheet date, these receivable amounts were neither past due nor impaired.

Financial liabilities owed by the Company as at the balance sheet date are largely in respect of borrowings (details of which are provided in note F and the Group consolidated financial statements, note 49) and loans owed to subsidiaries. Loans owed to subsidiaries were within agreed credit terms as at the balance sheet date.

Interest rate risk

Loans to and from subsidiaries are at either fixed or floating rates of interest, with the latter being exposed to fluctuations in these rates. The choice of rates is designed to match the characteristics of financial investments (which are also exposed to interest rate fluctuations) held in both the Company and the relevant subsidiary, to mitigate as far as possible each company's net exposure.

All of the Company's long-term external borrowings are at fixed rates of interest and are therefore not exposed to changes in these rates. However, for short term commercial paper, the Company is affected by changes in these rates to the extent the redemption of these borrowings is funded by the issuance of new commercial paper or other borrowings. Further details of the Company's borrowings are provided in note F and the Group consolidated financial statements, note 49.

The effect of a 100 basis point increase/decrease in interest rates on floating rate loans due to and from subsidiaries and on refinancing short term commercial paper as it matures would be a decrease/increase in profit before tax of £114 million (2016: decrease/increase of £108 million). The net asset value of the Company's financial resources is not materially affected by fluctuations in interest rates.

Currency risk

The Company's direct subsidiaries are exposed to foreign currency risk arising from fluctuations in exchange rates during the course of providing insurance and asset management services around the world. The exposure of the subsidiaries to currency risk is considered from a Group perspective in the Group consolidated financial statements, note 56(c)(v).

The Company faces exposure to foreign currency risk through some of its borrowings which are denominated in Euros. However, most of these borrowings have been on-lent to a subsidiary which holds investments in Euros, generating the net investment hedge described in the Group consolidated financial statements, note 57(a).

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. The Company's main sources of liquidity are liquid assets held within the Company and its subsidiary Aviva Group Holdings Limited, and dividends received from the Group's insurance and asset management businesses. Sources of liquidity in normal markets also includes 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 Company maintains significant undrawn committed borrowing facilities (£1,650 million) from a range of leading international banks to further mitigate this risk.

Maturity analysis of external borrowings and amounts due to and by subsidiaries are provided in notes F and I respectively.

I – Related party transactions

The Company receives dividend and interest income from subsidiaries and pays interest and fee expense to those subsidiaries in the normal course of business. These activities are reflected in the table below.

Loans to and from subsidiaries are made on normal arm's-length commercial terms. The maturity analysis of the related party loans is as follows:

Loans owed by subsidiaries

Maturity analysis	2017 £m	2016 £m
Within 1 year	1,730	—
1 – 5 years	754	3,111
Over 5 years	2,926	2,830
Total	5,410	5,941

On 1 January 2013, Aviva International Holdings Limited, an indirect subsidiary, transferred the following loan liabilities with the Company to Aviva Group Holdings Limited, its direct subsidiary:

- An unsecured loan of €250 million, entered into on 7 May 2003 accruing interest at fixed rate of 5.5% with settlement to be paid at maturity in May 2033. As at the Statement of Financial Position date, the total amount drawn down on the facility was £222 million (2016: £213 million).
- An unsecured loan of €500 million, entered into on 20 May 2008 accruing interest at a fixed rate of 6.88% with settlement to be paid at maturity in May 2018. As at the Statement of Financial Position date, the total amount drawn down on the facility was £444 million (2016: £427 million).

I – Related party transactions continued

Loans owed by subsidiaries continued

On 23 December 2014, the Company provided an unsecured revolving credit facility of £2,000 million to Aviva Group Holdings Limited, its subsidiary, with a maturity date of 3 September 2018. The facility accrues interest at 75 basis points above 6 month LIBOR. As at the Statement of Financial Position date, the total amount drawn down on the facility was £1,286 million (2016: £1,959 million).

On 27 June 2016, the Company provided an unsecured loan of C\$446 million to Aviva Group Holdings Limited, its subsidiary, with a maturity date of 27 June 2046. The loan accrues interest at 348 basis points above 6 month CDOR. As at the Statement of Financial Position date, the total amount drawn was £263 million (2016: £269 million).

On 30 September 2016, the Company provided the following loans to Aviva Group Holdings Limited, its subsidiary:

- An unsecured loan of €850 million with a maturity date of 30 September 2021. The loan accrues interest at 115 basis points above 12 month EURIBOR with settlement to be paid at maturity. As at the Statement of Financial Position date, the total amount drawn was £754 million (2016: £725 million).
- An unsecured loan of €650 million with a maturity date of 5 July 2023. The loan accrues interest at a fixed rate of 1.54% with settlement to be paid at maturity. As at the Statement of Financial Position date, the total amount drawn down on the facility was £577 million (2016: £555 million).
- An unsecured loan of €700 million with a maturity date of 3 July 2024. The loan accrues interest at a fixed rate of 1.64% with settlement to be paid at maturity. As at the Statement of Financial Position date, the total amount drawn down on the facility was £621 million (2016: £597 million).
- An unsecured loan of €900 million with a maturity date of 4 December 2025. The loan accrues interest at a fixed rate of 1.74% with settlement to be paid at maturity. As at the Statement of Financial Position date, the total amount drawn down on the facility was £799 million (2016: £769 million).

On 21 November 2016, the Company provided an unsecured loan €500 million to Aviva Group Holdings Limited, its subsidiary, with a maturity date of 27 October 2023. The loan accrues interest at a fixed rate of 1.75% with settlement to be paid at maturity. As at the Statement of Financial Position date, the total amount drawn was £444 million (2016: £427 million).

Loans owed to subsidiaries

	2017			2016		
	Principal £m	Interest £m	Total £m	Principal £m	Interest £m	Total £m
Maturity analysis of contractual undiscounted cash flows:						
Within 1 year	3,108	122	3,230	156	143	299
1 – 5 years	9,900	390	10,290	13,098	336	13,434
Over 5 years	—	—	—	—	—	—
Total	13,008	512	13,520	13,254	479	13,733

On 3 September 2013 Aviva Group Holdings Limited, its subsidiary provided and unsecured rolling credit facility of £5,000 million to the Company, accruing interest at 75 basis points above 6 month LIBOR and with maturity date of 3 September 2018. The total amount drawn down on the facility at 31 December 2017 was £3,108 million (2016: £3,108 million).

On 3 September 2013 Aviva Group Holdings Limited, its subsidiary provided and unsecured rolling credit facility of €250 million to the Company, accruing interest at 75 basis points above 6 month LIBOR and with maturity date of 3 September 2018. The total amount drawn down on the facility at 31 December 2017 was £nil (2016: £nil).

On 14 December 2017, the Company renewed its facility with GA plc, its subsidiary, of £9,990 million and the Board approved the extension of the maturity of the loan by five years from 31 December 2017 to 31 December 2022. The other terms of the loan will remain unchanged, including the rate of interest payable by the Company to GA plc (65 basis points above 3 months LIBOR and in the event that the LIBOR rate is less than zero, the rate shall be deemed to be zero). As at 31 December 2017, the loan balance outstanding was £9,900 million (2016: £9,990 million). This loan is secured against the ordinary share capital of Aviva Group Holdings Limited.

Other related party balances comprise dividends and interest receivable and payable, as well as intercompany balances for fees and other transactions in the normal course of business.

Dividends, loans, interest

Services provided to related parties

	2017		2016	
	Income earned in the year £m	Receivable at year end £m	Income earned in the year £m	Receivable at year end £m
Subsidiaries	1,856	5,708	2,566	6,262

The Company incurred expenses in the year of £0.2 million (2016: £0.2 million) representing audit fees paid by the Company on behalf of subsidiaries. The Company did not recharge subsidiaries for these expenses.

The related parties' receivables are not secured and no guarantees were received in respect thereof. The receivables will be settled in accordance with normal credit terms.

I – Related party transactions continued**Dividends, loans, interest continued****Services provided by related parties**

	2017		2016	
	Expense incurred in year £m	Payable at year end £m	Expense incurred in year £m	Payable at year end £m
Subsidiaries	175	17,092	182	17,296

Of the related parties' payables, £9,900 million (2016: £9,990 million) are secured. The remaining £7,192 million (2016: £7,306 million) are not secured and no guarantees were received in respect thereof. The payables will be settled in accordance with normal credit terms. Details of guarantees, indemnities and warranties given by the Company on behalf of related parties are given in note 52(f).

The directors and key management of the Company are considered to be the same as for the Group. Information on both the Company and Group key management compensation can be found in note 59.

J – Subsequent events

There are no subsequent events to report.

Other information

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[Alternative Performance Measures](#)**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 additional detail in respect of APMs utilised by the Group, including a reconciliation to the relevant amounts appearing in the Group's IFRS financial statements and, where appropriate, a commentary on the material reconciling items. This section should be read in conjunction with the Strategic report which includes an analysis of the development and performance of the Group's business during the year and its overall financial position at the end of the year.

1. Group adjusted operating profit (operating profit)

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 taken out of operating profit are:

Investment variances and economic assumptions changes

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 risks. 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.

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.

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 movement 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

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.

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.

The table below presents a reconciliation between our consolidated operating profit and profit before tax attributable to shareholders' profits.

	2017 £m	2016 £m
United Kingdom – Life	1,764	1,553
United Kingdom – General Insurance	411	395
Canada	46	270
Europe	1,059	1,019
Asia	191	201
Aviva Investors	201	160
Other Group activities	(604)	(588)
Operating profit before tax attributable to shareholders' profit	3,068	3,010
Integration and restructuring costs	(141)	(212)
Operating profit before tax after integration and restructuring costs	2,927	2,798
Adjusted for the following:		
Investment return variances and economic assumption changes on long-term business	34	379
Short-term fluctuation in return on investments on non-long-term business	(345)	(518)
Economic assumption changes on general insurance and health business	(7)	(242)
Impairment of goodwill, associates and joint ventures and other amounts expensed	(49)	—
Amortisation and impairment of intangibles	(197)	(175)
Amortisation and impairment of acquired value of in-force business	(495)	(540)
(Loss)/profit on the disposal and remeasurement of subsidiaries, joint ventures and associates	135	(11)
Other	—	(498)
Adjusting items before tax	(924)	(1,605)
Profit before tax attributable to shareholders' profits	2,003	1,193

Adjusting items

Integration and restructuring costs decreased to £141 million (2016: £212 million), as a result of lower transformation spend.

Life investment variances and economic assumption changes were £34 million positive (2016: £379 million positive). The variance in 2017 is driven by positive variances in the UK, which are partially offset by negative variances in France.

Positive variances in the UK are mainly due to economic modelling developments implemented in 2017. These include a one-off development to align the approach to calculating the valuation interest rate across the heritage Aviva and Friends Life portfolios and also a development to the approach to calculating the valuation interest rate for certain deferred annuity business. Positive variances also reflect fewer than expected defaults and downgrades on corporate bonds, better than expected experience on equity release mortgages (in terms of losses related to no negative equity guarantees) and a reduction in the default allowances for commercial mortgages.

The negative variance in France is primarily due to an increase in life annuity pension reserves, resulting from a reduction to the discount rate cap used in the calculation of these reserves. This economic assumption change reflects the current environment of

prolonged low interest rates. A further negative variance stems from losses realised in 2017 on derivative-based funds.

During 2017 the Group has kept 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. The aim has been to maintain the same allowance in these assumptions in 2017 as was included in 2016, as the impact of the Brexit process on the UK economy remains uncertain.

In 2016, investment variances and economic assumption changes were £379 million positive. Positive variances in the UK reflected lower interest rates and narrowing credit spreads, which increased asset values more than liabilities. In the first half of 2016 the Group revised its expectation of future property prices and rental income in light of the UK referendum vote for the UK to leave the European Union. The adverse impact of this adjustment on the Group's equity release and commercial mortgage portfolios was broadly offset in the second half of the year as expectations for future property price and rental growth increased. In addition, in the UK the investment variance reflected a refined approach of assuming best estimate expected credit defaults on corporate bonds, with a resulting increase in Group adjusted operating profit in the period. The positive variance in the UK was partially offset by negative variances in France and Italy. The negative variance in France reflected losses on equity hedges managed on an economic basis rather than an IFRS basis and falling interest rates, while the negative variance in Italy reflected widening credit spreads.

Short-term fluctuations on non long-term business were £345 million negative (2016: £518 million negative). The adverse movements during 2017 are mainly due to foreign exchange losses and adverse market movements on Group Centre holdings, including the centre hedging programme.

In the general insurance and health business, an adverse impact of £7 million (2016: £242 million adverse) mainly arises as a result of a slight decrease in the estimated future inflation rate used to value periodic payment orders offset by a slight decrease in the interest rates used to discount claim reserves for periodic payment orders and latent claims. During 2016 market interest rates used to discount periodic payment orders and latent claims reduced and the estimated future inflation rate used to value periodic payment orders was increased to be consistent with market expectations. This was, in part, offset by a change in estimate for the interest rate used to discount periodic payment orders to allow for the illiquid nature of these liabilities.

Impairment of goodwill, associates and joint ventures expensed in the period comprised of £2 million in respect of an impairment of goodwill at Elite Insurance Company of Canada and £47 million in respect of the full impairment of goodwill in our investment in associate Aviva India (2016: £nil).

Amortisation and impairment of acquired value of in-force business ('AVIF') in the year is a charge of £495 million (2016: £540 million charge). The charge for the year includes £469 million of amortisation in respect of the Group's subsidiaries and joint-ventures and impairment charges of £26 million in relation to the FPI's reinsured book of business and Aviva India.

The total Group profit on disposal and remeasurement of subsidiaries, joint ventures and associates is £135 million (2016: £11 million loss). This consists of £23 million of remeasurement gains in respect of the joint venture operations in Poland and Aviva Vietnam; £237 million profit on the disposals of Antarius, France health, three businesses in Spain and other small operations; offset by £125 million of remeasurement losses in relation to FPI and Taiwan.

Other items are those items that, in the directors' view, are required to be separately disclosed by virtue of their nature or incidence to enable a full understanding of the Group's financial performance. There were no other items in 2017.

In 2016, other items included a charge of £475 million in respect of the change in the Ogden discount rate. This was excluded from operating profit on the grounds that the change in rate from 2.5% to -0.75% reflects the Lord Chancellor's view of the development of interest rates in the period since 2001 when the rate was last adjusted. This was reported outside operating profit as it does not reflect the underlying performance of the Group for the year and would distort the trend in Group adjusted operating profit on a year-on-year basis. In 2017 the impact of Ogden was immaterial.

In 2016, other items also include £23 million relating to the loss upon the completion of an outwards reinsurance contract, written in 2015 by the UK General Insurance business, which provides significant protection against claims volatility from mesothelioma, industrial deafness and other long tail risks.

2. Solvency II

Solvency II, the European- wide prudential regulatory framework, came into force on 1 January 2016. Solvency II requires European insurers to calculate regulatory capital adequacy at the level of both individual regulated subsidiaries and in aggregate at Group level using a consistent prudential regulatory framework. The Aviva Group is regulated on a Solvency II basis and the Group Solvency II position reflects the consolidation of all underlying legal entities, including non-EEA subsidiaries, under Solvency II.

The Solvency II regime is underpinned by market-consistent principles whereby non-insurance assets and liabilities are typically measured using market value and liabilities arising from insurance contracts which are valued on a best estimate basis using market-implied assumptions. In addition, a risk margin is required to be held in respect of insurance contract liabilities to represent the additional amount an insurer would be expected to pay to transfer its obligations to another insurer. The combination of best estimate liabilities and the risk margin is referred to as 'technical provisions'. Subject to regulatory approval, insurers may utilise a transitional measure which spreads the increase in technical provisions arising as a result of the implementation of Solvency II over a period of sixteen years from 1 January 2016. During this year the transitional measures were utilised by three entities across the Aviva Group. No insurance undertakings within the Group use the transitional measure on risk-free interest rates.

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), 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 Aviva Group SCR is calculated using a partial internal model, and it is shown after the impact of diversification benefit.

The Solvency II Own Funds position 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 adjustments to the Solvency II valuation basis arising from changes to the underlying Regulations or updated interpretations provided by EIOPA.

The reconciliation from total Group equity on an IFRS basis to Solvency II Own Funds is presented below. This information is estimated and is therefore subject to change. The valuation differences reflect moving from IFRS valuations to a Solvency II shareholder view of Own Funds.

	2017 £bn	2016 £bn
Total Group equity on an IFRS basis	19.1	19.6
Elimination of goodwill and other intangible assets ¹	(9.8)	(10.0)
Liability valuation differences (net of transitional deductions) ²	22.0	22.1
Inclusion of risk margin (net of transitional deductions)	(3.3)	(4.4)
Net deferred tax ³	(1.3)	(1.6)
Revaluation of subordinated liabilities	(0.7)	(0.9)
Estimated Solvency II Net Assets (gross of non-controlling interests)⁴	26.0	24.8
Difference between Solvency II Net Assets and Own Funds ⁵	(1.3)	(0.8)
Estimated Solvency II Own Funds⁶	24.7	24.0

1 Includes £1.9 billion (2016: £2.0 billion) of goodwill and £7.9 billion (2016: £8.0 billion) of other intangible assets comprising acquired value of in-force business of £3.3 billion (2016: £3.9 billion), deferred acquisition costs (net of deferred income) of £2.9 billion (2016: £2.5 billion) and other intangibles of £1.7 billion (2016: £1.6 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 The 31 December 2016 Solvency II position includes the pro forma impacts of the disposal of Aviva's 50% shareholding in Antarius to Sogecap, which completed on 5 April 2017 (£0.1 billion) and an anticipated future change to UK tax rules restricting the tax relief that can be claimed in respect of tax losses (£0.1 billion). However, under the amended tax rules published on 13 July 2017, this restriction will not be material, and as a result no corresponding pro forma impact is included in the estimated 31 December 2017 Solvency II position. The 31 December 2016 Solvency II position also includes an adverse impact of a notional reset of the transitional measure on technical provisions ('TMTP') to reflect interest rates at 31 December 2016 of 0.4 billion. The net pro forma impact on Own Funds arising from disposals of Friends Provident International Limited and the Italian joint venture Avipop Assicurazioni S.p.A. in 2017 is £nil.

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

6 The estimated Solvency II position represents the shareholder view. It excludes the contribution to Group SCR and Group Own Funds of fully ring-fenced with-profits funds £3.3 billion (2016: £2.9 billion) and staff pension schemes in surplus £1.5 billion (2016: £1.1 billion) – these exclusions have no impact on Solvency II surplus.

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

- The Solvency II 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' which excludes the contribution of fully ring fenced with-profits funds and staff pension schemes in surplus. These adjustments have no impact on the Group's Solvency II surplus.
- Operating Capital Generation (OCG) is the Solvency II surplus movement in the period due to operating items including the impact of new business, expected investment returns on existing business, operating variances, non-economic assumption changes and non-recurring capital actions. It excludes economic variances, economic assumption changes and integration and restructuring costs which are included in non-operating capital generation. 'Underlying' OCG is the component of the OCG which excludes the effect of non-recurring capital actions and non-economic assumption changes and is therefore considered to be more representative of the long-term trend.
- The Solvency II value of new business (VNB) represents the increase in own funds arising from business written in the period, with adjustments made to i) include VNB not included in Solvency II (e.g. UK and Asia Healthcare business, retail fund management business and UK Equity Release business) ii) remove the impact of contract boundaries and iii) include a 'look through' to the value of profits arising in service companies (which would otherwise be excluded from Solvency II). 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.

Additional information relating to the component parts of these Solvency II key performance metrics is included below. The information in the following sections in respect of Solvency II is estimated and is therefore subject to change.

Solvency II position

The Solvency II position disclosed is based on a 'shareholder view'. This excludes the contribution to Group Solvency Capital Requirement (SCR) and Group Own Funds of fully ring fenced with-profits funds (£3.3 billion at 31 December 2017) and staff pension schemes in surplus (£1.5 billion at 31 December 2017). These exclusions have no impact on Solvency II surplus. The most material fully ring fenced with-profits funds and staff pension schemes are self-supporting on a Solvency II capital basis with any surplus capital above SCR not recognised in the Group position. The shareholder view is therefore 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.

The Solvency II risk margin is highly sensitive to movements in interest rates, which can be offset by a reset of the transitional measure on technical provisions ('TMT'). The 31 December 2016 Solvency II position disclosed includes a notional reset of the TMT to reflect interest rates at 31 December 2016. This presentation is in line with the Group's approach to manage its capital position assuming a dynamic TMT in respect of the impact of interest rate movements on the risk margin, as this avoids step changes to the Solvency II position that arise only when the formal TMT reset points are triggered. The estimated 31 December 2017 Solvency II position includes an estimated reset of the TMT in line with the regulatory requirement to reset the TMT every two years. This TMT has also been amortised on a straight line basis over 16 years from 1 January 2016 in line with the Solvency II rules.

The 31 December 2017 Solvency II position disclosed includes two pro forma adjustments, to reflect known or highly likely events materially affecting the Group's solvency position post 31 December 2017. The adjustments consist of the disposals of Friends Provident International Limited and the Italian joint venture Avipop Assicurazioni S.p.A. These adjustments have been made in order to show a more representative view of the Group's solvency position.

The 31 December 2016 Solvency II Own Funds position includes the pro forma impacts of £0.1 billion in relation to the disposal of Aviva's 50% shareholding in Antarius to Sogecap, which completed on 5 April 2017, and a then anticipated future change to UK tax rules restricting the tax relief that could be claimed in respect of tax losses announced in the Chancellor of the Exchequer's Autumn statement of 23 November 2016, which has been removed in 2017 following a clarification in the 13 July 2017 Finance Bill.

Summary of Solvency II position

	2017 £bn	2016 £bn
Own Funds ^{1,2,3}	24.7	24.0
Solvency Capital Requirement ^{1,2,3,4}	(12.5)	(12.7)
Estimated Solvency II Surplus at 31 December^{2,3}	12.2	11.3
Estimated Shareholder Cover Ratio^{1,2,3}	198%	189%

¹ The estimated Solvency II position represents the shareholder view. This excludes the contribution to Group Solvency Capital Requirement (SCR) and Group Own Funds of fully ring fenced with-profits funds £3.3 billion (2016: £2.9 billion) and staff pension schemes in surplus £1.5 billion (2016: £1.1 billion). These exclusions have no impact on Solvency II surplus.

² The estimated Solvency II position includes the pro forma impacts of the disposals of Friends Provident International Limited (£0.1 billion increase to surplus) and the Italian joint venture Avipop Assicurazioni S.p.A (£0.1 billion increase to surplus).

³ The 31 December 2016 Solvency II position includes the pro forma impacts of the disposal of Aviva's 50% shareholding in Antarius to Sogecap, which completed on 5 April 2017 (£0.2 billion increase to surplus) and an anticipated future change to UK tax rules restricting the tax relief that can be claimed in respect of tax losses (£0.4 billion decrease to surplus). However, under the amended tax rules published on 13 July 2017, this restriction will not be material, and as a result no corresponding pro forma impact is included in the estimated 31 December 2017 Solvency II position. The 31 December 2016 Solvency II position also includes an adverse impact of a notional reset of the transitional measure on technical provisions ('TMT') to reflect interest rates at 31 December 2016 £0.4 billion decrease to surplus.

⁴ The Solvency Capital Requirement above represents the Solvency Capital Requirement after the impact of diversification benefit.

Movement in Group Solvency II surplus

An analysis of change in respect of the overall Group solvency position, including as a result of Operating Capital Generation, is included below.

	Total 2017 £bn	Total 2016 £bn
Group Solvency II Surplus at 1 January 2017	11.3	9.7
Operating Capital Generation	2.6	3.5
Non-operating Capital Generation	(0.3)	(1.8)
Dividends	(1.1)	(1.0)
Share buy-back	(0.3)	—
Foreign exchange variances	0.1	0.6
Hybrid debt issuance/repayment	(0.5)	0.4
Acquired/divested business	0.4	(0.1)
Estimated Solvency II Surplus at 31 December 2017	12.2	11.3

The estimated Solvency II surplus at 31 December 2017 is £12.2 billion, with a shareholder cover ratio of 198%. This is an increase of £0.9 billion compared to the 31 December 2016 surplus. In 2017 the beneficial impacts of Operating Capital Generation, disposals and foreign exchange variances have been partially offset by hybrid debt repayment, share buy-back and the impact of the Aviva plc dividend. The 2017 Operating Capital Generation includes the beneficial impact of the transfer of the Friends Life business into the main UK life insurance fund. The beneficial impact from divested businesses in 2017 includes the disposal of the Spanish joint ventures Unicorn Vida and Caja Espana Vida and its retail life insurance business Aviva Vida y Pensiones. Also included are pro-forma impacts of the disposals of Friends Provident International Limited and the Italian joint venture Avipop Assicurazioni S.p.A.

Analysis of Solvency II Operating Capital Generation

An analysis of the components of Operating Capital Generation, including as a result of new business written in the period (VNB), is presented below:

	2017 £bn	2016 £bn
Adjusted Solvency II VNB (gross of tax and non-controlling interests)	1.2	0.9
Allowance for Solvency II contract boundary rules	—	—
Differences due to change in business in scope	(0.2)	(0.2)
Tax & Other ¹	(0.3)	(0.2)
Solvency II Own Funds impact of new business (net of tax and non-controlling interests)	0.7	0.5
Solvency II SCR impact of new business	(0.8)	(0.7)
Solvency II surplus impact of new business	(0.1)	(0.2)
Life earnings from existing business	1.6	2.0
Life Other OCG ²	0.9	1.8
Life Solvency II operating capital generation	2.4	3.6
GI, Health, FM & Other Solvency II OCG	0.2	(0.1)
Total Solvency II operating capital generation	2.6	3.5

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.

The Group's VNB increased by 25% to £1.2 billion (2016: £0.9 billion). This was primarily driven by growth of new business in the UK, Europe and Asia.

The UK benefitted from strong growth in volumes across all segments. However, average margins reduced reflecting lower margins on individual annuities and equity release. Following a clarification to the Solvency II rules made by the Prudential Regulation Authority (PRA) in 2017, new business written from 1 January 2016 is now reflected in the calculation of UK Life's transitional measures. This increased the adjusted Solvency II VNB (and Solvency II Own Funds impact of new business and Solvency II Surplus from life new business within OCG) mainly for annuities business by £0.1 billion gross of tax and non-controlling interests as at the end of 2017.

The increase in Europe was mainly driven by a change in business mix towards more profitable unit-linked and protection business in France and Italy and favourable foreign exchange movements, partly offset by lower volumes of with-profits business in France and sale of Antarius. Asia benefitted from higher volumes of business in Singapore and China driven by sales growth in agency and broker channels and favourable foreign exchange movements.

3. Combined operating ratio (COR)

A financial measurement 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 COR to amounts appearing in the financial statements is shown below together with an explanation of material reconciling items, where appropriate.

	2017 £m	2016 ¹ £m
Incurred claims	(5,856)	(5,536)
Commissions	(1,912)	(1,644)
Expenses	(901)	(823)
Total underwriting costs (including Ogden)	(8,669)	(8,003)
Impact of change in Ogden discount rate	—	475
Total underwriting costs (excluding Ogden)	(8,669)	(7,528)
Net earned premiums	8,976	8,000
Combined operating ratio	96.6%	94.2%

1 The combined operating ratio is now reported on an earned basis. Comparatives have been realigned to reflect this change.

An exceptional charge of £475 million was included in 2016 underwriting costs as a result of the change in the Ogden discount rate from 2.5% set in 2001 to minus 0.75% in line with the announcement made by the Lord Chancellor on 27 February 2017. This charge was excluded from this APM as it was considered that the change made was one-off in nature and did not reflect the Group's underlying performance i.e. it would distort the trend in the COR on a year-on-year basis.

The definition of COR has been changed to an earned basis. It was previously calculated on a hybrid basis: the claims ratio was on an earned basis with the incurred claims expressed as a percentage of net earned premiums; while the commission and expense ratio was on a written basis with written commissions and written expenses expressed as a percentage of net written premiums. This did not consider the impact of deferred commissions and expenses, which are included in the underwriting result. The new method is calculated as claims incurred, earned commission and earned expenses as a percentage of net earned premiums which aligns better to our underwriting result. Comparatives have been realigned for 2016 on an earned basis.

4. 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 included 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.

AUM is monitored as this reflects the potential earnings arising from investment interest and commission and measures the size and scale of the AUM business.

A reconciliation of this APM to amounts appearing in the Group's statement of financial position where possible is shown below.

	2017 £bn	2016 £bn
AUM managed on behalf of Group companies		
Assets included in statement of financial position ¹		
Financial investments	319	310
Investment properties	11	11
Loans	28	25
Cash and cash equivalents	44	39
Other	1	1
	403	386
Less: third party funds included above	(19)	(17)
	384	369
AUM managed on behalf of third parties²		
Aviva Investors	75	57
UK Platform	20	13
Other	11	11
	106	81
Total AUM	490	450

1 Includes assets classified as held for sale

2 AUM managed on behalf of third parties cannot be directly reconciled to the annual report and accounts

5. 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.

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.

A reconciliation of the component parts of this APM to amounts appearing in the financial statements is shown below.

	2017 £m	2016 £m
Equity attributable to shareholders of Aviva plc	17,169	17,003
Preference share capital	(200)	(200)
Net Asset Value	16,969	16,803
Actual number of shares in issue	4,013	4,062
Net asset value per share	423p	414p

6. 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, the direct capital instrument (DCI) and tier one note coupons divided by the weighted average number of ordinary shares in issue, after deducting treasury shares. Operating EPS is an important measure used by management to determine the dividend payout ratio target and hence a useful APM for the users of the financial statements.

A reconciliation of the components of this APM to amounts appearing in the financial statements is shown below. The components of operating and basic EPS are also detailed in note 14 – ‘Earnings per share’.

	2017 £m	2016 £m
Operating profit attributable to ordinary shareholders net of tax	2,429	2,304
Non-controlling interests	(134)	(147)
Preference dividends	(17)	(17)
Direct capital instrument and tier 1 notes ¹	(65)	(68)
Adjusted operating earnings	2,213	2,072
Weighted average number of shares (after deduction of treasury shares)	4,041	4,051
Operating EPS	54.8p	51.1p

¹ This relates to coupon payments in respect of the DCI and tier 1 notes (net of tax).

7. Operating expenses

The day-to-day expenses involved in running the business are classified as operating expenses and forms part of the disclosures within note 6 of annual report and accounts.

	2017 £m	2016 £m
Other expenses (per note 6)	3,481	3,279
Amortisation and impairment (per note 6)	(671)	(708)
Other acquisition cost (per note 6) ¹	892	846
Claims handling costs ²	330	290
Integration & restructuring costs (per note 6)	(141)	(212)
Less other costs ³	(113)	(87)
Operating expenses	3,778	3,408

¹ Other acquisition cost excluding £66 million acquisition costs relating to commission on non-participating investment contracts

² Claims handling costs includes £322 million (2016: £289 million) of claims handling expenses as included in the claims and benefits paid, net of recoveries from reinsurers and £8 million relating to the change in claims handling provision included in the change in insurance liabilities, net of reinsurance as per note 6 of the Annual report and accounts.

³ Other costs represent a reallocation of expenses to adjusting items 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 note 47 – Pension deficits and other provisions)

Operating expenses 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.

Integration & restructuring costs are also excluded as these are considered non-recurring and can be considered as strategic in nature.

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.

8. Cash remittances

Amounts paid by our operating businesses to the Group, comprise 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. Net cash remittances represent group cash remittances after deducting capital injections. This metric is used in assessing the financial performance within the Directors bonus scorecard for remuneration purposes.

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

9. 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).

Shareholder services

2018 Financial Calendar

Ordinary dividend timetable:	Final	Interim**
Ordinary ex-dividend date	5 April 2018	16 August 2018
Dividend record date	6 April 2018	17 August 2018
Last day for Dividend Reinvestment Plan and currency election	25 April 2018	3 September 2018
Dividend payment date*	17 May 2018	24 September 2018

Other key dates:

Annual General Meeting	11 am on 10 May 2018
2018 interim results announcement	2 August 2018

* Please note that the ADR local payment date will be approximately four business days after the proposed dividend date for ordinary shares.
** These dates are 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. This enables shareholders living outside of the Single European Payment Area 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 cash dividend 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 any dividend payments from Aviva.

Annual General Meeting (AGM)

The 2018 AGM will be held at The Queen Elizabeth II Centre, Broad Sanctuary, Westminster, London SW1P 3EE, on Wednesday, 10 May 2018, at 11am.

Details of each resolution to be considered at the meeting and voting instructions are provided in the Notice of AGM, which is available on the Company's website at [www.aviva.com/agm](#). The voting results of the 2018 AGM will be accessible on the Company's website at [www.aviva.com/agm](#) shortly after the meeting.

Aviva plc strategic report

The strategic report sets out a review of Aviva's business, addressing key issues such as its business model, strategy and principal risks and uncertainties facing the business. The strategic report forms part of the annual report and accounts. However, shareholders can also elect to receive Aviva's standalone strategic report as an alternative to the full annual report and accounts by contacting Computershare using the contact details opposite.

Manage your shareholding online

[www.aviva.com/shareholders:](#)

General information for shareholders.

[www.aviva.com/online:](#)

You can access Computershare online services and log in using your Computershare details to:

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

[www.aviva.co.uk/myaviva:](#)

If you have 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 login 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.

Shareholder contacts:

Ordinary and preference shares – Contact:

For any queries regarding your shareholding, please contact Computershare:

- **By Telephone:** 0371 495 0105
We are open Monday to Friday, 8.30am to 5.30pm UK time, excluding public holidays. Please call +44 117 378 8361 if calling from outside of the UK
- **By Email:** AvivaSHARES@computershare.co.uk
- **In Writing:** Computershare Investor Services PLC, The Pavilions, Bridgwater Road, Bristol, BS99 6ZZ

American Depository 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 are open Monday to Friday, 8.30am to 6pm US Eastern Standard Time, excluding public holidays. Please call +1 781 575 4555 if calling from outside of 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:

- **By Email:** Aviva.shareholders@aviva.com
- **In Writing:** Kirstine Cooper, Group Company Secretary, St Helen's, 1 Undershaft, London, EC3P 3DQ
- **By Telephone:** +44 (0)20 7283 2000

[Cautionary statements](#)

This document 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 the 'Risk and risk management' section of the strategic 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 report are current only as of the date on which such statements are made.

This report has been prepared for, and only for, the members of the Company, as a body, and no other persons. The Company, its directors, employees, agents or advisers do not accept or assume responsibility to any other person to whom this document is shown or into whose hands it may come, and any such responsibility or liability is expressly disclaimed.

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