

## A fitter, stronger Aviva poised for continued growth in UK and Europe

---

### Strong operating performance

- Total operating profit up 5% to £1,337 million (HY10: £1,270 million); up 13% excluding impact of £84 million special distribution benefit in 2010
- Operating profits in Europe up 21% to £525 million despite financial and economic difficulties in the eurozone
- Operating earnings per share increased to 29.1 pence; total earnings per share of 4.1 pence are lower primarily as a result of unrealised Delta Lloyd investment variances
- Pro forma MCEV NAV, including the impact of the sale of RAC, up 33 pence from FY10 to 575 pence per share at HY11
- Group return on equity strong at 12.8% (FY10: 14.8% on a lower equity base)
- 5% increase in interim dividend to 10 pence

---

### Beating targets

- 14% life insurance new business internal rate of return (IRR), against a target of 12%\*
- 96% group combined operating ratio (COR), against a target of 97%\*
- £0.8 billion net operational capital generation in H1 towards the £1.5 billion FY11 target; now targeting between £1.5 billion and £1.8 billion in FY11
- On track to deliver £400 million cost and efficiency savings by FY12

---

### Leaner and fitter

- Significant strategic delivery and strengthening of the balance sheet provide platform for further growth:
  - Sale of RAC at 17x earnings for £1 billion will realise significant shareholder value
  - Reduced shareholding and deconsolidation of Delta Lloyd raising £0.4 billion and further de-risking our balance sheet
  - Pro forma economic capital surplus, including the impact of the sale of the RAC, up 23% at £6.9 billion (FY10: £5.6 billion)

---

### Andrew Moss, group chief executive, commented:

"This has been a successful six months. We are beating all our operational targets. Operating profits rose in the UK and have increased by 21% in Europe despite tough economic conditions.

"After recent disposals, Aviva is fitter, stronger and well-positioned to be the undisputed leader in the UK market and to build on our strong European franchises.

"Markets may well continue to be volatile, but our strong balance sheet and capital position underpins our confidence in our continued momentum and our plans for growth."

## Key financial highlights

	6 months 2011 £m	6 months 2010 £m	Sterling % change
<b>IFRS</b>			
Long-term business	<b>1,082</b>	1,009	7 %
General insurance and health	<b>455</b>	444	2 %
Fund management	<b>42</b>	39	8 %
Other operations and regional costs	<b>(81)</b>	(65)	(25)%
Corporate centre	<b>(66)</b>	(54)	(22)%
Group debt and other interest costs	<b>(321)</b>	(327)	2 %
<b>Operating profit before tax (excluding Delta Lloyd as an associate) – continuing operations</b>	<b>1,111</b>	1,046	6 %
Share of operating profit (before tax) of Delta Lloyd, as an associate	<b>35</b>	—	n/a
<b>Operating profit before tax – continuing operations</b>	<b>1,146</b>	1,046	10 %
Operating profit before tax – discontinued operations	<b>191</b>	224	(15)%
<b>Operating profit before tax</b>	<b>1,337</b>	1,270	5 %
<b>(Loss)/ profit after tax*</b>	<b>(59)</b>	1,505	(104)%
<b>Earnings per share</b>	<b>4.1p</b>	38.8p	(89)%
<b>Operating earnings per share</b>	<b>29.1p</b>	27.4p	6 %
<b>Return on equity</b>	<b>12.8 %</b>	14.6 %	—

\*Loss after tax driven primarily by Delta Lloyd adverse investment variances of £0.8bn relating to differing movements in asset and liability yield curves used by Delta Lloyd. This is a reversal of the positive investment variances of £0.8bn seen in FY10

## Capital

	30 June 2011	30 June 2010	Sterling % Change
Net operational capital generated	<b>£0.8bn</b>	£0.9bn	(11)%
Interim dividend per share	<b>10.0p</b>	9.5p	5 %
	30 June 2011	31 December 2010	Sterling % change
IGD solvency surplus	<b>£4.0bn</b>	£3.8bn	5 %
IFRS net asset value per share	<b>425p</b>	454p	(6)%
MCEV net asset value per share	<b>554p</b>	542p	2 %
EEV equivalent net asset value per share	<b>615p</b>	621p	(1)%
Pro forma economic capital surplus**	<b>£6.9bn</b>	£5.6bn	23%

\*\*Pro forma for RAC

## Long-term business

	Long-term savings sales		IRR	
	6 months 2011 £m	6 months 2010 £m	6 months 2011 %	6 months 2010 %
<b>Continuing operations</b>				
United Kingdom	<b>5,468</b>	5,194	<b>16%</b>	15%
Aviva Europe	<b>6,289</b>	7,992	<b>14%</b>	12%
North America	<b>1,658</b>	2,334	<b>14%</b>	14%
Asia Pacific	<b>902</b>	794	<b>13%</b>	10%
<b>Total life and pensions – continuing operations</b>	<b>14,317</b>	16,314	<b>14.3%</b>	12.9%
<b>Total investment sales</b>	<b>1,830</b>	1,797		
<b>Total long-term savings sales – continuing operations</b>	<b>16,147</b>	18,111		

## General insurance and health

	Net written premiums		Operating profit		GI COR	
	6 months 2011 £m	6 months 2010 £m	6 months 2011 £m	6 months 2010 £m	6 months 2011 %	6 months 2010 %
<b>Continuing operations</b>						
United Kingdom	<b>2,510</b>	2,241	<b>261</b>	268	<b>96%</b>	98%
Aviva Europe	<b>1,123</b>	1,068	<b>80</b>	46	<b>97%</b>	102%
North America	<b>1,025</b>	996	<b>118</b>	132	<b>96%</b>	96%
Asia Pacific	<b>50</b>	32	<b>(4)</b>	(2)	<b>n/a</b>	n/a
<b>Total general insurance and health – continuing operations</b>	<b>4,708</b>	4,337	<b>455</b>	444	<b>96%</b>	97%

# Group chief executive's review

## Strong operating performance...

During the first half of 2011, we have increased total operating profits by 5% to £1,337 million. On an underlying basis, excluding last year's special distribution benefit of £84 million, total operating profits increased by 13%. Total operating profits in the UK were up 3% to £709 million; 17% on an underlying basis. Meanwhile, in Europe operating profits were up 21% to £525 million despite difficult financial and economic conditions in some European countries.

Our operating earnings per share have increased to 29.1 pence, while total earnings per share of 4.1 pence are lower primarily as a result of unrealised investment variances in Delta Lloyd of £820 million. Moving forward, the deconsolidation of Delta Lloyd significantly reduces our exposure to the volatility of earnings in this business.

We have acted to further strengthen and de-risk our balance sheet and continued to generate significant levels of capital with £0.8 billion net operational capital generated in the first half of 2011. The pro forma economic capital surplus has increased to £6.9 billion at 30 June 2011 from £5.6 billion at FY10, including the impact of the sale of the RAC.

In short, Aviva continues to make good progress. With growing profits, a strong brand and a clear strategic focus, we expect our momentum to continue through the year.

## ...beating our targets.

Our strength in both life insurance and general insurance and the actions we have taken have come through clearly in the numbers as we are beating our operational targets in both businesses.

## Profitable and sustainable growth in life...

In life insurance we have maintained a disciplined approach to volumes and product mix and achieved a healthy life new business internal rate of return (IRR) of 14%, up from 13% at HY10, exceeding our target of 12%. We have grown sales of more profitable products such as unit linked and protection and intentionally slowed sales of more capital intensive products, especially in Europe.

Our UK life business has scale in a profitable, growing market. During the first half, we achieved a strong IRR in the UK of 16% and underlying operating profits, excluding last year's special distribution, were up 22% to £462 million.

In Europe we have maintained our focus on capital efficient products and improved the IRR from 12% to 14%. As a result total life and pension sales in Europe were £6,289 million, lower than HY10 but up on H210, and operating profit increased by 11% to £473 million in HY11.

Overall, earnings growth has been driven by growing our book of business and IFRS life in-force reserves have increased to £253 billion (FY10: £246 billion).

## ...with strong franchises in our chosen markets.

Aviva is well-positioned for further profitable growth in life insurance. We have excellent franchises in our chosen markets with expected future cash flows from our in-force life book increased to £33.4 billion.

We distribute a broad range of life insurance products across a variety of channels. This provides our customers with choice and also gives our business flexibility as we adapt to market developments. In the UK, for example, the combination of Aviva's strong brand, diverse distribution and attractive product range means that we will be well-positioned relative to our peers following the introduction of the Retail Distribution Review.

## Momentum in general insurance continues...

In general insurance we have built on last year's strong performance, growing sales whilst maintaining our focus on profitability. Total general insurance and health net written premiums rose by 9% to £4,708 million.

Our general insurance performance in the UK is a particular highlight. We have built a powerful general insurance franchise and we have increased volumes in a market where rates are rising. Sales were up 14% and have now grown for six consecutive quarters. We increased personal motor sales again with customer numbers up by 670,000 over the last 18 months across our direct and broker business.

## ...with further improvements in profitability.

We have transformed our general insurance business over the last few years, taking out costs, improving the way we serve customers, and becoming more sophisticated in the pricing and selection of risks. As a result, we continued to improve the profitability of the general insurance business achieving a group combined operating ratio (COR) of 96% in the first half, beating our 2011 target of 97%.

Our underwriting expertise drove general insurance underwriting profits up by 88% from £60 million to £113 million. As a result, general insurance and health operating profits increased to £455 million, from £444 million in HY10, despite lower investment returns. Owing to our focus and disciplined underwriting, we have not incurred losses from wider global catastrophes in 2011.

In the UK, we improved the expense ratio by 1 percentage point to 10.5% and achieved a COR of 96%. In Europe, the COR improved 5 percentage points to 97%, despite lower prior year releases, largely due to better weather conditions. In Canada, our underwriting and pricing discipline helped achieve another strong half year performance with a COR of 96%.

## Capitalising on excellent distribution capability

Aviva's multi-channel distribution network continues to help to drive our profitable growth in both life and general insurance. Bancassurance is a particular strength and we are a partner of choice to many of the world's largest banks. From July this year we extended our relationship with Santander in the UK, offering life as well as general insurance products. In Europe we have become a Preferred Strategic Partner to HSBC.

## Strength of capital generation and balance sheet...

We have generated £0.8 billion of net operational capital so far this year. We will now look to generate between £1.5 billion and £1.8 billion of net operational capital by FY11, balancing the need for capital generation against the growth in value of our life business.

We have taken steps to make our strong balance sheet even stronger. The sale of a further 15% stake in Delta Lloyd reduced investment risk in our balance sheet and, together with the sale of RAC, increased the group's central liquidity. The deficit in the Group's pension schemes has been eliminated and is now marginally in surplus.

Our financial strength is reflected in the increase in Aviva's pro forma economic capital surplus, reflecting the impact of the sale of the RAC, which has grown by 23% to £6.9 billion (FY10: £5.6 billion) and in our IGD solvency which remains resilient at £4.0 billion. This leaves us well-prepared in advance of Solvency II implementation.

Aviva's MCEV net asset value (NAV) per share increased from 542 pence (FY10) to 554 pence and our IFRS NAV per share is down from 454 pence (FY10) to 425 pence. Adjusting for the sale of RAC, our pro forma IFRS NAV per share would have been 446 pence at HY11.

## ... supporting a solid and growing dividend.

Aviva's capital generation and strong balance sheet supports a solid and growing dividend and we have announced today that our interim dividend will increase by 5% to 10 pence.

## Robust risk management

We have an excellent track record of managing credit risk and, as long-term holders of assets which are carefully matched against our long-term commitments to policyholders, our balance sheet has in-built resilience. Although our financial statements reflect the market value of risk assets, our priority remains the management of assets and liabilities to maturity in the interests of both customers and shareholders. While the first six months of 2011 saw particular volatility in European sovereign debt, our exposures are in line with our risk appetite.

## Creating a stronger platform for further growth

We are now a more focused business with improved profitability, excellent capital generation, and a strengthened and de-risked balance sheet.

The success in the first half of 2011 owes much to the benefits of the management actions we have taken over the past few years. This includes the sale of our Australian life business and the IPO of Delta Lloyd.

As a result of these actions we have:

- reduced our cost base from £5.8 billion in 2008 to £4.0 billion (annualised HY11);
- improved profitability – life IRR of 14% and COR of 96% ahead of targets;
- grown the value of our in-force book (excluding Delta Lloyd) from £4.2 billion in 2008 to £6.6 billion;
- eliminated the pension deficit; and
- increased our pro forma economic capital surplus to £6.9 billion.

In the first half of this year we also sold a further 15% stake in Delta Lloyd, reducing our shareholding from 58% to 43%, raising approximately £0.4 billion and further strengthening Aviva's balance sheet. The sell down deconsolidated Delta Lloyd from Aviva's accounts and, as a result, reduced our exposure to Delta Lloyd's investment portfolio, allowing us to redeploy capital in markets where we can generate the greatest return.

We also announced the sale of the RAC to The Carlyle Group for £1.0 billion. At 17 times net earnings, the disposal will realise significant value for our shareholders and increase Aviva's tangible net assets by £1.0 billion.

Looking forward, we will continue to increase our earnings by expanding the life in-force book further, managing our cost base effectively and building on our strong performance in general insurance.

## Focused on our chosen markets

We are delivering on our commitment to focus on and grow our insurance and savings businesses in our chosen markets. In the UK and Europe we have strength and scale in two of the largest and most attractive insurance markets in the world.

In the UK we are the number one insurer in the third largest insurance market in the world. Our clear objective is to be the undisputed leader in our home market. The Aviva brand is strong and we were pleased to recently be recognised as the most reputable financial services company in the UK by the Reputation Institute. We are well-positioned to benefit from trends such as the move to auto-enrolment in work place pensions and the shift towards 'at-retirement' products as baby boomers retire. As the only large insurer offering both life insurance and general insurance we are confident that we have the product breadth, the brand, marketing and distribution strength to extend our competitive advantage even further.

Aviva is also well positioned in Europe. Savings rates remain high across Europe and have increased to 12% since 2008. Looking ahead, the 430 million strong population in the markets we serve has an increasing need to save for retirement as governments review the long-term sustainability of state pensions. Our chosen presence in Europe combines large, mature economies (France, Spain, Italy, Ireland and Poland) with emerging markets of Turkey and Russia. This allows Aviva to benefit from the varied growth rates across a number of European markets. Aviva's clear expertise in bancassurance continues to serve us well, especially in Southern Europe where this is the key route to market.

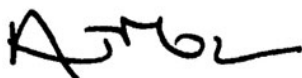
## Outlook

We are confident about Aviva's prospects and ability to deliver our financial targets while growing the business. Despite both the sell down of our stake in Delta Lloyd and the sale of RAC, we have reaffirmed our commitment to our near term targets.

In life insurance we are poised to extend our profitable growth as we benefit from our diverse product range, excellent distribution and the need for people to save more for retirement.

We expect the momentum we have built in our general insurance business to continue. We combine strong market positions with underwriting and operational excellence, giving our general insurance franchises further headroom for growth.

Challenges remain and we continue to be alert to the current economic climate. However, we take strength from the long-term nature of our business, the actions we have taken to restructure the Group and our focus on meeting customers' needs well. I am confident that we have the right platform to deliver further profitable growth.



**Andrew Moss**

Group chief executive

## Regional performance

### United Kingdom

- IFRS operating profit up 3% to £709 million (HY10: £691 million)
- Excluding impact of £84 million special distribution benefit in 2010, IFRS operating profit up 17%
- Life and pensions sales up 5% to £5,468 million (HY10: £5,194 million)
- General insurance sales up 14% to £2,222 million (HY10: £1,942 million)
- Life new business IRR improved to 16% (FY10: 15%)
- General insurance COR improved to 96% (HY10: 98%)

#### Continued strong momentum with profitable growth...

- Aviva is growing profitably in the UK with strong sales and IFRS operating profit up 3% to £709 million, with an underlying growth of 17%, excluding the impact of the £84 million special distribution benefit in 2010.
- We are building our business as more customers choose Aviva for their insurance and savings needs. Our strong brand is working well for us. General insurance sales grew for a sixth consecutive quarter and life and pensions sales also showed continued steady growth.
- We now have over two million personal motor customers, attracting an additional 670,000 new customers since the start of 2010.
- We have also further strengthened our new business franchise across the UK through new distribution agreements with HSBC, Santander and Barclays, and the full benefit of these will come on stream through the second half of this year and into 2012.

#### ...and clear delivery against strategy and targets.

- The sale of RAC reflects our focus on our insurance and savings businesses in priority markets, and will generate significant value for our shareholders.
- We are on track to meet our profitability and operational capital generation targets this year and are making good progress on our 2012 cost and efficiency target, leveraging the benefits of our composite business model.

#### Delivering strong and sustainable general insurance results

- UK GI operating profit has increased to £242 million, up 6% (HY10: £229 million).
- Sales are up 14%, with net written premiums of £2,222 million, while our COR improved two percentage points and is ahead of target at 96%, principally reflecting our focus on writing sustainably profitable business and a one percentage point improvement in the expense ratio to 10.5%.
- As our personal motor customers have increased, net written premiums are up 24% at £705 million (HY10: £569 million).
- Personal and commercial motor rating remains strong, with rate increases of 21% and 10% respectively. In our other key markets rating remains more subdued, with a 6% increase in homeowner and low single digits in commercial non-motor.

#### Broadening our general insurance franchise

- Our core strengths in underwriting, pricing and claims management give us a competitive advantage when combined with our strong brand, service and broad distribution.
- We will continue to build on this strength and explore new routes to market. We plan to grow our motor insurance business further and will shortly launch a new separately-branded internet-only offering, available on price comparison sites.
- We have also strengthened our relationship with HSBC, becoming a Preferred Strategic Partner across Europe, and will benefit from the extension of our general insurance agreement in the UK until 2016.

- The strength of our general insurance business is underpinned by our strong broker relationships. Earlier this year brokers voted us number one for underwriting and claims service across both personal and commercial lines.
- Our new Corporate and Speciality Risks team is securing high quality business and we will increase our risk preference as we further develop our underwriting expertise and capability.

#### Continued life sales growth and improved profitability

- Life IFRS operating profit was stable at £462 million (HY10: £463 million), while underlying UK Life IFRS operating profit was up 22%\*.
- Life and pensions sales were up by 5% with pensions and annuities performing strongly. Total pension sales were up 33%, with Group Personal Pensions up 82% and 290 schemes and 80,000 lives added in the first half with a strong pipeline.
- Our IRR increased to 16%, while maintaining our seven year payback and our margin also increased to 3.5%.
- This improvement in profitability has been achieved through a favourable new business mix, better capital efficiency and by growing our business while reducing our cost base.

#### A strategy for growth in life

- We are attracting over 30% of open market annuity business while also retaining 70% of our own pensions customers. We are able to achieve this through our strong brand and competitive annuity proposition, which make us the first choice for customers at retirement.
- With our broad product range and a variety of distribution channels, we are well-positioned to take an increasing share of this market.
- Corporate business will be key in our future growth as employees increasingly look to their employer for endorsement of pensions and savings products as auto-enrolment of workplace pensions begins.
- We are increasing our position in the protection market and are the provider of choice to RBS and the Post Office. Our extended partnership with Santander, offering life, critical illness and income protection products to Santander customers through 1300 branches, direct and online will further strengthen our protection sales.
- We will build on this from the summer of 2012 with an enhanced agreement with Barclays for the distribution of a range of life protection and personal accident products through the bank's non-advised sales channels, in addition to our general insurance home and travel products.

#### Outlook

- We are well-positioned to be the undisputed leader in the UK market.
- We stand to benefit from growth within the market and to capitalise on regulatory changes such as RDR and auto-enrolment, which we believe will benefit diversified players like Aviva with a strong brand and service, wide product ranges and multi-channel distribution.
- Our increased distribution strength will benefit both parts of our business as we continue to deliver value for customers and shareholders through the combined strength of our life and general insurance businesses.

\*Excluding the impact of the £84 million special distribution benefit in 2010



## Europe

- IFRS operating profit up 21% to £525 million (HY10: £434 million)
- Life and pensions sales £6,289 million (HY10: £7,992 million)
- Life new business IRR 14% (FY10: 13%)
- General insurance and health net written premiums £1,123 million (HY10: £1,068 million)
- General insurance COR 97% (HY10: 102%)

### Operating profit up 21% - driven by focus on value over volume

- We have increased IFRS operating profit by 21% as a result of actions taken to rebalance new business mix and due to the 7% growth in funds under management.
- In focusing on value generating sales Europe has improved IRR to 14% and margin to 3.7%, while improving capital efficiency.
- Life and pensions sales have decreased by 21% while our focus on value generating sales has increased the proportion of unit-linked and protection sales from 25% to 31%.
- General insurance and health net written premiums are up by 5% to £1,123 million as a result of rate increases and the continued success of our health business in Ireland.
- We have also improved our COR to 97% (HY10: 102%), following benign weather this year, despite lower reserve releases.

### Excelling in life and general insurance combined with strength in multi-distribution

- We benefit from our strong multi-channel distribution strategy and have more than 50 bancassurance agreements across the region, where this is the primary route to market.
- We operate a single retail model with 8,000 tied agents and 5,000 independent agents.

### Strong franchises

- We are focused on our five key markets of France, Ireland, Italy, Poland and Spain plus the two growth markets of Russia and Turkey, with their combined populations of over 430 million.
- We continue to drive sales of value generating products through disciplined capital management.
- Savings rates remain high across Europe and have increased from 11% to 12% since 2008<sup>1</sup>.

### France

- Our management actions to focus on value generation and a general decline in the market resulted in a 17% decrease in sales.
- Unit-linked sales rose by 5% driven by the promotional activities conducted in partnership with Credit du Nord.
- Management action has increased the capital efficiency of our with-profits portfolio and provided greater asset management flexibility.
- New business profitability improved with IRR and margin up to 11% (HY10: 9%) and 4.1% (HY10: 3.6%) respectively.
- General insurance and health net written premiums increased by 4% to £584 million as a result of achieving rating increases of 4% in motor and 7.5% in property.

### Italy

- We have increased capital efficiency to 4.7% (HY10: 5.2%) and IRR to 12% (HY10: 10%), while reducing sales by 42% in line with our decreased appetite for with-profits products.
- We have refocused our sales mix towards protection products, and are now a market leader having increased these sales by 12%.
- General insurance net written premiums increased by 13%, driven by rating increases of 12% on the motor book.

### Spain

- Our franchise is resilient with improved product cross sell during the economic turbulence.
- Despite a 31% reduction in mortgage activity<sup>2</sup>, sales through our 4,000+ branches are down only 4% to £1,015 million with IRR increasing to 23%.
- We are supporting our caja partners as they undergo structural reform. Our aim remains to protect our bancassurance franchise, maintaining our current distribution footprint.

### Ireland

- Despite the challenging economic conditions in Ireland, life and pensions sales have increased by 16% following continued opportunistic sales of single premium investment bonds.
- General insurance and health net written premiums in Ireland also increased by 5% due to strong sales in health and average rating increases of 5% on the motor book and 4% on the commercial book, which have been offset by continued high competition in the motor sector.

### Poland

- We are leveraging our strong brand in Poland, having been voted a "PremiumBrand"<sup>3</sup> for the second year in a row.
- Sales of unit-linked and protection have increased by 38% and 157% respectively, following changes to the way we incentivise the sales force.
- Sales of non-pensions sales are now 77% of our total sales compared to 44% at HY10 leading to a higher margin of 6.6% (HY10: 6.3%).
- In Poland we were voted the best life insurer in 2010 by Rzeczpospolita<sup>4</sup> and are now one of the top five life insurers in the market.
- General insurance net written premiums increased by 36% as a result of the active management of our distribution network and average rating increases of 6%.

### Turkey and Russia

- The opportunity in Turkey and Russia is significant with the population in these markets equal to that in our five other focus markets.
- Turkey and Russia are growth markets and both have delivered increased life and pensions sales this half year, with Turkey increasing by 32% to £124 million and Russia increasing by 34% to £47 million.

### Outlook

- Europe's share of the world insurance markets has grown from 32% to 40% in the past 10 years<sup>5</sup> demonstrating the clear attraction of operating in this region.
- We believe that in the short term the macroeconomic environment will remain challenging while uncertainty remains around the eurozone. However, we will continue to grow profits as we optimise our in-force book and costs.

<sup>1</sup> Source: Eurostat based on household savings as a proportion of household disposable income

<sup>2</sup> According to the Instituto Nacional de Estadística (INE) based on 31% decreased in mortgage approvals by value from the first six months of 2010 to the six months to May 2011

<sup>3</sup> As voted by research institute Millward Brown SMG/KRC

<sup>4</sup> A leading newspaper in Poland

<sup>5</sup> Sigma, WestLB Research

## North America

- IFRS operating profit £219 million (HY10: £209 million)
- Life and pension sales £1,658 million (HY10: £2,334 million)
- IRR 14% (FY10: 14%)
- General insurance COR 96% (HY10: 96%)

### Focus on profitable organic growth and efficient use of capital

- IFRS operating profit grew 5% to £219 million (HY10: £209 million) as a result of our actions on pricing and underwriting management and cost discipline:
  - In **life insurance**, operating profits increased 27% due to growth in the business and disciplined pricing.
  - In **general insurance**, underwriting profits increased offset by lower long term investment returns.
- We remain on track to meet the ambitious cost and efficiency savings of £60 million announced late last year.
- Our focus on profitable growth combined with a highly competitive marketplace in the first half of the year meant that life and pension sales were 29% lower at £1,658 million (HY10: £2,334 million).

### US: strong profit reflects pricing discipline and customer focus

- Our strategy of generating profitable growth and writing business at attractive rates of return resulted in another period of strong profits, with a 14% IRR (HY10: 14%) and an operating profit of £109 million (HY10: £86 million).
- We have focused on improving features and re-pricing life and annuity products to balance our competitive position, pricing discipline and customer needs. In May, we also launched the Aviva brand nationally in the US to build consumer recognition of the Aviva name and the life and annuity products we offer.
- Total life and annuity sales declined 29% to £1,658 million (HY10: £2,334 million), primarily in our annuity market, where we maintained our discipline in a highly competitive indexed annuity market – annuity sales were consequently 34% lower at £1,202 million (HY10: £1,829 million).
- Despite a 10% decline in total life sales to £456 million (HY10: £505 million), we maintained our focus on product diversification and broadened distribution in an extremely competitive market. Life sales now account for 28% of our business (HY10: 22%).

### Canada: profitable growth despite higher catastrophe claims

- Net written premiums increased in the first half to £1,025 million (HY10: £996 million) due to growth in motor insurance and price increases in our property insurance business, offset by lower premiums written in our liability insurance business.
- Operating profit decreased 11% to £118 million (HY10: £132 million), primarily as a result of lower new money yields in our investment portfolio that more than offset higher underwriting profits.
- Cost saving benefits from the actions we announced in 4Q10 ensured underwriting performance improved over the prior year despite higher weather experience in our property insurance business. Our combined operating ratio was unchanged at 96% (HY10: 96%).
- In May, wildfires destroyed the town of Slave Lake, an event recognized as the second costliest disaster in Canadian history. Aviva's catastrophe claim team was the first on the ground to help customers in their time of need.

### Outlook

- We expect continued momentum across the region as we maintain our focus on profitable growth and strong underwriting performance through our clear strategy of pricing and underwriting discipline.

## Asia Pacific

- IFRS operating profit £17 million (HY10: £14 million)
- Life and pension sales £902 million (HY10: £794 million)
- Life new business IRR 13% (FY10: 11%)

### Growth in franchise value

- We have continued to deliver a strong performance with increased sales, margin and IRR, supported by management actions to improve profitability and capital efficiency.
- Our franchise value growth is underpinned by a strong multi-channel distribution strategy and bancassurance partnerships.

### Operating profit up 21%

- IFRS operating profit has improved to £17 million from £14 million at HY10.
- The prior year result included a one off benefit from a new GAAP reporting basis in China and, on an underlying basis, profits increased strongly, driven by increased scale and profit emergence from existing business.

### Improved profitability and increasing sales

- Growth was further supported by an improvement in new business IRR to 13% (FY10: 11%), while new business margin increased significantly to 3.8% (HY10: 2.3%). Our payback period remains at 12 years.
- Overall, the region delivered 17% growth in long term savings sales to £1,180 million (HY10: £1,011 million). Life and pensions sales grew by 14% to £902 million (HY10: £794 million) and investment sales increased to £278 million (HY10: £217 million).

### China: fall in volumes reflected across the industry

- Across the industry, sales growth has been adversely impacted by the changing distribution landscape brought about by regulatory changes. In line with this, life and pension sales decreased by 12% to £207 million (HY10: £235 million).
- Despite the challenging environment, profitability improved and we increased new business margin.
- We will continue to expand into more provinces and deepen our bank partnerships, while focusing on sales of long-term retirement products.

### India: significant improvements in margin and profitability

- Our diversified product mix, ongoing cost management, the balancing of Unit Linked Insurance Plans and higher-margin traditional products countered regulatory challenges and resulted in significant improvements to margins and profitability.
- While the sector shrank 31% due to last year's regulatory changes, Aviva outperformed its peers and marginally increased market share.
- Sales decreased 14% to £50 million (HY10: £58 million).

### Regional strength

- Singapore led the region's growth with a 71% increase in life and pension sales to £244 million (HY10: £143 million). This represented a 101% rise against the previous quarter, driven by robust bancassurance sales and the momentum of our 'Aviva Advisors' channel.
- South Korea also delivered a strong performance with 20% growth to £242 million (HY10: £201 million) supported by fast-growing bancassurance and agency channels.
- Elsewhere in the region, we continued to focus on growing our franchise value by strengthening our multi-channel distribution capability, improving product innovation as well as managing our overall product portfolio.

### Outlook

- We remain positive about the long term outlook for the region and are focused on delivering profitable products and building our multi-channel distribution capability.



## Aviva Investors

- IFRS operating profit £41 million (HY10: £42 million)
- Net external sales (excluding liquidity funds) up 212% year-on-year at £2.5 billion (HY10: £0.8 billion)
- 75% of institutional funds performed above benchmark, where a benchmark is specified (HY10: 70%)

### A strong first half

- We have delivered good investment performance with continuing improvements in client service.
- We have made strong progress towards our objective of delivering growth in external assets under management with net sales substantially ahead of HY10.
- Assets under management were £269 billion at HY11, an increase of nearly 9% on the HY10 figure of £248 billion.
- The small decrease in operating profit was a result of focused investment to substantially improve our global operational capabilities.

### Good growth in external sales...

- Net external sales (excluding liquidity funds) in the first half of the year were £2.5 billion, greater than the £2.4 billion achieved in the whole of 2010 and up 212% against £0.8 billion for HY10.
- Increase in revenues from external sources from 34% in HY10 to 35% in HY11.

### ... and strong investment performance.

- 75% of institutional funds were performing above benchmark as at 30 June 2011 (where a benchmark is specified), against 73% at the end of 2010.

### Significant new business wins

- Investment performance and further improvements to our global distribution capabilities have helped us to secure a number of notable new external mandate wins, including:
  - A US\$500 million mandate in May for River Road Asset Management, our US equities manager, won through our Middle East sales team - the most significant 'cross border' sale by River Road since its acquisition in February 2010
  - Continuing strong demand for our Guaranteed Managed Solutions product in the United States with total assets under management reaching US\$2.36 billion by end June – just a year after the product was launched.
  - Further growth in Real Estate Multi Manager assets with new funded and committed mandates totalling more than €1 billion from clients in the Netherlands including SPMS and Philips.

### Outlook

- We are seeing increasing traction in our business model and are positive about our prospects.
- We will continue to leverage our global distribution capabilities, operational scale and strong investment performance to deliver further growth in external sales in the second half of 2011.

## Delta Lloyd

- Delta Lloyd operating profits have improved on a like-for-like basis to £272 million (HY10: £224 million) driven in part by the benefits of the cost saving programme.
- Life operating profit increased to £185 million for the first four months of 2011 compared with £119 million for the six months ended 30 June 2010.
- General insurance operating profit for the first four months of 2011 was £1 million compared with £81 million for the six months ended 30 June 2010. This is due to an increase in claims experience, particularly in respect of fire and income protection insurance.
- From the start of 2011 to the partial disposal of Delta Lloyd on 6 May 2011, the AAA collateralised bond spread narrowed by about 80bps as a result of changes in the underlying bond index. This movement was the main driver of the negative variance of £820 million seen in the first four months of 2011, largely reversing the positive variance reported in the prior year.

## Notes to editors

### Notes to editors

Aviva is a leading provider of life and pension products in Europe (including the UK) with substantial positions in other markets around the world, making it the world's sixth largest insurance group based on gross worldwide premiums at 31 December 2010.

Aviva's principal business activities are long-term savings, fund management and general insurance, with worldwide total sales\* of £47.1 billion and funds under management of £402 billion at 31 December 2010.

*\*Based on 2010 published life and pensions PVNBP on an MCEV basis, total investment sales and general insurance and health net written premiums, including share of associates' premiums.*

The Aviva media centre at [www.aviva.com/media](http://www.aviva.com/media) includes images, company and product information and a news release archive. Follow us on twitter @avivapl.

All figures have been translated at average exchange rates applying for the period. The average rates employed in this announcement are 1 euro = £0.87 (6 months to 30 June 2010: 1 euro = £0.87) and US\$1 = £0.62 (6 months to 30 June 2010: US\$1 = £0.65).

Income statements and cash flows of foreign entities are translated at average exchange rates while their balance sheets are translated at the closing exchange rates on 30 June 2011.

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

#### **Definition: Present value of new business premiums (PVNBP)**

PVNBP is derived from the single and regular premiums of the products sold during the financial period and are expressed at the point of sale. The PVNBP calculation is equal to total single premium sales received in the period plus the discounted value of regular premiums expected to be received over the term of the new contracts. The discount rate used reflects the appropriate risk-free rate for the country and duration of business. The projection assumptions used to calculate PVNBP for each product are the same as those used to calculate new business contribution. The discounted value of regular premiums is also expressed as annualised regular premiums multiplied by a Weighted Average Capitalisation Factor (WACF). The WACF will vary over time depending on the mix of new products sold, the average outstanding term of the new contracts and the projection assumptions.

#### **Cautionary statements:**

This should be read in conjunction with the documents filed by Aviva plc (the "Company" or "Aviva") with the United States Securities and Exchange Commission ("SEC").

This announcement contains, and we may make verbal statements containing, "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", "plans", "seeks", "aims", "may", "could", "outlook", "estimates" 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 these factors

include, but are not limited to: the impact of difficult conditions in the global capital markets and the economy generally; the impact of new government initiatives related to the financial crisis; defaults in our bond, mortgage and structured credit portfolios; the impact of volatility in the equity, capital and credit markets on our profitability and ability to access capital and credit; changes in general economic conditions, including foreign currency exchange rates, interest rates and other factors that could affect our profitability; risks associated with arrangements with third parties, including joint ventures; inability of reinsurers to meet obligations or unavailability of reinsurance coverage; a decline in our ratings with Standard & Poor's, Moody's, Fitch and A.M. Best; increased competition in the U.K. and in other countries where we have significant operations; changes in 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; changes in local political, regulatory and economic conditions, business risks and challenges which may impact demand for our products, our investment portfolio and credit quality of counterparties; the impact of actual experience differing from estimates on amortisation of deferred acquisition costs and acquired value of in-force business; 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 various legal proceedings and regulatory investigations; the impact of operational risks; the loss of key personnel; the impact of catastrophic events on our results; changes in government regulations or tax laws in jurisdictions where we conduct business; funding risks associated with our pension schemes; the effect of undisclosed liabilities, integration issues and other risks associated with our acquisitions; and the timing impact and other uncertainties relating to acquisitions and disposals and relating to other future acquisitions, combinations or disposals within relevant industries.

For a more detailed description of these risks, uncertainties and other factors, please see Item 3, "Risk Factors", and Item 5, "Operating and Financial Review and Prospects" in Aviva's Annual Report on Form 20-F as filed with the SEC on 24 March 2011. 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 announcement are current only as of the date on which such statements are made.

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

# Contacts

Investor contacts	Media contacts	Timings	Contents	
Andrew Moss +44 (0)20 7662 2286	Nigel Prideaux +44 (0)20 7662 0215	Media conference call 0730 hrs BST	Overview	1
Pat Regan +44 (0)20 7662 2228	Sue Winston +44 (0)20 7662 8221	Analyst presentation 0830 hrs BST	<b>Financial supplements</b>	
Charles Barrows +44 (0)20 7662 8115	Andrew Reid +44 (0)20 7662 3131	Presentation slides available at <a href="http://www.aviva.com">www.aviva.com</a> from 0830 hrs BST	IFRS	33
Jonathan Price/Jane Gillis +44 (0)20 7662 2111/8048		Live webcast <a href="http://www.aviva.com">www.aviva.com</a>	New business	71
			Capital	77
			Analysis of Assets	93
			MCEV	107
			Glossary	148
			Shareholder services	153

**This page is intentionally left blank**

# Overview

## Key financial highlights

Page

Key financial highlights

02

## Group performance – IFRS basis

Pro forma reconciliation of Group operating profit to profit after tax – IFRS basis	07
1 Long-term business IFRS operating profit	09
2 Long-term business IFRS profit driver analysis	10
3 General insurance and health	11
4 Fund management	15
5 Other operations and regional costs	16
6 Corporate centre	16
7 Group debt costs and other interest	16
8 Investment return variances and economic assumption changes on long-term business	17
9 Short-term fluctuation in return on investments on general insurance and health business	18
10 Economic assumption changes on general insurance and health business	19
11 Loss on the disposal of subsidiaries and associates	19
12 Integration and restructuring costs	19
13 Exceptional items	19
14 Net flows	19

## New business

15 Life and pension sales	20
16 Investment sales	22

## Capital management

17 Capital generation and utilisation	23
18 Internal rate of return and payback period	23
19 Net asset value	24
20 Financial flexibility	24
21 European Insurance Groups Directive (IGD)	25
22 Sensitivity analysis	25
23 Risk management	26
24 Return on capital employed	27
25 EEV equivalent embedded value	28

## Analysis of assets

26 Total assets	29
27 Shareholders' assets	31

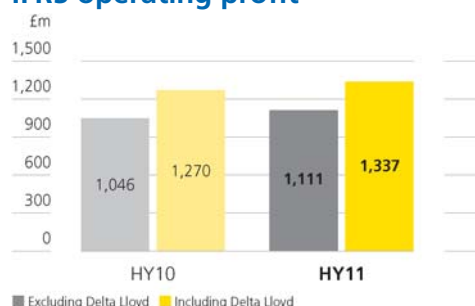
## Financial supplement

A IFRS	33
B New business	71
C Capital management	77
D Analysis of assets	93
E MCEV	107

# Key financial highlights

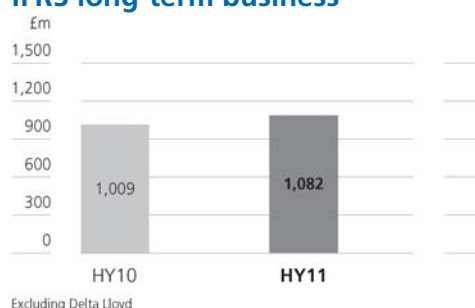
## Delivery of strong operating profit

### IFRS operating profit



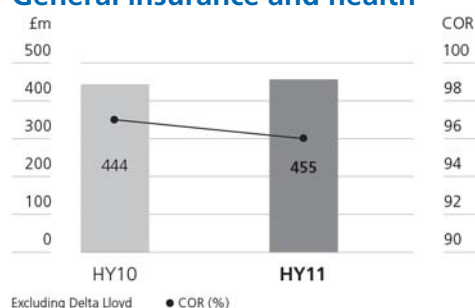
- IFRS operating profit increased to £1,337 million (HY10: £1,270 million), an increase of 5% driven in particular by strong growth in Europe.
- This number is impacted by the partial disposal of Delta Lloyd on 6 May 2011 which means that the Group operating profit includes 100% of Delta Lloyd's operating profit up to the date of transaction and only a 43% share thereafter.
- IFRS operating profit excluding Delta Lloyd increased to £1,111 million (HY10: £1,046 million), an increase of 6%.
- The IFRS loss after tax was £59 million (HY10: £1,505 million profit) driven primarily by adverse investment variances in Delta Lloyd of £0.8 billion relating to differing movements in asset and liability yield curves used by Delta Lloyd. This is a reversal of the positive investment variances of £0.8 billion seen in FY10. Moving forward, deconsolidation significantly reduces exposure to the volatility of earnings in this business.

### IFRS long-term business



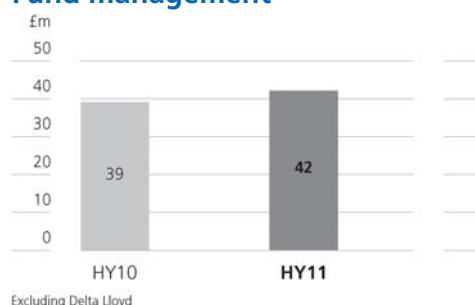
- Long-term business operating profit, excluding Delta Lloyd, increased 7% to £1,082 million (HY10: £1,009 million) driven primarily by Europe where there have been increased operating returns in participating business together with reduced new business strain. In the UK, results are in line with HY10, which benefitted from a special distribution of £84 million.
- On an underlying basis, excluding the impact of the special distribution in the UK in H1 2010, the long term business operating profit (excluding Delta Lloyd) increased by 17%.
- IFRS new business income improved marginally to £471 million (HY10: £467 million) with increased margins offsetting the impact of lower volumes.
- Investment returns excluding the special distribution increased 5% to £1,319 million (HY10: £1,254 million).

### General insurance and health



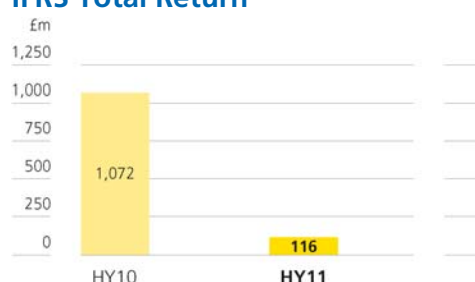
- General insurance and health operating profit decreased to £456 million (HY10: £525 million).
- Excluding Delta Lloyd, general insurance and health operating profit increased to £455 million (HY10: £444 million). Strong underwriting performance has been offset by lower LTIR income.
- The underwriting result increased to £119 million (HY10: £61 million), due to improving current year profitability in the UK and benign weather in Europe. In addition, HY10 included adverse weather particularly in Europe.
- The combined operating ratio improved to 96% (HY10: 97%).
- Net written premiums increased to £4,708 million (HY10: £4,337 million), with the growth primarily in the UK.

### Fund management



- Operating profit decreased to £53 million (HY10: £56 million). Excluding Delta Lloyd, operating profit increased to £42 million (HY10: £39 million).
- Total funds under management are £352 billion (FY10: £402 billion). Excluding Delta Lloyd, total funds under management have increased from £340 billion at the end of 2010 to £352 billion.

### IFRS Total Return



- Total return was £116 million (HY10: £1,072 million). Excluding discontinued operations (Delta Lloyd), total return was £434 million (HY10: £642 million). Included in this amount are adverse investment variances of £51 million (HY10: £129 million favourable).
- Delta Lloyd total return for the period was a loss of £318 million. This includes a loss of around £360 million (net of tax and non-controlling interest) that relates to a reversal of the positive investment variances seen in 2010.
- The key drivers of the movement compared with the prior year are the reversal of the positive investment variance seen in Delta Lloyd in FY10 and adverse investment variances in Aviva Europe, particularly in Italy and Ireland.
- The effective tax rate for the period was 13% (HY10: 27%).

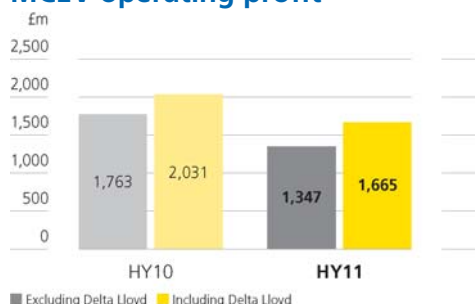


## Return on equity



- IFRS ROE is 12.8% (FY10: 14.8%). The main driver of the change is the 24% growth in the capital base over 2010 driven by profits in the period and the reduction in the staff pension scheme deficit.

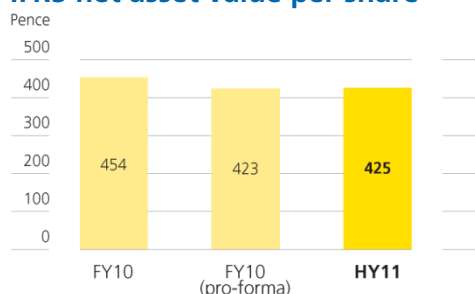
## MCEV operating profit



- MCEV operating profit decreased by 18% to £1,665 million (HY10: £2,031 million).
- Within this, Life MCEV operating earnings, excluding Delta Lloyd, were £1,350 million (HY10: £1,761 million), a decrease of 23%.
- The value of new business (VNB) excluding Delta Lloyd reduced to £369 million from £483 million (HY10), around half of this is driven by reduced volumes with the balance arising from reduced margins in the US (which have been affected by adverse movements in risk free rates).
- In addition, HY10 benefitted from positive reserve releases arising from modelling changes in France and positive experience variances which have not been repeated in HY11.
- MCEV profit after tax increased to £843 million (HY10: £830 million).

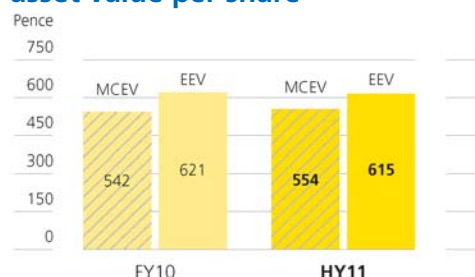
## Group performance

### IFRS net asset value per share



- IFRS net asset value (NAV) is 425 pence (FY10: 454 pence). This is an increase compared with the NAV on a pro-forma basis as at 31 December 2010 of 423 pence following the partial disposal of Delta Lloyd.
- Profits for the period and positive foreign exchange movements have been partially offset by payment of the final dividend and adverse investment market movements.

### MCEV and EEV equivalent net asset value per share



- The MCEV NAV has increased to 554 pence (FY10: 542 pence). This change is driven by profits for the period and positive foreign exchange movements offset by the partial disposal of Delta Lloyd and payment of the final dividend.
- The EEV equivalent NAV was 615 pence at 30 June 2011 (FY10: 621 pence). The main driver of this reduction is the partial disposal and consequent change in the classification of the Delta Lloyd life business to non-covered business.

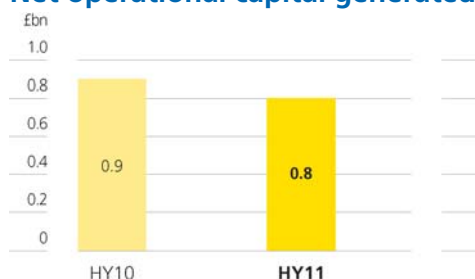
### IGD Solvency



- IGD solvency surplus at 30 June 2011 is £4.0 billion (FY10: £3.8 billion).
- A 20% fall in equities would reduce IGD surplus by £0.4 billion.
- At 30 June 2011 IGD cover is 1.6 times (FY10: 1.6 times).

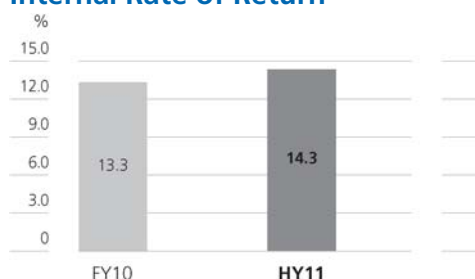
## Capital discipline

### Net operational capital generated



- Net Operational Capital Generated (OCG) is £0.8 billion (*HY10: £0.9 billion*). Capital generated from existing business was £1.3 billion (*HY10: £1.4 billion*) offset by capital investment in new business of £0.5 billion.
- Within the £0.5 billion of capital investment in new business (*HY10: £0.5 billion*), the life component has reduced by £0.2 billion compared with HY10 driven by improved efficiency of new business and some reduction in new business volumes. The capital investment in non-life business in the period is broadly neutral compared with the release of £0.2 billion in HY10.
- HY10 OCG benefitted from the special distribution from the UK with-profits funds, an AXXX reinsurance transaction in the US and a positive release of capital resource requirements in the UK general insurance business.

### Internal Rate of Return

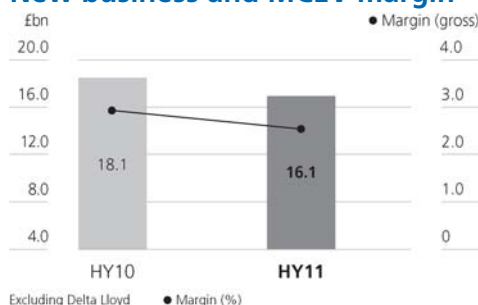


Excluding Delta Lloyd

- Overall group IRR excluding Delta Lloyd increased to 14.3% from 13.3% for FY10. Compared with 2010 there have been increases in UK, Europe and Asia Pacific with US IRR maintained in line with 2010.
- Payback periods have improved overall from 7 years in 2010 to 6 years for HY11.

## Growing VIF

### New business and MCEV margin



Excluding Delta Lloyd

- Worldwide long term savings sales (including investment products), excluding Delta Lloyd, were £16.1 billion (*HY10: £18.1 billion*), a reduction of 11%, with increases in the UK and Asia Pacific offset by reductions in Europe and North America. On a local currency basis, sales decreased by 10%.
- The reduction in long-term savings sales seen in H1 2011, is primarily driven by Italy and the US where we have taken management actions to improve profitability and capital consumption.
- Within this, total life and pensions sales were £14.3 billion (*HY10: £16.3 billion*), a decrease of 12%.
- New business margin excluding Delta Lloyd is 2.6% (*HY10: 3.0%*) with improvements in the UK, Europe and Asia Pacific offsetting a decrease in the US.
- MCEV VIF has increased to £6.6 billion (*FY10: £6.1 billion*).
- The expected future cash flows from our in-force life book increased to £33.4 billion (*FY10: £31.5 billion*) excluding Delta Lloyd.

## Other

### Underlying costs

- Total expenses, excluding Delta Lloyd, have increased by 1% from £1,952 million to £1,978 million in HY11. On a like-for-like basis (excluding the impact of foreign exchange, restructuring and acquisitions and disposals) costs increased by 1% with the impact of inflation broadly offset by cost savings.

### Interim dividend of 10.0 pence

- Interim dividend of 10.0 pence is an increase of 5%.

### Impact of foreign exchange

- Total foreign currency movements during 2011 resulted in a gain recognised in profit before tax of £61 million (*HY10: £22 million loss*).

### Funds under management

- Total funds under management excluding Delta Lloyd grew to £352 billion (*FY10: £340 billion*).
- Funds managed by Aviva Investors increased 4% to £269 billion (*FY10: £260 billion*).

### Liquidity

- Strong liquidity position with direct access to £1.8 billion of liquid assets (*FY10: £1.5 billion*).
- £2.1 billion of undrawn committed credit facilities provided by a range of leading international banks.
- The further sale of Delta Lloyd shares in May 2011, together with a new hybrid debt issuance resulted in centre liquidity being enhanced by £0.8 billion.

### Group's rating from Standards and Poors is AA- ("very strong")

- The group's rating from Standard and Poors is AA- ("very strong") with a Stable outlook; Aa3 ("excellent") with a Stable outlook from Moody's; and A ("excellent") with a Stable outlook from A M Best.
- The Group's financial strength ratings continue to reflect our strong competitive position, diversified underlying earnings profile, positive strategic management and substantial liquid assets.

### Asset quality

- The asset portfolio remains of high quality.
- Our exposure to European sovereign debt remains within our risk appetite. As these assets are fully marked to market both the balance sheet and income statement fully reflect the market positions at 30 June 2011.
- Excluding Delta Lloyd and net of non-controlling interests, our exposure within shareholder funds to the governments (and local authorities and agencies) of Greece, Ireland, Portugal and Spain has reduced from £0.7 billion to £0.5 billion.
- Our equivalent exposure to the government (and local authorities and agencies) of Italy is £0.9 billion within shareholders funds.

### Risk profile

- The types of risk to which the Group is exposed have not changed significantly over the half-year to 30 June 2011.
- However, the reduction of the shareholding in Delta Lloyd has decreased the Group's IFRS balance sheet risks and, in particular, has led to a substantial fall in equity and mortgage risk exposures.

### Pension schemes

- At the end of the first half of 2011, there is a small overall net surplus in the pension schemes, following the actions taken to achieve a significant reduction in the scheme deficits during 2010.

## Key financial highlights

	6 months 2011 £m			6 months 2010 £m			Total Change %
	Continuing Operations	Discontinued Operations	Total	Continuing Operations	Discontinued Operations	Total	
<b>IFRS</b>							
Long-term business	1,082	185	1,267	1,009	119	1,128	12%
General insurance and health	455	1	456	444	81	525	(13%)
Fund management	42	11	53	39	17	56	(5%)
Other operations and regional costs	(81)	(2)	(83)	(65)	18	(47)	(77%)
Corporate centre	(66)	—	(66)	(54)	—	(54)	(22%)
Group debt and other interest costs	(321)	(4)	(325)	(327)	(11)	(338)	4%
<b>Operating profit before tax (excluding Delta Lloyd as an associate)</b>	<b>1,111</b>	<b>191</b>	<b>1,302</b>	<b>1,046</b>	<b>224</b>	<b>1,270</b>	<b>3%</b>
Share of operating profit (before tax) of Delta Lloyd, as an associate	35	—	35	—	—	—	—
<b>Operating profit before tax</b>	<b>1,146</b>	<b>191</b>	<b>1,337</b>	<b>1,046</b>	<b>224</b>	<b>1,270</b>	<b>5%</b>
<b>(Loss) / profit after tax</b>	<b>465</b>	<b>(524)</b>	<b>(59)</b>	<b>734</b>	<b>771</b>	<b>1,505</b>	
IFRS total return	434	(318)	116	642	430	1,072	
Net operational capital generated			0.8bn			0.9bn	
IRR	14.3%			12.9%			
Combined operating ratio	96%			97%			
Earnings per share	15.4p	(11.3)p	4.1p	23.1p	15.7p	38.8p	
Operating profit per share	25.8p	3.3p	29.1p	24.2p	3.2p	27.4p	
Interim dividend per share			10.0p			9.5p	
Net asset value per share			425p			394p	
Equity shareholders' funds			12,171			11,051	
Return on equity shareholders' funds			12.8%			14.6%	

	6 months 2011 £m			Restated 6 months 2010 £m			Total Change %
	Continuing Operations	Discontinued Operations	Total	Continuing Operations	Discontinued Operations	Total	
<b>MCEV</b>							
MCEV earnings	1,350	270	1,620	1,761	157	1,918	(16%)
General insurance and health	455	1	456	444	81	525	(13%)
Fund management	9	9	18	—	13	13	38%
Other operations and regional costs	(80)	7	(73)	(61)	28	(33)	(121%)
Corporate centre	(66)	—	(66)	(54)	—	(54)	(22%)
Group debt and other interest costs	(321)	(4)	(325)	(327)	(11)	(338)	4%
<b>Operating profit before tax (excluding Delta Lloyd as an associate)</b>	<b>1,347</b>	<b>283</b>	<b>1,630</b>	<b>1,763</b>	<b>268</b>	<b>2,031</b>	<b>(20%)</b>
Share of operating profit (before tax) of Delta Lloyd, as an associate	35	—	35	—	—	—	—
<b>Operating profit before tax</b>	<b>1,382</b>	<b>283</b>	<b>1,665</b>	<b>1,763</b>	<b>268</b>	<b>2,031</b>	<b>(18%)</b>
<b>Profit / (loss) after tax</b>	<b>758</b>	<b>85</b>	<b>843</b>	<b>1,093</b>	<b>(263)</b>	<b>830</b>	
MCEV new business margin	2.6%			3.0%			
Long-term savings sales	16,147	1,255	17,402	18,111	2,127	20,238	
Earnings per share	26.3p	4.0p	30.3p	33.3p	(6.2)p	27.1p	
Net asset value per share			554p			462p	
EEV equivalent NAV			615p			546p	
Equity shareholders' funds			15,861			12,940	
Return on equity shareholders' funds			11.5%			17.5%	

## Group performance – IFRS basis

## Pro forma reconciliation of Group operating profit to profit after tax – IFRS basis

For the six month period ended 30 June 2011

	6 months 2011 £m			6 months 2010 £m			Full year 2010 £m		
	Continuing Operations	Discontinued Operations	Total	Continuing Operations	Discontinued Operations	Total	Continuing Operations	Discontinued Operations	Total
<b>Operating profit before tax attributable to shareholders' profits</b>									
<b>Long-term business</b>									
United Kingdom	462	—	462	463	—	463	850	—	850
Europe	473	185	658	425	119	544	893	330	1,223
North America	109	—	109	86	—	86	174	—	174
Asia Pacific	38	—	38	35	—	35	71	—	71
<b>Total long-term business (note 1)</b>	<b>1,082</b>	<b>185</b>	<b>1,267</b>	<b>1,009</b>	<b>119</b>	<b>1,128</b>	<b>1,988</b>	<b>330</b>	<b>2,318</b>
<b>General insurance and health</b>									
United Kingdom	261	—	261	268	—	268	579	—	579
Europe	80	1	81	46	81	127	109	146	255
North America	118	—	118	132	—	132	222	—	222
Asia Pacific	(4)	—	(4)	(2)	—	(2)	(6)	—	(6)
<b>Total general insurance and health (note 3)</b>	<b>455</b>	<b>1</b>	<b>456</b>	<b>444</b>	<b>81</b>	<b>525</b>	<b>904</b>	<b>146</b>	<b>1,050</b>
<b>Fund management</b>									
Aviva Investors	39	—	39	42	—	42	97	—	97
United Kingdom	3	—	3	(2)	—	(2)	3	—	3
Europe	—	11	11	—	17	17	—	103	103
Asia Pacific	—	—	—	(1)	—	(1)	(2)	—	(2)
<b>Total fund management (note 4)</b>	<b>42</b>	<b>11</b>	<b>53</b>	<b>39</b>	<b>17</b>	<b>56</b>	<b>98</b>	<b>103</b>	<b>201</b>
<b>Other:</b>									
Other operations and regional costs (note 5)	(81)	(2)	(83)	(65)	18	(47)	(177)	(43)	(220)
<b>Regional operating profit</b>	<b>1,498</b>	<b>195</b>	<b>1,693</b>	<b>1,427</b>	<b>235</b>	<b>1,662</b>	<b>2,813</b>	<b>536</b>	<b>3,349</b>
Corporate centre (note 6)	(66)	—	(66)	(54)	—	(54)	(143)	—	(143)
Group debt costs and other interest (note 7)	(321)	(4)	(325)	(327)	(11)	(338)	(644)	(12)	(656)
<b>Operating profit before tax attributable to shareholders' profits (excluding Delta Lloyd as an associate)</b>	<b>1,111</b>	<b>191</b>	<b>1,302</b>	<b>1,046</b>	<b>224</b>	<b>1,270</b>	<b>2,026</b>	<b>524</b>	<b>2,550</b>
Share of operating profit (before tax) of Delta Lloyd as an associate	35	—	35	—	—	—	—	—	—
<b>Operating profit before tax attributable to shareholders' profits</b>	<b>1,146</b>	<b>191</b>	<b>1,337</b>	<b>1,046</b>	<b>224</b>	<b>1,270</b>	<b>2,026</b>	<b>524</b>	<b>2,550</b>
Adjusted for the following:									
Investment return variances and economic assumption changes on long-term business (note 8)	(187)	(820)	(1,007)	111	951	1,062	(219)	1,010	791
Short-term fluctuation in return on investments on non-long-term business (note 9)	(80)	(60)	(140)	26	(20)	6	(199)	(44)	(243)
Economic assumption changes on general insurance and health business (note 10)	(8)	—	(8)	(64)	—	(64)	(61)	—	(61)
Impairment of goodwill and other amounts expensed	(20)	—	(20)	(2)	—	(2)	(23)	(1)	(24)
Amortisation and impairment of intangibles (Loss) / profit on the disposal of subsidiaries and associates (note 11)	(56)	(5)	(61)	(51)	(9)	(60)	(193)	(23)	(216)
Integration and restructuring costs (note 12)	(11)	(32)	(43)	28	—	28	163	(4)	159
Exceptional items (note 13)	(111)	—	(111)	(72)	—	(72)	(225)	(18)	(243)
	—	—	—	(10)	(107)	(117)	276	(549)	(273)
<b>Non-operating items before tax (excluding Delta Lloyd as an associate)</b>	<b>(473)</b>	<b>(917)</b>	<b>(1,390)</b>	<b>(34)</b>	<b>815</b>	<b>781</b>	<b>(481)</b>	<b>371</b>	<b>(110)</b>
Share of Delta Lloyd's non-operating items (before tax) as an associate	(8)	—	(8)	—	—	—	—	—	—
<b>Non-operating items before tax</b>	<b>(481)</b>	<b>(917)</b>	<b>(1,398)</b>	<b>(34)</b>	<b>815</b>	<b>781</b>	<b>(481)</b>	<b>371</b>	<b>(110)</b>
Share of Delta Lloyd's tax expense, as an associate	(7)	—	(7)	—	—	—	—	—	—
<b>(Loss) / Profit before tax attributable to shareholders' profits</b>	<b>658</b>	<b>(726)</b>	<b>(68)</b>	<b>1,012</b>	<b>1,039</b>	<b>2,051</b>	<b>1,545</b>	<b>895</b>	<b>2,440</b>
Tax on operating profit	(292)	(25)	(317)	(267)	(43)	(310)	(529)	(96)	(625)
Tax on other activities	99	227	326	(11)	(225)	(236)	206	(129)	77
	(193)	202	9	(278)	(268)	(546)	(323)	(225)	(548)
<b>(Loss) / Profit for the period</b>	<b>465</b>	<b>(524)</b>	<b>(59)</b>	<b>734</b>	<b>771</b>	<b>1,505</b>	<b>1,222</b>	<b>670</b>	<b>1,892</b>

## Earnings per share – IFRS basis

	6 months 2011 £m			6 months 2010 £m			Full year 2010 £m		
	Continuing Operations	Discontinued Operations	Total	Continuing Operations	Discontinued Operations	Total	Continuing Operations	Discontinued Operations	Total
<b>Operating profit per share on an IFRS basis after tax, attributable to ordinary shareholders of Aviva plc</b>									
Basic (pence per share)	<b>25.8p</b>	<b>3.3p</b>	<b>29.1p</b>	24.2p	3.2p	27.4p	47.2p	7.9p	55.1p
Diluted (pence per share)	<b>25.4p</b>	<b>3.2p</b>	<b>28.6p</b>	23.9p	3.1p	27.0p	46.5p	7.7p	54.2p
<b>Earnings after tax on an IFRS basis, attributable to ordinary shareholders of Aviva plc</b>									
Basic (pence per share)	<b>15.4p</b>	<b>(11.3)p</b>	<b>4.1p</b>	23.1p	15.7p	38.8p	37.6p	12.8p	50.4p
Diluted (pence per share)	<b>15.1p</b>	<b>(11.1)p</b>	<b>4.0p</b>	22.9p	15.3p	38.2p	37.0p	12.6p	49.6p



## 1 – Long-term business IFRS operating profit

	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
With-profit	21	110	147
Non-profit	441	353	703
<b>United Kingdom</b>	<b>462</b>	<b>463</b>	<b>850</b>
France	166	132	319
Ireland	32	86	122
Italy	72	49	119
Poland	90	78	157
Spain	109	79	179
Other Europe	4	1	(3)
<b>Aviva Europe</b>	<b>473</b>	<b>425</b>	<b>893</b>
<b>North America</b>	<b>109</b>	<b>86</b>	<b>174</b>
<b>Asia Pacific</b>	<b>38</b>	<b>35</b>	<b>71</b>
<b>Total – continuing operations</b>	<b>1,082</b>	<b>1,009</b>	<b>1,988</b>
<b>Total – discontinued operations</b>	<b>185</b>	<b>119</b>	<b>330</b>
<b>Total</b>	<b>1,267</b>	<b>1,128</b>	<b>2,318</b>

IFRS long-term business operating profit before shareholder tax for continuing operations was £1,082 million (*HY10: £1,009 million*), an increase of 7% on the prior period. Strong underlying growth was partly offset by lower positive one-off items than in the prior period. Total long-term business operating profit including the contribution from Delta Lloyd was £1,267 million (*HY10: £1,128 million*), an increase of 12% on the prior period.

### United Kingdom

IFRS operating profit was stable at £462 million (*HY10: £463 million*) with strong growth in the non-profit result offset by a lower with-profit result following last year's final special bonus distribution (*HY10: £84 million*).

The non-profit result increased by 25% to £441 million (*HY10: £353 million*) driven by continued strong performance in annuities, increased annual management charges and inclusion of the full results of RBS Life, following its purchase by Aviva at the end of 2010. Following the reattribution of the inherited estate in 2009, in HY11 earnings on the reattributed assets, unwind of guarantee costs and the demographic impact of policyholder actions contributed £91 million to operating profits (*HY10: £82 million*). Of this, around £70 million relating to investment return and unwind of guarantee costs is expected to recur. Also included in the result is a one-off benefit of £30 million relating to the release of tax provisions associated with the reattribution of the inherited estate.

The with-profit result, which includes the shareholders' share of regular and terminal bonus payments, was £21 million (*HY10: £110 million*) with the variance from 2010 mainly driven by the absence of the final special distribution (*HY10: £84 million*).

### Aviva Europe

Aviva Europe's life operating profit increased by 11% to £473 million (*HY10: £425 million*). This growth has mainly been driven by an increase in returns from existing business in France and Spain and lower new business strain, as management actions have led to lower with-profit sales in Italy and France. On an underlying basis 2011 further improved as the prior period result included a favourable one-off item of £55 million relating to the release of reserves for protection business following adoption of realistic reserving in Ireland.

### North America

In the US, the focus on profitable growth combined with underwriting and pricing discipline resulted in a 27% increase in operating profit to £109 million (*HY10: £86 million*), with the positive impact of business growth and lower DAC amortisation (and positive experience) partly offset by lower mortality profits.

### Asia Pacific

Life operating profit increased to £38 million (*HY10: £35 million*), driven by the increased scale and profitability of our existing business.

### Discontinued operations – Delta Lloyd

Operating profit for Delta Lloyd included in the Group long-term business total represents 100% of the result as a subsidiary up to 6 May 2011. For this period, the life operating profit included for Delta Lloyd group increased to £185 million compared with £119 million for the full first half year in 2010, principally driven by expense savings throughout the Delta Lloyd group.

## 2 – Long-term business IFRS profit driver analysis

	Note	6 months 2011			
		United Kingdom £m	Aviva Europe £m	Rest of the world <sup>1</sup> £m	Total £m
New business income	a	236	180	55	471
Underwriting margin	b	79	211	91	381
Unit-linked margin	c	198	275	13	486
Participating business	d	21	234	11	266
Spread margin	e	78	28	242	348
Expected return	f	111	80	28	219
Investment return		408	617	294	1,319
<b>Income</b>		<b>723</b>	<b>1,008</b>	<b>440</b>	<b>2,171</b>
Acquisition expenses	g	(178)	(262)	(52)	(492)
Administration expenses	h	(157)	(260)	(102)	(519)
<b>Expenses</b>		<b>(335)</b>	<b>(522)</b>	<b>(154)</b>	<b>(1,011)</b>
DAC/AVIF amortisation and other	i	74	(13)	(139)	(78)
<b>IFRS operating profit – continuing operations</b>		<b>462</b>	<b>473</b>	<b>147</b>	<b>1,082</b>
<b>IFRS operating profit – discontinued operations</b>		<b>—</b>	<b>—</b>	<b>185</b>	<b>185</b>
<b>IFRS operating profit</b>		<b>462</b>	<b>473</b>	<b>332</b>	<b>1,267</b>

1: 'Rest of the world' (continuing operations) includes North America and Asia Pacific.

	Note	6 months 2010				Full year 2010
		United Kingdom £m	Aviva Europe <sup>2</sup> £m	Rest of the world <sup>1</sup> £m	Total £m	Total £m
New business income	a	230	179	58	467	1,033
Underwriting margin	b	88	196	86	370	752
Unit-linked margin	c	177	271	13	461	920
Participating business	d	109	191	13	313	569
Spread margin	e	82	26	254	362	688
Expected return	f	98	66	38	202	429
Investment return		466	554	318	1,338	2,606
<b>Income</b>		<b>784</b>	<b>929</b>	<b>462</b>	<b>2,175</b>	<b>4,391</b>
Acquisition expenses	g	(183)	(275)	(52)	(510)	(990)
Administration expenses	h	(178)	(240)	(103)	(521)	(1,067)
<b>Expenses</b>		<b>(361)</b>	<b>(515)</b>	<b>(155)</b>	<b>(1,031)</b>	<b>(2,057)</b>
DAC/AVIF amortisation and other	i	40	11	(186)	(135)	(346)
<b>IFRS operating profit – continuing operations</b>		<b>463</b>	<b>425</b>	<b>121</b>	<b>1,009</b>	<b>1,988</b>
<b>IFRS operating profit – discontinued operations</b>		<b>—</b>	<b>—</b>	<b>119</b>	<b>119</b>	<b>330</b>
<b>IFRS operating profit</b>		<b>463</b>	<b>425</b>	<b>240</b>	<b>1,128</b>	<b>2,318</b>

1: 'Rest of the world' (continuing operations) includes North America and Asia Pacific.

2: Aviva Europe comparative for 6 months 2010 includes reclassification of £39 million from unit-linked margin to underwriting margin.

Detailed analysis of the above is given within the IFRS supplement, Note A19, page 66.

### (a) New business income

New business income was stable at £471 million (*HY10: £467 million*) as improvement in the new business income margin (as a percentage of APE sales) to 26% (*HY10: 24%*) was offset by a reduction in sales volumes. The UK continued to benefit from strong individual annuity performance although a higher pensions mix has impacted margins. In Aviva Europe, new business income margin increased to 24% (*HY10: 20%*) as a result of management action to drive more profitable sales. In the Rest of the World, new business income growth in Asia Pacific was driven by margin and volume increases in Singapore, offset by lower sales in the US.

### (b) Underwriting margin

The underwriting margin increased to £381 million (*HY10: £370 million*). In the UK, lower persistency gains as a result of policyholder behaviour were partly offset by increased margins following full consolidation of the RBS Life business. The underwriting result increased in Aviva Europe, with higher contributions from continental markets partly offset by a reduced margin in Ireland following reserving changes made in 2010. In the Rest of the World, the margin increased due to growth in the in-force book and favourable experience variances in Asia Pacific.

## 2 – Long-term business IFRS profit driver analysis continued

### (c) Unit-linked margin

The unit-linked margin, which mainly relates to unit-linked business in the UK and the major markets in Aviva Europe, grew from £461 million to £486 million as market growth in the second half of 2010 resulted in higher average unit-linked reserves of £91 billion (HY10: £81 billion). The margin as a proportion of average reserves reduced during the period to 106 bps (HY10: 114 bps), due to lower charges in Poland following legislative changes and a timing effect of market movements on average reserves.

### (d) Participating business

Income from participating business reduced to £266 million (HY10: £313 million). This reflects a lower shareholder transfer in the UK following the final tranche of the special distribution of £84 million in the first half of 2010. This was partly offset by increased income in Aviva Europe of £234 million (HY10: £191 million), mainly due to higher income recognised in France, where there is a fixed management charge of around 50bps on AFER business, supported by contributions from Italy and Spain. The contribution from Rest of the World relates primarily to closed block business in the United States.

### (e) Spread margin

Spread income reduced to £348 million (HY10: £362 million) with a spread margin on average reserves of 101 bps (HY10: 117 bps). Spread margins relate mainly to US equity indexed deferred annuity and life business, and UK annuity business. The reduction in margin reflects non-recurrence of the gains on US embedded derivative liabilities seen in the prior period and a weaker US dollar in the current period.

### (f) Expected return on shareholder assets

Expected returns increased to £219 million (HY10: £202 million), reflecting investment income on surplus funds. The UK contribution included £69 million related to the reattribution of the inherited estate (HY10: £60 million). Of this, earnings on the reattributed estate were £41 million and £28 million arose from unwind of guarantees.

### (g) Acquisition expenses

Acquisition expenses reduced to £492 million (HY10: £510 million) mainly due to lower new business sales in Aviva Europe.

### (h) Administration expenses

Administration expenses reduced to £519 million (HY10: £521 million) with the beneficial effect of cost reduction and reduced commission in the UK partly offset by higher renewal commission costs related to in-force business growth in Europe.

### (i) DAC, AVIF and other

DAC, AVIF and other items amounted to a charge of £78 million (HY10: £135 million charge). DAC and AVIF amortisation charges were lower in the US, as a result of the reduced spread margin noted above. This was partly offset by the smaller positive effect of one-off items in the UK and Europe. Other one-off items included the release of provisions in the UK of £30 million in the current period, and a release of £55 million in the prior period following a review of reserving assumptions in Ireland.

## 3 – General insurance and health

	Underwriting result			Longer-term investment return			Operating profit <sup>2</sup>		
	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
<b>General insurance – continuing operations</b>									
<b>United Kingdom<sup>1,2</sup></b>	<b>63</b>	56	184	<b>209</b>	223	419	<b>256</b>	269	567
France	<b>21</b>	(18)	1	<b>28</b>	23	49	<b>49</b>	5	50
Ireland <sup>2</sup>	<b>4</b>	(12)	(17)	<b>20</b>	29	50	<b>24</b>	16	32
Other <sup>3</sup>	<b>(19)</b>	(6)	(49)	<b>16</b>	17	31	<b>(3)</b>	11	(18)
<b>Aviva Europe</b>	<b>6</b>	(36)	(65)	<b>64</b>	69	130	<b>70</b>	32	64
<b>North America<sup>2</sup></b>	<b>46</b>	43	60	<b>78</b>	89	173	<b>118</b>	132	222
<b>Asia Pacific</b>	<b>(2)</b>	(3)	(7)	<b>2</b>	1	3	<b>—</b>	(2)	(4)
	<b>113</b>	60	172	<b>353</b>	382	725	<b>444</b>	431	849
<b>Health insurance – continuing operations</b>									
<b>United Kingdom</b>	<b>1</b>	(4)	5	<b>4</b>	3	7	<b>5</b>	(1)	12
France	<b>1</b>	(2)	11	<b>—</b>	8	15	<b>1</b>	6	26
Ireland	<b>8</b>	7	17	<b>1</b>	1	2	<b>9</b>	8	19
<b>Aviva Europe</b>	<b>9</b>	5	28	<b>1</b>	9	17	<b>10</b>	14	45
<b>Asia Pacific</b>	<b>(4)</b>	—	(2)	<b>—</b>	—	—	<b>(4)</b>	—	(2)
	<b>6</b>	1	31	<b>5</b>	12	24	<b>11</b>	13	55
<b>Total – continuing operations</b>	<b>119</b>	61	203	<b>358</b>	394	749	<b>455</b>	444	904
<b>Total – discontinued operations<sup>4</sup></b>	<b>(28)</b>	31	60	<b>34</b>	50	97	<b>1</b>	81	146
<b>Total</b>	<b>91</b>	92	263	<b>392</b>	444	846	<b>456</b>	525	1,050

1. United Kingdom includes Aviva Re and agencies in run-off.

2. Continuing operating profit includes an unfavourable impact of £22 million resulting from a combination of unwind of discount and pension scheme net finance costs (HY10: £11 million, FY10: £48 million). £16 million unfavourable impact relates to UKGI (HY10: £10 million, FY10: £36 million), £6 million unfavourable impact relates to Canada (HY10: £nil, FY10: £11 million), £Nil million relating to Ireland (HY10: £1 million, FY10: £1 million).

3. Other Europe includes Italy, Poland and Turkey.

4. HY11 discontinued operating profit includes an unfavourable impact of £5 million relating to unwind of discount (HY10: £nil, FY10: £11 million).

### 3 – General insurance and health continued

	Net written premiums		
	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
<b>General insurance – continuing operations</b>			
<b>United Kingdom<sup>1</sup></b>	<b>2,265</b>	2,018	4,109
France	456	429	734
Ireland	200	212	397
Other <sup>2</sup>	282	260	526
<b>Aviva Europe</b>	<b>938</b>	901	1,657
<b>North America</b>	<b>1,025</b>	996	1,958
<b>Asia Pacific</b>	<b>12</b>	8	19
	<b>4,240</b>	3,923	7,743
<b>Health insurance – continuing operations</b>			
<b>United Kingdom</b>	<b>245</b>	223	430
France	128	135	234
Ireland	57	32	62
<b>Aviva Europe</b>	<b>185</b>	167	296
<b>Asia Pacific</b>	<b>38</b>	24	53
	<b>468</b>	414	779
<b>Total – continuing operations</b>	<b>4,708</b>	4,337	8,522
<b>Total – discontinued operations<sup>3</sup></b>	<b>557</b>	707	1,177
<b>Total</b>	<b>5,265</b>	5,044	9,699

1. United Kingdom includes Aviva Re and agencies in run-off.

2. Other Europe includes Italy, Poland and Turkey.

3. Current period to 6 May 2011 only.

#### Combined operating ratios – general insurance business only

	Claims ratio			Expense ratio			Combined operating ratio		
	6 months 2011 %	6 months 2010 %	Full year 2010 %	6 months 2011 %	6 months 2010 %	Full year 2010 %	6 months 2011 %	6 months 2010 %	Full year 2010 %
<b>United Kingdom<sup>1</sup></b>	<b>62.5%</b>	64.8%	63.9%	<b>10.5%</b>	11.5%	11.0%	<b>96%</b>	98%	96%
France	65.0%	76.3%	71.2%	8.7%	8.6%	10.5%	92%	102%	99%
Ireland	68.5%	76.6%	74.9%	19.0%	18.7%	19.5%	98%	105%	105%
<b>Aviva Europe</b>	<b>68.7%</b>	73.6%	73.0%	<b>11.3%</b>	11.6%	13.1%	<b>97%</b>	102%	103%
<b>North America</b>	<b>64.9%</b>	63.5%	64.3%	<b>12.0%</b>	13.8%	13.6%	<b>96%</b>	96%	97%
<b>Total – continuing operations</b>	<b>64.4%</b>	65.8%	65.0%	<b>11.0%</b>	12.0%	12.2%	<b>96%</b>	97%	97%

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

Detailed analysis is given within the IFRS supplement, note A20, page 67.

Ratios are measured in local currency. The total Group ratios are based on average exchange rates applying to the respective periods.

#### Definitions:

Claims ratio	Inurred claims expressed as a percentage of net earned premiums.
Expense ratio	Written expenses excluding commissions expressed as a percentage of net written premiums.
Combined operating ratio	Aggregate of claims ratio, expense ratio and commission ratio.

### 3 – General insurance and health continued

Group operating profit from continuing general insurance and health operations for the period was £455 million (*HY10: £444 million*). The general insurance and health underwriting result from continuing operations increased to £119 million (*HY10: £61 million*), due to improving current year profitability in the UK and benign weather in Europe.

We continue to apply our reserving policy consistently and to focus on understanding the true cost of claims to ensure that reserves are maintained at a robust level. Prior year reserve movements will vary year to year but our business is predominantly short tail in nature and the loss development experience is generally stable. Current year underwriting results have improved significantly following actions including improving risk selection, expense management and reshaping the book. Over 2011, we have had prior year releases of £2 million excluding Delta Lloyd.

The worldwide general insurance combined operating ratio (COR) for continuing operations improved to 96% (*HY10: 97%*) ahead of the Group's target for the year. The worldwide GI expense ratio for continuing operations has decreased to 11.0% (*HY10: 12.0%*) reflecting cost savings from our efficiency programmes and actions taken across the Group to manage the cost base.

The longer term investment return (LTIR) on general insurance and health business assets for continuing operations was lower at £358 million (*HY10: £394 million*) reflecting a small reduction in the average asset levels and lower investment yields compared with the prior period.

#### United Kingdom

The result for our general insurance and health business in the UK includes the UK General Insurance business, the UK Health Insurance business, our Group captive reinsurer, Aviva Re, and agencies in run off. Operating profit of £261 million (*HY10: £268 million*) comprises UK General Insurance operating profit of £242 million (*HY10: £229 million*), a contribution of £6 million (*HY10: £39 million*) from Aviva Re, £8 million from agencies in run off (*HY10: £1 million*) and £5 million from our UK health business (*HY10: £1 million loss*). All subsequent commentary relates solely to UK General Insurance.

The first half of the year has built on the momentum generated in 2010 to deliver an increase in both sales and profitability. Business volumes continue to increase and we have now recorded six consecutive quarters of growth, with **net written premiums** for the first six months of the year of £2,222 million, an increase of 14% over the same period last year (*HY10 £1,942 million*). Personal motor has been the highlight where we have attracted 210,000 new customers since the end of 2010, with net written premiums up 24% at £705 million (*HY10: £569 million*). This reflects continued strong growth in direct sales and the highly successful roll out of 'direct pricing' to brokers. To build upon this momentum, we are launching a new low cost, web only product that will be available on price comparison websites. Our new Corporate and Specialty Risks team have made excellent progress in securing high quality business within our risk appetite for this area. In addition, we are delivering significant benefit from working with UK Life in strengthening our joint Bancassurance offering, a notable example being the extension of our agreement with HSBC through to 2016, having secured Preferred Strategic Partner status with them.

Overall, **operating profit** for the first six months of the year has increased to £242 million, up 6% on last year (*HY10: £229 million*). This strong performance reflects a further improvement of £57 million in current period operating profitability to £254 million for the period (*HY10: £197 million*), driven by our focus on ensuring the business we are writing is sustainably profitable in order to deliver maximum value for shareholders. The principal factors behind this continue to be underwriting and claims management excellence, together with a marked improvement in efficiency as we grow the business whilst keeping the cost base broadly flat. The result also includes a slight reduction in investment return to £203 million (*HY10: £212 million*) and a small strengthening in prior year claims reserves of £12 million (*HY10: £32 million release*).

The increase in profitability is also reflected in a **combined operating ratio** for the period of 96%, a 2pp improvement compared to the first half of 2010 (*HY10: 98%*) and ahead of the UK and Group target of 97% for 2011. The overall combined operating ratio has benefited from a 1pp improvement in the expense ratio to 10.5% for the first half of 2011 (*HY10: 11.5%*), reflecting the marked improvement in efficiency we have seen.

We continue to see a similar rating environment to 2010 with rate increases over the past year of 21% in personal motor and 6% in homeowner. In commercial motor we are seeing definite evidence of a hardening market and have increased rates by 10%. Conditions in commercial property and liability remain more subdued however and ratings increases are in low single digits.

### 3 – General insurance and health continued

#### Aviva Europe

**Net written premiums** have increased by 5% to £1,123 million (*HY10: £1,068 million*) driven by successful rating actions in personal motor in France (up 4%), Italy (up 12%) and Poland (up 6%) and the continued success of our health business in Ireland.

General insurance and health **operating profit** has increased by 74% to £80 million (*HY10: £46 million*). Benign weather in the first half of 2011 compared to the significant weather events in the first half of 2010 combined with our continued investment in underwriting and pricing expertise, has meant we have delivered a higher underwriting result of £15 million profit (*HY10: £31 million loss*). This was offset by lower long term investment returns primarily as a result of lower investment yields.

General insurance **combined operating ratio** of 97% is 5pp better than that reported at HY10 due to benign weather this year.

#### North America

**Net written premiums** in Canada increased 3% to £1,025 million (*HY10: £996 million*), due to pricing actions in motor insurance and property insurance businesses, offset by a slight decline in our liability insurance business as we continued our strategy of disciplined pricing, sophisticated underwriting and focused risk selection across our product portfolio.

**Operating profit** decreased 11% to £118 million (*HY10: £132 million*) as LTIR declined to £78 million (*HY10: £89 million*), primarily as a result of lower new money yields in our investment portfolio.

The **underwriting results** were strong at £46 million (*HY10: £43 million*) as underlying performance improvements, particularly in our motor insurance business, offset the adverse effect of seasonal catastrophe related weather experience in our property insurance business. Within this result, the adverse impact of the Slave Lake fires in Alberta was £10 million. Our **combined operating ratio** was unchanged at 96% (*HY10: 96%*).

#### Asia Pacific

The **net written premiums** in the general insurance and health business rose to £50 million (*HY10: £32 million*) due to new business initiatives in Singapore and the contribution of the Indonesia health business, which was acquired on 1 July 2010.

The **operating loss** was £4 million (*HY10: £2 million loss*), driven by integration and development costs in relation to the Indonesia health business.

#### Discontinued operations – Delta Lloyd

As a result of the partial disposal of Aviva's stake in Delta Lloyd, from 6 May 2011 the Group has ceased to consolidate the results and net assets of the Delta Lloyd group. The results of Delta Lloyd up to the transaction date have therefore been classified as discontinued operations. **Net written premiums** for the period to 6 May 2011 were £557 million (*6 months to 30 June 2010: £707 million*) and **operating profit** decreased to £1 million (*6 months to 30 June 2010: £81 million*).



## 4 – Fund management

### Geographical analysis of fund management operating profits

	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
United Kingdom	11	11	44
Europe	19	20	36
North America	13	13	22
Asia Pacific	(4)	(2)	(5)
<b>Aviva Investors<sup>1</sup></b>	<b>39</b>	<b>42</b>	<b>97</b>
<b>United Kingdom</b>	<b>3</b>	<b>(2)</b>	<b>3</b>
<b>Asia Pacific</b>	<b>—</b>	<b>(1)</b>	<b>(2)</b>
<b>Total – continuing operations</b>	<b>42</b>	<b>39</b>	<b>98</b>
<b>Total – discontinued operations</b>	<b>11</b>	<b>17</b>	<b>103</b>
<b>Total</b>	<b>53</b>	<b>56</b>	<b>201</b>

1. Aviva Investors total Regional operating profit of £41 million (HY10: £42 million, FY10: £100 million) also includes profit from the Aviva Investors pooled pensions business of £2 million (HY10: £nil, FY10: £3 million), which is included in the life segment.

Our worldwide fund management operating profit for continuing operations increased to £42 million (HY10: £39 million) on an IFRS basis.

#### Aviva Investors

Operating profit was lower at £39 million in 2011 (HY10: £42 million). The slight reduction in profit results from our focused investment in our third party distribution capabilities and the implementation of a globally scalable investment management platform.

During the first half of 2011 we delivered strong investment performance against benchmark and peer groups and this enabled us to make good progress towards our key objective of delivering growth in external assets under management and revenues with net sales ahead of HY 2010. Net funded external sales (excluding liquidity funds) in the first half were £2.5 billion against £0.8 billion for HY10, an increase of 212%.

#### Other fund management businesses

United Kingdom operating profit of £3 million relates solely to the Aviva UK investment business (HY10: £2 million loss). The increase in operating profit is a result of increased funds under management resulting in higher income. The collective investment business with Royal Bank of Scotland Group (RBSG) was sold in December 2010 (HY10: £4 million loss).

Operating profit in Asia Pacific includes our Navigator business in Singapore. The prior year result included an operating loss of £1 million in Hong Kong Navigator, which was closed to business in 2010. On an underlying basis, operating profit is in line with the prior period, showing a breakeven position for the first six months of the year.

#### Funds under management

Funds under management at 30 June 2011 were £352 billion (31 December 2010: £340 billion, excluding Delta Lloyd). The total funds under management reported at 31 December 2010 of £402 billion included £62 billion relating to Delta Lloyd, which has now been deconsolidated (see note A3 on page 40).

	30 June 2011			31 December 2010		
	Aviva Investors £m	Other Aviva and external managers £m	Total £m	Aviva Investors £m	Other Aviva and external managers £m	Total £m
Internal funds under management	216,928	62,833	279,761	209,094	117,666	326,760
Third party funds under management	52,451	19,400	71,851	50,693	24,798	75,491
<b>Funds under management</b>	<b>269,379</b>	<b>82,233</b>	<b>351,612</b>	<b>259,787</b>	<b>142,464</b>	<b>402,251</b>
Delta Lloyd	—	—	—	—	(62,362)	(62,362)
<b>Funds under management (excluding Delta Lloyd)</b>	<b>269,379</b>	<b>82,233</b>	<b>351,612</b>	<b>259,787</b>	<b>80,102</b>	<b>339,889</b>

Funds managed by Aviva Investors were up 4% to £269 billion (31 December 2010: £260 billion), with assets managed for external clients increasing 3% to £52 billion (31 December 2010: £51 billion). The growth in funds under management was due to positive net flows, capital appreciation and foreign exchange gains resulting from strengthening of the euro against sterling.

Detailed analysis is given within the IFRS supplement, note A21, page 68.

## 5 – Other operations and regional costs

	6 months 2011			6 months 2010			Full year 2010		
	Regional costs £m	Other operations £m	Total £m	Regional costs £m	Other operations £m	Total £m	Regional costs £m	Other operations £m	Total £m
United Kingdom	—	(28)	(28)	—	(1)	(1)	—	(21)	(21)
Aviva Europe	(20)	(8)	(28)	(18)	(19)	(37)	(55)	(49)	(104)
North America	(6)	(2)	(8)	(12)	3	(9)	(26)	6	(20)
Asia Pacific	(17)	—	(17)	(19)	1	(18)	(32)	—	(32)
<b>Total – continuing operations</b>	<b>(43)</b>	<b>(38)</b>	<b>(81)</b>	<b>(49)</b>	<b>(16)</b>	<b>(65)</b>	<b>(113)</b>	<b>(64)</b>	<b>(177)</b>
<b>Total – discontinued operations</b>	<b>—</b>	<b>(2)</b>	<b>(2)</b>	<b>—</b>	<b>18</b>	<b>18</b>	<b>—</b>	<b>(43)</b>	<b>(43)</b>
<b>Total</b>	<b>(43)</b>	<b>(40)</b>	<b>(83)</b>	<b>(49)</b>	<b>2</b>	<b>(47)</b>	<b>(113)</b>	<b>(107)</b>	<b>(220)</b>

Continuing other operations and regional costs have increased to £81 million (*HY10: £65 million*). Of the £28 million in the UK, £4 million relates to the UK region and the balance to Group Centre. The HY10 comparative also included a favourable non-recurring item of £12 million. Costs within Aviva Europe, North America and Asia Pacific have decreased.

Note A22 on page 68 in the IFRS supplement gives further information on the operational cost base.

## 6 – Corporate centre

	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
Project spend	(11)	(8)	(37)
Share awards and other incentive schemes	(7)	(7)	(14)
Central spend	(48)	(39)	(92)
<b>Total</b>	<b>(66)</b>	<b>(54)</b>	<b>(143)</b>

Corporate Centre costs increased to £66 million (*HY10: £54 million*) due mainly to increased central spend to meet greater financial and regulatory reporting requirements.

## 7 – Group debt costs and other interest

	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
External debt			
Subordinated debt	(147)	(146)	(290)
Other	(13)	(11)	(21)
Total external debt	(160)	(157)	(311)
Internal lending arrangements	(134)	(121)	(246)
Net finance charge on main UK pension scheme	(27)	(49)	(87)
<b>Total – continuing operations</b>	<b>(321)</b>	<b>(327)</b>	<b>(644)</b>
<b>Total – discontinued operations</b>	<b>(4)</b>	<b>(11)</b>	<b>(12)</b>
<b>Total</b>	<b>(325)</b>	<b>(338)</b>	<b>(656)</b>

Group debt costs and other interest for continuing operations of £321 million (*HY10: £327 million*) comprise external interest on borrowings, subordinated debt and internal lending arrangements. External interest costs remained consistent at £160 million (*HY10: £157 million*) and interest costs on internal lending arrangements increased to £134 million (*HY10: £121 million*) due to changes in internal debt balances through the period.

The UK pension scheme net charge represents the difference between the expected return on pension scheme assets and the interest charged on pension scheme liabilities. The net pension charge reduced to £27 million (*HY10: £49 million*) due mostly to the closure of the scheme to future accruals with effect from 1 April 2011 and the consequent reduction in scheme liabilities.

## 8 – Investment return variances and economic assumption changes on long-term business

### (a) Definitions

Operating profit for long-term business is based on expected investment returns on financial investments backing shareholder and policyholder funds over the period, with consistent allowance for the corresponding expected movements in liabilities. Operating profit includes the effect of variance in experience for non-economic items, such as mortality, persistency and expenses, and the effect of changes in non-economic assumptions, where not treated as exceptional. In 2010, the strengthening of annuitant longevity assumptions in the Netherlands was treated as an exceptional item outside operating profit. 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.

### (b) Economic volatility

The investment variances and economic assumption changes excluded from the long-term business operating profit are as follows:

	Long-term business		
	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
Investment variances and economic assumptions – continuing operations	<b>(187)</b>	111	(219)
Investment variances and economic assumptions – discontinued operations	<b>(820)</b>	951	1,010
Investment variances and economic assumptions	<b>(1,007)</b>	1,062	791

In the first six months of 2010, investment variances of £1,062 million included £951 million relating to Delta Lloyd. Of this, around £600 million was due to differing movements in asset and liability yield curves with the remainder primarily related to gains on interest rate derivatives. Over the second half of 2010, the impact of movements in yield curves increased to around £800 million. Liabilities in Delta Lloyd are discounted using a yield curve based on a fully collateralised AAA bond portfolio. The discount rate increased in 2010 as an increase of around 80bps in credit spreads on collateralised bonds was only partly offset by lower risk-free yields. As a result, whilst lower interest rates increased the market value of assets, this was not offset by a corresponding movement in liabilities. The AAA collateralised bond spread movement in 2010 reflected the perceived risk regarding the curve's components which include bonds issued by Spanish savings banks and a range of other European organisations.

Over the period from the start of 2011 to the partial disposal of Delta Lloyd on 6 May 2011, the AAA collateralised bond spread narrowed by about 80bps as a result of changes in the underlying bond index. This movement was the main driver of the negative variance of £820 million for discontinued operations in 2011, largely reversing the positive variance reported in the prior year.

For continuing operations, the negative investment variance relates largely to Aviva Europe, primarily arising from the impact of increased credit spreads on assets in Italy and Ireland. Any future increases in credit spreads on corporate and government bonds primarily in Italy and Ireland would cause further negative investment variances.

The additional allowances for credit defaults on UK corporate bonds and commercial mortgages that were established in 2008 remain at consistent levels.

### (c) 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		
	6 months 2011 %	6 months 2010 %	Full year 2010 %	6 months 2011 %	6 months 2010 %	Full year 2010 %
United Kingdom	<b>7.2%</b>	7.8%	7.8%	<b>5.7%</b>	6.3%	6.3%
Eurozone	<b>6.9%</b>	7.2%	7.2%	<b>5.4%</b>	5.7%	5.7%

The expected return on equities and properties has been calculated by reference to the 10 year swap rate in the relevant currency plus an appropriate risk margin. These are the same assumptions as are used under MCEV principles to calculate the longer-term investment return for the Group's long-term business.

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. Where such securities are classified as available for sale, such as in the United States, the expected investment return comprises the expected interest or dividend payments and amortisation of the premium or discount at purchase.

## 9 – Short-term fluctuation in return on investments on general insurance and health business

	General insurance and health		
	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
Continuing Operations			
Net investment income	369	334	497
Foreign exchange on unrealised gains/losses and other charges	(91)	86	53
	278	420	550
Analysed between:			
Longer term investment return, reported within operating profit	358	394	749
Short-term fluctuations in investment return, reported outside operating profit	(80)	26	(199)
	278	420	550
Total short-term fluctuations as per pro forma Group operating profit – continuing operations	(80)	26	(199)
Total short-term fluctuations as per pro forma Group operating profit – discontinued operations	(60)	(20)	(44)
Total short-term fluctuations as per pro forma Group operating profit	(140)	6	(243)

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 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.

General insurance and health includes the impact of the unrealised and realised gains on Group centre investments, including the centre hedging programme which is designed to economically protect the total Group's capital against adverse equity and FX movements.

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

	30 June 2011 £m	30 June 2010 £m	31 December 2010 £m
Debt securities	10,059	11,474	11,404
Equity securities	419	807	918
Properties	129	188	146
Cash and cash equivalents	2,605	2,425	1,787
Other	4,342	3,813	4,021
<b>Assets supporting general insurance and health business</b>	<b>17,554</b>	<b>18,707</b>	<b>18,276</b>
Assets supporting other non-long term business <sup>1</sup>	—	2,197	1,689
<b>Total assets supporting non long-term business</b>	<b>17,554</b>	<b>20,904</b>	<b>19,965</b>

<sup>1</sup> Represents Delta Lloyd Group's banking and mortgage activities which are no longer consolidated following the partial disposal of Delta Lloyd on 6 May 2011.

These assets have reduced due to the deconsolidation of Delta Lloyd following the partial disposal on 6 May 2011.

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

	Longer-term rates of return equities			Longer-term rates of return property		
	6 months 2011 %	6 months 2010 %	Full year 2010 %	6 months 2011 %	6 months 2010 %	Full year 2010 %
United Kingdom	7.2%	7.8%	7.8%	5.7%	6.3%	6.3%
France	6.9%	7.2%	7.2%	5.4%	5.7%	5.7%
Ireland	6.9%	7.2%	7.2%	5.4%	5.7%	5.7%
Canada	7.0%	7.5%	7.5%	5.5%	6.0%	6.0%
Netherlands – Discontinued	6.9%	7.2%	7.2%	5.4%	5.7%	5.7%

The underlying reference rates are at E15 within the MCEV financial supplement.

## 10 – Economic assumption changes on general insurance and health business

Economic assumption changes of £8 million adverse (*HY10: £64 million adverse*) mainly arise as a result of the reduction in the swap rate used to discount latent claims reserves.

## 11 – Loss on the disposal of subsidiaries and associates

The total Group loss on disposal of subsidiaries and associates was £43 million (*HY10: £28 million profit*). This includes a loss of £32 million arising from the sale of 25 million ordinary shares in Delta Lloyd N.V., on 6 May 2011, which reduced our holding to approximately 43% and resulted in the deconsolidation of Delta Lloyd. Cash consideration of £380 million was received for the sale of shares, and £8 million of costs are attributable to the disposal transaction. Note A3 on page 40 in the notes to the condensed financial statements gives further information on the calculation of the loss.

## 12 – Integration and restructuring costs

Integration and restructuring costs were £111 million (*HY10: £72 million*). This includes costs associated with preparing the businesses for Solvency II implementation of £41 million, a £30 million charge in the UK relating to the reattribution of the inherited estate and expenditure relating to the Quantum Leap project in Europe of £23 million. Expenditure relating to other restructuring exercises across the group amounted to £17 million, including £11 million in Aviva Investors.

## 13 – Exceptional items

There were no exceptional items during the first half of 2011 (*HY10: £117 million*). The HY10 exceptional items mainly arose in Delta Lloyd, which recognised a total of £107 million costs in relation to restructuring their German business (£35 million), unit-linked insurance compensation scheme (£35 million) and compensation costs in defined contribution pension schemes (£37 million).

## 14 – Net flows

	Funds under management at 1 Jan 2011 £m	Premiums and deposits, net of reinsurance £m	Claims and redemptions, net of reinsurance £m	Net flows £m	Market and other movements £m	Funds under management at 30 June 2011 £m
<b>Life business</b>						
UK – non-profit	72,964	3,609	(2,918)	691	1,283	74,938
UK – with-profits	48,432	391	(2,549)	(2,158)	1,134	47,408
<b>United Kingdom</b>	<b>121,396</b>	<b>4,000</b>	<b>(5,467)</b>	<b>(1,467)</b>	<b>2,417</b>	<b>122,346</b>
<b>Aviva Europe</b>	<b>105,859</b>	<b>5,911</b>	<b>(5,527)</b>	<b>384</b>	<b>4,976</b>	<b>111,219</b>
<b>North America</b>	<b>31,198</b>	<b>1,595</b>	<b>(1,367)</b>	<b>228</b>	<b>(58)</b>	<b>31,368</b>
<b>Asia Pacific</b>	<b>2,866</b>	<b>254</b>	<b>(165)</b>	<b>89</b>	<b>(29)</b>	<b>2,926</b>
<b>Life business – continuing operations</b>	<b>261,319</b>	<b>11,760</b>	<b>(12,526)</b>	<b>(766)</b>	<b>7,306</b>	<b>267,859</b>
Other funds under management included within consolidated IFRS assets	19,625					21,384
Third party funds under management not included within consolidated IFRS assets	58,945					62,369
<b>Funds under management (excluding Delta Lloyd)</b>	<b>339,889</b>					<b>351,612</b>
Delta Lloyd	62,362					—
<b>Total funds under management</b>	<b>402,251</b>					<b>351,612</b>

Funds under management at 30 June 2011 for continuing operations were £352 billion (*31 December 2010: £340 billion, excluding Delta Lloyd*). The total funds under management reported at 31 December 2010 of £402 billion included £62 billion relating to Delta Lloyd, which has now been deconsolidated (see note A3 on page 40).

### Life business

#### United Kingdom

During the first half of 2011, positive net inflows of £0.7 billion on non-profit business are mainly the result of continued significant sales of individual and bulk purchase annuities. Net outflows on our with-profits book amounted to £2.2 billion during the period.

#### Aviva Europe

Life business net inflows of £0.4 billion are mainly driven by inflows in France (reflecting strong net flows from protection and unit linked bonds and savings products), partly offset by our reduced appetite for capital intensive with-profits sales in Italy reflecting challenging market and economic conditions. Other movements mainly relate to favourable foreign exchange movements of £5.7 billion driven by the strengthening of the euro against the sterling, partly offset by fair value movements and other net cash flows.

#### North America

Net inflows in our US business are mainly due to continued growth of our protection and annuity portfolios. Other movements reflect unfavourable foreign exchange impacts, partly offset by favourable fair value movements.

## New business

### 15 – Life and pension sales

Life and pensions (gross of tax and minority interest)	Present value of new business premiums			Value of new business			New business margin		
	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m	6 months 2011 %	6 months 2010 %	Full year 2010 %
<b>United Kingdom</b>	<b>5,468</b>	5,194	10,298	<b>190</b>	176	354	<b>3.5%</b>	3.4%	3.4%
France	<b>2,345</b>	2,827	4,918	<b>97</b>	102	175	<b>4.1%</b>	3.6%	3.6%
Ireland	<b>553</b>	476	938	<b>2</b>	1	1	<b>0.4%</b>	0.2%	0.1%
Italy	<b>1,778</b>	3,052	4,456	<b>50</b>	84	142	<b>2.8%</b>	2.8%	3.2%
Poland	<b>305</b>	319	603	<b>20</b>	20	40	<b>6.6%</b>	6.3%	6.6%
Spain	<b>1,015</b>	1,060	2,084	<b>49</b>	66	128	<b>4.8%</b>	6.2%	6.1%
Other Europe	<b>293</b>	258	538	<b>13</b>	12	18	<b>4.4%</b>	4.7%	3.3%
<b>Aviva Europe</b>	<b>6,289</b>	7,992	13,537	<b>231</b>	285	504	<b>3.7%</b>	3.6%	3.7%
<b>North America</b>	<b>1,658</b>	2,334	4,728	<b>(86)</b>	4	(194)	<b>(5.2)%</b>	0.2%	(4.1)%
<b>Asia Pacific</b>	<b>902</b>	794	1,617	<b>34</b>	18	52	<b>3.8%</b>	2.3%	3.2%
<b>Total life and pensions – continuing operations</b>	<b>14,317</b>	16,314	30,180	<b>369</b>	483	716	<b>2.6%</b>	3.0%	2.4%
<b>Total life and pensions – discontinued operations<sup>1</sup></b>	<b>1,085</b>	1,732	3,178	<b>1</b>	(58)	(92)	<b>0.1%</b>	(3.3)%	(2.9)%
<b>Total life and pensions</b>	<b>15,402</b>	18,046	33,358	<b>370</b>	425	624	<b>2.4%</b>	2.4%	1.9%

1. Current period discontinued operations represent the results of Delta Lloyd up to 6 May 2011 only.

See New Business Supplement on page 71 for further analysis of sales volumes. Regional new business internal rates of return are included in the Capital Management section, page 23.

#### United Kingdom

A successful first half of the year with sales of Life and Pensions up 5% at £5,468 million (*HY10: £5,194 million*), whilst delivering improved IRR of 16% (*FY10: 15%*) and margin of 3.5% (*HY10: 3.4%*), and maintained payback at 7 years.

Total **pensions** sales were up 33% to £2,742 million (*HY10: £2,061 million*) which included a further strong performance in Group Personal Pensions, a significant highlight in the first half of the year. Sales were up 82% to £1,420 million (*HY10: £779 million*), reflecting the strength of our GPP proposition in the more active pre Retail Distribution Review (RDR) marketplace. We are winning a greater proportion of tenders, with a higher value than previously achieved. In the first half of the year we won 290 schemes with over 80,000 members, whilst maintaining an attractive level of IRR and margin.

Total **annuity** sales were slightly higher at £1,610 million (*HY10: £1,603 million*) which included a 9% increase in individual annuities supported by continued strong performance in the open market, with over 60% standard annuity premiums coming from customers shopping around for their annuity. The strength of our brand and proposition are also reflected in the 70% of existing pensions customers who also choose to stay with Aviva for their annuity. Sales of bulk purchase annuities were £305 million (*HY10: £409 million*), reflecting our strict financial criteria for writing this business and a quieter marketplace, where our first quarter sales of £140 million represented a market leading position. Although the market has seen lower volumes in 2011 than the previous year, we believe significant opportunities remain to write profitable business in this market.

Total **protection** sales were marginally down at £490 million (*HY10: £507 million*) with sales of core protection up 2%. We were delighted to be awarded Protection Organisation of the Year at the recent Protection Review Awards, reflecting the progress we have made in raising awareness of the need for consumers to protect themselves and their families. We launched our new protection platform, including a suite of simple protection products through Santander at the end of June, building on our existing general insurance distribution agreement.

Sales of **bonds** were lower in the first half of 2011 at £466 million (*HY10: £828 million*), reflecting our continued focus on writing profitable business, the impact of the changing distributor landscape pre-RDR, and the relative attractiveness of bonds following tax treatment changes. Sales of **equity release** were down 18% to £160 million (*HY10: £195 million*), as this market continues to decline.

We are well prepared for the Retail Distribution Review. Our multi-product, multi-distribution approach, including being the market-leader in bancassurance, is a unique strength as 85% of our new business value is unaffected by RDR. We have more than 10,000 financial advisers pursuing new industry advice qualifications through our Financial Adviser Academy.

We will retain our focus on maximising profitability as we grow our life business and are confident that the progress we are making in our key markets will continue throughout 2011.



## 15 – Life and pension sales continued

### Aviva Europe

Aviva Europe has had a successful six months within the confines of a challenging economic environment, continuing with our increased focus on selling higher margin unit-linked and protection products. Whilst unit-linked sales have decreased by 6% against HY10 they have increased by 37% against the second half of 2010. Protection sales have also increased 6% compared with the first half of 2010 and 36% against the second half of 2010.

Our strategy has been to rebalance the sales mix and we have taken disciplined management actions in Italy and France which has led to sales of with-profits products decreasing by 36% against HY10. This has led to an overall decrease in sales of 21% to £6,289 million (*HY10: £7,992 million*) whilst our proactive management of the sales mix has resulted in an increase of 0.1pp in margin to 3.7% and a 2pp increase in IRR to 14%.

Sales in **France** decreased by 17% to £2,345 million (*HY10: £2,827 million*) following the deliberate management actions to improve the profitability of the with-profits portfolio with sales of these products decreasing by 22%. Unit-linked sales have increased by 5% following the promotional activities carried out by our partner Credit du Nord. These actions have driven a higher IRR of 11% (*HY10: 9%*) and a higher margin of 4.1% (*HY10: 3.6%*).

Sales in **Italy** decreased by 42% to £1,778 million (*HY10: £3,052 million*) in line with our reduced appetite for capital intensive with-profit sales. Several initiatives have been directed at increasing protection sales which have increased 12%. The combined effect is an improved IRR of 12% (*HY10: 10%*).

Sales in **Spain** decreased by 4% to £1,015 million (*HY10: £1,060 million*) which is a resilient performance in the context of the structural reform of the financial sector and the current market conditions and low levels of consumer lending. Protection sales continue to be robust, dropping only 8% compared to a 31% decline in Spanish mortgage lending<sup>1</sup>.

Sales in **Ireland** have increased by 16% to £553 million (*HY10: £476 million*). This has been driven by continued opportunistic sales of single premium investment bonds. Excluding this product sales decreased by 5% as the market continues to be difficult.

Sales in **Poland** have decreased by 4% to £305 million (*HY10: £319 million*). Our sales force are focusing on selling protection and unit-linked products increasing the sales of these products by 157% and 38% respectively. Our success in redirecting our sales force can be seen in the increase in non-pension sales from 44% of the portfolio in Poland to 77%. This has taken us from being a top ten life insurer to being in the top five. This has been offset by the expected continuing reduction in pension sales.

We have achieved an increase in sales of 32% in **Turkey** driven by high pensions sales and 34% in **Russia** due to high sales of protection through the bancassurance channel.

### North America

In the US, life and annuity sales declined 29% to £1,658 million for the first half (*HY10: £2,334 million*), reflecting our continuing focus on balancing profitability and growth while diversifying our business mix and managing capital efficiency. The business delivered continued strong profitability, with a 14% IRR (*FY10: 14%*) as we continued our focus on driving shareholder value.

The sales decline was primarily in **annuities**, as we maintained a disciplined focus in a highly competitive indexed annuity market, with sales reducing 34% to £1,202 million for the first half (*HY10: £1,829 million*). Looking at the quarter-on-quarter trend, sales in the second quarter of 2011 grew 21% to £659 million (*1Q11: £543 million*), as we introduced new products to meet customer needs while maintaining a focus on profitability and capital efficiency. Despite a 10% decline in total **life** sales to £456 million (*HY10: £505 million*), we maintained our focus on product diversification and broadened distribution in an extremely competitive market. Life sales now account for 28% of our business (*HY10: 22%*).

### Asia Pacific

The Asia Pacific region has continued to deliver a strong performance with increased sales, margin and IRR, supported by management actions to improve profitability and capital efficiency whilst responding well to challenging regulatory changes. We remain positive about the long term outlook for the region and are focused on delivering profitable products and building our multi-distribution capability.

The Asia Pacific region delivered 14% growth in life and pensions sales to £902 million (*HY10: £794 million*). Our new business IRR improved to 13% (*FY10: 11%*) while new business margin increased significantly to 3.8% (*HY10: 2.3%*) due to our efforts in diversifying our product mix and managing capital efficiency while maintaining growth.

**Singapore** led the region's growth with a 71% increase (63% on a local currency basis) in life and pension sales to £244 million (*HY10: £143 million*). Discrete 2Q11 sales represented a 101% rise against the previous quarter, driven by robust bancassurance sales and the continued momentum of our 'Aviva Advisors' channel.

**South Korea** delivered strong performance with 20% growth (22% on a local currency basis) to £242 million (*HY10: £201 million*) supported by its fast-growing bancassurance and agency channels.

In **China**, regulatory changes have resulted in volumes declining across the industry. Life and pension sales decreased by 12% (11% on a local currency basis) to £207 million (*HY10: £235 million*). Despite a challenging environment, profitability improved and we increased new business margins. We will continue to expand into more provinces and deepen our bank partnerships, while focusing on sales of long-term retirement products.

In **India**, while sales are down 14% (11% on a local currency basis) to £50 million (*HY10: £58 million*), a diversified product mix, ongoing cost management, the balancing of Unit Linked Insurance Plans (ULIPs) and higher-margin traditional products countered regulatory challenges and resulted in significant improvements to margins and profitability.

1. According to the Instituto Nacional de Estadística (INE) based on 31% decrease in mortgage approvals by value from the first 6 months of 2010 to the six months to May 2011.

## 15 – Life and pension sales continued

### Delta Lloyd

As a result of the partial disposal of Aviva's stake in Delta Lloyd, from 6 May 2011 the Group has ceased to consolidate the results and net assets of the Delta Lloyd group. The results of Delta Lloyd up to the transaction date have therefore been classified as discontinued operations.

On a like for like basis excluding Germany the Delta Lloyd sales are flat on the prior year and there has been a significant improvement in IRR.

## 16 – Investment sales

	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
<b>Investment sales</b>			
<b>United Kingdom</b>	<b>782</b>	849	1,548
<b>Europe (Aviva Investors)</b>	<b>770</b>	731	1,350
Asia (Aviva Investors)	161	109	266
Asia	117	108	223
<b>Asia Pacific</b>	<b>278</b>	217	489
<b>Total investment sales – continuing operations</b>	<b>1,830</b>	1,797	3,387
<b>Total investment sales – discontinued operations<sup>1</sup></b>	<b>170</b>	395	615
<b>Total investment sales</b>	<b>2,000</b>	2,192	4,002

1. Current period discontinued operations represent the results of Delta Lloyd up to 6 May 2011 only.

Total investment sales (excluding Delta Lloyd) of £1,830 million were 2% higher than the same period last year (*HY10: £1,797 million*).

**UK** Investment sales were down 8% at £782 million (*HY10: £849 million*) primarily reflecting the high 2010 comparator which included an exceptional uplift in volumes as investors returned to property funds in the first part of 2010. During the first half of 2011 we have seen strong performance in multi-manager funds, and niche products including global convertibles, index opportunities and property.

**Europe** investment sales increased by 5% to £770 million (*HY10: £731 million*) reflecting increased demand for index opportunities funds while emerging market debt, global convertible and tactical asset allocation funds also continued to attract investment. Sales through Polish distribution channels benefited from a local marketing campaign, which coupled with the expansion of our external distribution network in Poland, resulted in the majority of the sales growth for the region.

Investment sales in **Asia Pacific** were 28% higher at £278 million (*HY10: £217 million*) reflecting higher sales in Australia at £159 million, an increase of 46% on prior year (*HY10: £109 million*) largely due to the launch of a separately managed account product in 2011. There was also an 8% increase on sales in Asia to £117 million (*HY10: £108 million*) due to higher portfolio transfer sales and the contribution of the Aviva Advisors channel in Singapore.

As described above, the results of **Delta Lloyd** up to 6 May 2011 have been classified as discontinued operations.

# Capital management

## 17 – Capital generation and utilisation

The active management of the generation and utilisation of capital is a primary Group focus, with the balancing of new business investment and shareholder distribution with operational capital generation a key financial priority.

The half-year 2011 result of £0.8 billion reinforces our confidence in the capital generation position of the Group. Profits from existing life business remain strong, generating £1.0 billion of capital (*HY10: £1.1 billion*), with a further £0.3 billion (*HY10: £0.3 billion*) generated by the general insurance, fund management and non-insurance businesses. Underlying capital generation has improved strongly as the first half of 2010 benefited from the positive impact of the special distribution from the UK with-profit funds, an XXXX reinsurance transaction in the US and a reduction in General Insurance capital requirements as a result of volume changes in prior years. Capital invested in new business remains at £0.5 billion (*HY10: £0.5 billion*), and continues to benefit from management actions to improve capital efficiency and the utilisation of the RIEESA to finance new business in UK Life. Within the £0.5 billion of capital investment in new business, the life component has reduced by £0.2 billion compared with HY10. The capital investment in non-life business in the period is broadly neutral compared with the release of £0.2 billion in HY10.

	6 months 2011 £bn	6 months 2010 £bn	Full year 2010 £bn
<b>Operational capital generation:</b>			
Life in-force profits <sup>1</sup>	1.0	1.1	2.1
General insurance, fund management and non-insurance profits	0.3	0.3	0.6
<b>Operational capital generated before investment in new business</b>	<b>1.3</b>	<b>1.4</b>	<b>2.7</b>
Capital invested in new business	(0.5)	(0.5)	(1.0)
<b>Operational capital generated after investment in new business</b>	<b>0.8</b>	<b>0.9</b>	<b>1.7</b>

1. The life in-force profits in full year 2010 excludes the negative impact of the Delta Lloyd longevity assumption change of £0.2 billion which is included in the MCEV analysis of free surplus generated.

Operational capital generation comprises the following components:

- Operating Free surplus emergence, including release of required capital, for the life in-force business (net of tax and minorities);
- IFRS operating profits for the general insurance and non-life businesses (net of tax and minorities);
- Capital invested in new business. For life business this is the impact of initial and required capital on free surplus. For general insurance business this reflects the movement in required capital, which has been assumed to equal the regulatory minimum multiplied by the local management target level. Where appropriate movements in capital requirements exclude the impact of foreign exchange and other movements deemed to be non-operating in nature. Previously the level was assumed to be two times the minimum and did not exclude non-operating items. This change does not have an impact on the 2010 comparatives above.
- Post disposal, all Delta Lloyd capital generation, including life business, has been included within general insurance, fund management and non-insurance profits on an IFRS basis.

## 18 – Internal rate of return and payback period

As set out above, the Group generates a significant amount of capital each year. This capital generation supports both shareholder distribution and reinvestment in new business. The internal rates of return on new business written during the period are set out below. We manage new business against a target IRR hurdle rate of 12% or above and a target payback hurdle rate of 10 years or less.

	6 months 2011 IRR %	6 months 2010 IRR %	Full year 2010 IRR %	6 months 2011 Payback period years	6 months 2010 Payback period years	Full year 2010 Payback period years
<b>United Kingdom</b>	<b>16%</b>	15%	15%	<b>7</b>	7	7
France	<b>11%</b>	9%	9%	<b>8</b>	11	9
Ireland	<b>8%</b>	6%	5%	<b>8</b>	10	11
Italy	<b>12%</b>	10%	11%	<b>6</b>	7	6
Poland	<b>20%</b>	25%	25%	<b>5</b>	4	4
Spain	<b>23%</b>	22%	22%	<b>4</b>	4	4
Other Europe	<b>16%</b>	17%	14%	<b>6</b>	5	6
<b>Aviva Europe</b>	<b>14%</b>	12%	13%	<b>6</b>	8	7
<b>North America</b>	<b>14%</b>	14%	14%	<b>5</b>	4	4
<b>Asia Pacific</b>	<b>13%</b>	10%	11%	<b>12</b>	12	13
<b>Total excluding Delta Lloyd</b>	<b>14.3%</b>	12.9%	13.3%	<b>6</b>	7	7
Delta Lloyd	<b>10%</b>	5%	6%	<b>10</b>	19	16
<b>Total</b>	<b>13.9%</b>	12.0%	12.5%	<b>7</b>	8	8

## 19 – Net asset value

IFRS net asset value per share has reduced during the period to 425p (31 December 2010: 454p), primarily driven by the impact of the partial disposal of Delta Lloyd (see below). After taking account of the impact of the Delta Lloyd disposal on opening net asset value, IFRS total equity has increased from £14,903 million to £15,205 million.

MCEV net asset value per share has increased to 554p (31 December 2010: 542p).

### Impact of partial disposal of Delta Lloyd on IFRS net asset value

As set out in note A3 - Subsidiaries on page 40, as a result of the partial disposal of Delta Lloyd on 6 May 2011 Aviva's share of Delta Lloyd's voting rights has fallen below 50%, so Delta Lloyd has been deconsolidated. Notwithstanding that Aviva has retained a 43% associate interest in Delta Lloyd's ordinary share capital following the partial disposal, deconsolidation is accounted for as the disposal of the Group's entire 58% interest pre-transaction, resulting in a loss on disposal on the entire 58% interest.

During the period ended 6 May 2011, Delta Lloyd's total equity decreased by £420 million, from £4,310 million to £3,890 million, mainly due to spreads narrowing by circa 80bps on the yield curve used to value liabilities.

Aviva's share of Delta Lloyd's total equity at 6 May 2011 was £2,120 million, with £1,770 million owned by non-controlling interests. Given net proceeds of £1,488 million, the movement in ordinary shareholders' equity following the partial disposal is therefore a reduction of £632 million.

In the income statement, the reported loss is £32 million, as the movement in ordinary shareholders' equity has mostly been offset by a credit of £600 million which represents other reserves relating to Delta Lloyd that have been recycled to the income statement on disposal.

	IFRS			MCEV		
	30 June 2011 £m	30 June 2010 £m	31 December 2010 £m	30 June 2011 £m	Restated 30 June 2010 £m	31 December 2010 £m
<b>Total equity at 1 January</b>	<b>17,725</b>	15,086	15,086	<b>20,462</b>	18,561	18,561
Movement in Delta Lloyd equity to 6 May 2011						
(Loss)/profit after tax recognised in the income statement, excluding loss on disposal	(492)	—	—	(74)	—	—
Other comprehensive income, net of tax	82	—	—	131	—	—
Other net equity movements	(10)	—	—	(41)	—	—
	(420)	—	—	16	—	—
Deconsolidation of Delta Lloyd:						
Movement in ordinary shareholders' equity	(632)	—	—	(157)	—	—
Movement in non-controlling interests	(1,770)	—	—	(1,484)	—	—
	<b>14,903</b>	15,086	15,086	<b>18,837</b>	18,561	18,561
Operating profit after tax – continuing operations	845	779	1,497	904	1,217	2,429
Operating profit after tax – discontinued operations	—	181	428	—	198	208
Non-operating items after tax – continuing operations	(380)	(45)	(275)	(146)	(124)	(696)
Non-operating items after tax – discontinued operations	—	590	242	—	(461)	(195)
Actuarial gains/(losses) on pension schemes	(8)	(255)	1,060	(8)	(255)	1,060
Foreign exchange rate movements	209	(41)	55	394	(449)	(60)
Other comprehensive income, net of tax – continuing operations	(54)	296	380	(71)	37	37
Other comprehensive income, net of tax – discontinued operations	—	(453)	(64)	—	(335)	(198)
Dividends and appropriations net of scrip	(276)	(273)	(548)	(276)	(273)	(548)
Other net equity movements	(34)	(87)	(136)	(3)	(87)	(136)
<b>Total equity at 30 June / 31 December</b>	<b>15,205</b>	15,778	17,725	<b>19,631</b>	18,029	20,462
Preference share capital and direct capital instruments	(1,190)	(1,190)	(1,190)	(1,190)	(1,190)	(1,190)
Non-controlling interests	(1,844)	(3,537)	(3,741)	(2,580)	(3,899)	(3,977)
<b>Net assets attributable to Ordinary shareholders of Aviva plc at 30 June/31 December (excluding preference shares)</b>	<b>12,171</b>	11,051	12,794	<b>15,861</b>	12,940	15,295
Number of shares	2,863	2,800	2,820	2,863	2,800	2,820
<b>Net asset value per share</b>	<b>425p</b>	394p	454p	<b>554p</b>	462p	542p

## 20 – Financial flexibility

The Group's borrowings are primarily comprised of long dated hybrid instruments with maturities spread over many years, minimising refinancing risk. In addition to central liquid asset holdings of £1.8 billion, the Group also has access to unutilised committed credit facilities of £2.1 billion provided by a range of leading international banks.

## 21 – European Insurance Groups Directive (IGD)

	UK life funds £bn	Other business £bn	30 June 2011 £bn	31 December 2010 £bn
Insurance Groups Directive (IGD) capital resources	5.0	10.6	15.6	16.3
Less: capital resource requirement (CRR)	(5.0)	(6.6)	(11.6)	(12.5)
Insurance Group Directive (IGD) excess solvency	—	4.0	4.0	3.8
Cover over EU minimum (calculated excluding UK life funds)			1.6 times	1.6 times

The EU Insurance Groups Directive (IGD) regulatory capital solvency surplus has increased by £0.2 billion since 31 December 2010 to £4.0 billion. The key movements over the period are set out in the following table:

	£bn
IGD solvency surplus at 31 December 2010	3.8
Operating profits net of other income and expenses	0.5
Movement in Lower Tier II Hybrid	0.4
Dividends net of scrip	(0.3)
Market movements including foreign exchange	(0.3)
Pension scheme funding	(0.2)
Increase in Capital Resource Requirement	(0.1)
Impact of Delta Lloyd sell down	0.1
Increase in market valuation of RAC	0.2
Other	(0.1)
<b>Estimated IGD solvency surplus at 30 June 2011</b>	<b>4.0</b>

Market movements include the impact of equity, credit spread, interest rate and foreign exchange movements net of the effect of hedging instruments.

## 22 – Sensitivity analysis

The sensitivity of the group's total equity, excluding Delta Lloyd, on an MCEV basis and IFRS basis at 30 June 2011 to a 10% fall in global equity markets, a rise of 1% in global interest rates or a 0.5% increase in credit spreads is as follows:

		Equities down 10%				
31 December 2010 £bn		30 June 2011 £bn	Direct £bn	Indirect £bn	Interest rates up 1% £bn	0.5% increased credit spread £bn
	MCEV basis					
19.0	Long-term savings <sup>1</sup>	20.0	(0.2)	(0.4)	(0.7)	(1.6)
7.6	General insurance and other	5.4	(0.1)	—	(0.6)	0.4
(6.1)	Borrowings <sup>2</sup>	(5.8)	—	—	—	—
20.5	Total equity	19.6	(0.3)	(0.4)	(1.3)	(1.2)

31 December 2010 £bn		30 June 2011 £bn	Equities down 10% £bn	Interest rates up 1% £bn	0.5% increased credit spread £bn
	IFRS basis				
15.0	Long-term savings	15.6	(0.2)	(1.0)	(0.3)
8.8	General insurance and other	5.4	(0.1)	(0.6)	0.4
(6.1)	Borrowings <sup>2</sup>	(5.8)	—	—	—
17.7	<b>Total equity</b>	15.2	(0.3)	(1.6)	0.1

1. Assumes MCEV assumptions adjusted to reflect revised bond yields.  
2. Comprising external and subordinated debt.

The HY11 sensitivities contained in the above tables exclude any contribution from Delta Lloyd following deconsolidation of this business. The main financial sensitivities in Delta Lloyd are covered in note C7 – IFRS Sensitivity analysis on page 92.

## 22 – Sensitivity analysis continued

These sensitivities assume a full tax charge/credit on market value assumptions. The interest rate sensitivity also assumes an equivalent movement in both inflation and discount rate (i.e. no change to real interest rates) and therefore incorporates the offsetting effects of these items on the pension scheme liabilities. A 1% increase in the real interest rate has the effect of reducing the pension scheme liability by £1.4 billion.

The 0.5% increased credit spread sensitivities for MCEV and IFRS do not make an allowance for any adjustment to risk-free interest rates. MCEV sensitivities assume that the credit spread movement relates to credit risk and not liquidity risk; in practice, credit spread movements may be partially offset due to changes in liquidity risk. Life IFRS sensitivities provide for any impact of credit spread movements on liability valuations. The MCEV and IFRS sensitivities also include the allocation of staff pension scheme sensitivities, which assume inflation rates and government bond yields remain constant. In practice, the sensitivity of the business to changes in credit spreads is subject to a number of complex interactions. The impact of the credit spread movements will be related to individual portfolio composition and may be driven by changes in credit or liquidity risk; hence, the actual impact may differ substantially from applying spread movements implied by various published credit spread indices to these sensitivities.

### Group IGD

The sensitivity of the Group's IGD surplus reflects the impact of the hedges we have put in place as part of our long-term strategy to protect the group from extreme market movements. At 30 June 2011 the sensitivity to a 10% fall in global equity markets or a rise of 1% in global interest rates is as follows:

	30 June 2011 £bn	Equities down 10% £bn	Interest rates up 1% £bn
IGD Group surplus	4.0	(0.2)	(0.7)

We expect that a 20% fall in equity markets at 30 June 2011 would reduce IGD by £0.4 billion. The Group's IGD surplus is not materially exposed to further equity market shocks as hedging strategies in place protect against further extreme market shocks.

## 23 – Risk management

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

The Group's risk strategy is to invest its available capital to optimise the balance between return and risk whilst maintaining an appropriate level of economic (i.e. risk-based) capital and regulatory capital. Consequently, our risk management goals are to:

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

### Risk environment

The first six months of 2011 have seen continued tensions in the Middle East and North Africa and increasing concerns over the levels of sovereign debt within and, to a lesser degree, outside the eurozone. Interest rates remained low in developed markets and inflationary threats increased. Despite these potential headwinds, equity markets rose modestly in the UK, Europe and the US and credit spreads narrowed. Discussions over key aspects of the future European Solvency II regime have progressed, although some uncertainty remains.

### Risk profile

The types of risk to which the Group is exposed have not changed significantly over the half-year to 30 June 2011 and remain credit, market, life insurance, general insurance, liquidity, operational and reputational risks as described on pages 68 and 69 in the 2010 annual report. However, the reduction of the shareholding in Delta Lloyd has decreased the Group's IFRS balance sheet risks and, in particular, has led to a substantial fall in equity and mortgage risk exposures. The reduction of the shareholding in Delta Lloyd also resulted in a modest reduction in the Group's underlying exposures to equity, credit, property, interest rate and inflation risks when measured on an economic capital basis. The Group has broad ranging investment restrictions in place on sovereign and corporate exposure to Greece, Ireland, Italy, Portugal and Spain and has actively reduced exposure to the most vulnerable countries. The Group continues to pursue its strategy of focusing on the more profitable business lines. Overall the Group was operating within its quantitative economic capital and liquidity risk appetites at the 30 June 2011.

We provide more detail on the risk profile and risk management approach in note A17 – Risk Management on page 64 on the material risks and uncertainties facing the Group for the next six months. Our risk management processes ensure close and ongoing monitoring of all our capital measures and control any mismatch between our assets and liabilities. These processes include the use of derivative hedges which are described in more detail below.

### Equity hedging

Alongside use of derivatives for portfolio management and the local management of equity risk within each business unit, the Group has maintained a long-term strategy to manage its residual overall equity risk through the use of derivatives. As at 30 June 2011 the

## 23 – Risk management continued

Group's shareholder funds held £6 billion notional of equity hedges, with up to 3 months to maturity with a strike of 76% of the prevailing market levels on the 30 June 2011.

### Interest rate hedging

Interest rate hedges are used widely to manage asymmetric interest rate exposures across our life insurance businesses as well as an efficient way to manage cash flow and duration matching. The most material examples of uses to hedge guarantees relate to guaranteed annuity exposures in both the UK and Ireland. These hedges are used to protect against interest rate falls and are sufficient in scale to materially reduce the Group's interest rate exposure.

### Currency hedging

At a Group level we actively seek to manage foreign currency risk primarily by matching assets and liabilities in functional currencies at the business unit level. Foreign currency dividends from subsidiaries are hedged using foreign exchange forward contracts to provide certainty regarding the sterling value to be received by Group. Derivatives have also been used to reduce foreign exchange balance sheet translation risk. At 30 June 2011 the Group had in place zero cost collar Euro and Canadian Dollar hedges with a notional value of £2.0 billion and £0.3 billion respectively. These hedges are used to protect the Group's capital against a significant depreciation in the local currency versus sterling.

## 24 – Return on capital employed

The Group measures its return on capital employed on both an IFRS and MCEV basis. On an IFRS basis return on equity shareholders' funds is 12.8% (31 December 2010: 14.8%). Although operating profit after tax and minority interests has increased (on an annualised basis) since full year 2010, the main driver of the decrease in RoCE is the 24% growth in the capital base from £10.4 billion at the start of 2010 to £12.8 billion at the start of 2011, driven by profits in the period and actuarial gains on staff pension schemes. On an MCEV basis return on equity shareholders' funds is 11.5% (31 December 2010: 16.4%) decreasing due to similar factors.

	IFRS		MCEV	
	Annualised 30 June 2011 %	31 December 2010 %	Annualised 30 June 2011 %	31 December 2010 %
Life assurance	11.7%	10.4%	10.1%	13.8%
General insurance and health	12.6%	15.3%	12.6%	15.3%
Fund management	26.0%	29.9%	6.1%	9.1%
Other business	99.2%	19.3%	94.1%	18.7%
Corporate	31.0%	24.3%	31.0%	24.3%
<b>Return on total capital employed (excluding Delta Lloyd)</b>	<b>10.0%</b>	<b>10.4%</b>	<b>8.8%</b>	<b>13.2%</b>
Delta Lloyd	7.7%	11.0%	12.3%	5.5%
<b>Return on total capital employed</b>	<b>9.5%</b>	<b>10.5%</b>	<b>9.3%</b>	<b>11.9%</b>
Subordinated debt	4.7%	4.5%	4.7%	4.5%
External debt	1.6%	2.8%	1.6%	2.8%
<b>Return on total equity</b>	<b>11.4%</b>	<b>12.8%</b>	<b>10.9%</b>	<b>14.2%</b>
Less: Non-controlling interests	9.6%	9.4%	11.3%	10.0%
Direct capital instrument	—	4.2%	—	4.2%
Preference capital	9.0%	8.5%	9.0%	8.5%
<b>Return on equity shareholders' funds</b>	<b>12.8%</b>	<b>14.8%</b>	<b>11.5%</b>	<b>16.4%</b>



## 25 – EEV equivalent embedded value

The embedded value of Aviva shown below is based on the projected future profits allowing for expected investment returns in excess of risk-free, and discounts those profits at a risk-discount rate. This result is deemed more comparable to our UK insurers who publish European Embedded Value (EEV) than market consistent embedded value.

The expected release of future profits and required capital is shown in five-year groups. Projected cash flows are those used for Implied Discount Rate (IDR) calculations for in-force business.

The discount rate applied is 7.20% (FY10: 7.75%), based on a risk-free rate of 3.7%, a risk margin of 3.10% and an allowance for the time value of options and guarantees of 0.4%.

The new business margin on continuing operations (net of tax and non-controlling interests) for business written during the period to 30 June 2011 is 2.6% (MCEV: 1.8%).

## Segmental analysis of life and related business EEV equivalent embedded value

	Net worth			VIF on traditional embedded value			Embedded value		
	30 June 2011 £bn	30 June 2010 £bn	31 December 2010 £bn	30 June 2011 £bn	30 June 2010 £bn	31 December 2010 £bn	30 June 2011 £bn	30 June 2010 £bn	31 December 2010 £bn
<b>United Kingdom</b>	<b>4.0</b>	3.8	4.1	<b>3.3</b>	2.9	2.8	<b>7.3</b>	6.7	6.9
<b>Aviva Europe</b>	<b>3.4</b>	2.8	3.1	<b>3.1</b>	2.8	3.0	<b>6.5</b>	5.6	6.1
<b>North America</b>	<b>1.3</b>	1.3	1.2	<b>1.5</b>	0.8	1.3	<b>2.8</b>	2.1	2.5
<b>Asia Pacific</b>	<b>0.3</b>	0.3	0.3	<b>0.4</b>	0.2	0.3	<b>0.7</b>	0.5	0.6
<b>Total covered business excluding Delta Lloyd</b>	<b>9.0</b>	8.2	8.7	<b>8.3</b>	6.7	7.4	<b>17.3</b>	14.9	16.1
Delta Lloyd <sup>1</sup>	—	1.2	1.3	—	0.8	0.9	—	2.0	2.2
<b>Total covered business</b>	<b>9.0</b>	9.4	10.0	<b>8.3</b>	7.5	8.3	<b>17.3</b>	16.9	18.3
<b>Non-covered business<sup>1</sup></b>							<b>1.5</b>	(0.4)	0.4
<b>Total Group EV</b>							<b>18.8</b>	16.5	18.7
<b>Less preference share capital and direct capital instruments</b>							<b>(1.2)</b>	(1.2)	(1.2)
<b>Equity attributable to ordinary shareholders on an EV basis</b>							<b>17.6</b>	15.3	17.5

1. Delta Lloyd is included in covered business at 31 December 2010 and in non-covered business at 30 June 2011.

## Maturity profile of undiscounted EEV equivalent embedded value cash flows

### Total in-force business

To show the profile of the free surplus emergence implicit in the traditional embedded value calculation for in-force business, the cash flows have been split into five year tranches depending on the date when the profit is expected to emerge.

30 June 2011 £bn	Free surplus	Release of future profits and required capital					Total net of non-controlling interest
		0-5	6-10	11-15	16-20	20+	
<b>United Kingdom</b>	<b>1.1</b>	<b>2.6</b>	<b>3.0</b>	<b>2.4</b>	<b>1.9</b>	<b>4.5</b>	<b>14.4</b>
<b>Aviva Europe</b>	<b>0.4</b>	<b>3.4</b>	<b>2.6</b>	<b>2.0</b>	<b>1.6</b>	<b>3.2</b>	<b>12.8</b>
<b>North America</b>	<b>(0.2)</b>	<b>1.9</b>	<b>1.2</b>	<b>0.7</b>	<b>0.6</b>	<b>0.9</b>	<b>5.3</b>
<b>Asia Pacific</b>	<b>0.1</b>	<b>0.3</b>	<b>0.2</b>	<b>0.1</b>	<b>0.1</b>	<b>0.2</b>	<b>0.9</b>
<b>Total</b>	<b>1.4</b>	<b>8.2</b>	<b>7.0</b>	<b>5.2</b>	<b>4.2</b>	<b>8.8</b>	<b>33.4</b>

31 December 2010 £bn	Free surplus	Release of future profits and required capital					Total net of non-controlling interest
		0-5	6-10	11-15	16-20	20+	
<b>United Kingdom</b>	<b>1.1</b>	<b>2.4</b>	<b>2.9</b>	<b>2.4</b>	<b>1.9</b>	<b>4.4</b>	<b>14.0</b>
<b>Aviva Europe</b>	<b>0.2</b>	<b>3.5</b>	<b>2.4</b>	<b>1.9</b>	<b>1.5</b>	<b>2.5</b>	<b>11.8</b>
<b>North America</b>	<b>(0.2)</b>	<b>1.9</b>	<b>1.0</b>	<b>0.7</b>	<b>0.5</b>	<b>0.7</b>	<b>4.8</b>
<b>Asia Pacific</b>	<b>0.1</b>	<b>0.3</b>	<b>0.2</b>	<b>0.1</b>	<b>0.1</b>	<b>0.2</b>	<b>0.9</b>
<b>Total excluding Delta Lloyd</b>	<b>1.2</b>	<b>8.1</b>	<b>6.5</b>	<b>5.1</b>	<b>4.0</b>	<b>7.8</b>	<b>31.5</b>
Delta Lloyd <sup>1</sup>	0.4	1.1	0.8	0.7	0.6	1.3	4.5
<b>Total</b>	<b>1.6</b>	<b>9.2</b>	<b>7.3</b>	<b>5.8</b>	<b>4.6</b>	<b>9.1</b>	<b>36.0</b>

1. Delta Lloyd is included in covered business at 31 December 2010 and in non-covered business at 30 June 2011.

# Analysis of assets

As an insurance business, Aviva Group holds a variety of assets to match the characteristics and duration of its insurance liabilities. Appropriate and effective asset liability matching (on an economic basis) is the principal way in which we manage our investments. In addition, to support this, we also use a variety of hedging and other risk management strategies to diversify away residual mis-match risk that is outside of our risk appetite.

During 2011 Aviva has completed a partial disposal of its equity holding in Delta Lloyd. At 31 December 2010 Aviva held a controlling interest of 58% in Delta Lloyd's issued equity, and as a result and in accordance with IFRS, consolidated 100% of Delta Lloyd's assets and liabilities. At 30 June 2011 Aviva held 42% of Delta Lloyd's issued equity and is no longer considered to have control of Delta Lloyd. The Group therefore no longer consolidates Delta Lloyd's assets and liabilities as at 30 June 2011. In place of 100% of Delta Lloyd's assets, there is a substantial asset shown as a 'Share in joint ventures and associates' which represents Aviva's equity share of Delta Lloyd. As a result, a direct comparison of the 31 December 2010 and 30 June 2011 balance sheets for asset quality purposes would be distorted by the effect of this deconsolidation. Throughout the disclosure, therefore, Delta Lloyd has been excluded for the purposes of the 31 December 2010 balance sheet to allow a proper comparison. Aviva continues to actively monitor the quality of Delta Lloyd's balance sheet and manages the Group's balance sheet holistically including all sources of risk within our overall risk appetite.

## 26 – Total assets

	Policyholder assets £m	Participating fund assets £m	Shareholder assets £m	Total assets analysed £m	Less assets of operations classified as held for sale £m	Balance sheet total £m
<b>30 June 2011</b>						
Loans	—	6,232	18,608	24,840	(12)	24,828
Financial investments						—
Debt securities	14,997	85,861	54,796	155,654	—	155,654
Equity securities	23,295	12,103	1,237	36,635	—	36,635
Other investments	27,898	5,745	2,077	35,720	(3)	35,717
Total loans and financial investments	66,190	109,941	76,718	252,849	(15)	252,834
Cash and cash equivalents	4,334	10,259	8,553	23,146	(40)	23,106
Other assets	6,679	12,671	27,261	46,611	(673)	45,938
Assets of operations classified as held for sale	—	—	—	—	728	728
<b>Total</b>	<b>77,203</b>	<b>132,871</b>	<b>112,532</b>	<b>322,606</b>	<b>—</b>	<b>322,606</b>
<b>Interest in Delta Lloyd as an associate</b>	<b>—</b>	<b>—</b>	<b>1,061</b>	<b>1,061</b>	<b>—</b>	<b>1,061</b>
<b>Total (excluding Delta Lloyd as an associate)</b>	<b>77,203</b>	<b>132,871</b>	<b>111,471</b>	<b>321,545</b>	<b>—</b>	<b>321,545</b>
<b>Total % (excluding Delta Lloyd as an associate)</b>	<b>24.0%</b>	<b>41.3%</b>	<b>34.7%</b>	<b>100.0%</b>	<b>—</b>	<b>100.0%</b>
<b>FY10 as reported</b>	85,462	136,787	147,858	370,107	—	370,107
<b>Delta Lloyd</b>	10,947	8,815	39,501	59,263	—	59,263
<b>FY10 Total (excluding Delta Lloyd)</b>	74,515	127,972	108,357	310,844	—	310,844
<b>FY10 Total % (excluding Delta Lloyd)</b>	24.0%	41.2%	34.8%	100.0%	—	100.0%

The assets and liabilities of operations classified as held for sale as at 30 June 2011 relate to RAC Limited (formerly RAC plc), our investment management business in Australia and our interest in a joint venture in Taiwan.

## 26 – Total assets continued

### Total assets – Valuation bases

	30 June 2011				31 December 2010 Excluding Delta Lloyd			
	Fair value £m	Amortised cost £m	Equity accounted/ tax assets £m	Total £m	Fair value £m	Amortised cost £m	Equity accounted/ tax assets £m	Total £m
Policyholder assets	74,948	1,969	286	77,203	72,280	1,644	591	74,515
Participating fund assets	120,672	10,617	1,582	132,871	118,517	8,936	519	127,972
Shareholder assets	82,773	27,782	916	111,471	80,176	26,591	1,590	108,357
<b>Total</b>	<b>278,393</b>	<b>40,368</b>	<b>2,784</b>	<b>321,545</b>	<b>270,973</b>	<b>37,171</b>	<b>2,700</b>	<b>310,844</b>
<b>Total %</b>	<b>86.6%</b>	<b>12.5%</b>	<b>0.9%</b>	<b>100.0%</b>	<b>87.2%</b>	<b>11.9%</b>	<b>0.9%</b>	<b>100.0%</b>

The proportion of total assets measured at fair value (which includes 100% of financial investments) has remained stable at 86.6% (31 December 2010: 87.2%). The principal asset classes measured at fair value are loans, debt securities, equity securities and other financial investments.

### Total assets – financial investments

	30 June 2011				31 December 2010 Excluding Delta Lloyd			
	Cost/ amortised cost £m	Unrealised gain £m	Unrealised losses and impairments £m	Fair value £m	Cost/ amortised cost £m	Unrealised gain £m	Unrealised losses and impairments £m	Fair value £m
Debt securities	151,271	8,270	(3,887)	155,654	145,418	7,104	(3,671)	148,851
Equity securities	32,981	5,595	(1,941)	36,635	32,077	5,431	(2,038)	35,470
Other investments	34,732	1,868	(880)	35,720	33,225	2,733	(618)	35,340
<b>Total<sup>1</sup></b>	<b>218,984</b>	<b>15,733</b>	<b>(6,708)</b>	<b>228,009</b>	<b>210,720</b>	<b>15,268</b>	<b>(6,327)</b>	<b>219,661</b>

1. Includes assets classified as held for sale.

All unrealised losses on financial investments have been recognised in profit or loss, except unrealised losses on those financial investments classified as available-for-sale (AFS). Unrealised losses on AFS financial investments are recognised in profit or loss on disposal or in the event of impairment. Since the disposal of Delta Lloyd the Group no longer has any significant direct interest in financial investments classified as available for sale other than debt securities. Total unrealised losses on available for sale debt securities at 30 June 2011 were £115 million (2010: £373 million).

The total impairment expense for the period for AFS debt securities was £8 million (31 December 2010: £79 million) of which £7 million relates to Alt-A securities in our U.S. business. These are not yet in default but continued deterioration in market values and defaults on more junior tranches are considered indicators of impairment.

## 27 – Shareholders' assets

As at 30 June 2011, total shareholder investments in loans and financial investments included within shareholder assets was £76.7 billion (31 December 2010 excluding Delta Lloyd: £75.5 billion), including loans of £18.6 billion, debt securities of £54.8 billion, equity securities of £1.2 billion and other investments of £2.1 billion.

### Shareholders' assets – loans

	United Kingdom £m	Aviva Europe £m	North America £m	Asia Pacific £m	Total £m
<b>30 June 2011</b>					
Policy loans	7	14	231	38	290
Loans and advances to banks	856	—	—	—	856
Mortgage loans – securitised	1,916	—	—	—	1,916
Mortgage loans – non-securitised	13,155	1	2,109	—	15,265
Other loans	177	4	98	2	281
<b>Total</b>	<b>16,111</b>	<b>19</b>	<b>2,438</b>	<b>40</b>	<b>18,608</b>
FY10 Total (excluding Delta Lloyd)	15,899	18	2,256	40	18,213

Our well diversified UK Life commercial mortgage portfolio remains of high quality, with low levels of default losses recorded in the period. Loan Interest Cover (LIC) remains strong at 1.32 times and over 97% of mortgages are neither in arrears nor otherwise impaired. The average LTV has remained relatively stable at 93% (31 December 2010: 95%).

The valuation allowance (including supplementary provisions) made in the UK for corporate bonds and commercial mortgages (including healthcare mortgages) carried at fair value equates to 66bps and 79bps respectively at 30 June 2011 (31 December 2010: 63bps and 78bps respectively). This is equivalent to a valuation allowance of £1.3 billion (31 December 2010: £1.3 billion) over the remaining term of the UK Life corporate bond and commercial mortgage portfolio. In addition, we hold £91 million (31 December 2010: £60 million) of provisions in our UK General Insurance mortgage portfolio, which is carried at amortised cost.

### Shareholders' assets – financial investments

	30 June 2011				31 December 2010 Excluding Delta Lloyd			
	Fair value hierarchy				Fair value hierarchy			
	Level 1 £m	Level 2 £m	Level 3 £m	Total £m	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Debt securities	21,757	32,267	772	54,796	21,040	32,285	845	54,170
Equity securities	460	400	377	1,237	472	276	365	1,113
Other investments	427	1,256	394	2,077	512	1,174	351	2,037
<b>Total</b>	<b>22,644</b>	<b>33,923</b>	<b>1,543</b>	<b>58,110</b>	<b>22,024</b>	<b>33,735</b>	<b>1,561</b>	<b>57,320</b>
<b>Total %</b>	<b>39.0%</b>	<b>58.3%</b>	<b>2.7%</b>	<b>100.0%</b>	<b>38.4%</b>	<b>58.9%</b>	<b>2.7%</b>	<b>100.0%</b>

During the period, there has been an increase to 39.0% (31 December 2010: 38.4%) in the proportion of shareholder financial investments classified as "Level 1", which means that they are valued using quoted prices in active markets.

The majority of the debt instruments held by our North American businesses are valued by independent pricing firms in accordance with usual market practice in that region and consistent with other companies operating in the region are classified as Level 2 in the Fair Value hierarchy. Excluding our North American businesses, the proportion of shareholder debt securities classified as Level 1 in the Fair Value hierarchy would be 84% (2010: 84%).

## 27 – Shareholders' assets continued

### Shareholders' assets – debt securities

30 June 2011	Rating						Total £m
	AAA £m	AA £m	A £m	BBB £m	Less than BBB £m	Not rated £m	
Government	7,387	3,308	1,130	365	163	86	12,439
Corporate	1,557	5,291	12,970	10,335	1,467	4,439	36,059
Certificates of deposits	—	161	160	117	108	20	566
Structured	3,465	597	709	337	542	82	5,732
<b>Total</b>	<b>12,409</b>	<b>9,357</b>	<b>14,969</b>	<b>11,154</b>	<b>2,280</b>	<b>4,627</b>	<b>54,796</b>
<b>Total %</b>	<b>22.6%</b>	<b>17.1%</b>	<b>27.3%</b>	<b>20.4%</b>	<b>4.2%</b>	<b>8.4%</b>	<b>100.0%</b>
FY10 Total (excluding Delta Lloyd)	13,280	8,112	14,796	10,936	2,146	4,900	54,170
FY10 % (excluding Delta Lloyd)	24.5%	15.0%	27.3%	20.2%	4.0%	9.0%	100.0%

We grade debt securities according to current external credit ratings issued at the balance sheet date. The credit rating used for each individual security is the second highest of the available ratings from Standard & Poor's, Moody's and Fitch. If a credit rating is available from only one of these three rating agencies then this rating is used. If an individual security has not been given a credit rating by any of these three rating agencies, the security is classified as "not rated".

For the tables in this document we have used the standard Standard & Poor's rating classifications. Investment grade debt securities are classified within the range of AAA (extremely strong) to BBB (good) ratings, with AAA being the highest possible rating. Debt securities which fall outside this range are classified as less than BBB. Where we use a rating provided by Moody's or Fitch, we have expressed it as the Standard & Poor's equivalent rating. For example, we consider Standard & Poor's rating of AA (very strong) to be equivalent to Moody's rating of AA (excellent) and Fitch's rating of AA (very strong).

During the first two quarters of 2011, the proportion of our shareholder debt securities that are investment grade remained relatively stable at 87.4% (31 December 2010 (excluding Delta Lloyd): 87.0%). The remaining 12.6% of shareholder debt securities that do not have an external rating of BBB or higher can be split as follows:

- 4.2% are debt securities that are rated as below investment grade
- 3.7% are US private placements which are not rated by the major ratings agencies, but are rated as an average equivalent of A by the Securities Valuation Office of the National Association of Insurance Commissioners (NAIC), a US national regulatory agency
- 4.7% are not rated by the major rating agencies or the NAIC.

Of the securities not rated by an external agency or NAIC most are allocated an internal rating using a methodology largely consistent with that adopted by an external ratings agency, and are considered to be of investment grade credit quality; these include £2.1 billion (3.8% of total shareholder debt securities) 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.

£0.8 billion (31 December 2010: £0.9 billion) of shareholder holdings in debt securities represent exposures to the governments (and local authorities and agencies) of Greece, Ireland, Portugal and Spain. This corresponds to just 0.3% of total balance sheet assets at 30 June 2011. Net of non-controlling interests, our exposure to these governments is reduced to £0.5 billion (31 December 2010: £0.7 billion). Exposure to Greece is less than £1 million (31 December 2010: £3.4 million). A further £1.8 billion (31 December 2010: £1.8 billion) of exposures to these governments are held in participating fund assets (£1.4 billion net of non-controlling interests), shareholder market risk exposure to these assets is governed by the nature and extent of shareholder participation in these funds. In addition, our shareholder exposure (net of non-controlling interests) to the Italian government is £0.9 billion. All of these bonds are held on a mark to market through the profit and loss basis under IAS 39, and therefore our balance sheet and profit and loss statement already reflect any reduction in value between the date of purchase and the balance sheet date.

Within structured assets, the group continues to have very limited exposure (3% of total balance sheet assets) to sub-prime and Alt A RMBS, ABS, Wrapped Credit, CDOs and CLOs. Of our remaining exposures to RMBS, the majority are backed by US Government Sponsored Entities, and so are considered to have minimal credit risk.

# Financial statements IFRS

## In this section

	Page
Condensed consolidated income statement	34
Condensed consolidated statement of comprehensive income	35
Condensed consolidated statement of changes in equity	36
Condensed consolidated statement of financial position	37
Condensed consolidated statement of cash flows	38

## Notes to the condensed financial statements

A1 Basis of preparation	39
A2 Exchange rates	39
A3 Subsidiaries	40
A4 Segmental information	42
A5 Tax	52
A6 Earnings per share	53
A7 Dividends and appropriations	56
A8 Insurance liabilities	56
A9 Liability for investment contracts	58
A10 Reinsurance assets	59
A11 Effect of changes in assumptions and estimates during the period	60
A12 Unallocated divisible surplus	61
A13 Borrowings	61
A14 Pension obligations	62
A15 Cash and cash equivalents	63
A16 Related party transactions	64
A17 Risk management	64
A18 Subsequent events	65
A19 Long-term business IFRS profit driver analysis	66
A20 Analysis of general insurance	67
A21 Funds under management	68
A22 Operational cost base	68

<b>Directors' responsibility statement pursuant to the Disclosure and Transparency Rule 4</b>	<b>69</b>
---	-----------

<b>Independent review report for the six months ended 30 June 2011</b>	<b>70</b>
--	-----------

# IFRS condensed financial statements

## Condensed consolidated income statement

For the six month period ended 30 June 2011

6 months 2011 €m		6 months 2011 £m			6 months 2010 £m			Full year 2010 £m		
Total		Continuing operations	Discontinued operations	Total	Continuing operations	Discontinued operations	Total	Continuing operations	Discontinued operations	Total
<b>Income</b>										
<b>20,133</b>	Gross written premiums	<b>15,398</b>	<b>2,118</b>	<b>17,516</b>	17,223	2,515	19,738	31,805	4,469	36,274
<b>(1,166)</b>	Premiums ceded to reinsurers	<b>(942)</b>	<b>(73)</b>	<b>(1,015)</b>	(848)	(64)	(912)	(1,739)	(124)	(1,863)
—	Internal reinsurance revenue	2	(2)	—	5	(5)	—	5	(5)	—
<b>18,967</b>	Premiums written net of reinsurance	<b>14,458</b>	<b>2,043</b>	<b>16,501</b>	16,380	2,446	18,826	30,071	4,340	34,411
<b>(398)</b>	Net change in provision for unearned premiums	<b>(290)</b>	<b>(56)</b>	<b>(346)</b>	(150)	(90)	(240)	(73)	(2)	(75)
<b>18,569</b>	Net earned premiums	<b>14,168</b>	<b>1,987</b>	<b>16,155</b>	16,230	2,356	18,586	29,998	4,338	34,336
<b>938</b>	Fee and commission income	<b>719</b>	<b>97</b>	<b>816</b>	770	149	919	1,450	332	1,782
<b>7,153</b>	Net investment income	<b>5,787</b>	<b>436</b>	<b>6,223</b>	6,911	2,422	9,333	18,749	3,244	21,993
<b>206</b>	Share of profit/(loss) after tax of joint ventures and associates	<b>152</b>	<b>28</b>	<b>180</b>	91	(6)	85	141	(10)	131
<b>(49)</b>	(Loss)/ profit on the disposal and re-measurement of subsidiaries and associates	<b>(11)</b>	<b>(32)</b>	<b>(43)</b>	28	—	28	163	(4)	159
<b>26,817</b>		<b>20,815</b>	<b>2,516</b>	<b>23,331</b>	24,030	4,921	28,951	50,501	7,900	58,401
<b>Expenses</b>										
<b>(16,710)</b>	Claims and benefits paid, net of recoveries from reinsurers	<b>(13,063)</b>	<b>(1,475)</b>	<b>(14,538)</b>	(12,519)	(2,111)	(14,630)	(24,918)	(4,234)	(29,152)
<b>(2,354)</b>	Change in insurance liabilities, net of reinsurance	<b>(1,139)</b>	<b>(909)</b>	<b>(2,048)</b>	(2,720)	(587)	(3,307)	(6,608)	(569)	(7,177)
<b>(2,357)</b>	Change in investment contract provisions	<b>(1,957)</b>	<b>(94)</b>	<b>(2,051)</b>	(2,641)	(81)	(2,722)	(8,693)	(48)	(8,741)
<b>94</b>	Change in unallocated divisible surplus	<b>101</b>	<b>(19)</b>	<b>82</b>	(538)	(15)	(553)	362	(33)	329
<b>(2,911)</b>	Fee and commission expense	<b>(2,341)</b>	<b>(192)</b>	<b>(2,533)</b>	(2,947)	(231)	(3,178)	(5,433)	(434)	(5,867)
<b>(1,969)</b>	Other expenses	<b>(1,422)</b>	<b>(291)</b>	<b>(1,713)</b>	(1,328)	(541)	(1,869)	(2,573)	(964)	(3,537)
<b>(692)</b>	Finance costs	<b>(339)</b>	<b>(262)</b>	<b>(601)</b>	(294)	(316)	(610)	(699)	(723)	(1,422)
<b>(26,899)</b>		<b>(20,160)</b>	<b>(3,242)</b>	<b>(23,402)</b>	(22,987)	(3,882)	(26,869)	(48,562)	(7,005)	(55,567)
<b>(82)</b>	<b>Profit/(loss) before tax</b>	<b>655</b>	<b>(726)</b>	<b>(71)</b>	1,043	1,039	2,082	1,939	895	2,834
<b>4</b>	Tax attributable to policyholders' returns	<b>3</b>	<b>—</b>	<b>3</b>	(31)	—	(31)	(394)	—	(394)
<b>(78)</b>	<b>Profit/(loss) before tax attributable to shareholders' profits</b>	<b>658</b>	<b>(726)</b>	<b>(68)</b>	1,012	1,039	2,051	1,545	895	2,440
<b>14</b>	Tax expense	<b>(190)</b>	<b>202</b>	<b>12</b>	(309)	(268)	(577)	(717)	(225)	(942)
<b>(4)</b>	Less: tax attributable to policyholders' returns	<b>(3)</b>	<b>—</b>	<b>(3)</b>	31	—	31	394	—	394
<b>10</b>	Tax attributable to shareholders' profits	<b>(193)</b>	<b>202</b>	<b>9</b>	(278)	(268)	(546)	(323)	(225)	(548)
<b>(68)</b>	<b>Profit/(loss) for the period</b>	<b>465</b>	<b>(524)</b>	<b>(59)</b>	734	771	1,505	1,222	670	1,892
Attributable to:										
<b>144</b>	Equity shareholders of Aviva plc	<b>443</b>	<b>(318)</b>	<b>125</b>	651	430	1,081	1,105	358	1,463
<b>(212)</b>	Non-controlling interests	<b>22</b>	<b>(206)</b>	<b>(184)</b>	83	341	424	117	312	429
<b>(68)</b>		<b>465</b>	<b>(524)</b>	<b>(59)</b>	734	771	1,505	1,222	670	1,892
<b>Earnings per share</b>										
<b>4.7c</b>	Basic (pence per share)	<b>15.4p</b>	<b>(11.3)p</b>	<b>4.1p</b>	23.1p	15.7p	38.8p	37.6p	12.8p	50.4p
<b>4.6c</b>	Diluted (pence per share)	<b>15.1p</b>	<b>(11.1)p</b>	<b>4.0p</b>	22.9p	15.3p	38.2p	37.0p	12.6p	49.6p



**Condensed consolidated statement of comprehensive income**

For the six month period ended 30 June 2011

6 months 2011 €m		6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
<b>534</b>	<b>Profit for the period from continuing operations</b>	<b>465</b>	734	1,222
<b>(602)</b>	<b>(Loss)/profit for the period from discontinued operations</b>	<b>(524)</b>	771	670
<b>(68)</b>	<b>Total (loss)/ profit for the period</b>	<b>(59)</b>	1,505	1,892
	<b>Other comprehensive income from continuing operations:</b>			
	Investments classified as available for sale			
<b>64</b>	Fair value gains	<b>56</b>	392	505
<b>(44)</b>	Fair value gains transferred to profit on disposals	<b>(38)</b>	(35)	(73)
<b>9</b>	Impairment losses on assets previously revalued through other comprehensive income now taken to the income statement	<b>8</b>	49	78
	Owner-occupier properties			
<b>1</b>	Fair value gains/(losses)	<b>1</b>	1	(14)
<b>(69)</b>	Share of other comprehensive income of joint ventures and associates	<b>(60)</b>	(3)	—
<b>25</b>	Actuarial gains/(losses) on pension schemes	<b>22</b>	(255)	1,078
<b>(34)</b>	Other pension scheme movements transferred to unallocated divisible surplus	<b>(30)</b>	—	(18)
<b>240</b>	Foreign exchange rate movements	<b>209</b>	(41)	55
<b>(24)</b>	Aggregate tax effect – shareholder tax	<b>(21)</b>	(108)	(116)
<b>168</b>	<b>Other comprehensive income, net of tax from continuing operations</b>	<b>147</b>	—	1,495
<b>94</b>	<b>Other comprehensive income, net of tax from discontinued operations</b>	<b>82</b>	(453)	(64)
<b>262</b>	<b>Total other comprehensive income, net of tax</b>	<b>229</b>	(453)	1,431
<b>702</b>	<b>Total comprehensive income for the period from continuing operations</b>	<b>612</b>	734	2,717
<b>(508)</b>	<b>Total comprehensive income for the period from discontinued operations</b>	<b>(442)</b>	318	606
<b>194</b>	<b>Total comprehensive income for the period</b>	<b>170</b>	1,052	3,323
	Attributable to:			
<b>269</b>	Equity shareholders of Aviva plc	<b>234</b>	942	2,950
<b>(75)</b>	Non-controlling interests	<b>(64)</b>	110	373
<b>194</b>		<b>170</b>	1,052	3,323

**Condensed consolidated statement of changes in equity**

For the six month period ended 30 June 2011

6 months 2011 £m		6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
<b>19,694</b>	<b>Balance at 1 January</b>	<b>17,725</b>	<b>15,086</b>	<b>15,086</b>
<b>(66)</b>	(Loss)/profit for the period	<b>(59)</b>	1,505	1,892
<b>254</b>	Other comprehensive income	<b>229</b>	(453)	1,431
<b>188</b>	Total comprehensive income for the period	<b>170</b>	1,052	3,323
<b>(511)</b>	Dividends and appropriations	<b>(460)</b>	(424)	(757)
<b>204</b>	Shares issued in lieu of dividends	<b>184</b>	151	209
<b>28</b>	Capital contributions from non-controlling interests	<b>25</b>	1	42
<b>(667)</b>	Movements in ordinary shareholder equity following deconsolidation of Delta Lloyd	<b>(600)</b>	—	—
<b>(1,967)</b>	Movements in non controlling interests following deconsolidation of Delta Lloyd	<b>(1,770)</b>	—	—
<b>(84)</b>	Minority share of dividends declared in the period applicable to non-controlling interests	<b>(76)</b>	(81)	(187)
—	Non-controlling interest in disposed subsidiaries	—	—	3
<b>(12)</b>	Changes in non-controlling interest in existing subsidiaries	<b>(11)</b>	(43)	(38)
—	Shares acquired by employee trusts	—	—	(14)
<b>20</b>	Reserves credit for equity compensation plans	<b>18</b>	36	41
—	Aggregate tax effect – shareholder tax	—	—	17
<b>16,893</b>	<b>Balance at 30 June/31 December</b>	<b>15,205</b>	<b>15,778</b>	<b>17,725</b>

**Condensed consolidated statement of financial position**

As at 30 June 2011

30 June 2011 €m		30 June 2011 €m	30 June 2010 €m	31 December 2010 €m
<b>Assets</b>				
3,137	Goodwill	2,823	3,377	3,391
2,662	Acquired value of in-force business and intangible assets	2,396	2,642	2,806
2,393	Interests in, and loans to, joint ventures	2,154	1,871	1,994
1,586	Interests in, and loans to, associates	1,427	1,268	643
519	Property and equipment	467	686	750
12,484	Investment property	11,236	12,536	13,064
27,587	Loans	24,828	41,394	43,074
253,341	Financial investments	228,006	236,582	253,288
7,300	Reinsurance assets	6,570	7,271	7,084
151	Deferred tax assets	136	288	288
124	Current tax assets	112	269	198
10,300	Receivables	9,271	9,041	8,295
6,618	Deferred acquisition costs and other assets	5,956	5,365	6,072
3,767	Prepayments and accrued income	3,390	3,576	3,691
25,673	Cash and cash equivalents	23,106	28,446	25,455
809	Assets of operations classified as held for sale	728	6	14
<b>358,451</b>	<b>Total assets</b>	<b>322,606</b>	<b>354,618</b>	<b>370,107</b>
<b>Equity</b>				
Capital				
796	Ordinary share capital	716	701	705
222	Preference share capital	200	200	200
<b>1,018</b>		<b>916</b>	<b>901</b>	<b>905</b>
Capital reserves				
1,316	Share premium	1,184	1,198	1,194
3,634	Merger reserve	3,271	3,271	3,271
<b>4,950</b>		<b>4,455</b>	<b>4,469</b>	<b>4,465</b>
(36)	Shares held by employee trusts	(32)	(68)	(32)
1,922	Other reserves	1,729	1,978	2,245
5,892	Retained earnings	5,303	3,971	5,411
<b>13,746</b>	<b>Equity attributable to shareholders of Aviva plc</b>	<b>12,371</b>	<b>11,251</b>	<b>12,994</b>
1,100	Direct capital instrument	990	990	990
2,048	Non-controlling interests	1,844	3,537	3,741
<b>16,894</b>	<b>Total equity</b>	<b>15,205</b>	<b>15,778</b>	<b>17,725</b>
<b>Liabilities</b>				
166,128	Gross insurance liabilities	149,515	171,182	177,700
132,538	Gross liabilities for investment contracts	119,284	107,203	117,787
3,637	Unallocated divisible surplus	3,273	4,225	3,428
9,706	Net asset value attributable to unitholders	8,735	9,842	9,032
1,226	Provisions	1,103	4,003	2,943
1,296	Deferred tax liabilities	1,166	1,246	1,758
277	Current tax liabilities	249	455	314
9,869	Borrowings	8,882	14,127	14,949
13,366	Payables and other financial liabilities	12,029	22,800	20,292
3,133	Other liabilities	2,822	3,757	4,179
381	Liabilities of operations classified as held for sale	343	—	—
<b>341,557</b>	<b>Total liabilities</b>	<b>307,401</b>	<b>338,840</b>	<b>352,382</b>
<b>358,451</b>	<b>Total equity and liabilities</b>	<b>322,606</b>	<b>354,618</b>	<b>370,107</b>

## Condensed consolidated statement of cash flows

For the six month period ended 30 June 2011

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.

	6 months 2011 £m	6 months 2010 £m	Full Year 2010 £m
<b>Cash flows from operating activities</b>			
Cash generated from continuing operations	(1,425)	4,560	1,337
Tax paid	(198)	(184)	(412)
Net cash from operating activities - continuing operations	(1,623)	4,376	925
Net cash from operating activities - discontinued operations	(15)	855	882
Total net cash from operating activities	(1,638)	5,231	1,807
<b>Cash flows from investing activities</b>			
Acquisitions of, and additions to subsidiaries, joint ventures and associates, net of cash acquired	(119)	(156)	542
Disposals of subsidiaries, joint ventures and associates, net of cash transferred	51	49	222
Disposal of non-controlling interest in subsidiary	—	15	15
New loans to joint ventures and associates	(19)	—	(64)
Repayment of loans to joint ventures and associates	1	17	5
Net new loans to joint ventures and associates	(18)	17	(59)
Purchases of property and equipment	(39)	(40)	(161)
Proceeds on sale of property and equipment	34	13	18
Purchases of intangible assets	(29)	(11)	(131)
Net cash (used in)/from investing activities - continuing operations	(120)	(113)	446
Net cash (used in)/from investing activities - discontinued operations	(512)	(28)	(82)
Total net cash (used in)/from investing activities	(632)	(141)	364
<b>Cash flows from financing activities</b>			
Proceeds from issue of ordinary shares, net of transaction costs	—	1	—
Treasury shares purchased for employee trusts	—	—	(14)
New borrowings drawn down, net expenses	718	223	2,885
Repayment of borrowings	(254)	(287)	(2,059)
Net drawdown/(repayment) of borrowings	464	(64)	826
Interest paid on borrowings	(290)	(289)	(696)
Preference dividends paid	(9)	(9)	(17)
Ordinary dividends paid	(267)	(264)	(472)
Coupon payments on direct capital instruments	—	—	(59)
Capital contributions from non-controlling interests	25	1	42
Dividends paid to non-controlling interests of subsidiaries	(76)	(64)	(157)
Net cash (used in)/from financing activities - continuing operations	(153)	(688)	(547)
Net cash (used in)/from financing activities - discontinued operations	(516)	(401)	(821)
Total net cash (used in)/from financing activities	(669)	(1,089)	(1,368)
<b>Total net (decrease)/increase in cash and cash equivalents</b>	<b>(2,939)</b>	<b>4,001</b>	<b>803</b>
Cash and cash equivalents at 1 January	24,695	24,251	24,251
Effect of exchange rate changes on cash and cash equivalents	504	(961)	(359)
<b>Cash and cash equivalents at 30 June /31 December</b>	<b>22,260</b>	<b>27,291</b>	<b>24,695</b>

Further detail on cash and cash equivalents is provided in note A15 on page 63.

## A1 – Basis of preparation

- (a) The condensed financial statements for the six months to 30 June 2011 have been prepared using International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB) and endorsed by the European Union (EU). These include IAS 34, *Interim Financial Reporting*, which specifically addresses the contents of interim condensed financial statements. The results apply the accounting policies set out in Aviva plc's 2010 Annual Report and Accounts with Delta Lloyd presented as a discontinued operation in these financial statements, as explained in note 3(b).

During 2009 and 2010, the IASB issued amendments to IFRS 1, *First Time Adoption of IFRS*, IAS 24, *Related Party Disclosures*, and IAS 32, *Financial Instruments – Presentation*, and the results of its annual improvements project, all of which have been endorsed by the EU. In addition, IFRIC interpretation 19, *Extinguishing Financial Liabilities with Equity Instruments*, and an amendment to interpretation 14, *IAS 19 – The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction*, issued in 2008 and 2009, have now been endorsed by the EU.

These are all applicable for the first time in the current accounting period and are now reflected in the Group's financial reporting, with no material impact.

The results for the six months to 30 June 2011 and 2010 are unaudited but have been reviewed by the auditor, Ernst & Young LLP. The interim results do not constitute statutory accounts as defined in Section 434 of the Companies Act 2006. The results for the full year 2010 have been taken from the Group's 2010 Annual Report and Accounts and do not in themselves constitute statutory accounts. The auditor has reported on the 2010 financial statements and the report was unqualified and did not contain a Statement under section 498 (2) or (3) of the Companies Act 2006. The Group's 2010 Report and Accounts have been filed with the Registrar of Companies.

After making enquiries, the directors have a reasonable expectation that the Company and the Group as a whole have adequate resources to continue in operational existence for the foreseeable future. For this reason, they continue to adopt the going concern basis in preparing the financial statements.

- (b) 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 sterling, which is the Company's functional and presentational currency. Unless otherwise noted, the amounts shown in the financial statements are in millions of pounds sterling (£m). As supplementary information, consolidated financial information is also presented in euros, with income and cash flow items translated at the average exchange rate for the period and statement of financial position items at the period end exchange rate.

## A2 – Exchange rates

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

	6 months 2011	6 months 2010	Full year 2010
Eurozone			
– Average rate (€1 equals)	<b>£0.87</b>	£0.87	£0.85
– Period end rate (€1 equals)	<b>£0.90</b>	£0.82	£0.86
United States			
– Average rate (\$US1 equals)	<b>£0.62</b>	£0.65	£0.65
– Period end rate (\$US1 equals)	<b>£0.62</b>	£0.67	£0.64

Total foreign currency movements during the period resulted in a gain recognised in the income statement of £61 million (30 June 2010: £22 million loss; 31 December 2010: £34 million gain).

### A3 – Subsidiaries

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

#### (a) Acquisitions

There were no material acquisitions in the six months ended 30 June 2011.

#### (b) Disposal and remeasurement of subsidiaries, joint ventures and associates

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

	6 months 2011 £m	6 months 2010 £m	Full Year 2010 £m
<b>Continuing operations</b>			
United Kingdom			
RBS Life and RBS Collective	—	—	128
Non-core operations	(3)	4	4
France	—	24	26
Other small operations	(8)	—	5
<b>(Loss)/ profit on disposal and remeasurement from continuing operations</b>	<b>(11)</b>	<b>28</b>	<b>163</b>
Loss on disposal from discontinued operations (see below)	(32)	—	(4)
<b>Total (loss)/profit on disposal and remeasurement</b>	<b>(43)</b>	<b>28</b>	<b>159</b>

#### Delta Lloyd

On 6 May 2011, the Group sold 25 million shares in Delta Lloyd N.V. ("Delta Lloyd") (the Group's Dutch long-term insurance, general insurance and fund management operation), reducing our holding to 42.7% of Delta Lloyd's ordinary share capital, representing 40% of shareholder voting rights. As the Group no longer commands a majority of shareholder voting rights, it no longer controls Delta Lloyd. Accordingly, from 6 May 2011 the Group has ceased to consolidate the results and net assets of Delta Lloyd.

Cash consideration of £380 million was received for the sale of shares, and £8 million of costs are attributable to the disposal transaction.

The Group retains significant influence over Delta Lloyd through its 42.7% shareholding (42.2% at 30 June 2011) and contractual right to appoint two members of Delta Lloyd's supervisory board. Our continuing interest in Delta Lloyd has been classified as an associate and initially re-measured at fair value as at 6 May 2011, using the closing market value of the Delta Lloyd shares listed on Euronext on that day. As Delta Lloyd is no longer consolidated, equity reserves for accumulated currency translation differences and accumulated fair value differences on available for sale financial investments relating to that company have been recycled to the income statement. Equity reserves relating to Delta Lloyd's owner-occupied property have been transferred directly to retained earnings.

The transaction results in the loss of control of a major geographical area of operations, previously presented as 'Delta Lloyd' in the segmental reporting note. The results of Delta Lloyd, up to the transaction date as well as those for the comparative period have therefore been classified as discontinued operations. The Group's share of the profits of its retained interest in Delta Lloyd as an associate after the transaction date form part of continuing operations.

The loss on the disposal of Delta Lloyd is calculated as follows:

	6 months 2011 £m
Net cash proceeds from disposal	372
Fair value of continuing interest in associate at 6 May 2011	1,116
Currency translation and investment valuation equity reserves recycled to the income statement	600
Consolidated net assets of Delta Lloyd as at 6 May 2011, net of non-controlling interests	(2,120)
<b>Loss on disposal recognised through the income statement</b>	<b>(32)</b>

The tax on the loss on the disposal of Delta Lloyd is £nil.

**A3 – Subsidiaries continued****(b) Disposal and remeasurement of subsidiaries, joint ventures and associates continued**

Aviva's interest in the carrying value of Delta Lloyd's IFRS net assets prior to disposal and fair value adjustments at the date of initial recognition of the associate were as follows:

	£m
<b>Assets</b>	
Goodwill	316
Acquired value of in-force business and intangible assets	59
Interests in, and loans to, joint ventures and associates	359
Property and equipment	242
Investment property	2,131
Loans	20,196
Financial investments	34,081
Deferred acquisition costs	195
Other assets	3,528
<b>Total assets</b>	<b>61,107</b>
<b>Liabilities</b>	
Insurance liabilities	32,481
Liabilities for investment contracts	3,355
Unallocated divisible surplus	144
Net asset value attributable to unitholders	631
External borrowings	6,499
Other liabilities	14,107
<b>Total liabilities</b>	<b>57,217</b>
<b>Net assets</b>	<b>3,890</b>
Non-controlling interests before disposal	(1,770)
<b>Group's share of net assets before disposal</b>	<b>2,120</b>
Net assets sold (14.9%)	(577)
Fair value adjustments on initial recognition of associate	(427)
<b>Residual interest in associate</b>	<b>1,116</b>

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

The assets and liabilities of operations classified as held for sale as at 30 June 2011 relate to RAC Limited (formerly RAC plc), our investment management business in Australia and our interest in a joint venture in Taiwan, and are as follows:

	30 June 2011 £m	30 June 2010 £m	31 December 2010 £m
<b>Assets</b>			
Goodwill	284	—	—
Intangible assets	229	—	—
Interests in, and loans to, joint ventures and associates	14	6	14
Property and equipment	31	—	—
Investments	3	—	—
Receivables and other financial assets	158	—	—
Prepayments and accrued income	9	—	—
<b>Total assets</b>	<b>728</b>	<b>6</b>	<b>14</b>
<b>Liabilities</b>			
Insurance liabilities	(149)	—	—
Other liabilities	(194)	—	—
<b>Total liabilities</b>	<b>(343)</b>	<b>—</b>	<b>—</b>
<b>Net assets</b>	<b>385</b>	<b>6</b>	<b>14</b>

On 23 June 2011, the Group announced that it had agreed to sell RAC Limited ("RAC") to The Carlyle Group for £1.0 billion. Completion, which is subject to regulatory and other approvals, is expected at the end of the third quarter of 2011. Aviva will continue its commercial relationship with RAC, both as a key underwriter of motor insurance on RAC's panel and as a partner, selling RAC breakdown cover to our customers. The Group will retain the RAC (2003) Pension Scheme which, at 30 June 2011, had an IAS 19 deficit of £138 million. The assets and liabilities of RAC, excluding this pension scheme obligation, have been classified as held for sale, at their carrying values, in the consolidated statement of financial position as at 30 June 2011.

The operations held for sale at 30 June 2010 comprised an associate in Australia which was sold later in 2010. The figure at 31 December 2010 related to our interest in the Taiwan joint venture only.



## A4 – Segmental information

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

### (a) Operating segments

The Group has determined its operating segments along regional lines. These reflect the management structure whereby a member of the Executive Management team is accountable to the Group Chief Executive for the operating segment for which he is responsible. The activities of each operating segment are described below:

#### United Kingdom

The United Kingdom comprises two operating segments – UK Life and UK General Insurance (UK GI). The principal activities of UK Life are life insurance, long-term health and accident insurance, savings, pensions and annuity business, whilst UK GI provides insurance cover to individuals and businesses, for risks associated mainly with motor vehicles, property and liability, such as employers' liability and professional indemnity liability, and medical expenses. UK GI also includes the RAC motor recovery business, the Group reinsurance result and the results of run-off agency business.

#### Aviva Europe

Activities reported in the Aviva Europe operating segment exclude operations in the UK and Delta Lloyd but include those in Russia and Turkey. Principal activities are long-term business in France, Ireland, Italy, Poland and Spain, and general insurance in France, Ireland and Italy.

#### North America

Our activities in North America principally comprise our long-term business operation in the US and general insurance business operation in Canada.

#### Asia Pacific

Our activities in Asia Pacific principally comprise our long-term business operations in China, India, Singapore, Hong Kong, Sri Lanka, Taiwan, Malaysia, South Korea and Indonesia.

#### Aviva Investors

Aviva Investors operates in most of the regions in which the Group operates, in particular the UK, France, the US and Canada 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'. Similarly, central core structural borrowings and certain tax balances are included in 'Other Group activities' in the segmental statement of financial position. Also included here are consolidation and elimination adjustments.

#### Delta Lloyd and discontinued operations

The activities of Delta Lloyd comprise long-term business operations in the Netherlands, Belgium and Germany and general insurance, fund management and banking operations in the Netherlands.

As set out in note A3, on 6 May 2011 the Group ceased to hold a majority of the shareholder voting rights in Delta Lloyd and therefore the results of Delta Lloyd up to 6 May 2011 are presented as discontinued operations. After this date, the Group ceased to consolidate Delta Lloyd. The Group's share of the profits of its retained interest in Delta Lloyd as an associate are shown within the Delta Lloyd segment within continuing operations.

#### 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 on normal commercial terms and market conditions. The Group evaluates performance of operating segments on the basis of:

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

**A4 – Segmental information continued****(i) Segmental income statement for the six month period ended 30 June 2011**

	United Kingdom										
	Life £m	GI <sup>#</sup> £m	Aviva Europe £m	North America £m	Asia Pacific £m	Aviva Investors <sup>†</sup> £m	Delta Lloyd £m	Other Group activities £m	Continuing operations £m	Discontinued operations £m	Total £m
Gross written premiums	3,592	2,325	6,465	2,675	341	—	—	—	15,398	2,118	17,516
Premiums ceded to reinsurers	(460)	(71)	(274)	(101)	(36)	—	—	—	(942)	(73)	(1,015)
Internal reinsurance revenue	—	11	(4)	(4)	(1)	—	—	—	2	(2)	—
Net written premiums	3,132	2,265	6,187	2,570	304	—	—	—	14,458	2,043	16,501
Net change in provision for unearned premiums	(29)	(124)	(112)	(18)	(7)	—	—	—	(290)	(56)	(346)
Net earned premiums	3,103	2,141	6,075	2,552	297	—	—	—	14,168	1,987	16,155
Fee and commission income	158	88	278	16	4	175	—	—	719	97	816
	3,261	2,229	6,353	2,568	301	175	—	—	14,887	2,084	16,971
Net investment income	2,873	212	1,236	1,165	83	28	—	190	5,787	436	6,223
Inter-segment revenue	—	—	—	—	—	89	—	—	89	—	89
Share of profit of joint ventures and associates	112	—	4	—	14	2	20	—	152	28	180
Loss on the disposal of subsidiaries and associates	—	(3)	(8)	—	—	—	—	—	(11)	(32)	(43)
<b>Segmental income*</b>	<b>6,246</b>	<b>2,438</b>	<b>7,585</b>	<b>3,733</b>	<b>398</b>	<b>294</b>	<b>20</b>	<b>190</b>	<b>20,904</b>	<b>2,516</b>	<b>23,420</b>
Claims and benefits paid, net of recoveries from reinsurers	(4,363)	(1,451)	(5,162)	(1,892)	(195)	—	—	—	(13,063)	(1,475)	(14,538)
Change in insurance liabilities, net of reinsurance	247	105	(464)	(959)	(68)	—	—	—	(1,139)	(909)	(2,048)
Change in investment contract provisions	(784)	—	(1,071)	(43)	—	(59)	—	—	(1,957)	(94)	(2,051)
Change in unallocated divisible surplus	(194)	—	329	—	(34)	—	—	—	101	(19)	82
Amortisation of acquired value of in-force business	(2)	—	(20)	(74)	(2)	—	—	—	(98)	(1)	(99)
Depreciation and other amortisation expense	(33)	(14)	(20)	(35)	(3)	(7)	—	—	(112)	(9)	(121)
Other operating expenses	(547)	(833)	(1,003)	(456)	(75)	(199)	—	(400)	(3,513)	(471)	(3,984)
Impairment losses**	—	(30)	(1)	(9)	—	—	—	—	(40)	(2)	(42)
Inter-segment expenses	(44)	—	(9)	(36)	—	—	—	—	(89)	—	(89)
Finance costs	(92)	(17)	(13)	(14)	—	(2)	—	(201)	(339)	(262)	(601)
<b>Segmental expenses</b>	<b>(5,812)</b>	<b>(2,240)</b>	<b>(7,434)</b>	<b>(3,518)</b>	<b>(377)</b>	<b>(267)</b>	<b>—</b>	<b>(601)</b>	<b>(20,249)</b>	<b>(3,242)</b>	<b>(23,491)</b>
Profit/(loss) before tax	434	198	151	215	21	27	20	(411)	655	(726)	(71)
Tax attributable to policyholders' returns	8	—	(3)	—	(2)	—	—	—	3	—	3
<b>Profit/(loss) before tax attributable to shareholders</b>	<b>442</b>	<b>198</b>	<b>148</b>	<b>215</b>	<b>19</b>	<b>27</b>	<b>20</b>	<b>(411)</b>	<b>658</b>	<b>(726)</b>	<b>(68)</b>
Adjusted for non-operating items:											
Reclassification of corporate costs and unallocated interest	—	(3)	11	2	—	—	—	(10)	—	—	—
Investment return variances and economic assumption changes on long-term business	(44)	—	250	(16)	(3)	—	—	—	187	820	1,007
Short-term fluctuation in return on investments backing non-long-term business	—	21	66	(22)	—	—	—	15	80	60	140
Economic assumption changes on general insurance and health business	—	7	1	—	—	—	—	—	8	—	8
Impairment of goodwill	20	—	—	—	—	—	—	—	20	—	20
Amortisation and impairment of intangibles	11	2	8	31	1	3	—	—	56	5	61
(Profit)/loss on the disposal of subsidiaries and associates	—	3	8	—	—	—	—	—	11	32	43
Integration and restructuring costs	35	11	33	9	—	11	—	12	111	—	111
Exceptional items	—	—	—	—	—	—	—	—	—	—	—
Share of Delta Lloyd's non-operating items (before tax), as an associate	—	—	—	—	—	—	8	—	8	—	8
Share of Delta Lloyd's tax expense, as an associate	—	—	—	—	—	—	7	—	7	—	7
<b>Operating profit/(loss) before tax attributable to shareholders</b>	<b>464</b>	<b>239</b>	<b>525</b>	<b>219</b>	<b>17</b>	<b>41</b>	<b>35</b>	<b>(394)</b>	<b>1,146</b>	<b>191</b>	<b>1,337</b>

\* Total reported income, excluding inter-segment revenue, is split United Kingdom £8,684 million, France £3,986 million, Netherlands £2,802 million, USA £2,610 million and Rest of the World £2,733 million. Income is attributed on the basis of geographical origin which does not materially differ from revenue by geographical destination, as most risks are located in the countries where the contracts were written.

\*\* Impairment losses, and reversal of such losses, recognised directly in other comprehensive income were £8 million and £nil million respectively.

† Aviva Investors operating profit includes £2 million profit relating to the Aviva Investors Pooled Pension business.

# United Kingdom General Insurance includes the Group Reinsurance business, agency run-off business and the non-insurance business for the RAC.

## A4 – Segmental information continued

## (ii) Segmental income statement for the six month period ended 30 June 2010

	United Kingdom									
	Life £m	GI <sup>#</sup> £m	Aviva Europe £m	North America £m	Asia Pacific £m	Aviva Investors £m	Other Group activities £m	Continuing operations £m	Discontinued operations £m	Total £m
Gross written premiums	3,576	2,157	7,897	3,283	310	—	—	17,223	2,515	19,738
Premiums ceded to reinsurers	(308)	(178)	(233)	(105)	(24)	—	—	(848)	(64)	(912)
Internal reinsurance revenue	—	37	(14)	(16)	(2)	—	—	5	(5)	—
Net written premiums	3,268	2,016	7,650	3,162	284	—	—	16,380	2,446	18,826
Net change in provision for unearned premiums	(12)	(23)	(115)	5	(5)	—	—	(150)	(90)	(240)
Net earned premiums	3,256	1,993	7,535	3,167	279	—	—	16,230	2,356	18,586
Fee and commission income	167	138	269	29	3	164	—	770	149	919
Net investment income	3,423	2,131	7,804	3,196	282	164	—	17,000	2,505	19,505
Inter-segment revenue	2,933	219	2,126	789	14	71	759	6,911	2,422	9,333
Share of profit/(loss) of joint ventures and associates	—	—	—	—	—	90	—	90	—	90
Profit on the disposal of subsidiaries and associates	77	—	3	—	11	—	—	91	(6)	85
Segmental income*	6,433	2,354	9,957	3,985	307	325	759	24,120	4,921	29,041
Claims and benefits paid, net of recoveries from reinsurers	(4,099)	(1,429)	(4,807)	(1,979)	(205)	—	—	(12,519)	(2,111)	(14,630)
Change in insurance liabilities, net of reinsurance	(1,067)	114	(445)	(1,238)	(84)	—	—	(2,720)	(587)	(3,307)
Change in investment contract provisions	240	—	(2,696)	(89)	—	(96)	—	(2,641)	(81)	(2,722)
Change in unallocated divisible surplus	(62)	—	(531)	—	55	—	—	(538)	(15)	(553)
Amortisation of acquired value of in-force business	—	—	(23)	(71)	(2)	—	—	(96)	(2)	(98)
Depreciation and other amortisation expense	(4)	(22)	(21)	(35)	(2)	(4)	—	(88)	(16)	(104)
Other operating expenses	(625)	(798)	(980)	(356)	(66)	(195)	(1,013)	(4,033)	(708)	(4,741)
Impairment losses**	(4)	(3)	(1)	(50)	—	—	—	(58)	(46)	(104)
Inter-segment expenses	(45)	(2)	(8)	(35)	—	—	—	(90)	—	(90)
Finance costs	(103)	(10)	(6)	(8)	—	(2)	(165)	(294)	(316)	(610)
Segmental expenses	(5,769)	(2,150)	(9,518)	(3,861)	(304)	(297)	(1,178)	(23,077)	(3,882)	(26,959)
Profit/(loss) before tax	664	204	439	124	3	28	(419)	1,043	1,039	2,082
Tax attributable to policyholders' returns	(25)	—	(6)	—	—	—	—	(31)	—	(31)
Profit/(loss) before tax attributable to shareholders	639	204	433	124	3	28	(419)	1,012	1,039	2,051
Adjusted for non-operating items:										
Reclassification of corporate costs and unallocated interest	1	(5)	4	2	—	1	(3)	—	—	—
Investment return variances and economic assumption changes on long-term business	(199)	—	10	68	10	—	—	(111)	(951)	(1,062)
Short-term fluctuation in return on investments backing non-long-term business	—	(45)	(29)	(35)	—	—	83	(26)	20	(6)
Economic assumption changes on general insurance and health business	—	58	2	4	—	—	—	64	—	64
Impairment of goodwill	2	—	—	—	—	—	—	2	—	2
Amortisation and impairment of intangibles	1	5	10	32	1	2	—	51	9	60
Profit on the disposal of subsidiaries and associates	—	(4)	(24)	—	—	—	—	(28)	—	(28)
Integration and restructuring costs	12	12	28	4	—	11	5	72	—	72
Exceptional items	—	—	—	10	—	—	—	10	107	117
Operating profit/(loss) before tax attributable to shareholders	456	225	434	209	14	42	(334)	1,046	224	1,270

\* Total reported income, excluding inter-segment revenue, is split United Kingdom £8,787 million, France £4,511 million, Netherlands £4,921 million, USA £2,842 million and Rest of the World £7,935 million. Income is attributed on the basis of geographical origin which does not materially differ from revenue by geographical destination, as most risks are located in the countries where the contracts were written.

\*\* Impairment losses, and reversal of such losses, recognised directly in other comprehensive income were £49 million and £nil respectively.

# United Kingdom General Insurance includes the Group Reinsurance business, agency run-off business and the non-insurance business for the RAC.

## A4 – Segmental information continued

## (iii) Segmental income statement for the year ended 31 December 2010

	United Kingdom									
	Life £m	GI <sup>#</sup> £m	Aviva Europe £m	North America £m	Asia Pacific £m	Aviva Investors £m	Other Group activities £m	Continuing operations £m	Discontinued operations £m	Total £m
Gross written premiums	6,572	4,405	13,507	6,680	641	—	—	31,805	4,469	36,274
Premiums ceded to reinsurers	(673)	(333)	(452)	(221)	(60)	—	—	(1,739)	(124)	(1,863)
Internal reinsurance revenue	—	37	(14)	(16)	(2)	—	—	5	(5)	—
Net written premiums	5,899	4,109	13,041	6,443	579	—	—	30,071	4,340	34,411
Net change in provision for unearned premiums	(12)	(16)	(68)	29	(6)	—	—	(73)	(2)	(75)
Net earned premiums	5,887	4,093	12,973	6,472	573	—	—	29,998	4,338	34,336
Fee and commission income	302	248	512	41	6	341	—	1,450	332	1,782
Net investment income	6,189	4,341	13,485	6,513	579	341	—	31,448	4,670	36,118
Inter-segment revenue	10,945	424	3,961	2,223	211	171	814	18,749	3,244	21,993
Share of profit/(loss) of joint ventures and associates	—	—	—	—	—	214	—	214	—	214
Profit/(loss) on the disposal of subsidiaries and associates	128	—	(14)	—	33	3	(9)	141	(10)	131
<b>Segmental income*</b>	<b>17,390</b>	<b>4,770</b>	<b>17,458</b>	<b>8,737</b>	<b>823</b>	<b>729</b>	<b>808</b>	<b>50,715</b>	<b>7,900</b>	<b>58,615</b>
Claims and benefits paid, net of recoveries from reinsurers	(8,144)	(2,829)	(9,413)	(4,069)	(463)	—	—	(24,918)	(4,234)	(29,152)
Change in insurance liabilities, net of reinsurance	(2,923)	237	(687)	(3,020)	(215)	—	—	(6,608)	(569)	(7,177)
Change in investment contract provisions	(3,300)	—	(5,034)	(129)	—	(230)	—	(8,693)	(48)	(8,741)
Change in unallocated divisible surplus	(166)	—	478	—	50	—	—	362	(33)	329
Amortisation of acquired value of in-force business	—	—	(43)	(115)	(4)	—	—	(162)	(12)	(174)
Depreciation and other amortisation expense	(71)	(42)	(54)	(82)	(5)	(10)	—	(264)	(37)	(301)
Other operating expenses	(1,300)	(1,636)	(2,060)	(834)	(140)	(425)	(1,101)	(7,496)	(1,226)	(8,722)
Impairment losses**	—	(3)	—	(81)	—	—	—	(84)	(123)	(207)
Inter-segment expenses	(125)	(2)	(16)	(71)	—	—	—	(214)	—	(214)
Finance costs	(193)	(38)	(18)	(27)	—	(3)	(420)	(699)	(723)	(1,422)
<b>Segmental expenses</b>	<b>(16,222)</b>	<b>(4,313)</b>	<b>(16,847)</b>	<b>(8,428)</b>	<b>(777)</b>	<b>(668)</b>	<b>(1,521)</b>	<b>(48,776)</b>	<b>(7,005)</b>	<b>(55,781)</b>
Profit/(loss) before tax	1,168	457	611	309	46	61	(713)	1,939	895	2,834
Tax attributable to policyholders' returns	(384)	—	(3)	—	(7)	—	—	(394)	—	(394)
<b>Profit/(loss) before tax attributable to shareholders</b>	<b>784</b>	<b>457</b>	<b>608</b>	<b>309</b>	<b>39</b>	<b>61</b>	<b>(713)</b>	<b>1,545</b>	<b>895</b>	<b>2,440</b>
Adjusted for non-operating items:										
Reclassification of corporate costs and unallocated interest	99	148	7	5	—	12	(271)	—	—	—
Investment return variances and economic assumption changes on long-term business	87	—	154	(10)	(12)	—	—	219	(1,010)	(791)
Short-term fluctuation in return on investments backing non-long-term business	—	(31)	47	(44)	—	—	227	199	44	243
Economic assumption changes on general insurance and health business	—	60	1	—	—	—	—	61	—	61
Impairment of goodwill	4	—	9	—	1	—	9	23	1	24
Amortisation and impairment of intangibles	68	7	37	75	1	5	—	193	23	216
(Profit)/loss on the disposal of subsidiaries and associates	(128)	(5)	(26)	(1)	—	—	(3)	(163)	4	(159)
Integration and restructuring costs	41	35	61	32	2	30	24	225	18	243
Exceptional items	(99)	(157)	—	10	—	(11)	(19)	(276)	549	273
<b>Operating profit/(loss) before tax attributable to shareholders</b>	<b>856</b>	<b>514</b>	<b>898</b>	<b>376</b>	<b>31</b>	<b>97</b>	<b>(746)</b>	<b>2,026</b>	<b>524</b>	<b>2,550</b>

\* Total reported income, excluding inter-segment revenue, is split United Kingdom £22,160 million, France £8,748 million, Netherlands £7,782 million, USA £6,497 million and Rest of the World £13,214 million. Income is attributed on the basis of geographical origin which does not materially differ from revenue by geographical destination, as most risks are located in the countries where the contracts were written.

\*\* Impairment losses, and reversal of such losses, recognised directly in other comprehensive income were £78 million and £nil million respectively.

# United Kingdom General Insurance includes the Group Reinsurance business, agency run-off business and the non-insurance business for the RAC.

**A4 – Segmental information continued****(iv) Segmental statement of financial position as at 30 June 2011**

	United Kingdom							Other Group activities £m	Total £m
	Life £m	GI £m	Aviva Europe £m	North America £m	Asia Pacific £m	Aviva Investors £m	Delta Lloyd £m		
Goodwill	10	924	976	825	60	28	—	—	2,823
Acquired value of in-force business and intangible assets	263	20	1,098	964	12	39	—	—	2,396
Interests in, and loans to, joint ventures and associates	1,737	—	315	1	451	16	1,061	—	3,581
Property and equipment	171	50	85	136	7	18	—	—	467
Investment property	8,168	15	1,476	6	—	1,078	—	493	11,236
Loans	20,504	565	996	2,723	40	—	—	—	24,828
Financial investments	82,989	2,632	103,739	31,792	2,747	1,001	—	3,106	228,006
Deferred acquisition costs	1,478	566	676	2,598	5	—	—	—	5,323
Other assets	15,583	4,211	17,296	3,094	437	516	—	2,809	43,946
<b>Total assets</b>	<b>130,903</b>	<b>8,983</b>	<b>126,657</b>	<b>42,139</b>	<b>3,759</b>	<b>2,696</b>	<b>1,061</b>	<b>6,408</b>	<b>322,606</b>
Insurance liabilities									
Long-term business and outstanding claims provisions	66,063	4,810	39,493	31,504	2,511	—	—	—	144,381
Unearned premiums	214	2,237	1,226	1,118	52	—	—	—	4,847
Other insurance liabilities	—	69	117	102	(1)	—	—	—	287
Liability for investment contracts	45,083	—	69,209	2,806	—	2,186	—	—	119,284
Unallocated divisible surplus	2,233	—	969	—	71	—	—	—	3,273
Net asset value attributable to unitholders	1,040	—	3,612	—	—	—	—	4,083	8,735
External borrowings	2,763	—	135	151	—	—	—	5,833	8,882
Other liabilities, including inter-segment liabilities	8,499	(2,300)	5,153	2,507	212	309	—	3,332	17,712
<b>Total liabilities</b>	<b>125,895</b>	<b>4,816</b>	<b>119,914</b>	<b>38,188</b>	<b>2,845</b>	<b>2,495</b>	<b>—</b>	<b>13,248</b>	<b>307,401</b>
<b>Total equity</b>									<b>15,205</b>
<b>Total equity and liabilities</b>									<b>322,606</b>
Capital expenditure (excluding business combinations)	22	19	5	14	2	8	—	—	70

External borrowings by holding companies within the Group which are not allocated to operating companies are included in 'Other Group activities'.

**(v) Segmental statement of financial position as at 30 June 2010**

	United Kingdom		Europe					Other Group activities £m	Total £m
	Life £m	GI £m	Aviva Europe £m	Delta Lloyd £m	North America £m	Asia Pacific £m	Aviva Investors £m		
Goodwill	31	1,208	884	294	875	54	31	—	3,377
Acquired value of in-force business and intangible assets	16	244	1,064	77	1,183	18	40	—	2,642
Interests in, and loans to, joint ventures and associates	2,096	—	332	347	2	342	16	4	3,139
Property and equipment	104	106	92	243	126	4	11	—	686
Investment property	7,766	86	1,246	1,985	9	(6)	915	535	12,536
Loans	19,396	557	910	18,016	2,352	38	—	125	41,394
Financial investments	74,650	2,507	89,993	31,676	31,416	2,424	1,069	2,847	236,582
Deferred acquisition costs	1,312	682	646	202	2,242	6	—	—	5,090
Other assets	15,752	3,668	18,481	4,062	3,402	442	587	2,778	49,172
<b>Total assets</b>	<b>121,123</b>	<b>9,058</b>	<b>113,648</b>	<b>56,902</b>	<b>41,607</b>	<b>3,322</b>	<b>2,669</b>	<b>6,289</b>	<b>354,618</b>
Insurance liabilities									
Long-term business and outstanding claims provisions	63,169	5,358	35,498	28,946	30,588	2,323	—	—	165,882
Unearned premiums	184	2,204	1,013	417	1,104	35	—	—	4,957
Other insurance liabilities	—	79	105	59	101	(1)	—	—	343
Liability for investment contracts	38,720	—	60,114	3,127	3,090	—	2,152	—	107,203
Unallocated divisible surplus	1,910	—	2,145	140	—	30	—	—	4,225
Net asset value attributable to unitholders	981	—	4,589	646	—	—	—	3,626	9,842
External borrowings	2,414	8	137	6,173	195	—	—	5,200	14,127
Other liabilities, including inter-segment liabilities	9,347	(347)	3,883	13,352	2,675	173	347	2,831	32,261
<b>Total liabilities</b>	<b>116,725</b>	<b>7,302</b>	<b>107,484</b>	<b>52,860</b>	<b>37,753</b>	<b>2,560</b>	<b>2,499</b>	<b>11,657</b>	<b>338,840</b>
<b>Total equity</b>									<b>15,778</b>
<b>Total equity and liabilities</b>									<b>354,618</b>
Capital expenditure (excluding business combinations)	—	4	11	26	33	—	2	—	76

**A4 – Segmental information continued****(vi) Segmental statement of financial position as at 31 December 2010**

	United Kingdom		Europe							
	Life £m	GI £m	Aviva Europe £m	Delta Lloyd £m	North America £m	Asia Pacific £m	Aviva Investors £m	Other Group activities £m	Total £m	
Goodwill	29	1,208	927	307	838	54	28	—	3,391	
Acquired value of in-force business and intangible assets	277	241	1,072	58	1,102	16	40	—	2,806	
Interests in, and loans to, joint ventures and associates	1,603	—	315	323	1	381	14	—	2,637	
Property and equipment	152	90	99	236	149	7	17	—	750	
Investment property	8,121	37	1,382	2,043	6	—	1,060	415	13,064	
Loans	19,781	502	977	19,120	2,529	40	—	125	43,074	
Financial investments	83,099	2,525	95,940	33,627	31,829	2,639	1,062	2,567	253,288	
Deferred acquisition costs	1,445	628	632	188	2,518	5	—	—	5,416	
Other assets	14,409	3,724	17,748	3,361	2,939	446	1,164	1,890	45,681	
Total assets	128,916	8,955	119,092	59,263	41,911	3,588	3,385	4,997	370,107	
Insurance liabilities										
Long-term business and outstanding claims provisions	66,261	5,136	37,165	30,240	31,218	2,482	—	—	172,502	
Unearned premiums	185	2,171	1,023	336	1,098	42	—	—	4,855	
Other insurance liabilities	—	69	111	61	100	2	—	—	343	
Liability for investment contracts	44,350	—	65,020	3,220	2,929	—	2,268	—	117,787	
Unallocated divisible surplus	2,010	—	1,243	138	—	37	—	—	3,428	
Net asset value attributable to unitholders	991	—	4,231	678	—	—	—	3,132	9,032	
External borrowings	2,796	—	127	6,574	178	—	—	5,274	14,949	
Other liabilities, including inter-segment liabilities	7,316	(1,823)	3,760	13,706	2,541	193	901	2,892	29,486	
Total liabilities	123,909	5,553	112,680	54,953	38,064	2,756	3,169	11,298	352,382	
Total equity									17,725	
Total equity and liabilities									370,107	
Capital expenditure (excluding business combinations)	379	11	20	88	68	6	12	—	584	

**(b) Further analysis by products and services**

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

**Long-term business**

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

**General insurance and health**

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

**Fund management**

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

**Other**

Other includes the RAC non-insurance operations, our banking businesses, service companies, head office expenses, such as Group treasury and finance functions, and certain financing costs and taxes not allocated to business segments.

**Delta Lloyd**

In the products and services analysis, the results of Delta Lloyd up to 6 May 2011 are presented as discontinued operations. After this date, the Group's share of the profits of its retained interest in Delta Lloyd as an associate are shown only within other activities within continuing operations.

**A4 – Segmental information continued****(i) Segmental income statement – products and services for the six month period ended 30 June 2011**

	Long-term business £m	General insurance and health** £m	Fund management £m	Other† £m	Total £m
Gross written premiums*	10,404	4,994	—	—	15,398
Premiums ceded to reinsurers	(654)	(286)	—	—	(940)
Net written premiums	9,750	4,708	—	—	14,458
Net change in provision for unearned premiums	—	(290)	—	—	(290)
Net earned premiums	9,750	4,418	—	—	14,168
Fee and commission income	322	8	207	182	719
	10,072	4,426	207	182	14,887
Net investment income	5,244	369	4	170	5,787
Inter-segment revenue	—	—	94	—	94
Share of profit of joint ventures and associates	132	—	—	20	152
Loss on the disposal of subsidiaries and associates	—	—	—	(11)	(11)
<b>Segmental income</b>	<b>15,448</b>	<b>4,795</b>	<b>305</b>	<b>361</b>	<b>20,909</b>
Claims and benefits paid, net of recoveries from reinsurers	(10,106)	(2,957)	—	—	(13,063)
Change in insurance liabilities, net of reinsurance	(1,195)	56	—	—	(1,139)
Change in investment contract provisions	(1,957)	—	—	—	(1,957)
Change in unallocated divisible surplus	101	—	—	—	101
Amortisation of acquired value of in-force business	(98)	—	—	—	(98)
Depreciation and other amortisation expense	(78)	(9)	(6)	(19)	(112)
Other operating expenses	(1,206)	(1,462)	(250)	(595)	(3,513)
Impairment losses	(6)	(31)	—	(3)	(40)
Inter-segment expenses	(89)	(4)	—	(1)	(94)
Finance costs	(36)	(19)	(22)	(262)	(339)
<b>Segmental expenses</b>	<b>(14,670)</b>	<b>(4,426)</b>	<b>(278)</b>	<b>(880)</b>	<b>(20,254)</b>
Profit/(loss) before tax from continuing operations	778	369	27	(519)	655
Tax attributable to policyholder returns	3	—	—	—	3
Profit/(loss) before tax attributable to shareholders	781	369	27	(519)	658
Adjusted for:					
Non-operating items from continuing operations (excluding Delta Lloyd as an associate)	301	86	15	71	473
Share of Delta Lloyd's non-operating items (before tax), as an associate	—	—	—	8	8
Share of Delta Lloyd's tax expense, as an associate	—	—	—	7	7
<b>Operating profit/(loss) before tax attributable to shareholders' profits from continuing operations</b>	<b>1,082</b>	<b>455</b>	<b>42</b>	<b>(433)</b>	<b>1,146</b>
<b>Operating profit/(loss) before tax attributable to shareholders' profits from discontinued operations</b>	<b>185</b>	<b>1</b>	<b>11</b>	<b>(6)</b>	<b>191</b>
<b>Operating profit/(loss) before tax attributable to shareholders' profits</b>	<b>1,267</b>	<b>456</b>	<b>53</b>	<b>(439)</b>	<b>1,337</b>

\* Gross written premiums includes inward reinsurance premiums assumed from other companies amounting to £110 million, of which £49 million relates to property and liability insurance and £61 million relates to long-term business.

\*\* General insurance and health business segment includes gross written premiums of £589 million relating to health business. The remaining business relates to property and liability insurance.

† Other includes the RAC non-insurance operations, our banking business, head office expenses, such as group treasury and finance functions, and certain financing costs and taxes not allocated to business segments.



**A4 – Segmental information continued****(ii) Segmental income statement – products and services for the six month period ended 30 June 2010**

	Long-term business £m	General insurance and health** £m	Fund management £m	Other† £m	Total £m
Gross written premiums*	12,558	4,665	—	—	17,223
Premiums ceded to reinsurers	(515)	(328)	—	—	(843)
Net written premiums	12,043	4,337	—	—	16,380
Net change in provision for unearned premiums	1	(151)	—	—	(150)
Net earned premiums	12,044	4,186	—	—	16,230
Fee and commission income	344	47	193	186	770
	12,388	4,233	193	186	17,000
Net investment income	5,703	334	5	869	6,911
Inter-segment revenue	—	—	84	—	84
Share of profit/(loss) of joint ventures and associates	98	—	(4)	(3)	91
Profit on the disposal of subsidiaries and associates	—	—	—	28	28
<b>Segmental income</b>	<b>18,189</b>	<b>4,567</b>	<b>278</b>	<b>1,080</b>	<b>24,114</b>
Claims and benefits paid, net of recoveries from reinsurers	(9,593)	(2,926)	—	—	(12,519)
Change in insurance liabilities, net of reinsurance	(2,790)	70	—	—	(2,720)
Change in investment contract provisions	(2,641)	—	—	—	(2,641)
Change in unallocated divisible surplus	(538)	—	—	—	(538)
Amortisation of acquired value of in-force business	(96)	—	—	—	(96)
Depreciation and other amortisation expense	(51)	(9)	(4)	(24)	(88)
Other operating expenses	(1,175)	(1,312)	(215)	(1,331)	(4,033)
Impairment losses	(54)	(3)	—	(1)	(58)
Inter-segment expenses	(79)	(5)	—	—	(84)
Finance costs	(86)	(11)	(33)	(164)	(294)
<b>Segmental expenses</b>	<b>(17,103)</b>	<b>(4,196)</b>	<b>(252)</b>	<b>(1,520)</b>	<b>(23,071)</b>
Profit/(loss) before tax	1,086	371	26	(440)	1,043
Tax attributable to policyholder returns	(31)	—	—	—	(31)
Profit/(loss) before tax attributable to shareholders	1,055	371	26	(440)	1,012
Adjusted for non-operating items	(46)	73	13	(6)	34
<b>Operating profit/(loss) before tax attributable to shareholders' profits from continuing operations</b>	<b>1,009</b>	<b>444</b>	<b>39</b>	<b>(446)</b>	<b>1,046</b>
<b>Operating profit/(loss) before tax attributable to shareholders' profits from discontinued operations</b>	<b>119</b>	<b>81</b>	<b>17</b>	<b>7</b>	<b>224</b>
<b>Operating profit/(loss) before tax attributable to shareholders' profits</b>	<b>1,128</b>	<b>525</b>	<b>56</b>	<b>(439)</b>	<b>1,270</b>

\* Gross written premiums includes inward reinsurance premiums assumed from other companies amounting to £156 million, of which £86 million relates to property and liability insurance and £70 million relates to long-term business.

\*\* General insurance and health business segment includes gross written premiums of £492 million relating to health business. The remaining business relates to property and liability insurance.

† Other includes the RAC non-insurance operations, our banking business, head office expenses, such as group treasury and finance functions, and certain financing costs and taxes not allocated to business segments.

**A4 – Segmental information continued****(iii) Segmental income statement – products and services for the year ended 31 December 2010**

	Long-term business £m	General insurance and health** £m	Fund management £m	Other £m	Total £m
Gross written premiums*	22,600	9,205	—	—	31,805
Premiums ceded to reinsurers	(1,051)	(683)	—	—	(1,734)
Net written premiums	21,549	8,522	—	—	30,071
Net change in provision for unearned premiums	—	(73)	—	—	(73)
Net earned premiums	21,549	8,449	—	—	29,998
Fee and commission income	624	94	389	343	1,450
	22,173	8,543	389	343	31,448
Net investment income	17,183	500	7	1,059	18,749
Inter-segment revenue	—	—	216	—	216
Share of profit/(loss) of joint ventures and associates	180	—	(5)	(34)	141
Profit on the disposal of subsidiaries and associates	130	1	—	32	163
<b>Segmental income</b>	<b>39,666</b>	<b>9,044</b>	<b>607</b>	<b>1,400</b>	<b>50,717</b>
Claims and benefits paid, net of recoveries from reinsurers	(18,909)	(6,009)	—	—	(24,918)
Change in insurance liabilities, net of reinsurance	(6,997)	389	—	—	(6,608)
Change in investment contract provisions	(8,693)	—	—	—	(8,693)
Change in unallocated divisible surplus	362	—	—	—	362
Amortisation of acquired value of in-force business	(162)	—	—	—	(162)
Depreciation and other amortisation expense	(177)	(27)	(10)	(50)	(264)
Other operating expenses	(2,581)	(2,788)	(469)	(1,658)	(7,496)
Impairment losses	(82)	(3)	—	1	(84)
Inter-segment expenses	(206)	(8)	—	(2)	(216)
Finance costs	(155)	(48)	(65)	(431)	(699)
<b>Segmental expenses</b>	<b>(37,600)</b>	<b>(8,494)</b>	<b>(544)</b>	<b>(2,140)</b>	<b>(48,778)</b>
Profit/(loss) before tax	2,066	550	63	(740)	1,939
Tax attributable to policyholder returns	(394)	—	—	—	(394)
Profit/(loss) before tax attributable to shareholders	1,672	550	63	(740)	1,545
Adjusted for non-operating items	316	354	35	(224)	481
Operating profit/(loss) before tax attributable to shareholders' profits from continuing operations	1,988	904	98	(964)	2,026
Operating profit/(loss) before tax attributable to shareholders' profits from discontinued operations	330	146	103	(55)	524
<b>Operating profit/(loss) before tax attributable to shareholders' profits</b>	<b>2,318</b>	<b>1,050</b>	<b>201</b>	<b>(1,019)</b>	<b>2,550</b>

\* Gross written premiums includes inward reinsurance premiums assumed from other companies amounting to £255 million, of which £113 million relates to property and liability insurance and £142 million relates to long-term business.

\*\* General insurance and health business segment includes gross written premiums of £942 million relating to health business. The remaining business relates to property and liability insurance.

**(iv) Segmental statement of financial position – products and services as at 30 June 2011**

	Long-term business £m	General insurance and health £m	Fund management £m	Other* £m	Total £m
Goodwill	1,615	308	28	872	2,823
Acquired value of in-force business and intangible assets	2,161	151	39	45	2,396
Interests in, and loans to, joint ventures and associates	2,513	6	1	1,061	3,581
Property and equipment	337	44	18	68	467
Investment property	10,614	129	—	493	11,236
Loans	24,165	663	—	—	24,828
Financial investments	214,421	9,978	81	3,526	228,006
Deferred acquisition costs	4,270	1,040	13	—	5,323
Other assets	32,630	7,122	461	3,733	43,946
<b>Total assets</b>	<b>292,726</b>	<b>19,441</b>	<b>641</b>	<b>9,798</b>	<b>322,606</b>
Gross insurance liabilities	133,901	15,614	—	—	149,515
Gross liabilities for investment contracts	119,284	—	—	—	119,284
Unallocated divisible surplus	3,273	—	—	—	3,273
Net asset value attributable to unit holders	4,653	—	—	4,082	8,735
Borrowings	2,879	—	—	6,003	8,882
Other liabilities, including inter-segment liabilities	13,181	(1,595)	414	5,712	17,712
<b>Total liabilities</b>	<b>277,171</b>	<b>14,019</b>	<b>414</b>	<b>15,797</b>	<b>307,401</b>
<b>Total equity</b>					<b>15,205</b>
<b>Total equity and liabilities</b>					<b>322,606</b>

\* Aviva's continuing associate interest in Delta Lloyd is included within other.

**A4 – Segmental information continued****(v) Segmental statement of financial position – products and services as at 30 June 2010**

	Long-term business £m	General insurance and health £m	Fund management £m	Other £m	Total £m
Goodwill	1,620	451	31	1,275	3,377
Acquired value of in-force business and intangible assets	2,147	365	60	70	2,642
Interests in, and loans to, joint ventures and associates	3,044	4	43	48	3,139
Property and equipment	357	42	13	274	686
Investment property	11,718	188	—	630	12,536
Loans	27,560	722	—	13,112	41,394
Financial investments	220,884	11,368	55	4,275	236,582
Deferred acquisition costs	3,852	1,218	17	3	5,090
Other assets	38,225	7,509	871	2,567	49,172
<b>Total assets</b>	<b>309,407</b>	<b>21,867</b>	<b>1,090</b>	<b>22,254</b>	<b>354,618</b>
Gross insurance liabilities	153,759	17,423	—	—	171,182
Gross liabilities for investment contracts	107,203	—	—	—	107,203
Unallocated divisible surplus	4,225	—	—	—	4,225
Net asset value attributable to unit holders	6,206	10	—	3,626	9,842
Borrowings	3,696	82	—	10,349	14,127
Other liabilities, including inter-segment liabilities	16,588	(516)	832	15,357	32,261
<b>Total liabilities</b>	<b>291,677</b>	<b>16,999</b>	<b>832</b>	<b>29,332</b>	<b>338,840</b>
<b>Total equity</b>					<b>15,778</b>
<b>Total equity and liabilities</b>					<b>354,618</b>

**(vi) Segmental statement of financial position – products and services as at 31 December 2010**

	Long-term business £m	General insurance and health £m	Fund management £m	Other £m	Total £m
Goodwill	1,615	459	28	1,289	3,391
Acquired value of in-force business and intangible assets	2,328	356	59	63	2,806
Interests in, and loans to, joint ventures and associates	2,630	6	—	1	2,637
Property and equipment	472	47	18	213	750
Investment property	12,490	146	—	428	13,064
Loans	28,596	664	—	13,814	43,074
Financial investments	237,659	11,481	82	4,066	253,288
Deferred acquisition costs	4,261	1,141	14	—	5,416
Other assets	34,678	7,517	1,627	1,859	45,681
<b>Total assets</b>	<b>324,729</b>	<b>21,817</b>	<b>1,828</b>	<b>21,733</b>	<b>370,107</b>
Gross insurance liabilities	160,579	17,121	—	—	177,700
Gross liabilities for investment contracts	117,787	—	—	—	117,787
Unallocated divisible surplus	3,428	—	—	—	3,428
Net asset value attributable to unit holders	5,892	8	—	3,132	9,032
Borrowings	3,653	86	139	11,071	14,949
Other liabilities, including inter-segment liabilities	14,334	(1,129)	1,361	14,920	29,486
<b>Total liabilities</b>	<b>305,673</b>	<b>16,086</b>	<b>1,500</b>	<b>29,123</b>	<b>352,382</b>
<b>Total equity</b>					<b>17,725</b>
<b>Total equity and liabilities</b>					<b>370,107</b>

**A5 – Tax**

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

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

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

	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
<b>Current tax</b>			
For this year	249	298	583
Prior year adjustments	(1)	1	(44)
Total current tax from continuing operations	248	299	539
<b>Deferred tax</b>			
Origination and reversal of temporary differences	(67)	10	280
Changes in tax rates or tax laws	(29)	—	(35)
Write-down/(back) of deferred tax assets	38	—	(67)
Total deferred tax from continuing operations	(58)	10	178
Total tax charged to income statement from continuing operations	190	309	717
Total tax (credited)/charged to income statement from discontinued operations	(202)	268	225
Total tax (credited)/charged to income statement	(12)	577	942

(ii) The Group, as a proxy for policyholders in the UK, Ireland and Singapore, is required to record taxes on investment income and gains each year. Accordingly, the tax benefit or expense attributable to UK, Ireland and Singapore insurance policyholder returns is included in the tax charge. The tax credit attributable to policyholders' returns included in the credit above is £3 million (6 months 2010: £31 million charge; Full year 2010: £394 million charge).

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

	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
UK tax	74	138	447
Overseas tax	(86)	439	495
	(12)	577	942

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

(i) The total tax charge comprises:

	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
Current tax from continuing operations			
In respect of pensions and other post-retirement obligations	(28)	(27)	(29)
In respect of foreign exchange movements	11	—	(5)
	(17)	(27)	(34)
Deferred tax from continuing operations			
In respect of pensions and other post-retirement obligations	29	(9)	(3)
In respect of fair value gains on owner-occupied properties	—	—	2
In respect of unrealised gains on investments	9	144	151
	38	135	150
Tax charged to other comprehensive income arising from continuing operations	21	108	116
Tax credited to other comprehensive income arising from discontinued operations	(3)	(22)	(4)
Total tax charged to other comprehensive income	18	86	112

**(c) Tax credited to equity**

Tax credited directly to equity in the period amounted to £nil (6 months 2010: £nil; Full year 2010: £17 million). The full year 2010 amount of £17 million was wholly in respect of coupon payments on direct capital instruments.

**A5 – Tax continued****(d) Tax reconciliation**

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

	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
Profit before tax from continuing operations	<b>655</b>	1,043	1,939
(Loss)/profit before tax from discontinued operations	<b>(726)</b>	1,039	895
Total (loss)/profit before tax	<b>(71)</b>	2,082	2,834
Tax calculated at standard UK corporation tax rate of 26.5% (2010: 28%)	<b>(19)</b>	583	794
Different basis of tax – policyholders	<b>(27)</b>	6	272
Adjustment to tax charge in respect of prior years	<b>(18)</b>	(2)	(18)
Non-assessable income	<b>(13)</b>	(11)	(38)
Non-taxable loss/(profit) on sale of subsidiaries and associates	<b>14</b>	(8)	(44)
Disallowable expenses	<b>36</b>	37	99
Different local basis of tax on overseas profits	<b>32</b>	(15)	103
Reduction in future local statutory tax rates	<b>(27)</b>	—	(20)
Movement in deferred tax not recognised	<b>34</b>	12	(166)
Differences arising from discontinued operations	<b>(18)</b>	(23)	(26)
Tax effect of profit from associates & joint ventures	<b>(11)</b>	(2)	(4)
Other	<b>5</b>	—	(10)
Total tax (credited)/charged to income statement	<b>(12)</b>	577	942

A gradual reduction in the UK corporation tax rate from 28% to 24% over four years was announced in the Emergency Budget of 22 June 2010. The first 1% rate reduction was enacted in the Finance (No.2) Act 2010. This was augmented in the Finance Act 2011 to include an additional 1% reduction from April 2011, the effect of which is shown in the table above. A further 1% rate reduction to 25%, with effect from 1 April 2012, was substantively enacted on 5 July 2011. The benefit to the Group's net assets is estimated as £30 million. Subsequent reductions will be dealt with by future legislation. The benefit to the Group's net assets from the further 2% reduction in the rate from 25% to 23% is estimated as approximately £60 million in total and will be recognised as the legislation is substantively enacted.

Considerable changes to the regime for taxing UK life insurance companies were announced with the budget of 23 March 2011 and a second consultation commenced in April 2011. The uncertainty surrounding the final outcome of the consultation and the complexity of the changes means that it has not been possible to estimate their impact on the deferred tax assets and liabilities shown in the consolidated statement of financial position.

**A6 – Earnings per share****(a) Basic earnings per share**

(i) The profit attributable to ordinary shareholders is:

	6 months 2011			6 months 2010			Full year 2010		
	Operating profit £m	Non- operating items £m	Total £m	Operating profit £m	Non- operating items £m	Total £m	Operating profit £m	Non- operating items £m	Total £m
Profit before tax attributable to shareholders' profits	<b>1,146</b>	<b>(481)</b>	<b>665</b>	1,046	(34)	1,012	2,026	(481)	1,545
Share of Delta Lloyd's tax expense as an associate	<b>(9)</b>	<b>2</b>	<b>(7)</b>	—	—	—	—	—	—
Profit before tax	<b>1,137</b>	<b>(479)</b>	<b>658</b>	1,046	(34)	1,012	2,026	(481)	1,545
Tax attributable to shareholders' profits	<b>(292)</b>	<b>99</b>	<b>(193)</b>	(267)	(11)	(278)	(529)	206	(323)
Profit for the period	<b>845</b>	<b>(380)</b>	<b>465</b>	779	(45)	734	1,497	(275)	1,222
Amount attributable to non-controlling interests	<b>(107)</b>	<b>85</b>	<b>(22)</b>	(100)	17	(83)	(123)	6	(117)
Cumulative preference dividends for the period	<b>(9)</b>	—	<b>(9)</b>	(9)	—	(9)	(17)	—	(17)
Coupon payments in respect of direct capital instruments (DCI) (net of tax)	—	—	—	—	—	—	(42)	—	(42)
Profit attributable to ordinary shareholders from continuing operations	<b>729</b>	<b>(295)</b>	<b>434</b>	670	(28)	642	1,315	(269)	1,046
Profit attributable to ordinary shareholders from discontinued operations	<b>93</b>	<b>(411)</b>	<b>(318)</b>	88	342	430	219	139	358
<b>Profit attributable to ordinary shareholders</b>	<b>822</b>	<b>(706)</b>	<b>116</b>	758	314	1,072	1,534	(130)	1,404

**A6 – Earnings per share continued**

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

	6 months 2011			6 months 2010			Full year 2010		
	Before tax £m	Net of tax, non- controlling interests, preference dividends and DCI £m	Per share p	Before tax £m	Net of tax, non- controlling interests, preference dividends and DCI £m	Per share p	Before tax £m	Net of tax, non- controlling interests, preference dividends and DCI £m	Per share p
Operating profit attributable to ordinary shareholders – continuing operations	<b>1,146</b>	<b>729</b>	<b>25.8</b>	1,046	670	24.2	2,026	1,315	47.2
Non-operating items:									
Investment return variances and economic assumption changes on long-term business	<b>(187)</b>	<b>2</b>	<b>0.1</b>	111	141	5.1	(219)	(90)	(3.2)
Short-term fluctuation in return on investments backing non-long-term business	<b>(80)</b>	<b>(53)</b>	<b>(1.9)</b>	26	(12)	(0.5)	(199)	(157)	(5.6)
Economic assumption changes on general insurance and health business	<b>(8)</b>	<b>(6)</b>	<b>(0.2)</b>	(64)	(46)	(1.7)	(61)	(44)	(1.6)
Impairment of goodwill	<b>(20)</b>	<b>(20)</b>	<b>(0.7)</b>	(2)	(2)	(0.1)	(23)	(23)	(0.9)
Amortisation and net impairment of intangibles	<b>(56)</b>	<b>(101)</b>	<b>(3.6)</b>	(51)	(38)	(1.4)	(193)	(115)	(4.1)
Profit on the disposal of subsidiaries and associates	<b>(11)</b>	<b>(14)</b>	<b>(0.5)</b>	28	28	1.0	163	163	5.9
Integration and restructuring costs and exceptional items	<b>(111)</b>	<b>(97)</b>	<b>(3.4)</b>	(82)	(99)	(3.5)	51	(3)	(0.1)
Share of Delta Lloyd's non-operating items (before tax) as an associate	<b>(8)</b>	<b>(6)</b>	<b>(0.2)</b>	—	—	—	—	—	—
Share of Delta Lloyd's tax expense, as an associate	<b>(7)</b>	—	—	—	—	—	—	—	—
Profit attributable to ordinary shareholders from continuing operations	<b>658</b>	<b>434</b>	<b>15.4</b>	1,012	642	23.1	1,545	1,046	37.6
(Loss)/ profit attributable to ordinary shareholders from discontinued operations	<b>(726)</b>	<b>(318)</b>	<b>(11.3)</b>	1,039	430	15.7	895	358	12.8
<b>(Loss)/ profit attributable to ordinary shareholders</b>	<b>(68)</b>	<b>116</b>	<b>4.1</b>	2,051	1,072	38.8	2,440	1,404	50.4

(iii) The calculation of basic earnings per share uses a weighted average of 2,825 million (30 June 2010: 2,765 million; 31 December 2010: 2,784 million) ordinary shares in issue, after deducting shares owned by the employee share trusts. The actual number of shares in issue at 30 June 2011 was 2,863 million (30 June 2010: 2,805 million; 31 December 2010: 2,820 million) and 2,859 million (30 June 2010: 2,800 million; 31 December 2010: 2,812 million) excluding shares owned by the employee share trusts.

**A6 – Earnings per share continued****(b) Diluted earnings per share**

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

	6 months 2011			6 months 2010			Full year 2010		
	Total £m	Weighted average number of shares m	Per share p	Total £m	Weighted average number of shares m	Per share p	Total £m	Weighted average number of shares m	Per share p
Profit attributable to ordinary shareholders	434	2,825	15.4	642	2,765	23.1	1,046	2,784	37.6
Dilutive effect of share awards and options	—	48	(0.3)	—	38	(0.2)	—	47	(0.6)
<b>Diluted earnings per share from continuing operations</b>	<b>434</b>	<b>2,873</b>	<b>15.1</b>	<b>642</b>	<b>2,803</b>	<b>22.9</b>	<b>1,046</b>	<b>2,831</b>	<b>37.0</b>
Profit attributable to ordinary shareholders	(318)	2,825	(11.3)	430	2,765	15.7	358	2,784	12.8
Dilutive effect of share awards and options	—	48	0.2	—	38	(0.4)	—	47	(0.2)
<b>Diluted earnings per share from discontinued operations</b>	<b>(318)</b>	<b>2,873</b>	<b>(11.1)</b>	<b>430</b>	<b>2,803</b>	<b>15.3</b>	<b>358</b>	<b>2,831</b>	<b>12.6</b>
<b>Diluted earnings per share</b>	<b>116</b>	<b>2,873</b>	<b>4.0</b>	<b>1,072</b>	<b>2,803</b>	<b>38.2</b>	<b>1,404</b>	<b>2,831</b>	<b>49.6</b>

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

	6 months 2011			6 months 2010			Full year 2010		
	Total £m	Weighted average number of shares m	Per share p	Total £m	Weighted average number of shares m	Per share p	Total £m	Weighted average number of shares m	Per share p
Operating profit attributable to ordinary shareholders	729	2,825	25.8	670	2,765	24.2	1,315	2,784	47.2
Dilutive effect of share awards and options	—	48	(0.4)	—	38	(0.3)	—	47	(0.7)
<b>Diluted operating profit per share from continuing operations</b>	<b>729</b>	<b>2,873</b>	<b>25.4</b>	<b>670</b>	<b>2,803</b>	<b>23.9</b>	<b>1,315</b>	<b>2,831</b>	<b>46.5</b>
Operating profit attributable to ordinary shareholders	93	2,825	3.3	88	2,765	3.2	219	2,784	7.9
Dilutive effect of share awards and options	—	48	(0.1)	—	38	(0.1)	—	47	(0.2)
<b>Diluted operating profit per share from discontinued operations</b>	<b>93</b>	<b>2,873</b>	<b>3.2</b>	<b>88</b>	<b>2,803</b>	<b>3.1</b>	<b>219</b>	<b>2,831</b>	<b>7.7</b>
<b>Diluted operating profit per share</b>	<b>822</b>	<b>2,873</b>	<b>28.6</b>	<b>758</b>	<b>2,803</b>	<b>27.0</b>	<b>1,534</b>	<b>2,831</b>	<b>54.2</b>

## A7 – Dividends and appropriations

	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
Ordinary dividends declared and charged to equity in the period			
Final 2010 – 16.00 pence per share, paid on 17 May 2011	451	—	—
Interim 2010 – 9.50 pence per share, paid on 17 November 2010	—	—	266
Final 2009 – 15.00 pence per share, paid on 17 May 2010	—	415	415
	451	415	681
Preference dividends declared and charged to equity in the year	9	9	17
Coupon payments on direct capital instruments	—	—	59
	460	424	757

Subsequent to 30 June 2011, the directors proposed an interim dividend for 2011 of 10 pence per ordinary share (*HY10: 9.5 pence*), amounting to £286 million (*HY10: £266 million*) in total. The dividend will be paid on 17 November 2011 and will be accounted for as an appropriation of retained earnings in the year ending 31 December 2011.

Interest on the direct capital instruments issued in November 2004 is treated as an appropriation of retained profits and, accordingly, it is accounted for when paid. Tax relief is obtained at a rate of 26.5% (*2010: 28.0%*).

## A8 – Insurance liabilities

### (a) Carrying amount

Insurance liabilities at 30 June/31 December comprise:

	30 June 2011			30 June 2010			31 December 2010		
	Long-term business £m	General insurance and health £m	Total £m	Long-term business £m	General insurance and health £m	Total £m	Long-term business £m	General insurance and health £m	Total £m
Long-term business provisions									
Participating	59,084	—	59,084	63,508	—	63,508	64,043	—	64,043
Unit-linked non-participating	11,027	—	11,027	21,349	—	21,349	21,450	—	21,450
Other non-participating	62,517	—	62,517	69,437	—	69,437	75,453	—	75,453
	132,628	—	132,628	154,294	—	154,294	160,946	—	160,946
Outstanding claims provisions	1,273	8,398	9,671	847	9,678	10,525	1,078	9,528	10,606
Provision for claims incurred but not reported	—	2,518	2,518	—	2,785	2,785	—	2,735	2,735
	1,273	10,916	12,189	847	12,463	13,310	1,078	12,263	13,341
Provision for unearned premiums	—	4,847	4,847	—	4,957	4,957	—	4,855	4,855
Provision arising from liability adequacy tests	—	—	—	—	3	3	—	2	2
Other technical provisions	—	—	—	—	—	—	—	1	1
<b>Total</b>	<b>133,901</b>	<b>15,763</b>	<b>149,664</b>	<b>155,141</b>	<b>17,423</b>	<b>172,564</b>	<b>162,024</b>	<b>17,121</b>	<b>179,145</b>
Less: Obligations to staff pension schemes transferred to provisions	—	—	—	(1,382)	—	(1,382)	(1,445)	—	(1,445)
Amounts classified as held for sale	—	(149)	(149)	—	—	—	—	—	—
	133,901	15,614	149,515	153,759	17,423	171,182	160,579	17,121	177,700



**A8 – Insurance liabilities continued****(b) Movements in long-term business liabilities**

The following movements have occurred in the long-term business provisions during the period:

	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
<b>Carrying amount at 1 January</b>	<b>160,946</b>	<b>154,058</b>	<b>154,058</b>
Provisions in respect of new business	5,289	5,755	12,502
Expected change in existing business provisions	(4,166)	(3,689)	(9,259)
Variance between actual and expected experience	(172)	(46)	1,858
Impact of other operating assumption changes	(20)	1	(520)
Impact of economic assumption changes	1,023	1,424	1,959
Exceptional strengthening of longevity assumptions	—	—	483
Other movements	(90)	(315)	(197)
Change in liability recognised as an expense	1,864	3,130	6,826
Effect of portfolio transfers, acquisitions and disposals	(6)	(1)	1,117
Deconsolidation of Delta Lloyd	(32,159)	—	—
Foreign exchange rate movements	1,983	(2,893)	(1,055)
<b>Carrying amount at 30 June/31 December</b>	<b>132,628</b>	<b>154,294</b>	<b>160,946</b>

**(c) Movements in general insurance and health liabilities**

The following changes have occurred in the general insurance and health claims provisions during the period:

	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
<b>Carrying amount at 1 January</b>	<b>12,263</b>	<b>12,696</b>	<b>12,696</b>
Impact of changes in assumptions	3	80	26
Claim losses and expenses incurred in the current year	3,366	3,399	6,908
Decrease in estimated claim losses and expenses incurred in prior years	(19)	(193)	(358)
Exceptional strengthening of general insurance latent claims provisions	—	10	10
<b>Incurred claims losses and expenses</b>	<b>3,350</b>	<b>3,296</b>	<b>6,586</b>
Less:			
Payments made on claims incurred in the current year	(1,450)	(1,459)	(3,641)
Payments made on claims incurred in prior years	(2,149)	(2,108)	(3,803)
Recoveries on claim payments	135	122	271
<b>Claims payments made in the year, net of recoveries</b>	<b>(3,464)</b>	<b>(3,445)</b>	<b>(7,173)</b>
Unwind of discounting	26	25	64
Other movements in the claims provisions	(6)	—	(18)
<b>Change in claims reserve recognised as an expense</b>	<b>(94)</b>	<b>(124)</b>	<b>(541)</b>
Effect of portfolio transfers, acquisitions and disposals	—	—	4
Deconsolidation of Delta Lloyd	(1,445)	—	—
Foreign exchange rate movements	187	(109)	102
Other movements	5	—	2
<b>Carrying amount at 30 June/31 December</b>	<b>10,916</b>	<b>12,463</b>	<b>12,263</b>

**(d) Movements in unearned premiums**

The following changes have occurred in the provision for unearned premiums (UPR) during the period:

	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
<b>Carrying amount at 1 January</b>	<b>4,855</b>	<b>4,781</b>	<b>4,781</b>
Premiums written during the period	5,612	5,426	10,469
Less: Premiums earned during the period	(5,265)	(5,189)	(10,424)
<b>Change in UPR recognised as income</b>	<b>347</b>	<b>237</b>	<b>45</b>
Gross portfolio transfers and acquisitions	—	(23)	(14)
Deconsolidation of Delta Lloyd	(424)	—	—
Foreign exchange rate movements	69	(38)	43
<b>Carrying amount at 30 June/31 December</b>	<b>4,847</b>	<b>4,957</b>	<b>4,855</b>

**A9 – Liability for investment contracts****(a) Carrying amount**

The liability for investment contracts at 30 June/31 December comprised:

	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
<b>Long-term business</b>			
Participating contracts	<b>71,253</b>	64,608	69,482
Non-participating contracts at fair value	<b>46,391</b>	40,351	46,124
Non-participating contracts at amortised cost	<b>1,640</b>	2,244	2,181
	<b>48,031</b>	42,595	48,305
<b>Total</b>	<b>119,284</b>	107,203	117,787

**(b) Movements in participating investment contracts**

The following movements have occurred in the year:

	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
<b>Carrying amount at 1 January</b>	<b>69,482</b>	66,559	66,559
Provisions in respect of new business	<b>2,169</b>	3,367	6,169
Expected change in existing business provisions	<b>(1,288)</b>	(1,476)	(2,400)
Variance between actual and expected experience	<b>339</b>	544	845
Impact of operating assumption changes	<b>(27)</b>	(1)	36
Impact of economic assumption changes	<b>45</b>	114	240
Other movements	<b>(2)</b>	(93)	(65)
Change in liability recognised as an expense	<b>1,236</b>	2,455	4,825
Effect of portfolio transfers, acquisitions and disposals	—	—	—
Foreign exchange rate movements	<b>3,049</b>	(4,407)	(1,918)
Deconsolidation of Delta Lloyd	<b>(2,523)</b>	—	—
Other movements	<b>9</b>	1	16
<b>Carrying amount at 30 June/31 December</b>	<b>71,253</b>	64,608	69,482

**(c) Movements in non-participating investment contracts**

	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
<b>Carrying amount at 1 January</b>	<b>48,305</b>	43,456	43,456
Provisions in respect of new business	<b>2,253</b>	1,867	4,096
Expected change in existing business provisions	<b>(1,689)</b>	(1,191)	(2,145)
Variance between actual and expected experience	<b>(488)</b>	(799)	1,276
Impact of operating assumption changes	<b>1</b>	—	20
Impact of economic assumption changes	<b>1</b>	12	3
Other movements	<b>(78)</b>	20	53
Change in liability	—	(91)	3,303
Effect of portfolio transfers, acquisitions and disposals	—	—	1,903
Deconsolidation of Delta Lloyd	<b>(832)</b>	—	—
Foreign exchange rate movements	<b>558</b>	(770)	(357)
<b>Carrying amount at 30 June/31 December</b>	<b>48,031</b>	42,595	48,305

**A10 – Reinsurance assets****(a) Carrying amounts**

The reinsurance assets at 30 June/31 December comprised:

	30 June 2011 £m	30 June 2010 £m	Full year 2010 £m
<b>Long-term business</b>			
Insurance contracts	3,280	3,891	3,650
Participating investment contracts	2	—	2
Non-participating investment contracts	1,556	1,409	1,463
Outstanding claims provisions	127	34	104
	<b>4,965</b>	<b>5,334</b>	<b>5,219</b>
<b>General insurance and health</b>			
Outstanding claims provisions	929	1,180	1,113
Provisions for claims incurred but not reported	392	436	445
	<b>1,321</b>	<b>1,616</b>	<b>1,558</b>
Provision for unearned premiums	284	321	307
	<b>1,605</b>	<b>1,937</b>	<b>1,865</b>
<b>Total</b>	<b>6,570</b>	<b>7,271</b>	<b>7,084</b>

**(b) Movements in respect of long-term business provisions**

The following movements have occurred in the reinsurance asset during the period:

	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
<b>Carrying amount at 1 January</b>	<b>5,115</b>	<b>5,557</b>	<b>5,557</b>
Asset in respect of new business	296	215	358
Expected change in existing business asset	(141)	(47)	(208)
Variance between actual and expected experience	5	60	81
Impact of other operating assumption changes	3	—	(443)
Impact of economic assumption changes	4	71	(25)
Other movements	(149)	(451)	(318)
Change in asset	18	(152)	(555)
Effect of portfolio transfers, acquisitions and disposals	(1)	—	174
Deconsolidation of Delta Lloyd	(375)	—	—
Foreign exchange rate movements	81	(105)	(61)
<b>Carrying amount at 30 June/31 December</b>	<b>4,838</b>	<b>5,300</b>	<b>5,115</b>

**A10 – Reinsurance assets continued****(c) Movements in respect of general insurance and health outstanding claims provisions and IBNR**

	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
<b>Carrying amount at 1 January</b>	<b>1,558</b>	<b>1,643</b>	<b>1,643</b>
Impact of changes in assumptions	17	38	17
Reinsurers' share of claim losses and expenses			
Incurred in current period	115	80	265
Incurred in prior periods	(44)	(53)	(46)
Reinsurers' share of incurred claim losses and expenses	71	27	219
Less:			
Reinsurance recoveries received on claims			
Incurred in current period	(42)	(34)	(125)
Incurred in prior periods	(148)	(119)	(282)
Reinsurance recoveries received in the period	(190)	(153)	(407)
Unwind of discounting	9	11	23
Change in reinsurance asset recognised as income	(93)	(77)	(148)
Effect of portfolio transfers, acquisitions and disposals	5	7	34
Deconsolidation of Delta Lloyd	(153)	—	—
Foreign exchange rate movements	(1)	44	28
Other movements	5	(1)	1
<b>Carrying amount at 30 June/31 December</b>	<b>1,321</b>	<b>1,616</b>	<b>1,558</b>

**(d) Reinsurers' share of the provision for unearned premiums (UPR)**

	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
<b>Carrying amount at 1 January</b>	<b>307</b>	<b>332</b>	<b>332</b>
Premiums ceded to reinsurers in the period	345	382	770
Less: Reinsurers' share of premiums earned during the period	(344)	(386)	(800)
Change in reinsurance asset recognised as income	1	(4)	(30)
Reinsurers' share of portfolio transfers and acquisitions	1	—	4
Deconsolidation of Delta Lloyd	(30)	—	—
Foreign exchange rate movements	5	(8)	(2)
Other movements	—	1	3
<b>Carrying amount at 30 June/31 December</b>	<b>284</b>	<b>321</b>	<b>307</b>

**A11 – Effect of changes in assumptions and estimates during the period**

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

	Effect on profit 6 months 2011 £m	Effect on profit 6 months 2010 £m	Effect on profit full year 2010 £m
<b>Assumptions</b>			
<b>Long-term insurance business</b>			
Interest rates	(897)	(621)	(796)
Expenses	(3)	8	(1)
Persistency rates	—	20	2
Mortality for assurance contracts	—	—	71
Mortality for annuity contracts	—	—	(637)
Tax and other assumptions	31	19	167
<b>Investment contracts</b>			
Interest rates	(79)	(53)	1
Expenses	—	—	1
Persistency rates	—	—	(21)
Tax and other assumptions	28	—	(3)
<b>General insurance and health business</b>			
Change in loss ratio assumptions	5	4	(4)
Change in discount rate assumptions	(8)	(47)	(61)
Change in expense ratio and other assumptions	15	1	38
<b>Total</b>	<b>(908)</b>	<b>(669)</b>	<b>(1,243)</b>

The impact of interest rates for long-term business relates primarily to the Netherlands, with smaller impacts to the UK and US, driven by the reduction in valuation interest rates. This had the effect of increasing liabilities and hence a negative impact on profit. The overall impact on profit also depends on movements in the value of assets backing the liabilities, which is not included in this disclosure. Other assumption changes relate mainly to Delta Lloyd.

## A12 – 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. This note shows the movements in this surplus during the period.

The following movements have occurred in the period:

	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
<b>Carrying amount at 1 January</b>	<b>3,428</b>	<b>3,866</b>	<b>3,866</b>
Change in participating contract assets	(183)	488	(444)
Change in participating contract liabilities	101	51	169
Effect of special bonus to with-profit policyholders	—	—	(58)
Other movements	—	14	4
Change in liability recognised as an expense	(82)	553	(329)
Effect of portfolio transfers, acquisitions and disposals	—	—	(3)
Deconsolidation of Delta Lloyd	(144)	—	—
Movement in respect of change in pension scheme deficit	30	—	18
Foreign exchange rate movements	57	(179)	(61)
Other movements	(16)	(15)	(63)
<b>Carrying amount at 30 June/31 December</b>	<b>3,273</b>	<b>4,225</b>	<b>3,428</b>

In Ireland, Italy and Spain, the UDS balances were £359 million negative in total at 30 June 2011 (*HY10: Italy £69 million negative*) because of an accounting mismatch between participating assets carried at market value and participating liabilities measured using local practice. The negative balance is considered to be recoverable from margins in the existing participating business liabilities.

In Italy a loss of £200 million was incurred for negative UDS considered irrecoverable (*HY10: £46 million, FY10: £111 million*).

## A13 – Borrowings

On 26 May 2011, Aviva plc issued subordinated debt of £450 million at a fixed rate of 6.625% maturing on 3 June 2041.

On 10 November 2010, Delta Lloyd N.V. issued senior unsecured bonds of €575 million at a fixed rate of 4.25% maturing in November 2017. In November 2010 Delta Lloyd N.V. also issued short term commercial paper of €162 million.

**A14 – Pension obligations****(a) Pension scheme deficits in condensed consolidated statement of financial position**

In the condensed consolidated statement of financial position, the amount described as provisions includes the pension scheme deficits and comprises:

	30 June 2011 £m	30 June 2010 £m	31 December 2010 £m
Deficits in the main staff pension schemes	483	1,657	527
Other obligations to main staff pension schemes – insurance policies issued by Group companies <sup>1</sup>	—	1,382	1,445
Total IAS 19 obligations to main staff pension schemes	483	3,039	1,972
Deficits in other staff pension schemes	75	—	129
Total IAS 19 obligations to staff pension schemes	558	3,039	2,101
Restructuring provisions	83	152	152
Other provisions	479	812	690
<b>Total</b>	<b>1,120</b>	<b>4,003</b>	<b>2,943</b>
Less: amounts classified as held for sale	(17)	—	—
	<b>1,103</b>	<b>4,003</b>	<b>2,943</b>

1. The 2010 comparatives include insurance policies in respect of Delta Lloyd which were non-transferable under the requirements of IAS 19 and so were treated as other obligations to staff pension schemes within provisions above. Delta Lloyd ceased to be a subsidiary on 6 May 2011.

**(b) Movements in the scheme deficits and surpluses**

Movements in the pension schemes' deficits and surpluses comprise:

	6 months 2011 Pension scheme deficits £m	6 months 2010 Pension scheme deficits £m	Full year 2010 Pension scheme deficits £m
<b>Net deficits in the schemes at 1 January</b>	<b>(3)</b>	<b>(1,707)</b>	<b>(1,707)</b>
Employer contributions	240	458	579
Current and past service cost	(43)	(89)	(170)
Gains on curtailments and settlements	—	18	347
Charge to finance costs	(60)	(71)	(130)
Actuarial gains/(losses)	17	(277)	1,079
Transfers	—	—	3
Deconsolidation of Delta Lloyd	(31)	—	—
Exchange rate movements on foreign plans	(8)	11	(4)
<b>Net surpluses/(deficits) in the schemes at 30 June/31 December</b>	<b>112</b>	<b>(1,657)</b>	<b>(3)</b>
Comprising:			
Deficits	(483)	(1,657)	(527)
Surpluses	595	—	524
	<b>112</b>	<b>(1,657)</b>	<b>(3)</b>

**A14 – Pension obligations continued****(c) Pension expense**

The total pension expense for these schemes comprises:

**(i) Recognised in the income statement**

	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
<b>Continuing operations</b>			
Current service cost	(36)	(62)	(126)
Past service cost	—	(9)	(10)
Gains on curtailments	—	18	347
Total pension (cost)/credit from continuing operations	(36)	(53)	211
Total pension (cost)/credit from discontinued operations	(7)	(18)	(34)
Total pension (cost)/credit charged to net operating expenses	(43)	(71)	177
Expected return on scheme assets	224	224	457
Interest charge on scheme liabilities	(271)	(294)	(584)
Charge to finance costs from continuing operations	(47)	(70)	(127)
Charge to finance costs from discontinued operations	(26)	(34)	(68)
Total charge to finance costs	(73)	(104)	(195)
<b>Total (charge)/credit to income arising from continuing operations</b>	<b>(83)</b>	<b>(123)</b>	<b>84</b>
<b>Total charge to income arising from discontinued operations</b>	<b>(33)</b>	<b>(52)</b>	<b>(102)</b>
<b>Total charge to income</b>	<b>(116)</b>	<b>(175)</b>	<b>(18)</b>

**(ii) Recognised in the statement of comprehensive income**

	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
<b>Continuing operations</b>			
Expected return on scheme assets	(224)	(224)	(457)
Actual return on these assets	192	320	1,001
Actuarial (losses)/gains on scheme assets	(32)	96	544
Experience (losses)/gains arising on scheme liabilities	(40)	(46)	382
Changes in assumptions underlying the present value of the scheme liabilities	94	(305)	152
<b>Actuarial gains/(losses) from continuing operations</b>	<b>22</b>	<b>(255)</b>	<b>1,078</b>
<b>Actuarial gains/(losses) from discontinued operations</b>	<b>11</b>	<b>(113)</b>	<b>(79)</b>
<b>Total actuarial (losses)/gains recognised in other comprehensive income</b>	<b>33</b>	<b>(368)</b>	<b>999</b>
Attributable to equity shareholders of Aviva plc	28	(321)	1,032
Attributable to non-controlling interests	5	(47)	(33)
	33	(368)	999

**A15 – Cash and cash equivalents**

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

	30 June 2011 £m	30 June 2010 £m	31 December 2010 £m
Cash at bank and in hand	10,158	11,473	9,740
Cash equivalents	12,988	16,973	15,715
	23,146	28,446	25,455
Bank overdrafts	(886)	(1,155)	(760)
	22,260	27,291	24,695

Of the total cash and cash equivalents shown above, £40 million has been classified as held for sale (30 June 2010: £nil; 31 December 2010: £nil).

Operating cashflows in the Group cash flow statement reflect the movement in both policyholder and shareholder controlled cash and cash equivalent balances. Around two thirds of the Group's balances relate to unit-linked or participating policyholder funds. As such, the asset mix and the level of cash held by these funds are determined from a policyholder perspective and can move significantly from one period to another. Shareholder cash has remained broadly unchanged at £8.6 billion (FY10: £8.5 billion, HY10: £8.4 billion).

Purchases and sales of operating assets including 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. During the period, the net operating cash outflow reflects a number of factors including changes in the investment strategy of funds to hold a lower weighting of cash and higher levels of financial investments, the level of premium income and the timing of receipts of premiums and the payment of creditors, claims and surrenders. It also includes changes in the size and value of consolidated cash investment funds, and changes in the Group participation in these funds.

## A16 – Related party transactions

The Group receives income and pays expenses to and from related parties from transactions made in the normal course of business. Loans to and from related parties are made on normal arm's-length commercial terms.

As described in note A3 (subsidiaries), our continuing interest in Delta Lloyd from 6 May 2011 has been classified as an associate and as such Delta Lloyd is now a related party of the Group. The table below includes balances arising from the following transactions:

- A long term loan from Delta Lloyd to the Aviva UK business under the agreed terms of a reinsurance treaty.
- Reinsurance recoverables and payables together with associated income and expenses in respect of reinsurance transactions between Delta Lloyd and the Aviva Group Reinsurance business.

There have been no other significant changes to the nature of the Group's related party transactions during the period.

### Services provided to related parties

	June 2011				June 2010				December 2010			
	Income earned in period £m	Expenses incurred in period £m	Payable at period end £m	Receivable at period end £m	Income earned in period £m	Expenses incurred in period £m	Payable at period end £m	Receivable at period end £m	Income earned in year £m	Expenses incurred in year £m	Payable at year end £m	Receivable at year end £m
Associates	—	—	—	—	23	—	—	—	47	—	—	—
Associate – Delta Lloyd	—	(1)	(54)	—	—	—	—	—	—	—	—	—
Joint ventures	10	—	—	404	5	—	—	314	18	—	—	375
Employee pension schemes	5	—	—	8	5	—	—	5	10	—	—	2
	15	(1)	(54)	412	33	—	—	319	75	—	—	377

Transactions with related parties other than Delta Lloyd include receivables that are not secured and for which no guarantees have been received. The receivables will be settled in accordance with normal credit terms.

## A17 – Risk management

### Risk profile

In accordance with the requirements of the FSA Handbook (DTR 4.2.7) we provide an update here on the material risks and uncertainties facing the Group for the next six months. The types of risk to which the Group is exposed have not changed significantly over the half-year to 30 June 2011 and remain credit, market, life insurance, general insurance, liquidity, operational and reputational risks as described on pages 68 and 69 in the 2010 annual report.

#### (a) Credit risk

Aviva has a strong record of managing credit risk and we see credit as an area where we can make a good return for the benefit of both our policyholders and shareholders. We have broad ranging investment restrictions in place on sovereign and corporate exposure to Greece, Ireland, Italy, Portugal and Spain and have actively reduced our exposure to the most vulnerable countries. We have in place a comprehensive group-wide reporting system that consolidates credit exposures across geographies, business lines and exposure types. We have a robust framework of limits and controls to ensure portfolio diversification and the early identification of potential issues. Refer to section D3.4.5 on page 105 of this report for details of exposure to Greece, Ireland, Portugal, Spain and Italy.

During the first half of 2011 the credit rating profile of our debt securities portfolio has remained strong. The proportion of our shareholder debt securities that are investment grade remained relatively stable at 87% (31 December 2010 (excluding Delta Lloyd): 87%).

#### (b) Market risk

We continue to limit our direct equity exposure. As discussed in note 23 on page 26, a rolling central equity hedging strategy remains in place to help control the Group's overall direct and indirect exposure to equities.

We have a limited appetite for interest rate risk as we do not believe this is adequately rewarded. Our conservative and disciplined approaches to asset and liability management and pricing limits interest rate and guarantee risk. Asset and liability durations across the Group are generally well matched and actions have been taken to manage guarantee risk in the current low interest rate environment. Interest rate hedges are used widely to manage asymmetric interest rate exposures across our life insurance businesses as well as an efficient way to manage cash flow and duration matching. These hedges are used to protect against interest rate falls and are sufficient in scale to materially reduce the Group's interest rate exposure.

At a Group level we actively seek to manage foreign currency risk primarily by matching assets and liabilities in functional currencies at the business unit level. Foreign currency dividends from subsidiaries are hedged using FX forwards to provide certainty regarding the sterling value to be received by the Group. As described in note 23, hedges have also been used to protect the Group's capital against a significant depreciation in local currency versus sterling.

#### (c) Liquidity risk

The nature of our business means that we have a strong liquidity position, however we have in place a comprehensive monitoring and reporting process covering extreme scenarios along with appropriate contingency plans. At a Group level we maintain a prudent level of liquidity by holding a buffer of liquid assets to cover unforeseen circumstances. In addition, the Group has maintained £2.1 billion of un-drawn committed borrowing facilities from a range of leading international banks.



**A17 – Risk management continued****(d) Life insurance risk**

The risk profile of our life insurance risks, primarily persistency, longevity, mortality and expense risk, has remained stable in the first half of 2011. Persistency risk remains significant and continues to have a volatile outlook, with underlying performance linked to economic conditions. However, businesses across the Group continue to make progress with a range of customer retention activities. The Group continues to write strong volumes of annuity new business in the UK adding to an already significant in force portfolio, offset to some degree by the reduced holding of Delta Lloyd longevity exposure. The Group has continued to write significant volumes of life protection business, and to utilise reinsurance to reduce exposure to potential losses. All life insurance risks benefit from a significant diversification against other risks in the portfolio, limiting the impact on the Group's aggregate risk profile.

**(e) General insurance risk**

We continue to monitor our general insurance risk profile, including the impact of the underwriting cycle, customer, competitor and distributor behaviour, natural catastrophe events and the impact of broader economic conditions. The general insurance risk profile has shown a modest increase reflecting some growth in underlying general insurance business volumes.

Aviva has no direct exposure to the catastrophe events in Australia, Japan and New Zealand in the first half of 2011 and we successfully renewed our main group-wide catastrophe reinsurance programme in April 2011.

**(f) Operational risk**

The Group continues to operate, validate and enhance its key operational controls and maintains constructive relationships with its regulators around the world. Developments in relation to key regulatory changes such as Solvency II and the Retail Distribution Review are monitored closely and we continue to work with regulatory bodies to ensure an appropriate outcome from an insurance industry perspective and prepare for the necessary business changes.

**(g) Brand and reputation risk**

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

**A18 – Subsequent events**

Since 30 June 2011, volatility has continued within the Eurozone. We continue to monitor events on a daily basis and have a broad range of mitigating actions either in place or available if circumstances merit them.

## A19 – Long-term business IFRS profit driver analysis

	6 months 2011				6 months 2010				Full year 2010
	United Kingdom £m	Aviva Europe £m	Rest of the world (excluding Delta Lloyd) £m	Total £m	United Kingdom £m	Aviva Europe <sup>1</sup> £m	Rest of the world (excluding Delta Lloyd) £m	Total £m	Total £m
<b>Note (a)</b>									
<b>New business margin (£m)</b>	<b>236</b>	<b>180</b>	<b>55</b>	<b>471</b>	230	179	58	467	1,033
APE (£m)	<b>766</b>	<b>739</b>	<b>328</b>	<b>1,833</b>	657	904	377	1,938	3,613
As margin on APE (%)	<b>31%</b>	<b>24%</b>	<b>17%</b>	<b>26%</b>	35%	20%	15%	24%	29%

New business margin reflects premiums less initial capital reserves.

<b>Note (b)</b>									
<b>Underwriting margin (£m)</b>	<b>79</b>	<b>211</b>	<b>91</b>	<b>381</b>	88	196	86	370	752
Analysed by:									
Expenses (£m)	<b>53</b>	<b>82</b>	<b>77</b>	<b>212</b>	54	76	67	197	371
Mortality and longevity (£m)	<b>17</b>	<b>97</b>	<b>7</b>	<b>121</b>	17	90	14	121	289
Persistency (£m)	<b>9</b>	<b>32</b>	<b>7</b>	<b>48</b>	17	30	5	52	92

Expense margin represents unwind of annual expense allowance on risk business and assumption changes. Mortality and persistency margin reflect conservative reserving for unit-linked, risk and spread business.

<b>Note (c)</b>									
<b>Unit-linked margin (£m)</b>	<b>198</b>	<b>275</b>	<b>13</b>	<b>486</b>	177	271	13	461	920
As annual management charge on average reserves (bps)	<b>95</b>	<b>114</b>	<b>186</b>	<b>106</b>	100	122	203	114	111
Average reserves (£bn)	<b>41.7</b>	<b>48.3</b>	<b>1.4</b>	<b>91.4</b>	35.5	44.4	1.3	81.2	82.8

Unit-linked margin represents the return made on unit-linked business.

Average reserves include managed pension fund assets not consolidated in IFRS balance sheet.

<b>Note (d)</b>									
<b>Participating business (£m)</b>	<b>21</b>	<b>234</b>	<b>11</b>	<b>266</b>	109	191	13	313	569
As bonus on average reserves (bps)	<b>10</b>	<b>71</b>	<b>73</b>	<b>48</b>	51	63	93	59	54
Average reserves (£bn)	<b>41.7</b>	<b>65.9</b>	<b>3.0</b>	<b>110.6</b>	42.5	60.3	2.8	105.6	106.3

Participating business is shareholders' share of the bonus to policyholders on with profit and other participating business.

<b>Note (e)</b>									
<b>Spread margin (£m)</b>	<b>78</b>	<b>28</b>	<b>242</b>	<b>348</b>	82	26	254	362	688
As spread margin on average reserves (bps)	<b>50</b>	<b>100</b>	<b>153</b>	<b>101</b>	60	94	175	117	108
Average reserves (£bn)	<b>31.5</b>	<b>5.6</b>	<b>31.6</b>	<b>68.7</b>	27.4	5.5	29.0	61.9	63.9

Spread margin represents the return made on annuity and non-linked investment business.

<b>Note (f)</b>									
<b>Expected return on shareholder assets (£m)</b>	<b>111</b>	<b>80</b>	<b>28</b>	<b>219</b>	98	66	38	202	429
Equity (%)	<b>7.2%</b>	<b>6.9%</b>	<b>n/a</b>	<b>6.9%</b>	7.8%	7.2%	n/a	7.2%	7.2%
Property (%)	<b>5.7%</b>	<b>5.4%</b>	<b>n/a</b>	<b>5.6%</b>	6.3%	5.7%	n/a	6.2%	6.2%
Bonds (%)	<b>5.5%</b>	<b>4.3%</b>	<b>4.3%</b>	<b>4.9%</b>	5.5%	4.4%	3.6%	4.8%	4.8%

Expected return being the return made on shareholder net assets.

<b>Note (g)</b>									
<b>Acquisition expenses (£m)</b>	<b>(178)</b>	<b>(262)</b>	<b>(52)</b>	<b>(492)</b>	(183)	(275)	(52)	(510)	(990)
APE (£m)	<b>766</b>	<b>739</b>	<b>328</b>	<b>1,833</b>	657	904	377	1,938	3,613
As acquisition expense ratio on APE (%)	<b>23%</b>	<b>35%</b>	<b>16%</b>	<b>27%</b>	28%	30%	14%	26%	27%

Acquisition expenses include commission incurred in writing new business less deferred costs.

<b>Note (h)</b>									
<b>Administrative expenses (£m)</b>	<b>(157)</b>	<b>(260)</b>	<b>(102)</b>	<b>(519)</b>	(178)	(240)	(103)	(521)	(1,067)
As existing business expense ratio on average reserves (bps)	<b>27</b>	<b>43</b>	<b>57</b>	<b>38</b>	34	44	62	42	42
Average reserves (£bn)	<b>114.9</b>	<b>119.8</b>	<b>36.0</b>	<b>270.7</b>	105.4	110.2	33.1	248.7	253.0

Administrative expenses comprise expenses and renewal commissions incurred in managing the existing book.

1. Aviva Europe comparative for 6 months 2010 includes reclassification of £39 million from unit-linked margin to underwriting margin.

**A20 – Analysis of general insurance****(i) United Kingdom (excluding Group reinsurance and agencies in run-off)**

	Net written premium			Underwriting result			Combined operating ratio		
	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m	6 months 2011 %	6 months 2010 %	Full year 2010 %
<b>Personal</b>									
Motor	705	569	1,195	38	(30)	(46)	94%	104%	103%
Homeowner	396	387	809	20	21	12	96%	98%	100%
Other	278	188	419	9	9	66	97%	98%	89%
	1,379	1,144	2,423	67	—	32	94%	98%	97%
<b>Commercial</b>									
Motor	303	261	545	(18)	6	10	106%	98%	98%
Property	340	327	638	4	3	20	98%	102%	99%
Other	200	210	440	2	18	44	99%	91%	90%
	843	798	1,623	(12)	27	74	101%	97%	96%
<b>Total</b>	2,222	1,942	4,046	55	27	106	96%	98%	96%

**(ii) France**

	Net written premium			Underwriting result			Combined operating ratio		
	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m	6 months 2011 %	6 months 2010 %	Full year 2010 %
Motor	193	184	318	4	(22)	(14)	95%	112%	104%
Property and other	263	245	416	17	4	15	89%	95%	96%
<b>Total</b>	456	429	734	21	(18)	1	92%	102%	99%

**(iii) Ireland**

	Net written premium			Underwriting result			Combined operating ratio		
	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m	6 months 2011 %	6 months 2010 %	Full year 2010 %
Motor	98	106	200	15	15	(32)	85%	83%	117%
Property and other	102	106	197	(11)	(27)	15	111%	128%	92%
<b>Total</b>	200	212	397	4	(12)	(17)	98%	105%	105%

**(iv) Canada**

	Net written premium			Underwriting result			Combined operating ratio		
	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m	6 months 2011 %	6 months 2010 %	Full year 2010 %
Motor	579	551	1,055	60	15	29	91%	97%	98%
Property	322	315	654	(8)	20	(3)	101%	96%	101%
Liability	99	105	201	(7)	3	18	106%	98%	92%
Other	25	25	48	1	5	16	89%	67%	62%
<b>Total</b>	1,025	996	1,958	46	43	60	96%	96%	97%

## A21 – Funds under management

	30 June 2011		31 December 2010
	Life and related businesses £m	General business and other £m	Total £m
<b>Total IFRS assets included in the consolidated statement of financial position</b>	<b>292,726</b>	<b>29,880</b>	<b>322,606</b>
Less: third party funds included within consolidated IFRS assets	—	(9,482)	(9,999)
	<b>292,726</b>	<b>20,398</b>	<b>313,124</b>
Third party funds under management			<b>71,851</b>
			<b>384,975</b>
Non-managed assets			<b>(33,363)</b>
<b>Funds under management</b>			<b>351,612</b>
<b>Delta Lloyd</b>			<b>—</b>
<b>Funds under management (excluding Delta Lloyd)</b>			<b>351,612</b>

## A22 – Operational cost base

The Aviva operating cost base is calculated from reported IFRS expenses as set out in the table below:

	6 months 2011 £m	6 months 2010 £m
Other expenses (as reported)	<b>1,422</b>	1,328
Less: Non-operating items included above (amortisation and impairments)	<b>(334)</b>	(224)
Add: Claims handling costs <sup>1</sup>	<b>306</b>	307
Non-commission acquisition costs <sup>2</sup>	<b>584</b>	541
Operating cost base from continuing operations	<b>1,978</b>	1,952
Operating cost base from discontinued operations	<b>362</b>	451
<b>Operating cost base</b>	<b>2,340</b>	<b>2,403</b>

1. As reported within Claims and benefits paid of £14,538 million (2010: £14,630 million).

2. As reported within Fee and commissions expense of £2,533 million (2010: £3,178 million).

During HY11, the operating cost base from continuing operations increased by 1% to £1,978 million (HY10: £1,952 million). The like-for-like cost base presented below is adjusted for the impact of foreign exchange, businesses acquired during the year, the impact of European levies, Solvency II costs and elimination of one-off restructuring and integration spend in both years. On a like-for-like basis the cost base increased by 1% to £1,865 million compared with a 30 June 2010 like-for-like cost base of £1,849 million.

### Movement in operating cost base

	£m
Total operating cost base 30 June 2010	<b>2,403</b>
Delta Lloyd costs for the six months to 30 June 2010 <sup>1</sup>	<b>(451)</b>
Total operating cost base from continuing operations 30 June 2010	<b>1,952</b>
Less: restructuring, integration and brand costs for the six months to 30 June 2010	<b>(72)</b>
European levies <sup>2</sup>	<b>(30)</b>
Impact of acquisitions <sup>3</sup>	<b>5</b>
Foreign exchange	<b>(6)</b>
<b>30 June 2010 like-for-like operating cost base</b>	<b>1,849</b>
Inflation <sup>4</sup>	<b>53</b>
UK Life	<b>(26)</b>
UK General Insurance	<b>(18)</b>
Aviva Europe	<b>9</b>
Other businesses (including Group centre)	<b>(2)</b>
<b>30 June 2011 like-for-like operating cost base</b>	<b>1,865</b>
Restructuring, integration and brand costs 30 June 2011	<b>81</b>
European levies <sup>2</sup>	<b>32</b>
Total operating cost base from continuing operations 30 June 2011	<b>1,978</b>
Delta Lloyd costs from 1 January 2011 to 6 May 2011 <sup>1</sup>	<b>362</b>
<b>Total operating cost base 30 June 2011</b>	<b>2,340</b>

1. Delta Lloyd associate status effective from 7 May 2011 onwards

2. Levies and sales taxes charged to European Businesses.

3. Impact of acquisitions – restatement of the 2010 cost base for the impact of acquisitions in both 2010 and 2011 to achieve a cost base on a like-for-like basis.

4. Inflation – Notional level of Inflation that would have impacted the operating cost base during the period. This is calculated at an individual country level, and applied to operating expenditure i.e. excluding restructuring and integration costs (but including adjustments for acquisitions and disposals). The overall weighted average is calculated at 2.8%.

## Directors' responsibility statement

### Directors' responsibility statement pursuant to Disclosure and Transparency Rule 4.2.10

Each of the directors confirms that, to the best of their knowledge:

- (a) the Group condensed financial statements in this report, which have been prepared in accordance with IFRS as adopted by the EU, IFRIC interpretation and those parts of the Companies Act 2006 applicable to companies reporting under IFRS, give a true and fair view of the assets, liabilities, financial position and results of the Group taken as a whole;
- (b) the commentary contained in this report includes a fair review of the development and performance of the business and the position of the Group taken as a whole, together with a description of the principal risks and uncertainties that they face; and
- (c) the half year report includes a fair review of the information required on material transactions with related parties and changes since the last annual report.

Information on the current directors responsible for providing this statement can be found on pages 94 and 95 of Aviva plc's 2010 Annual Report and Accounts.

By order of the Board

**Andrew Moss**  
Group chief executive  
3 August 2011

**Patrick Regan**  
Chief financial officer

---

# Independent review report to Aviva Plc

## Independent review report to Aviva plc

### Introduction

We have been engaged by the Company to review the condensed set of financial statements in the half-yearly financial report for the six months ended 30 June 2011 which comprises the Condensed Consolidated Income Statement, the Condensed Consolidated Statement of Comprehensive Income, the Condensed Consolidated Statement of Changes in Equity, the Condensed Consolidated Statement of Financial Position, the Condensed Consolidated Statement of Cash Flows and the related notes A1 to A18 on pages 39 to 65. Our review did not extend to the information disclosed in notes A19 to A22. We have read the other information contained in the half-yearly financial report and considered whether it contains any apparent misstatements or material inconsistencies with the information in the condensed set of financial statements.

This report is made solely to the Company in accordance with guidance contained in International Standards on Review Engagements (UK and Ireland) 2410, "Review of Interim Financial Information Performed by the Independent Auditor of the Entity" issued by the Auditing Practices Board (ISRE 2410). To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company, for our work, for this report, or for the conclusions we have formed.

### Directors' responsibilities

The half-yearly financial report is the responsibility of, and has been approved by, the directors. The directors are responsible for preparing the half-yearly financial report in accordance with the Disclosure Rules and Transparency Rules of the United Kingdom's Financial Services Authority.

As disclosed in note A1, the annual financial statements of the group are prepared in accordance with IFRS as adopted by the European Union. The condensed set of financial statements included in this half-yearly financial report has been prepared in accordance with International Accounting Standard 34, "Interim Financial Reporting", as adopted by the European Union.

### Our responsibility

Our responsibility is to express to the Company a conclusion on the condensed set of financial statements in the half-yearly financial report based on our review.

### Scope of review

We conducted our review in accordance with ISRE 2410. A review of interim financial information consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing (UK and Ireland) and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

### Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the condensed set of financial statements in the half-yearly financial report for the six months ended 30 June 2011 is not prepared, in all material respects, in accordance with International Accounting Standard 34 as adopted by the European Union and the Disclosure Rules and Transparency Rules of the United Kingdom's Financial Services Authority.

**Ernst & Young LLP**

London

3 August 2011

# New business

---

## In this section

	Page
B1 Geographical analysis of life, pension and investment sales	72
B2 Product analysis of life and pension sales	73
B3 Trend analysis of PVNBP – cumulative	74
B4 Trend analysis of PVNBP – discrete	74
B5 Geographical analysis of regular and single premiums – life and pensions sales	75
B6 Geographical analysis of regular and single premiums – investment sales	75
B7 Life and pensions new business – net of tax and non-controlling interests	76

# New business

## B1 – Geographical analysis of life, pension and investment sales

	6 months 2011 £m	6 months 2010 £m	% Growth	
			Sterling	Local <sup>2</sup> currency
<b>Life and pensions business - Present value of new business premiums<sup>1</sup></b>				
<b>United Kingdom</b>	<b>5,468</b>	5,194	5%	5%
France	<b>2,345</b>	2,827	(17)%	(17)%
Ireland	<b>553</b>	476	16%	16%
Italy	<b>1,778</b>	3,052	(42)%	(42)%
Poland	<b>305</b>	319	(4)%	(4)%
Spain	<b>1,015</b>	1,060	(4)%	(4)%
Other Europe	<b>293</b>	258	14%	17%
<b>Aviva Europe</b>	<b>6,289</b>	7,992	(21)%	(21)%
<b>North America</b>	<b>1,658</b>	2,334	(29)%	(25)%
China	<b>207</b>	235	(12)%	(11)%
Hong Kong	<b>83</b>	79	5%	11%
India	<b>50</b>	58	(14)%	(11)%
Singapore	<b>244</b>	143	71%	63%
South Korea	<b>242</b>	201	20%	22%
Other Asia	<b>76</b>	78	(3)%	(5)%
<b>Asia Pacific</b>	<b>902</b>	794	14%	14%
<b>Total life and pensions – continuing operations</b>	<b>14,317</b>	16,314	(12)%	(11)%
<b>Total life and pensions – discontinued operations<sup>4</sup></b>	<b>1,085</b>	1,732	(37)%	(37)%
<b>Total life and pensions</b>	<b>15,402</b>	18,046	(15)%	(14)%
<b>Investment sales<sup>3</sup></b>				
<b>United Kingdom</b>	<b>782</b>	849	(8)%	(8)%
<b>Europe (Aviva Investors)</b>	<b>770</b>	731	5%	5%
Asia (Aviva Investors)	<b>161</b>	109	48%	35%
Asia	<b>117</b>	108	8%	4%
<b>Asia Pacific</b>	<b>278</b>	217	28%	20%
<b>Total investment sales – continuing operations</b>	<b>1,830</b>	1,797	2%	1%
<b>Total investment sales – discontinued operations<sup>4</sup></b>	<b>170</b>	395	(57)%	(57)%
<b>Total investment sales</b>	<b>2,000</b>	2,192	(9)%	(9)%
<b>Total long-term savings sales – continuing operations</b>	<b>16,147</b>	18,111	(11)%	(10)%
<b>Total long-term savings sales – discontinued operations<sup>4</sup></b>	<b>1,255</b>	2,127	(41)%	(41)%
<b>Total long-term savings sales</b>	<b>17,402</b>	20,238	(14)%	(13)%

1. Present value of new business premiums (PVNBP) is the present value of new regular premiums plus 100% of single premiums, calculated using assumptions consistent with those used to determine the value of new business.

2. Local currency growth rates are calculated based on constant rates of exchange.

3. Investment sales are calculated as new single premiums plus the annualised value of new regular premiums.

4. Current period discontinued operations represent the results of Delta Lloyd up to 6 May 2011 only.

5. United Kingdom life and pensions business includes £34 million (30 June 2010: £218 million) relating to the Aviva Investors Pooled Pension business.



## B2 – Product analysis of life and pension sales

	Present value of new business premiums <sup>1</sup>			
	6 months 2011 £m	6 months 2010 £m	% Growth	
			Sterling	Local <sup>2</sup> currency
<b>Life and pensions business</b>				
Pensions	2,742	2,061	33%	33%
Annuities	1,610	1,603	—	—
Bonds	466	828	(44)%	(44)%
Protection	490	507	(3)%	(3)%
Equity release	160	195	(18)%	(18)%
<b>United Kingdom</b>	<b>5,468</b>	<b>5,194</b>	<b>5%</b>	<b>5%</b>
Pensions	640	751	(15)%	(15)%
Savings	5,026	6,670	(25)%	(25)%
Annuities	57	35	63%	63%
Protection	566	536	6%	6%
<b>Aviva Europe</b>	<b>6,289</b>	<b>7,992</b>	<b>(21)%</b>	<b>(21)%</b>
Life	456	505	(10)%	(4)%
Annuities	1,202	1,829	(34)%	(30)%
<b>North America</b>	<b>1,658</b>	<b>2,334</b>	<b>(29)%</b>	<b>(25)%</b>
<b>Asia Pacific</b>	<b>902</b>	<b>794</b>	<b>14%</b>	<b>14%</b>
<b>Total life and pensions sales – continuing operations</b>	<b>14,317</b>	<b>16,314</b>	<b>(12)%</b>	<b>(11)%</b>
<b>Total life and pensions sales – discontinued operations<sup>3</sup></b>	<b>1,085</b>	<b>1,732</b>	<b>(37)%</b>	<b>(37)%</b>
<b>Total life and pensions sales</b>	<b>15,402</b>	<b>18,046</b>	<b>(15)%</b>	<b>(14)%</b>

1. Present value of new business premiums (PVNBP) is the present value of new regular premiums plus 100% of single premiums, calculated using assumptions consistent with those used to determine the value of new business.

2. Growth rates are calculated based on constant rates of exchange.

3. Current period discontinued operations represent the results of Delta Lloyd up to 6 May 2011 only.

## B3 – Trend analysis of PVNBP – cumulative

	1Q10 YTD £m	2Q10 YTD £m	3Q10 YTD £m	4Q10 YTD £m	1Q11 YTD £m	2Q11 YTD £m
<b>Life and pensions business - Present value of new business premiums<sup>1</sup></b>						
Pensions	941	2,061	3,028	4,062	1,124	2,742
Annuities	877	1,603	2,291	3,170	785	1,610
Bonds	412	828	1,277	1,686	271	466
Protection	231	507	737	944	250	490
Equity release	96	195	298	436	83	160
<b>United Kingdom</b>	<b>2,557</b>	<b>5,194</b>	<b>7,631</b>	<b>10,298</b>	<b>2,513</b>	<b>5,468</b>
France	1,550	2,827	3,869	4,918	1,271	2,345
Ireland	247	476	680	938	280	553
Italy	1,567	3,052	3,793	4,456	874	1,778
Poland	206	319	469	603	149	305
Spain	590	1,060	1,447	2,084	524	1,015
Other Europe	125	258	382	538	151	293
<b>Aviva Europe</b>	<b>4,285</b>	<b>7,992</b>	<b>10,640</b>	<b>13,537</b>	<b>3,249</b>	<b>6,289</b>
<b>North America</b>	<b>997</b>	<b>2,334</b>	<b>3,668</b>	<b>4,728</b>	<b>786</b>	<b>1,658</b>
<b>Asia Pacific</b>	<b>409</b>	<b>794</b>	<b>1,153</b>	<b>1,617</b>	<b>426</b>	<b>902</b>
<b>Total life and pensions</b>	<b>8,248</b>	<b>16,314</b>	<b>23,092</b>	<b>30,180</b>	<b>6,974</b>	<b>14,317</b>
<b>Investment sales<sup>2</sup></b>	<b>870</b>	<b>1,797</b>	<b>2,556</b>	<b>3,387</b>	<b>869</b>	<b>1,830</b>
<b>Total long term saving sales – continuing operations</b>	<b>9,118</b>	<b>18,111</b>	<b>25,648</b>	<b>33,567</b>	<b>7,843</b>	<b>16,147</b>
<b>Total long term saving sales – discontinued operations<sup>3</sup></b>	<b>1,056</b>	<b>2,127</b>	<b>2,945</b>	<b>3,793</b>	<b>921</b>	<b>1,255</b>
<b>Total long term saving sales</b>	<b>10,174</b>	<b>20,238</b>	<b>28,593</b>	<b>37,360</b>	<b>8,764</b>	<b>17,402</b>

1. Present value of new business premiums (PVNBP) is the present value of new regular premiums plus 100% of single premiums, calculated using assumptions consistent with those used to determine the value of new business.

2. Investment sales are calculated as new single premiums plus the annualised value of new regular premiums.

3. Current period discontinued operations represent the results of Delta Lloyd up to 6 May 2011 only.

## B4 – Trend analysis of PVNBP – discrete

	1Q10 £m	2Q10 £m	3Q10 £m	4Q10 £m	1Q11 £m	2Q11 £m	% Growth on 1Q11 Sterling
<b>Life and pensions business - Present value of new business premiums<sup>1</sup></b>							
Pensions	941	1,120	967	1,034	1,124	1,618	44%
Annuities	877	726	688	879	785	825	5%
Bonds	412	416	449	409	271	195	(28)%
Protection	231	276	230	207	250	240	(4)%
Equity release	96	99	103	138	83	77	(7)%
<b>United Kingdom</b>	<b>2,557</b>	<b>2,637</b>	<b>2,437</b>	<b>2,667</b>	<b>2,513</b>	<b>2,955</b>	<b>18%</b>
France	1,550	1,277	1,042	1,049	1,271	1,074	(15)%
Ireland	247	229	204	258	280	273	(3)%
Italy	1,567	1,485	741	663	874	904	3%
Poland	206	113	150	134	149	156	5%
Spain	590	470	387	637	524	491	(6)%
Other Europe	125	133	124	156	151	142	(6)%
<b>Aviva Europe</b>	<b>4,285</b>	<b>3,707</b>	<b>2,648</b>	<b>2,897</b>	<b>3,249</b>	<b>3,040</b>	<b>(6)%</b>
<b>North America</b>	<b>997</b>	<b>1,337</b>	<b>1,334</b>	<b>1,060</b>	<b>786</b>	<b>872</b>	<b>11%</b>
<b>Asia Pacific</b>	<b>409</b>	<b>385</b>	<b>359</b>	<b>464</b>	<b>426</b>	<b>476</b>	<b>12%</b>
<b>Total life and pensions</b>	<b>8,248</b>	<b>8,066</b>	<b>6,778</b>	<b>7,088</b>	<b>6,974</b>	<b>7,343</b>	<b>5%</b>
<b>Investment sales<sup>2</sup></b>	<b>870</b>	<b>927</b>	<b>759</b>	<b>831</b>	<b>869</b>	<b>961</b>	<b>11%</b>
<b>Total long term saving sales – continuing operations</b>	<b>9,118</b>	<b>8,993</b>	<b>7,537</b>	<b>7,919</b>	<b>7,843</b>	<b>8,304</b>	<b>6%</b>
<b>Total long term saving sales – discontinued operations<sup>3</sup></b>	<b>1,056</b>	<b>1,071</b>	<b>818</b>	<b>848</b>	<b>921</b>	<b>334</b>	<b>(64)%</b>
<b>Total long term saving sales</b>	<b>10,174</b>	<b>10,064</b>	<b>8,355</b>	<b>8,767</b>	<b>8,764</b>	<b>8,638</b>	<b>(1)%</b>

1. Present value of new business premiums (PVNBP) is the present value of new regular premiums plus 100% of single premiums, calculated using assumptions consistent with those used to determine the value of new business.

2. Investment sales are calculated as new single premiums plus the annualised value of new regular premiums.

3. Current period discontinued operations represent the results of Delta Lloyd up to 6 May 2011 only.

## B5 – Geographical analysis of regular and single premiums – life and pensions sales

	Regular premiums								Single premiums		
	6 months 2011 £m	Local currency growth	WACF	Present value £m	6 months 2010 £m	Local currency growth	WACF	Present value £m	6 months 2011 £m	6 months 2010 £m	Local currency growth
Pensions	346	66%	4.5	1,562	208	(8)%	4.7	985	1,180	1,076	10%
Annuities	—	—	—	—	—	—	—	—	1,610	1,603	—
Bonds	—	—	—	—	—	—	—	—	466	828	(44)%
Protection	78	(1)%	6.3	490	79	8%	6.4	507	—	—	—
Equity release	—	—	—	—	—	—	—	—	160	195	(18)%
United Kingdom	424	48%	4.8	2,052	287	(4)%	5.2	1,492	3,416	3,702	(8)%
France	47	(13)%	6.6	308	54	15%	7.2	389	2,037	2,438	(16)%
Ireland	32	(11)%	3.9	125	36	(3)%	4.1	146	428	330	30%
Italy	39	5%	5.5	215	37	(51)%	5.2	191	1,563	2,861	(45)%
Poland	29	—	7.6	219	29	(34)%	9.4	273	86	46	87%
Spain	53	(10)%	5.7	300	59	(8)%	5.6	333	715	727	(2)%
Other Europe	50	22%	4.7	234	43	—	4.8	207	59	51	20%
Aviva Europe	250	(2)%	5.6	1,401	258	(17)%	6.0	1,539	4,888	6,453	(24)%
North America	47	2%	9.6	453	49	20%	10.2	502	1,205	1,832	(30)%
Asia Pacific	139	17%	4.9	678	119	24%	4.4	527	224	267	(16)%
Total life and pensions sales – continuing operations	860	21%	5.3	4,584	713	(8)%	5.7	4,060	9,733	12,254	(20)%
Total life and pensions sales – discontinued operations <sup>1</sup>	73	(16)%	9.1	663	87	(12)%	10.1	878	422	854	(51)%
Total life and pensions	933	17%	5.6	5,247	800	(9)%	6.2	4,938	10,155	13,108	(22)%

1. Current period discontinued operations represent the results of Delta Lloyd up to 6 May 2011 only.

## B6 – Geographical analysis of regular and single premiums – investment sales

	Regular			Single			PVNB <sup>1</sup>
	6 months 2011 £m	6 months 2010 £m	Local currency growth	6 months 2011 £m	6 months 2010 £m	Local currency growth	Local currency growth
<b>Investment sales</b>							
<b>United Kingdom</b>	—	43	(100)%	782	797	(2)%	(8)%
<b>Europe (Aviva Investors)</b>	3	3	—	767	728	5%	5%
Asia (Aviva Investors)	—	—	—	161	109	35%	35%
Asia	—	—	—	117	108	4%	4%
<b>Asia Pacific</b>	—	—	—	278	217	20%	20%
<b>Total investment sales – continuing operations</b>	<b>3</b>	<b>46</b>	<b>(93)%</b>	<b>1,827</b>	<b>1,742</b>	<b>4%</b>	<b>1%</b>
<b>Total investment sales – discontinued operations<sup>1</sup></b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>170</b>	<b>395</b>	<b>(57)%</b>	<b>(57)%</b>
<b>Total investment sales</b>	<b>3</b>	<b>46</b>	<b>(93)%</b>	<b>1,997</b>	<b>2,137</b>	<b>(7)%</b>	<b>(9)%</b>

1. Current period discontinued operations represent the results of Delta Lloyd up to 6 May 2011 only.

## B7 – Life and pensions new business – net of tax and non-controlling interests

	Present value of new business premiums			Value of new business			New business margin		
	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m	6 months 2011 %	6 months 2010 %	Full year 2010 %
<b>Life and pensions (net of tax and non-controlling interests)</b>									
<b>United Kingdom</b>	<b>5,468</b>	5,194	10,298	<b>140</b>	126	254	<b>2.6%</b>	2.4%	2.5%
France	1,947	2,367	4,340	53	58	100	2.7%	2.5%	2.3%
Ireland	415	356	704	1	1	1	0.2%	0.3%	0.1%
Italy	792	1,351	1,965	15	24	42	1.9%	1.8%	2.1%
Poland	276	279	531	14	14	29	5.1%	5.0%	5.5%
Spain	555	580	1,136	17	22	43	3.1%	3.8%	3.8%
Other Europe	293	259	538	11	10	15	3.8%	3.8%	2.8%
<b>Aviva Europe</b>	<b>4,278</b>	5,192	9,214	<b>111</b>	129	230	<b>2.6%</b>	2.5%	2.5%
<b>North America</b>	<b>1,658</b>	2,334	4,728	<b>(55)</b>	2	(126)	<b>(3.3)%</b>	0.1%	(2.7)%
<b>Asia Pacific</b>	<b>889</b>	787	1,598	<b>27</b>	14	41	<b>3.0%</b>	1.8%	2.6%
<b>Total life and pensions sales – continuing operations</b>	<b>12,293</b>	<b>13,507</b>	<b>25,838</b>	<b>223</b>	<b>271</b>	<b>399</b>	<b>1.8%</b>	<b>2.0%</b>	<b>1.5%</b>
<b>Total life and pensions sales – discontinued operations<sup>1</sup></b>	<b>599</b>	<b>937</b>	<b>1,721</b>	<b>—</b>	<b>(25)</b>	<b>(41)</b>	<b>—</b>	<b>(2.7)%</b>	<b>(2.4)%</b>
<b>Total life and pensions</b>	<b>12,892</b>	<b>14,444</b>	<b>27,559</b>	<b>223</b>	<b>246</b>	<b>358</b>	<b>1.7%</b>	<b>1.7%</b>	<b>1.3%</b>

1. Current period discontinued operations represent the results of Delta Lloyd up to 6 May 2011 only.

# Capital management

---

## In this section

	Page
C1 Capital management objectives and approach	78
C2 Group capital structure	80
C3 Analysis of return on capital employed	82
C3 i – Analysis of IFRS return on capital employed	82
C3 ii – Analysis of MCEV return on capital employed	83
C4 Capital generation and utilisation	85
C5 Capital required to write new business, internal rate of return and payback period	86
C6 Regulatory capital	87
C7 IFRS Sensitivity analysis	89

# Capital management

## C1 – Capital management objectives and approach

The primary objective of capital management is to optimise the balance between return and risk, whilst maintaining economic and regulatory capital in accordance with risk appetite. Aviva's capital and risk management objectives are closely interlinked, and support the dividend policy and earnings per share growth, whilst also recognising the critical importance of protecting policyholder and other stakeholder interests.

Overall capital risk appetite, which is reviewed and approved by the Aviva board, is set and managed with reference to the requirements of a range of different stakeholders including shareholders, policyholders, regulators and rating agencies. Risk appetite is expressed in relation to a number of key capital and risk measures, and includes an economic capital risk appetite of holding sufficient capital resources to enable the Group to meet its liabilities in extreme adverse scenarios, on an ongoing basis, calibrated consistently with the Group's strategic target of maintaining credit ratings in the AA range.

In managing capital we seek to:

- 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;
- optimise our overall debt to equity structure to enhance our returns to shareholders, subject to our capital risk appetite and balancing the requirements of the range of stakeholders;
- retain financial flexibility by maintaining strong liquidity, including significant unutilised committed credit facilities and access to a range of capital markets;
- allocate capital rigorously across the group, to drive value adding growth through optimizing risk and return; and
- declare dividends on a basis judged prudent, while retaining capital to support future business growth, using dividend cover on an IFRS operating earnings after tax basis in the 1.5 to 2.0 times range as a guide.

In line with these objectives, the capital generated and invested by the Group's businesses is a key management focus. Operating capital generation, which measures net capital generated after taking into account capital invested in new business (before the impact of non-operating items) is a core regulatory capital based management performance metric used across the Group. This is embedded in the Group business planning process and other primary internal performance and management information processes.

Capital is measured and managed on a number of different bases. These are discussed further in the following sections.

### Regulatory capital

Individual regulated subsidiaries measure and report solvency based on applicable local regulations, including in the UK the regulations established by the Financial Services Authority (FSA). These measures are also consolidated under the European Insurance Groups Directive (IGD) to calculate regulatory capital adequacy at an aggregate group level, where we have a regulatory obligation to have a positive position at all times. This measure represents the excess of the aggregate value of regulatory capital employed in our business over the aggregate minimum solvency requirements imposed by local regulators, excluding the surplus held in the UK and Ireland with-profit life funds. The minimum solvency requirement for our European businesses is based on the Solvency 1 Directive. In broad terms, for EU operations, this is set at 4% and 1% of non-linked and unit-linked life reserves respectively and for our general insurance portfolio of business is the higher of 18% of gross premiums or 26% of gross claims, in both cases adjusted to reflect the level of reinsurance recoveries. For our major non-European businesses (the US and Canada) a risk charge on assets and liabilities approach is used.

### Rating agency capital

Credit ratings are an important indicator of financial strength and support access to debt markets as well as providing assurance to business partners and policyholders over our ability to service contractual obligations. In recognition of this, we have solicited relationships with a number of rating agencies. The agencies generally assign ratings based on an assessment of a range of financial factors (e.g. capital strength, gearing, liquidity and fixed charge cover ratios) and non financial factors (e.g. strategy, competitive position, and quality of management).

Certain rating agencies have proprietary capital models which they use to assess available capital resources against capital requirements as a component in their overall criteria for assigning ratings. Managing our capital and liquidity position in accordance with our target rating levels is a core consideration in all material capital management and capital allocation decisions.

The group's overall financial strength is reflected in our credit ratings. The group's rating from Standard and Poors is AA- ("very strong") with a Stable outlook; Aa3 ("excellent") with a Stable outlook from Moody's; and A ("excellent") with a Positive outlook from A M Best. These ratings continue to reflect our strong competitive position, positive strategic management, strong and diversified underlying earnings profile and very strong liquidity position.

## C1 – Capital management objectives and approach continued

### Economic capital

We use a risk-based capital model to assess economic capital requirements and to aid in risk and capital management across the group. The model is based on a framework for identifying the risks to which business units, and the group as a whole, are exposed. A mixture of scenario based approaches and stochastic models are used to capture market risk, credit risk, insurance risk and operational risk. Scenarios are specified centrally to provide consistency across businesses and to achieve a minimum standard. Where appropriate, businesses also supplement these with additional risk models and stressed scenarios specific to their own risk profile. When aggregating capital requirements at business unit and group level, we allow for diversification benefits between risks and between businesses, with restrictions to allow for non-fungibility of capital when appropriate. This means that the aggregate capital requirement is less than the sum of capital required to cover all of the individual risks.

This model is used to support our Individual Capital Assessments (ICA) which are reported to the FSA for all our UK regulated insurance businesses. The FSA uses the results of our ICA process when setting target levels of capital for our UK regulated insurance businesses. In line with FSA requirements, the ICA estimates the capital required to mitigate the risk of insolvency to a 99.5% confidence level over a one year time horizon (equivalent to events occurring in 1 out of 200 years) against financial and non-financial tests.

The financial modelling techniques employed in economic capital enhance our practice of risk and capital management. They enable understanding of the impact of the interaction of different risks allowing us to direct risk management activities appropriately. These same techniques are employed to enhance product pricing and capital allocation processes. Unlike more traditional regulatory capital measures, economic capital also recognises the value of longer term profits emerging from in-force and new business, allowing for consideration of longer term value emergence as well as shorter term net worth volatility in our risk and capital management processes. We continue to develop our economic capital modelling capability for all our businesses as part of our development programme to increase the focus on economic capital management and meeting the emerging requirements of the Solvency II framework and external agencies.

### Solvency II

The development of Solvency II continues in 2011. The European Commission is focused on concluding the development of the Level 2 implementing measures that will establish the technical requirements governing the practical application of Solvency II. The implementation data continues to be discussed in the context of the ongoing draft Omnibus II directive deliberations. Aviva continues to actively participate in these developments through the key European industry working groups and engaging with the FSA and HM Treasury to inform the on-going negotiations in Brussels.

## C2 – Group capital structure

The table below shows how our capital, on an MCEV basis, is deployed by segment and how that capital is funded.

	30 June 2011 £m	31 December 2010 £m
Long-term savings	19,981	18,963
General insurance and health	5,298	5,082
Fund management	227	231
Other business	(343)	(119)
Corporate <sup>1</sup>	(760)	(1,521)
Delta Lloyd	1,061	3,892
<b>Total capital employed</b>	<b>25,464</b>	<b>26,528</b>
<b>Financed by</b>		
Equity shareholders' funds	15,861	15,295
Non-controlling interests	2,580	3,977
Direct capital instrument	990	990
Preference shares	200	200
Subordinated debt	5,132	4,572
External debt	701	1,494
<b>Total capital employed</b>	<b>25,464</b>	<b>26,528</b>

1. "Corporate" includes centrally held tangible net assets, the element of the staff pension scheme deficit or surplus allocated centrally and also reflects internal lending arrangements. These internal lending arrangements, which net out on consolidation, arise in relation to the following:  
— Aviva International Insurance Limited (AII) acts as both a UK general insurer and as the primary holding company for our foreign subsidiaries. Internal capital management mechanisms in place allocate a portion of the total capital of the company to the UK general insurance operations, giving rise to notional lending between the general insurance and holding company activities. These mechanisms also allow for some of the assets of the general insurance business to be made available for use across the Group.  
— Certain subsidiaries, subject to continuing to satisfy stand alone capital and liquidity requirements, loan funds to corporate and holding entities. These loans satisfy arms length criteria and all interest payments are made when due.

Total capital employed is financed by a combination of equity shareholders' funds, preference capital, subordinated debt and borrowings.

At 30 June 2011 we had £25.5 billion (31 December 2010: £26.5 billion) of total capital employed in our trading operations, measured on an MCEV basis.

In May 2011 we issued £450 million of Lower Tier 2 hybrid debt maturing 2041 which may be called from 2021. This transaction had a positive impact on group IGD solvency and Economic Capital measures.

Financial leverage, the ratio of external senior and subordinated debt to MCEV capital and reserves, was 31.6% (31 December 2010: 31.5%). Fixed charge cover, which measures the extent to which external interest costs, including subordinated debt interest and preference dividends, are covered by MCEV operating profit was 9.6 times (31 December 2010: 9.4 times).

At 30 June 2011 the market value of our external debt, subordinated debt, preference shares (including both Aviva plc preference shares of £200 million and General Accident plc preference shares, within non-controlling interest, of £250 million), and direct capital instrument was £7,104 million (31 December 2010: £7,279 million), with a weighted average cost, post tax, of 4.9% (31 December 2010: 4.5%). The group Weighted Average Cost of Capital (WACC) is 7.2% (31 December 2010: 7.8%) and has been calculated by reference to the cost of equity and the cost of debt at the relevant date. The cost of equity at 30 June 2011 was 8.5% (31 December 2010: 9.9%) based on a risk free rate of 3.4% (31 December 2010: 3.4%), an equity risk premium of 4.0% (31 December 2010: 4.0%) and a market beta of 1.3 (31 December 2010: 1.6).



**C2 – Group capital structure continued**

Shareholders' funds, including non-controlling interest

	30 June 2011 Closing shareholders' funds			31 December 2010 Closing shareholders' funds		
	IFRS net asset £m	Internally generated AVIF £m	Total Equity £m	IFRS net asset £m	Internally generated AVIF £m	Total Equity £m
<b>Life assurance</b>						
<b>United Kingdom</b>	<b>5,009</b>	<b>1,841</b>	<b>6,850</b>	4,805	1,756	6,561
France	1,911	1,630	3,541	1,700	1,490	3,190
Ireland	1,199	67	1,266	1,171	78	1,249
Italy	1,242	195	1,437	1,256	238	1,494
Poland	247	1,052	1,299	279	1,002	1,281
Spain	1,391	534	1,925	1,291	467	1,758
Other Europe	264	148	412	270	139	409
<b>Aviva Europe</b>	<b>6,254</b>	<b>3,626</b>	<b>9,880</b>	5,967	3,414	9,381
<b>North America</b>	<b>3,490</b>	<b>(1,214)</b>	<b>2,276</b>	3,500	(1,383)	2,117
<b>Asia Pacific</b>	<b>802</b>	<b>173</b>	<b>975</b>	757	147	904
	<b>15,555</b>	<b>4,426</b>	<b>19,981</b>	15,029	3,934	18,963
<b>General insurance and health</b>						
<b>United Kingdom</b>	<b>2,966</b>	—	<b>2,966</b>	2,895	—	2,895
France	464	—	464	434	—	434
Ireland	406	—	406	387	—	387
Other Europe	321	—	321	300	—	300
<b>Aviva Europe</b>	<b>1,191</b>	—	<b>1,191</b>	1,121	—	1,121
<b>North America</b>	<b>1,091</b>	—	<b>1,091</b>	1,021	—	1,021
<b>Asia Pacific</b>	<b>50</b>	—	<b>50</b>	45	—	45
	<b>5,298</b>	—	<b>5,298</b>	5,082	—	5,082
Fund management	227	—	227	231	—	231
Other business	(343)	—	(343)	(119)	—	(119)
Corporate	(760)	—	(760)	(1,521)	—	(1,521)
<b>Total capital employed (excluding Delta Lloyd)</b>	<b>19,977</b>	<b>4,426</b>	<b>24,403</b>	18,702	3,934	22,636
Delta Lloyd	1,061	—	1,061	5,089	(1,197)	3,892
<b>Total capital employed</b>	<b>21,038</b>	<b>4,426</b>	<b>25,464</b>	23,791	2,737	26,528
Subordinated debt	(5,132)	—	(5,132)	(4,572)	—	(4,572)
External debt	(701)	—	(701)	(1,494)	—	(1,494)
<b>Total equity</b>	<b>15,205</b>	<b>4,426</b>	<b>19,631</b>	17,725	2,737	20,462
Less:						
Non-controlling interests			(2,580)			(3,977)
Direct capital instruments			(990)			(990)
Preference capital			(200)			(200)
<b>Equity shareholders' funds</b>			<b>15,861</b>			15,295
Less: goodwill and intangibles <sup>1</sup>			(4,134)			(4,410)
<b>Equity shareholders funds' excluding goodwill and intangibles</b>			<b>11,727</b>			10,885

1. Goodwill and intangibles comprise £3,107 million (31 December 2010: £3,391 million) of goodwill in subsidiaries, £1,340 million (31 December 2010: £1,357 million) of intangibles in subsidiaries, £156 million (31 December 2010: £156 million) of goodwill and intangibles in joint ventures and £115 million (31 December 2010: £80 million) of goodwill in associates, net of associated deferred tax liabilities of £338 million (31 December 2010: £336 million) and the minority share of intangibles of £246 million (31 December 2010: £238 million). The FY10 comparative has been adjusted to facilitate comparison with HY11 presentation.

## C3 Analysis of return on capital employed

### C3 i – Analysis of IFRS return on capital employed

30 June 2011				
	Operating return <sup>1</sup>		Opening shareholders' funds including non-controlling interests £m	Return on capital %
	Before tax £m	After tax £m		
Life assurance	1,082	880	15,029	11.7%
General insurance and health	438	320	5,082	12.6%
Fund management	42	30	231	26.0%
Other business	(81)	(59)	(119)	99.2%
Corporate <sup>2</sup>	(210)	(236)	(1,521)	31.0%
<b>Return on total capital employed (excluding Delta Lloyd)</b>	<b>1,271</b>	<b>935</b>	<b>18,702</b>	<b>10.0%</b>
Delta Lloyd	230	196	5,089	7.7%
<b>Return on total capital employed</b>	<b>1,501</b>	<b>1,131</b>	<b>23,791</b>	<b>9.5%</b>
Subordinated debt	(147)	(108)	(4,572)	4.7%
External debt	(17)	(12)	(1,494)	1.6%
<b>Return on total equity</b>	<b>1,337</b>	<b>1,011</b>	<b>17,725</b>	<b>11.4%</b>
Less: Non-controlling interests		(180)	(3,741)	9.6%
Direct capital instrument		—	(990)	—
Preference capital		(9)	(200)	9.0%
<b>Return on equity shareholders' funds</b>		<b>822</b>	<b>12,794</b>	<b>12.8%</b>

1. The operating return is based upon group IFRS operating profit, which is stated before impairment of goodwill, amortisation of intangibles, exceptional items and investment variance.

2. The 'Corporate' loss before tax of £210 million comprises costs of £66 million, net finance charge on the main UK pension scheme of £27 million and interest on internal lending arrangements of £134 million offset by investment return of £17 million.

31 December 2010				
	Operating return <sup>1</sup>		Opening shareholders' funds including non-controlling interests £m	Return on capital %
	Before tax £m	After tax £m		
Life assurance	1,988	1,485	14,334	10.4%
General insurance and health	847	614	4,017	15.3%
Fund management	98	69	231	29.9%
Other business	(177)	(125)	(647)	19.3%
Corporate <sup>2</sup>	(419)	(322)	(1,327)	24.3%
<b>Return on total capital employed (excluding Delta Lloyd)</b>	<b>2,337</b>	<b>1,721</b>	<b>16,608</b>	<b>10.4%</b>
Delta Lloyd	536	437	3,967	11.0%
<b>Return on total capital employed</b>	<b>2,873</b>	<b>2,158</b>	<b>20,575</b>	<b>10.5%</b>
Subordinated debt	(290)	(209)	(4,637)	4.5%
External debt	(33)	(24)	(852)	2.8%
<b>Return on total equity</b>	<b>2,550</b>	<b>1,925</b>	<b>15,086</b>	<b>12.8%</b>
Less: Non-controlling interests		(332)	(3,540)	9.4%
Direct capital instrument		(42)	(990)	4.2%
Preference capital		(17)	(200)	8.5%
<b>Return on equity shareholders' funds</b>		<b>1,534</b>	<b>10,356</b>	<b>14.8%</b>

1. The operating return is based upon group IFRS operating profit, which is stated before impairment of goodwill, amortisation of intangibles, exceptional items and investment variance.

2. The 'Corporate' loss before tax of £419 million comprises costs of £143 million, net finance charge on the main UK pension scheme of £87 million and interest on internal lending arrangements of £246 million offset by investment return of £57 million.

## C3 Analysis of return on capital employed continued

## C3 ii – Analysis of MCEV return on capital employed

30 June 2011				
	Operating return <sup>1</sup>		Opening shareholders' funds including non-controlling interests £m	Return on capital %
	Before tax £m	After tax £m		
<b>Life assurance</b>				
<b>United Kingdom</b>	521	387	6,561	11.8%
France	295	193	3,190	12.1%
Ireland	(9)	(8)	1,249	(1.3)%
Italy	130	88	1,494	11.8%
Poland	98	79	1,281	12.3%
Spain	111	78	1,758	8.9%
Other Europe	20	16	409	7.8%
<b>Aviva Europe</b>	645	446	9,381	9.5%
<b>North America</b>	136	88	2,117	8.3%
<b>Asia Pacific</b>	48	38	904	8.4%
	1,350	959	18,963	10.1%
<b>General insurance and health</b>				
<b>United Kingdom<sup>2</sup></b>	244	179	2,895	12.4%
France	50	33	434	15.2%
Ireland	33	28	387	14.5%
Other Europe	(3)	(2)	300	(1.3)%
<b>Aviva Europe</b>	80	59	1,121	10.5%
<b>North America</b>	118	85	1,021	16.7%
<b>Asia Pacific</b>	(4)	(3)	45	(13.3)%
	438	320	5,082	12.6%
Fund management	9	7	231	6.1%
Other business	(80)	(56)	(119)	94.1%
Corporate <sup>3</sup>	(210)	(236)	(1,521)	31.0%
<b>Return on total capital employed (excluding Delta Lloyd)</b>	1,507	994	22,636	8.8%
Delta Lloyd	322	239	3,892	12.3%
<b>Return on total capital employed</b>	1,829	1,233	26,528	9.3%
Subordinated debt	(147)	(108)	(4,572)	4.7%
External debt	(17)	(12)	(1,494)	1.6%
<b>Return on total equity</b>	1,665	1,113	20,462	10.9%
Less: Non-controlling interests		(224)	(3,977)	11.3%
Direct capital instrument		—	(990)	—
Preference capital		(9)	(200)	9.0%
<b>Return on equity shareholders' funds</b>		880	15,295	11.5%

1. The operating return is based upon group MCEV operating profit, which is stated before impairment of goodwill, amortisation of intangibles, exceptional items and investment variance.

2. Opening shareholders' funds includes the impact of allocating a share of the UK pension scheme surplus, which increases shareholders' funds and decreases annualised return on capital.

3. The 'Corporate' loss before tax of £210 million comprises costs of £66 million, net finance charge on the main UK pension scheme of £27 million and interest on internal lending arrangements of £134 million offset by investment return of £17 million.

## C3 Analysis of return on capital employed continued

## C3 ii – Analysis of MCEV return on capital employed continued

	31 December 2010			
	Operating return <sup>1</sup>		Restated Opening shareholders' funds including non-controlling interests £m	Return on capital %
	Before tax £m	After tax £m		
<b>Life assurance</b>				
<b>United Kingdom</b>	1,085	778	5,797	13.4%
France	971	637	3,093	20.6%
Ireland	37	31	1,340	2.3%
Italy	266	180	1,695	10.6%
Poland	377	306	1,312	23.3%
Spain	319	224	1,950	11.5%
Other Europe	43	33	348	9.5%
<b>Aviva Europe</b>	2,013	1,411	9,738	14.5%
<b>North America</b>	289	188	1,582	11.9%
<b>Asia Pacific</b>	109	85	741	11.5%
	3,496	2,462	17,858	13.8%
<b>General insurance and health</b>				
<b>United Kingdom<sup>2</sup></b>	522	376	1,876	20.0%
France	76	62	410	15.1%
Ireland	51	45	450	10.0%
Other Europe	(18)	(15)	329	(4.6)%
<b>Aviva Europe</b>	109	92	1,189	7.7%
<b>North America</b>	222	151	928	16.3%
<b>Asia Pacific</b>	(6)	(5)	24	(20.8)%
	847	614	4,017	15.3%
Fund management	31	21	231	9.1%
Other business	(171)	(121)	(647)	18.7%
Corporate <sup>3</sup>	(419)	(322)	(1,327)	24.3%
<b>Return on total capital employed (excluding Delta Lloyd)</b>	3,784	2,654	20,132	13.2%
Delta Lloyd	299	216	3,918	5.5%
<b>Return on total capital employed</b>	4,083	2,870	24,050	11.9%
Subordinated debt	(290)	(209)	(4,637)	4.5%
External debt	(33)	(24)	(852)	2.8%
<b>Return on total equity</b>	3,760	2,637	18,561	14.2%
Less: Non-controlling interests		(426)	(4,279)	10.0%
Direct capital instrument		(42)	(990)	4.2%
Preference capital		(17)	(200)	8.5%
<b>Return on equity shareholders' funds</b>		2,152	13,092	16.4%

1. The operating return is based upon group MCEV operating profit, which is stated before impairment of goodwill, amortisation of intangibles, exceptional items and investment variance.

2. Opening shareholders' funds includes the impact of allocating a share of the UK pension scheme deficit, which lowers shareholders' funds and increases annualised return on capital.

3. The 'Corporate' loss before tax of £419 million comprises costs of £143 million, net finance charge on the main UK pension scheme of £87 million and interest on internal lending arrangements of £246 million offset by investment return of £57 million.

## C4 – Capital generation and utilisation

The active management of the generation and utilisation of capital is a primary Group focus, with the balancing of new business investment and shareholder distribution with operational capital generation a key financial priority.

The half-year 2011 result of £0.8 billion reinforces our confidence in the capital generation position of the Group. Profits from existing life business remain strong, generating £1.0 billion of capital (HY10: £1.1 billion), with a further £0.3 billion (HY10: £0.3 billion) generated by the general insurance, fund management and non-insurance businesses. Underlying capital generation has improved strongly as the first half of 2010 benefited from the positive impact of the special distribution from the UK with-profit funds, an AXXX reinsurance transaction in the US and a reduction in General Insurance capital requirements as a result of volume changes in prior years. Capital invested in new business remains at £0.5 billion (HY10: £0.5 billion), and continues to benefit from management actions to improve capital efficiency and the utilisation of the RIEESA to finance new business in UK Life. Within the £0.5 billion of capital investment in new business, the life component has reduced by £0.2 billion compared with HY10. The capital investment in non-life business in the period is broadly neutral compared with the release of £0.2 billion in HY10.

	6 months 2011 £bn	6 months 2010 £bn	Full year 2010 £bn
<b>Operational capital generation:</b>			
Life in-force profits <sup>1</sup>	1.0	1.1	2.1
General insurance, fund management and non-insurance profits	0.3	0.3	0.6
<b>Operational capital generated before investment in new business</b>	<b>1.3</b>	<b>1.4</b>	<b>2.7</b>
Capital invested in new business	(0.5)	(0.5)	(1.0)
<b>Operational capital generated after investment in new business</b>	<b>0.8</b>	<b>0.9</b>	<b>1.7</b>

1. The life in-force profits in full year 2010 excludes the negative impact of the Delta Lloyd longevity assumption change of £0.2 billion which is included in the MCEV analysis of free surplus generated.

Operational capital generation comprises the following components:

— Operating Free surplus emergence, including release of required capital, for the life in-force business (net of tax and minorities);

— IFRS operating profits for the general insurance and non-life businesses (net of tax and minorities);

— Capital invested in new business. For life business this is the impact of initial and required capital on free surplus. For general insurance business this reflects the movement in required capital, which has been assumed to equal the regulatory minimum multiplied by the local management target level. Where appropriate movements in capital requirements exclude the impact of foreign exchange and other movements deemed to be non-operating in nature. Previously the level was assumed to be two times the minimum and did not exclude non-operating items. This change does not have an impact on the 2010 comparatives above.

— Post disposal, all Delta Lloyd capital generation, including life business, has been included within general insurance, fund management and non-insurance profits on an IFRS basis.

As well as financing new business investment, operational capital generated is used to finance corporate costs, service the Group's debt capital and to finance shareholder dividend distributions. After taking these items into account the net operational capital generated after financing is a £0.1 billion surplus.

	6 months 2011 £bn	6 months 2010 £bn	Full year 2010 £bn
<b>Operational capital generated after investment in new business</b>	<b>0.8</b>	<b>0.9</b>	<b>1.7</b>
Interest, corporate and other costs	(0.4)	(0.3)	(0.6)
External dividend net of scrip	(0.3)	(0.3)	(0.5)
<b>Net operational capital generation after financing</b>	<b>0.1</b>	<b>0.3</b>	<b>0.6</b>

## C5 – Capital required to write new business, internal rate of return and payback period

As set out in C4, the group generates a significant amount of capital each year. This capital generation supports both shareholder distribution and reinvestment in new business. The new business written requires up front capital investment, due to high set-up costs and capital requirements.

The internal rate of return (IRR) is a measure of the shareholder return expected on this capital investment. It is equivalent to the discount rate at which the present value of the post-tax cash flows expected to be earned over the life time of the business written, including allowance for the time value of options and guarantees, is equal to the total invested capital to support the writing of the business. The capital included in the calculation of the IRR is the initial capital required to pay acquisition costs and set up statutory reserves in excess of premiums received ("initial capital"), plus required capital at the same level as for the calculation of the value of new business.

The payback period shows how quickly shareholders can expect the total capital to be repaid. The payback period has been calculated based on undiscounted cash flows and allows for the initial and required capital.

The projected investment returns in both the IRR and payback period calculations assume that equities, properties and bonds earn a return in excess of risk-free consistent with the long-term rate of return assumed in operating earnings.

The internal rates of return on new business written during the period are set out below.

	Initial capital £m	Required capital £m	Total invested capital £m	IRR %	Payback period years
30 June 2011					
<b>United Kingdom</b>	<b>41</b>	<b>80</b>	<b>121</b>	<b>16%</b>	<b>7</b>
France	22	76	98	11%	8
Ireland	13	15	28	8%	8
Italy	20	63	83	12%	6
Poland	15	5	20	20%	5
Spain	12	41	53	23%	4
Other Europe	21	9	30	16%	6
<b>Aviva Europe</b>	<b>103</b>	<b>209</b>	<b>312</b>	<b>14%</b>	<b>6</b>
<b>North America</b>	<b>36</b>	<b>127</b>	<b>163</b>	<b>14%</b>	<b>5</b>
<b>Asia Pacific</b>	<b>27</b>	<b>16</b>	<b>43</b>	<b>13%</b>	<b>12</b>
<b>Total excluding Delta Lloyd</b>	<b>207</b>	<b>432</b>	<b>639</b>	<b>14.3%</b>	<b>6</b>
Delta Lloyd	26	27	53	10%	10
<b>Total</b>	<b>233</b>	<b>459</b>	<b>692</b>	<b>13.9%</b>	<b>7</b>

	Initial capital £m	Required capital £m	Total invested capital £m	IRR %	Payback period years
30 June 2010					
<b>United Kingdom</b>	<b>59</b>	<b>93</b>	<b>152</b>	<b>15%</b>	<b>7</b>
France	27	95	122	9%	11
Ireland	23	11	34	6%	10
Italy	31	128	159	10%	7
Poland	7	4	11	25%	4
Spain	14	36	50	22%	4
Other Europe	21	7	28	17%	5
<b>Aviva Europe</b>	<b>123</b>	<b>281</b>	<b>404</b>	<b>12%</b>	<b>8</b>
<b>North America</b>	<b>54</b>	<b>178</b>	<b>232</b>	<b>14%</b>	<b>4</b>
<b>Asia Pacific</b>	<b>29</b>	<b>24</b>	<b>53</b>	<b>10%</b>	<b>12</b>
<b>Total excluding Delta Lloyd</b>	<b>265</b>	<b>576</b>	<b>841</b>	<b>12.9%</b>	<b>7</b>
Delta Lloyd	57	65	122	5%	19
<b>Total</b>	<b>322</b>	<b>641</b>	<b>963</b>	<b>12.0%</b>	<b>8</b>

	Initial capital £m	Required capital £m	Total invested capital £m	IRR %	Payback period years
31 December 2010					
<b>United Kingdom</b>	<b>98</b>	<b>198</b>	<b>296</b>	<b>15%</b>	<b>7</b>
France	34	202	236	9%	9
Ireland	34	17	51	5%	11
Italy	32	183	215	11%	6
Poland	16	9	25	25%	4
Spain	25	80	105	22%	4
Other Europe	41	16	57	14%	6
<b>Aviva Europe</b>	<b>182</b>	<b>507</b>	<b>689</b>	<b>13%</b>	<b>7</b>
<b>North America</b>	<b>65</b>	<b>366</b>	<b>431</b>	<b>14%</b>	<b>4</b>
<b>Asia Pacific</b>	<b>62</b>	<b>34</b>	<b>96</b>	<b>11%</b>	<b>13</b>
<b>Total excluding Delta Lloyd</b>	<b>407</b>	<b>1,105</b>	<b>1,512</b>	<b>13.3%</b>	<b>7</b>
Delta Lloyd	106	112	218	6%	16
<b>Total</b>	<b>513</b>	<b>1,217</b>	<b>1,730</b>	<b>12.5%</b>	<b>8</b>

## C5 – Capital required to write new business, internal rate of return and payback period continued

The capital invested data above is stated gross of non-controlling interests and valued on a point of sale basis. This differs from the analysis of life and pensions earnings in notes E7 and E9 which is stated net of minorities, valued on a year-end basis and benefits from the writing of new business in the UK Life RIEESA. The reconciliation is as follows:

6 months 2011	£m
Total capital invested	692
Non-controlling interests	(114)
Benefit of RIEESA on new business funding	(47)
Timing differences (point of sale versus year end basis)	(14)
<b>New business impact on free surplus (continuing and discontinued operations)</b>	<b>517</b>

## C6 – Regulatory capital

Individual regulated subsidiaries measure and report solvency based on applicable local regulations, including in the UK the regulations established by the Financial Services Authority (FSA). These measures are also consolidated under the European Insurance Groups Directive (IGD) to calculate regulatory capital adequacy at an aggregate group level, where we have a regulatory obligation to have a positive position at all times. This measure represents the excess of the aggregate value of regulatory capital employed in our business over the aggregate minimum solvency requirements imposed by local regulators, excluding the surplus held in the UK and Ireland with-profit life funds. The minimum solvency requirement for our European businesses is based on the Solvency 1 Directive. In broad terms, for EU operations, this is set at 4% and 1% of non-linked and unit-linked life reserves respectively and for our general insurance portfolio of business is the higher of 18% of gross premiums or 26% of gross claims, in both cases adjusted to reflect the level of reinsurance recoveries. For our major non-European businesses (the US, and Canada) a risk charge on assets and liabilities approach is used.

### Regulatory capital – Group: European Insurance Groups Directive (IGD)

	UK life funds £bn	Other business £bn	30 June 2011 £bn	31 December 2010 £bn
Insurance Groups Directive (IGD) capital resources	5.0	10.6	15.6	16.3
Less: capital resource requirement	(5.0)	(6.6)	(11.6)	(12.5)
Insurance Group Directive (IGD) excess solvency	—	4.0	4.0	3.8
Cover over EU minimum (calculated excluding UK life funds)			1.6 times	1.6 times

The EU Insurance Groups Directive (IGD) regulatory capital solvency surplus has increased by £0.2 billion since 31 December 2010 to £4.0 billion. The key movements over the period are set out in the following table:

	£bn
IGD solvency surplus at 31 December 2010	3.8
Operating profits net of other income and expenses	0.5
Movement in Lower Tier II Hybrid	0.4
Dividends net of scrip	(0.3)
Market movements including foreign exchange	(0.3)
Pension scheme funding	(0.2)
Increase in Capital Resource Requirement	(0.1)
Impact of Delta Lloyd sell down	0.1
Increase in market valuation of RAC	0.2
Other	(0.1)
<b>Estimated IGD solvency surplus at 30 June 2011</b>	<b>4.0</b>

Market movements include the impact of equity, credit spread, interest rate and foreign exchange movements net of the effect of hedging instruments.

## C6 – Regulatory capital continued

### Regulatory capital – Long-term businesses

For our worldwide life assurance businesses, our capital requirements, expressed as a percentage of the EU minimum, are generally set for each business unit as the higher of:

- The level of capital at which the local regulator is empowered to take action;
- The capital requirement of the business unit under the group's economic capital requirements; and
- The target capital level of the business unit.

For Aviva US, the required capital is set at 325% of the NAIC Company Action Level in line with management targets and target credit ratings.

The required capital across our life businesses varies between 100% and 325% of EU minimum or equivalent. The weighted average level of required capital for our life business, excluding Delta Lloyd, expressed as a percentage of the EU minimum (or equivalent) solvency margin has decreased to 128% (31 December 2010: 130%). These levels of required capital are used in the calculation of the group's embedded value to evaluate the cost of locked in capital. At 30 June 2011 the aggregate regulatory requirements based on the EU minimum test amounted to £6.2 billion (31 December 2010: £6.0 billion). At this date, the actual net worth held in our long-term business was £9.0 billion (31 December 2010: £8.7 billion) which represents 145% (31 December 2010: 145%) of these minimum requirements.

### Regulatory capital – UK Life with-profits funds

The available capital of the with-profit funds is represented by the realistic inherited estate. The estate represents the assets of the long-term with-profit funds less the realistic liabilities for non-profit policies within the funds, less asset shares aggregated across the with-profit policies and any additional amounts expected at the valuation date to be paid to in-force policyholders in the future in respect of smoothing costs, guarantees and promises. Realistic balance sheet information is shown below for the three main UK with-profit funds: Old With-Profit Sub Fund (OWPSF), New With-Profit Sub Fund (NWPSF) and With-Profit Sub-Fund (WPSF). These realistic liabilities have been included within the long-term business provision and the liability for insurance and investment contracts on the consolidated IFRS balance sheet at 30 June 2011 and 31 December 2010.

	30 June 2011					31 December 2010
	Estimated realistic assets £bn	Realistic liabilities <sup>1</sup> £bn	Estimated realistic inherited estate <sup>2</sup> £bn	Support Arrangement <sup>3</sup> £bn	Estimated risk Capital Margin <sup>5</sup> £bn	Estimated excess £bn
NWPSF	19.9	(19.9)	—	1.3	(0.3)	0.8
OWPSF	3.1	(2.8)	0.3	—	(0.1)	0.2
WPSF <sup>4</sup>	20.1	(18.0)	2.1	—	(0.4)	1.4
<b>Aggregate</b>	<b>43.1</b>	<b>(40.7)</b>	<b>2.4</b>	<b>1.3</b>	<b>(0.8)</b>	<b>2.4</b>

1. These realistic liabilities include the shareholders' share of future bonuses of £0.6 billion (31 December 2010: £0.7 billion). Realistic liabilities adjusted to eliminate the shareholders' share of future bonuses are £40.1 billion (31 December 2010: £41.5 billion). These realistic liabilities make provision for guarantees, options and promises on a market consistent stochastic basis. The value of the provision included within realistic liabilities is £1.7 billion, £0.3 billion and £2.9 billion for NWPSF, OWPSF and WPSF respectively (31 December 2010: £1.9 billion, £0.3 billion and £3.1 billion).

2. Estimated realistic inherited estate at 31 December 2010 was £nil, £0.3 billion and £1.8 billion for NWPSF, OWPSF and WPSF respectively.

3. The support arrangement represents the reattributed estate of £1.3 billion at 30 June 2011 (31 December 2010: £1.2 billion) held within the non-profit fund with WPSF included within the other UK Life operations.

4. The WPSF fund includes the Provident Mutual (PM) fund which has realistic assets and liabilities of £1.7 billion and therefore does not contribute to the realistic inherited estate.

5. The risk capital margin (RCM) is 4.9 times covered by the inherited estate and support arrangement (31 December 2010: 3.7 times).

### Investment mix

The aggregate investment mix of the assets in the three main with-profit funds was:

	30 June 2011 %	31 December 2010 %
Equity	26%	26%
Property	16%	16%
Fixed interest	55%	57%
Other	3%	1%

The equity backing ratios, including property, supporting with-profit asset shares are 69% in NWPSF and OWPSF, and 68% in WPSF.



## C7 – IFRS Sensitivity analysis

The Group uses a number of sensitivity test-based risk management tools to understand the volatility of earnings, the volatility of its capital requirements, and to manage its capital more efficiently. Primarily, MCEV, ICA, and scenario analysis are used. Sensitivities to economic and operating experience are regularly produced on all of the Group's financial performance measurements to inform the Group's decision making and planning processes, and as part of the framework for identifying and quantifying the risks that each of its business units, and the Group as a whole are exposed to.

For long-term business in particular, sensitivities of MCEV performance indicators to changes in both economic and noneconomic experience are continually used to manage the business and to inform the decision making process. More information on MCEV sensitivities can be found in the presentation of results on an MCEV basis in the supplementary section of this report.

### 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 for both IFRS reporting and reporting under MCEV methodology.

### 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.

### 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.
Equity/property market values	The impact of a change in equity/property market values by $\pm 10\%$ .
Expenses	The impact of an increase in maintenance expenses by 10%.
Assurance mortality/morbidity (life insurance only)	The impact of an increase in mortality/morbidity rates for assurance contracts by 5%.
Annuitant mortality (life insurance only)	The impact of a reduction in mortality rates for annuity contracts by 5%.
Gross loss ratios (non-life insurance only)	The impact of an increase in gross loss ratios for general insurance and health business by 5%.

### Long-term businesses

Impact on profit before tax £m	30 June 2011						
	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Assurance mortality +5%	Annuitant mortality -5%
Insurance participating	5	(105)	60	(120)	(50)	(5)	(40)
Insurance non-participating	(160)	160	40	(40)	(20)	(55)	(320)
Investment participating	(285)	220	80	(75)	(5)	—	—
Investment non-participating	(20)	20	15	(20)	(5)	—	—
Assets backing life shareholders' funds	(5)	10	20	(20)	—	—	—
<b>Total excluding Delta Lloyd</b>	<b>(465)</b>	<b>305</b>	<b>215</b>	<b>(275)</b>	<b>(80)</b>	<b>(60)</b>	<b>(360)</b>

Impact on shareholders' equity before tax £m	30 June 2011						
	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Assurance mortality +5%	Annuitant mortality -5%
Insurance participating	(25)	(70)	60	(120)	(50)	(5)	(40)
Insurance non-participating	(555)	595	40	(40)	(20)	(55)	(320)
Investment participating	(285)	220	80	(75)	(5)	—	—
Investment non-participating	(100)	110	15	(20)	(5)	—	—
Assets backing life shareholders' funds	(120)	125	25	(25)	—	—	—
<b>Total excluding Delta Lloyd</b>	<b>(1,085)</b>	<b>980</b>	<b>220</b>	<b>(280)</b>	<b>(80)</b>	<b>(60)</b>	<b>(360)</b>

## C7 – IFRS Sensitivity analysis continued

## Long-term businesses continued

Impact on profit before tax £m	31 December 2010						
	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Assurance mortality +5%	Annuitant mortality -5%
Insurance participating	(35)	(155)	45	(105)	(30)	(10)	(45)
Insurance non-participating	(210)	225	45	(40)	(10)	(45)	(305)
Investment participating	(20)	15	15	(55)	—	—	—
Investment non-participating	(10)	10	10	(10)	(5)	—	—
Assets backing life shareholders' funds	30	(35)	15	(10)	—	—	—
<b>Total - continuing operations</b>	<b>(245)</b>	<b>60</b>	<b>130</b>	<b>(220)</b>	<b>(45)</b>	<b>(55)</b>	<b>(350)</b>
<b>Discontinued operations</b>	<b>(60)</b>	<b>5</b>	<b>200</b>	<b>(200)</b>	<b>(40)</b>	<b>—</b>	<b>(5)</b>
<b>Total</b>	<b>(305)</b>	<b>65</b>	<b>330</b>	<b>(420)</b>	<b>(85)</b>	<b>(55)</b>	<b>(355)</b>

Impact on shareholders' equity before tax £m	31 December 2010						
	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Assurance mortality +5%	Annuitant mortality -5%
Insurance participating	(60)	(125)	40	(100)	(30)	(10)	(45)
Insurance non-participating	(575)	635	45	(40)	(10)	(45)	(305)
Investment participating	(20)	15	15	(55)	—	—	—
Investment non-participating	(90)	100	10	(10)	(5)	—	—
Assets backing life shareholders' funds	(75)	70	20	(15)	—	—	—
<b>Total - continuing operations</b>	<b>(820)</b>	<b>695</b>	<b>130</b>	<b>(220)</b>	<b>(45)</b>	<b>(55)</b>	<b>(350)</b>
<b>Discontinued operations</b>	<b>(70)</b>	<b>25</b>	<b>505</b>	<b>(505)</b>	<b>(40)</b>	<b>—</b>	<b>(5)</b>
<b>Total</b>	<b>(890)</b>	<b>720</b>	<b>635</b>	<b>(725)</b>	<b>(85)</b>	<b>(55)</b>	<b>(355)</b>

The different impacts of the economic sensitivities on profit and shareholders' equity arise from classification of certain assets as available for sale in some business units, for which movements in unrealised gains or losses would be taken directly to shareholders' equity.

The sensitivities to economic movements relate mainly to the UK, US and Italy. In general a fall in market interest rates has a beneficial impact on non-participating business and shareholders' funds due to the increase in market value of fixed interest securities; similarly a rise in interest rates has a negative impact. In the US most debt securities are classified as available-for-sale, which limits the overall sensitivity of IFRS profit to interest rate movements. The mortality sensitivities relate primarily to the UK.

Changes in sensitivities between 31 December 2010 and 30 June 2011 reflect the deconsolidation of Delta Lloyd on 6<sup>th</sup> May 2011, as well as movements in market interest rates, portfolio growth, changes to asset mix and relative durations of assets and liabilities and asset liability management actions.

The impact on the Group's results from sensitivity to these assumptions can also be found in the MCEV sensitivities included in the alternative method of reporting long-term business profits section.

## C7 – IFRS Sensitivity analysis continued

### General insurance and health businesses

	30 June 2011					
Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Gross loss ratios +5%
<b>Gross of reinsurance excluding Delta Lloyd</b>	<b>(220)</b>	<b>205</b>	<b>50</b>	<b>(50)</b>	<b>(70)</b>	<b>(155)</b>
<b>Net of reinsurance excluding Delta Lloyd</b>	<b>(280)</b>	<b>280</b>	<b>50</b>	<b>(50)</b>	<b>(70)</b>	<b>(150)</b>

	30 June 2011					
Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Gross loss ratios +5%
<b>Gross of reinsurance excluding Delta Lloyd</b>	<b>(220)</b>	<b>205</b>	<b>50</b>	<b>(50)</b>	<b>(30)</b>	<b>(155)</b>
<b>Net of reinsurance excluding Delta Lloyd</b>	<b>(280)</b>	<b>280</b>	<b>50</b>	<b>(50)</b>	<b>(30)</b>	<b>(150)</b>

	31 December 2010					
Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Gross loss ratios +5%
Gross of reinsurance - continuing operations	(235)	220	45	(50)	(110)	(285)
Gross of reinsurance - discontinued operations	(70)	80	50	(50)	(25)	(40)
<b>Total gross of reinsurance</b>	<b>(305)</b>	<b>300</b>	<b>95</b>	<b>(100)</b>	<b>(135)</b>	<b>(325)</b>
Net of reinsurance - continuing operations	(290)	285	45	(50)	(110)	(280)
Net of reinsurance - discontinued operations	(70)	80	50	(50)	(25)	(35)
<b>Total net of reinsurance</b>	<b>(360)</b>	<b>365</b>	<b>95</b>	<b>(100)</b>	<b>(135)</b>	<b>(315)</b>

	31 December 2010					
Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Gross loss ratios +5%
Gross of reinsurance - continuing operations	(235)	220	45	(50)	(30)	(285)
Gross of reinsurance - discontinued operations	(70)	80	50	(50)	(5)	(40)
<b>Total gross of reinsurance</b>	<b>(305)</b>	<b>300</b>	<b>95</b>	<b>(100)</b>	<b>(35)</b>	<b>(325)</b>
Net of reinsurance - continuing operations	(290)	285	45	(50)	(30)	(280)
Net of reinsurance - discontinued operations	(70)	80	50	(50)	(5)	(35)
<b>Total net of reinsurance</b>	<b>(360)</b>	<b>365</b>	<b>95</b>	<b>(100)</b>	<b>(35)</b>	<b>(315)</b>

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

### Fund management and non-insurance businesses

	30 June 2011			
Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%
<b>Total excluding Delta Lloyd</b>	<b>(20)</b>	<b>20</b>	<b>5</b>	<b>35</b>

	30 June 2011			
Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%
<b>Total excluding Delta Lloyd</b>	<b>(20)</b>	<b>20</b>	<b>10</b>	<b>35</b>

	31 December 2010			
Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%
Continuing operations	(15)	15	(5)	55
Discontinued operations	20	(20)	20	(20)
<b>Total</b>	<b>5</b>	<b>(5)</b>	<b>15</b>	<b>35</b>

	31 December 2010			
Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%
Continuing operations	(15)	15	—	50
Discontinued operations	(15)	25	20	(20)
<b>Total</b>	<b>(30)</b>	<b>40</b>	<b>20</b>	<b>30</b>

## C7 – IFRS Sensitivity analysis continued

The sensitivity of the Group's fund management and non-insurance business to movements in equity and property markets includes the impact of hedging instruments held at Group Centre.

### Delta Lloyd

The HY11 sensitivities contained in the above tables exclude any contribution from Delta Lloyd following deconsolidation of this business. The main financial sensitivities in Delta Lloyd are as follows:

#### **Interest rate risk**

Delta Lloyd Group incurs interest rate risk as the value of its assets and liabilities depend on different yield curves. All fixed income assets and instruments bear an additional risk, as the yields on these assets may develop differently from the yields used for discounting the liabilities.

#### **Equity risk and property risk**

The Delta Lloyd equity risk is managed by hedging a major part of its equity portfolio. By use of equity options Delta Lloyd Group is protected against the downside risk in the equity portfolio while maintaining upward potential. For property risk Delta Lloyd Group's risk management strategy is focused on retaining a high-quality self-managed portfolio.

#### **Credit risk**

The Delta Lloyd credit risk is related primarily to government bonds, corporate bonds, mortgages, reinsurance and other loans. Delta Lloyd maintains a diversified fixed-income investment portfolio that is structured to match its insurance liabilities.

#### **Sensitivity analysis**

The financial risk management strategy aims to minimise the exposure to market fluctuations. The techniques used include selling investments, changing investment portfolio allocation and using derivative financial instruments.

Delta Lloyd's General Insurance business is subject to underwriting, reserve and catastrophe risks, but manages these risks via its governance, control processes, and the purchase of reinsurance.

#### **Limitations of sensitivity analysis**

The previous 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.

# Analysis of assets

## In this section

	Page
D1 Total assets – Shareholder/policyholder exposure to risk	94
D2 Total assets – Valuation bases/fair value hierarchy	95
D3 Analysis of asset quality	98
D3.1 Goodwill, Acquired value of in-force business and intangible assets	98
D3.2 Investment property	98
D3.3 Loans	99
D3.4 Financial investments	102
D4 Pension fund assets	106
D5 Available funds	106
D6 Guarantees	106

## Analysis of assets

As an insurance business, Aviva Group holds a variety of assets to match the characteristics and duration of its insurance liabilities. Appropriate and effective asset liability matching (on an economic basis) is the principal way in which we manage our investments. In addition, to support this, we also use a variety of hedging and other risk management strategies to diversify away residual mis-match risk that is outside of our risk appetite.

### D1 – Total assets – Shareholder/policyholder exposure to risk

	Policyholder assets £m	Participating fund assets £m	Shareholder assets £m	Total assets analysed £m	Less assets of operations classified as held for sale £m	Balance sheet total £m
<b>30 June 2011</b>						
Goodwill and acquired value of in-force business and intangible assets	—	—	5,732	5,732	(513)	5,219
Interests in joint ventures and associates	286	1,582	1,727	3,595	(14)	3,581
Property and equipment	—	121	377	498	(31)	467
Investment property	4,424	5,660	1,152	11,236	—	11,236
Loans	—	6,232	18,608	24,840	(12)	24,828
Financial investments						
Debt securities	14,997	85,861	54,796	155,654	—	155,654
Equity securities	23,295	12,103	1,237	36,635	—	36,635
Other investments	27,898	5,745	2,077	35,720	(3)	35,717
Reinsurance assets	1,389	733	4,449	6,571	(1)	6,570
Deferred tax assets	—	—	138	138	(2)	136
Current tax assets	—	—	112	112	—	112
Receivables and other financial assets	323	2,773	6,259	9,355	(84)	9,271
Deferred acquisition costs and other assets	122	222	5,631	5,975	(19)	5,956
Prepayments and accrued income	135	1,580	1,684	3,399	(9)	3,390
Cash and cash equivalents	4,334	10,259	8,553	23,146	(40)	23,106
Assets of operations classified as held for sale	—	—	—	—	728	728
<b>Total</b>	<b>77,203</b>	<b>132,871</b>	<b>112,532</b>	<b>322,606</b>	<b>—</b>	<b>322,606</b>
<b>Interest in Delta Lloyd as an associate</b>	<b>—</b>	<b>—</b>	<b>1,061</b>	<b>1,061</b>	<b>—</b>	<b>1,061</b>
<b>Total (excluding Delta Lloyd as an associate)</b>	<b>77,203</b>	<b>132,871</b>	<b>111,471</b>	<b>321,545</b>	<b>—</b>	<b>321,545</b>
<b>Total % (excluding Delta Lloyd as an associate)</b>	<b>24.0%</b>	<b>41.3%</b>	<b>34.7%</b>	<b>100.0%</b>	<b>0.0%</b>	<b>100.0%</b>
<b>FY10 as reported</b>	<b>85,462</b>	<b>136,787</b>	<b>147,858</b>	<b>370,107</b>	<b>—</b>	<b>370,107</b>
<b>Delta Lloyd</b>	<b>10,947</b>	<b>8,815</b>	<b>39,501</b>	<b>59,263</b>	<b>—</b>	<b>59,263</b>
<b>FY10 Total (excluding Delta Lloyd)</b>	<b>74,515</b>	<b>127,972</b>	<b>108,357</b>	<b>310,844</b>	<b>—</b>	<b>310,844</b>
<b>FY10 Total % (excluding Delta Lloyd)</b>	<b>24.0%</b>	<b>41.2%</b>	<b>34.8%</b>	<b>100.0%</b>	<b>—</b>	<b>100.0%</b>

As at 30 June 2011, 34.7% of our total asset base was shareholder assets, 41.3% participating assets where Aviva shareholders have partial exposure, and 24.0% policyholder assets where Aviva shareholders have no exposure. Of the total assets, investment property, loans and financial investments comprised £264.1 billion, compared to £254.6 billion at 31 December 2010 (excluding Delta Lloyd).

During 2011 Aviva have completed a partial disposal of their equity holding in Delta Lloyd.

At 31 December 2010 Aviva held a controlling interest of 58% in Delta Lloyd's issued equity, and as a result and in accordance with IFRS, consolidated 100% of Delta Lloyd's assets and liabilities. At 30 June 2011 Aviva held 43% of Delta Lloyd's issued equity and is no longer considered to have control of Delta Lloyd. The Group therefore no longer consolidates Delta Lloyd's assets and liabilities as at 30 June 2011. In place of 100% of Delta Lloyd's assets, there is a substantial asset shown as a 'Share in joint ventures and associates' which represents Aviva's equity share of Delta Lloyd. As a result, a direct comparison of the 31 December 2010 and 30 June 2011 balance sheets for asset quality purposes would be distorted by the effect of this deconsolidation. Throughout the disclosure, therefore, Delta Lloyd have been excluded for the purposes of the 31 December 2010 balance sheet to allow a proper comparison. Aviva continue to actively monitor the quality of Delta Lloyd's balance sheet and manage the Group balance sheet holistically including all sources of risk within our overall risk appetite.

## D2 – Total assets – Valuation bases/fair value hierarchy

	30 June 2011			
	Fair value £m	Amortised cost £m	Equity accounted/ tax assets <sup>1</sup> £m	Total £m
<b>Total assets</b>				
Goodwill and acquired value of in-force business and intangible assets	—	5,732	—	5,732
Interests in joint ventures and associates (excluding Delta Lloyd as an associate)	—	—	2,534	2,534
Property and equipment	245	253	—	498
Investment property	11,236	—	—	11,236
Loans	15,757	9,083	—	24,840
Financial investments				
Debt securities	155,654	—	—	155,654
Equity securities	36,635	—	—	36,635
Other investments	35,720	—	—	35,720
Reinsurance assets	—	6,571	—	6,571
Deferred tax assets	—	—	138	138
Current tax assets	—	—	112	112
Receivables and other financial assets	—	9,355	—	9,355
Deferred acquisition costs and other assets	—	5,975	—	5,975
Prepayments and accrued income	—	3,399	—	3,399
Cash and cash equivalents	23,146	—	—	23,146
<b>Total (excluding Delta Lloyd as an associate)</b>	<b>278,393</b>	<b>40,368</b>	<b>2,784</b>	<b>321,545</b>
<b>Total % (excluding Delta Lloyd as an associate)</b>	<b>86.6%</b>	<b>12.6%</b>	<b>0.8%</b>	<b>100.0%</b>
<b>FY10 Total (excluding Delta Lloyd)</b>	270,973	37,171	2,700	310,844
<b>FY10 Total % (excluding Delta Lloyd)</b>	87.2%	11.9%	0.9%	100%

1. Within the group's statement of financial position, assets are recognised for deferred tax and current tax. The valuation basis of these assets does not directly fall within any of the categories outlined above. As such, these assets have been reported together with equity accounted within the analysis of the group's assets.

	30 June 2011			
	Fair value £m	Amortised cost £m	Equity accounted/ tax assets <sup>1</sup> £m	Total £m
<b>Total assets – Policyholder assets</b>				
Goodwill and acquired value of in-force business and intangible assets	—	—	—	—
Interests in joint ventures and associates (excluding Delta Lloyd as an associate)	—	—	286	286
Property and equipment	—	—	—	—
Investment property	4,424	—	—	4,424
Loans	—	—	—	—
Debt securities	14,997	—	—	14,997
Equity securities	23,295	—	—	23,295
Other investments	27,898	—	—	27,898
Reinsurance assets	—	1,389	—	1,389
Deferred tax assets	—	—	—	—
Current tax assets	—	—	—	—
Receivables and other financial assets	—	323	—	323
Deferred acquisition costs and other assets	—	122	—	122
Prepayments and accrued income	—	135	—	135
Cash and cash equivalents	4,334	—	—	4,334
<b>Total (excluding Delta Lloyd as an associate)</b>	<b>74,948</b>	<b>1,969</b>	<b>286</b>	<b>77,203</b>
<b>Total % (excluding Delta Lloyd as an associate)</b>	<b>97.0%</b>	<b>2.6%</b>	<b>0.4%</b>	<b>100.0%</b>
<b>FY10 Total (excluding Delta Lloyd)</b>	72,280	1,644	591	74,515
<b>FY10 Total % (excluding Delta Lloyd)</b>	97.0%	2.2%	0.8%	100%

1. Within the group's statement of financial position, assets are recognised for deferred tax and current tax. The valuation basis of these assets does not directly fall within any of the categories outlined above. As such, these assets have been reported together with equity accounted within the analysis of the group's assets.

## D2 – Total assets – Valuation bases/fair value hierarchy continued

	Fair value £m	Amortised cost £m	Equity accounted/ tax assets <sup>1</sup> £m	Total £m
<b>Total assets – Participating fund assets 30 June 2011</b>				
Goodwill and acquired value of in-force business and intangible assets	—	—	—	—
Interests in joint ventures and associates (excluding Delta Lloyd as an associate)	—	—	1,582	1,582
Property and equipment	27	94	—	121
Investment property	5,660	—	—	5,660
Loans	1,017	5,215	—	6,232
Financial investments				
Debt securities	85,861	—	—	85,861
Equity securities	12,103	—	—	12,103
Other investments	5,745	—	—	5,745
Reinsurance assets	—	733	—	733
Deferred tax assets	—	—	—	—
Current tax assets	—	—	—	—
Receivables and other financial assets	—	2,773	—	2,773
Deferred acquisition costs and other assets	—	222	—	222
Prepayments and accrued income	—	1,580	—	1,580
Cash and cash equivalents	10,259	—	—	10,259
<b>Total (excluding Delta Lloyd as an associate)</b>	<b>120,672</b>	<b>10,617</b>	<b>1,582</b>	<b>132,871</b>
<b>Total % (excluding Delta Lloyd as an associate)</b>	<b>90.8%</b>	<b>8.0%</b>	<b>1.2%</b>	<b>100.0%</b>
<b>FY10 Total (excluding Delta Lloyd)</b>	118,517	8,936	519	127,972
<b>FY10 Total % (excluding Delta Lloyd)</b>	92.6%	7.0%	0.4%	100%

1. Within the group's statement of financial position, assets are recognised for deferred tax and current tax. The valuation basis of these assets does not directly fall within any of the categories outlined above. As such, these assets have been reported together with equity accounted within the analysis of the group's assets.

	Fair value £m	Amortised cost £m	Equity accounted/ tax assets <sup>1</sup> £m	Total £m
<b>Total assets – Shareholder assets 30 June 2011</b>				
Goodwill and acquired value of in-force business and intangible assets	—	5,732	—	5,732
Interests in joint ventures and associates (excluding Delta Lloyd as an associate)	—	—	666	666
Property and equipment	218	159	—	377
Investment property	1,152	—	—	1,152
Loans	14,740	3,868	—	18,608
Financial investments				
Debt securities	54,796	—	—	54,796
Equity securities	1,237	—	—	1,237
Other investments	2,077	—	—	2,077
Reinsurance assets	—	4,449	—	4,449
Deferred tax assets	—	—	138	138
Current tax assets	—	—	112	112
Receivables and other financial assets	—	6,259	—	6,259
Deferred acquisition costs and other assets	—	5,631	—	5,631
Prepayments and accrued income	—	1,684	—	1,684
Cash and cash equivalents	8,553	—	—	8,553
<b>Total (excluding Delta Lloyd as an associate)</b>	<b>82,773</b>	<b>27,782</b>	<b>916</b>	<b>111,471</b>
<b>Total % (excluding Delta Lloyd as an associate)</b>	<b>74.3%</b>	<b>24.9%</b>	<b>0.8%</b>	<b>100.0%</b>
<b>FY10 Total (excluding Delta Lloyd)</b>	80,176	26,591	1,590	108,357
<b>FY10 Total % (excluding Delta Lloyd)</b>	74.0%	24.5%	1.5%	100%

1. Within the group's statement of financial position, assets are recognised for deferred tax and current tax. The valuation basis of these assets does not directly fall within any of the categories outlined above. As such, these assets have been reported together with equity accounted within the analysis of the group's assets.



## D2 – Total assets – Valuation bases/fair value hierarchy continued

### Financial instruments (including derivatives and loans)

The Group classifies its investments as either financial assets at fair value through profit or loss (FV) or financial assets available for sale (AFS). The classification depends on the purpose for which the investments were acquired, and is determined by local management at initial recognition. The FV category has two subcategories – those that meet the definition as being held for trading and those the Group chooses to designate as FV (referred to in this section as “other than trading”).

In general, the FV category is used as, in most cases, our investment or risk management strategy is to manage our financial investments on a fair value basis. All securities in the FV category are classified as other than trading, except for non-hedge derivatives and a small amount of debt and equity securities, bought with the intention to resell in the short term, which are classified as trading. The AFS category is used where the relevant long-term business liability (including shareholders' funds) is passively managed.

Loans are carried at amortised cost, except for certain mortgage loans, where we have taken advantage of the fair value option under IAS 39 to present the mortgages, associated borrowings, other liabilities and derivative financial instruments at fair value, since they are managed together on a fair value basis. We believe this presentation provides more relevant information and eliminates any accounting mismatch that would otherwise arise from using different measurement bases for these four items.

### Fair value hierarchy

To provide further information on the valuation techniques we use to measure assets carried at fair value, we have categorised the measurement basis for assets carried at fair value into a ‘fair value hierarchy’ in accordance with the valuation inputs and consistent with IFRS7 *Financial Instruments: Disclosures*.

- Inputs to Level 1 fair values are quoted prices (unadjusted) in active markets for identical assets.
- Inputs to Level 2 fair values are inputs other than quoted prices included within Level 1 that are observable for the asset, either directly or indirectly. If the asset has a specified (contractual) term, a Level 2 input must be observable for substantially the full term of the asset.
- Inputs to Level 3 fair values are unobservable inputs for the asset. 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 at the measurement date (or market information for the inputs to any valuation models). As such, unobservable inputs reflect the assumptions the business unit considers that market participants would use in pricing the asset. Examples are certain private equity investments and private placements.

Fair values sourced from internal models are Level 2 only if substantially all the inputs are market observable. Otherwise fair values sourced from internal models are classified as Level 3.

The table below presents an analysis of investments according to fair value hierarchy:

Total assets 30 June 2011	Fair value hierarchy				Amortised cost £m	Less: Assets of operations classified as held for sale £m	Balance sheet total £m
	Level 1 £m	Level 2 £m	Level 3 £m	Sub-total fair value £m			
Investment properties	—	11,236	—	11,236	—	—	11,236
Loans	—	15,757	—	15,757	9,083	(12)	24,828
Debt securities	106,393	40,352	8,909	155,654	—	—	155,654
Equity securities	35,383	724	528	36,635	—	—	36,635
Other investments (including derivatives)	27,121	5,749	2,850	35,720	—	(3)	35,717
<b>Total</b>	<b>168,897</b>	<b>73,818</b>	<b>12,287</b>	<b>255,002</b>	<b>9,083</b>	<b>(15)</b>	<b>264,070</b>
<b>Total %</b>	<b>64.0%</b>	<b>28.0%</b>	<b>4.6%</b>	<b>96.6%</b>	<b>3.4%</b>	<b>—</b>	<b>100.0%</b>
<b>FY10 Total (excluding Delta Lloyd)</b>	163,302	71,153	11,830	246,285	8,352	—	254,637
<b>FY10 Total % (excluding Delta Lloyd)</b>	64.1%	28.0%	4.6%	96.7%	3.3%	—	100%

At 30 June 2011, the proportion of total financial investments, loans and investment properties classified as Level 1 in the fair value hierarchy were broadly level at 64.0% (31 December 2010: 64.1%). At Level 2 and Level 3 (fair valued using models with significant unobservable market parameters) financial investments, loans and investment properties have remained constant at 28.0% (31 December 2010: 28.0%) and 4.6% (31 December 2010: 4.6%), respectively.

### D3 – Analysis of asset quality

#### D3.1 – Goodwill, Acquired value of in-force business and intangible assets

The group's goodwill, acquired value of in-force business and the majority of other intangible assets have arisen from the group's business combinations. These business combinations include several bancassurance arrangements, which have resulted in £689 million of the total £3,107 million of goodwill and £797 million of the total £2,625 million of other intangible assets. These balances primarily represent the value of bancassurance distribution agreements acquired in these business combinations, and are before the deduction of goodwill and other intangibles held for sale.

#### D3.2 – Investment property

	30 June 2011				31 December 2010 Excluding Delta Lloyd			
	Fair value hierarchy			Total £m	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m		Level 1 £m	Level 2 £m	Level 3 £m	
<b>Investment property – Total</b>								
Lease to third parties under operating leases	—	11,224	—	11,224	—	10,936	—	10,936
Vacant investment property/held for capital appreciation	—	12	—	12	—	85	—	85
<b>Total</b>	—	11,236	—	11,236	—	11,021	—	11,021
<b>Total %</b>	—	100.0%	—	100.0%	—	100.0%	—	100.0%

	30 June 2011				31 December 2010 Excluding Delta Lloyd			
	Fair value hierarchy			Total £m	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m		Level 1 £m	Level 2 £m	Level 3 £m	
<b>Investment property – Shareholder assets</b>								
Lease to third parties under operating leases	—	1,140	—	1,140	—	485	—	485
Vacant investment property/held for capital appreciation	—	12	—	12	—	14	—	14
<b>Total</b>	—	1,152	—	1,152	—	499	—	499
<b>Total %</b>	—	100.0%	—	100.0%	—	100.0%	—	100.0%

90% (31 December 2010: 95%) of investment properties by value are held in unit-linked or participating funds. Shareholder exposure to investment properties is principally through investments in Property Limited Partnerships (PLPs). Depending on the Group's interest in these PLPs its investments are classified as either interest in joint ventures, unit trusts or consolidated as a subsidiary, in which case the underlying investment properties held by the PLP are included on the balance sheet. The increase in shareholder exposure to investment properties is a result of the consolidation of more PLPs at 30 June 2011 compared to 2010 and is entirely offset by a reduction in shareholder exposure to PLPs classified as joint ventures.

Investment properties are stated at their market values as assessed by qualified external valuers or by local qualified staff of the Group in overseas operations, all with recent relevant experience. Values are calculated using a discounted cash flow approach and are based on current rental income plus anticipated uplifts at the next rent review, assuming no future growth in rental income. This uplift and the discount rate are derived from rates implied by recent market transactions on similar properties. The basis of valuation therefore naturally falls to be classified as Level 2. Valuations are typically undertaken on a quarterly (and in some cases monthly) basis.

99% (31 December 2010: 99%) of investment properties by value are leased to third parties under operating leases, with the remainder either being vacant or held for capital appreciation.

## D3 – Analysis of asset quality continued

### D3.3 – Loans

The Group loan portfolio is principally made up of:

- Policy loans which are generally collateralised by a lien or charge over the underlying policy;
- Loans and advances to banks, which primarily relate to loans of cash collateral received in stock lending transactions. These loans are fully collateralised by other securities;
- Mortgage loans collateralised by property assets; and
- Other loans, which include loans and advances to customers of our banking business, and to brokers and intermediaries.

Loans with fixed maturities, including policy loans, mortgage loans (at amortised cost) and loans and advances to banks, are recognised when cash is advanced to borrowers. These loans are carried at their unpaid principal balances and adjusted for amortisation of premium or discount, non-refundable loan fees and related direct costs. These amounts are deferred and amortised over the life of the loan as an adjustment to loan yield using the effective interest rate method.

For certain mortgage loans, the Group has taken advantage of the revised fair value option under IAS 39 to present the mortgages, associated borrowings, other liabilities and derivative financial instruments at fair value, since they are managed together on a fair value basis. Due to the illiquid nature of these assets, where fair value accounting is applied, it is done so on a Level 2 basis.

Loans – Total assets 30 June 2011	United Kingdom £m	Aviva Europe £m	North America £m	Asia Pacific £m	Total £m
Policy loans	39	977	433	38	1,487
Loans and advances to banks	4,783	—	—	—	4,783
Mortgage loans	16,082	4	2,192	—	18,278
Other loans	177	15	98	2	292
<b>Total*</b>	<b>21,081</b>	<b>996</b>	<b>2,723</b>	<b>40</b>	<b>24,840</b>
<b>Total %</b>	<b>84.8%</b>	<b>4.0%</b>	<b>11.0%</b>	<b>0.2%</b>	<b>100.0%</b>
<b>FY10 Total (excluding Delta Lloyd)</b>	<b>20,407</b>	<b>977</b>	<b>2,529</b>	<b>40</b>	<b>23,953</b>
<b>FY10 Total % (excluding Delta Lloyd)</b>	<b>85.2%</b>	<b>4.1%</b>	<b>10.5%</b>	<b>0.2%</b>	<b>100.0%</b>

\*Includes £12 million classified as held for sale

Loans – Total shareholder assets 30 June 2011	United Kingdom £m	Aviva Europe £m	North America £m	Asia Pacific £m	Total £m
Policy loans	7	14	231	38	290
Loans and advances to banks	856	—	—	—	856
Mortgage loans	15,071	1	2,109	—	17,181
Other loans	177	4	98	2	281
<b>Total*</b>	<b>16,111</b>	<b>19</b>	<b>2,438</b>	<b>40</b>	<b>18,608</b>
<b>Total %</b>	<b>86.6%</b>	<b>0.1%</b>	<b>13.1%</b>	<b>0.2%</b>	<b>100.0%</b>
<b>FY10 Total (excluding Delta Lloyd)</b>	<b>15,899</b>	<b>18</b>	<b>2,256</b>	<b>40</b>	<b>18,213</b>
<b>FY10 Total % (excluding Delta Lloyd)</b>	<b>87.3%</b>	<b>0.1%</b>	<b>12.4%</b>	<b>0.2%</b>	<b>100.0%</b>

The value of the group's loan portfolio (including Policyholder, Participating Fund and Shareholder assets), at 30 June 2011 stood at £24.8 billion (31 December 2010 (excluding Delta Lloyd): £24.0 billion), an increase of £0.8 billion.

The total shareholder exposure to loans increased to £18.6 billion (31 December 2010 (excluding Delta Lloyd): £18.2 billion), and represented 75% of the total loan portfolio, with the remaining 25% in participating funds (£6.2 billion).

**D3 – Analysis of asset quality continued****D3.3 – Loans continued****Mortgage loans – Shareholder assets**

	United Kingdom £m	Aviva Europe £m	North America £m	Asia Pacific £m	Total £m
<b>30 June 2011</b>					
Non-securitised mortgage loans					
– Residential	—	1	—	—	1
– Equity release	2,092	—	—	—	2,092
– Commercial	8,166	—	2,109	—	10,275
– Healthcare	2,897	—	—	—	2,897
	13,155	1	2,109	—	15,265
Securitised mortgage loans	1,916	—	—	—	1,916
<b>Total</b>	<b>15,071</b>	<b>1</b>	<b>2,109</b>	<b>—</b>	<b>17,181</b>
<b>FY10 Total (excluding Delta Lloyd)</b>	<b>14,918</b>	<b>1</b>	<b>1,943</b>	<b>—</b>	<b>16,862</b>

Of the group's total loan portfolio (including Policyholder, Participating Fund and Shareholder assets), 74% (31 December 2010: 74%) is invested in mortgage loans. The group's mortgage loan portfolio spans several business units, primarily in the UK and USA, and across various sectors, including residential loans, commercial loans and government supported healthcare loans. Aviva shareholders are exposed predominantly to mortgage loans (accounting for 92% of total Shareholder asset loans). This section focuses on explaining the residual shareholder risk within these exposures.

Mortgage loan assets are divided into type of loan (residential, equity release, commercial, healthcare and securitised) and the regions in which they are held (predominantly United Kingdom and the United States). Each loan type and region has its own unique characteristic and composition.

**UK Residential**

The UK non-securitised residential mortgage portfolio has a total current value of £2.1 billion (31 December 2010: £2.0 billion). The increase from 2010 to 2011 relates to c£0.2bn of new loans and accrued interest offset by c£0.1bn of repayments and fair value losses. These mortgages are all in the form of equity release, whereby homeowners that usually own a fully paid up property will mortgage it to release cash equity. Due to the low relative levels of equity released in each property, they predominantly all currently have a Loan to Value ("LTV") of below 70%, and the average LTV across the portfolio is approximately 29% (31 December 2010: 26%). We therefore consider these mortgages to be low risk.

**Non-securitised mortgage loans – Commercial**

Gross exposure by loan to value and arrears

*United Kingdom – shareholder assets*

	>120% £m	115– 120% £m	110– 115% £m	105– 110% £m	100– 105% £m	95– 100% £m	90– 95% £m	80– 90% £m	70– 80% £m	<70% £m	Total £m
<b>30 June 2011</b>											
Not in arrears	211	19	119	1,195	2,117	827	595	1,548	1,008	307	7,946
0 – 3 months	—	—	—	—	—	—	—	3	—	—	3
3 – 6 months	11	—	—	—	—	—	6	35	—	—	52
6 – 12 months	9	43	7	—	—	—	—	59	1	—	119
> 12 months	12	—	—	—	—	23	3	—	—	8	46
<b>Total</b>	<b>243</b>	<b>62</b>	<b>126</b>	<b>1,195</b>	<b>2,117</b>	<b>850</b>	<b>604</b>	<b>1,645</b>	<b>1,009</b>	<b>315</b>	<b>8,166</b>

Of the total £9.2 billion of UK non-securitised commercial mortgage loans, held in both the shareholder and participating funds, £8.8 billion are held by our UK Life business to back annuity liabilities, and are stated on a fair value basis. The loan exposures for our UK Life business are calculated on a discounted cash flow basis, and include a risk adjustment through the use of Credit Risk Adjusted Value ("CRAV") methods. Aviva UK General Insurance hold the remaining £405 million of loans which are stated on an amortised cost basis and are subject to impairment review, using a fair value methodology calibrated to the UK Life approach, adjusted for specific portfolio characteristics.

Loan service collection ratios, a key indicator of mortgage portfolio performance, remained high during the period. Loan Interest Cover ("LIC"), which is defined as the annual net rental income (including rental deposits and less ground rent) divided by the annual loan interest service, remained stable at 1.32x due to low levels of material tenant defaults. In addition, mortgage LTV's were little changed over the period whilst the amount of uncovered exposure has reduced.

All loans in arrears have been assessed for impairment. Of the £220 million (31 December 2010: £246 million) value of loans in arrears, the interest and capital amount in arrears is only £19.5 million. The valuation allowance (including supplementary provisions) made in the UK for corporate bonds and commercial mortgages (including healthcare mortgages) carried at fair value equates to 66bps and 79bps respectively at 30 June 2011 (31 December 2010: 63bps and 78bps respectively). This is equivalent to a valuation allowance of £1.3 billion (31 December 2010: £1.3 billion) over the remaining term of the UK Life corporate bond and commercial mortgage portfolio which maintains a strong buffer against potential future losses. In addition, we hold £91 million (31 December 2010: £60 million) of impairment provisions in our UK General Insurance mortgage portfolio, which is carried at amortised cost.

## D3 – Analysis of asset quality continued

### D3.3 – Loans continued

The UK portfolio remains well diversified in terms of property type, location and tenants as well as the spread of loans written over time. The risks in commercial mortgages are addressed through several layers of protection with the mortgage risk profile being primarily driven by the ability of the underlying tenant rental income to cover loan interest and amortisation. Should any single tenant default on their rental payment, rental from other tenants backing the same loan often ensures the loan interest cover does not fall below 1.0x. Where there are multiple loans to a single borrower further protection may be achieved through cross-charging (or pooling) such that any single loan is also supported by rents received within other pool loans. Additionally, there may be support provided by the borrower of the loan itself and further loss mitigation from any general floating charge held over other assets within the borrower companies.

If the LIC cover falls below 1.0x and the borrower defaults then Aviva still retains the option of selling the security or restructuring the loans and benefiting from the protection of the collateral. A combination of these benefits and the high recovery levels afforded by property collateral (compared to corporate debt or other uncollateralised credit exposures) results in the economic exposure being significantly lower than the gross exposure reported above."

#### UK Primary Healthcare & PFI

Of the £11.1 billion (31 December 2010: £11.0 billion) UK non-securitised commercial and healthcare mortgage loans in the Shareholders Fund, £2.9 billion (31 December 2010: £2.8 billion) relates to primary healthcare & PFI businesses and is secured against General Practitioner premises, other primary health related premises or schools leased to government bodies. For all such loans, Government support is provided through either direct funding or reimbursement of rental payments to the tenants to meet income service and provide for the debt to be reduced substantially over the term of the loan. Although the loan principal is not Government guaranteed, the nature of these businesses and premises provides considerable comfort of an ongoing business model and low risk of default.

On a market value basis, we estimate the average LTV of these mortgages to be 90%, although as explained above, we do not consider this to be a key risk driver. Income support from the government bodies and the social need for these premises provide sustained income stability. Aviva therefore considers these loans to be low risk and uncorrelated with the strength of the UK or global economy.

#### Non-securitised mortgage loans – Commercial

Gross exposure by loan to value and arrears

North America – shareholder assets

30 June 2011	>120% £m	115– 120% £m	110– 115% £m	105– 110% £m	100– 105% £m	95– 100% £m	90– 95% £m	80– 90% £m	70– 80% £m	<70% £m	Total £m
Neither past due nor impaired	11	—	14	19	9	39	58	189	435	1,315	2,089
0 – 3 months	—	—	—	1	—	2	—	—	—	—	3
3 – 6 months	—	—	—	—	17	—	—	—	—	—	17
6 – 12 months	—	—	—	—	—	—	—	—	—	—	—
> 12 months	—	—	—	—	—	—	—	—	—	—	—
<b>Total</b>	<b>11</b>	<b>—</b>	<b>14</b>	<b>20</b>	<b>26</b>	<b>41</b>	<b>58</b>	<b>189</b>	<b>435</b>	<b>1,315</b>	<b>2,109</b>
<b>Total %</b>	<b>0.5%</b>	<b>0.0%</b>	<b>0.7%</b>	<b>0.9%</b>	<b>1.2%</b>	<b>1.9%</b>	<b>2.8%</b>	<b>9.0%</b>	<b>20.6%</b>	<b>62.4%</b>	<b>100.0%</b>

Aviva USA currently holds £2.1 billion (31 December 2010: £1.9 billion) of commercial mortgages under shareholder assets. Of these, 62% (31 December 2010: 59%) have LTV ratios of below 70%, and 92% (31 December 2010: 90%) have LTV ratios of below 90%. The mortgage portfolio currently has a total of £71 million (3% of portfolio) in principal balances where the LTV exceeds 100%. These mortgages continue to perform well, reflecting:

- Low underwriting LTVs (shall not exceed 80% at the time of issuance), and consequently a portfolio with an average LTV of 65% (31 December 2010: 65%);
- A highly diversified portfolio, with strong volumes in many states with more stable economies and related real estate values; and
- Strong LIC ratios, with 94% of the loans having an LIC above 1.4x, and 3% with LIC below 1.0x.

As at 30 June 2011, the actual amount of payment in arrears was £1.2 million.

#### Securitised mortgage loans

Of the total securitised residential mortgages (£1.9 billion), approximately £262 million of securities are still held by Aviva. The remaining securities have been sold to third parties, and therefore present little credit risk to Aviva. Securitised residential mortgages held are predominantly issued through vehicles in the UK.

**D3 – Analysis of asset quality continued****D3.4 – Financial investments**

Total Assets	30 June 2011				31 December 2010 Excluding Delta Lloyd			
	Cost/ amortised cost £m	Unrealised gains £m	Impairment and Unrealised losses £m	Fair value £m	Cost/ amortised cost £m	Unrealised gains £m	Impairment and Unrealised losses £m	Fair value £m
Debt securities	151,271	8,270	(3,887)	155,654	145,418	7,104	(3,671)	148,851
Equity securities	32,981	5,595	(1,941)	36,635	32,077	5,431	(2,038)	35,470
Other investments	34,732	1,868	(880)	35,720	33,225	2,733	(618)	35,340
<b>Total</b>	<b>218,984</b>	<b>15,733</b>	<b>(6,708)</b>	<b>228,009</b>	<b>210,720</b>	<b>15,268</b>	<b>(6,327)</b>	<b>219,661</b>

The table above is a summary of the cost/amortised cost, gross unrealised gains and losses and fair value of financial investments.

Aviva holds large quantities of high quality bonds, primarily to match our liability to make guaranteed payments to policyholders. Some credit risk is taken, partly to increase returns to policyholders and partly to optimise the risk/return profile for shareholders. The risks are consistent with the products we offer and the related investment mandates, and are in line with our risk appetite.

The Group also holds equities, the majority of which are held in participating funds or unit linked funds, where they form an integral part of the investment expectations of policyholders and follow well-defined investment mandates. Some equities are also held in shareholder funds and the staff pension schemes, where the holdings are designed to maximise long-term returns with an acceptable level of risk. The vast majority of equity investments are valued at quoted market prices.

**D3.4.1 – Debt securities**

Debt securities – Shareholder assets	30 June 2011			
	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m	
UK Government	2,125	—	—	2,125
Non-UK Government	6,048	4,149	117	10,314
Europe	4,901	273	—	5,174
North America	363	3,480	11	3,854
Asia Pacific & Other	784	396	106	1,286
Corporate bonds – Public utilities	2,298	2,723	17	5,038
Corporate convertible bonds	7	133	—	140
Other corporate bonds	9,903	20,534	444	30,881
Other	1,376	4,728	194	6,298
<b>Total</b>	<b>21,757</b>	<b>32,267</b>	<b>772</b>	<b>54,796</b>
<b>Total %</b>	<b>39.7%</b>	<b>58.9%</b>	<b>1.4%</b>	<b>100.0%</b>
<b>FY10 (excluding Delta Lloyd)</b>	21,040	32,285	845	54,170
<b>FY10 % (excluding Delta Lloyd)</b>	38.8%	59.6%	1.6%	100.0%

Only 1.4% (31 December 2010: 1.6%) of shareholder exposure to debt securities is fair valued using models with significant unobservable market parameters (classified as Fair Value Level 3). Where estimates are used, these are based on a combination of independent third party evidence and internally developed models, calibrated to market observable data where possible.

40% of shareholder exposure to debt securities is based on quoted prices in an active market and are therefore classified as Fair Value Level 1 (31 December 2010: 39%). The majority of the debt instruments held by our North American businesses are valued by independent pricing firms in accordance with usual market practice in that region and consistent with other companies operating in the region are classified as Level 2 in the Fair Value hierarchy. Excluding our North American businesses, the proportion of shareholder debt securities classified as Level 1 in the Fair Value hierarchy would be 84% (31 December 2010: 84%).

**D3 – Analysis of asset quality continued****D3.4 – Financial investments continued****D3.4.1 – Debt securities continued**

Debt securities – Shareholder assets 30 June 2011	External ratings					Non-rated £m	Total £m
	AAA £m	AA £m	A £m	BBB £m	Less than BBB £m		
<b>Government</b>							
UK Government	2,105	—	—	—	—	—	2,105
UK local authorities	4	—	—	—	—	16	20
Non-UK Government	5,278	3,308	1,130	365	163	70	10,314
	7,387	3,308	1,130	365	163	86	12,439
<b>Corporate</b>							
Public utilities	12	344	2,709	1,603	82	288	5,038
Convertibles and bonds with warrants	7	—	47	85	—	1	140
Other corporate bonds	1,538	4,947	10,214	8,647	1,385	4,150	30,881
	1,557	5,291	12,970	10,335	1,467	4,439	36,059
<b>Certificates of deposits</b>	—	161	160	117	108	20	566
<b>Structured</b>							
RMBS non-agency sub-prime	—	—	—	—	—	—	—
RMBS non-agency ALT A	12	5	6	11	131	—	165
RMBS non-agency prime	108	20	10	21	23	—	182
RMBS agency	1,378	—	—	—	—	—	1,378
	1,498	25	16	32	154	—	1,725
CMBS	1,280	215	368	144	211	3	2,221
ABS	687	167	148	77	30	23	1,132
CDO (including CLO)	—	—	—	1	107	—	108
ABCP	—	—	—	—	—	—	—
ABFRN	—	—	—	—	—	—	—
	1,967	382	516	222	348	26	3,461
Wrapped credit	—	186	85	83	40	56	450
Other	—	4	92	—	—	—	96
<b>Total</b>	<b>12,409</b>	<b>9,357</b>	<b>14,969</b>	<b>11,154</b>	<b>2,280</b>	<b>4,627</b>	<b>54,796</b>
<b>Total %</b>	<b>22.6%</b>	<b>17.1%</b>	<b>27.3%</b>	<b>20.4%</b>	<b>4.2%</b>	<b>8.4%</b>	<b>100.0%</b>
<b>FY10 (excluding Delta Lloyd)</b>	13,280	8,112	14,796	10,936	2,146	4,900	54,170
<b>FY10 % (excluding Delta Lloyd)</b>	24.5%	15.0%	27.3%	20.2%	4.0%	9.0%	100.0%

The overall quality of the book remains strong, despite the continuing downgrade activity by the major rating agencies during the first two quarters of 2011. 23% of shareholder exposure to debt securities is in government holdings (31 December 2010 (excluding Delta Lloyd): 23%). Our corporate debt securities portfolio represents 66% (31 December 2010 (excluding Delta Lloyd): 65%) of total shareholder debt securities.

The majority of non-rated corporate bonds are held by our businesses in the US and UK.

During the first two quarters of 2011, the proportion of our shareholder debt securities that are investment grade remained relatively stable at 87.4% (31 December 2010 (excluding Delta Lloyd): 87.0%). The remaining 12.6% of shareholder debt securities that do not have an external rating of BBB or higher can be split as follows:

- 4.2% are debt securities that are rated as below investment grade
- 3.7% are US private placements which are not rated by the major ratings agencies, but are rated as an average equivalent of A by the Securities Valuation Office of the National Association of Insurance Commissioners (NAIC), a US national regulatory agency
- 4.7% are not rated by the major rating agencies or the NAIC.

Of the securities not rated by an external agency or NAIC most are allocated an internal rating using a methodology largely consistent with that adopted by an external ratings agency, and are considered to be of investment grade credit quality; these include £2.1 billion (3.8% of total shareholder debt securities) 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.



## D3 – Analysis of asset quality continued

### D3.4 – Financial investments continued

The majority of the Residential Mortgage-Backed Securities (RMBS) are U.S. investments and over 86% of this exposure is backed by one of the U.S. Government Sponsored Entities (GSEs) including Fannie Mae and Freddie Mac which, under the conservatorship arrangements implemented in September 2008, have an implicit guarantee, although they are not expressly backed by the full faith and credit of the U.S. Government.

The Group has extremely limited exposure to CDOs, CLOs and 'Sub-prime' debt securities.

Asset backed securities (ABS) are held primarily by our US business. 95% of the Group's shareholder holdings in ABS are investment grade. ABS that either have a rating below BBB or are not rated represent less than 0.1% of shareholder exposure to debt securities.

#### D3.4.2 – Equity securities

	30 June 2011				31 December 2010 Excluding Delta Lloyd			
	Fair value hierarchy			Total £m	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m		Level 1 £m	Level 2 £m	Level 3 £m	
<b>Equity securities – Shareholder assets</b>								
Public utilities	27	—	—	27	22	—	—	22
Banks, trusts and insurance companies	186	84	367	637	201	78	352	631
Industrial miscellaneous and all other	247	—	10	257	247	2	9	258
Non-redeemable preferred shares	—	316	—	316	2	196	4	202
<b>Total</b>	<b>460</b>	<b>400</b>	<b>377</b>	<b>1,237</b>	<b>472</b>	<b>276</b>	<b>365</b>	<b>1,113</b>
<b>Total %</b>	<b>37.2%</b>	<b>32.3%</b>	<b>30.5%</b>	<b>100.0%</b>	<b>42.4%</b>	<b>24.8%</b>	<b>32.8%</b>	<b>100.0%</b>

37% of our shareholder exposure to equity securities is based on quoted prices in an active market and as such is classified as Level 1 (31 December 2010: 42%). The increase in absolute amount and relative proportion of Level 2 shareholder equities is principally a result of an increase of £112 million in non-redeemable preference shares held by our Canadian business unit, following a strategic decision to further invest in this asset class. As a result Level 2 shareholder equities as proportion of total shareholder equities have increased from 25% in 2010 to 32% at 30 June 2011.

Shareholder investments include a strategic holding in UniCredit and other Italian banks of £459 million (£287 million net of non-controlling interest share).

#### D3.4.3 – Other investments

	30 June 2011				31 December 2010 Excluding Delta Lloyd			
	Fair value hierarchy			Total £m	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m		Level 1 £m	Level 2 £m	Level 3 £m	
<b>Other investments – Shareholder assets</b>								
Unit trusts and other investment vehicles	205	140	300	645	275	202	262	739
Derivative financial instruments	65	1,060	13	1,138	67	899	10	976
Deposits with credit institutions	146	—	30	176	161	11	28	200
Minority holdings in property management undertakings	—	56	—	56	—	60	—	60
Other	11	—	51	62	9	2	51	62
<b>Total</b>	<b>427</b>	<b>1,256</b>	<b>394</b>	<b>2,077</b>	<b>512</b>	<b>1,174</b>	<b>351</b>	<b>2,037</b>
<b>Total %</b>	<b>20.5%</b>	<b>60.5%</b>	<b>19.0%</b>	<b>100.0%</b>	<b>25.1%</b>	<b>57.7%</b>	<b>17.2%</b>	<b>100.0%</b>

In total 81% (31 December 2010: 83%) of shareholder other investments, are classified as Level 1 or 2 in the fair value hierarchy. The unit trusts and other investment vehicles invest in a variety of assets with the majority of the value being invested in Property and Equity securities with a smaller portion being invested in Debt Securities. The relative increase in Level 2 and 3 other investments compared to Level 1 investments reflect asset allocation decisions made by individual businesses rather than transfers between fair value hierarchies. In the UK there has been a reduction in shareholder investments in unit trusts (predominately Level 1), while in the US there have been some further investments made in hedge funds (classified as Level 3). The increase in shareholder exposure to Level 2 derivative instruments arises in our US business, principally as a result of valuation increases on index options.

#### D3.4.4 – Available for sale investments – Impairments and duration and amount of unrealised losses

The total impairment expense for the six months to 30 June 2011 for AFS debt securities was £8 million (31 December 2010: £79 million) of which £7 million relates to Alt-A securities in our U.S. business, that are not yet in default. However, continued deterioration in market values and defaults on more junior tranches are considered indicators of impairment.

Total unrealised losses on available for sale debt securities at 30 June 2011 were £115 million (31 December 2010: £373 million) and are at their lowest level since the onset of the credit crisis in 2007.

Since the disposal of Delta Lloyd the Group no longer has any significant direct interest in equity securities classified as available for sale.



### D3 – Analysis of asset quality continued

#### D3.4 – Financial investments continued

##### D3.4.5 – Exposures to peripheral European countries

As with other disclosures in the analysis of assets section, all current and comparative figures stated below exclude Delta Lloyd. Included in our debt securities and other financial assets are exposures to peripheral European countries. All of these assets are held on a mark to market through the profit and loss basis under IAS 39, and therefore our balance sheet and profit and loss statement already reflect any reduction in value between the date of purchase and the balance sheet date.

We have limited exposure to Greek sovereign, financial or other counterparties, especially within our shareholder assets.

##### *Direct exposures to Greece (net of non-controlling interests, excluding policyholder assets)*

	Participating fund assets £m	Shareholder assets £m	Total £m
<b>30 June 2011</b>			
Sovereign	72	1	73
Financial	—	10	10
Non financial	3	4	7
<b>Total</b>	<b>75</b>	<b>15</b>	<b>90</b>

Our exposure to the governments (and local authorities and agencies) of Greece, Ireland, Portugal and Spain has reduced since FY10 and is detailed below. 98% (FY10: 73%) of our shareholder asset exposure to Greece, Ireland, Portugal and Spain countries arises from investment exposure in businesses domiciled in the respective countries.

##### *Direct sovereign exposures to Greece, Ireland, Portugal and Spain (net of non-controlling interests, excluding policyholder assets)*

	Participating fund assets £billion	Shareholder assets £billion	Total £billion
<b>30 June 2011</b>			
Greece	0.1	—	0.1
Ireland	0.4	0.2	0.6
Portugal	0.3	—	0.3
Spain	0.6	0.3	0.9
<b>Total Greece, Ireland, Portugal and Spain</b>	<b>1.4</b>	<b>0.5</b>	<b>1.9</b>
FY10 Greece, Ireland, Portugal and Spain	1.4	0.7	2.1

In addition, we hold £7.5 billion of Italian sovereign debt. The significant majority of this holding is within our participating funds where the risk to our shareholders is governed by the nature and extent of our participation within those funds.

##### *Direct sovereign exposures to Italy (net of non-controlling interests, excluding policyholder assets)*

	Participating fund assets £billion	Shareholder assets £billion	Total £billion
<b>30 June 2011</b>			
Italy	6.6	0.9	7.5

## D4 – Pension fund assets

In addition to the assets recognised directly on the group's balance sheet outlined in the disclosures above, the Group is also exposed to the "Plan assets" that are shown net of the present value of scheme liabilities within the IAS 19 net pension deficit. Pension surpluses are included within other assets and pension deficits are recognised within provisions in the group's consolidated statement of financial position.

Plan assets include insurance policies of £155 million in the UK scheme. The 2010 comparatives exclude insurance policies in the Dutch scheme which were considered non-transferable under the requirements of IAS 19 and so were excluded as assets of the relevant scheme in this table. Delta Lloyd ceased to be a subsidiary on 6 May 2011.

	30 June 2011				31 December 2010				
	United Kingdom £m	Ireland £m	Canada £m	Total £m	United Kingdom £m	Delta Lloyd £m	Ireland £m	Canada £m	Total £m
Equities	1,190	47	55	1,292	2,435	—	50	54	2,539
Bonds	6,604	236	148	6,988	5,533	—	202	150	5,885
Property	587	18	—	605	558	—	17	—	575
Other	1,180	107	11	1,298	835	7	118	12	972
<b>Total</b>	<b>9,561</b>	<b>408</b>	<b>214</b>	<b>10,183</b>	<b>9,361</b>	<b>7</b>	<b>387</b>	<b>216</b>	<b>9,971</b>

### Risk management and asset allocation strategy

The long-term investment objectives of the trustees and the employers are to limit the risk of the assets failing to meet the liabilities of the schemes over the long term, and to maximise returns consistent with an acceptable level of risk so as to control the long-term costs of these schemes. To meet these objectives, each scheme's assets are invested in a diversified portfolio, consisting primarily of equity and debt securities. These reflect the current long-term asset allocation ranges chosen, having regard to the structure of liabilities within the schemes.

### Main UK scheme

Both the Group and the trustees regularly review the asset/liability management of the main UK scheme. It is fully understood that, whilst the current asset mix is designed to produce appropriate long-term returns, this introduces a material risk of volatility in the scheme's surplus or deficit of assets compared with its liabilities.

The principal asset risks to which the scheme is exposed are:

- Equity market risk – the effect of equity market falls on the value of plan assets.
- Inflation risk – the effect of inflation rising faster than expected on the value of the plan liabilities.
- Interest rate risk – falling interest rates leading to an increase in liabilities significantly exceeding the increase in the value of assets.

There is also an exposure to currency risk where assets are not denominated in the same currency as the liabilities. The majority of this exposure has been removed by the use of hedging instruments.

### 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.

## D5 – Available funds

To ensure access to liquidity as and when needed, the Group maintains over £2.1 billion of undrawn committed central borrowing facilities with various highly rated banks, £0.75 billion of which is allocated to support the credit rating of Aviva plc's £2 billion commercial paper programme. The expiry profile of the undrawn committed central borrowing facilities is as follows:

	£m
Expiring in one year	800
Expiring beyond one year	1,315
<b>Total</b>	<b>2,115</b>

## D6 – Guarantees

As a normal part of their operating activities, various Group companies have given guarantees and options, including investment return guarantees, in respect of certain long-term insurance and fund management products.

For the UK Life with-profit business, provisions in respect of these guarantees and options are calculated on a market consistent basis, in which stochastic models are used to evaluate the level of risk (and additional cost) under a number of economic scenarios, which allow for the impact of volatility in both interest rates and equity prices. For UK Life non-profit business, provisions do not materially differ from those determined on a market consistent basis.

In all other businesses, provisions for guarantees and options are calculated on a local basis with sensitivity analysis undertaken where appropriate to assess the impact on provisioning levels of a movement in interest rates and equity levels (typically a 1% decrease in interest rates and 10% decline in equity markets).

# MCEV Supplement

## In this section

Page

Condensed consolidated income statement – MCEV basis	108
Condensed consolidated statement of comprehensive income – MCEV basis	110
Condensed consolidated statement of changes in equity – MCEV basis	110
Condensed consolidated statement of financial position – MCEV basis	111
Reconciliation of shareholders' equity on IFRS and MCEV bases	112
Reconciliation of IFRS total equity to MCEV net worth	112
Group MCEV analysis of earnings	113
E1 – Basis of preparation	114
E2 – Geographical analysis of life MCEV operating earnings	118
E3 – Geographical analysis of fund management operating earnings	126
E4 – Analysis of other operations and regional costs	126
E5 – Exceptional items	126
E6 – Segmentation of condensed consolidated statement of financial position	127
E7 – Analysis of life and pension earnings	128
E8 – Life MCEV operating earnings	130
E9 – Free surplus emergence	131
E10 – Maturity profile of business	132
E11 – Segmental analysis of life and related business embedded value	133
E12 – Risk allowance within present value of in-force (VIF)	134
E13 – Implied discount rates (IDR)	135
E14 – Summary of non-controlling interest in life and related businesses' MCEV results	136
E15 – Principal assumptions	136
E16 – Sensitivity analysis	142
<b>Statement of directors' responsibilities in respect of the Market Consistent Embedded Value (MCEV) basis</b>	
<b>Independent review report for the six months to 30 June 2011</b>	146

# MCEV financial statements

## Condensed consolidated income statement – MCEV basis

For the six month period ended 30 June 2011

6 months 2011 €m				6 months 2011 €m			Restated 6 months 2010 €m			Full year 2010 €m
Total		Continuing operations	Discontinued operations	Total	Continuing operations	Discontinued operations	Total	Continuing operations	Discontinued operations	Total
	Operating profit before tax attributable to shareholders' profits									
599	United Kingdom	521	—	521	559	—	559	1,085	—	1,085
1,052	Europe	645	270	915	893	157	1,050	2,013	83	2,096
156	North America	136	—	136	271	—	271	289	—	289
55	Asia Pacific	48	—	48	38	—	38	109	—	109
1,862	Long-term business	1,350	270	1,620	1,761	157	1,918	3,496	83	3,579
524	General insurance and health	455	1	456	444	81	525	904	146	1,050
21	Fund management <sup>1</sup>	9	9	18	—	13	13	31	94	125
(84)	Other operations and regional costs <sup>2</sup>	(80)	7	(73)	(61)	28	(33)	(171)	(24)	(195)
2,323	Regional Operating Profit	1,734	287	2,021	2,144	279	2,423	4,260	299	4,559
(76)	Corporate centre	(66)	—	(66)	(54)	—	(54)	(143)	—	(143)
(373)	Group debt costs and other interest	(321)	(4)	(325)	(327)	(11)	(338)	(644)	(12)	(656)
1,874	Operating profit before tax attributable to shareholders' profits (excluding Delta Lloyd as an associate)	1,347	283	1,630	1,763	268	2,031	3,473	287	3,760
40	Share of operating profit (before tax) of Delta Lloyd as an associate	35	—	35	—	—	—	—	—	—
1,914	Operating profit before tax attributable to shareholders' profits	1,382	283	1,665	1,763	268	2,031	3,473	287	3,760
(200)	Adjusted for the following: Economic variances on long-term business	142	(316)	(174)	9	(577)	(568)	(32)	(71)	(103)
(161)	Short-term fluctuation in return on investments on non-long-term business	(80)	(60)	(140)	26	(20)	6	(199)	(44)	(243)
(9)	Economic assumption changes on general insurance and health business	(8)	—	(8)	(64)	—	(64)	(61)	—	(61)
(23)	Impairment of goodwill	(20)	—	(20)	(2)	—	(2)	(23)	(1)	(24)
(54)	Amortisation and impairment of intangibles	(42)	(5)	(47)	(44)	(7)	(51)	(173)	(14)	(187)
170	Profit on the disposal of subsidiaries and associates	(11)	159	148	28	—	28	163	(4)	159
(69)	Integration and restructuring costs	(60)	—	(60)	(72)	—	(72)	(294)	(18)	(312)
—	Exceptional items	—	—	—	(10)	(50)	(60)	(303)	(125)	(428)
(346)	Non-operating items before tax (excluding Delta Lloyd as an associate)	(79)	(222)	(301)	(129)	(654)	(783)	(922)	(277)	(1,199)
(9)	Share of Delta Lloyd's non-operating items (before tax) as an associate	(8)	—	(8)	—	—	—	—	—	—
(355)	Non-operating items before tax	(87)	(222)	(309)	(129)	(654)	(783)	(922)	(277)	(1,199)
(8)	Share of Delta Lloyd's tax expense, as an associate	(7)	—	(7)	—	—	—	—	—	—
1,551	Profit / (loss) before tax attributable to shareholders' profits	1,288	61	1,349	1,634	(386)	1,248	2,551	10	2,561
(624)	Tax on operating profit	(469)	(74)	(543)	(546)	(70)	(616)	(1,044)	(79)	(1,123)
42	Tax on other activities	(61)	98	37	5	193	198	226	82	308
(582)		(530)	24	(506)	(541)	123	(418)	(818)	3	(815)
969	Profit / (loss) for the period	758	85	843	1,093	(263)	830	1,733	13	1,746

1. Excludes the proportion of the results of Aviva Investors fund management businesses and other fund management operations within the Group that arises from the provision of fund management services to our life businesses. These results are included within the life MCEV operating earnings consistent with the MCEV methodology.

2. Excludes the proportion of the results of subsidiaries providing services to the Life business. These results are included within the life MCEV operating earnings consistent with the MCEV methodology.

## Earnings per share – MCEV basis

6 months 2011	Earnings per share			6 months 2011			Restated 6 months 2010			Full year 2010
Total		Continuing operations	Discontinued operations	Total	Continuing operations	Discontinued operations	Total	Continuing operations	Discontinued operations	Total
	Operating earnings per share on an MCEV basis after tax, attributable to ordinary shareholders of Aviva plc									
<b>35.9p</b>	Basic (pence per share)	<b>27.3p</b>	<b>3.9p</b>	<b>31.2p</b>	37.7p	3.5p	41.2p	74.5p	2.8p	77.3p
<b>35.2p</b>	Diluted (pence per share)	<b>26.8p</b>	<b>3.8p</b>	<b>30.6p</b>	37.2p	3.4p	40.6p	73.2p	2.8p	76.0p
	Earnings after tax on an MCEV basis, attributable to ordinary shareholders of Aviva plc									
<b>34.8c</b>	Basic (pence per share)	<b>26.3p</b>	<b>4.0p</b>	<b>30.3p</b>	33.3p	(6.2p)	27.1p	58.2p	1.0p	59.2p
<b>34.3c</b>	Diluted (pence per share)	<b>25.8p</b>	<b>4.0p</b>	<b>29.8p</b>	32.9p	(6.1p)	26.8p	57.2p	1.0p	58.2p

Total Group MCEV operating profit before shareholder tax was £1,665 million (*HY10: £2,031 million*), a decrease of 18%. Within this total the long-term business operating profit before shareholder tax was £1,620 million (*HY10: £1,918 million*), a decrease of 16%.

**Condensed consolidated statement of comprehensive income – MCEV basis**

For the six month period ended 30 June 2011

6 months 2011 €m		6 months 2011 £m	Restated 6 months 2010 £m	Full year 2010 £m
<b>871</b>	<b>Profit for the period from continuing operations</b>	<b>758</b>	1,093	1,733
<b>98</b>	<b>Profit / (loss) for the period from discontinued operations</b>	<b>85</b>	(263)	13
<b>969</b>	<b>Profit for the period</b>	<b>843</b>	830	1,746
	<b>Other comprehensive income from continuing operations</b>			
<b>(69)</b>	Fair value losses on AFS securities, owner-occupied properties and hedging instruments	<b>(60)</b>	—	—
<b>25</b>	Actuarial gains /(losses) on pension schemes	<b>22</b>	(255)	1,078
<b>(34)</b>	Actuarial gains on pension schemes transferred to unallocated divisible surplus and other movements	<b>(30)</b>	—	(18)
<b>453</b>	Foreign exchange rate movements	<b>394</b>	(449)	(60)
<b>(13)</b>	Aggregate tax effect – shareholder tax	<b>(11)</b>	37	37
<b>362</b>	<b>Other comprehensive income, net of tax from continuing operations</b>	<b>315</b>	(667)	1,037
<b>151</b>	<b>Other comprehensive income, net of tax from discontinued operations</b>	<b>131</b>	(335)	(198)
<b>513</b>	<b>Other comprehensive income / (expense), net of tax</b>	<b>446</b>	(1,002)	839
<b>1,233</b>	<b>Total comprehensive income for the period from continuing operations</b>	<b>1,073</b>	426	2,770
<b>248</b>	<b>Total comprehensive income for the period from discontinued operations</b>	<b>216</b>	(598)	(185)
<b>1,481</b>	<b>Total comprehensive income / (expense) for the period</b>	<b>1,289</b>	(172)	2,585
	Attributable to:			
<b>1,309</b>	Equity shareholders of Aviva plc	<b>1,139</b>	95	2,714
<b>172</b>	Non-controlling interests	<b>150</b>	(267)	(129)
<b>1,481</b>		<b>1,289</b>	(172)	2,585

**Condensed consolidated statement of changes in equity – MCEV basis**

For the six month period ended 30 June 2011

6 months 2011 €m		6 months 2011 £m	Restated 6 months 2010 £m	Full year 2010 £m
<b>22,736</b>	<b>Balance at 1 January</b>	<b>20,462</b>	18,561	18,561
<b>1,431</b>	Total comprehensive (expense)/income for the year	<b>1,289</b>	(172)	2,585
<b>(511)</b>	Dividends and appropriations	<b>(460)</b>	(424)	(757)
—	Issues of share capital	—	—	—
<b>204</b>	Shares issued in lieu of dividends	<b>184</b>	151	209
<b>28</b>	Capital contributions from minority shareholders	<b>25</b>	1	42
<b>(351)</b>	Movements in ordinary shareholder equity following deconsolidation of Delta Lloyd	<b>(316)</b>	—	—
<b>(1,649)</b>	Movements in non controlling interests following deconsolidation of Delta Lloyd	<b>(1,484)</b>	—	—
<b>(84)</b>	Minority share of dividends declared in the year	<b>(76)</b>	(81)	(187)
—	Non-controlling interest in (disposed)/acquired subsidiaries	—	—	3
<b>(12)</b>	Changes in non-controlling interest in existing subsidiaries	<b>(11)</b>	(43)	(38)
—	Shares acquired by employee trusts	—	—	(14)
<b>20</b>	Reserves credit for equity compensation plans	<b>18</b>	36	41
—	Share issued under equity compensation plans	—	—	—
—	Aggregate tax effect – shareholder tax	—	—	17
<b>21,812</b>	<b>Total equity</b>	<b>19,631</b>	18,029	20,462
<b>(2,868)</b>	Non-controlling interests	<b>(2,580)</b>	(3,899)	(3,977)
<b>18,944</b>	<b>Balance at 30 June/31 December</b>	<b>17,051</b>	14,130	16,485

## Condensed consolidated statement of financial position – MCEV basis

As at 30 June 2011

30 June 2011 €m		30 June 2011 £m	Restated 30 June 2010 £m	31 December 2010 £m
<b>Assets</b>				
3,137	Goodwill	2,823	3,377	3,391
2,662	Acquired value of in-force business and intangible assets	2,396	2,642	2,806
4,918	Additional value of in-force long-term business <sup>1</sup>	4,426	2,251	2,737
2,393	Interests in, and loans to, joint ventures	2,154	1,871	1,994
1,586	Interests in, and loans to, associates	1,427	1,268	643
519	Property and equipment	467	686	750
12,484	Investment property	11,236	12,536	13,064
27,587	Loans	24,828	41,394	43,074
253,341	Financial investments	228,006	236,582	253,288
7,300	Reinsurance assets	6,570	7,271	7,084
151	Deferred tax assets	136	288	288
124	Current tax assets	112	269	198
10,300	Receivables	9,271	9,041	8,295
6,618	Deferred acquisition costs and other assets	5,956	5,365	6,072
3,767	Prepayments and accrued income	3,390	3,576	3,691
25,673	Cash and cash equivalents	23,106	28,446	25,455
809	Assets of operations classified as held for sale	728	6	14
<b>363,369</b>	<b>Total assets</b>	<b>327,032</b>	<b>356,869</b>	<b>372,844</b>
<b>Equity</b>				
796	Ordinary share capital	716	701	705
4,949	Capital reserves	4,455	4,469	4,465
1,815	Other reserves	1,634	1,951	2,069
(36)	Shares held by employee trusts	(32)	(68)	(32)
5,892	Retained earnings	5,303	3,971	5,411
4,206	Additional retained earnings on an MCEV basis <sup>1</sup>	3,785	1,916	2,677
<b>17,622</b>	<b>Equity attributable to ordinary shareholders of Aviva plc</b>	<b>15,861</b>	<b>12,940</b>	<b>15,295</b>
1,322	Preference share capital and direct capital instruments	1,190	1,190	1,190
2,868	Non-controlling interests <sup>1</sup>	2,580	3,899	3,977
<b>21,812</b>	<b>Total equity</b>	<b>19,631</b>	<b>18,029</b>	<b>20,462</b>
<b>Liabilities</b>				
166,128	Gross insurance liabilities	149,515	171,182	177,700
132,538	Gross liabilities for investment contracts	119,284	107,203	117,787
3,637	Unallocated divisible surplus	3,273	4,225	3,428
9,706	Net asset value attributable to unitholders	8,735	9,842	9,032
1,226	Provisions	1,103	4,003	2,943
1,296	Deferred tax liabilities	1,166	1,246	1,758
277	Current tax liabilities	249	455	314
9,869	Borrowings	8,882	14,127	14,949
13,366	Payables and other financial liabilities	12,029	22,800	20,292
3,133	Other liabilities	2,822	3,757	4,179
381	Liabilities of operations classified as held for sale	343	—	—
<b>341,557</b>	<b>Total liabilities</b>	<b>307,401</b>	<b>338,840</b>	<b>352,382</b>
<b>363,369</b>	<b>Total equity and liabilities</b>	<b>327,032</b>	<b>356,869</b>	<b>372,844</b>

The summarised consolidated statement of financial position presented above is unaltered from the corresponding IFRS summarised consolidated statement of financial position with the exception of the following:

1. Adding the excess of the Life MCEV, including non controlling interests, over the corresponding Life IFRS net assets represented as the additional value of in-force long-term business; corresponding item within equity represented by the additional retained profit on an MCEV basis; and, corresponding adjustments to non-controlling interests.

## Reconciliation of shareholders' equity on IFRS and MCEV bases

For the six month period to 30 June 2011

30 June 2011	IFRS £m	Adjustment £m	MCEV £m
Ordinary share capital	716	—	716
Capital reserves	4,455	—	4,455
Other reserves	1,729	(95)	1,634
Shares held by employee trusts	(32)	—	(32)
Retained earnings	5,303	—	5,303
Additional retained earnings on an MCEV basis	—	3,785	3,785
<b>Equity attributable to ordinary shareholders of Aviva plc</b>	<b>12,171</b>	<b>3,690</b>	<b>15,861</b>
Preference share capital	200	—	200
Direct capital instruments	990	—	990
Non-controlling interests	1,844	736	2,580
<b>Total equity</b>	<b>15,205</b>	<b>4,426</b>	<b>19,631</b>

30 June 2010	IFRS £m	Adjustment £m	Restated MCEV £m
Ordinary share capital	701	—	701
Capital reserves	4,469	—	4,469
Other reserves	1,978	(27)	1,951
Shares held by employee trusts	(68)	—	(68)
Retained earnings	3,971	—	3,971
Additional retained earnings on an MCEV basis	—	1,916	1,916
Equity attributable to ordinary shareholders of Aviva plc	11,051	1,889	12,940
Preference share capital	200	—	200
Direct capital instruments	990	—	990
Non-controlling interests	3,537	362	3,899
<b>Total equity</b>	<b>15,778</b>	<b>2,251</b>	<b>18,029</b>

## Reconciliation of IFRS total equity to MCEV net worth

For the six month period to 30 June 2011

	30 June 2011 £m	Restated 30 June 2010 £m	31 December 2010 £m
<b>Net assets on a statutory IFRS net basis</b>	<b>15,205</b>	15,778	17,725
Adjusting for general business and other net assets on a statutory IFRS net basis	350	1,952	1,331
<b>Life and related businesses net assets on a statutory IFRS net basis</b>	<b>15,555</b>	17,730	19,056
Goodwill and other intangibles	(2,378)	(2,593)	(2,356)
Acquired value of in-force business	(1,285)	(1,298)	(1,447)
Adjustment for share of joint ventures and associates	(5)	(370)	(120)
Adjustment for assets to regulatory value net of tax	(1,005)	(730)	(890)
Adjustment for DAC and DIR net of tax	(2,899)	(2,531)	(2,839)
Adjustment for differences in technical provisions	2,843	1,049	1,303
Other accounting and tax differences	(616)	316	(467)
<b>MCEV net worth</b>	<b>10,210</b>	11,573	12,240
MCEV value of in-force <sup>1</sup>	7,197	6,122	7,024
<b>MCEV<sup>2</sup></b>	<b>17,407</b>	17,695	19,264

1. Comprises PVFP of £9,878 million (30 June 2010: £9,008 million; 31 December 2010: £10,180 million), FC of £(758) million (30 June 2010: (866) million; 31 December 2010: £(882) million), CNHR of £(942) million (30 June 2010: (£765) million; 31 December 2010: £(1,070) million), and TVOG of £(981) million (30 June 2010: (£1,255) million; 31 December 2010: £(1,204) million).

2. Comprises embedded value of £15,557 million (30 June 2010: £14,529 million; 31 December 2010: £16,131 million) and non-controlling interest in long-term business assets of £1,850 million (30 June 2010: £3,166 million; 31 December 2010: £3,133 million).

Movements in the reconciling items during the period arise mainly from the deconsolidation of Delta Lloyd on 6<sup>th</sup> May and consequent removal of the Delta Lloyd life business from covered business.

The adjustment for assets to regulatory value and differences in technical provisions relate mainly to the US, reflecting differences between the IFRS and local solvency reserving basis. The DAC and DIR adjustment relates mainly to the UK and US.



## Group MCEV analysis of earnings

	Covered business <sup>1</sup> £m A	Non-covered but related to life business <sup>2</sup> £m B	Total life business <sup>3</sup> £m A+B	Non-covered relating to non-life £m C	Total non-covered business £m B+C	Total £m A+B+C
<b>30 June 2011</b>						
Opening Group MCEV	16,131	2,339	18,470	(1,985)	354	16,485
Operating MCEV earnings	956	—	956	(67)	(67)	889
Non-operating MCEV earnings	90	(41)	49	(74)	(115)	(25)
<b>Total MCEV earnings</b>	<b>1,046</b>	<b>(41)</b>	<b>1,005</b>	<b>(141)</b>	<b>(182)</b>	<b>864</b>
Other movements in IFRS net equity	—	23	23	(92)	(69)	(69)
Capital and dividend flows	(417)	—	(417)	(156)	(156)	(573)
Foreign exchange variances	316	23	339	5	28	344
Acquired/divested businesses	(1,519)	34	(1,485)	1,485	1,519	—
<b>Closing Group MCEV</b>	<b>15,557</b>	<b>2,378</b>	<b>17,935</b>	<b>(884)</b>	<b>1,494</b>	<b>17,051</b>
Preference share capital and direct capital instruments						(1,190)
<b>Equity attributable to ordinary shareholders of Aviva plc on an MCEV basis</b>						<b>15,861</b>

1. Covered business represents the business that the MCEV calculations cover, as detailed in the Basis of preparation note. The embedded value is presented net of non-controlling interests and tax.

2. Non-covered but related to life business represents the adjustments to the MCEV, including goodwill, to calculate the long-term business net assets on an MCEV basis. An analysis of net assets on an MCEV basis gross of non-controlling interests is provided in E6.

3. Net assets for the total life businesses on an MCEV basis presented net of non-controlling interests.

	Covered business <sup>1</sup> £m A	Non-covered but related to life business <sup>2</sup> £m B	Total life business <sup>3</sup> £m A+B	Non-covered relating to non-life £m C	Total non-covered business £m B+C	Total £m A+B+C
<b>Restated 30 June 2010</b>						
Opening Group MCEV	15,058	2,055	17,113	(2,831)	(776)	14,282
Operating MCEV earnings	1,132	—	1,132	15	15	1,147
Non-operating MCEV earnings	(246)	(25)	(271)	(117)	(142)	(388)
<b>Total MCEV earnings</b>	<b>886</b>	<b>(25)</b>	<b>861</b>	<b>(102)</b>	<b>(127)</b>	<b>759</b>
Other movements in IFRS net equity	—	45	45	(316)	(271)	(271)
Capital and dividend flows	(892)	—	(892)	646	646	(246)
Foreign exchange variances	(509)	(1)	(510)	116	115	(394)
Acquired/divested businesses	(14)	31	17	(17)	14	—
<b>Closing Group MCEV</b>	<b>14,529</b>	<b>2,105</b>	<b>16,634</b>	<b>(2,504)</b>	<b>(399)</b>	<b>14,130</b>
Preference share capital and direct capital instruments						(1,190)
<b>Equity attributable to ordinary shareholders of Aviva plc on an MCEV basis</b>						<b>12,940</b>

1. Covered business represents the business that the MCEV calculations cover, as detailed in the Basis of preparation note. The embedded value is presented net of non-controlling interests and tax.

2. Non-covered but related to life business represents the adjustments to the MCEV, including goodwill, to calculate the long-term business net assets on an MCEV basis. An analysis of net assets on an MCEV basis gross of non-controlling interests is provided in E6.

3. Net assets for the total life businesses on an MCEV basis presented net of non-controlling interests.

	Covered business <sup>1</sup> £m A	Non-covered but related to life business <sup>2</sup> £m B	Total life business <sup>3</sup> £m A+B	Non-covered relating to non-life £m C	Total non-covered business £m B+C	Total £m A+B+C
<b>31 December 2010</b>						
Opening Group MCEV	15,058	2,055	17,113	(2,831)	(776)	14,282
Operating MCEV earnings	2,199	—	2,199	12	12	2,211
Non-operating MCEV earnings	(361)	(63)	(424)	(79)	(142)	(503)
<b>Total MCEV earnings</b>	<b>1,838</b>	<b>(63)</b>	<b>1,775</b>	<b>(67)</b>	<b>(130)</b>	<b>1,708</b>
Other movements in IFRS net equity	—	525	525	536	1,061	1,061
Capital and dividend flows	(1,020)	—	(1,020)	509	509	(511)
Foreign exchange variances	(170)	2	(168)	113	115	(55)
Acquired/divested businesses	425	(180)	245	(245)	(425)	—
<b>Closing Group MCEV</b>	<b>16,131</b>	<b>2,339</b>	<b>18,470</b>	<b>(1,985)</b>	<b>354</b>	<b>16,485</b>
Preference share capital and direct capital instruments						(1,190)
<b>Equity attributable to ordinary shareholders of Aviva plc on an MCEV basis</b>						<b>15,295</b>

1. Covered business represents the business that the MCEV calculations cover, as detailed in the Basis of preparation note. The embedded value is presented net of non-controlling interests and tax.

2. Non-covered but related to life business represents the adjustments to the MCEV, including goodwill, to calculate the long-term business net assets on an MCEV basis. An analysis of net assets on an MCEV basis gross of non-controlling interests is provided in E6.

3. Net assets for the total life businesses on an MCEV basis presented net of non-controlling interests.

## E1 – Basis of preparation

The condensed consolidated income statement and condensed consolidated statement of financial position on pages 108 to 111 present the Group's results and financial position for the covered life and related businesses on the Market Consistent Embedded Value (MCEV) basis and for its non-covered businesses on the International Financial Reporting Standards (IFRS) basis. The MCEV methodology adopted is in accordance with the MCEV Principles published by the CFO Forum in October 2009.

The directors consider that the MCEV methodology gives useful insight into the drivers of financial performance of the Group's life and related businesses. This basis values future cash flows from assets consistently with market prices, including more explicit allowance for the impact of uncertainty in future investment returns and other risks. Embedded value is also consistent with the way pricing is assessed and the business is managed.

The results for our half year report have been reviewed by our auditors, Ernst & Young. Their report in respect of the half year report can be found on page 147.

### Covered business

The MCEV calculations cover the following lines of business: life insurance, long-term health and accident insurance, savings, pensions and annuity business written by our life insurance subsidiaries, including managed pension fund business and our share of certain life and related business written in our associated undertakings and joint ventures, as well as the equity release business written in the UK.

Covered business includes the Group's share of our joint ventures including our associated undertakings in India, China, Turkey, Malaysia, Taiwan and South Korea. In addition, the results of group companies providing significant administration, fund management and other services and of Group holding companies have been included to the extent that they relate to covered business. Together these businesses are referred to as "Life and related businesses".

Aviva's associate holding of Delta Lloyd is not included within covered business as MCEV is not used to manage Delta Lloyd. For 'Group' MCEV reporting, which includes general insurance and other non-covered business, Delta Lloyd is included on an IFRS basis.

### New business premiums

New business premiums include:

- premiums arising from the sale of new contracts during the period;
- non-contractual additional premiums; and
- expected renewals on new contracts and expected future contractual alterations to new contracts.

The Group's definition of new business under MCEV includes contracts that meet the definition of "non-participating investment" contracts under IFRS.

For products sold to individuals, premiums are considered to represent new business where a new contract has been signed, or where underwriting has been performed. Renewal premiums include contractual renewals, non-contractual variations that are reasonably predictable and recurrent single premiums that are pre-defined and reasonably predictable.

For Group products, new business includes new contracts and increases to aggregate premiums under existing contracts. Renewal premiums are based on the level of premium received during the reporting period and allow for premiums expected to be received beyond the expiry of any guaranteed premium rates.

### Life and pensions operating earnings

For life and pensions operating earnings, Aviva uses normalised investment returns. The use of asset risk premia reflects management's long-term expectations of asset returns in excess of the swap yield from investing in different asset classes.

The normalised investment return on equities and property has been calculated by reference to the 10 year swap rate in the relevant currency plus an appropriate risk premium. The expected return on bonds has been calculated by reference to the swap rate consistent with the duration of the backing assets in the relevant currency plus an appropriate risk margin (equivalent to the gross redemption yield less an allowance for defaults).

The expected existing business contribution (in excess of reference rate) is calculated using the implied discount rates (IDR), which itself is based on the normalised investment returns. The methodology applies the IDR to the Value of In Force (VIF) and Required Capital (RC) components of the MCEV and adds to this the total expected return for Free Surplus (FS) to derive the total expected return, in a manner consistent with that previously used under European Embedded Value reporting. This total is presented as the expected existing business contribution (reference rate), expected existing business contribution (in excess of reference rate) and expected return on shareholders' net worth (grossed up for tax for pre tax presentation), with only the excess contribution being impacted by the change. The change to expected returns has no impact on total return or on the closing balance sheet.

## E1 – Basis of preparation continued

### MCEV methodology

#### Overview

Under the MCEV methodology, profit is recognised as it is earned over the life of products defined within covered business. The total profit recognised over the lifetime of a policy is the same as under the IFRS basis of reporting, but the timing of recognition is different.

#### Calculation of the embedded value

The shareholders' interest in the life and related businesses is represented by the embedded value. The embedded value is the total of the net worth of the life and related businesses and the value of in-force covered business. Calculations are performed separately for each business and are based on the cash flows of that business, after allowing for both external and intra-Group reinsurance. Where one life business has an interest in another, the net worth of that business excludes the interest in the dependent company.

The embedded value is calculated on an after-tax basis applying current legislation and practice together with future known changes. Where gross results are presented, these have been calculated by grossing up post-tax results at the full rate of corporation tax for each country based on opening period tax rates, apart from the UK, where a 26% tax rate was used for 2011 for grossing up.

#### Net worth

The net worth is the market value of the shareholders' funds and the shareholders' interest in the surplus held in the non-profit component of the long-term business funds, determined on a statutory solvency basis and adjusted to add back any non-admissible assets, and consists of the required capital and free surplus.

Required capital is the market value of assets attributed to the covered business over and above that required to back liabilities for covered business, for which distribution to shareholders is restricted. Required capital is reported net of implicit items permitted on a local regulatory basis to cover minimum solvency margins which are assessed at a local entity level. The level of required capital for each business unit is generally set equal to the higher of:

- The level of capital at which the local regulator is empowered to take action;
- The capital requirement of the business unit under the group's economic capital requirements; and
- The target capital level of the business unit.

For Aviva US, the required capital is set at 325% of the NAIC Company Action Level in line with management targets and target credit ratings.

This methodology reflects the level of capital considered by the directors to be appropriate to manage the business, and includes any additional shareholder funds not available for distribution, such as the reattributed inherited estate in the UK. The same definition of required capital is used for both existing and new business.

The free surplus is the market value of any assets allocated to, but not required to support, the in-force covered business at the valuation date. The level of required capital across the business units expressed as a percentage of the EU minimum solvency margin (or equivalent) can be found in E15.

#### Value of in-force covered business (VIF)

The value of in-force covered business consists of the following components:

- present value of future profits;
- time value of financial options and guarantees;
- frictional costs of required capital; and
- cost of residual non-hedgeable risks.

#### Present value of future profits (PVFP)

This is the present value of the distributable profits to shareholders arising from the in-force covered business projected on a best estimate basis.

Distributable profits generally arise when they are released following actuarial valuations. These valuations are carried out in accordance with any local statutory requirements designed to ensure and demonstrate solvency in long-term business funds. Future distributable profits will depend on experience in a number of areas such as investment return, discontinuance rates, mortality, administration costs, as well as management and policyholder actions. Releases to shareholders arising in future years from the in-force covered business and associated required capital can be projected using assumptions of future experience.

Future profits are projected using best estimate non-economic assumptions and market consistent economic assumptions. In principle, each cash flow is discounted at a rate that appropriately reflects the riskiness of that cash flow, so higher risk cash flows are discounted at higher rates. In practice, the PVFP is calculated using the "certainty equivalent" approach, under which the reference rate is used for both the investment return and the discount rate. This approach ensures that asset cash flows are valued consistently with the market prices of assets without options and guarantees. Further information on the risk-free rates is given in note E15.

The PVFP includes the capitalised value of profits and losses arising from subsidiary companies providing administration, investment management and other services to the extent that they relate to covered business. This is referred to as the "look through" into service company expenses. In addition, expenses arising in holding companies that relate directly to acquiring or maintaining covered business have been allowed for. Where external companies provide services to the life and related businesses, their charges have been allowed for in the underlying projected cost base.

## E1 – Basis of preparation continued

### US capital solutions

Credit has been taken within the US embedded value, and value of new business, for the anticipated reduction in capital requirements based on management's intention to enact transactions which allow recognition of additional assets that can be held against certain reserves, reducing shareholder capital requirements. Similar transactions have been enacted for business written between 2006 and 2009.

### US new business tax

US new business has been valued on a standalone basis with tax applied at the full corporation rate and consequential movements in the value of the Deferred Tax Asset included as a variance within existing business operating return.

### Time value of financial options and guarantees (TVOG)

The PVFP calculation is based on a single (base) economic scenario; however, a single scenario cannot appropriately allow for the effect of certain product features. If an option or guarantee affects shareholder cash flows in the base scenario, the impact is included in the PVFP and is referred to as the intrinsic value of the option guarantee; however, future investment returns are uncertain and the actual impact on shareholder profits may be higher or lower. The value of in-force business needs to be adjusted for the impact of the range of potential future outcomes. Stochastic modelling techniques can be used to assess the impact of potential future outcomes, and the difference between the intrinsic value and the total stochastic value is referred to as the time value of the option or guarantee.

Stochastic modelling typically involves projecting the future cash flows of the business under thousands of economic scenarios that are representative of the possible future outcomes for market variables such as interest rates and equity returns. Under a market consistent approach, the economic scenarios generated reflect the market's tendency towards risk aversion. Allowance is made, where appropriate, for the effect of management and/or policyholder actions in different economic conditions on future assumptions such as asset mix, bonus rates and surrender rates.

Stochastic models are calibrated to market yield curves and volatility levels at the valuation date. Tests are performed to confirm that the scenarios used produce results that replicate the market price of traded instruments.

Where evidence exists that persistency rates are linked to economic scenarios, dynamic lapse assumptions are set that vary depending on the individual scenarios. This cost is included in the TVOG. Dynamic lapses are modelled for parts of the UK, US and French businesses. Asymmetries in non-economic assumptions that are linked to economic scenarios, but that have insufficient evidence for credible dynamic assumptions, are allowed for within mean best estimate assumptions.

### Frictional costs of required capital

The additional costs to a shareholder of holding the assets backing required capital within an insurance company rather than directly in the market are called frictional costs. They are explicitly deducted from the PVFP. The additional costs allowed for are the taxation costs and any additional investment expenses on the assets backing the required capital. The level of required capital is set out above in the net worth section.

Frictional costs are calculated by projecting forwards the future levels of required capital. Tax on investment return and investment expenses are payable on the assets backing required capital, up until the point that they are released to shareholders.

### Cost of residual non-hedgeable risks (CNHR)

The cost of residual non-hedgeable risks (CNHR) covers risks not already allowed for in the time value of options and guarantees or the PVFP. The allowance includes the impact of both non-hedgeable financial and non-financial risks. The most significant risk not included in the PVFP or TVOG is operational risk.

Asymmetric risks allowed for in the TVOG or PVFP are described earlier in the basis of preparation. No allowance has been made within the cost of non-hedgeable risk for symmetrical risks as these are diversifiable by investors.

### Participating business

Future regular bonuses on participating business are projected in a manner consistent with current bonus rates and expected future market-consistent returns on assets deemed to back the policies.

For with-profit funds in the UK and Ireland, for the purpose of recognising the value of the estate, it is assumed that terminal bonuses are increased to exhaust all of the assets in the fund over the future lifetime of the in-force with-profit policies. However, under stochastic modelling there may be some extreme economic scenarios when the total assets in the Group's with-profit funds are not sufficient to pay all policyholder claims. The average additional shareholder cost arising from this shortfall has been included in the TVOG.

For profit sharing business in continental Europe, where policy benefits and shareholder value depend on the timing of realising gains, the apportionment of unrealised gains between policyholders and shareholders reflect contractual requirements as well as existing practice. Under certain economic scenarios where additional shareholder injections are required to meet policyholder payments, the average additional cost has been included in the TVOG.

## E1 – Basis of preparation continued

The embedded value of the US spread-based products anticipates the application of management discretion allowed for contractually within the policies, subject to contractual guarantees. This includes the ability to change the crediting rates and indexed strategies available within the policy. Consideration is taken of the economic environment assumed in future projections and returns in excess of the reference rate are not assumed. Anticipated market and policyholder reaction to management action has been considered. The anticipated management action is consistent with current decision rules and has been approved and signed off by management and legal counsel.

### Consolidation adjustments

The effect of transactions between group life companies such as loans and reinsurance arrangements have been included in the results split by territory in a consistent manner. No elimination is required on consolidation.

As the MCEV methodology incorporates the impact of profits and losses arising from subsidiary companies providing administration, investment management and other services to the Group's life companies, the equivalent profits and losses have been removed from the relevant segment (non-insurance or fund management) and are instead included within the results of life and related businesses. In addition, the underlying basis of calculation for these profits has changed from the IFRS basis to the MCEV basis.

The capitalised value of the future profits and losses from such service companies are included in the embedded value and value of new business calculations for the relevant business, but the net assets (representing historical profits and other amounts) remain under non-insurance or fund management. In order to reconcile the profits arising in the financial period within each segment with the assets on the opening and closing statement of financial positions, a transfer of IFRS profits from life and related business to the appropriate segment is deemed to occur. An equivalent approach has been adopted for expenses within our holding companies. The assessments of goodwill, intangibles and pension schemes relating to life insurance business utilise the IFRS measurement basis.

### Exchange rates

The Group's principal overseas operations during the period were located within the Eurozone and the United States.

The results and cash flows of these operations have been translated at the average rates for that period and the assets and liabilities have been translated at the period end rates. Please refer to note A2 on page 39 of the IFRS financial statements.

### Restatement

During 2010, the Group's Dutch subsidiary, Delta Lloyd, reviewed its approach to the scope of business using adjusted swap rates (also known as a 'liquidity premium'). Delta Lloyd's approach was aligned with the Quantitative Impact Study (QIS) 5 methodology set out as part of Solvency II developments. The swap rate adjustment is applied in full to immediate annuity type contracts (as previously). In addition, 75% of the liquidity premium is applied to participating contracts and 50% to all other life covered business.

Results for HY 2010 have been restated on a consistent basis leading to an increase in the opening 2010 Embedded Value of £57 million, which was restated at FY 2010, and an increase in closing HY 2010 Embedded Value of £19 million, all net of non-controlling interests. The impact on value of new business and expected return are not material. The movement in the restatement (£38) million) is reported in economic variances.

### Impact of Delta Lloyd disposal

On 6 May 2011, the Group sold 25 million shares in Delta Lloyd N.V. ("Delta Lloyd") (the Group's Dutch long-term insurance, general insurance and fund management subsidiary), reducing our holding to approximately 43% of Delta Lloyd's ordinary share capital.

In line with IFRS, up to the date of partial disposal, Delta Lloyd has been presented as a discontinued operation. Following the partial disposal, when Delta Lloyd became an associate of Aviva, Delta Lloyd has been removed from covered business as it is not managed by either Aviva or Delta Lloyd on an MCEV basis. The impact on closing MCEV is a reduction of £1,519 million.

## E2 – Geographical analysis of life MCEV operating earnings

	6 months 2011						
	United Kingdom £m	Aviva Europe £m	North America £m	Asia Pacific £m	Continuing operations £m	Discontinued operations £m	Total £m
Value of new business	190	231	(86)	34	369	1	370
Earnings from existing business:							
– expected returns at the reference rate	79	138	33	11	261	19	280
– expected returns in excess of the reference rate	190	170	198	4	562	109	671
– expected returns	269	308	231	15	823	128	951
– experience variances	(10)	33	(55)	(7)	(39)	3	(36)
– operating assumption changes	1	(17)	(14)	5	(25)	99	74
Expected return on shareholders' net worth	80	102	40	7	229	41	270
Other operating variances	(9)	(12)	20	(6)	(7)	(2)	(9)
<b>Operating earnings before tax</b>	<b>521</b>	<b>645</b>	<b>136</b>	<b>48</b>	<b>1,350</b>	<b>270</b>	<b>1,620</b>

	6 months 2010						
	United Kingdom £m	Aviva Europe £m	North America £m	Asia Pacific £m	Continuing operations £m	Discontinued operations £m	Total £m
Value of new business	176	285	4	18	483	(58)	425
Earnings from existing business:							
– expected returns at the reference rate	78	129	34	6	247	26	273
– expected returns in excess of the reference rate	219	175	179	17	590	98	688
– expected returns	297	304	213	23	837	124	961
– experience variances	(8)	62	8	(12)	50	(25)	25
– operating assumption changes	2	(13)	—	(2)	(13)	—	(13)
Expected return on shareholders' net worth	87	79	40	6	212	50	262
Other operating variances	5	176	6	5	192	66	258
<b>Operating earnings before tax</b>	<b>559</b>	<b>893</b>	<b>271</b>	<b>38</b>	<b>1,761</b>	<b>157</b>	<b>1,918</b>

	Full year 2010						
	United Kingdom £m	Aviva Europe £m	North America £m	Asia Pacific £m	Continuing operations £m	Discontinued operations £m	Total £m
Value of new business	354	504	(194)	52	716	(92)	624
Earnings from existing business:							
– expected returns at the reference rate	169	244	20	20	453	49	502
– expected returns in excess of the reference rate	425	357	401	25	1,208	181	1,389
– expected returns	594	601	421	45	1,661	230	1,891
– experience variances	(20)	147	(7)	(28)	92	(16)	76
– operating assumption changes	(18)	338	(146)	13	187	(320)	(133)
Expected return on shareholders' net worth	179	152	82	12	425	124	549
Other operating variances	(4)	271	133	15	415	157	572
<b>Operating earnings before tax</b>	<b>1,085</b>	<b>2,013</b>	<b>289</b>	<b>109</b>	<b>3,496</b>	<b>83</b>	<b>3,579</b>

### United Kingdom

**MCEV operating earnings** were 7% lower at £521 million (*HY10: £559 million*) driven by a reduced expected return partially offset by an increased value of new business.

**Value of new business** grew 8% to £190 million (*HY10: £176 million*), reflecting higher sales of Group Personal Pensions and Annuities, alongside our continued focus on value maximisation through active management of our new business mix, robust cost control and pricing discipline.

**Total expected return** decreased to £349 million (*HY10: £384 million*), as a result of lower implied discount rate, albeit on higher embedded value.

**Experience variances** of £10 million adverse (*HY10: £8 million adverse*) reflect adverse pensions persistency experience driven by current economic conditions partially offset by favourable mortality experience.

**Other operating variances** of £9 million adverse (*HY10: £5 million positive*) reflect the finalisation of previous years regulatory returns.

## E2 – Geographical analysis of life MCEV operating earnings continued

### Aviva Europe

**MCEV operating earnings** decreased 28% to £645 million (*HY10: £893 million*) predominantly because the prior period included £188 million for modelling refinements recorded in France. Additionally our focus on value over volume has driven life and pensions sales down with a corresponding decline in the value of new business whilst improving margin to 3.7% (*HY10: 3.6%*).

**Value of new business** decreased 19% to £231 million (*HY10: £285 million*) following lower sales in Spain and the management action to reduce sales of profit-sharing products in Italy and, to a lesser extent, in France.

**Total expected return** increased 7% to £410 million (*HY10: £383 million*) resulting from increased yields on shareholders' net worth.

**Experience variances** were positive at £33 million (*HY10: £62 million*) following positive mortality and other experience in France and Poland.

**Assumption changes** of negative £17 million (*HY10: £13 million adverse*) reflects strengthening of expense assumptions in Ireland partially offset by a provision release in Poland.

**Other operating variances** were negative at £12 million (*HY10: £176 million positive*). The significant variance from the prior period is accounted for in the £188 million of prior period modelling refinements that were recorded in France.

### North America

**MCEV operating earnings** decreased to £136 million (*HY10: £271 million*) due to lower value of new business combined with lower earnings from existing business. The decline in in-force earnings was primarily driven by unfavourable mortality and spread experience variances.

**Value of new business** of negative £86 million (*HY10: £4 million positive*) reflected adverse economic movements from lower risk-free rates and adverse impacts of assumption changes from 2010, partially offset by the benefits of pricing and product management actions.

**Total expected return** increased to £271 million (*HY10: £253 million*) reflecting the growing book of existing business.

**Operating experience and assumption changes** on existing business were £69 million adverse (*HY10: £8 million favourable*) reflecting higher mortality and unfavourable spread variances.

**Other operating variances** were £20 million favourable (*HY10: £6 million favourable*) reflecting modelling refinements offset by the marginal impact of new business on the value of deferred tax losses.

### Asia Pacific

**MCEV operating earnings** were 26% higher at £48 million (*HY10: £38 million*) as higher value of new business was partly offset by adverse other operating variances.

**Value of new business** was 89% higher at £34 million (*HY10: £18 million*), reflecting improved product mix and volumes.

**Total expected return** was £22 million (*HY10: £29 million*), as a result of lower implied discount rates.

**Operating experience variances, other operating variances and assumption changes** on existing business of £8 million unfavourable (*HY10: £9 million unfavourable*), is relatively unchanged.



## E2 – Geographical analysis of life MCEV operating earnings continued

Gross of tax and non-controlling interests 30 June 2011	UK £m	France £m	Ireland £m	Italy £m	Poland £m	Spain £m	Other Europe £m	Aviva Europe £m	North America £m	Asia Pacific £m	Continuing operations £m	Discontinued operations £m	Total £m
Value of new business	190	97	2	50	20	49	13	231	(86)	34	369	1	370
Earnings from existing business													
– expected existing business contribution (reference rate)	79	57	8	12	36	16	9	138	33	11	261	19	280
– expected existing business contribution (in excess of reference rate)	190	71	12	35	12	37	3	170	198	4	562	109	671
Experience variances													
– maintenance expense	12	(3)	(4)	(1)	3	—	3	(2)	1	—	11	(1)	10
– project and other related expenses	(10)	(4)	—	—	—	—	(2)	(6)	(5)	(1)	(22)	4	(18)
– mortality/morbidity <sup>1</sup>	4	19	(3)	5	5	(7)	3	22	(18)	6	14	(8)	6
– lapses <sup>2</sup>	(14)	3	(5)	(3)	—	—	—	(5)	(5)	(10)	(34)	(1)	(35)
– other <sup>3</sup>	(2)	14	(4)	5	6	—	3	24	(28)	(2)	(8)	9	1
	(10)	29	(16)	6	14	(7)	7	33	(55)	(7)	(39)	3	(36)
Operating assumption changes:													
– maintenance expense <sup>4</sup>	—	—	(26)	—	11	—	2	(13)	—	5	(8)	100	92
– project and other related expenses	—	—	—	—	—	—	—	—	—	—	—	—	—
– mortality/morbidity	—	—	—	—	—	—	—	—	—	1	1	(1)	—
– lapses <sup>5</sup>	—	—	—	—	—	—	(4)	(4)	(14)	(1)	(19)	—	(19)
– other	1	—	—	—	—	—	—	—	—	—	1	—	1
	1	—	(26)	—	11	—	(2)	(17)	(14)	5	(25)	99	74
Expected return on shareholders' net worth	80	40	14	23	6	16	3	102	40	7	229	41	270
Other operating variances <sup>6</sup>	(9)	1	(3)	4	(1)	—	(13)	(12)	20	(6)	(7)	(2)	(9)
<b>Earnings before tax and non-controlling interests</b>	<b>521</b>	<b>295</b>	<b>(9)</b>	<b>130</b>	<b>98</b>	<b>111</b>	<b>20</b>	<b>645</b>	<b>136</b>	<b>48</b>	<b>1,350</b>	<b>270</b>	<b>1,620</b>

1. Mortality experience continues to be better than the assumption set across a number of our businesses, most notably in France. Adverse experience reflects normal volatility in mortality and increased retention limits in the US.

2. Persistency experience remains volatile across most of our businesses, in part reflecting the wider economic circumstances. Asia reflects an accumulation of small adverse experience across businesses.

3. Other experience includes positive tax variances in France and adverse spread variance in the US.

4. Maintenance expense assumptions reflect the adverse impact of reallocating expenses from acquisition to maintenance in Ireland, provision release in Poland and the benefits of restructuring in Delta Lloyd.

5. Persistency assumptions have been updated in a number of businesses, including refinement of 2010 assumptions in the US.

6. Other operating variances for the US relate to modelling enhancements offset by the marginal impact of new business on the value of deferred tax losses, and in Other Europe, management action to improve persistency.



## E2 – Geographical analysis of life MCEV operating earnings continued

Gross of tax and non-controlling interests 30 June 2010	UK £m	France £m	Ireland £m	Italy £m	Poland £m	Spain £m	Other Europe £m	Aviva Europe £m	North America £m	Asia Pacific £m	Continuing operations £m	Discontinued operations £m	Total £m
Value of new business	176	102	1	84	20	66	12	285	4	18	483	(58)	425
Earnings from existing business													
– expected existing business contribution (reference rate)	78	53	6	8	37	16	9	129	34	6	247	26	273
– expected existing business contribution (in excess of reference rate)	219	90	16	18	14	36	1	175	179	17	590	98	688
Experience variances													
– maintenance expense <sup>1</sup>	(2)	(12)	—	1	5	4	2	—	—	—	(2)	(15)	(17)
– project and other related expenses	(6)	—	—	—	—	—	(2)	(2)	(8)	—	(16)	(1)	(17)
– mortality/morbidity <sup>2</sup>	12	22	5	1	5	(5)	2	30	9	3	54	3	57
– lapses <sup>3</sup>	(10)	18	(6)	1	—	(13)	(1)	(1)	(1)	(14)	(26)	4	(22)
– other <sup>4</sup>	(2)	6	10	6	14	—	(1)	35	8	(1)	40	(16)	24
	(8)	34	9	9	24	(14)	—	62	8	(12)	50	(25)	25
Operating assumption changes:													
– maintenance expense <sup>5</sup>	95	—	4	—	—	—	—	4	—	3	102	—	102
– project and other related expenses <sup>5</sup>	(89)	—	—	—	—	—	—	—	—	—	(89)	—	(89)
– mortality/morbidity	—	—	—	—	—	—	—	—	—	—	—	—	—
– lapses <sup>6</sup>	—	—	—	—	—	(17)	—	(17)	—	(3)	(20)	—	(20)
– other	(4)	—	—	—	—	—	—	—	—	(2)	(6)	—	(6)
	2	—	4	—	—	(17)	—	(13)	—	(2)	(13)	—	(13)
Expected return on shareholders' net worth	87	27	8	27	5	9	3	79	40	6	212	50	262
Other operating variances <sup>7</sup>	5	188	(3)	—	(1)	(1)	(7)	176	6	5	192	66	258
<b>Earnings before tax and non-controlling interests</b>	<b>559</b>	<b>494</b>	<b>41</b>	<b>146</b>	<b>99</b>	<b>95</b>	<b>18</b>	<b>893</b>	<b>271</b>	<b>38</b>	<b>1,761</b>	<b>157</b>	<b>1,918</b>

1. Adverse expense experience occurs across several countries, partly offset by favourable experience in Poland.

2. Mortality experience continues to be better than the assumptions set across a number of our businesses, most notably in France and the UK annuity business.

3. Persistency experience remains volatile across most of our businesses, in part reflecting the wider economic circumstances. In France, persistency experience reflects a release of the short term provision.

4. Other experience relates to a number of smaller items within various business including a reduction in the allowance for non hedgeable risk in Poland. In the USA, there were positive impacts from spread variances.

5. For UK, the expense assumptions include a reallocation of provisions in the service company, better reflecting the expected future allocation of expenses. The impact in Ireland reflected the benefit of a release of prudent regulatory reserves.

6. Persistency assumptions have been strengthened in Spain.

7. Other operating variances for France relate to modelling changes, particularly relating to the time value of options and guarantees. In Delta Lloyd, modelling changes include impacts related to commercial mortgages partly offset by changes to group pension business.

## E2 – Geographical analysis of life MCEV operating earnings continued

Gross of tax and non-controlling interests 31 December 2010	UK £m	France £m	Ireland £m	Italy £m	Poland £m	Spain £m	Other Europe £m	Aviva Europe £m	North America £m	Asia Pacific £m	Continuing operations £m	Discontinued operations £m	Total £m
Value of new business	354	175	1	142	40	128	18	504	(194)	52	716	(92)	624
Earnings from existing business													
– expected existing business contribution (reference rate)	169	98	12	13	74	34	13	244	20	20	453	49	502
– expected existing business contribution (in excess of reference rate)	425	183	30	34	25	76	9	357	401	25	1,208	181	1,389
Experience variances													
– maintenance expense <sup>1</sup>	12	(25)	6	(11)	5	(1)	5	(21)	(16)	(2)	(27)	(21)	(48)
– project and other related expenses <sup>1</sup>	(8)	(5)	(2)	—	—	(2)	(5)	(14)	(18)	(3)	(43)	(4)	(47)
– mortality/morbidity <sup>2</sup>	23	27	3	(4)	13	2	3	44	(7)	9	69	13	82
– lapses <sup>3</sup>	(29)	27	(10)	18	(1)	(11)	(11)	12	(3)	(27)	(47)	5	(42)
– other <sup>4</sup>	(18)	93	(4)	12	14	3	8	126	37	(5)	140	(9)	131
	(20)	117	(7)	15	31	(9)	—	147	(7)	(28)	92	(16)	76
Operating assumption changes:													
– maintenance expense <sup>5</sup>	83	31	(3)	(11)	140	132	—	289	(88)	8	292	220	512
– project and other related expenses <sup>5</sup>	(92)	—	—	—	—	—	—	—	—	—	(92)	(6)	(98)
– mortality/morbidity <sup>6</sup>	2	57	7	1	7	(2)	—	70	(64)	17	25	(470)	(445)
– lapses <sup>7</sup>	(3)	(12)	(17)	39	13	(49)	(7)	(33)	6	(12)	(42)	(52)	(94)
– other	(8)	4	—	(2)	8	—	2	12	—	—	4	(12)	(8)
	(18)	80	(13)	27	168	81	(5)	338	(146)	13	187	(320)	(133)
Expected return on shareholders' net worth	179	47	20	50	9	18	8	152	82	12	425	124	549
Other operating variances <sup>8</sup>	(4)	271	(6)	(15)	30	(9)	—	271	133	15	415	157	572
Earnings before tax and non-controlling interests	1,085	971	37	266	377	319	43	2,013	289	109	3,496	83	3,579

1. Adverse expense experience occurred across a number of businesses.

2. Mortality experience continues to be better than the assumption set across a number of our businesses, most notably in France and the UK Annuity business.

3. Persistency experience remains volatile across most of our businesses, in part reflecting the wider economic circumstances. In France, persistency experience reflects a release of the short-term provision.

4. Other experience includes, in France, the benefit from policyholders switching to unit linked funds, and, in the USA favourable spread experience.

5. Favourable maintenance expense assumptions reflect the benefit of the shared service centre in Spain, together with the release of margins in Spain, related to bancassurance joint venture governance costs, and Poland. In the UK, the expense assumptions include a reallocation of provisions in the service company, better reflecting the expected future allocation of costs. In the USA, the adverse impact reflects a revised allocation of costs between ongoing and one-off. In Delta Lloyd, favourable expense assumptions relate to planned expense saving following restructuring activities.

6. Delta Lloyd have updated mortality assumptions to reflect recently published tables, which include a significantly increased allowance for mortality improvements. In France and the USA, mortality assumptions have been updated reflecting experience.

7. Persistency assumptions have been updated in a number of businesses.

8. Other operating variances for France relate to modelling changes, particularly relating to the time value of options and guarantees, and the benefit of reducing minimum guarantee rates. In Delta Lloyd, modelling changes include impacts related to commercial mortgages partly offset by changes to group pensions business. In the US, other operating variances related to the benefit of an AXXX capital solution together with modelling refinements on our asset portfolio.

## E2 – Geographical analysis of life MCEV operating earnings continued

Net of tax and non-controlling interests 30 June 2011	UK £m	France £m	Ireland £m	Italy £m	Poland £m	Spain £m	Other Europe £m	Aviva Europe £m	North America £m	Asia Pacific £m	Continuing operations £m	Discontinued operations £m	Total £m
Value of new business	140	53	1	15	14	17	11	111	(55)	27	223	—	223
Earnings from existing business													
– expected existing business contribution (reference rate)	58	36	5	4	26	6	8	85	21	8	172	7	179
– expected existing business contribution (in excess of reference rate)	141	43	9	11	8	13	3	87	128	3	359	41	400
Experience variances													
– maintenance expense	9	(2)	(3)	(1)	3	—	2	(1)	1	—	9	—	9
– project and other related expenses	(7)	(2)	—	—	—	—	(2)	(4)	(3)	(1)	(15)	2	(13)
– mortality/morbidity <sup>1</sup>	3	11	(2)	2	4	(3)	3	15	(12)	5	11	(4)	7
– lapses <sup>2</sup>	(10)	3	(3)	(1)	—	(2)	—	(3)	(4)	(8)	(25)	—	(25)
– other <sup>3</sup>	(2)	8	(3)	2	4	—	2	13	(18)	(1)	(8)	4	(4)
	(7)	18	(11)	2	11	(5)	5	20	(36)	(5)	(28)	2	(26)
Operating assumption changes:													
– maintenance expense <sup>4</sup>	—	—	(17)	—	8	—	1	(8)	—	3	(5)	43	38
– project and other related expenses	—	—	—	—	—	—	—	—	—	—	—	—	—
– mortality/morbidity	—	—	—	—	—	—	—	—	—	—	—	(1)	(1)
– lapses <sup>5</sup>	—	—	—	—	—	—	(4)	(4)	(9)	2	(11)	—	(11)
– other	1	—	—	—	—	—	—	—	—	—	1	—	1
	1	—	(17)	—	8	—	(3)	(12)	(9)	5	(15)	42	27
Expected return on shareholders' net worth	60	24	9	8	4	7	2	54	26	5	145	17	162
Other operating variances <sup>6</sup>	(6)	4	(2)	1	(1)	—	(10)	(8)	13	(5)	(6)	(3)	(9)
<b>Earnings after tax and non-controlling interests</b>	<b>387</b>	<b>178</b>	<b>(6)</b>	<b>41</b>	<b>70</b>	<b>38</b>	<b>16</b>	<b>337</b>	<b>88</b>	<b>38</b>	<b>850</b>	<b>106</b>	<b>956</b>

1. Mortality experience continues to be better than the assumption set across a number of our businesses, most notably in France. Adverse experience reflects normal volatility in mortality and increased retention limits in the US.

2. Persistency experience remains volatile across most of our businesses, in part reflecting the wider economic circumstances. Asia reflects an accumulation of small adverse experience across businesses.

3. Other experience includes positive tax variances in France and adverse spread variance in the US.

4. Maintenance expense assumptions reflect the adverse impact of reallocating expenses from acquisition to maintenance in Ireland, provision release in Poland and the benefits of restructuring in Delta Lloyd.

5. Persistency assumptions have been updated in a number of businesses, including refinement of 2010 assumptions in the US.

6. Other operating variances for the US relate to modelling enhancements offset by the marginal impact of new business on the value of deferred tax losses, and in Other Europe, management action to improve persistency.

## E2 – Geographical analysis of life MCEV operating earnings continued

Net of tax and non-controlling interests 30 June 2010	UK £m	France £m	Ireland £m	Italy £m	Poland £m	Spain £m	Other Europe £m	Aviva Europe £m	North America £m	Asia Pacific £m	Continuing operations £m	Discontinued operations £m	Total £m
Value of new business	126	58	1	24	15	22	9	129	2	14	271	(25)	246
Earnings from existing business													
– expected existing business contribution (reference rate)	56	32	4	3	26	6	8	79	22	3	160	11	171
– expected existing business contribution (in excess of reference rate)	158	53	11	5	10	11	1	91	116	14	379	38	417
Experience variances													
– maintenance expense <sup>1</sup>	(2)	(7)	—	—	4	1	1	(1)	—	1	(2)	(5)	(7)
– project and other related expenses	(5)	1	—	—	—	—	(2)	(1)	(5)	—	(11)	(1)	(12)
– mortality/morbidity <sup>2</sup>	9	12	4	—	4	(2)	1	19	6	3	37	(1)	36
– lapses <sup>3</sup>	(7)	12	(5)	1	(1)	(5)	—	2	—	(11)	(16)	—	(16)
– other <sup>4</sup>	(2)	4	6	2	10	1	—	23	5	(1)	25	(5)	20
	(7)	22	5	3	17	(5)	—	42	6	(8)	33	(12)	21
Operating assumption changes:													
– maintenance expense <sup>5</sup>	68	—	3	—	—	—	—	3	—	2	73	—	73
– project and other related expenses <sup>5</sup>	(64)	—	—	—	—	—	—	—	—	—	(64)	—	(64)
– mortality/morbidity	—	—	—	—	—	—	—	—	—	—	—	—	—
– lapses <sup>6</sup>	—	—	—	—	—	(6)	—	(6)	—	(1)	(7)	—	(7)
– other	(2)	—	—	—	—	—	—	—	—	(2)	(4)	—	(4)
	2	—	3	—	—	(6)	—	(3)	—	(1)	(2)	—	(2)
Expected return on shareholders' net worth	63	16	5	9	3	4	2	39	26	4	132	21	153
Other operating variances <sup>7</sup>	4	101	(2)	—	(1)	(1)	(6)	91	4	2	101	25	126
Earnings after tax and non-controlling interests	402	282	27	44	70	31	14	468	176	28	1,074	58	1,132

1. Adverse expense experience occurs across several countries, partly offset by favourable experience in Poland.

2. Mortality experience continues to be better than the assumptions set across a number of our businesses, most notably in France and the UK annuity business.

3. Persistency experience remains volatile across most of our businesses, in part reflecting the wider economic circumstances. In France, persistency experience reflects a release of the short term provision.

4. Other experience relates to a number of smaller items within various business including a reduction in the allowance for non hedgeable risk in Poland. In the USA, there were positive impacts from spread variances.

5. For UK, the expense assumptions include a reallocation of provisions in the service company, better reflecting the expected future allocation of expenses. The impact in Ireland reflected the benefit of a release of prudent regulatory reserves.

6. Persistency assumptions have been strengthened in Spain.

7. Other operating variances for France relate to modelling changes, particularly relating to the time value of options and guarantees. In Delta Lloyd, modelling changes include impacts related to commercial mortgages partly offset by changes to group pension business.

**E2 – Geographical analysis of life MCEV operating earnings continued**

Net of tax and non-controlling interests 31 December 2010	UK £m	France £m	Ireland £m	Italy £m	Poland £m	Spain £m	Other Europe £m	Aviva Europe £m	North America £m	Asia Pacific £m	Continuing operations £m	Discontinued operations £m	Total £m
Value of new business	254	100	1	42	29	43	15	230	(126)	41	399	(41)	358
Earnings from existing business													
– expected existing business contribution (reference rate)	122	61	8	4	53	13	11	150	13	14	299	19	318
– expected existing business contribution (in excess of reference rate)	306	115	19	11	18	27	7	197	261	20	784	68	852
Experience variances													
– maintenance expense <sup>1</sup>	8	(16)	5	(6)	3	(3)	4	(13)	(10)	(1)	(16)	(9)	(25)
– project and other related expenses <sup>1</sup>	(6)	(3)	(1)	—	—	(2)	(4)	(10)	(12)	(3)	(31)	(1)	(32)
– mortality/morbidity <sup>2</sup>	17	15	2	(2)	10	—	2	27	(5)	7	46	3	49
– lapses <sup>3</sup>	(21)	19	(7)	6	—	(6)	(9)	3	(2)	(22)	(42)	—	(42)
– other <sup>4</sup>	(12)	62	(3)	3	10	2	6	80	24	(4)	88	(3)	85
	(14)	77	(4)	1	23	(9)	(1)	87	(5)	(23)	45	(10)	35
Operating assumption changes:													
– maintenance expense <sup>5</sup>	57	21	(2)	(8)	97	83	—	191	(57)	8	199	89	288
– project and other related expenses	(65)	—	—	—	—	—	—	—	—	—	(65)	(3)	(68)
– mortality/morbidity <sup>6</sup>	1	38	5	1	4	—	—	48	(42)	13	20	(198)	(178)
– lapses <sup>7</sup>	(2)	(8)	(12)	10	10	(17)	(6)	(23)	4	(9)	(30)	(21)	(51)
– other	(6)	3	—	—	6	—	1	10	—	—	4	(5)	(1)
	(15)	54	(9)	3	117	66	(5)	226	(95)	12	128	(138)	(10)
Expected return on shareholders' net worth	129	27	14	17	6	7	6	77	53	9	268	50	318
Other operating variances <sup>8</sup>	(4)	162	(4)	(2)	20	(4)	—	172	87	9	264	64	328
Earnings after tax and non-controlling interests	778	596	25	76	266	143	33	1,139	188	82	2,187	12	2,199

1. Adverse expense experience occurred across a number of businesses.

2. Mortality experience continues to be better than the assumption set across a number of our businesses, most notably in France and the UK Annuity business.

3. Persistency experience remains volatile across most of our businesses, in part reflecting the wider economic circumstances. In France, persistency experience reflects a release of the short-term provision.

4. Other experience includes, in France, the benefit from policyholders switching to unit linked funds, and, in the USA favourable spread experience.

5. Favourable maintenance expense assumptions reflect the benefit of the shared service centre in Spain, together with the release of margins in Spain, related to bancassurance joint venture governance costs, and Poland. In the UK, the expense assumptions include a reallocation of provisions in the service company, better reflecting the expected future allocation of costs. In the USA, the adverse impact reflects a revised allocation of costs between ongoing and one-off. In Delta Lloyd, favourable expense assumptions relate to planned expense saving following restructuring activities.

6. Delta Lloyd have updated mortality assumptions to reflect recently published tables, which include a significantly increased allowance for mortality improvements. In France and the USA, mortality assumptions have been updated reflecting experience.

7. Persistency assumptions have been updated in a number of businesses.

8. Other operating variances for France relate to modelling changes, particularly relating to the time value of options and guarantees, and the benefit of reducing minimum guarantee rates. In Delta Lloyd, modelling changes include impacts related to commercial mortgages partly offset by changes to group pensions business. In the US, other operating variances related to the benefit of an AXXX capital solution together with modelling refinements on our asset portfolio.

### E3 – Geographical analysis of fund management operating earnings

The summarised consolidated income statement – MCEV basis, includes earnings from the Group's fund management operations as analysed below. This excludes the proportion of the results of Aviva Investors fund management businesses and other fund management operations within the group that arise from the provision of fund management services to our Life businesses. These results are included within the Life MCEV operating earnings.

	6 months 2011 £m	6 months 2010 £m	Full year 2010 £m
United Kingdom	2	2	28
Europe	7	6	10
North America	(3)	(3)	(8)
Asia Pacific	—	(2)	—
<b>Aviva Investors</b>	<b>6</b>	<b>3</b>	<b>30</b>
United Kingdom	3	(2)	3
Aviva Europe	—	—	—
Asia Pacific	—	(1)	(2)
<b>Total – continuing operations</b>	<b>9</b>	<b>—</b>	<b>31</b>
<b>Total – discontinued operations</b>	<b>9</b>	<b>13</b>	<b>94</b>
<b>Total</b>	<b>18</b>	<b>13</b>	<b>125</b>

### E4 – Analysis of other operations and regional costs

Where subsidiaries provide services to our life business, that proportion has been excluded. These results are included within the Life MCEV operating return.

	6 months 2011			6 months 2010			Full year 2010		
	Regional costs £m	Other operations £m	Total £m	Regional costs £m	Other operations £m	Total £m	Regional costs £m	Other operations £m	Total £m
<b>United Kingdom</b>	—	(28)	(28)	—	(1)	(1)	—	(21)	(21)
Aviva Europe	(20)	(7)	(27)	(18)	(15)	(33)	(55)	(43)	(98)
<b>North America</b>	<b>(6)</b>	<b>(2)</b>	<b>(8)</b>	<b>(12)</b>	<b>3</b>	<b>(9)</b>	<b>(26)</b>	<b>6</b>	<b>(20)</b>
<b>Asia Pacific</b>	<b>(17)</b>	—	<b>(17)</b>	<b>(19)</b>	<b>1</b>	<b>(18)</b>	<b>(32)</b>	—	<b>(32)</b>
<b>Total – continuing operations</b>	<b>(43)</b>	<b>(37)</b>	<b>(80)</b>	<b>(49)</b>	<b>(12)</b>	<b>(61)</b>	<b>(113)</b>	<b>(58)</b>	<b>(171)</b>
<b>Total – discontinued operations</b>	—	7	7	—	28	28	—	(24)	(24)
<b>Total</b>	<b>(43)</b>	<b>(30)</b>	<b>(73)</b>	<b>(49)</b>	<b>16</b>	<b>(33)</b>	<b>(113)</b>	<b>(82)</b>	<b>(195)</b>

### E5 – Exceptional items and Integration and restructuring costs

There were no exceptional items in the first half of 2011 (*HY10: £(60) million; FY10: £(428) million*). Exceptional items for the half year 2010 were mainly due to Delta Lloyd which recognised a total of £(50) million costs in relation to unit-linked insurance compensation scheme and compensation costs in defined contribution pension schemes.

For full year 2010, exceptional items were mainly due to a change in the cost of capital charge for the Cost of Non-Hedgeable Risk, from 2.5% to 3.3% p.a. with total impact of £(365) million, the impact of reducing state contributions to Pillar II Pension funds in Poland, following the announcement to change legislation on 1 April 2011 of £(280) million, and the recognition by Delta Lloyd of £(59) million costs in relation to unit-linked insurance compensation scheme and compensation costs in defined contribution pension schemes, partly offset by a £286 million benefit from the closure of the final salary section of the UK staff pension scheme to future accruals.

Integration and restructuring costs incurred in the year amounted to £(60) million (*HY10: £(72) million; FY10: £(312) million*). This includes costs associated with preparing the businesses for Solvency II implementation of £34 million, expenditure relating to the Quantum Leap project in Europe of £23 million, and other restructuring exercises across the Group of £17 million, partially offset by benefits of regulatory changes of £14 million.

## E6 – Segmentation of condensed consolidated statement of financial position

	30 June 2011			Restated 30 June 2010			31 December 2010		
	Life and related businesses £m	General business and other £m	Group £m	Life and related businesses £m	General business and other £m	Group £m	Life and related businesses £m	General business and other £m	Group £m
<b>Total assets before acquired value of in-force long-term business</b>	<b>291,631</b>	<b>29,880</b>	<b>321,511</b>	308,194	45,211	353,405	323,476	45,378	368,854
Acquired additional value of in-force long-term business	1,095	—	1,095	1,213	—	1,213	1,253	—	1,253
<b>Total assets included in the IFRS statement of financial position</b>	<b>292,726</b>	<b>29,880</b>	<b>322,606</b>	309,407	45,211	354,618	324,729	45,378	370,107
Liabilities of the long-term business	(277,171)	—	(277,171)	(291,677)	—	(291,677)	(305,673)	—	(305,673)
Liabilities of the general insurance and other businesses	—	(30,230)	(30,230)	—	(47,163)	(47,163)	—	(46,709)	(46,709)
<b>Net assets on a statutory IFRS basis</b>	<b>15,555</b>	<b>(350)</b>	<b>15,205</b>	17,730	(1,952)	15,778	19,056	(1,331)	17,725
Additional value of in-force long-term business <sup>1</sup>	4,426	—	4,426	2,251	—	2,251	2,737	—	2,737
<b>Net assets on an MCEV basis<sup>2</sup></b>	<b>19,981</b>	<b>(350)</b>	<b>19,631</b>	19,981	(1,952)	18,029	21,793	(1,331)	20,462
Equity capital, capital reserves, shares held by employee trusts and other reserves			6,773			7,053			7,207
IFRS basis retained earnings			5,303			3,971			5,411
Additional MCEV basis retained earnings			3,785			1,916			2,677
<b>Equity attributable to ordinary shareholders of Aviva plc on an MCEV basis</b>			<b>15,861</b>			12,940			15,295
Preference share capital and direct capital instruments			1,190			1,190			1,190
Non-controlling interests			2,580			3,899			3,977
<b>MCEV basis total equity</b>			<b>19,631</b>			18,029			20,462

1. The analysis between the group's and non-controlling interests' share of the additional value of in-force long-term business is as follows:

	30 June 2011 £m	31 December 2010 £m	Movement in period £m
Group's share included in shareholders' funds	3,785	2,677	1,108
Non-controlling interests' share	736	236	500
Movements in AFS securities	(95)	(176)	81
<b>Additional value of in-force long-term business</b>	<b>4,426</b>	<b>2,737</b>	<b>1,689</b>

2. Analysis of net assets on an MCEV basis is made up as follows:

	30 June 2011 £m	Restated 30 June 2010 £m	31 December 2010 £m
Embedded value	15,557	14,529	16,131
Non-controlling interests	1,850	3,166	3,133
	17,407	17,695	19,264
Goodwill and intangible assets allocated to long-term business <sup>3</sup>	2,378	2,593	2,356
Notional allocation of IAS19 pension fund surplus/(deficit) to long-term business <sup>4</sup>	196	(307)	173
Investment in Delta Lloyd long-term business	—	—	—
<b>Long-term business net assets on an MCEV basis</b>	<b>19,981</b>	<b>19,981</b>	<b>21,793</b>

3. Goodwill and intangible assets includes amounts related to associated undertakings and joint ventures.

4. The value of the Aviva Staff Pension Scheme surplus has been notionally allocated between segments, based on current funding and the Life proportion has been included within the long-term business net assets on an MCEV basis. The pension fund surplus notionally allocated to long-term business is net of the agreed funding borne by the UK with-profit funds.

## E7 – Analysis of life and pension earnings

The following table provides an analysis of the movement in embedded value for covered business. The analysis is shown separately for free surplus, required capital and the value of in-force covered business, and includes amounts transferred between these categories. All figures are shown net of tax and non-controlling interests.

Net of tax and non-controlling interests 30 June 2011	Continuing operations				Discontinued operations				Total
	Free surplus £m	Required capital <sup>1</sup> £m	VIF £m	Total MCEV £m	Free surplus £m	Required capital <sup>1</sup> £m	VIF £m	Total MCEV £m	Total MCEV £m
<b>Opening Group MCEV</b>	<b>1,285</b>	<b>7,398</b>	<b>5,952</b>	<b>14,635</b>	<b>356</b>	<b>944</b>	<b>196</b>	<b>1,496</b>	<b>16,131</b>
New business value	(488)	319	392	223	(29)	14	15	—	223
Expected existing business contribution (reference rate)	—	—	172	172	—	—	7	7	179
Expected existing business contribution (in excess of reference rate)	—	—	359	359	—	—	41	41	400
Transfers from VIF and required capital to the free surplus	897	(309)	(588)	—	85	(25)	(60)	—	—
Experience variances	25	50	(103)	(28)	2	—	—	2	(26)
Assumption changes	68	(126)	43	(15)	—	—	42	42	27
Expected return on shareholders' net worth	48	97	—	145	5	12	—	17	162
Other operating variances	(134)	23	105	(6)	(2)	3	(4)	(3)	(9)
Operating MCEV earnings	416	54	380	850	61	4	41	106	956
Economic variances	119	23	71	213	212	(83)	(255)	(126)	87
Other non-operating variances <sup>2</sup>	7	(19)	15	3	—	—	—	—	3
<b>Total MCEV earnings</b>	<b>542</b>	<b>58</b>	<b>466</b>	<b>1,066</b>	<b>273</b>	<b>(79)</b>	<b>(214)</b>	<b>(20)</b>	<b>1,046</b>
Capital and dividend flows <sup>3</sup>	(414)	—	—	(414)	(3)	—	—	(3)	(417)
Foreign exchange variances	17	110	143	270	16	28	2	46	316
Acquired/divested business	—	—	—	—	(642)	(893)	16	(1,519)	(1,519)
<b>Closing MCEV</b>	<b>1,430</b>	<b>7,566</b>	<b>6,561</b>	<b>15,557</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>15,557</b>

1. Required capital is shown net of implicit items permitted by local regulators to cover minimum solvency margins.

2. Other non-operating variances relate to costs for Solvency II implementation and other restructuring exercises offset by minor benefits of regulatory changes in Spain and Poland.

3. Included within capital and dividend flows is the transfer to Life and related businesses from other segments consisting of service company profits and losses during the reported period that have emerged from the value of in-force. Since the "look through" into service companies includes only future profits and losses, these amounts must be eliminated from the closing embedded value.

Divested business is the removal of Delta Lloyd from covered business subsequent to the reduction of our holding to 43%.

Restated Net of tax and non-controlling interests 30 June 2010	Continuing operations				Discontinued operations				Total
	Free surplus £m	Required capital <sup>1</sup> £m	VIF £m	Total MCEV £m	Free surplus £m	Required capital <sup>1</sup> £m	VIF £m	Total MCEV £m	Total MCEV £m
<b>Opening Group MCEV</b>	<b>1,836</b>	<b>6,451</b>	<b>5,183</b>	<b>13,470</b>	<b>368</b>	<b>1,095</b>	<b>125</b>	<b>1,588</b>	<b>15,058</b>
New business value	(605)	374	502	271	(63)	32	6	(25)	246
Expected existing business contribution (reference rate)	—	—	160	160	—	—	11	11	171
Expected existing business contribution (in excess of reference rate)	—	—	379	379	—	—	38	38	417
Transfers from VIF and required capital to the free surplus	819	(165)	(654)	—	96	(34)	(62)	—	—
Experience variances	48	1	(16)	33	(18)	—	6	(12)	21
Assumption changes	50	(3)	(49)	(2)	—	—	—	—	(2)
Expected return on shareholders' net worth	51	81	—	132	7	14	—	21	153
Other operating variances	58	(27)	70	101	—	—	25	25	126
Operating MCEV earnings	421	261	392	1,074	22	12	24	58	1,132
Economic variances	(26)	239	(202)	11	(13)	(130)	(92)	(235)	(224)
Other non-operating variances <sup>2</sup>	(11)	—	9	(2)	(30)	(1)	11	(20)	(22)
<b>Total MCEV earnings</b>	<b>384</b>	<b>500</b>	<b>199</b>	<b>1,083</b>	<b>(21)</b>	<b>(119)</b>	<b>(57)</b>	<b>(197)</b>	<b>886</b>
Capital and dividend flows <sup>3</sup>	(892)	—	—	(892)	—	—	—	—	(892)
Foreign exchange variances	(40)	(85)	(271)	(396)	(27)	(76)	(10)	(113)	(509)
Acquired/divested business	—	—	(5)	(5)	(2)	(7)	—	(9)	(14)
<b>Closing MCEV</b>	<b>1,288</b>	<b>6,866</b>	<b>5,106</b>	<b>13,260</b>	<b>318</b>	<b>893</b>	<b>58</b>	<b>1,269</b>	<b>14,529</b>

1. Required capital is shown net of implicit items permitted by local regulators to cover minimum solvency margins.

2. Other non-operating variances relate to unit-linked insurance compensation scheme and compensation costs in Delta Lloyd.

3. Included within capital and dividend flows is the transfer to Life and related businesses from other segments consisting of service company profits and losses during the reported period that have emerged from the value of in-force. Since the "look through" into service companies includes only future profits and losses, these amounts must be eliminated from the closing embedded value.



## E7 – Analysis of life and pension earnings continued

Net of tax and non-controlling interests 31 December 2010	Continuing operations				Discontinued operations				Total
	Free surplus £m	Required capital <sup>1</sup> £m	VIF £m	Total MCEV £m	Free surplus £m	Required capital <sup>1</sup> £m	VIF £m	Total MCEV £m	Total MCEV £m
<b>Opening Group MCEV</b>	1,836	6,451	5,183	13,470	368	1,095	125	1,588	15,058
New business value	(1,136)	846	689	399	(114)	55	18	(41)	358
Expected existing business contribution (reference rate)	—	—	299	299	—	—	19	19	318
Expected existing business contribution (in excess of reference rate)	—	—	784	784	—	—	68	68	852
Transfers from VIF and required capital to the free surplus	1,594	(509)	(1,085)	—	217	(78)	(139)	—	—
Experience variances	114	86	(155)	45	(7)	(10)	7	(10)	35
Assumption changes	22	18	88	128	(169)	(39)	70	(138)	(10)
Expected return on shareholders' net worth	111	157	—	268	15	35	—	50	318
Other operating variances	55	(2)	211	264	(8)	9	63	64	328
Operating MCEV earnings	760	596	831	2,187	(66)	(28)	106	12	2,199
Economic variances	(218)	175	229	186	43	(72)	(1)	(30)	156
Other non-operating variances <sup>2</sup>	(39)	—	(429)	(468)	(20)	—	(29)	(49)	(517)
<b>Total MCEV earnings</b>	503	771	631	1,905	(43)	(100)	76	(67)	1,838
Capital and dividend flows <sup>3</sup>	(1,068)	—	—	(1,068)	48	—	—	48	(1,020)
Foreign exchange variances	(13)	(26)	(75)	(114)	(13)	(39)	(4)	(56)	(170)
Acquired/divested business	27	202	213	442	(4)	(12)	(1)	(17)	425
<b>Closing MCEV</b>	1,285	7,398	5,952	14,635	356	944	196	1,496	16,131

1. Required capital is shown net of implicit items permitted by local regulators to cover minimum solvency margins.

2. Other non-operating variances relate to increase in CNHR charge from 2.5% to 3.3% p.a., legislation changes to Poland Pensions, costs for Solvency II implementation and other restructuring and unit-linked insurance compensation scheme and compensation costs in Delta Lloyd.

3. Included within capital and dividend flows is the transfer to Life and related businesses from other segments consisting of service company profits and losses during the reported period that have emerged from the value of in-force. Since the "look through" into service companies includes only future profits and losses, these amounts must be eliminated from the closing embedded value.

## E8 – Life MCEV operating earnings

In this table the life and pensions MCEV earnings have been broken down into constituent parts. The life and pensions MCEV operating earnings comprise: the value of new business written during the year; the earnings from existing business including other operating variances; and, the expected investment return on the shareholders' net worth.

These components are calculated using economic assumptions as at the start of the year (in-force business) or start of the quarter (new business) and operating (demographic and expenses) assumptions as at the end of the year.

Gross of tax and non-controlling interests	6 months 2011 £m	Restated 6 months 2010 £m	Full year 2010 £m
Value of new business	369	483	716
Earnings from existing business			
– expected returns at the reference rate	261	247	453
– expected returns in excess of the reference rate	562	590	1,208
– expected returns	823	837	1,661
– experience variances	(39)	50	92
– operating assumption changes	(25)	(13)	187
Other operating variance	(7)	192	415
Expected return on shareholders' net worth	229	212	425
<b>Life and Pensions operating earnings before tax</b>	<b>1,350</b>	<b>1,761</b>	<b>3,496</b>
Economic Variances	142	12	(32)
Other non-operating variances	6	(2)	(686)
<b>Life and Pensions earnings before tax</b>	<b>1,498</b>	<b>1,771</b>	<b>2,778</b>
Tax on operating earnings	(390)	(534)	(1,035)
Tax on other activities	(47)	(1)	150
<b>Life and Pensions earnings after tax – continuing operations</b>	<b>1,061</b>	<b>1,236</b>	<b>1,893</b>
<b>Life and Pensions earnings after tax – discontinued operations</b>	<b>(33)</b>	<b>(323)</b>	<b>(83)</b>
<b>Total Life and Pensions earnings after tax</b>	<b>1,028</b>	<b>913</b>	<b>1,810</b>

There were no separate development costs reported in these years.

Other non operating variances are described in note E7.

The table above presents a summarised breakdown of the life and pensions MCEV earnings on a gross of non-controlling interests basis and gross of tax with tax shown separately. The Group favours the gross presentation for consistency with the IFRS results. The table below compares the key items on the different bases as the subsequent analysis is provided predominantly on a net of tax and non-controlling interests basis as preferred by the CFO Forum Principles.

## Key indicators

	6 months 2011		Restated 6 months 2010		Full year 2010	
	Net of non-controlling interests and tax £m	Gross of non-controlling interests and tax £m	Net of non-controlling interests and tax £m	Gross of non-controlling interests and tax £m	Net of non-controlling interests and tax £m	Gross of non-controlling interests and tax £m
Value of new business – continuing operations	223	369	271	483	398	716
Value of new business – discontinued operations	—	1	(25)	(58)	(40)	(92)
Total value of new business	223	370	246	425	358	624
Life and pensions operating return – continuing operations	850	1,350	1,074	1,761	2,187	3,496
Life and pensions operating return – discontinued operations	106	270	58	157	12	83
Life and pensions operating return	956	1,620	1,132	1,918	2,199	3,579
Life and pensions earnings – continuing operations	1,066	1,498	1,083	1,771	1,905	2,778
Life and pensions earnings – discontinued operations	(20)	(46)	(197)	(470)	(67)	(113)
Life and pensions earnings	1,046	1,452	886	1,301	1,838	2,665

## E9 – Free surplus emergence

	Existing business					New business		Total business	
	Transfer from VIF to net worth £m	Return on net worth £m	Impact of experience variances and assumption changes on net worth £m	Release of required capital to free surplus £m	Total existing business surplus generation £m	Impact on net worth £m	Reduction in free surplus from required capital £m	Total new business surplus generation £m	Total free surplus generation £m
Net of tax and non-controlling interests 30 June 2011									
United Kingdom	151	60	(61)	96	246	(24)	(36)	(60)	186
Aviva Europe	273	54	7	72	406	(84)	(138)	(222)	184
North America	130	26	(39)	98	215	(36)	(129)	(165)	50
Asia Pacific	34	5	(1)	(1)	37	(25)	(16)	(41)	(4)
<b>Total – continuing operations</b>	<b>588</b>	<b>145</b>	<b>(94)</b>	<b>265</b>	<b>904</b>	<b>(169)</b>	<b>(319)</b>	<b>(488)</b>	<b>416</b>
<b>Total – discontinued operations</b>	<b>60</b>	<b>17</b>	<b>3</b>	<b>10</b>	<b>90</b>	<b>(15)</b>	<b>(14)</b>	<b>(29)</b>	<b>61</b>
<b>Total</b>	<b>648</b>	<b>162</b>	<b>(91)</b>	<b>275</b>	<b>994</b>	<b>(184)</b>	<b>(333)</b>	<b>(517)</b>	<b>477</b>

	Existing business					New business		Total business	
	Transfer from VIF to net worth £m	Return on net worth £m	Impact of experience variances and assumption changes on net worth £m	Release of required capital to free surplus £m	Total existing business surplus generation £m	Impact on net worth £m	Reduction in free surplus from required capital £m	Total new business surplus generation £m	Total free surplus generation £m
Net of tax and non-controlling interests 30 June 2010									
United Kingdom	232	62	96	(96)	294	(56)	(2)	(58)	236
Aviva Europe	210	40	70	71	391	(96)	(171)	(267)	124
North America	185	26	(36)	144	319	(50)	(177)	(227)	92
Asia Pacific	27	4	(3)	(6)	22	(29)	(24)	(53)	(31)
<b>Total – continuing operations</b>	<b>654</b>	<b>132</b>	<b>127</b>	<b>113</b>	<b>1,026</b>	<b>(231)</b>	<b>(374)</b>	<b>(605)</b>	<b>421</b>
<b>Total – discontinued operations</b>	<b>62</b>	<b>21</b>	<b>(18)</b>	<b>20</b>	<b>85</b>	<b>(31)</b>	<b>(32)</b>	<b>(63)</b>	<b>22</b>
<b>Total</b>	<b>716</b>	<b>153</b>	<b>109</b>	<b>133</b>	<b>1,111</b>	<b>(262)</b>	<b>(406)</b>	<b>(668)</b>	<b>443</b>

	Existing business					New business		Total business	
	Transfer from VIF to net worth £m	Return on net worth £m	Impact of experience variances and assumption changes on net worth £m	Release of required capital to free surplus £m	Total existing business surplus generation £m	Impact on net worth £m	Reduction in free surplus from required capital £m	Total new business surplus generation £m	Total free surplus generation £m
Net of tax and non-controlling interests 31 December 2010									
United Kingdom	345	129	208	(183)	499	(43)	(95)	(138)	361
Aviva Europe	478	77	147	126	828	(150)	(342)	(492)	336
North America	210	53	(56)	292	499	(41)	(375)	(416)	83
Asia Pacific	52	9	(5)	15	71	(57)	(34)	(91)	(20)
<b>Total – continuing operations</b>	<b>1,085</b>	<b>268</b>	<b>294</b>	<b>250</b>	<b>1,897</b>	<b>(291)</b>	<b>(846)</b>	<b>(1,137)</b>	<b>760</b>
<b>Total – discontinued operations</b>	<b>139</b>	<b>50</b>	<b>(225)</b>	<b>83</b>	<b>47</b>	<b>(58)</b>	<b>(55)</b>	<b>(113)</b>	<b>(66)</b>
<b>Total</b>	<b>1,224</b>	<b>318</b>	<b>69</b>	<b>333</b>	<b>1,944</b>	<b>(349)</b>	<b>(901)</b>	<b>(1,250)</b>	<b>694</b>

## E10 – Maturity profile of business

### (a) Total in-force business

To show the profile of the VIF emergence, the value of VIF in the statements of financial position has been split into five year tranches depending on the date when the profit is expected to emerge.

30 June 2011 £m	0-5	6-10	11-15	16-20	20+	Total gross of non- controlling interest	Total net of non- controlling interest
United Kingdom	67	871	624	388	677	2,627	2,627
Aviva Europe	1,734	1,024	583	316	395	4,052	3,426
North America	363	(147)	(38)	3	(37)	144	144
Asia Pacific	224	120	49	14	(33)	374	364
<b>Total</b>	<b>2,388</b>	<b>1,868</b>	<b>1,218</b>	<b>721</b>	<b>1,002</b>	<b>7,197</b>	<b>6,561</b>

31 December 2010 £m	0-5	6-10	11-15	16-20	20+	Total gross of non- controlling interest	Total net of non- controlling interest
United Kingdom	153	766	538	287	553	2,297	2,297
Aviva Europe	1,649	980	575	342	375	3,921	3,288
North America	56	(47)	12	12	9	42	42
Asia Pacific	187	94	35	15	3	334	325
<b>Total excluding Delta Lloyd</b>	<b>2,045</b>	<b>1,793</b>	<b>1,160</b>	<b>656</b>	<b>940</b>	<b>6,594</b>	<b>5,952</b>
<b>Delta Lloyd</b>	<b>517</b>	<b>109</b>	<b>56</b>	<b>(176)</b>	<b>(76)</b>	<b>430</b>	<b>196</b>
<b>Total</b>	<b>2,562</b>	<b>1,902</b>	<b>1,216</b>	<b>480</b>	<b>864</b>	<b>7,024</b>	<b>6,148</b>

### (b) New business

To show the profile of the VIF emergence, the value of new business has been split into five year tranches depending on the date when the profit is expected to emerge.

30 June 2011 £m	0-5	6-10	11-15	16-20	20+	Total gross of non- controlling interest	Total net of non- controlling interest
United Kingdom	45	25	17	13	64	164	164
Aviva Europe	127	63	33	19	18	260	195
North America	19	(20)	(9)	(6)	(3)	(19)	(19)
Asia Pacific	29	14	6	4	1	54	52
<b>Total – continuing operations</b>	<b>220</b>	<b>82</b>	<b>47</b>	<b>30</b>	<b>80</b>	<b>459</b>	<b>392</b>
<b>Total – discontinued operations</b>	<b>3</b>	<b>11</b>	<b>10</b>	<b>(1)</b>	<b>4</b>	<b>27</b>	<b>15</b>
<b>Total</b>	<b>223</b>	<b>93</b>	<b>57</b>	<b>29</b>	<b>84</b>	<b>486</b>	<b>407</b>

31 December 2010 £m	0-5	6-10	11-15	16-20	20+	Total gross of non- controlling interest	Total net of non- controlling interest
United Kingdom	78	42	22	13	143	298	298
Aviva Europe	257	119	70	31	40	517	378
North America	(26)	(85)	10	22	(6)	(85)	(85)
Asia Pacific	59	22	11	5	3	100	98
<b>Total – continuing operations</b>	<b>368</b>	<b>98</b>	<b>113</b>	<b>71</b>	<b>180</b>	<b>830</b>	<b>689</b>
<b>Total – discontinued operations</b>	<b>(6)</b>	<b>21</b>	<b>21</b>	<b>12</b>	<b>(10)</b>	<b>38</b>	<b>18</b>
<b>Total</b>	<b>362</b>	<b>119</b>	<b>134</b>	<b>83</b>	<b>170</b>	<b>868</b>	<b>707</b>

## E11 – Segmental analysis of life and related business embedded value

Net of non-controlling interests 30 June 2011	Free surplus £m	Required capital <sup>1</sup> £m	VIF £m	Total MCEV £m
<b>United Kingdom</b>	<b>1,106</b>	<b>2,922</b>	<b>2,627</b>	<b>6,655</b>
France <sup>2</sup>	(110)	1,854	1,537	3,281
Ireland	31	353	454	838
Italy	176	340	32	548
Poland	95	120	920	1,135
Spain	119	265	250	634
Other Europe	47	53	233	333
<b>Aviva Europe</b>	<b>358</b>	<b>2,985</b>	<b>3,426</b>	<b>6,769</b>
<b>North America<sup>2,3</sup></b>	<b>(151)</b>	<b>1,433</b>	<b>144</b>	<b>1,426</b>
<b>Asia Pacific</b>	<b>117</b>	<b>226</b>	<b>364</b>	<b>707</b>
<b>Total</b>	<b>1,430</b>	<b>7,566</b>	<b>6,561</b>	<b>15,557</b>

1. Required capital is shown net of implicit items permitted by local regulators to cover minimum solvency margins.

2. France and Aviva USA have a positive surplus on a statutory basis.

3. Aviva USA's holding company debt amounting to £709 million at 30 June 2011 has been included within non-covered business.

Restated Net of non-controlling interests 30 June 2010	Free surplus £m	Required capital <sup>1</sup> £m	VIF £m	Total MCEV £m
<b>United Kingdom<sup>2</sup></b>	<b>909</b>	<b>2,859</b>	<b>1,998</b>	<b>5,766</b>
France <sup>3</sup>	(186)	1,527	1,267	2,608
Ireland	226	206	429	861
Italy	146	308	139	593
Poland	64	103	896	1,063
Spain	139	200	228	567
Other Europe	32	37	214	283
Aviva Europe	421	2,381	3,173	5,975
North America <sup>3,4</sup>	(164)	1,415	(309)	942
Asia Pacific	122	211	244	577
<b>Total excluding Delta Lloyd</b>	<b>1,288</b>	<b>6,866</b>	<b>5,106</b>	<b>13,260</b>
<b>Delta Lloyd</b>	<b>318</b>	<b>893</b>	<b>58</b>	<b>1,269</b>
<b>Total</b>	<b>1,606</b>	<b>7,759</b>	<b>5,164</b>	<b>14,529</b>

1. Required capital is shown net of implicit items permitted by local regulators to cover minimum solvency margins.

2. The large increase in required capital in the UK reflects the additional capital locked in following the reattribution of the inherited estate.

3. France and Aviva USA have a positive surplus on a statutory basis.

4. Aviva USA's holding company debt amounting to £824 million at 30 June 2010 has been included within non-covered business.

Net of non-controlling interests 31 December 2010	Free surplus £m	Required capital <sup>1</sup> £m	VIF £m	Total MCEV £m
<b>United Kingdom</b>	<b>1,139</b>	<b>2,934</b>	<b>2,297</b>	<b>6,370</b>
France <sup>2</sup>	(243)	1,737	1,446	2,940
Ireland	47	336	444	827
Italy	202	313	82	597
Poland	129	114	876	1,119
Spain	81	266	207	554
Other Europe	43	45	233	321
Aviva Europe	259	2,811	3,288	6,358
North America <sup>2,3</sup>	(248)	1,437	42	1,231
Asia Pacific	135	216	325	676
<b>Total excluding Delta Lloyd</b>	<b>1,285</b>	<b>7,398</b>	<b>5,952</b>	<b>14,635</b>
<b>Delta Lloyd</b>	<b>356</b>	<b>944</b>	<b>196</b>	<b>1,496</b>
<b>Total</b>	<b>1,641</b>	<b>8,342</b>	<b>6,148</b>	<b>16,131</b>

1. Required capital is shown net of implicit items permitted by local regulators to cover minimum solvency margins.

2. France and Aviva USA have a positive surplus on a statutory basis.

3. Aviva USA's holding company debt amounting to £765 million at 31 December 2010 has been included within non-covered business.

**E12 – Risk allowance within present value of in-force (VIF)**

Within the VIF in the tables, there are additional allowances for risks not included within the basic present value of future profits calculation.

Net of non-controlling interests 30 June 2011	PVFP £m	Frictional costs £m	Non- hedgeable risks £m	Time value of financial options and guarantees £m	VIF £m
<b>United Kingdom</b>	<b>3,294</b>	<b>(297)</b>	<b>(333)</b>	<b>(37)</b>	<b>2,627</b>
France	2,287	(172)	(187)	(391)	1,537
Ireland	499	(16)	(26)	(3)	454
Italy	133	(21)	(12)	(68)	32
Poland	1,062	(15)	(122)	(5)	920
Spain	324	(18)	(43)	(13)	250
Other Europe	248	(3)	(10)	(2)	233
<b>Aviva Europe</b>	<b>4,553</b>	<b>(245)</b>	<b>(400)</b>	<b>(482)</b>	<b>3,426</b>
<b>North America</b>	<b>670</b>	<b>(133)</b>	<b>(53)</b>	<b>(340)</b>	<b>144</b>
<b>Asia Pacific</b>	<b>469</b>	<b>(25)</b>	<b>(60)</b>	<b>(20)</b>	<b>364</b>
<b>Total</b>	<b>8,986</b>	<b>(700)</b>	<b>(846)</b>	<b>(879)</b>	<b>6,561</b>

The allowance for Non-hedgeable risks has increased by £268 million, relative to 30 June 2010, reflecting the change to the charge from 2.5% to 3.3%.

Restated Net of non-controlling interests 30 June 2010	PVFP £m	Frictional costs £m	Non- hedgeable risks £m	Time value of financial options and guarantees £m	VIF £m
United Kingdom	2,529	(295)	(211)	(25)	1,998
France	2,023	(124)	(149)	(483)	1,267
Ireland	453	(7)	(17)	—	429
Italy	202	(24)	(12)	(27)	139
Poland	980	(14)	(62)	(8)	896
Spain	283	(12)	(28)	(15)	228
Other Europe	226	(4)	(6)	(2)	214
Aviva Europe	4,167	(185)	(274)	(535)	3,173
North America	96	(157)	(51)	(197)	(309)
Asia Pacific	348	(24)	(42)	(38)	244
<b>Total excluding Delta Lloyd</b>	<b>7,140</b>	<b>(661)</b>	<b>(578)</b>	<b>(795)</b>	<b>5,106</b>
<b>Delta Lloyd</b>	<b>426</b>	<b>(78)</b>	<b>(65)</b>	<b>(225)</b>	<b>58</b>
<b>Total</b>	<b>7,566</b>	<b>(739)</b>	<b>(643)</b>	<b>(1,020)</b>	<b>5,164</b>

Net of non-controlling interests 31 December 2010	PVFP £m	Frictional costs £m	Non- hedgeable risks £m	Time value of financial options and guarantees £m	VIF £m
United Kingdom	2,938	(291)	(322)	(28)	2,297
France	2,051	(123)	(170)	(312)	1,446
Ireland	476	(9)	(23)	—	444
Italy	156	(19)	(11)	(44)	82
Poland	1,013	(14)	(118)	(5)	876
Spain	281	(18)	(41)	(15)	207
Other Europe	247	(3)	(9)	(2)	233
Aviva Europe	4,224	(186)	(372)	(378)	3,288
North America	607	(133)	(69)	(363)	42
Asia Pacific	441	(26)	(58)	(32)	325
<b>Total excluding Delta Lloyd</b>	<b>8,210</b>	<b>(636)</b>	<b>(821)</b>	<b>(801)</b>	<b>5,952</b>
<b>Delta Lloyd</b>	<b>580</b>	<b>(107)</b>	<b>(85)</b>	<b>(192)</b>	<b>196</b>
<b>Total</b>	<b>8,790</b>	<b>(743)</b>	<b>(906)</b>	<b>(993)</b>	<b>6,148</b>

**E13 – Implied discount rates (IDR)**

In the valuation of a block of business, the implied discount rate is the rate of discount such that a traditional embedded value calculation for the covered business equates to the MCEV.

The cash flows projected are the expected future cash flows including expected investment cash flows from equities, bonds and properties earning a risk premium in excess of risk free, statutory reserves and required capital. The risk premiums used are consistent with those used in the expected existing business contribution within operating earnings. As the risk premiums are positive, a discount rate higher than risk-free is required to give a value equal to the market-consistent embedded value.

Average derived risk discount rates are shown below for the embedded value.

	30 June 2011 %	31 December 2010 %
<b>United Kingdom</b>	<b>8.4%</b>	8.4%
France	<b>6.1%</b>	6.7%
Ireland	<b>5.3%</b>	4.4%
Italy	<b>9.1%</b>	7.3%
Poland	<b>7.3%</b>	7.3%
Spain	<b>10.4%</b>	9.6%
Other Europe	<b>6.7%</b>	8.0%
<b>Aviva Europe</b>	<b>7.0%</b>	6.9%
<b>North America</b>	<b>23.7%</b>	24.5%
<b>Asia Pacific</b>	<b>4.3%</b>	5.9%
<b>Total excluding Delta Lloyd</b>	<b>9.1%</b>	9.3%
<b>Delta Lloyd</b>	—	14.8%
<b>Total</b>	<b>9.1%</b>	9.9%

**E14 – Summary of non-controlling interest in life and related businesses' MCEV results**

	France £m	Ireland £m	Italy £m	Poland £m	Spain £m	Aviva Europe £m	Asia Pacific £m	Delta Lloyd £m	Total £m	Share- holders' interest £m	Group £m	
30 June 2011												
Value of new business after tax	11	—	19	2	18	50	—	—	50	223	273	
Life MCEV operating earnings after tax	15	(2)	47	9	40	109	—	94	203	956	1,159	
Life MCEV (loss)/earnings after tax	11	(12)	(70)	10	55	(6)	1	(13)	(18)	1,046	1,028	
Closing covered businesses' embedded value	260	266	608	155	541	1,830	20	—	1,850	15,557	17,407	
Restated 30 June 2010	France £m	Ireland £m	Italy £m	Poland £m	Spain £m	Aviva Europe £m	Delta Lloyd £m	Europe £m	Asia Pacific £m	Total £m	Share- holders' interest £m	Group £m
Value of new business after tax	8	—	34	2	25	69	(17)	52	—	52	246	298
Life MCEV operating earnings after tax	43	9	55	10	35	152	58	210	2	212	1,132	1,344
Life MCEV (loss)/earnings after tax	55	16	44	13	23	151	(125)	26	1	27	886	913
Closing covered businesses' embedded value	334	281	694	150	559	2,018	1,132	3,150	16	3,166	14,529	17,695
31 December 2010	France £m	Ireland £m	Italy £m	Poland £m	Spain £m	Aviva Europe £m	Delta Lloyd £m	Europe £m	Asia Pacific £m	Total £m	Share- holders' interest £m	Group £m
Value of new business after tax	15	(1)	54	4	47	119	(26)	93	—	93	358	451
Life MCEV operating earnings after tax	41	6	104	40	81	272	49	321	3	324	2,199	2,523
Life MCEV (loss)/earnings after tax	47	(11)	(26)	2	(29)	(17)	(17)	(34)	6	(28)	1,838	1,810
Closing covered businesses' embedded value	250	268	630	153	489	1,790	1,324	3,114	19	3,133	16,131	19,264

There are no non-controlling interests in the United Kingdom or North America.

**E15 – Principal assumptions****(a) Economic assumptions – Deterministic calculations**

Economic assumptions are derived actively, based on market yields on risk-free fixed interest assets at the end of each reporting period.

In setting the risk-free rate we have, wherever possible, used the mid-price swap yield curve for an AA-rated bank. The curve is extrapolated if necessary to get rates suitable to the liabilities. For markets in which there is no reliable swap yield curve the relevant government bond yields are used. For certain business, swap rates are adjusted for a 'liquidity premium' in deriving the risk free rates, and these adjustments are shown below the reference rate table.

Required capital is shown as a multiple of the EU statutory minimum solvency margin or equivalent.

The principal economic assumptions used are as follows:

**Reference rate (spot, swap rates) and expense inflation**

	United Kingdom			
	30 June 2011 %	30 June 2010 %	31 December 2010 %	31 December 2009 %
Reference rate				
1 year	1.1%	1.3%	1.0%	1.2%
5 years	2.5%	2.5%	2.7%	3.5%
10 years	3.6%	3.6%	3.7%	4.3%
15 years	4.1%	4.0%	4.1%	4.6%
20 years	4.3%	4.1%	4.2%	4.6%
Expense inflation	3.4%	3.0%	3.3%	3.3%
	Delta Lloyd			
	30 June 2011 %	30 June 2010 %	31 December 2010 %	31 December 2009 %
Reference rate				
1 year	n/a	1.2%	1.3%	1.3%
5 years	n/a	2.1%	2.6%	2.9%
10 years	n/a	3.0%	3.4%	3.7%
15 years	n/a	3.4%	3.8%	4.1%
20 years	n/a	3.4%	3.8%	4.2%
Expense inflation	n/a	2.5%	2.0%	2.4%



**E15 – Principal assumptions continued****(a) Economic assumptions – Deterministic calculations continued**

	Eurozone (excluding Delta Lloyd)			
	30 June 2011 %	30 June 2010 %	31 December 2010 %	31 December 2009 %
Reference rate				
1 year	<b>2.0%</b>	1.2%	1.3%	1.3%
5 years	<b>2.9%</b>	2.1%	2.5%	2.8%
10 years	<b>3.5%</b>	3.0%	3.4%	3.7%
15 years	<b>3.9%</b>	3.4%	3.8%	4.1%
20 years	<b>4.0%</b>	3.5%	3.8%	4.2%
Expense inflation	<b>2.1%</b>	2.7%	2.1%	2.5%

	Poland			
	30 June 2011 %	30 June 2010 %	31 December 2010 %	31 December 2009 %
Reference rate				
1 year	<b>5.0%</b>	4.1%	4.4%	4.5%
5 years	<b>5.3%</b>	5.2%	5.5%	5.8%
10 years	<b>5.4%</b>	5.4%	5.7%	5.8%
15 years	<b>5.2%</b>	5.3%	5.4%	5.7%
20 years	<b>5.1%</b>	5.0%	5.1%	5.5%
Expense inflation	<b>3.1%</b>	2.7%	3.0%	3.0%

	United States			
	30 June 2011 %	30 June 2010 %	31 December 2010 %	31 December 2009 %
Reference rate				
1 year	<b>0.4%</b>	0.7%	0.4%	0.7%
5 years	<b>2.1%</b>	2.1%	2.2%	3.1%
10 years	<b>3.4%</b>	3.2%	3.5%	4.2%
15 years	<b>4.0%</b>	3.6%	4.0%	4.6%
20 years	<b>4.2%</b>	3.8%	4.2%	4.8%
Expense inflation	<b>3.0%</b>	3.0%	3.0%	3.0%

For service companies, expense inflation relates to the underlying expenses rather than the fees charged to the life company.

The following adjustments are made to the swap rate for immediate annuity type contracts and for all contracts for Aviva USA and for Delta Lloyd. The risk-free rate is taken as the swap yield curve for the currency of the liability, adjusted by:

	New business						Embedded value	
	1Q 2011	2Q 2011	1Q 2010	2Q 2010	3Q 2010	4Q 2010	30 June 2011	30 June 2010 31 December 2010
UK <sup>1</sup>	<b>1.14%/</b> <b>0.72%</b>	<b>1.00%/</b> <b>0.65%</b>	0.80%/	0.75%/	0.87%/	1.09%/	<b>1.06%</b>	1.15%
France	<b>n/a</b>	<b>n/a</b>	n/a	n/a	n/a	n/a	<b>0.33%</b>	0.35%
Spain	<b>0.36%</b>	<b>0.31%</b>	0.15%	0.20%	0.12%	0.15%	<b>0.33%</b>	0.25%
Delta Lloyd	<b>0.36%</b>	<b>0.31%</b>	0.43%	0.34%	0.39%	0.38%	<b>n/a</b>	0.39%
US immediate annuities	<b>0.66%</b>	<b>0.57%</b>	0.65%	0.65%	0.85%	0.76%	<b>0.59%</b>	0.85%
US deferred annuities and all other contracts	<b>0.56%</b>	<b>0.49%</b>	0.55%	0.55%	0.70%	0.64%	<b>0.51%</b>	0.70%

1. The rate provided is for immediate annuities/bulk purchase annuities.

For Delta Lloyd, the adjustment shown is applied to immediate annuity type contracts. For participating contracts, 75% of this value is used and for all other contracts, 50% of this value is used. This methodology is consistent with QIS 5 Solvency II requirements.

The approach to estimating the market level of liquidity premium in corporate bond assets uses the formula structure proposed by CFO/CRO Forum working party.

The formula is:

UK/Europe: 50% of (iBoxx Corporate bond spread – 40bp)

USA: 60% of (iBoxx Corporate bond spread – 40bp)

Adjustments are made where liabilities are not fully backed by assets earning a liquidity premium and for contracts that are exposed to some lapse risk.

## E15 – Principal assumptions continued

### (a) Economic assumptions – Deterministic calculations continued

There has been no change to the types of contracts to which a liquidity premium is applied, apart from in Delta Lloyd, which has been restated for the move to the QIS 5 approach.

#### Risk premium – used for operating profit, Implied Discount Rates (IDR), Internal Rates of Return (IRR) and payback period

For life and pensions operating earnings, Aviva uses normalised investment returns. The normalised investment returns are expressed as a swap rate based on the typical duration of the assets held plus an asset risk premium. More detail is given in note E1 – Basis of Preparation.

The use of asset risk premia only impacts operating earnings as expected returns reflect management's long-term expectations of asset returns in excess of the reference rate from investing in different asset classes. This assumption does not impact the embedded value or value of new business as asset risk premia are not recognised until earned. The asset risk premia set out in the table below are added to the ten year swap rate to calculate expected returns.

	All territories			
	30 June 2011	30 June 2010	31 December 2010	31 December 2009
Equity risk premium	3.5%	3.5%	3.5%	3.5%
Property risk premium	2.0%	2.0%	2.0%	2.0%

Future returns on corporate fixed interest investments are calculated from prospective yields less an adjustment for credit risk.

### Required capital and tax

	Tax rates <sup>6</sup>				Required capital (% EU minimum or equivalent)		
	30 June 2011	30 June 2010	31 December 2010	31 December 2009	30 June 2011	30 June 2010	31 December 2010
United Kingdom <sup>1</sup>	26.0%	28.0%	27.0%	28.0%	100%/200%	100%/110%/200%	100%/110%/200%
France	34.4%	34.4%	34.4%	34.4%	107.5%	110%	107.5%
Ireland <sup>2</sup>	12.5%	12.5%	12.5%	12.5%	174%/180%	150%	175%/250%
Italy <sup>3</sup>	32.4%	32.4%	32.4%	32.4%	115%/165%	115%/222%	111%/165%
Poland	19.0%	19.0%	19.0%	19.0%	125.5%	130%	125.5%
Spain <sup>4</sup>	30.0%	30.0%	30.0%	30.0%	130% – 134%/175%	110%/125%	130% – 134%/175%
Delta Lloyd <sup>5</sup>	n/a	25.5%	25.0%	25.5%	n/a	116%	120%
United States	35.0%	35.0%	35.0%	0.0%	325%	325%	325%

1. The required capital in the United Kingdom under MCEV is 100% for unit-linked, other non-participating business and annuity business with 200% for BPA business. In addition, the reattribution of the inherited Estate has led to additional capital being locked in to support the with-profit business, and this has been included within required capital.

2. Required capital in Ireland under MCEV is 174% for bancassurance and 180% for retail business.

3. Required capital in Italy under MCEV is 165% of the EU minimum for Eurovita and 115% for bancassurance and 130% for retail business.

4. Required capital in Spain is 175% of the EU minimum for Aviva Vida y Pensiones and 130% – 134% for bancassurance companies.

5. This capital level is the aggregate capital required for Delta Lloyd

6. Current tax legislation and rates have been assumed to continue unaltered except where changes in future tax rates have been substantively enacted as at the valuation date.

A gradual reduction in the UK corporation tax rate from 28% to 24% over 4 years was announced in the Emergency Budget of 22 June 2010. The first 1% rate reduction was enacted in the Finance (No.2) Act 2010. This was augmented in the Finance Act 2011 to include an additional 1% reduction from April 2011 which takes the rate to 26%. The effect of the 26% rate has been reflected in the Group's MCEV net assets at 30 June 2011. A further 1% rate reduction to 25%, with effect from 1 April 2012, was substantively enacted on 5 July 2011. Subsequent reductions in the rate to 23% are to be dealt with by future legislation. The benefit to the Group's MCEV net assets from the 3% reduction of the rate from 26% to 23% is estimated at approximately £170 million in total.

#### Other economic assumptions

Required capital relating to with-profit business is generally assumed to be covered by the surplus within the with-profit funds and no effect has been attributed to shareholders. Where the fund is insufficient, and additional shareholder support is required, this is included within required capital, including the RIEESA in the UK. Bonus rates on participating business have been set at levels consistent with the economic assumptions. The distribution of profit between policyholders and shareholders within the with-profit funds assumes that the shareholder interest in conventional with-profit business in the United Kingdom and Ireland continues at the current rate of one-ninth of the cost of bonus.

### (b) Economic Assumptions – Stochastic calculations

The calculation of time value of options and guarantees allows for expected management and policyholder actions in response to varying future investment conditions. The management actions modelled include changes to asset mix, bonus rates and rates of interest and other guarantees granted to policyholders. Modelled policyholder actions are described under "Other assumptions".

## E15 – Principal assumptions continued

### Model – United Kingdom, Europe (excluding Delta Lloyd) and Asia Pacific

Swap rates are generated by a model, the LIBOR Market Model (LMM), that projects a full swap curve at monthly intervals. Forward rates are assumed to have a log-normal distribution which guarantees non-negative interest rates. The model is calibrated to at-the-money swaptions of a variety of terms and tenors. Swaption volatilities are taken from SuperDerivatives. Tests have been performed to ensure that sufficient scenarios have been used that the result converges to the stochastic value of the business being valued.

The total annual return on equities is calculated as the return on one-year swaps plus an excess return. This excess return is generally modelled using a log-normal model where volatility varies by time horizon. This allows the model to capture the term structure of implied volatilities. The model is calibrated to at-the-money options of a variety of terms. For the UK, a two-dimensional model is used to capture the term structure of implied volatilities and the projected in the money position. Option volatilities are taken from Markit.

The model also generates property total returns and real yield curves, although these are not significant asset classes for Aviva outside the UK. In the absence of liquid market data, the volatilities of these asset classes are based on historic data.

Assumptions for correlations between asset classes have been set based on historic data.

### Model – North America

Swap rates are generated by a model, the LIBOR Market Model Plus (LMM+), which projects a full swap curve at monthly intervals. Forward rates are assumed to have a distribution that lies between the log-normal and normal distributions. Although this no longer guarantees non-negative interest rates, it maintains interest rates within a more plausible range than the standard Libor Market Model, and gives a better fit to certain swaption volatility surfaces. The model is calibrated to volatilities for swaptions for 10 year swaps for a range of option terms and strike rates. Swaption volatilities are taken from SuperDerivatives. Tests have been performed to ensure that sufficient scenarios have been used that the result converges to the stochastic value of the business being valued.

The total annual return on equities is calculated as the return on one-year swaps plus an excess return. This excess return is modelled using a log-normal model where volatility varies by time horizon. This allows the model to capture the term structure of implied volatilities. The model is calibrated to at-the-money options of a variety of terms. Option volatilities are taken from Markit.

Assumptions for correlations between asset classes have been set based on historic data.

### Model – Delta Lloyd

The interest rate model used is a short rate G2++ model. The model is calibrated to the QIS5 yield curve and the swaption implied volatilities. Swaption implied volatilities are taken from Bloomberg. The equity model is a Heston model.

Assumptions for correlations between asset classes have been set based on historic data.

### Asset classes

The significant asset classes for UK participating business are equities, property and long-term fixed rate bonds. The most significant assumptions are the distribution of future long-term interest rates (nominal and real) and swaption implied volatilities

For many businesses, including US, France and Delta Lloyd, the most important assets are fixed rate bonds of various durations.

### Summary statistics

#### Swaption implied volatilities

The implied volatility is that determined by Black-Scholes' formula to reproduce the market price of the option. The following table sets out the model swaption implied volatilities.

Option length	30 June 2011 Swap length				30 June 2010 Swap length				31 December 2010 Swap length			
	10 years	15 years	20 years	25 years	10 years	15 years	20 years	25 years	10 years	15 years	20 years	25 years
UK sterling												
10 years	13.3%	12.8%	12.5%	n/a	n/a	n/a	12.5%	n/a	15.3%	14.8%	14.3%	13.6%
15 years	13.3%	12.7%	12.3%	n/a	n/a	n/a	12.3%	n/a	14.1%	13.6%	13.1%	12.3%
20 years	13.0%	12.3%	11.8%	n/a	n/a	n/a	11.9%	n/a	13.1%	12.5%	12.0%	11.2%
25 years	13.4%	12.5%	11.6%	n/a	n/a	n/a	11.5%	n/a	12.3%	11.7%	11.2%	10.4%
Euro												
10 years	16.9%	16.4%	15.9%	15.5%	18.6%	18.4%	18.1%	17.8%	21.2%	20.9%	20.6%	20.3%
15 years	15.6%	15.0%	14.5%	14.0%	18.3%	17.8%	17.3%	16.6%	20.7%	20.1%	19.5%	18.8%
20 years	14.7%	14.0%	13.4%	12.9%	17.1%	16.5%	15.9%	15.2%	19.2%	18.5%	17.8%	16.9%
25 years	13.6%	13.0%	12.4%	11.8%	16.0%	15.2%	14.5%	13.8%	17.8%	16.9%	16.1%	15.2%
US dollar												
10 years	18.9%	19.0%	18.9%	18.6%	20.4%	19.5%	18.6%	18.0%	24.0%	23.6%	22.9%	22.2%
15 years	17.8%	17.6%	17.3%	16.8%	18.5%	17.5%	16.7%	16.0%	23.9%	23.1%	22.2%	21.1%
20 years	16.5%	16.1%	15.6%	15.0%	16.7%	15.8%	15.1%	14.4%	23.0%	21.9%	20.6%	19.4%
25 years	15.0%	14.5%	13.9%	13.4%	15.0%	14.2%	13.5%	12.8%	21.7%	20.4%	19.1%	17.8%
Delta Lloyd												
10 years	n/a	n/a	n/a	n/a	16.4%	17.0%	17.9%	19.2%	17.8%	18.1%	18.8%	19.8%
15 years	n/a	n/a	n/a	n/a	18.2%	19.0%	19.5%	20.4%	20.5%	21.0%	21.4%	21.7%
20 years	n/a	n/a	n/a	n/a	22.1%	22.4%	22.0%	21.6%	25.2%	25.3%	24.3%	23.4%
25 years	n/a	n/a	n/a	n/a	23.7%	23.1%	21.9%	21.4%	28.5%	26.4%	24.0%	22.5%

For businesses where stochastic scenarios are calibrated before the period end, the closing embedded value has been adjusted for the subsequent change in market volatilities up to the period end.

## E15 – Principal assumptions continued

### Equity implied volatilities

The implied volatility is that determined by the Black-Scholes' formula to reproduce the market price of the option. The following tables set out the model equity implied volatilities.

Option length	30 June 2011						
	UK	France	Italy	Ireland	Spain	US	Delta Lloyd
5 years	22.6%	22.8%	24.5%	24.3%	25.2%	24.1%	n/a
10 years	23.4%	23.9%	24.5%	24.8%	26.7%	25.0%	n/a
15 years	24.2%	24.6%	24.9%	24.9%	25.9%	25.1%	n/a

Option length	30 June 2010						
	UK	France	Italy	Ireland	Spain	US	Delta Lloyd
5 years	27.8%	31.1%	30.1%	29.5%	34.1%	31.0%	27.6%
10 years	28.5%	29.4%	29.6%	28.7%	31.9%	31.2%	30.1%
15 years	29.1%	29.7%	28.2%	29.1%	30.5%	31.1%	31.7%

Option length	31 December 2010						
	UK	France	Italy	Ireland	Spain	US	Delta Lloyd
5 years	24.5%	29.0%	27.5%	27.7%	32.4%	28.8%	27.2%
10 years	25.5%	28.4%	27.0%	27.6%	31.2%	29.1%	27.0%
15 years	26.4%	29.1%	26.1%	28.4%	30.2%	29.7%	26.3%

### Property implied volatilities

Best estimate levels of volatility have been used in the absence of meaningful option prices from which implied levels of volatility can be derived.

For the UK and Delta Lloyd, model property implied volatility is 15% for 30 June 2011 (30 June 2010: 15%).

### Demographic assumptions

Assumed future mortality, morbidity and lapse rates have been derived from an analysis of Aviva's recent operating experience with a view to giving a best estimate of future experience. We have anticipated future changes in experience where that is appropriate, e.g. we have allowed for improvements in future policyholder longevity.

We have set the assumptions based on a best estimate of shareholder outcomes. In particular, where the policyholder behaviour varies with economic experience, we have set assumptions which are dynamic, i.e. vary depending on the economic assumptions. For example, surrender and option take up rate assumptions that vary according to the investment scenario under consideration have been used in the calculation of the time value of options and guarantees, based on our assessment of likely policyholder behaviour in different investment scenarios.

Additionally, where demographic experience is not driven by economic scenarios but is asymmetric on a stand-alone basis, the best estimate assumption considers the weighted-average expected experience, not simply the median or most likely outcome.

### Expense assumptions

Management expenses and operating expenses of holding companies attributed to life and related businesses have been included in the MCEV calculations and split between expenses relating to the acquisition of new business, the maintenance of business in-force and project expenses. Future expense assumptions include an allowance for maintenance expenses and a proportion of recurring project expenses. Certain expenses of an exceptional nature, when they occur, are identified separately and are generally charged as incurred. No future productivity gains have been anticipated.

Where subsidiary companies provide administration, investment management or other services to our life businesses, the value of profits or losses arising from these services have been included in the embedded value and value of new business.

### Non-hedgeable risk

For the balance sheet and operating profit, a charge of 3.3% has been applied to the group-diversified capital required on a 1-in-200 one-year basis over the remaining lifetime of in-force business.

The charge is set so as to give an aggregate allowance that is in excess of the expected operational risk costs arising from the in-force covered business over its remaining lifetime.

The capital levels used are projected to be sufficient to cover non-hedgeable risks at the 99.5% confidence level one-year after the valuation date. The capital is equal to the capital from the ICA results for those risks considered. The capital has been projected as running off over the remaining life of the in-force portfolio in line with the drivers of the capital requirement.

In addition to the operational risk allowance, financial non-hedgeable risks and other product level asymmetries have been allowed for. These allowances are not material as significant financial non-hedgeable risks and product level asymmetries are either modelled explicitly and included in the TVOG or are included in the PVFP through the use of appropriate best estimate assumptions.

**E15 – Principal assumptions continued****(c) Other assumptions****Valuation of debt**

Borrowings in the MCEV consolidated statement of financial position are valued on an IFRS basis, consistent with the primary financial statements. At 30 June 2011 the market value of the group's external debt, subordinated debt, preference shares including General Accident plc preference shares of £250 million (classified as non-controlling interests) and direct capital instrument was £7,104 million (30 June 2010: £6,399 million; 31 December 2010: £7,279 million).

	30 June 2011 £m	30 June 2010 £m	31 December 2010 £m
<b>Borrowings per summarised consolidated statement of financial position – MCEV basis</b>	<b>8,882</b>	14,127	14,949
Add: amount included within held for sale	—	—	—
Less: Securitised mortgage funding	<b>(1,259)</b>	(6,574)	(6,332)
Borrowings excluding non-recourse funding – MCEV basis	<b>7,623</b>	7,553	8,617
Less: Operational financing by businesses	<b>(1,790)</b>	(2,195)	(2,551)
External debt and subordinated debt – MCEV basis	<b>5,833</b>	5,358	6,066
Add: Preference shares (including General Accident plc) and direct capital instrument	<b>1,440</b>	1,440	1,440
External debt, subordinated debt, preference shares and direct capital instrument – MCEV basis	<b>7,273</b>	6,798	7,506
Effect of marking these instruments to market	<b>(169)</b>	(399)	(227)
<b>Market value of external debt, subordinated debt, preference shares and direct capital instrument</b>	<b>7,104</b>	6,399	7,279

**Other**

It has been assumed that there will be no changes to the methods and bases used to calculate the statutory technical provisions and current surrender values, except where driven by varying future investment conditions under stochastic economic scenarios.

## E16 – Sensitivity analysis

### (a) Economic assumptions

The following tables show the sensitivity of the embedded value and the value of new business to:

- 10 basis point increase in the liquidity premium adjustment, where applicable;
- one and two percentage point increase and decrease in the risk-free rate, including all consequential changes (including assumed investment returns for all asset classes, market values of fixed interest assets, risk discount rates);
- 10% increase and decrease in market values of equity and property assets;
- 25% increase in equity and swaption volatilities;
- 50 basis point increase and decrease in credit spreads with no change to liquidity premium; and
- decrease in the level of required capital to 100% EU minimum (or equivalent).

In each sensitivity calculation, all other assumptions remain unchanged except where they are directly affected by the revised economic conditions. For example, future bonus rates are automatically adjusted to reflect sensitivity changes to future investment returns. Some of the sensitivity scenarios may have consequential effects on valuation bases, where the basis for certain blocks of business is actively updated to reflect current economic circumstances. Consequential valuation impacts on the sensitivities are allowed for where an active valuation basis is used. Where businesses have a target asset mix, the portfolio is re-balanced after a significant market movement otherwise no re-balancing is assumed.

For new business, the sensitivities reflect the impact of a change immediately after inception of the policy.

In general, the magnitude of the sensitivities will reflect the size of the embedded values, though this will vary as the sensitivities have different impacts on the different components of the embedded value. In addition, other factors can have a material impact, such as the nature of the options and guarantees, as well as the types of investments held.

The credit spread sensitivities assume that the change relates to credit risk and not liquidity risk; in practice, credit spread movements may be partially offset due to changes in liquidity risk.

Sensitivities will also vary according to the current economic assumptions, mainly due to the impact of changes to both the intrinsic cost and time value of options and guarantees. Options and guarantees are the main reason for the asymmetry of the sensitivities where the guarantee impacts to different extents under the different scenarios. This can be seen in the sensitivity of a 1%–2% movement in the interest rate for the US, where there is a significant amount of business with investment return guarantees.

### Embedded value

30 June 2011 Embedded value (net of tax and non-controlling interest)	As reported on page 133 £m	10bp increase in adjustment to risk-free rates £m	Interest rates			
			1% increase £m	1% decrease £m	2% increase £m	2% decrease £m
<b>United Kingdom</b>	<b>6,655</b>	<b>155</b>	<b>(150)</b>	<b>140</b>	<b>(295)</b>	<b>290</b>
France	3,281	5	(100)	(5)	(210)	(255)
Ireland	838	—	(30)	35	(50)	85
Italy	548	—	45	(40)	65	(80)
Poland	1,135	—	(60)	70	(115)	140
Spain	634	10	(25)	25	(55)	45
Other Europe	333	—	(10)	15	(20)	25
<b>Aviva Europe</b>	<b>6,769</b>	<b>15</b>	<b>(180)</b>	<b>100</b>	<b>(385)</b>	<b>(40)</b>
<b>North America</b>	<b>1,426</b>	<b>170</b>	<b>(115)</b>	<b>15</b>	<b>(320)</b>	<b>(55)</b>
<b>Asia Pacific</b>	<b>707</b>	<b>—</b>	<b>40</b>	<b>(90)</b>	<b>50</b>	<b>(260)</b>
<b>Total</b>	<b>15,557</b>	<b>340</b>	<b>(405)</b>	<b>165</b>	<b>(950)</b>	<b>(65)</b>

## E16 – Sensitivity analysis continued

30 June 2011 Embedded value (net of tax and non-controlling interest)	Equity/property			
	As reported on page 133 £m	Market values		Volatility 25% increase £m
		10% increase £m	10% decrease £m	
<b>United Kingdom</b>	<b>6,655</b>	<b>305</b>	<b>(365)</b>	<b>(180)</b>
France	3,281	165	(180)	(120)
Ireland	838	20	(20)	—
Italy	548	15	(15)	—
Poland	1,135	10	(10)	—
Spain	634	15	(15)	(5)
Other Europe	333	5	(5)	—
<b>Aviva Europe</b>	<b>6,769</b>	<b>230</b>	<b>(245)</b>	<b>(125)</b>
<b>North America</b>	<b>1,426</b>	<b>25</b>	<b>(20)</b>	<b>—</b>
<b>Asia Pacific</b>	<b>707</b>	<b>15</b>	<b>(15)</b>	<b>—</b>
<b>Total</b>	<b>15,557</b>	<b>575</b>	<b>(645)</b>	<b>(305)</b>

30 June 2011 Embedded value (net of tax and non-controlling interest)	As reported on page 133 £m	Swaption implied volatilities 25% increase £m	Corporate bond credit spread		EU minimum capital or equivalent £m
			50bps increase £m	50bps decrease £m	
			50bps increase £m	50bps decrease £m	
<b>United Kingdom</b>	<b>6,655</b>	<b>(15)</b>	<b>(720)</b>	<b>785</b>	<b>5</b>
France	3,281	(80)	(125)	175	15
Ireland	838	—	—	—	5
Italy	548	—	—	—	5
Poland	1,135	—	—	—	5
Spain	634	—	(50)	55	5
Other Europe	333	—	—	—	—
<b>Aviva Europe</b>	<b>6,769</b>	<b>(80)</b>	<b>(175)</b>	<b>230</b>	<b>35</b>
<b>North America</b>	<b>1,426</b>	<b>(110)</b>	<b>(880)</b>	<b>680</b>	<b>90</b>
<b>Asia Pacific</b>	<b>707</b>	<b>—</b>	<b>(15)</b>	<b>15</b>	<b>30</b>
<b>Total</b>	<b>15,557</b>	<b>(205)</b>	<b>(1,790)</b>	<b>1,710</b>	<b>160</b>

## New business

30 June 2011 Value of new business (net of tax and non-controlling interest)	As reported on page 123 £m	10bp increase in adjustment to risk-free rates £m	Interest rates			
			1% increase £m	1% decrease £m	2% increase £m	2% decrease £m
			1% increase £m	1% decrease £m	2% increase £m	2% decrease £m
<b>United Kingdom</b>	<b>140</b>	<b>7</b>	<b>(4)</b>	<b>5</b>	<b>(7)</b>	<b>12</b>
France	53	—	(3)	4	(9)	4
Ireland	1	—	—	—	1	(1)
Italy	15	—	(1)	1	(2)	1
Poland	14	—	(1)	1	(2)	3
Spain	17	—	—	—	(1)	(1)
Other Europe	11	—	(1)	1	(1)	1
<b>Aviva Europe</b>	<b>111</b>	<b>—</b>	<b>(6)</b>	<b>7</b>	<b>(14)</b>	<b>7</b>
<b>North America</b>	<b>(55)</b>	<b>5</b>	<b>17</b>	<b>(23)</b>	<b>25</b>	<b>(62)</b>
<b>Asia Pacific</b>	<b>27</b>	<b>—</b>	<b>8</b>	<b>(15)</b>	<b>14</b>	<b>(39)</b>
<b>Total</b>	<b>223</b>	<b>12</b>	<b>15</b>	<b>(26)</b>	<b>18</b>	<b>(82)</b>

## E16 – Sensitivity analysis continued

30 June 2011 Value of new business (net of tax and non-controlling interest)	Equity/property			
	Market values			Volatility 25% increase £m
	As reported on page 123 £m	10% increase £m	10% decrease £m	
<b>United Kingdom</b>	<b>140</b>	—	—	—
France	53	3	(4)	(1)
Ireland	1	—	—	—
Italy	15	—	(1)	—
Poland	14	—	—	—
Spain	17	—	—	—
Other Europe	11	—	—	—
<b>Aviva Europe</b>	<b>111</b>	<b>3</b>	<b>(5)</b>	<b>(1)</b>
<b>North America</b>	<b>(55)</b>	—	—	—
<b>Asia Pacific</b>	<b>27</b>	—	—	—
<b>Total</b>	<b>223</b>	<b>3</b>	<b>(5)</b>	<b>(1)</b>

30 June 2011 Value of new business (net of tax and non-controlling interest)	Corporate bond credit spread				
	As reported on page 123 £m	Swaption implied volatilities 25% increase £m	50bps		EU minimum capital or equivalent £m
			increase £m	decrease £m	
<b>United Kingdom</b>	<b>140</b>	—	(22)	24	—
France	53	(3)	(1)	1	1
Ireland	1	—	—	—	—
Italy	15	—	—	—	—
Poland	14	—	—	—	—
Spain	17	—	(3)	3	—
Other Europe	11	—	—	—	—
<b>Aviva Europe</b>	<b>111</b>	<b>(3)</b>	<b>(4)</b>	<b>4</b>	<b>1</b>
<b>North America</b>	<b>(55)</b>	<b>(3)</b>	<b>(25)</b>	<b>19</b>	<b>6</b>
<b>Asia Pacific</b>	<b>27</b>	—	—	—	<b>3</b>
<b>Total</b>	<b>223</b>	<b>(6)</b>	<b>(51)</b>	<b>47</b>	<b>10</b>

## (b) Non-economic assumptions

The following tables below show the sensitivity of the embedded value and the value of new business to the following changes in non-economic assumptions:

- 10% decrease in maintenance expenses (a 10% sensitivity on a base expense assumption of £10 pa would represent an expense assumption of £9 pa). Where there is a “look through” into service company expenses the fee charged by the service company is unchanged while the underlying expense decreases;
- 10% decrease in lapse rates (a 10% sensitivity on a base assumption of 5% pa would represent a lapse rate of 4.5% pa); and
- 5% decrease in both mortality and morbidity rates disclosed separately for life assurance and annuity business.

No future management actions are modelled in reaction to the changing non-economic assumptions. In each sensitivity calculation all other assumptions remain unchanged. No changes to valuation bases have been included.



**E16 – Sensitivity analysis continued****Embedded value**

30 June 2011 Embedded value (net of tax and non-controlling interest)	As reported on page 133 £m	10% decrease in maintenance expenses £m	10% decrease in lapse rates £m	5% decrease in mortality/ morbidity rates – life assurance £m	5% decrease in mortality/ morbidity rates – annuity business £m
<b>United Kingdom</b>	<b>6,655</b>	<b>165</b>	<b>30</b>	<b>35</b>	<b>(295)</b>
France	3,281	55	40	35	(5)
Ireland	838	20	20	5	(10)
Italy	548	15	(10)	5	—
Poland	1,135	25	50	15	—
Spain	634	5	45	15	(5)
Other Europe	333	10	20	5	—
<b>Aviva Europe</b>	<b>6,769</b>	<b>130</b>	<b>165</b>	<b>80</b>	<b>(20)</b>
<b>North America</b>	<b>1,426</b>	<b>75</b>	<b>(35)</b>	<b>60</b>	<b>(15)</b>
<b>Asia Pacific</b>	<b>707</b>	<b>30</b>	<b>5</b>	<b>15</b>	<b>—</b>
<b>Total</b>	<b>15,557</b>	<b>400</b>	<b>165</b>	<b>190</b>	<b>(330)</b>

**New business**

30 June 2011 Value of new business (net of tax and non-controlling interest)	As reported on page 123 £m	10% decrease in maintenance expenses £m	10% decrease in lapse rates £m	5% decrease in mortality/ morbidity rates – life assurance £m	5% decrease in mortality/ morbidity rates – annuity business £m
<b>United Kingdom</b>	<b>140</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>(7)</b>
France	53	2	4	1	—
Ireland	1	—	—	—	—
Italy	15	1	1	—	—
Poland	14	1	2	1	—
Spain	17	1	3	1	—
Other Europe	11	2	3	1	—
<b>Aviva Europe</b>	<b>111</b>	<b>7</b>	<b>13</b>	<b>4</b>	<b>—</b>
<b>North America</b>	<b>(55)</b>	<b>3</b>	<b>(5)</b>	<b>4</b>	<b>—</b>
<b>Asia Pacific</b>	<b>27</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>—</b>
<b>Total</b>	<b>223</b>	<b>17</b>	<b>13</b>	<b>10</b>	<b>(7)</b>

---

## Statement of directors' responsibilities in respect of the Market Consistent Embedded Value (MCEV) basis

When compliance with the European Insurance CFO Forum Market Consistent Embedded Value Principles (MCEV Principles), published in October 2009, is stated, those principles require the directors to prepare supplementary information in accordance with the methodology contained in the MCEV Principles and to disclose and explain any non-compliance with the guidance included in the MCEV Principles.

In preparing this supplementary information, the directors have done so in accordance with these MCEV Principles and have also fully complied with all the guidance included therein. Specifically, the directors have:

- determined assumptions on a realistic basis, having regard to past, current and expected future experience and to relevant external data, and then applied them consistently;
- made estimates that are reasonable and consistent; and,
- provided additional disclosures when compliance with the specific requirements of the MCEV Principles is insufficient to enable users to understand the impact of particular transactions, other events and conditions and the Group's financial position and financial performance.

Information on the directors can be found on page 94 of Aviva plc's 2010 Annual Report and Accounts.

By order of the Board

**Patrick Regan**

Chief financial officer  
3 August 2011

# Independent review report to Aviva Plc

## INDEPENDENT REVIEW REPORT TO THE DIRECTORS OF AVIVA PLC

### Introduction

We have been engaged by the Company to review the condensed set of MCEV financial statements in the half-yearly financial report for the six months ended 30 June 2011 which comprises the Condensed Consolidated Income Statement – MCEV Basis, the Condensed Consolidated Statement of Comprehensive Income – MCEV Basis, the Condensed Consolidated Statement of Changes in Equity – MCEV Basis, the Condensed Consolidated Statement of Financial Position – MCEV Basis, the Reconciliation of Shareholders' Equity on IFRS and MCEV bases, the Reconciliation of IFRS Total Equity to MCEV Net Worth, the Group MCEV Analysis of Earnings and the related notes E1 to E16 on pages 114 to 145 ; We have read the other information contained in the half-yearly financial report and considered whether it contains any apparent misstatements or material inconsistencies with the information in the condensed set of MCEV financial statements.

We have reported separately on the condensed financial statements of Aviva plc prepared on an IFRS basis for the six months ended 30 June 2011. The information contained in the condensed set of MCEV financial statements should be read in conjunction with the condensed set of financial statements prepared on an IFRS basis. This information is described within the condensed set of MCEV financial statements in the half-yearly financial report as having being reviewed.

This report is made solely to the Company in accordance with guidance contained in International Standards on Review Engagements (UK and Ireland) 2410, "Review of Interim Financial Information Performed by the Independent Auditor of the Entity" issued by the Auditing Practices (ISRE 2410). To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company, for our work, for this report, or for the conclusions we have formed.

### Directors' Responsibilities

The condensed set of MCEV financial statements in the half-yearly financial report is the responsibility of, and has been approved by, the directors. The directors are responsible for preparing the condensed set of MCEV financial statements in the half-yearly financial report in accordance with the Basis of Preparation set out on pages 114 to 117.

### Our Responsibility

Our responsibilities, as independent auditors, in relation to the condensed set of MCEV financial statements in the half-yearly financial report are set out in our engagement letter with you dated 3 August 2011. We report to you our opinion as to whether the condensed set of MCEV financial statements in the half-yearly financial report have been properly prepared, in all material respects, in accordance with the Basis of Preparation set out on pages 114 to 117.

### Scope of Review

We conducted our review in accordance with ISRE 2410. A review of interim financial information consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing (UK and Ireland) and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

### Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the condensed set of MCEV financial statements in the half-yearly financial report for the six months ended 30 June 2011 is not prepared, in all material respects, in accordance with the Basis of Preparation set out on pages 114 to 117.

Ernst & Young LLP  
London  
3 August 2011

# Glossary

## Product definitions

### Annuities

A type of policy that pays out regular amounts of benefit, either immediately and for the remainder of a person's lifetime, or deferred to commence from a future date. Immediate annuities may be purchased for an individual and his or her dependants or on a bulk purchase basis for groups of people. Deferred annuities are accumulation contracts, which may be used to provide benefits in retirement, and may be guaranteed, unit-linked or index-linked.

### Bonds and savings

These are accumulation products with single or regular premiums and unit-linked or guaranteed investment returns. Our product ranges include single premium investment bonds, regular premium savings plans and mortgage endowment products.

### Critical illness cover

Critical illness cover pays out a lump sum if the insured person is diagnosed with a serious illness that meets the plan definition. The cover is often provided in conjunction with other benefits under a protection contract.

### Deferred annuities

An annuity (or pension) due to be paid from a future date or when the policyholder reaches a specified age. A deferred annuity may be funded by a policyholder by payment of a series of regular contributions or by a capital sum (the latter often provided from a pension fund).

### Group pensions

A pension plan that covers a group of people, which is typically purchased by a company and offered to their employees.

### Guaranteed annuities

A policy that pays out a fixed regular amount of benefit for a defined period.

### Income drawdown

The policyholder can transfer money from any pension fund to an income drawdown plan from which they receive an income. The remainder of the pension fund continues to be invested, giving it the potential for growth.

### Index linked annuities

An index linked annuity is a type of deferred annuity whose credited interest is linked to an equity index. It guarantees a minimum interest rate and protects against a loss of principal.

### Investment sales

Comprise retail sales of mutual fund type products such as unit trusts, individual savings accounts (ISAs) and Open Ended Investment Companies (OEICs).

### ISAs

Individual savings accounts – Tax efficient plans for investing in stocks and shares, cash deposits or life insurance investment funds, subject to certain limits. Introduced in the UK in 1999.

### Monolines

Financial companies specialising in a single line of products such as credit cards, mortgages or home equity loans.

### Mortgage endowment

An insurance contract combining savings and protection elements which is designed to repay the principal of a loan or mortgage.

### Mortgage life insurance

A protection contract designed to pay off the outstanding amount of a mortgage or loan in the event of death of the insured.

### Non profits

Long-term savings and insurance products sold in the UK other than "With profits" (see definition below) products.

### OEIC

An open ended investment company is a collective investment fund structured as a limited company in which investors can buy and sell shares.

### Pensions

A means of providing income in retirement for an individual and possibly his/her dependants. Our pensions products include personal and group pensions, stakeholder pensions and income drawdown.

### Personal pensions

A pension plan tailored to the individual policyholder, which includes the options to stop, start or change their payments.

### Protection

An insurance contract that protects the policyholder or his/her dependants against financial loss on death or ill-health. Our product ranges include term assurance, mortgage life insurance, flexible whole life and critical illness cover.

### Regular premium

A series of payments are made by the policyholder, typically monthly or annually, for part of or all of the duration of the contract.

### SICAVs

Société d'investissement à capital variable (variable capital investment company). This is an open-ended investment fund, structured as a legally independent joint stock company, whose units are issued in the form of shares.

## Product definitions cont.

### Single premium

A single lump sum is paid by the policyholder at commencement of the contract.

### Stakeholder pensions

Low cost and flexible pension plans available in the UK, governed by specific regulations.

### Superannuation

Superannuation is a pension product sold in Australia where employers pay a proportion of an employee's salaries and wages into a fund, which can be accessed when the employee retires.

### Takaful

Insurance products that observe the rules and regulations of Islamic law.

### Term assurance

A simple form of life insurance, offering cover over a fixed number of years during which a lump sum will be paid out if the life insured dies.

### Unit trusts

A form of open ended collective investment constituted under a trust deed, in which investors can buy and sell units.

### Unit-linked annuities

A unit-linked annuity is a type of deferred annuity which is invested in units of investment funds, whose value depends directly on the market value of assets in those funds.

### Whole life

Whole life insurance is a protection policy that remains in force for the insured's whole life. Traditional whole life contracts have fixed premium payments that typically cannot be missed without lapsing the policy. Flexible whole life contracts allow the policyholder to vary the premium and/or amount of life cover, within certain limits.

### With profits

A type of long-term savings and insurance product sold in the UK. Under with profits policies premiums are paid into a separate fund. Policyholders receive a return on their policies through bonuses, which "smooth" the investment return from the assets which premiums are invested in. Bonuses are declared on an annual and terminal basis. Shareholders have a participating interest in the with-profit funds and any declared bonuses. Generally, policyholder and shareholder participation in with-profit funds in the UK is split 90:10.

### Wrap investments

An account in which a broker or fund manager executes investment decisions on behalf of a client in exchange for a single quarterly or annual fee, usually based on the total assets in the account rather than the number of transactions.

## General terms

### Available for sale (AFS)

Securities that have been acquired neither for short-term sale nor to be held to maturity. These are shown at fair value on the statement of financial position and changes in value are taken straight to equity instead of the income statement.

### Association of British Insurers (ABI)

Association of British Insurers – A major trade association for UK insurance companies, established in July 1985.

### Acquired value of in force (AVIF)

An estimate of future profits that will emerge over the remaining term of all existing life and pensions policies for which premiums are being paid or have been paid at the statement of financial position date.

### Bancassurance

An arrangement whereby banks and building societies sell insurance and investment products to their customers on behalf of other financial providers.

### Combined Code on Corporate Governance

The Combined Code on Corporate Governance sets out guidance in the form of principles and provisions on how companies should be directed and controlled to follow good governance practice. The Financial Services Authority requires companies listed in the UK to disclose, in relation to the Combined Code, how they have applied its principles and whether they have complied with its provisions throughout the accounting year. Where the provisions have not been complied with, companies must provide an explanation for this.

### Deferred acquisition costs (DAC)

The cost directly attributable to the acquisition of new business for insurance and participating investment contracts (excluding those written in the UK) are deferred to the extent that they are expected to be recoverable out of future margins in revenue on these contracts.

### Fair value

The price that a reasonable buyer would be willing to pay and a reasonable seller would be willing to accept for a product on the open market.

### FSA

The UK's Financial Services Authority – Main regulatory body appointed by the government to oversee the financial services industry in the UK. Since December 2001 it has been the single statutory regulator responsible for the savings, insurance and investment business.

### Funds under management

Represents all assets actively managed or administered by or on behalf of the Group including those funds managed by third parties.

**General terms cont.****Funds under management by Aviva**

Represents all assets actively managed or administered by the fund management operations of the Group.

**General insurance**

Also known as non-life or property and casualty insurance. Casualty insurance primarily covers losses arising from accidents that cause injury to other people or damage property of others. Property insurance covers loss or damage through fire, theft, flood, storms and other specified risks.

**Gross written premiums**

The total earnings or revenue generated by sales of insurance products, before any reinsurance is taken into account. Not all premiums written will necessarily be treated as income in the current financial year, because some of them could relate to insurance cover for a subsequent period.

**"Hard" insurance market**

A term used to describe the state of the general insurance market. A "hard" insurance market is characterised by high levels of underwriting profits and the ability of insurers to charge high premium rates. Hard insurance markets generally occur when capital is scarce and are the opposite of "soft" insurance markets.

**Independent Financial Advisers (IFAs)**

A person or organisation authorised to give advice on financial matters and to sell the products of all financial service providers. In the UK they are legally obliged to offer the product that best suits their clients' needs. Outside the UK IFAs may be referred to by other names.

**IFRS**

International Financial Reporting Standards. These are accounting regulations designed to ensure comparable statement of financial position preparation and disclosure, and are the standards that all publicly listed companies in the European Union are required to use.

**IFRS operating profit**

From continuing operations on an IFRS basis, stated before tax attributable to shareholders' profits, impairment of goodwill and exceptional items. This is also referred to as adjusted operating profit

**Inherited estate**

In the UK, the assets of the long-term with-profit funds less the realistic reserves for non-profit policies, less asset shares aggregated across the with-profit policies and any additional amounts expected at the valuation date to be paid to in-force policyholders in the future in respect of smoothing costs and guarantees.

**Internal rate of return**

Internal Rate of Return is the rate at which the discounted value of post-tax profits expected to

be earned over the life time of the new business written is equal to the total capital invested in new business.

**Long-term and savings business**

Collective term for life insurance, pensions, savings, investments and related business.

**Market Consistent Embedded Value**

Aviva's Market Consistent Embedded Value (MCEV) methodology which is in accordance with the MCEV Principles published by the CFO Forum in June 2008 as amended in October 2009.

**Net written premiums**

Total gross written premiums for the given period, minus premiums paid over or "ceded" to reinsurers.

**Present value of new business (PVNBP)**

Present value of new regular premiums plus 100% of single premiums, calculated using assumptions consistent with those used to determine the value of new business under Market Consistent Embedded Value (MCEV) principles published by the CFO Forum of major European listed and non-listed insurance companies.

**"Soft" insurance market**

A term used to describe the state of the general insurance market. A "soft" insurance market is characterised by low levels of profitability and market competition driving premium rates lower. Soft insurance markets generally occur when there is excess capital and are the opposite of "hard" insurance markets.

**Turnbull Guidance on Internal Control**

The Turnbull guidance sets out best practice on internal controls for UK listed companies, and provides additional guidance in applying certain sections of the Combined Code.

**Market Consistent Embedded Value (MCEV) terms****Asymmetric risk**

Risks that will cause shareholder profits to vary where the variation above and below the average are not equal in distribution.

**CFO Forum**

The CFO Forum [www.cfoforum.nl](http://www.cfoforum.nl) is a high-level group formed by the Chief Financial Officers of major European listed and non-listed insurance companies. Its aim is to discuss issues relating to proposed new accounting regulations for their businesses and how they can create greater transparency for investors. The Forum was created in 2002, the Market Consistent Embedded Value principles were launched in June 2008. The principles are a further development of the European Embedded Value principles first launched in May 2004.

## Market Consistent Embedded Value (MCEV) terms cont.

### Cost of non-hedgeable risks

This is the cost of undertaking those risks for which a deep and liquid market in which to hedge that risk does not exist. This can include both financial risks and non-financial risks such as mortality, persistency and expense.

### Covered business

The contracts to which the MCEV methodology has been applied.

### EU solvency

The excess of assets over liabilities and the worldwide minimum solvency margins, excluding goodwill and the additional value of in-force long-term business, and excluding the surplus held in the Group's life funds. The Group solvency calculation is determined according to the UK Financial Services Authority application of EU Insurance Groups Directive rules.

### Financial options and guarantees

Features of the covered business conferring potentially valuable guarantees underlying, or options to change, the level or nature of policyholder benefits and exercisable at the discretion of the policyholder, whose potential value is impacted by the behaviour of financial variables.

### Free surplus

The amount of any capital and surplus allocated to, but not required to support, the in-force covered business.

### Frictional costs

The additional taxation and investment costs incurred by shareholders through investing the Required Capital in the Company rather than directly.

### Funds under management

Represents all assets actively managed or administered by or on behalf of the group including those funds managed by third parties.

### Group MCEV

A measure of the total consolidated value of the group with covered life business included on an MCEV basis and non-covered business (including pension schemes and goodwill) included on an IFRS basis.

### Gross risk-free yields

Gross of tax yields on risk-free fixed interest investments, generally swap rates under MCEV.

### Implicit items

Amounts allowed by local regulators to be deducted from capital amounts when determining the EU required minimum margin.

### Inherited estate

The assets of the long-term with-profit funds less the realistic reserves for non-profit policies, less asset shares aggregated across the with-profit policies and any additional amounts expected at the valuation date to be paid to in-force policyholders in the future in respect of smoothing costs and guarantees.

### Life business

Subsidiaries selling life and pensions contracts that are classified as covered business under MCEV.

### Life MCEV

The MCEV balance sheet value of covered business as at the reporting date. Excludes non-covered business including pension schemes and goodwill.

### Life MCEV operating earnings

Operating earnings on the MCEV basis relating to the lines of business included in the embedded value calculations. From continuing operations and is stated before tax, impairment of goodwill and exceptional items.

### Life MCEV earnings

Total earnings on the MCEV basis relating to the lines of business included in the embedded value calculations. From continuing operations.

### Look-through basis

Inclusion of the capitalised value of profits and losses arising from subsidiary companies providing administration, investment management and other services to the extent that they relate to covered business.

### Long-term savings

Includes life and pension sales calculated under MCEV and retail investment sales.

### Market consistent

A measurement approach where economic assumptions are such that projected asset cash flows are valued consistently with current market prices for traded assets.

### Net asset value per ordinary share

Net asset value divided by the number of ordinary shares in issue. Net asset value is based on equity shareholders' funds.

### Net worth

The market value of the shareholders' funds and the shareholders' interest in the surplus held in the non-profit component of the long-term business funds, determined on a statutory solvency basis and adjusted to add back any non-admissible assets, and consists of the required capital and free surplus.



**Market Consistent Embedded Value (MCEV) terms cont.****New business margin**

New business margins are calculated as the value of new business divided by the present value of new business premiums (PVNBP), and expressed as a percentage.

**Present value of new business premiums (PVNBP)**

Present value of new regular premiums plus 100% of single premiums, calculated using assumptions consistent with those used to determine the value of new business.

**Required capital**

The amount of assets, over and above the value placed on liabilities in respect of covered business, whose distribution to shareholders is restricted.

**Risk-free rate (reference rate in CFO Forum terminology)**

In stable markets, including the period from 31 December 2006 to 30 June 2007, the risk-free rate is taken as the swap curve yield. In current markets, including the period from 1 July 2007, the risk-free rate is taken as swaps except for all contracts that contain features similar to immediate annuities and are backed by appropriate assets, including paid up group deferred annuities and all other contracts in the Netherlands, and deferred annuities and all other contracts in the US. The adjusted risk-free rate is taken as swaps plus the additional return available for products and where backing asset portfolios can be held to maturity.

**Service companies**

Companies providing administration or fund management services to the covered business.

**Solvency cover**

The excess of the regulatory value of total assets over total liabilities, divided by the regulatory value of the required minimum solvency margin.

**Spread business**

Contracts where a significant source of shareholder profits is the taking of credit spread risk that is not passed on to policyholders. The most significant spread business in Aviva are immediate annuities and US deferred annuities and life business.

**Statutory basis**

The valuation basis and approach used for reporting financial statements to local regulators.

**Stochastic techniques**

Techniques that incorporate the potential future variability in assumptions.

**Symmetric risks**

Risks that will cause shareholder profits to vary where the variation above and below the average are equal and opposite. Financial theory says that investors do not require compensation for non-market risks that are symmetrical as the risks can be diversified away by investors.

**Time value and intrinsic value**

A financial option or guarantee has two elements of value, the time value and intrinsic value. The intrinsic value is the discounted value of the option or guarantee at expiry, assuming that future economic conditions follow best estimate assumptions. The time value is the additional value arising from uncertainty about future economic conditions.

**Value of new business**

Is calculated using economic assumptions set at the start of each quarter and the same operating assumptions as those used to determine the embedded values at the end of the reporting period and is stated after the effect of any frictional costs. Unless otherwise stated, it is also quoted net of tax and minority interests.



## Group financial calendar for 2011

Announcement of third quarter Interim Management Statement	03 November 2011
---	------------------

## Annual General Meeting

The voting results of the 2011 AGM, including proxy votes and votes withheld can be viewed on our website at [www.aviva.com/agm](http://www.aviva.com/agm). In addition you will also find the group chief executive's 2011 presentation and a webcast of the formal business of the meeting. Information relating to previous Annual General Meetings since 2002 is also available.

## Dividends

Dividends on Aviva ordinary shares are normally paid in May and November; please see the table below for the 2011 interim dividend dates. Dividends paid on Aviva preference shares are normally paid in March, June, September and December; please visit [www.aviva.com/preferenceshares](http://www.aviva.com/preferenceshares) for the latest dividend payment dates.

Holders of the Company's ordinary and preference shares receive dividends in sterling and holders of ADRs will receive dividends in US dollars.

### Ordinary shareholders – Have your dividends paid directly into your bank account

Visit [www.aviva.com/dividends](http://www.aviva.com/dividends) for further details or contact the Company's Registrar, Computershare Investors Services PLC (contact details overleaf), to obtain a dividend mandate form. For UK resident shareholders, if your shareholding is valued at £10,000 or less, you can set up a mandate instruction over the telephone.

Shareholders resident outside the UK can elect to receive dividends in a choice of over 65 international currencies through the Global Payment Service. For further details, including the fees for this service, please visit [www.investorcentre.co.uk/faq](http://www.investorcentre.co.uk/faq) and select the Dividends and Payments tab, followed by Global Payment Service.

## Ordinary shares – 2011 interim dividend

Ex-dividend date	21 September 2011
Record date	23 September 2011
Last date for receipt of Scrip elections	21 October 2011
Dividend payment date*	17 November 2011

\* Please note that the ADR local payment date will be approximately 5 business days after the proposed dividend date for ordinary shares.

## Be on your guard – beware of fraudsters

Shareholders are advised to be very wary of any unsolicited telephone calls or correspondence offering to buy shares at a discount or offering free financial advice or company reports. If you receive any unsolicited advice:

- Make sure you get the correct name of the person and organisation,
- Check that they are properly authorised by the Financial Services Authority (FSA) before getting involved by visiting [www.fsa.gov.uk/register/](http://www.fsa.gov.uk/register/),
- Report the matter to the FSA by calling 0845 606 1234 or visit [www.fsa.gov.uk/pages/consumerinformation](http://www.fsa.gov.uk/pages/consumerinformation),
- If the calls persist, hang up.

More detailed information on this can be found on the Money Advice Service website at [www.moneyadvice.org.uk](http://www.moneyadvice.org.uk).

## Company Registrar

### Ordinary and Preference Shares

On 4 July 2011, Computershare Investors Services PLC ("Computershare") replaced Equiniti as Aviva's Registrar. Any queries regarding Aviva plc shares should be directed to Computershare using the contact details overleaf. Please quote Aviva plc, together with the name and address in which the shares are held and your Computershare Shareholder Reference Number (SRN).

## How to obtain your Computershare Shareholder Reference Number (SRN)

On moving the Aviva share register from Equiniti to Computershare, each shareholder was allocated a new SRN which will be quoted on any future shareholder correspondence.

If you are registered to receive electronic communications, you should have received your new SRN from Computershare.

If you do not have your SRN, which you will need either to use the Computershare share dealing facility, or to use online shareholder services, you will be able to obtain your SRN by contacting Computershare by telephone on 0871 495 0105\*. Computershare will send you confirmation of your SRN by post, to be received within five business days.

If you need your SRN immediately, Computershare will be able to provide your SRN over the telephone providing you can answer some security questions and provide your Equiniti SRN.

\*Please call +44 (0) 117 378 8361 if calling from outside of the UK.

## Electronic Communications

Please note that shareholders registered with Shareview are no longer able to view their Aviva shareholding via the online Shareview site. Shareholders can register for online services via the Computershare Investor Centre at [www.investorcentre.co.uk](http://www.investorcentre.co.uk).

This is a free and secure service that allows you to:

- Access details of your individual Aviva shareholding quickly and securely online;
- Change your details online;
- Elect to receive important shareholder communications by email or in hard copy format;
- Arrange for any dividend payments to be made directly to your bank or building society account;
- Elect to join the Aviva Scrip Dividend Scheme; and
- Vote online.

## Online Shareholder Services Centre – [www.aviva.com/shareholderservices](http://www.aviva.com/shareholderservices)

The online shareholder services centre has been designed to meet the specific needs of holders of Aviva ordinary shares, preference shares and ADRs, and includes features which allow you to manage your holding in Aviva easily and efficiently.

Within the online centre, you will be able to find current and historic Aviva ordinary and preference share and ADR prices, share dealing information, news, updates and, when available, presentations from Aviva's senior management. You will also be able to download an electronic copy of the Company's reports.

There is also a range of frequently asked questions on holding ordinary shares, preference shares and ADRs in Aviva, which contain practical and helpful information, including useful contact details.

#### Aviva share price

You can access the current share price of Aviva ordinary shares and ADRs at [www.aviva.com/shareprice](http://www.aviva.com/shareprice). If you would like to find out the price of Aviva preference shares, please visit the London Stock Exchange website at [www.londonstockexchange.com](http://www.londonstockexchange.com).

### Contact Details

#### Ordinary and Preference Shares

##### Computershare Investor Services PLC

The Pavilions  
Bridgwater Road  
Bristol  
BS99 6ZZ

**Email:** [avivaSHARES@computershare.co.uk](mailto:avivaSHARES@computershare.co.uk)

**Telephone:** 0871 495 0105\*

\*Please call +44 (0) 117 378 8361 if calling from outside of the UK.

#### ADRs

Aviva has a sponsored ADR facility administered by Citibank, NA. Any queries regarding Aviva ADRs can be directed to Citibank by post, telephone or email.

##### Citibank Shareholder Services

PO Box 43077  
Providence,  
Rhode Island  
USA 02940-5000

**Email:** [citibank@shareholders-online.com](mailto:citibank@shareholders-online.com)

**Telephone:** (00 1) 877 248 4237

(free phone for callers within the US)

+(1) 781 575 4555 (non free phone for callers outside the US)

**Fax:** +(1) 201 324 3284

For further information about Aviva's ADR programme, please go to [www.citi.com/dr](http://www.citi.com/dr).

### Form 20-F

Aviva is a foreign private issuer in the United States of America and is subject to certain reporting requirements of the Securities Exchange Commission (SEC). Aviva files its Form 20-F with the SEC, copies of which can be found at [www.aviva.com/reports](http://www.aviva.com/reports).

### Internet sites

Aviva owns various internet sites, most of which interlink with each other:

Aviva Group

**[www.aviva.com](http://www.aviva.com)**

UK long-term savings and general insurance

**[www.aviva.co.uk](http://www.aviva.co.uk)**

Asset management

**[www.avivainvestors.com](http://www.avivainvestors.com)**

Aviva worldwide internet sites

**[www.aviva.com/websites](http://www.aviva.com/websites)**

### Other useful links for shareholders

Aviva shareholder services centre

**[www.aviva.com/shareholderservices](http://www.aviva.com/shareholderservices)**

ADR holders

**[www.aviva.com/adr](http://www.aviva.com/adr)**

Aviva preference shareholders

**[www.aviva.com/preferenceshares](http://www.aviva.com/preferenceshares)**

Dividend information for ordinary shares

**[www.aviva.com/dividends](http://www.aviva.com/dividends)**

Annual general meeting information

**[www.aviva.com/agm](http://www.aviva.com/agm)**

Aviva share price

**[www.aviva.com/shareprice](http://www.aviva.com/shareprice)**

Register for electronic communications

**[www.aviva.com/ecomms](http://www.aviva.com/ecomms)**