News Release

Aviva plc preliminary results for the year ended 31 December 2010

3rd March 2011

26% growth in operating profit
Strong results pave the way for further growth

Strong performance	■ IFRS operating profit up 26% to £2.55 billion (FY 2009: £2.02 billion) ■ Profit before tax up 35% to £2.44 billion (FY 2009: £1.81 billion) ■ Increased net operational capital generation by 70% to £1.7 billion[1] (FY 2009: £1.0 billion) ■ IFRS Net Asset Value per share up by 21% to 454p (FY 2009: 374p) EEV equivalent NAV per share 621p. ■ IFRS return on equity 14.8% (FY 2009: 10.9%) ■ Total dividend per share up 6% to 25.5 pence
Profitable growth in both life and general insurance	■ Improved life new business IRR to 12.5% and payback to 8 years (FY 2009: 10.0% and 14 years) and long term savings sales up 4% to £37.4 billion (FY 2009: £35.9 billion) ■ General insurance COR of 96.8% (FY 2009: 99%) and general insurance and health net written premiums up 6% to £9.7 billion
Positive outlook: good platform for continued growth	■ Focusing on markets where we have strength and scale: UK and Europe is the largest savings market in the world with greatest absolute growth in next five years ■ Improved profitability and focus on robust capital generation ■ Stronger balance sheet - pension deficit reduced to zero from £1.7 billion[2] (31.12.09); IFRS shareholder equity now exceeds pre-financial crisis levels, increasing during the year by £2.5 billion to £13.0 billion ■ Financial strength recognised in recent positive rating action by S&P and Fitch

Andrew Moss, group chief executive, commented:

"We've gone from strength to strength in 2010. In a tough external environment we've outperformed. Operating profits are up 26% and we are able to reinvest in the business and pay a healthy and growing dividend.

"Over the last few years, we've grown the business, significantly reduced costs and strengthened the balance sheet. As a result, we've created a good platform for the next phase of growth.

"We have a clear strategy and we are meeting our customers' needs. By focusing on what we do best in the markets where we have strength and scale, we will continue to prosper in 2011."

1 Gross of Delta Lloyd longevity assumption change

2 IAS19 basis

Key financial highlights

	IFRS		
	2010 £m	2009 £m	Sterling % change
Long-term business	**2,318**	1,887	23%
General insurance and health	**1,050**	960	9%
Fund management	**201**	133	51%
Other operations and regional costs	**(220)**	(214)	(3)%
Corporate centre	**(143)**	(108)	(32)%
Group debt and other interest costs	**(656)**	(636)	(3)%
Operating profit before tax	**2,550**	2,022	26%
Profit after tax	**1,892**	1,315	44%
Earnings per share	**50.4p**	37.8p	33%

Long-term business

	Present value of new business premiums		IRR	
	2010 £m	2009 £m	**2010 %**	2009 %
United Kingdom	**10,298**	8,914	**15%**	14%
Aviva Europe	**13,537**	13,523	**13%**	13%
Delta Lloyd	**3,178**	3,665	**6%**	6%
North America	**4,728**	4,545	**14%**	7%
Asia Pacific[3]	**1,617**	1,356	**11%**	8%
Total life and pensions	**33,358**	32,003	**12.5%**	10.0%
Investment sales	**4,002**	3,872		
Long-term savings sales	**37,360**	35,875		

General insurance and health

	Net written premiums		Operating profit		GI COR	
	2010 £m	2009 £m	**2010 £m**	2009 £m	**2010 %**	2009 %
United Kingdom	**4,539**	4,298	**579**	535	**96%**	99%
Aviva Europe	**1,953**	1,883	**109**	132	**103%**	103%
Delta Lloyd	**1,177**	1,163	**146**	143	**95%**	97%
North America	**1,958**	1,800	**222**	144	**97%**	100%
Asia Pacific	**72**	49	**(6)**	6	**n/a**	n/a
Total general insurance and health	**9,699**	9,193	**1,050**	960	**97%**	99%

Capital

	31 December 2010	31 December 2009	Sterling % change
Net operating capital generated	**£1.7bn**[4]	£1.0bn	70%
Total dividend per share	**25.5p**	24.0p	6%

	31 December 2010	31 December 2009	Sterling % change
IFRS net asset value per share	**454p**	374p	21%
EEV equivalent net asset value per share	**621p**	n/a	n/a
IGD solvency surplus	**£3.8bn**	£4.5bn	

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Timings

Real-time media conference call
0800 hrs GMT

Analyst presentation
0930 hrs GMT

Presentation slides available at www.aviva.com from 0930 hrs GMT

Live webcast
www.aviva.com

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3 Includes the Australian life business sold on 1 October 2009

4 Gross of Delta Lloyd longevity assumption change

A successful year for Aviva

This has been a successful year for Aviva. Despite the tough economic environment in 2010, we have grown the business and the benefits of Aviva's transformation over recent years have started to come through.

We have seen strong growth during the year: IFRS operating profits were up 26% to £2.55 billion and total sales were up 4% to £47.1 billion. We are selling more and improving profitability: we delivered a life new business internal rate of return (IRR) of 12.5% and a general insurance combined operating ratio (COR) of 96.8%. We have also beaten our target for capital generation, increasing net operational capital by 70% to £1.7 billion.

This is the result of a great deal of hard work across the group – focusing on our customers, growing the business and driving cost and capital efficiency.

We are in good shape to continue building on last year's strong performance. We have a clear strategy to concentrate on the markets where we have strength and scale and to make the most of running our life and general insurance businesses under a single strong brand.

We have created a strong platform for profitable growth...

With the global economy in the grip of a financial crisis, we have created a strong platform for profitable growth, taking decisive management actions to improve our productivity and efficiency.

The steps we have taken as part of our 'One Aviva, twice the value' strategy have helped us achieve this. We have simplified and streamlined the group, moving from a federation of independent businesses to a successful, global business operating under a single, strong brand. This has strengthened the business and enabled us to serve our customers better.

...and the benefits are clearly evident in the numbers

As expected, the economic situation remained difficult in 2010. The fact that we turned in such a strong financial performance under these circumstances underlines the strength of our business.

We are seeing evidence of improved performance right across our business. We had another strong year in life insurance. General insurance is returning to growth from a low point in the cycle. Our asset management business, Aviva Investors, delivered significant growth in funded external sales.

Our customers are at the heart of our success...

Aviva's resilience and improving performance are underpinned by the scale of our customer base, now over 53 million strong.

Against an uncertain economic backdrop, customers are looking to save more for their financial security. Investment performance and customer demand for our products increased total funds under management by £23 billion to £402 billion in the year.

Through our determination to focus on meeting customers' needs effectively and efficiently, we are attracting new customers and giving existing customers greater reason to stay with Aviva.

...as we continued to grow the business profitably...

During the year we maintained our emphasis on growing the business profitably. We ensured that we allocated our capital to areas where we could earn optimal returns and continued to bear down on costs.

We reduced our cost base by £149 million, a reduction of 3%, and over the last three years we have taken more than £750 million of costs out of the business.

With this combination of keeping down costs and pursuing profitable growth, Aviva's life business is now significantly more profitable than it was three years ago and the momentum is continuing. In general insurance, absolute cost savings combined with rising sales and disciplined underwriting have driven a significant improvement in profitability.

These improvements helped to drive IFRS operating profit up by 26% to £2,550 million and earnings per share increased by 33% to 50p.

In addition, the consultation on the planned closure of Aviva's final salary staff pension scheme was completed during the year. Moving all UK staff to a defined contribution scheme from 1 April 2011 has benefitted Aviva's net asset value by £286 million and will reduce funding costs by £50 million a year.

...due to strong performances across our businesses

We delivered a strong life insurance performance in 2010. Long-term savings sales increased by 4% to £37,360 million. Through our focus on profitable new business growth and disciplined allocation of capital the group's IRR increased to 12.5% (from 10.0% in 2009) with a payback of 8 years (14 years in 2009).

In the UK our life business is clearly winning in an attractive market and we were voted the UK's top insurer by independent financial advisers. Not only did we grow long-term saving sales by 19% and increase our market share for the third consecutive quarter but we also delivered excellent profitability with a 15% (IRR) and significantly increased margins to 3.4% (FY 2009: 2.8%).

In Europe we are well positioned in the world's largest life and pensions market. We achieved a 13% IRR in Aviva Europe - ahead of the group's short term financial target - on life and pensions sales up 3% on a local currency basis.

In North America we significantly increased profitability with an IRR of 14% and a four year payback as a result of disciplined pricing management and our focus on more capital-efficient life products.

In Asia Pacific we have made great strides in the growth of our franchise. Life and pensions sales were up 48%[5] and IRRs improved significantly from 6%[5] to 11% through active management of the product mix and capital discipline.

Our **general insurance** performance is a very important highlight of 2010. Over the last couple of years, we took tough decisions to move away from unprofitable business, particularly in the UK. This means that, from a sound footing, we are now growing in a market which shows some signs of improvement and total general insurance and health net written premiums increased by 6% to £9,699 million.

Our offering is proving very successful. In the UK General Insurance business, net written premiums were 5% higher at £4,046 million in 2010 and we delivered four consecutive quarters of sales growth. In Aviva Europe the COR was 103%, and although some of this was due to poor weather this is an area for further improvement in 2011. In Canada – our second largest general insurance business – our decision to exit unprofitable business contributed to a 54% increase in operating profit to £222 million on slightly lower sales, down 3% to £1,958 million on a constant currency basis.

Across the general insurance business we achieved a COR of 96.8%, better than our 2011 target of 97%.

The strength of our bancassurance performance was particularly pleasing. Our combination of life and general insurance and our excellent products and services in both areas make us an attractive business partner and during 2010 we announced new arrangements with Santander and Royal Bank of Scotland. We have over 100 bank partnerships and long-term savings sales in this area grew by 10% in the year.

Aviva Investors, our global asset management business, grew assets under management by 4% to £260 billion. IFRS operating profits were down from £115 million in 2009 to £100 million in 2010 as we continued to invest in the business. Despite the unpredictable nature of the financial markets, investment performance was ahead of target for Aviva Investors with 73% of its funds beating benchmark. The business has also made good progress in the development of a global infrastructure which will help to reinforce the focus on delivering strong growth in third party business. Net funded external sales rose from £236 million outflows in 2009 to £2,364 million inflows in 2010.

Overall, our results in life, general insurance and asset management have been largely unaffected by foreign exchange movements.

Cash and capital is a clear differentiator...

We took time in 2010 to highlight to analysts and shareholders the strength of our cash and capital generation. Indeed, we generate substantially more capital than any other insurer in the UK.

Given the strength of our business across life and general insurance, and with over 30 million customers on long-term contracts, a key characteristic of Aviva is the strength of our cash flows and our capital position. 2010 saw a £3 billion increase in expected future cash flows from our in-force life book to £36 billion.

Last year we forecast net operating capital for the year of £1.5 billion. We have beaten that guidance, delivering £1.7 billion net operating capital in 2010 – an increase of 70% on 2009.

...and our balance sheet is stronger...

We also provided further clarity on the strength and quality of our balance sheet which underpins our resilient profits and powerful capital generation.

During the year our IFRS net asset value per share increased to 454p (31 December 2010) from 374p (31 December 2009), largely through the strength of our earnings and by reducing the pension deficit to zero (31 December 2010) from £1.7 billion (31 December 2009), but also partly through improving financial markets.

The strength of Aviva's balance sheet rests on our effective management of credit and insurance risk and our disciplined asset liability management. We have high quality, well managed and diverse fixed income portfolios, and our asset manager Aviva Investors has helped to deliver a consistently strong performance across these assets over a number of years.

In line with the prudent management of our balance sheet in the current economic environment and our strong capital generation, we plan to reduce Aviva's hybrid debt by at least £700 million over the next three years.

In January 2011 we provided the market with further embedded value disclosure. This gave additional clarity to the value of Aviva's future cash flows and allows greater comparability with other UK insurers. On a European Embedded Value equivalent basis Aviva's net asset value per share is 621p at 31 December 2010.

Our IFRS shareholder equity now exceeds the level before the global financial crisis, having increased during the year by £2.5 billion to £13.0 billion and our financial strength was recognised by the positive rating action by credit rating agencies S&P and Fitch at the start of 2011.

...supporting a healthy and growing dividend.

It is the strength of our capital generation and our balance sheet which support a healthy and growing dividend. For 2010, we intend to pay a dividend of 25.5p, an increase of 6% over 2009.

We have refreshed our strategy

In November 2010, we set out the results of our strategic review.

There is no doubt we are in a strong position because of the actions we have taken across the business. Equally, the world is a very different place to when we laid out our strategy in 2007. We are in a new economic environment as customers prefer to pay down debt and save more and constraints on capital require greater investment discipline, strategic focus and strong balance sheets.

Given this changed environment, in 2010 we took a step back and took a hard look at our strategic direction. In summary, we concluded that we can maximise value for shareholders through:

5 Excluding Australian life business sold on 1 October 2009

1. Increasing our geographic focus on twelve markets where we have strength and scale, particularly in the UK and Europe where our market-leading positions mean that we are well placed to make the most of the significant demographic opportunity in the region.

2. Benefiting from the combination of life and general insurance. Our life and general insurance operations are excellent businesses in their own right, with strong market positions, good growth prospects and attractive returns. In addition to their inherent strengths, there are significant advantages of running both under one brand. For example, Aviva benefits from the diversification of risk that allows us to hold 30-40% less capital to write new general insurance business than on a standalone basis.

3. Building on our core strengths in marketing and distribution expertise, technical excellence, operational effectiveness and financial discipline. We already perform well in these areas, but by focusing our efforts and resources we aim to excel at each of them, and enhance Aviva's position as a leading insurer.

Delivering on short-term financial commitments

In addition to our longer-term strategy, we have set out a number of near-term, demanding financial targets. We aim to deliver:

- at least £1.5 billion operational capital generation in 2011;
- life IRR of at least 12% with payback of 10 years or less;
- 2011 general insurance COR of 97% or better; and
- £200 million of cost savings and £200 million of efficiency gains by the end of 2012.

In 2010 we demonstrated our ability to meet these targets as we generated £1.7 billion net operational capital; delivered a life new business IRR of 12.5% and a general insurance COR of 96.8%.

Strength from our people and our customers

We are reaping the benefits of the commitment and hard work of our people over the past few years and I am grateful to all of the Aviva team.

The real source of our success, of which I am always conscious, is the difference that our people can make to our customers' lives. This is what motivates us and makes Aviva an exciting place to work.

Building a strong and sustainable business

Our business helps our customers to manage the risks of everyday life and to secure their financial futures. We must be there for them throughout their lives and beyond, so it is crucial we are a sustainable and profitable business, for the mutual benefit of our shareholders and our customers.

Our sustainability and financial strength are underpinned by effective risk management, which allows us to predict future changes, move more quickly and take better decisions for our customers, giving them prosperity and peace of mind.

Confident outlook

We are in good shape with a clear way forward and strong momentum in our businesses.

In our life business, we are confident that with our brand strength, leading market positions and great product offerings, we are in a strong position to benefit from our customers' increasing propensity to save in these uncertain times.

In our general insurance business, because of the actions we have taken and the improving market conditions, I believe the prospects are better than at any time in the last five years.

We have come a long way in the last few years and I am confident that, although the economic environment may well be tough in 2011, we have a strong platform from which to deliver the continued success of Aviva.

Andrew Moss
Group chief executive

Regional performance

United Kingdom

- IFRS operating profit of £1,411 million (FY09: £1,165 million)
- Life and pension sales of £10,298 million (FY09: £8,914 million)
- Life new business IRR of 15% (FY09: 14%)
- General insurance COR of 96% (FY09: 99%)

An excellent year with momentum building in profit, sales and service across our UK business

In 2010 we delivered strong and profitable growth across our UK business. IFRS operating profit increased 21% to £1,411 million, clearly demonstrating the significant value generated from our unique combination of life and general insurance businesses. We aim to excel in both life and general insurance, while driving out additional value from operating the two businesses together. We significantly increased our distribution strength during the year by expanding our corporate partnerships across our UK businesses while at the same time being voted the UK's top insurer by insurance intermediaries across life, general insurance and health. Our continued disciplined focus on operational capital generation across our UK business resulted in an 85% increase to £973 million.

Our life business is winning in an attractive marketplace

We delivered a record result in our UK life business with IFRS operating profits up 26% to £850 million as we drove increased earnings from our new and in-force business. This includes a full year of benefit from the reattribution of the inherited estate. We have created competitive advantage from our strong and diversified new business franchise, leading brand and multi-distribution.

Total long-term savings were up 19% to £11,846 million and life and pensions sales increased 16% to £10,298 million. The UK market is growing again and we grew our market share for the third consecutive quarter (Q310: 11.1%; Q309: 9.7%) with a strong performance in annuities and core life protection.

We increased margins significantly to 3.4% (FY09 2.8%) through our disciplined approach to business mix, costs and capital. Our IRR was 15% with a reduced payback period of 7 years. (FY09 14%; 8 year payback).

We are well-placed for the Retail Distribution Review (RDR) in 2013 and are supporting IFAs as they make the transition. 8,600 IFAs are going through our Financial Adviser Academy and we are already offering RDR compliant products with c.50% of new individual personal pensions written on this basis.

Our diverse distribution and broad product range is a strategic advantage as only approximately 15% of our new business contribution is impacted by scope of the review and our RDR-resilient bancassurance partnerships are growing.

Significant opportunity for future earnings growth as general insurance performance accelerates

Our general insurance and health business delivered a strong performance with IFRS operating profit increasing 8% to £579 million and our general insurance combined operating ratio improving from 99% to 96%, demonstrating the quality of our portfolio and our continuing focus on cost control. Our enhanced pricing and risk selection techniques through the Aviva Risk Index and our digital flood mapping tool bring us more detailed segmentation of risks and pricing. This enables us to more accurately recognise individual risks with the most competitive premium, which in turn has been reflected in our improved claims experience. Our approach to reserving and prior year releases has remained consistent to previous years. Our expense ratio has declined further from 11.5% to 11.0%.

In the UK General Insurance business, we have delivered four consecutive quarters of sales growth with net written premiums 5% higher at £4,046 million.

Our direct business is growing fast with over one million customers holding direct motor policies with Aviva, 200,000 more than at the start of 2010. Direct pricing has been rolled out to 2,300 brokers making a significant contribution to our growth and RAC Panel sales have more than doubled. We continue to exploit our market leading SME franchise in commercial lines and SME net written premiums increased 7% as we successfully leveraged our excellent broker networks. We have made good progress in building our corporate risks and speciality lines business through the controlled expansion of our risk appetite and the recruitment of specialist expertise. We are attracting high quality risks with £50 million of new gross premiums and a COR of 81%.

Our disciplined approach to risk selection, claims excellence and our geographical spread helped mitigate some of the effects of the adverse winter weather experienced in late November and December. We have received over 23,000 weather related property claims for homes and businesses at a cost of £60 million above our long-term average weather assumptions. To help our customers and minimise claims costs, we contacted 800,000 customers by text message to give practical advice in dealing with the difficult weather conditions. Weather in the rest of the year was better than expected despite the January freeze, taking the overall impact to £40 million above long-term average for the whole of 2010. In the absence of the adverse weather, our COR would have improved by a further 1% to 95%, reflecting the strength of our UK general insurance business.

Our sophisticated pricing enables us to target the right price for the right risk. In personal motor we have seen rating increases of 25% in 2010 building on our early action in previous years to respond to rising bodily injury claims inflation. Commercial motor rates increased 7% in 2010 with higher increases during the second half of the year as claims trends in personal motor impacted commercial motor. In homeowner rates increased 6%. In commercial property and liability we have seen little change in overall rating reflecting continuing intense competition. We have protected profitability by selectively targeting rate increases by segment and case, careful risk selection resulting in reduced overall claims frequencies, and continuing excellence in claims management.

Benefiting from the trust, confidence and visibility of being the UK's leading insurance brand and customer franchise

We have 19 million customers in the UK, with one in three households having an Aviva relationship. We continue to invest in developing our brand and customer franchise.

We have embedded strong customer focus in everything we do by making it part of our reward package for every member of staff. In 2010 service improved across our business on all measures and we launched a number of innovative new services that allow customers to benefit from our expertise through their mobile devices.

The Aviva brand is strong; customer recognition and consideration levels improved in 2010 with spontaneous awareness at 54% at the year end. Our new sponsorship of Premiership Rugby is bringing us extra visibility with 6.2 million viewers. We have also adopted a single approach to TV advertising using Paul Whitehouse which has both contributed to growing customer interest and sales. Our latest advertisement takes a new approach to promote life protection for families and early results are very positive with online quotes and sales up one third over the same period last year.

Our unrivalled product range means Aviva can meet customer needs throughout their lives and our customer research highlights the significant opportunity we have to increase value and deliver a wider service to our UK customers. The number of customers who hold multiple Aviva products is growing and we are focussing on further developing this.

Becoming the partner of choice

Our strategic partnerships with leading banks and other leading organisations delivered strong financial results in 2010 with an IRR of 15% and a general insurance COR of 96%.

We are now the leading UK bancassurer based on both new business volume and breadth of offer. We continue to invest in the proposition we can bring to each of our current and prospective partners, drawing on the insight and expertise we have gained from these long-term relationships. We strengthened this market-leading distribution with some significant wins in 2010 and will build further on these in 2011.

In our exclusive relationship with Santander we are adding life insurance, critical illness and income protection to our existing general insurance distribution agreement, which we renewed in 2010. We are on track to launch the life protection products later this year. Our long-term successful strategic partnership with RBS was renewed in 2010 on the basis of a new exclusive distribution agreement for the sale of life, protection and pensions products. In general insurance we also secured or renewed ten partnership arrangements with bank and building society partners in 2010.

Driving value across our UK business for customers and shareholders

In November we set out a number of financial targets to demonstrate the significant potential of our UK business.
In 2010 total costs including brand and restructuring have fallen by £200 million to £1.7 billion. Costs continue to be an area of focus and we remain on track to deliver £200 million of cost and efficiency gains by the end of 2012.

Following consultation with our staff, we are closing our UK final salary pension schemes to future accrual from 1 April 2011. This reduced the pension fund deficit benefiting Aviva's net asset value by approximately £286 million and reducing future funding costs by £50 million per year.

We continue to simplify our business and improve our service to customers. Our new online services mean that 95% of new online general insurance customers receive their documents electronically. We have also introduced a range of smartphone applications for customers. Customers can now report their motor claim through our new claims app, our pensions app helps customers to plan for the financial future, and the RAC traffic app has been downloaded over 750,000 times.

During the year we completed the biggest policy migration in our industry, as we simplified our administration with the transfer of almost 3 million policies over 3 years. This has enabled us to decommission over 300 IT systems and benefit from a lower and more flexible cost base.

Outlook: A growing business with a unique opportunity

Aviva is growing profitably in the UK and we expect this momentum to continue in 2011 as we benefit from our strong brand, broad product range and diverse distribution.

The long-term savings market continues to show great resilience and is growing. While we remain cautious about the economy overall, we expect to continue to grow as we extend our competitive advantage and retain a disciplined approach. The growth dynamics in the UK market remain compelling with new research from Aviva finding that the UK has the largest annual pensions gap per person in Europe at £318 billion overall; in addition 61% of families have no life insurance protection. As a trusted brand Aviva is well-placed to respond.

The general insurance market remains competitive. Through disciplined deployment of our capital we will extend our risk appetite and business mix to drive superior returns. At the heart of this will be continued excellence in our risk selection and underwriting.

We will drive additional and unique benefit from operating our life and general insurance businesses together and have clear plans to expand distribution, develop our customer agenda and further improve cost management.

Europe

Aviva Europe

- IFRS operating profit of £898 million (FY09: £797 million)
- Life and pensions sales of £13,537 million (FY09: £13,523 million)
- Life new business IRR of 13% (FY09: 13%)
- General insurance COR of 103% (FY09: 103%)

Increased profit in a challenging market

Aviva Europe increased IFRS operating profits by 13% to £898 million (FY09: £797 million) underpinned by disciplined capital management and driven by a pan-European distribution model through our retail and bancassurance channels.

Life and pensions operating profit higher

Life and pensions sales were maintained at £13,537 million (FY09: £13,523 million), a 3% increase on a local currency basis. A number of initiatives have been enacted in 2010 including a reduction in the guaranteed interest rate in Italy and the redesign of unit-linked products in France, Ireland and Poland. This has helped to deliver a strong performance in life operating profits with a 17% increase to £893 million (FY09: £761 million). Furthermore it has helped to achieve a margin of 3.7% and an IRR of 13% with a payback period of 7 years (FY09: 7 years), in line with the group's short term financial targets.

Positive general insurance sales

General insurance and health net written premiums increased 4% to £1,953 million (FY09: £1,883 million). This is supported by management action in Poland, where we have expanded the product offering sold through independent agents, strong growth in Italian personal motor and creditor business, and strong health sales in both Ireland and France. General insurance and health operating profits are 17% lower at £109 million (FY09: £132 million) as a result of lower longer-term investment returns of £147 million (2009: £175 million). Adverse weather and a significantly lower level of reserve margin release than prior year has led to a general insurance COR of 103% (FY09:103%).

Customer-focussed, multi-channel distribution

We operate a pan-European distribution model through our retail and bancassurance channels. We benefit from offering both life and general insurance in France, Ireland, Italy, Poland and Turkey and will assess opportunities to leverage our skills across the region. We are a leader in bancassurance and continuously evaluate potential new relationships. This year we established a new general insurance bancassurance agreement with Ulster Bank in Ireland bringing our total number of bancassurance relationships to 55. Sales through the bancassurance channel increased by 9% to £8,040 million (FY09: £7,353 million)

Delivering attractive propositions to our customers

We have leveraged best practice in pricing and underwriting principles across Europe in both life and general insurance. This enables us to bring attractive propositions to our customers while ensuring we generate appropriate returns for shareholders:

- CPPI Fund, a unit-linked product with an element of guarantee, has launched successfully in Poland, Ireland and France.
- In Turkey, we have launched a retirement savings product in anticipation of new pensions legislation. This has the potential to be a significant new market.
- 'My Aviva Customer Bundling' was launched as a pilot in Ireland to maximise cross-selling of general, life and health products for our most profitable customers.
- In Spain and Ireland we have offered customers additional peace of mind through innovative product enhancements providing market-leading breast cancer cover.

Transformation delivers operational excellence

We've made good progress developing our shared service capabilities to embed single and consistent ways of doing business. This combined with a management focus on cost discipline has enabled Aviva Europe to maintain like for like costs at the same level as 2009. This is a great achievement that negates the impact of inflation.

In addition to the pan-European product initiatives above, another example of how we share expertise across the region is our approach to brand and marketing initiatives. This enables high media exposure via cost-efficient campaigns. Poland and Ireland rebranded in 2010; this was supported by the opening in Dublin of the Aviva Stadium and an extensive branding campaign in Poland. The 'Faces' advertising campaign, launched across France and Italy, clearly demonstrates the efficiencies gained from a single brand and extends the reach of Aviva's global "You are the Big Picture" campaign.

Europe presents a significant opportunity

Europe has significant long-term potential for Aviva with a $1.7 trillion growth in life and pensions assets expected between 2009 and 2014. The strategic attractiveness of the region was underscored by research we conducted in 2010 into Europe's pensions gap. This pioneering study demonstrated that European citizens need to find an additional €2.4 trillion in savings every year to fully close the gap between the pension amount they can currently expect to receive and the pension provision that people retiring between 2011 and 2051 will need for an adequate standard of living in retirement.

Outlook

There is evidence that economies in Europe are recovering at different rates as well as continuing uncertainty around legislative changes. However our geographic diversity means that we remain well positioned. As we look ahead, while there may be an element of uncertainty in some of our markets, the need for people to save and protect what they have allied with our clear strategic direction means that we are optimistic about the long-term prospects for growth.

We expect consumer sentiment to continue to favour guaranteed savings products and the general insurance market to remain competitive. Our focus in 2011 will be on positively contributing towards the group's targets through margin growth and generating operational capital.

We will continue executing our strategy: driving operational excellence, maximising the value from our combination of life and general insurance and competitive distribution network, and deepening our presence in growth markets.

Delta Lloyd

- IFRS operating profit of £536 million (FY09: £399 million)
- Life and pension sales of £3,178 million (FY09: £3,665 million). (3% lower on a local currency basis excluding Germany)
- Life new business IRR 6% (FY09: 6%) (excluding Germany, FY 2010: IRR 7%)
- General Insurance COR of 95% (FY09: 97%)

Increased profit as fund management delivers exceptional result

Delta Lloyd increased IFRS operating profits by 34% to £536 million (FY09: £399 million) driven by higher than expected investment returns, higher fund management performance fees and higher expense margins.

Life and pensions sales in Delta Lloyd's core Benelux markets decreased by 3% on a local currency basis to £3,109 million (FY09: £3,324 million) as a result of a decline in the market for Group Pension business.

Life operating profit increased by 19% to £330 million (FY09: £277 million) reflecting an increase in technical margins and a decrease in administrative expenses. The life result was also impacted by a change in mortality assumptions leading to a one-off increase in the longevity provision as at year-end 2010. As a result there was a one-off negative impact of £483 million on the IFRS result before tax.

General insurance net written premiums at £1,177 million were in line with the prior year (FY09: £1,163 million) and 5% higher on a local currency basis.

General insurance COR improved to 95% (FY09: 97%) with expense savings and reserve margin releases offsetting a higher claims ratio.

Fund management operating profits are 268% ahead of prior year at £103 million (FY09: £28 million) due to the receipt of substantial one-off performance fees in the fourth quarter of 2010. This is largely due to Delta Lloyd's investment in the Brazilian telecoms market which underwent a period of consolidation during 2010.

Simplification drives efficiency

Delta Lloyd implemented a simplification plan during 2010 which aims to reduce the management cost base by 8% to €850 million by 2012. The number of risk-bearing insurance businesses was reduced from 12 to 5, the number of staff departments from 13 to 7 and the number of directors from 52 to 32.

Outlook

The Benelux market and the economic environment continue to be challenging, and Delta Lloyd remains focused on growing its profitability and providing appropriate returns to shareholders. Central to this are the efficiency plans implemented in 2010 which has seen costs reduced by €74 million in 2010.

North America

- IFRS operating profit of £376 million (FY09: £213 million)
- Life and pension sales of £4,728 million (FY09: £4,545 million)
- Life new business IRR 14% (FY09: 7%)
- General insurance COR of 97% (FY09: 100%)

Strong profits and progress against strategic priorities across the region

In 2010, the North American businesses saw strong financial performance as a result of our focus and discipline. We increased our total regional IFRS operating profit by 77% to £376 million, benefiting from strong pricing and underwriting management, cost discipline and an improved economic environment.

Healthy profit growth in US life and annuity business

In the US, our disciplined pricing management led IFRS operating profits from our life and annuity business to more than double, with life new business profitability also improving significantly to a 14% IRR (FY09: 7%). Our US protection sales as measured on a PVNBP basis rose 15% to £999 million and are the largest across Aviva. Annuity sales grew moderately as we focused on profitable growth and capital efficiency. We continue to focus on diversifying our business mix, specifically targeting the growth of life sales in existing and new channels.

This past year, the US business introduced its 'Building insurance around YOU' consumer strategy, which will enable us to deliver life and annuity products to meet our customers' changing needs. We also entered the guaranteed investment contract market through an institutional investor-focused product that leverages the capabilities of both our life business and those of Aviva Investors North America.

Strong general insurance performance in Canada

In Canada, operating profit rose 54% to £222 million reflecting improved underwriting performance combined with benign weather in the early part of 2010. Following our decision last year to exit unprofitable business we saw a moderate decline in premiums on a local currency basis and we concentrated efforts on growing profits from our book.

We made further progress enhancing our sophisticated underwriting capabilities and dealt successfully with new regulation in the Ontario auto market, further strengthening our position in that sector. We have taken difficult but necessary actions to improve our cost base and operational performance, including targeted cost reductions announced in November 2010 that form part of the overall £60 million of cost savings and efficiencies to be achieved across the North American Region by the end of 2012.

Outlook

The North American region is the home to two of the world's largest and richest economies. Looking forward to the year ahead regional economic growth is recovering and the outlook is for moderate growth overall.

In this context, our disciplined underwriting and operational effectiveness in our general insurance business – combined with a continued focus on profitable growth underpinned by compelling value propositions to our customers in our life business – positions the North American region well to further grow our contribution to Aviva's overall profits.

Asia Pacific

- IFRS operating profit of £31 million (FY 2009: £77 million[6])
- Life and pension sales of £1,617 million (FY 2009: £1,356 million[6])
- Life new business IRR of 11% and payback 13 years (FY 2009: 8%[6] and 20 years[6])

Franchise value growth through organic investment

We continue to progress against our strategic priorities across nine Asian markets, pursuing franchise growth though organic investment and improved margins. We have further sharpened our focus on markets where we have strength and scale such as China, India and Singapore where we expect to generate a significant proportion of our new business growth.

Sales increase significantly as Asian franchise grows[7]

Total sales were £1,911 million in 2010. This represents an increase of 25% on 2009, with margin on a Present Value of New Business Premium (PVNBP) basis increasing from 0.9% to 3.2%. Life and pensions sales increased by 48% and on a local currency basis, life and pension sales were 39% higher, reflecting the growth and development of Aviva's franchise in Asia. We delivered a strong performance in our priority markets of China and India where sales increased by 28% and 22% respectively.

Life and pension sales in our Asian markets (excluding China and India) were higher than the previous year, increasing from £676 million to £1,085 million. This reflects the region's strong economic recovery as well as our renewed strategic focus on delivering strong new business margins. Markets such as Singapore recorded a rise in life and pensions sales to £345 million from £155 million and South Korea is now our second largest market after China in terms of sales volumes, growing by 41%.

IFRS operating profit for the year fell to £31 million as a result of prior year favourable reserve releases in Singapore and the sale of Aviva's Australian business. Excluding these one-off factors and the one-off impact from the change in China's GAAP accounting basis this year, underlying adjusted operating profit increased by £40 million reflecting our increased scale and focused cost management.

Our direct online general insurance business in Singapore continues to offer an attractive proposition for customers and has expanded to include a home and travel offering. Launched in April 2010, it has proven a significant alternative to current market distribution channels and has captured 2.2% market share of the individual car market after only eight months.

We have also focused on capital efficiency. Our internal rate of return (IRR) has improved significantly from 6% to 11% through a better product mix and the increasing benefits of scale coupled with careful portfolio management and capital discipline.

Strengthening our multi-channel distribution capability

Our improved performance in 2010 can be largely attributed to strengthened relationships with our bank partners. This has encouraged an evolving product portfolio focused on higher-margin products in areas such as protection and saving.

We have continued to build our multi-distribution platform and now have over 50 bank partnerships, with sales from our bancassurance operations increasing by 76% since 2009. In addition, we have transformed the traditional agency model in Singapore and Hong Kong with the launch of Aviva Advisors to better meet the evolving needs of our customers. This is an innovative approach that bridges the gap between the traditional agency and independent financial advisors.

Outlook

The fundamentals of the Asian markets remain attractive with the region's economies reverting to pre-crisis levels of activity and confidence. The longer-term outlook for our business in Asia remains positive owing to the current low penetration rates of insurance products in many markets, high GDP growth, growing middle class and ageing populations. By strengthening our multi-channel distribution capability as well as managing our product portfolio, we are well-positioned to continue delivering strong growth in both volume and margins, and growing our franchise value.

6 Includes the Australian life business sold on 1 October 2009

7 All 2009 comparators exclude the Australian life business sold on 1 October 2009

Aviva Investors

- IFRS operating profit of £100 million (FY09: £115 million)
- Net funded external sales (excluding liquidity funds) of £2.36 billion (FY09: £236 million outflows)
- Higher management fee rates from third party sales
- 73% of institutional funds where a benchmark is specified, performed above benchmark

Growth in external sales

We made strong progress in the development of our global business development infrastructure during 2010 and saw encouraging signs that our business model is supporting our primary objective of delivering strong growth in external fund sales. Net funded external sales (excluding liquidity funds) rose from an outflow of £236 million in 2009 to inflows of £2,364 million in 2010. Gross external sales were £8,320 million offset by higher than expected redemptions of £5,956 million. Net liquidity fund sales were an outflow of £745 million (FY09: inflows of £2,593 million).

During 2010, we re-oriented our business towards more durable, higher margin funds, which resulted in an increased average fee rate on gross external sales, excluding liquidity funds. Assets under management of £260 billion (at 31 December 2010) were up 4% on 2009's figure of £250 billion, with assets managed for external clients increasing 13% to £51 billion (FY09: £45 billion).

Strong investment performance and further improvements in client service

At the end of 2010, 73% of institutional funds where a benchmark is specified performed above benchmark over the 1 year and 3 year horizon (equally weighted). For portfolios measured against a relevant peer group, 70% performed above median over 1 and 3 years at the end of December 2010, with 33% in the top quartile over 1 year and 42% in the top quartile over the 3 year period.

Our continuing focus on client-centricity enabled us to deliver further improvements in client service rankings for Aviva UK, UK institutional and for UK/European financial institutions in 2010 according to independent surveys undertaken by Investit. Rankings in UK pensions, measured by Greenwich Associates, slipped slightly in comparison with 2009 from 1st quartile to 2nd, but we remain in a strong position competitively, particularly for client service and in Real Estate.

Continuing investment in the business leads to a fall in operating profit

We saw a reduction in operating profit from £115 million in 2009 to £100 million in 2010 as a result of higher than expected redemptions and ongoing investment in the business which is starting to bear fruit as we see an increase in higher margin external assets. The £100 million profit in 2010 comprises £97 million (FY09: £115 million) in respect of fund management operations and £3 million (FY09: zero) from our pooled pensions business, which is reported within the long-term business segment.

Strengthening our mutually beneficial position within Aviva

Our strategy for growth is focused on leveraging our Aviva parentage and insurance heritage to further increase external assets under management. In 2010 we further strengthened our relationship with Aviva, continuing to benefit from the financial strength and global brand presence of the Group while, in return, delivering investment know-how, strong and sustainable returns and supporting financial risk management initiatives.

An example of this working in practice is our Guaranteed Managed Solutions (GMS) product in the US, which brought in mandates totalling over £500 million in the last four months of the year. GMS was developed in partnership with Aviva USA and is an important product for both companies.

Outlook

We have made considerable progress developing the infrastructure necessary to meet our objectives and are seeing the benefits of this through improved sales performance. In 2011 we will continue to focus on our core investment strategies to deliver added-value investment solutions to clients in our established markets of the UK, Europe and the US, as well as actively pursuing market share in potential high growth markets in the Asia Pacific region.

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 2009.

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 includes images, company and product information and a news release archive.

All figures have been translated at average exchange rates applying for the period. The average rates employed in this announcement are 1 euro = £0.85 (12 months to 31 December 2009: 1 euro = £0.88) and £1 = US$1.55 (12 months to 31 December 2009: £1 = US$1.57).

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 31 December 2010.

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 30 March 2010. 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.
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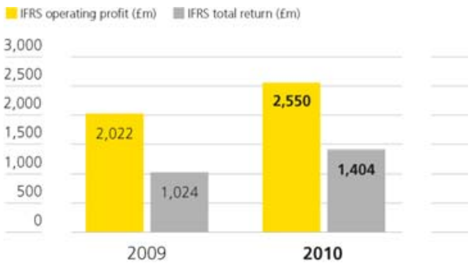
London
EC3P 3DQ

Overview

Key financial highlights

Group Performance

IFRS operating profit and IFRS total return



- IFRS operating profit increased to £2,550 million *(2009: £2,022 million)* driven in particular by strong growth in UK, Europe and the US.
- IFRS profit after tax increased to £1,892 million *(2009: £1,315 million)* driven by the strong growth in operating profits.
- Total return increased to £1,404 million *(2009: £1,024 million)* driven by the strong growth in operating profits.
- Included in this were gains on the closure of the pension scheme and reorganisation of the joint venture with Royal Bank of Scotland (RBS) of £0.4 billion and net positive investment variances of £0.5 billion. These items have been more than offset by restructuring and amortisation costs and other exceptional items totalling £1.0 billion.
- Within these amounts there is a positive investment variance of around £0.8 billion that relates to differing movements in the asset and liability yield curves used by Delta Lloyd. There are also £0.5 billion of exceptional items in Delta Lloyd, including the adoption of revised longevity tables. The net impact of these one-offs in Delta Lloyd items is to increase the Aviva Group EPS (after tax and minority interests) by 4p.
- The effective tax rate for the period was 22% *(2009: 27%).*

EPS

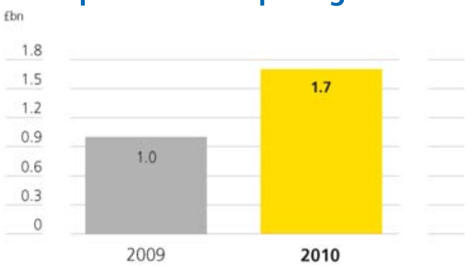
- IFRS earnings per share increased to 50.4 pence *(2009: 37.8 pence)* driven by the growth in operating profit.

Total dividend of 25.5 pence

- Total dividend for 2010 of 25.5 pence is an increase of 6% on the 2009 dividend of 24.0 pence.

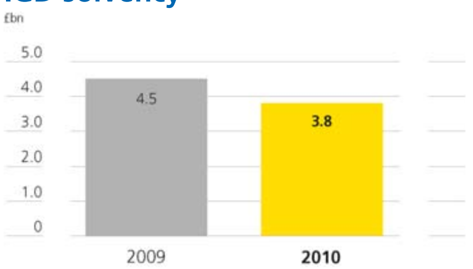
Capital

Net operational capital generated



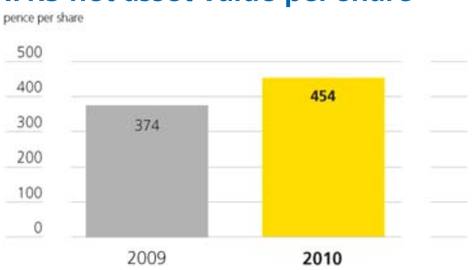
- Net operational capital generated increased to £1.7 billion[1] *(2009: £1.0 billion).* Capital generated from existing business was £2.7 billion offset by capital investment in new business of £1.0 billion.
- Group IRR increased to 12.5% from 10.0% for 2009. Compared with 2009 there have been increases in UK, US and Asia Pacific.
- The US IRR has improved from 7% to 14%, driven by broadly equal impacts of the AXXX capital solution and management actions.
- In addition, Asia Pacific IRR has improved from 6%[2] to 11%, driven by improvements in product mix and individual product profitability.
- Payback periods have improved overall from 14 years for 2009 to 8 years in 2010.

IGD solvency



- IGD solvency surplus at 31 December 2010 is £3.8 billion *(2009: £4.5 billion)*. Of this movement, £0.3 billion relates to additional funding contributions to the Aviva pension scheme.
- A 40% fall in equities would reduce IGD surplus by £0.6 billion.
- At 31 December 2010 IGD cover is 1.6 times *(2009: 1.7 times)*.

IFRS net asset value per share



- IFRS NAV has increased to 454 pence (2009: 374 pence) driven by strong operating profit, gains on available for sale (AFS) assets and actuarial gains on staff pension schemes. These have been partially offset by external dividend payments.

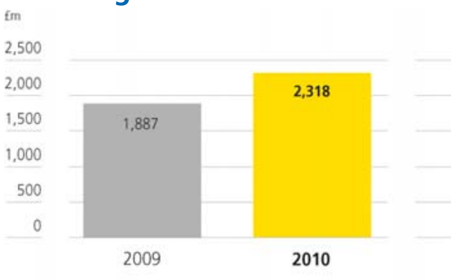
"EEV" equivalent NAV

- The European Equivalent Embedded Value ("EEV") equivalent NAV was 621 pence at 31 December 2010 (546 pence at 30 June 2010).

1 Excluding Delta Lloyd longevity assumption impact of £0.2 billion
2 Excluding the Australian life business which was sold on 1 October 2009

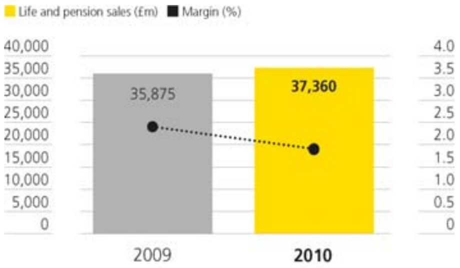
Life

IFRS long-term business



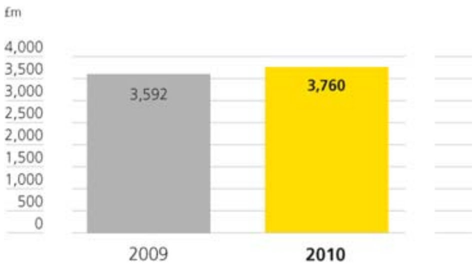
- Long-term business operating profit increased 23% to £2,318 million *(2009: £1,887 million)* driven by returns on the UK reattributed estate, actions to improve the profitability of the business in the US and stronger existing business returns in Europe.
- IFRS new business income improved to £1,021 million *(2009: £813 million)* driven by strong profits from UK annuity sales, and growth in new business profitability and volumes in all other regions.
- Overall investment returns increased to £3,226 million *(2009: £2,865 million)* principally driven by improved credit spread earnings in the US.
- Expenses increased to £2,444 million *(2009: £2,353 million)* partially as a result of higher initial and renewal commissions in Europe driven by changes in product mix towards single premium contracts.

New business



- Worldwide long-term business sales (including investment products) were £37.4 billion *(2009: £35.9 billion)* an increase of 4% with significant increases in the UK and Asia Pacific, and a resilient performance in Europe. On a local currency basis, sales increased by 5%.
- Within this total life and pensions sales were £33.4 billion *(2009: £32.0 billion)* an increase of 4%.
- New business margin is 1.9% *(2009: 2.4%)* as improvements in the UK where the margin increased from 2.8% to 3.4% were more than offset by the impact of lower risk free rates in the US MCEV margin.

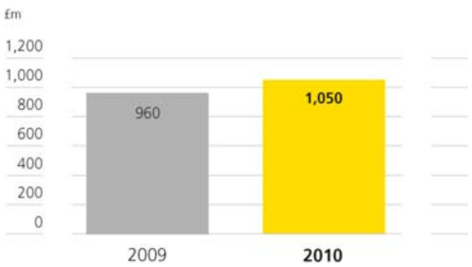
MCEV result



- MCEV operating profit increased by 5% to £3,760 million *(2009: £3,592 million).*
- Life MCEV operating earnings were £3,579 million *(2009: £3,498 million)* an increase of 2%. Within this total, expected return is now calculated based on implied discount rates (IDRs) to improve the predictability of the operating result.
- The value of new business (VNB) decreased to £624 million from £765 million in 2009, as a result of the lower reported margins in the US (as a consequence of the fall in risk-free rates). MCEV profit after tax reduced to £1,746 million *(2009: £2,722 million).*
- MCEV NAV was 542 pence *(2009: 473 pence)*, driven by strong operating profit and actuarial gains on staff pension schemes partly offset by external dividend payments.

General Insurance

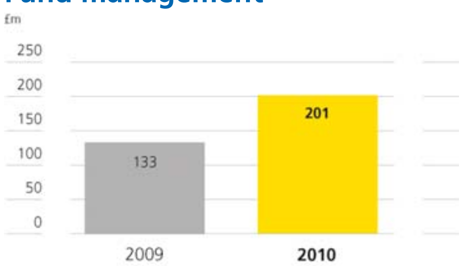
General insurance and health



- General insurance and health operating profit increased to £1,050 million *(2009: £960 million)*. A strong improvement in underlying profitability has been partially offset by lower prior year development and adverse weather experience. The general insurance combined operating ratio for the year is 97% *(2009: 99%)* with strong improvements in the UK and Canada.
- Operating profit benefited from reserve releases of £212 million in 2010 compared with £372 million in 2009.
- Net written premiums increased to £9,699 million *(2009: £9,193 million)* primarily due to strong levels of retention and growth in the UK. In addition, the Canadian result has benefited from foreign exchange movements during the year.

Fund management

Fund management



- Operating profit increased to £201 million *(2009: £133 million),* particularly reflecting higher performance fees in Delta Lloyd.
- Total funds under management are £402 billion *(2009: £379 billion).*

Other

Underlying costs

- Total expenses have reduced by 3% from £5,144 million in 2009 to £4,995 million in 2010. On a like for like basis (excluding the impact of foreign exchange, restructuring and acquisitions and disposals) costs remain broadly flat at £4,686 million *(2009: £4,638 million)* with the impact of inflation offset by cost savings.

Group's financial strength rating

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

Liquidity

- Strong liquidity position with direct access to £1.5 billion of central liquid assets *(2009: £2.2 billion).*
- £2.1 billion of undrawn committed credit facilities provided by a range of leading international banks.

ROCE

- Return on equity shareholders' funds on an IFRS basis increased to 14.8% *(2009: 10.9%)* benefitting from the growth in operating profits.

Asset quality

- The asset portfolio remains of high quality.
- Aviva's exposure to sovereign debt is well within our risk appetite. We hold these assets for the long-term and believe that the risk of European countries defaulting on their sovereign debt is low.

Impact of foreign exchange

- Total foreign currency movements during 2010 resulted in a gain recognised in the income statement of £34 million *(2009: £154 million gain).*

Key Financial Highlights

			IFRS			MCEV
	2010 £m	2009 £m	Change %	**2010 £m**	Restated 2009 £m	Change %
Long-term business IFRS profit / MCEV earnings	**2,318**	1,887	23%	**3,579**	3,498	2%
General insurance and health	**1,050**	960	9%	**1,050**	960	9%
Fund management	**201**	133	51%	**125**	51	145%
Other operations and regional costs	**(220)**	(214)	(3)%	**(195)**	(173)	(13)%
Corporate centre	**(143)**	(108)	(32)%	**(143)**	(108)	(32)%
Group debt and other interest costs	**(656)**	(636)	(3)%	**(656)**	(636)	(3)%
Operating profit before tax	**2,550**	2,022	26%	**3,760**	3,592	5%
Profit after tax	**1,892**	1,315	44%	**1,746**	2,722	(36)%
IFRS total return	**1,404**	1,024	37%	**n/a**	n/a	
Net operational capital generated	**£1.7bn**[1]	£1.0bn		**n/a**	n/a	
IRR	**12.5%**	10.0%		**n/a**	n/a	
MCEV new business margin	**n/a**	n/a		**1.9%**	2.4%	
Combined operating ratio	**97%**	99%		**n/a**	n/a	
Long-term savings sales	**n/a**	n/a		**37,360**	35,875	
Total dividend per share	**25.5p**	24.0p		**n/a**	n/a	
Net asset value per share	**454p**	374p		**542p**	473p	
EEV equivalent NAV	**n/a**	n/a		**621p**	n/a	
Earnings per share	**50.4p**	37.8p		**59.2p**	95.8p	
Equity shareholder's funds	**12,794**	10,356		**15,295**	13,092	
Return on equity shareholders' funds	**14.8%**	10.9%		**16.4%**	16.3%	

[1] Excluding Delta Lloyd longevity assumption impact of £0.2 billion

Group performance - IFRS basis

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

For the year ended 31 December 2010

	2010 £m	2009 £m
Operating profit before tax attributable to shareholders' profits		
Long-term business		
United Kingdom	**850**	672
Europe	**1,223**	1,038
North America	**174**	85
Asia Pacific	**71**	92
Total long-term business (note 1)	**2,318**	1,887
General insurance and health		
United Kingdom	**579**	535
Europe	**255**	275
North America	**222**	144
Asia Pacific	**(6)**	6
Total general insurance and health (note 3)	**1,050**	960
Fund management		
Aviva Investors	**97**	115
United Kingdom	**3**	(14)
Europe	**103**	31
Asia Pacific	**(2)**	1
Total fund management (note 4)	**201**	133
Other:		
Other operations and regional costs (note 5)	**(220)**	(214)
Regional operating profit	**3,349**	2,766
Corporate centre (note 6)	**(143)**	(108)
Group debt costs and other interest (note 7)	**(656)**	(636)
Operating profit before tax attributable to shareholders' profits	**2,550**	2,022
Adjusted for the following:		
Investment return variances and economic assumption changes on long-term business (note 8)	**791**	(75)
Short-term fluctuation in return on investments on non-long-term business (note 9)	**(243)**	95
Economic assumption changes on general insurance and health business (note 10)	**(61)**	57
Impairment of goodwill and other amounts expensed	**(24)**	(62)
Amortisation and impairment of intangibles	**(216)**	(144)
Profit on the disposal of subsidiaries and associates (note 11)	**159**	153
Integration and restructuring costs (note 12)	**(243)**	(286)
Exceptional items (note 13)	**(273)**	45
Profit before tax attributable to shareholders' profits	**2,440**	1,805
Tax on operating profit	**(625)**	(547)
Tax on other activities	**77**	57
	(548)	(490)
Profit for the year	**1,892**	1,315

Earnings per share – IFRS basis

	2010	2009
Operating earnings per share on an IFRS basis after tax, attributable to ordinary shareholders of Aviva plc		
Basic (pence per share)	**55.1p**	45.1p
Diluted (pence per share)	**54.2p**	44.8p
Earnings after tax on an IFRS basis, attributable to ordinary shareholders of Aviva plc		
Basic (pence per share)	**50.4p**	37.8p
Diluted (pence per share)	**49.6p**	37.5p

1 – Long-term business IFRS operating profit

	2010 £m	2009 £m
With-profit	**147**	177
Non-profit	**703**	495
United Kingdom	**850**	672
France	**319**	272
Ireland	**122**	50
Italy	**119**	128
Poland	**157**	152
Spain	**179**	160
Other Europe	**(3)**	(1)
Aviva Europe	**893**	761
Delta Lloyd	**330**	277
Europe	**1,223**	1,038
North America	**174**	85
Asia Pacific	**71**	92
Total	**2,318**	1,887

IFRS long-term business operating profit before shareholder tax was £2,318 million *(2009: £1,887 million)*, an increase of 23% on the prior period.

United Kingdom

IFRS operating profit was 26% higher at £850 million *(2009: £672 million)* driven by strong growth in the non-profit result. The non-profit result increased to £703 million *(2009: £495 million)* from a strong performance in annuities, increased annual management charges and earnings related to the reattributed estate. The full year benefit of earnings on the reattributed assets, unwind of guarantee costs and the demographic impact of policyholder actions contributed £171 million to operating profits *(2009: £79 million)*. Of this at least £120 million relating to investment return and unwind of guarantee costs is expected to recur.

This was partly offset by a lower with-profit result of £147 million *(2009: £177 million)*, reflecting the shareholders' share of reduced regular and terminal bonus payments. The with-profit result includes the final tranche of special bonus distribution of £84 million *(2009: £86 million)*.

Aviva Europe

Aviva Europe's life operating profit increased 17% to £893 million *(2009: £761 million)*. This growth was partly driven by an increase in returns from existing business in France, Italy and Spain as a result of growth in assets under management and favourable investment performance. The current year result includes £75 million from release of reserves following a review of reserving assumptions in Ireland (£55 million of this was announced at the half year).

Delta Lloyd

Life operating profit for Delta Lloyd group increased to £330 million *(2009: £277 million)* due to higher expected investment returns and expense margins.

North America

Life operating profit doubled to £174 million *(2009: £85 million)*, as a result of our actions to improve the profitability of the business. This performance reflects spread management, expense discipline and an improved economic environment, combined with growth in the in-force business.

Asia Pacific

Life operating profit reduced to £71 million *(2009: £92 million)*. The current year includes a £27 million benefit from changes to local GAAP reporting in China. The prior year result included a one-off release of reserves in Singapore of £68 million, and £40 million for the Australian life business sold on 1 October 2009. On an underlying basis, profits from the Asia region increased strongly, driven by new business growth, increased scale and profit emergence from existing business.

2 – Long-term business IFRS profit driver analysis

	Note	United Kingdom £m	Aviva Europe £m	Rest of the world £m	Total £m
					2010
New business income	a	**499**	**382**	**140**	**1,021**
Underwriting margin	b	**178**	**433**	**270**	**881**
Unit-linked margin	c	**348**	**541**	**110**	**999**
Participating business	d	**147**	**394**	**141**	**682**
Spread margin	e	**173**	**44**	**673**	**890**
Expected return	f	**223**	**138**	**294**	**655**
Investment return		**891**	**1,117**	**1,218**	**3,226**
Income		**1,568**	**1,932**	**1,628**	**5,128**
Acquisition expenses	g	**(353)**	**(515)**	**(216)**	**(1,084)**
Administration expenses	h	**(333)**	**(515)**	**(512)**	**(1,360)**
Expenses		**(686)**	**(1,030)**	**(728)**	**(2,444)**
DAC/AVIF amortisation and other	i	**(32)**	**(9)**	**(325)**	**(366)**
IFRS operating profit		**850**	**893**	**575**	**2,318**

'Rest of the world' includes Delta Lloyd, North America and Asia Pacific

	Note	United Kingdom £m	Aviva Europe £m	Rest of the world £m	Total £m
					Restated 2009
New business income	a	402	310	101	813
Underwriting margin	b	148	433	202	783
Unit-linked margin	c	322	532	84	938
Participating business	d	176	322	162	660
Spread margin	e	166	50	460	676
Expected return	f	167	138	286	591
Investment return		831	1,042	992	2,865
Income		1,381	1,785	1,295	4,461
Acquisition expenses	g	(320)	(422)	(203)	(945)
Administration expenses	h	(347)	(506)	(555)	(1,408)
Expenses		(667)	(928)	(758)	(2,353)
DAC/AVIF amortisation and other	i	(42)	(96)	(83)	(221)
IFRS operating profit		672	761	454	1,887

Detailed analysis of the above is given within the IFRS supplement, Note A18, page 80.

(a) New business income

New business income increased 26% to £1,021 million as the new business income margin (as a percentage of APE sales) increased to 26% *(2009: 22%)* and sales on an APE basis increased 5%. This was primarily driven by annuity volumes and profit growth in the UK. In Aviva Europe, new business income margin increased to 25% *(2009: 20%)* reflecting geographical mix from growth in with-profit business in Italy and France.

In the Rest of the World, new business income includes the effect on new business of the reserving changes made in 2009 in Asia Pacific.

(b) Underwriting margin

The underwriting margin increased to £881 million *(2009: £783 million)*. This increase reflects a benefit of £36 million in the UK from non-profit business and policyholder behaviour following the reattribution of the inherited estate in October 2009. The underwriting result remained stable in Aviva Europe and increased in the Rest of the World due to improved expense margins in Delta Lloyd.

(c) Unit-linked margin

The unit-linked margin grew from £938 million to £999 million as improved market conditions resulted in higher average unit-linked reserves of £93 billion *(2009: £85 billion)*. The annual management charge as a percentage of reserves reduced slightly to 108 bps. The majority of this unit-linked income comes from the UK and Aviva Europe, which primarily relates to unit-linked business in France, Poland and Spain.

(d) Participating business

Income from participating business increased to £682 million *(2009: £660 million)*. Whilst the special distribution of £84 million *(2009: £86 million)* was in line with prior year, the reduction in bonus rates lowered shareholder income in the UK. This was more than offset by an increase in Aviva Europe's result within which France is the main contributor reflecting a fixed management charge of circa 50bps on AFER business. The reduced contribution from Rest of the World reflects closure of the Delta Lloyd German business.

2 – Long-term business IFRS profit driver analysis continued

(e) Spread margin

Spread income increased 32% to £890 million as the spread margin increased to 114 bps *(2009: 94 bps)* driven by the benefit of management actions to improve profitability in our US business.

(f) Expected return on shareholder assets

Expected returns increased to £655 million *(2009: £591 million)* due to a £135 million contribution in the UK following the reattribution of the inherited estate. Of this, £55 million were earnings on the reattributed estate and £80 million from unwind of guarantees of which £65 million expected to recur, going forward.

(g) Acquisition expenses

Acquisition expenses have increased to £1,084 million *(2009: £945 million)* mainly due to new business growth in the UK and Italy.

(h) Administration expenses

Administration expenses reduced to £1,360 million (*2009: £1,408 million)* reflecting cost reduction activity in the UK and Delta Lloyd.

(i) DAC, AVIF and other

DAC, AVIF and other amounted to £366 million *(2009: £221 million)* as the prior year included a significant number of one-off positives including one-off reserve releases in Singapore of £68 million and £40 million contribution from the Australian life business sold in October 2009. In 2010, the current year result includes £75 million from release of reserves following a review of reserving assumptions in Ireland, £55 million announced at the half year.

3 – General insurance and health

	Net written premiums		Underwriting result		Longer-term investment return		Operating profit[2]	
	2010 £m	2009 £m	**2010 £m**	2009 £m	**2010 £m**	2009 £m	**2010 £m**	2009 £m
General insurance								
United Kingdom[1,2]	**4,109**	3,911	**184**	98	**419**	439	**567**	520
France	**734**	729	**1**	15	**49**	55	**50**	70
Ireland[2]	**397**	422	**(17)**	(11)	**50**	62	**32**	49
Other[3]	**526**	457	**(49)**	(62)	**31**	40	**(18)**	(22)
Aviva Europe	**1,657**	1,608	**(65)**	(58)	**130**	157	**64**	97
Delta Lloyd[2]	**1,177**	1,163	**60**	38	**97**	105	**146**	143
Europe	**2,834**	2,771	**(5)**	(20)	**227**	262	**210**	240
North America[2]	**1,958**	1,800	**60**	(4)	**173**	148	**222**	144
Asia Pacific	**19**	10	**(7)**	—	**3**	1	**(4)**	1
	8,920	8,492	**232**	74	**822**	850	**995**	905
Health insurance								
United Kingdom	**430**	387	**5**	8	**7**	7	**12**	15
France	**234**	223	**11**	10	**15**	17	**26**	27
Ireland	**62**	52	**17**	7	**2**	1	**19**	8
Aviva Europe	**296**	275	**28**	17	**17**	18	**45**	35
Asia Pacific	**53**	39	**(2)**	5	**—**	—	**(2)**	5
	779	701	**31**	30	**24**	25	**55**	55
Total	**9,699**	9,193	**263**	104	**846**	875	**1,050**	960

1. United Kingdom includes Aviva Re and agencies in run-off.
2. Group operating profit includes an unfavourable impact of £59 million resulting from unwind of discount and pension scheme net finance costs (2009: £19 million). £36 million relating to UKGI (2009: £17 million), £11 million relating to Delta Lloyd (2009: £nil), £11 million relating to Canada (2009: £nil) and £1 million relating to Ireland (2009: £2 million).
3 Other Europe includes Italy, Poland and Turkey.

Combined operating ratios – general insurance business only

	Claims ratio		Expense ratio		Combined operating ratio	
	2010 %	2009 %	**2010 %**	2009 %	**2010 %**	2009 %
United Kingdom[1]	**63.9%**	66.2%	**11.0%**	11.5%	**96%**	99%
France	**71.2%**	68.1%	**10.5%**	11.2%	**99%**	98%
Ireland	**74.9%**	73.6%	**19.5%**	19.6%	**105%**	103%
Aviva Europe	**73.0%**	72.3%	**13.1%**	13.7%	**103%**	103%
Delta Lloyd	**61.3%**	63.0%	**13.7%**	14.7%	**95%**	97%
Europe	**68.0%**	68.4%	**13.4%**	14.1%	**100%**	101%
North America	**64.3%**	68.5%	**13.6%**	12.8%	**97%**	100%
Total	**64.5%**	66.7%	**12.4%**	12.6%	**97%**	99%

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

Detailed analysis is given within the IFRS supplement, note A19, page 81.
Ratios are measured in local currency. The total group ratios are based on average exchange rates applying to the respective periods.

Definitions:

Claims ratio	Incurred 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 general insurance and health businesses for the period was £1,050 million *(2009: £960 million)*. The general insurance and health underwriting result increased to £263 million *(2009: £104 million)*, due to improving current year profitability within the UK and more favourable claims experience in Canada.

We continue to apply our reserving policy consistently and the reserves in the group are set conservatively with the aim to protect against adverse future claims and development. Our business is predominantly short tail in nature and loss development experience is generally stable. As a result of the conservatism applied in setting the reserves, operating profit has benefited from releases of £212 million, net of reinsurance, which reflect releases from the 2009 accident year and prior *(2009: £372 million)*.

The worldwide general insurance combined operating ratio (COR) was 97% *(2009: 99%)* ahead of the group's 'meet or beat' target. The worldwide GI expense ratio has decreased to 12.4% *(2009: 12.6%)* 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 was lower at £846 million *(2009: £875 million)* reflecting a small reduction in the average asset levels compared with the prior year.

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 £579 million *(2009: £535 million)* comprises UK General Insurance operating profit of £476 million *(2009: £424 million)*, a contribution of £91 million *(2009: £91 million)* from Aviva Re and £12 million from our UK health business *(2009: £15 million)*. All subsequent commentary relates solely to UK General Insurance.

Momentum has continued to build strongly during the year in UK General Insurance, both in terms of profitability and sales volumes. Overall, **operating profit** has increased to £476 million, up 12% from 2009 *(2009: £424 million)*, and includes an adverse impact from weather-related claims of £40 million compared to the long-term average *(2009: neutral)*. The result is driven by an improvement in underlying current year underwriting result of £140 million (before the adverse impact of weather-related claims) which has more than offset the adverse weather impact of £40 million, an £11 million reduction in investment return to £406 million (*2009: £417 million*) and slightly lower savings on prior year claims development of £87 million (*2009: £105 million*).

Current year operating profitability has increased by £70 million to £389 million in 2010 *(2009: £319 million)*, building on the £38 million improvement recorded in 2009 and notwithstanding the adverse impact from weather-related claims. This strong performance reflects the growing sustainable profitability of the business now being written, as we reap the benefits from the action we took to exit unprofitable business and build on the promise of scale to deliver shareholder value. The principal factors behind this success are underwriting and claims management excellence, enhanced risk selection through the implementation of sophisticated pricing techniques, a continued focus on cost control, and a reduction in creditor claims from the levels seen last year.

The full year **combined operating ratio** was 96% *(2009: 99%)*. Our loss ratio has improved to 64% *(2009: 66%)*, despite the adverse weather and lower prior year savings, reflecting our disciplined approach to underwriting and focus on claims management excellence. The distribution ratio has also improved further to 32% *(2009: 33%)*, principally as a result of the delivery of further cost savings as we continue to focus on cost control, as well as holding costs whilst premiums grow.

During the year UK General Insurance has seen four consecutive quarters of premium growth culminating in **net written premiums** for the discrete fourth quarter being 20% higher than those recorded in the same period in 2009. Full year net written premiums of £4,046 million were 5% higher *(2009: £3,866 million)*. This performance has been driven by a combination of factors including strong levels of retention across all lines of business; substantial growth in our direct channel, reflecting the impact of our marketing initiatives and the success of the RAC panel; rolling out our direct prices to brokers; good levels of commercial new business; and the launch of our corporate risks offering.

Europe

In Europe, net written premiums were 3% higher at £3,130 million *(2009: £3,046 million)*. Operating profit was £255 million *(2009: £275 million)* due to lower LTIR.

3 – General insurance and health continued

Aviva Europe

General Insurance **net written premiums** increased 3% to £1,657 million *(2009: £1,608 million)*. This is supported by management action in Poland, where we have expanded the product offering sold through independent agents, strong growth in Italian personal motor and creditor business, and positive rating actions in France. Sales in Ireland continued to be impacted by the challenging market, characterised by aggressive price competition.

Health net written premiums increased 8% to £296 million *(2009: £275 million)* building on momentum from 2009, with increased sales in both France and Ireland.

General insurance and health **operating profit** was £109 million *(2009: £132 million)*. The result was adversely impacted by lower longer-term investment returns of £147 million *(2009: £175 million),* as a result of lower investment yields, which was partially offset by expense savings.

The **combined operating ratio** for Aviva Europe was 103% *(2009: 103%)* reflecting adverse weather and includes a significantly lower level of reserve margin release than prior year. Our expense ratio improved 1pp reflecting cost savings achieved over and above the increase in volumes.

Delta Lloyd

Net written premiums were £1,177 million, in line with the prior year *(2009: £1,163 million)* and 5% higher on a local currency basis. This includes amounts from accelerating the reporting of brokered business onto an actual basis. Excluding these amounts net written premiums were stable year on year.

Operating profit remained stable at £146 million *(2009: £143 million).* **COR** improved to 95% *(2009: 97%)*, with expense savings and reserve margin releases offsetting higher claims.

North America

Net written premiums in Canada were £1,958 million *(2009: £1,800 million),* 3% lower on a constant currency basis. This reflected lower personal lines premiums following actions to exit unprofitable business. The **operating profit** increased 54% to £222 million *(2009: £144 million)* as the underwriting result increased to £60 million *(2009: loss of £4 million)* and LTIR increased by 17% to £173 million *(2009: £148 million)*.

The underwriting profit was driven by improved claims from actions to improve underwriting effectiveness and favourable weather experience in the first half of the year. These resulted in the **combined operating ratio** improving to 97% *(2009: 100%)*.

LTIR was 4% (£7 million) higher than prior year on a constant currency basis (excluding foreign exchange movements of £18 million) primarily due to interest income related to an expected tax refund and the repositioning of the investment portfolio.

Asia Pacific

The **net written premiums** in the general insurance and health business rose to £72 million *(2009: £49 million)* primarily due to new business initiatives in Singapore and contributions from the newly acquired Indonesia health business, acquired on 1 July 2010.

The **operating loss** was £6 million *(2009: £6 million profit)* reflecting the non recurrence of the favourable £5 million one-off release of reserves in the Singapore health business in 2009 and the costs of setting up the general insurance business in Singapore and health business in Indonesia.

4 – Fund management

Geographical analysis of fund management operating profits

	2010 £m	2009 £m
United Kingdom	**44**	66
Europe	**36**	28
North America	**22**	22
Asia Pacific	**(5)**	(1)
Aviva Investors	**97**	115
United Kingdom	**3**	(14)
Aviva Europe[1]	**—**	3
Delta Lloyd	**103**	28
Europe	**103**	31
Asia Pacific	**(2)**	1
Total	**201**	133

1. Aviva Europe includes the result from fund management operations in Poland in 2009. This business was transferred across to Aviva Investors from 1 January 2010.

Our worldwide fund management operating profit increased to £201 million *(2009: £133 million)* on an IFRS basis.

Aviva Investors

Operating profit reduced to £97 million in 2010 (*2009: £115 million*) as a result of higher than expected redemptions and ongoing investment in the business, which is starting to bear fruit as we see an increase in higher margin external assets.

We have made strong progress in the development of our global infrastructure and during 2010 saw encouraging signs of traction in our business model towards our primary objective of delivering strong growth in third party business. Net funded external sales (excluding liquidity funds) rose from an outflow of £236 million in 2009 to inflows of £2,364 million (at 31 December 2010). Gross external sales were £8,320 million offset by redemptions of £5,956 million. Liquidity sales were an outflow of £745 million *(2009: inflows of £2,593 million).*

During 2010, we re-oriented our business towards more durable, higher margin funds, which resulted in an increased average fee rate on gross external sales, excluding liquidity funds.

Other fund management businesses

United Kingdom operating profit of £3 million comprises £8 million profit *(2009: £1 million)* from our Aviva UK investment business and £5 million loss *(2009: £15 million loss)* from our collective investment business with Royal Bank of Scotland Group (RBSG) reflecting improved strain on new business sales compared to the previous year.

Delta Lloyd operating profit of £103 million *(2009: £28 million)* partly reflected the receipt of substantial performance fees generated by an investment in the Brazilian telecoms market which experienced a period of consolidation during 2010. We do not expect this level of performance fees to recur regularly.

Asia Pacific, comprising our Navigator businesses in Singapore and Hong Kong, contributed £2 million loss *(2009: £1 million profit)*. The 2009 result included £4 million profit from the Australian business which was sold on 1 October 2009.

Funds under management

Total funds under management at 31 December 2010 were £402 billion *(2009: £379 billion)*.

	2010			2009		
	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	**209,094**	**117,666**	**326,760**	204,923	104,100	309,023
Third party funds under management	**50,693**	**24,798**	**75,491**	44,707	25,681	70,388
Funds under management	**259,787**	**142,464**	**402,251**	249,630	129,781	379,411

Funds managed by Aviva Investors were up 4% to £260 billion *(2009: £250 billion),* with assets managed for external clients increasing 13% to £51 billion *(2009: £45 billion).* Funds under management increased due to market growth and the River Road acquisition.

Detailed analysis is given within the IFRS supplement, note A20, page 82.

5 – Other operations and regional costs

	2010			2009		
	Regional costs £m	**Other operations £m**	**Total £m**	Regional costs £m	Other operations £m	Total £m
United Kingdom	**—**	**(21)**	**(21)**	—	(28)	(28)
Aviva Europe	**(55)**	**(49)**	**(104)**	(36)	(63)	(99)
Delta Lloyd	**—**	**(43)**	**(43)**	—	(49)	(49)
Europe	**(55)**	**(92)**	**(147)**	(36)	(112)	(148)
North America	**(26)**	**6**	**(20)**	(19)	3	(16)
Asia Pacific	**(32)**	**—**	**(32)**	(20)	(2)	(22)
Total	**(113)**	**(107)**	**(220)**	(75)	(139)	(214)

Across all regions head office costs have increased due to the expansion of regional initiatives and projects and ongoing brand spend. Note A21 on page 82 in the IFRS supplement gives further information on the operational cost base.

6 – Corporate centre

	2010 £m	2009 £m
Project spend	**(37)**	(11)
Share awards and other incentive schemes	**(14)**	(12)
Central spend	**(92)**	(85)
Total	**(143)**	(108)

The Corporate Centre costs increased to £143 million *(2009: £108 million)* due mainly to increased project costs which include the investment in our successful global Brand marketing campaign in the second half of the year. In addition central spend increased by £7 million reflecting costs to meet greater financial and regulatory reporting requirements.

7 – Group debt costs and other interest

	2010 £m	2009 £m
External debt		
Subordinated debt	**(290)**	(293)
Other	**(33)**	(42)
Total external debt	**(323)**	(335)
Internal lending arrangements	**(246)**	(227)
Net finance charge on main UK pension scheme	**(87)**	(74)
Total	**(656)**	(636)

Group debt costs and other interest of £656 million *(2009: £636 million)* comprise external interest on borrowings, subordinated debt and internal lending arrangements. External interest costs remained level at £323 million *(2009: £335 million),* interest costs on internal lending arrangements increased to £246 million *(2009: £227 million)* due to changes in internal debt balances throughout the year.

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 increased to £87 million *(2009: £74 million)* due mostly to the effect of the higher deficit at the beginning of the period, which offset the reduction in discount rates from 31 December 2008 to 31 December 2009.

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 is 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	
	2010 £m	2009 £m
Investment variances and economic assumptions	**791**	(75)

Investment variances of £791 million include £1,010 million relating to Delta Lloyd. Of this, around £800 million is due to differing movements in asset and liability yield curves while, the remainder primarily relates to gains on interest rate derivatives. 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 has not been offset by a corresponding movement in liabilities. The AAA collateralised bond spread movement in the year reflected the perceived risk regarding the curve's components which include bonds issued by Spanish savings banks and a range of other European organisations. If spreads were to reduce, this would increase the insurance liabilities and this increase may not be offset by a corresponding increase in asset values.

The positive investment variance in Delta Lloyd was partly offset by negative economic variances of £154 million in Aviva Europe, primarily from the impact of increased bond yields and credit spreads on assets in Ireland, Italy and Spain.

The additional allowance 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	
	2010 %	2009 %	**2010 %**	2009 %
United Kingdom	**7.8%**	7.0%	**6.3%**	5.5%
Eurozone	**7.2%**	7.3%	**5.7%**	5.8%

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	
	2010 £m	2009 £m
Net investment income	**633**	1,272
Foreign exchange on unrealised gains/losses and other charges	**55**	(179)
	688	1,093
Analysed between:		
Longer term investment return, reported within operating profit	**846**	875
Short-term fluctuations in investment return, reported outside operating profit	**(158)**	218
	688	1,093
General insurance and health	***(158)***	*218*
Other operations	***(85)***	*(123)*
Total short term fluctuations as per pro forma group operating profit	***(243)***	*95*

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. For other operations, the longer-term return reflects interest income earned in the Netherlands bank and retail mortgage divisions.

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:

	2010 £m	2009 £m
Debt securities	**11,404**	11,649
Equity securities	**918**	1,239
Properties	**146**	200
Cash and cash equivalents	**1,787**	2,078
Other	**4,021**	3,490
Assets supporting general insurance and health business	**18,276**	18,656
Assets supporting other non-long term business	**1,689**	2,598
Total assets supporting non long-term business	**19,965**	21,254

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	
	2010 %	2009 %	**2010 %**	2009 %
United Kingdom	**7.8%**	7.0%	**6.3%**	5.5%
France	**7.2%**	7.3%	**5.7%**	5.8%
Ireland	**7.2%**	7.3%	**5.7%**	5.8%
Netherlands	**7.2%**	7.3%	**5.7%**	5.8%
Canada	**7.5%**	6.1%	**6.0%**	4.6%

The underlying reference rates are at E18 within the MCEV financial supplement.

10 – Economic assumption changes on general insurance and health business

Economic assumption changes of £61 million adverse *(2009: £57 million positive)* mainly arise as a result of the reduction in the swap rate used to discount latent claims reserves.

11 – Profit on the disposal of subsidiaries and associates

Profit on disposal of subsidiaries and associates was £159 million *(2009: £153 million),* which includes profits arising from the sales of our joint venture with Royal Bank of Scotland (RBS) (£128 million), Sogessur, a non-insurance operation in France (£24 million) and certain UK non-core operations (£4 million).

12 – Integration and restructuring costs

Integration and restructuring costs were £243 million *(2009: £286 million)*. This includes expenditure relating to restructuring exercises across the group of £123 million, including UK restructuring costs of £53 million, £18 million in Delta Lloyd, £20 million in North America and £30 million in Aviva Investors. Expenditure relating to the Quantum Leap project in Europe amounted to £40 million and costs associated with preparing the businesses for Solvency II implementation amounted to £59 million. Costs incurred in 2009 mainly related to expenditure on cost saving programmes in the UK and Europe.

13 – Exceptional items

Exceptional costs of £273 million *(2009: £45 million positive)* mainly arose in Delta Lloyd partly offset by a £286 million benefit from the closure of the final salary section of the UK staff pension scheme to future accruals. Delta Lloyd has recognised a total of £549 million which comprises the cost of adopting new longevity tables of £483 million, German business closure, unit-linked insurance compensation scheme costs and compensation costs in defined contribution pension schemes of £66 million.

14 – Net flows

	Funds under management at 1 Jan 2010 £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 31 Dec 2010 £m
Life business						
UK - non-profit	**63,516**	**7,390**	**(5,907)**	**1,483**	**7,965**	**72,964**
UK - with-profits	**47,055**	**1,146**	**(5,030)**	**(3,884)**	**5,261**	**48,432**
United Kingdom	**110,571**	**8,536**	**(10,937)**	**(2,401)**	**13,226**	**121,396**
Aviva Europe	**105,130**	**12,902**	**(9,965)**	**2,937**	**(2,208)**	**105,859**
Delta Lloyd	**36,412**	**3,204**	**(3,539)**	**(335)**	**2,088**	**38,165**
Europe	**141,542**	**16,106**	**(13,504)**	**2,602**	**(120)**	**144,024**
North America	**26,758**	**4,713**	**(3,033)**	**1,680**	**2,760**	**31,198**
Asia Pacific	**2,430**	**507**	**(420)**	**87**	**349**	**2,866**
Total life business	**281,301**	**29,862**	**(27,894)**	**1,968**	**16,215**	**299,484**
Other funds under management included within consolidated IFRS assets	**37,702**					**37,275**
Third party funds under management not included within consolidated IFRS assets	**60,408**					**65,492**
Total funds under management	**379,411**					**402,251**

Life business

United Kingdom

During 2010, positive net inflows of £1.5 billion on non-profit business have mainly been driven by significant sales of individual and bulk purchase annuities. Net outflows on our with-profits book amounted to £3.9 billion in 2010.

Aviva Europe

Life business net inflows of £2.9 billion are mainly driven by inflows in France, reflecting the strength of our relationships with AFER and Credit du Nord, and in Italy, where sales of unit-linked and participating savings products have increased significantly. Other movements mainly relate to the adverse effect of foreign exchange, partly offset by fair value movements and other net cash inflows.

North America

Net inflows in our US business are mainly due to continued growth of our protection and annuity portfolios.

New business

15 – Life and pension sales

Life and pensions (gross of tax and minority interest)	Present value of new business premiums 2010 £m	2009 £m	Value of new business 2010 £m	Restated 2009 £m	New business margin 2010 %	Restated 2009 %
United Kingdom	**10,298**	8,914	**354**	247	**3.4%**	2.8%
France	**4,918**	4,891	**175**	169	**3.6%**	3.5%
Ireland	**938**	1,072	**1**	12	**0.1%**	1.1%
Italy	**4,456**	3,607	**142**	124	**3.2%**	3.4%
Poland	**603**	1,079	**40**	55	**6.6%**	5.1%
Spain	**2,084**	2,454	**128**	151	**6.1%**	6.2%
Other Europe	**538**	420	**18**	10	**3.3%**	2.4%
Aviva Europe	**13,537**	13,523	**504**	521	**3.7%**	3.9%
Delta Lloyd excluding Germany	**3,109**	3,324	**(82)**	(31)	**(2.6)%**	(0.9)%
Germany	**69**	341	**(10)**	(17)	**(14.1)%**	(5.0)%
Delta Lloyd[2]	**3,178**	3,665	**(92)**	(48)	**(2.9)%**	(1.3)%
Europe	**16,715**	17,188	**412**	473	**2.5%**	2.8%
North America	**4,728**	4,545	**(194)**	16	**(4.1)%**	0.4%
Asia Pacific[1]	**1,617**	1,095	**52**	10	**3.2%**	0.9%
Australia[1]	**—**	261	**—**	19	**—**	7.3%
Total life and pensions	**33,358**	32,003	**624**	765	**1.9%**	2.4%

1. Asia Pacific excludes the Australian life business that was sold on 1 October 2009
2. For details of the 2009 Delta Lloyd restatement see basis of preparation in the MCEV Financial Statements

See New Business Supplement on page 83 for further analysis of sales volumes.

Regional new business internal rates of return are included in the Capital Management section, page 21 and 100.

United Kingdom

Our UK business continued to deliver a strong performance. We have successfully increased sales, margin and IRR through robust cost control, active management of our new business mix, and an increasingly strong and trusted brand.

Life and pensions sales were up 16% to £10,298 million *(2009: £8,914 million)* backed by a significantly increased margin at 3.4% *(2009: 2.8%)* and our IRR strengthened to 15% *(2009: 14%)*. Highlights of the year were our strong performances in annuities, core protection and group personal pensions.

Growing our customer franchise remains a key priority and we have made excellent progress in developing and deepening our distribution partnerships. Earlier in the year we announced a new exclusive five year distribution agreement with Santander in the UK, for the sale of protection products from June 2011, which builds on our existing personal lines insurance arrangements. In addition, we have renewed our successful strategic partnership with RBS with a new exclusive seven year agreement for the sale of life, protection and pensions products from the start of this year. Customers will be able to purchase Aviva products through over 21,000 branches of major banks and other organisations, such as the Post Office.

Intermediaries continue to be important to Aviva, with the majority of our sales made through independent financial advisers (IFAs). During 2010 we were voted Life Company Of The Year by intermediaries. As we approach the implementation of the Retail Distribution Review in 2013 our strong brand, diverse distribution, and strong product range position us well for success. We have already delivered adviser charging individual pensions products and at the end of 2010 approximately 50% of sales were on this basis.

Annuity sales increased by 67% to £3,170 million *(2009: £1,897 million)*. Bulk purchase annuity sales grew to £871 million *(2009: £175 million)* as we were able to maintain our strict pricing disciplines and manage capital efficiently in this highly competitive market. Sales of individual annuities were 34% higher at £2,299 million *(2009: £1,722 million)* reflecting a strong pricing position and recognition of our position as a retirement expert.

Equity release sales grew 58% to £436 million *(2009: £276 million)*, forming an important part of our at retirement planning package and offering customers the widest possible range of options to suit their individual needs.

Core protection sales increased by 14% to £674 million *(2009: £589 million)*, reflecting the continued popularity of our Simplified Life product ,with overall **protection** sales broadly level at £944 million *(2009: £965 million)*. We remain committed to raising awareness amongst consumers, in particular families, of the importance of protecting themselves and their families. Our new television advertising featuring Paul Whitehouse, tackles this important issue in a new and compelling way, which represents a new approach to UK financial services advertising.

Pension sales were 8% higher at £4,062 million *(2009: £3,752 million)*, with a strong performance in group personal pensions, up 37% to £1,789 million *(2009: £1,310 million)*, representing five consecutive quarters of growth. We are supporting this growth market through the launch of a Worksite service, including online employer microsites, to encourage new employees to join their employers' group personal pension scheme and demonstrate the benefits of increased contributions to existing scheme members.

Bond sales were lower at £1,686 million *(2009: £2,024 million)* as we maintained our clear focus on profitability, while still remaining a leading player in this market with a strong proposition.

15 – Life and pension sales continued

The long-term savings market has returned to growth and while we remain cautious about the economy overall, our business has proved its resilience and we expect to continue to grow as we retain our competitive advantage. The drivers for growth in this market remain compelling with new research from Aviva finding that 61% of families have no financial protection and only 28% of families regularly pay into a private or employer pension. As a trusted brand Aviva is well-placed to respond to this.

We are well-placed as we enter 2011 with a broad product range backed by an increasingly strong and trusted brand. We will retain our focus on maximising our profitability as we continue to build on the positive momentum of 2010. We will increase our distribution reach, and continue to develop our service proposition to customers, as we grow our life business in 2011.

Europe

In Europe, life and pension sales were 3% lower at £16,715 million *(2009: £17,188 million)*, but level on a local currency basis. The slowdown in the second half of the year follows deliberate action to manage down sales. Margin was 2.5% *(2009: 2.8%)* reflecting product mix in Aviva Europe and discontinuation of the loss making German business in Delta Lloyd.

Aviva Europe

Aviva Europe has delivered a robust performance despite the economic environment continuing to be challenging. Life and pensions sales have been maintained at £13,537 million *(2009: £13,523 million)*, a 3% increase on a local currency basis.

Actions taken to rebalance the sales mix, such as reducing the guaranteed interest rate in Italy, have led to sales of guaranteed savings products significantly slowing in the second half of the year, bringing them level with sales in 2009. Further actions throughout 2010 to improve sales mix, such as the introduction of new unit-linked products and a focus by our partners on selling protection, have led to a 49% increase in unit linked sales to £2,521 million and a 3% increase in protection sales to £953 million against the 2009 position.

These actions have partially offset the impact of a lower yield curve leading to a new business margin of 3.7% which is 0.1pp higher than HY10 and 0.2pp down on 2009 whilst delivering an IRR of 13% and a payback of 7 years *(2009: 7 years)*.

Bancassurance

Sales through our bancassurance channel have increased 9% to £8,040 million *(2009: £7,353 million)* an increase of 13% on a local currency basis.

The increase in bancassurance sales is led largely by **Italy**, which has increased 23% to £4,307 million *(2009: £3,492 million)*. This has been driven by high sales of guaranteed products across all of our banking partners in the first half of the year and high sales of unit-linked products through UniCredit. Actions have been taken in the second half of the year in order to rebalance the sales mix resulting in a 15% overall increase in sales of protection on last year. These actions have partially offset the decrease in Italy's overall margin which at 3.2% is 0.2pp lower than 2009.

Sales in **Spain** have decreased 16% to £1,850 million *(2009: £2,209 million)*. Following a downturn across the Spanish pensions' market, we have experienced lower seasonal pension sales than in the prior year. In addition management actions to rebalance the sales mix, by reducing the interest rate on the SAFA[1] non-profit financial annuity product, resulted in lower savings sales. Despite the challenging economy and struggling property market our protection sales have been resilient declining only 3% compared to the 18% decline in mortgage approvals in Spain[2] this year. This has been achieved by management actions to promote stand-alone sales.

Sales in **France** have increased 9% to £1,245 million *(2009: £1,141 million)*. Our partnership with Credit du Nord continues to be successful and customers continue to invest with us through the popular 'Duo' savings product.

Sales in **Ireland** have decreased 5% to £413 million *(2009: £436 million)*, a resilient performance given the current challenges facing the Irish economy.

It is encouraging to see the progress of our two growth markets, **Turkey** and **Russia**, which have delivered increased sales of 163% and 350% respectively this year. Growth at this initial stage, whilst in the early stages of brand recognition, is promising and demonstrates the future development potential of these two markets.

Retail

Retail sales have decreased 11% to £5,497 million *(2009: £6,170 million)*, a reduction of 9% on a local currency basis.

The main driver behind the decline in retail sales is **Poland**, where sales have reduced 49% to £545 million *(2009 £1,061 million)*. Last year's change to pensions' legislation limited pension funds' potential income through a reduction of contract fees and a cap on total asset management revenues. Aviva Poland has consequently taken management actions directed at promoting sales of higher margin unit-linked and protection products. This resulted in an increase in Poland's overall margin from 5.1% in 2009 to 6.6% in 2010.

Retail sales in **France** have decreased 2% to £3,673 million *(2009: £3,750 million)*, an increase of 1% on a local currency basis, with our relationship with AFER continuing to be very strong. Overall this is a good performance in a difficult market. Strong efforts were made to promote higher margin unit-linked product sales resulting in an overall increase in the unit-linked share of new business from 14% at the end of the first quarter to 22% at the end of the discrete fourth quarter.

Retail sales in **Ireland** have decreased 17% to £525 million *(2009: £636 million)* largely reflecting the current condition of the Irish economy. Furthermore continued aggressive competitor pricing actions on pensions products and a number of changes made by the Irish Government to retirement savings and income drawdown products in the latter part of 2010 means that the seasonal increase in pensions sales was significantly lower than seen in 2009.

[1] Seguro Ahorro Fondo Acumulado
[2] According to the Instituto Nacional de Estadística (INE) based on 18% decrease in the capital of new mortgage lending from 2009 (€149bn) to 2010 (€122bn)

15 – Life and pension sales continued

Retail sales in **Russia** have increased 176% to £47 million *(2009: £17 million)*. Following good pensions sales and several new group pensions contracts, Aviva Pensions non-state pension fund in the non-captive market is now ranked number one in the market[1].

Growth across the region is likely to be muted in 2011 and customer sentiment is expected to continue in its preference for guaranteed savings products. Our priority is to manage our capital efficiently and profitably and as a result we will continue to actively manage our sales towards an improved margin.

Delta Lloyd

Life and pension sales decreased 13% to £3,178 million *(2009: £3,665 million).* Excluding Germany, life and pensions sales have reduced by 3% on a local currency basis to £3,109 million *(2009: £3,324 million).* The decline in German[2] sales is more than offset by increasing sales of annuity products while the market for Group Pension business declined year on year.

The market for individual life products in the Netherlands is contracting and customers are increasingly buying bank savings products as an alternative to individual unit-linked insurance. These products give similar tax relief to that enjoyed by individual pensions and mortgage loan repayment products and customers are shifting towards them. As a consequence, the balance of customers' savings in bank savings products has increased by 72% to £357 million *(2009: £207 million[3]).*

The integration of the Fortis branches into ABN Amro will significantly increase the distribution opportunities in bancassurance.

North America

In the US, life and pensions sales grew 4% to £4,728 million *(2009: £4,545 million)*. Within this, life insurance sales increased 15% and annuity sales grew 1% reflecting our focus upon balancing profitability and growth, while diversifying our business mix and managing capital efficiency. The business delivered a strong improvement in new business profitability with an internal rate of return of 14% *(2009: 7%)* and a four year payback period *(2009: 14 years)* reflecting our focus on driving shareholder value.

Annuity sales in 2010 grew to £3,729 million slightly above last year levels *(2009: £3,674 million)* as we strengthened relationships with key distribution partners while balancing productivity, profitability and capital efficiency.

Compared to the prior year, our **Life** sales have increased by 15% to £999 million *(2009: £871 million)* and account for 21% *(2009: 19%)* of our total new business sales reflecting our continued strategy to focus on business diversification. The US business is now the leading provider of life insurance protection products in the Aviva Group, following the second consecutive year of double digit organic growth in this segment.

We are well-positioned to continue achieving profitable organic growth through the strategy we have in place.

Asia Pacific

Life and pensions sales increased by 48% to £1,617 million *(2009: £1,095 million[4])*. On a local currency basis, life and pension sales were 39% higher, reflecting the growth of Aviva's franchise in Asia, supported by an improving economic environment and recovering investor confidence.

Profitability continues to improve with the life new business margin at 3.2% for the full year *(2009: 0.9%[4])* as a result of the benefits of our increasing scale and the actions we took to withdraw or reprice low margin products. These initiatives, coupled with careful portfolio management and capital discipline, have enabled us to increase our new business IRR to 11% *(2009: 6%[4])* and significantly reduce the average payback period to 13 years *(2009: 25 years[4])*. Major markets delivering growth include **South Korea** with sales of £405 million, an increase of 27% on a local currency basis compared to the same period last year. This performance was driven by robust bancassurance sales through our joint venture partner Woori Bank and the successful expansion of our agency force.

With sales increasing by 25% on a local currency basis to £436 million, **China** continues to perform strongly, benefiting from our effective multi-channel distribution network.

India, our joint venture, recorded a 13% increase on a local currency basis to £96 million, largely due to improved investor sentiment. This strong growth took place despite the dampening effect from recent regulatory changes on investment linked products sold by life companies in the local market.

Sales in our remaining South East Asian markets, led by **Singapore**, were all higher than prior year, producing a total increase of 75% to £680 million, which reflects the strong economic recovery in this region.

We are well-positioned to continue to increase franchise value through organic profitable growth underpinned by our multi-distribution platform.

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[1] According to Russia's Federal Financial Markets Service, as at September 2010

[2] Germany was closed to new business in the second half of 2010

[3] These sales are not included in long-term savings sales

[4] Excludes the Australian life business sold on 1 October 2009

16 – Investment sales

	2010 £m	2009 £m
Investment sales		
United Kingdom	**1,548**	1,049
Aviva Europe	**1,350**	852
Delta Lloyd	**615**	664
Europe	**1,965**	1,516
Australia[1]	**266**	188
Asia	**223**	385
Asia Pacific	**489**	573
Australia life business[1]	**—**	734
Total investment sales	**4,002**	3,872

Total investment sales of £4,002 million were 3% higher than the same period last year *(2009: £3,872 million)*.

UK investment sales increased to £1,548 million *(2009: £1,049 million)* due to growth in managed and structured fund sales and as consumers began to reinvest in property as an asset class during the first half of the year. The second half of the year saw a return to more normal levels of investment.

Aviva Europe sales increased by 58% to £1,350 million *(2009: £852 million)* reflecting demand for emerging market debt funds while global convertible and tactical asset allocation funds continued to attract investment. Sales through Polish distribution channels benefited from the strong investment performance across this fund range. Aviva Investors continues to broaden its distribution footprint across continental Europe, and in 2010 started to distribute SICAV products through its French distribution channels.

Delta Lloyd investment sales decreased by 7% to £615 million *(2009: £664 million)*.

Investment sales in **Asia Pacific** were lower at £489 million *(2009: £573 million[1])* reflecting lower sales in Asia of £223 million *(2009: £385 million)* driven by a reduction in Singapore following a rationalisation of distribution partnerships. Sales in Australia increased by 41% to £266 million *(2009: £188 million)* as Navigator sales continued through our Aviva Investors business.

[1] Asia Pacific excludes the Australian life business that was sold on 1 October 2009

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 2010 result of £1.7 billion represents a £0.7 billion increase on 2009 and reinforces our confidence in the capital generation position of the Group. This excludes the negative impact of the Delta Lloyd longevity assumption change of £0.2 billion which is included in the MCEV existing business free surplus generated.

Profits from existing life business remain strong, generating £2.1 billion of capital[1] *(31 December 2009: £1.9 billion)*, with a further £0.6 billion *(31 December 2009: £0.6 billion)* generated by the general insurance, fund management and non-insurance businesses. Capital invested in new business has reduced significantly to £1.0 billion *(31 December 2009: £1.5 billion)*, benefiting in particular from management actions to improve capital efficiency in the US business, the utilisation of the RIEESA to finance new business in UK Life and reduced required capital on general insurance business.

	2010 £bn	2009 £bn
Operational capital generation:		
Life in-force profits[1]	**2.1**	1.9
General insurance, fund management and non-insurance profits	**0.6**	0.6
Operational capital generated before investment in new business	**2.7**	2.5
Capital invested in new business	**(1.0)**	(1.5)
Operational capital generated after investment in new business	**1.7**	1.0

1. Life in-force profits exclude the 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 the life business this is the impact of initial and required capital on free surplus. For general insurance businesses this reflects the movement in required capital, which we have assumed to equal two times the regulatory minimum. Where appropriate, the movement in capital requirements excludes the impact of foreign exchange movements.

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. With the exception of Asia Pacific and Delta Lloyd, all regions met these requirements, with a particularly strong improvement in North America, where IRR has increased to 14% *(2009: 7%)* and payback has reduced to 4 years *(2009: 14 years)*, benefiting from a range of management actions as well as recognising the expected future benefits of an AXXX capital solution.

	2010 IRR %	2009 IRR %	**2010 Payback period years**	2009 Payback period years
United Kingdom	**15%**	14%	**7**	8
France	**9%**	9%	**9**	9
Ireland	**5%**	6%	**11**	10
Italy	**11%**	10%	**6**	7
Poland	**25%**	22%	**4**	5
Spain	**22%**	26%	**4**	3
Other Europe	**14%**	12%	**6**	8
Aviva Europe	**13%**	13%	**7**	7
Delta Lloyd	**6%**	6%	**16**	33
Europe	**11%**	11%	**9**	15
North America	**14%**	7%	**4**	14
Asia Pacific[2]	**11%**	8%	**13**	20
Total	**12.5%**	10.0%	**8**	14
Total excluding Delta Lloyd	**13.3%**	10.6%	**7**	11

2. Asia Pacific IRR and payback period for 2009 includes the Australian life and pensions business which was sold on 1 October 2009.

19 – Net asset value

IFRS net asset value per share has increased over the year to 454p *(31 December 2009: 374p)*, primarily driven by profits in the period and actuarial gains on staff pension schemes. MCEV NAV has also increased to 542p *(31 December 2009: 473p)*, largely driven by the same factors.

	IFRS 2010 £m	IFRS 2009 £m	MCEV 2010 £m	MCEV Restated 2009 £m
Net assets at 1 January	**15,086**	14,573	**18,561**	17,771
Operating profit after tax	**1,925**	1,475	**2,637**	2,640
Non-operating items after tax	**(33)**	(160)	**(891)**	82
Actuarial gains / (losses) on pension schemes	**981**	(1,116)	**981**	(1,116)
Foreign exchange rate movements	**(78)**	(951)	**(190)**	(1,018)
Other comprehensive income for the year, net tax	**528**	1,084	**48**	21
Dividends and appropriations net of scrip	**(548)**	(554)	**(548)**	(554)
Net increase in total equity following Delta Lloyd IPO	**-**	930	**-**	930
Other movements	**(136)**	(195)	**(136)**	(195)
Total equity	**17,725**	15,086	**20,462**	18,561
Preference share capital and direct capital instruments	**(1,190)**	(1,190)	**(1,190)**	(1,190)
Non-controlling interest	**(3,741)**	(3,540)	**(3,977)**	(4,279)
Net assets at 31 December	**12,794**	10,356	**15,295**	13,092
Number of shares	**2,820**	2,767	**2,820**	2,767
Net asset value per share	**454p**	374p	**542p**	473p

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 £1.5 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	Total 2010 £bn	Total 2009 £bn
Insurance Groups Directive (IGD) capital resources	**6.0**	**10.3**	**16.3**	**15.7**
Less: capital resource requirement (CRR)	**(6.0)**	**(6.5)**	**(12.5)**	**(11.2)**
Insurance Group Directive (IGD) excess solvency	**—**	**3.8**	**3.8**	**4.5**
Cover over EU minimum (calculated excluding UK life funds)			**1.6 times**	**1.7 times**

The EU Insurance Groups Directive (IGD) regulatory capital solvency surplus has decreased by £0.7 billion since 31 December 2009 to £3.8 billion. The key movements over the period are set out in the following table:

	£bn
IGD solvency surplus at 31 December 2009	**4.5**
Operating profits net of other income and expenses	**1.0**
Dividends net of scrip	**(0.5)**
Market movements including foreign exchange	**(0.2)**
Pension scheme funding	**(0.3)**
Increase in Capital Resource Requirements	**(0.3)**
Acquisitions (River Road and other small transactions)	**(0.2)**
Other	**(0.2)**
Estimated IGD solvency surplus at 31 December 2010	**3.8**

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 on an MCEV basis and IFRS basis at 31 December 2010 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:

2009 £bn	MCEV basis	2010 £bn	Equities down 10% Direct £bn	Equities down 10% Indirect £bn	Interest rates up 1% £bn	0.5% increased credit spread £bn
20.8	Long-term savings[1]	**21.8**	**(0.4)**	**(0.4)**	**(0.2)**	**(1.8)**
3.3	General insurance and other	**4.8**	**(0.2)**	**—**	**(0.6)**	**0.4**
(5.5)	Borrowings[2]	**(6.1)**	**—**	**—**	**—**	**—**
18.6	**Total equity**	**20.5**	**(0.6)**	**(0.4)**	**(0.8)**	**(1.4)**

2009 £bn	IFRS basis	2010 £bn	Equities down 10% £bn	Interest rates up 1% £bn	0.5% increased credit spread £bn
17.3	Long-term savings	**19.0**	**(0.4)**	**(0.8)**	**(0.4)**
3.3	General insurance and other	**4.8**	**(0.2)**	**(0.6)**	**0.4**
(5.5)	Borrowings[2]	**(6.1)**	**—**	**—**	**—**
15.1	**Total equity**	**17.7**	**(0.6)**	**(1.4)**	**—**

1. Assumes MCEV assumptions adjusted to reflect revised bond yields.
2. Comprising external and subordinated debt, net of tangible net assets.

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 31 December 2010 the sensitivity to a 10% fall in global equity markets or a rise of 1% in global interest rates is as follows:

	2010 £bn	Equities down 10% £bn	Interest rates up 1% £bn
IGD Group surplus	**3.8**	**(0.3)**	**(1.0)**

We continue to actively manage our exposure to further market volatility, with ongoing hedging strategies in place. We expect that a 40% fall in equity markets at 31 December 2010 would reduce IGD by £0.6 billion.

	£bn
Equities down 10%	(0.3)
Equities down 20%	(0.5)
Equities down 30%	(0.5)
Equities down 40%	(0.6)

23 – Risk management

Equity hedging

Our risk management processes ensure close and ongoing monitoring of all our capital measures. The following table shows the material equity derivatives within the group's shareholder funds at 31 December 2010 that are used as part of a long-term strategy to manage equity risk. It excludes derivatives used for portfolio management purposes:

Derivative	Notional £bn[1]	Market fall below protection level %[2,4]	Market fall required before protection starts %[3,4]	Outstanding duration
(a)	4.6	—	22%	< 3 months
(b)	0.2	—	14%	3 - 12 months
(c)	1.1	—	11%	> 12 months

1. The notional represents the notional amount of hedging as at 31 December 2010 (gross of non-controlling interests).
2. The "Market fall below protection level" shows the percentage the market has fallen below the protection level as at 31 December 2010.
3. The "Market fall required before protection starts" shows the percentage the market would have to fall from the 31 December 2010 position before the derivative moves into the money.
4. Derivatives (a), (b) and (c) each represent a collection of derivatives with different strike prices. The strike prices used in the above calculations are the weighted average strikes of the derivatives in each bucket.

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 minimum interest rate guarantees in the Netherlands, and also 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 FX forwards to provide certainty regarding the sterling value to be received by Group. Derivatives have also been used to reduce balance sheet FX translation risk. At 31 December 2010 the group had in place zero cost collar Euro hedges with a notional value of £2.0 billion. These hedges are used to protect the group's capital against a significant depreciation in the Euro versus Sterling.

See also note A17 – Risk management.

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 14.8% *(31 December 2009: 10.9%)* benefiting from growth in operating profits. On an MCEV basis return on equity shareholders' funds is 16.4% *(31 December 2009: 16.3%)* with growth in profits broadly in line with growth in opening capital employed.

	IFRS		MCEV	
	2010 %	2009 %	**2010 %**	Restated 2009 %
Life assurance	**10.2%**	8.5%	**12.1%**	13.1%
General insurance and health	**15.8%**	12.0%	**15.8%**	12.0%
Fund management	**52.4%**	27.4%	**32.3%**	10.6%
Other business	**63.0%**	76.4%	**56.1%**	60.8%
Corporate	**24.3%**	13.6%	**24.3%**	13.6%
Return on total capital employed	**10.5%**	**8.5%**	**11.9%**	**12.4%**
Subordinated debt	**4.5%**	4.6%	**4.5%**	4.6%
External debt	**2.8%**	3.3%	**2.8%**	3.3%
Return on total equity	**12.8%**	**10.1%**	**14.2%**	**14.9%**
Less: Non-controlling interests	**9.4%**	8.8%	**10.0%**	12.2%
Direct capital instrument	**4.2%**	4.4%	**4.2%**	4.4%
Preference capital	**8.5%**	8.5%	**8.5%**	8.5%
Return on equity shareholders' funds	**14.8%**	**10.9%**	**16.4%**	**16.3%**

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 future release of future profits and required capital are 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 7.75%, based on a risk-free rate of 3.7%, a risk margin of 3.65% and an allowance for the time value of options and guarantees of 0.4%.

Segmental analysis of life and related business EEV equivalent embedded value

	Net worth		VIF on traditional embedded value		Embedded value	
	31 December 2010 £bn	30 June 2010 £bn	**31 December 2010 £bn**	30 June 2010 £bn	**31 December 2010 £bn**	30 June 2010 £bn
United Kingdom	**4.1**	3.8	**2.8**	2.9	**6.9**	6.7
Aviva Europe	**3.1**	2.8	**3.0**	2.8	**6.1**	5.6
Delta Lloyd	**1.3**	1.2	**0.9**	0.8	**2.2**	2.0
Europe	**4.4**	4.0	**3.9**	3.6	**8.3**	7.6
North America	**1.2**	1.3	**1.3**	0.8	**2.5**	2.1
Asia Pacific	**0.3**	0.3	**0.3**	0.2	**0.6**	0.5
Total covered business	**10.0**	9.4	**8.3**	7.5	**18.3**	16.9
Non-covered business					**0.4**	(0.4)
Total Group EV					**18.7**	16.5
Less preference share capital and direct capital instruments					**(1.2)**	(1.2)
Equity attributable to ordinary shareholders on an EV basis					**17.5**	15.3

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.

31 December 2010		Release of future profits and required capital					
£bn	**Free surplus**	**0-5**	**6-10**	**11-15**	**16-20**	**20+**	**Total net of non-controlling interest**
United Kingdom	**1.1**	**2.4**	**2.9**	**2.4**	**1.9**	**4.4**	**14.0**
Aviva Europe	**0.2**	**3.5**	**2.4**	**1.9**	**1.5**	**2.5**	**11.8**
Delta Lloyd	**0.4**	**1.1**	**0.8**	**0.7**	**0.6**	**1.3**	**4.5**
Europe	**0.6**	**4.6**	**3.2**	**2.6**	**2.1**	**3.8**	**16.3**
North America	**(0.2)**	**1.9**	**1.0**	**0.7**	**0.5**	**0.7**	**4.8**
Asia Pacific	**0.1**	**0.3**	**0.2**	**0.1**	**0.1**	**0.2**	**0.9**
Total	**1.6**	**9.2**	**7.3**	**5.8**	**4.6**	**9.1**	**36.0**

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.

The quality of our asset base continues to be strong, and prudent management of investments has limited our exposure to market volatility and toxic assets. Equity and debt markets continued to recover in 2010, but rating agencies have downgraded the debt securities of a number of governments and corporate institutions, especially within the Eurozone. The impact on Aviva's investment portfolio has not been significant and the credit rating profile of our debt securities portfolio remains strong.

During 2010, the Group has continued to refine its classification of assets. Where relevant, 2009 comparative amounts in the tables that follow have been adjusted accordingly. Please see Section D – Analysis of Assets for details.

26 – Total assets

2010	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
Loans	**35**	**8,314**	**34,725**	**43,074**	**—**	**43,074**
Financial investments						
Debt securities	**16,150**	**85,414**	**65,918**	**167,482**	**—**	**167,482**
Equity securities	**31,441**	**12,308**	**5,327**	**49,076**	**—**	**49,076**
Other investments	**26,814**	**6,608**	**3,308**	**36,730**	**—**	**36,730**
Total loans and financial investments	**74,440**	**112,644**	**109,278**	**296,362**	**—**	**296,362**
Cash and cash equivalents	**4,772**	**12,194**	**8,489**	**25,455**	**—**	**25,455**
Other assets	**6,250**	**11,949**	**30,091**	**48,290**	**(14)**	**48,276**
Assets of operations classified as held for sale	**—**	**—**	**—**	**—**	**14**	**14**
Total	**85,462**	**136,787**	**147,858**	**370,107**	**—**	**370,107**
Total %	**23.0%**	**37.0%**	**40.0%**	**100.0%**	**—**	**100.0%**
2009	80,796	135,628	137,967	354,391	—	354,391
2009 %	22.8%	38.3%	38.9%	100.0%	—	100.0%

Total assets – Valuation bases

	2010				2009			
	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	**83,192**	**1,679**	**591**	**85,462**	77,975	2,465	356	80,796
Participating fund assets	**124,690**	**11,578**	**519**	**136,787**	122,794	12,237	597	135,628
Shareholder assets	**105,393**	**40,438**	**2,027**	**147,858**	96,844	38,517	2,606	137,967
Total	**313,275**	**53,695**	**3,137**	**370,107**	297,613	53,219	3,559	354,391
Total %	**84.6%**	**14.5%**	**0.9%**	**100.0%**	84.0%	15.0%	1.0%	100.0%

The proportion of total assets measured at fair value (which includes 100% of financial investments) has remained stable at 84.6% *(2009: 84.0%)*. The principal asset classes measured at fair value are loans, debt securities, equity securities and other financial investments.

Total assets – financial investments

	2010				2009			
2010	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	**164,266**	**7,507**	**(4,291)**	**167,482**	160,572	5,872	(4,687)	161,757
Equity securities	**44,878**	**7,186**	**(2,988)**	**49,076**	46,479	4,173	(5,225)	45,427
Other investments	**33,957**	**3,391**	**(618)**	**36,730**	30,505	1,940	(927)	31,518
Total	**243,101**	**18,084**	**(7,897)**	**253,288**	237,556	11,985	(10,839)	238,702

At 31 December 2010, cumulative impairments on available for sale debt securities were £150 million (*2009: £119 million*). The total impairment expense for available for sale debt securities for 2010 was low at £79 million *(2009: £93 million)*, gross of reversals. Most of the write down relates to mortgage backed securities in the US. Although these securities are not yet in default continued deterioration in market values is considered an indicator of impairment.

27 – Shareholders' assets

As at 31 December 2010, total shareholder investments in loans and financial investments included within shareholder assets was £109.2 billion *(2009: £98.7 billion)*, including loans of £34.7 billion, debt securities of £65.9 billion, equity securities of £5.3 billion and other investments of £3.3 billion. The increase in shareholder exposure to loans and financial investments during the year is predominantly driven by new mortgage loans in our UK Life business and increases in debt securities due to new business in our UK and US life businesses.

Shareholders' assets – loans

2010	United Kingdom £m	Aviva Europe £m	Delta Lloyd £m	North America £m	Asia Pacific £m	Total £m
Policy loans	**7**	**13**	**251**	**230**	**38**	**539**
Loans and advances to banks	**921**	**—**	**98**	**—**	**—**	**1,019**
Mortgage loans – securitised	**1,912**	**—**	**6,404**	**—**	**—**	**8,316**
Mortgage loans – non-securitised	**13,006**	**1**	**6,843**	**1,943**	**—**	**21,793**
Other loans	**53**	**4**	**2,916**	**83**	**2**	**3,058**
Total	**15,899**	**18**	**16,512**	**2,256**	**40**	**34,725**
2009	14,545	19	16,088	1,953	14	32,619

Our well diversified UK Life commercial mortgage portfolio remains of high quality, with minimal levels of default losses recorded in the period. Interest service cover remains strong at 1.33 times and over 97.6% of mortgages are neither in arrears nor otherwise impaired. The average LTV has remained relatively stable 95% *(2009: 94%)*. Improvements to the way portfolio risk adjustments are allocated to individual loans has resulted in the amount of exposure uncovered by the underlying security falling slightly to £411 million. Income cover levels, which remain the primary risk driver within the mortgage portfolio, remain strong.

The valuation allowance made in the UK for defaults on corporate bonds and commercial mortgages carried at fair value equates to 63bps and 78bps respectively *(2009: 64bps and 81bps respectively)*. This equates to a total valuation allowance of £1.3 billion (2009: £1.1 billion) for the life of the UK corporate bond and commercial mortgage portfolios which maintains a strong buffer against potential future losses, the increase being attributable to the growth in the value of the portfolio. In addition, we hold £60 million of provisions in our UK General Insurance mortgage portfolio.

The total shareholder exposure to loans issued by Delta Lloyd has increased to £16.5 billion *(2009: £16.0 billion)*, including £6.4 billion of securitised mortgages and £6.8 billion of non-securitised (primarily residential) mortgages. The securitised mortgages have predominantly been sold to third party investors, and therefore present little credit risk to Aviva. Of the non-securitised mortgages, £2.7 billion *(2009: £1.9 billion)* are guaranteed by the Dutch Government, and over 97% are neither past due nor impaired. Delta Lloyd has not made any additional provisions, as it does not consider the amount of potential loss to be significant.

Shareholders' assets – financial investments

	2010				2009			
	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	**32,150**	**32,922**	**846**	**65,918**	30,835	27,405	1,786	60,026
Equity securities	**3,021**	**1,423**	**883**	**5,327**	2,995	1,499	617	5,111
Other investments	**578**	**2,379**	**351**	**3,308**	1,127	1,536	22	2,685
Total	**35,749**	**36,724**	**2,080**	**74,553**	34,957	30,440	2,425	67,822
Total %	**48.0%**	**49.2%**	**2.8%**	**100.0%**	51.5%	44.9%	3.6%	100.0%

During 2010, there has been a decrease to 48.0% *(2009: 51.5%)* 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 87% *(2009: 88%)*.

The decrease in shareholder exposure to Level 3 debt securities arises as a result of the transfer from Level 3 to 2 of Italian structured bonds and certain debt securities in our UK business for which either values are corroborated against a Level 2 internal model price, new valuation models have been developed, or there has been sufficient market activity in observable inputs to justify Level 2 classification.

27 – Shareholders' assets continued

Shareholders' assets – debt securities

2010	AAA £m	AA £m	A £m	BBB £m	Less than BBB £m	Not rated £m	Total £m
	Rating						
Government	**12,495**	**3,637**	**1,640**	**596**	**202**	**579**	**19,149**
Corporate	**2,958**	**5,117**	**13,696**	**10,862**	**1,549**	**4,555**	**38,737**
Certificates of deposits	**—**	**78**	**114**	**210**	**—**	**24**	**426**
Structured	**4,648**	**749**	**817**	**385**	**491**	**516**	**7,606**
Total	**20,101**	**9,581**	**16,267**	**12,053**	**2,242**	**5,674**	**65,918**
Total %	**30.5%**	**14.5%**	**24.7%**	**18.3%**	**3.4%**	**8.6%**	**100.0%**
2009	19,363	8,399	15,549	10,456	1,762	4,497	60,026
2009 %	32.3%	14.0%	25.9%	17.4%	2.9%	7.5%	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 2010, the proportion of our shareholder debt securities that are investment grade declined slightly to 88% *(2009: 90%).* This movement was primarily due to the increase in private placements to back UK annuity liabilities. The remaining 12.0% of shareholder debt securities that do not have an external rating of BBB or higher can be split as follows:

- 3.4% are debt securities that are rated as below investment grade
- 3.0% 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
- 5.6% 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 £1.8 billion (2.7% of total shareholder debt securities) of private placements and other corporate bonds held in our UK Life business which have been internally rated as investment grade.

£1.0 billion of shareholder holdings in debt securities represent exposures to the governments (and local authorities and agencies) of Greece, Ireland, Portugal and Spain. This represents just 0.3% of total balance sheet assets at 31 December 2010. A further £1.9 billion of exposures to these governments are held in participating fund assets, although we have limited shareholder risk to these assets. Net of non-controlling interests, our total exposure to these governments is further reduced to £0.7 billion within shareholder assets and £1.5 billion within participating fund assets.

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

Notes to the consolidated financial statements

IFRS consolidated financial statements

Consolidated income statement

For the year ended 31 December 2010

2010 €m		2010 £m	2009 £m
	Income		
42,675	Gross written premiums	**36,274**	34,690
(2,191)	Premiums ceded to reinsurers	**(1,863)**	(2,576)
40,484	Premiums written net of reinsurance	**34,411**	32,114
(89)	Net change in provision for unearned premiums	**(75)**	559
40,395	Net earned premiums	**34,336**	32,673
2,096	Fee and commission income	**1,782**	1,789
25,874	Net investment income	**21,993**	25,155
155	Share of profit/(loss) after tax of joint ventures and associates	**131**	(504)
187	Profit on the disposal and re-measurement of subsidiaries and associates	**159**	153
68,707		**58,401**	59,266
	Expenses		
(34,296)	Claims and benefits paid, net of recoveries from reinsurers	**(29,152)**	(27,549)
(8,444)	Change in insurance liabilities, net of reinsurance	**(7,177)**	(5,682)
(10,284)	Change in investment contract provisions	**(8,741)**	(11,185)
387	Change in unallocated divisible surplus	**329**	(1,547)
(6,902)	Fee and commission expense	**(5,867)**	(4,396)
(4,161)	Other expenses	**(3,537)**	(5,366)
(1,673)	Finance costs	**(1,422)**	(1,519)
(65,373)		**(55,567)**	(57,244)
3,334	**Profit before tax**	**2,834**	2,022
(463)	Tax attributable to policyholders' returns	**(394)**	(217)
2,871	**Profit before tax attributable to shareholders' profits**	**2,440**	1,805
(1,108)	Tax expense	**(942)**	(707)
463	Less: tax attributable to policyholders' returns	**394**	217
(645)	Tax attributable to shareholders' profits	**(548)**	(490)
2,226	**Profit for the year**	**1,892**	1,315
	Attributable to:		
1,721	Equity shareholders of Aviva plc	**1,463**	1,085
505	Non-controlling interests	**429**	230
2,226		**1,892**	1,315
	Earnings per share		
59.3c	Basic (pence per share)	**50.4p**	37.8p
58.3c	Diluted (pence per share)	**49.6p**	37.5p

IFRS

Consolidated statement of comprehensive income
For the year ended 31 December 2010

2010 €m		2010 £m	2009 £m
2,226	**Profit for the year**	**1,892**	1,315
	Other comprehensive income		
	Investments classified as available for sale		
815	Fair value gains	**693**	1,011
(188)	Fair value gains transferred to profit on disposals	**(160)**	(310)
211	Impairment losses on assets previously revalued through other comprehensive income now taken to the income statement	**179**	482
	Owner-occupier properties		
(54)	Fair value losses	**(46)**	(25)
(31)	Share of other comprehensive income of joint ventures and associates	**(26)**	122
1,175	Actuarial gains/(losses) on pension schemes	**999**	(1,140)
(21)	Actuarial losses on pension schemes transferred to unallocated divisible surplus and other movements	**(18)**	24
(92)	Foreign exchange rate movements	**(78)**	(951)
(131)	Aggregate tax effect – shareholder tax	**(112)**	(196)
1,684	**Other comprehensive income, net of tax**	**1,431**	(983)
3,910	**Total comprehensive income for the year**	**3,323**	332
	Attributable to:		
3,471	Equity shareholders of Aviva plc	**2,950**	240
439	Non-controlling interests	**373**	92
3,910		**3,323**	332

Consolidated statement of changes in equity

For the year ended 31 December 2010

	Ordinary share capital £m	Preference share capital £m	Share premium £m	Merger reserve £m	Shares held by employee trusts £m	Currency translation reserve £m	Owner-occupied properties reserve £m	Investment valuation reserve £m	Hedging instruments reserve £m	Equity compensation reserve £m	Retained earnings £m	**Equity attributable to shareholders of Aviva plc £m**	Direct capital instrument £m	Non-controlling interests £m	**Total equity £m**
Balance at 1 January	**692**	**200**	**1,207**	**3,271**	**(68)**	**2,224**	**104**	**163**	**(771)**	**109**	**3,425**	**10,556**	**990**	**3,540**	**15,086**
Profit for the year	—	—	—	—	—	—	—	—	—	—	**1,463**	**1,463**	—	**429**	**1,892**
Other comprehensive income	—	—	—	—	—	**(38)**	**(21)**	**411**	**78**	—	**1,057**	**1,487**	—	**(56)**	**1,431**
Total comprehensive income for the year	—	—	—	—	—	**(38)**	**(21)**	**411**	**78**	—	**2,520**	**2,950**	—	**373**	**3,323**
Dividends and appropriations	—	—	—	—	—	—	—	—	—	—	**(757)**	**(757)**	—	—	**(757)**
Shares issued in lieu of dividends	**13**	—	**(13)**	—	—	—	—	—	—	—	**209**	**209**	—	—	**209**
Capital contributions from non-controlling interests	—	—	—	—	—	—	—	—	—	—	—	—	—	**42**	**42**
Dilution of shareholding in Delta Lloyd	—	—	—	—	—	**(3)**	—	**(1)**	—	—	**(4)**	**(8)**	—	**8**	—
Non-controlling interests' share of dividends declared in the year	—	—	—	—	—	—	—	—	—	—	—	—	—	**(187)**	**(187)**
Non-controlling interests in acquired/(disposed) subsidiaries	—	—	—	—	—	—	—	—	—	—	—	—	—	**3**	**3**
Changes in non-controlling interests in existing subsidiaries	—	—	—	—	—	—	—	—	—	—	—	—	—	**(38)**	**(38)**
Shares acquired by employee trusts	—	—	—	—	**(14)**	—	—	—	—	—	—	**(14)**	—	—	**(14)**
Shares distributed by employee trusts	—	—	—	—	**50**	—	—	—	—	—	**(50)**	—	—	—	—
Reserves credit for equity compensation plans	—	—	—	—	—	—	—	—	—	**41**	—	**41**	—	—	**41**
Shares issued under equity compensation plans	—	—	—	—	—	—	—	—	—	**(51)**	**51**	—	—	—	—
Aggregate tax effect – shareholder tax	—	—	—	—	—	—	—	—	—	—	**17**	**17**	—	—	**17**
Balance at 31 December	**705**	**200**	**1,194**	**3,271**	**(32)**	**2,183**	**83**	**573**	**(693)**	**99**	**5,411**	**12,994**	**990**	**3,741**	**17,725**

Consolidated statement of changes in equity continued

For the year ended 31 December 2009

	Ordinary share capital £m	Preference share capital £m	Share premium £m	Merger reserve £m	Shares held by employee trusts £m	Currency translation reserve £m	Owner-occupied properties reserve £m	Investment valuation reserve £m	Hedging instruments reserve £m	Equity compensation reserve £m	Retained earnings £m	Equity attributable to shareholders of Aviva plc £m	Direct capital instrument £m	Non-controlling interests £m	Total equity £m
At 1 January 2009	664	200	1,234	3,271	(33)	3,685	157	(711)	(1,103)	113	3,902	11,379	990	2,204	14,573
Profit for the year	—	—	—	—	—	—	—	—	—	—	1,085	1,085	—	230	1,315
Other comprehensive income	—	—	—	—	—	(1,110)	(26)	1,030	332	—	(1,071)	(845)	—	(138)	(983)
Total comprehensive income for the year	—	—	—	—	—	(1,110)	(26)	1,030	332	—	14	240	—	92	332
Owner-occupied properties – fair value losses transferred to retained earnings on disposals	—	—	—	—	—	—	(1)	—	—	—	1	—	—	—	—
Dividends and appropriations	—	—	—	—	—	—	—	—	—	—	(853)	(853)	—	—	(853)
Issues of share capital	1	—	—	—	—	—	—	—	—	—	—	1	—	—	1
Shares issued in lieu of dividends	27	—	(27)	—	—	—	—	—	—	—	299	299	—	—	299
Capital contributions from non-controlling interests	—	—	—	—	—	—	—	—	—	—	—	—	—	6	6
Transfers to non-controlling interests following Delta Lloyd IPO	—	—	—	—	—	(351)	(26)	(156)	—	—	3	(530)	—	1,460	930
Minority share of dividends declared in the year	—	—	—	—	—	—	—	—	—	—	—	—	—	(109)	(109)
Non-controlling interests in acquired/(disposed) subsidiaries	—	—	—	—	—	—	—	—	—	—	—	—	—	(2)	(2)
Changes in non-controlling interests in existing subsidiaries	—	—	—	—	—	—	—	—	—	—	—	—	—	(111)	(111)
Shares acquired by employee trusts	—	—	—	—	(53)	—	—	—	—	—	—	(53)	—	—	(53)
Shares distributed by employee trusts	—	—	—	—	18	—	—	—	—	—	(18)	—	—	—	—
Reserves credit for equity compensation plans	—	—	—	—	—	—	—	—	—	56	—	56	—	—	56
Shares issued under equity compensation plans	—	—	—	—	—	—	—	—	—	(60)	60	—	—	—	—
Aggregate tax effect – shareholder tax	—	—	—	—	—	—	—	—	—	—	17	17	—	—	17
Balance at 31 December	692	200	1,207	3,271	(68)	2,224	104	163	(771)	109	3,425	10,556	990	3,540	15,086

Consolidated statement of financial position

As at 31 December 2010

2010 €m		2010 £m	2009 £m
	Assets		
3,943	Goodwill	**3,391**	3,381
3,263	Acquired value of in-force business and intangible assets	**2,806**	2,860
2,319	Interests in, and loans to, joint ventures	**1,994**	1,701
748	Interests in, and loans to, associates	**643**	1,281
872	Property and equipment	**750**	753
15,191	Investment property	**13,064**	12,422
50,086	Loans	**43,074**	41,079
294,521	Financial investments	**253,288**	238,679
8,237	Reinsurance assets	**7,084**	7,572
335	Deferred tax assets	**288**	218
230	Current tax assets	**198**	359
9,645	Receivables	**8,295**	9,632
7,060	Deferred acquisition costs and other assets	**6,072**	5,621
4,292	Prepayments and accrued income	**3,691**	3,604
29,599	Cash and cash equivalents	**25,455**	25,176
16	Assets of operations classified as held for sale	**14**	53
430,357	**Total assets**	**370,107**	354,391
	Equity		
	Capital		
820	Ordinary share capital	**705**	692
233	Preference share capital	**200**	200
1,053		**905**	892
	Capital reserves		
1,388	Share premium	**1,194**	1,207
3,803	Merger reserve	**3,271**	3,271
5,191		**4,465**	4,478
(37)	Shares held by employee trusts	**(32)**	(68)
2,610	Other reserves	**2,245**	1,829
6,292	Retained earnings	**5,411**	3,425
15,109	**Equity attributable to shareholders of Aviva plc**	**12,994**	10,556
1,151	Direct capital instrument	**990**	990
4,350	Non-controlling interests	**3,741**	3,540
20,610	**Total equity**	**17,725**	15,086
	Liabilities		
206,628	Gross insurance liabilities	**177,700**	171,092
136,962	Gross liabilities for investment contracts	**117,787**	110,015
3,986	Unallocated divisible surplus	**3,428**	3,866
10,502	Net asset value attributable to unitholders	**9,032**	9,894
3,422	Provisions	**2,943**	3,980
2,044	Deferred tax liabilities	**1,758**	1,038
365	Current tax liabilities	**314**	192
17,383	Borrowings	**14,949**	15,000
23,595	Payables and other financial liabilities	**20,292**	20,542
4,860	Other liabilities	**4,179**	3,653
—	Liabilities of operations classified as held for sale	**—**	33
409,747	**Total liabilities**	**352,382**	339,305
430,357	**Total equity and liabilities**	**370,107**	354,391

Consolidated statement of cash flows

For the year ended 31 December 2010

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.

	2010 £m	2009 £m
Cash flows from operating activities		
Cash generated from operations	**2,213**	3,286
Tax paid	**(406)**	(601)
Net cash from operating activities	**1,807**	2,685
Cash flows from investing activities		
Acquisitions of subsidiaries, joint ventures and associates, net of cash acquired	**477**	(596)
Disposals of subsidiaries, joint ventures and associates, net of cash transferred	**251**	201
Disposal of non-controlling interest in subsidiary	**15**	—
New loans to joint ventures and associates	**(64)**	(145)
Repayment of loans to joint ventures and associates	**5**	99
Net new loans to joint ventures and associates	**(59)**	(46)
Purchases of property and equipment	**(225)**	(149)
Proceeds on sale of property and equipment	**61**	188
Purchases of intangible assets	**(156)**	(30)
Net cash from investing activities	**364**	(432)
Cash flows from financing activities		
Proceeds from issue of ordinary shares, net of transaction costs	**—**	1
Treasury shares purchased for employee trusts	**(14)**	(53)
New borrowings drawn down, net expenses	**3,647**	4,260
Repayment of borrowings	**(2,887)**	(3,853)
Net drawdown of borrowings	**760**	407
Interest paid on borrowings	**(1,421)**	(1,199)
Preference dividends paid	**(17)**	(17)
Ordinary dividends paid	**(472)**	(476)
Coupon payments on direct capital instruments	**(59)**	(61)
Capital contributions from non-controlling interests	**42**	6
Dividends paid to non-controlling interests of subsidiaries	**(187)**	(109)
Partial disposal of subsidiary	—	930
Net cash from financing activities	**(1,368)**	(571)
Net increase in cash and cash equivalents	**803**	1,682
Cash and cash equivalents at 1 January	**24,251**	23,531
Effect of exchange rate changes on cash and cash equivalents	**(359)**	(962)
Cash and cash equivalents at 31 December	**24,695**	24,251

Notes to the consolidated financial statements

A1 – Basis of preparation

(a) The results for the year ended 31 December 2010 have been prepared using International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB) and endorsed by the European Union (EU). The results in this preliminary announcement have been prepared in accordance with IFRS applicable at 31 December 2010 and have been taken from the group's Annual Report and Accounts which will be available on the company's website on 29 March 2011.

In 2008, the IASB issued revised versions of IFRS 3, *Business Combinations*, and IAS 27, *Consolidated and Separate Financial Statements*. The former introduced a number of changes in accounting for such transactions that impact the amount of goodwill recognised, the reported results in the period an acquisition occurs, and future reported results. The latter now requires a change in the ownership interest of a subsidiary (without loss of control) to be accounted for as an equity transaction, rather than giving rise to goodwill or a gain or loss. Consequential amendments were made to IAS 7, *Statement of Cash Flows*, IAS 12, *Income Taxes*, IAS 21, *The Effects of Changes in Foreign Exchange Rates*, IAS 28, *Investments in Associates*, and IAS 31, *Interests in Joint Ventures*.

During 2008 and 2009, the IASB also issued amendments to IFRS 1, *First Time Adoption of IFRS*, IFRS 2, *Share-Based Payment*, IAS 39, *Financial Instruments: Recognition and Measurement*, and the results of its annual improvements project. IFRIC interpretation 17, *Distributions of Non-cash Assets to Owners*, issued in 2008, has also 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 other than on presentation as described in (c)(ii) below.

The preliminary announcement for the year ended 31 December 2010 does not constitute statutory accounts as defined in section 435 of the Companies Act 2006. The results on an IFRS basis for the full year 2010 and 2009 have been audited by Ernst & Young LLP. The auditor has reported on the 2010 and 2009 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 2009 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.

(c) Presentation changes

(i) Pension scheme net finance costs

In financial years prior to and including 2008, the net finance income on the Group's defined benefit pension schemes, representing the surplus of expected income on scheme assets over the unwind of the discount on their liabilities, was classified as investment income in the consolidated income statement. Since adoption of IFRS in 2004, this figure had always been in a net finance income position but movements in scheme deficits and interest rates resulted in a net finance charge in 2009. For consistency with prior years, this net charge was included within investment income in the Group's 2009 financial statements. In 2010, there is again a net finance charge which we believe should more appropriately be included within finance costs in the consolidated income statement. For consistency and comparability, we have therefore reclassified the 2009 comparative (£183 million) from net investment income to finance costs

(ii) Reclassification within the statement of cash flows

The Group has adopted the revised versions of IFRS 3, *Business Combinations*, and IAS 27, *Consolidated and Separate Financial Statements,* and consequential amendments to several other accounting standards, in its financial reporting for the current accounting period. One such amendment to IAS 7, *Statement of Cash Flows*, requires cash flows arising from changes in ownership interests in a subsidiary, that do not result in a loss of control, to be classified as cash flows from financing activities, in the same way as other transactions with equity holders. The Group's partial disposal of Delta Lloyd through its Initial Public Offering in 2009 gave rise to net cash proceeds of £930 million which, in accordance with the previous version of IAS 7, was disclosed as arising from investing activities in our consolidated statement of cash flows last year. As a result of the amendment to IAS 7 described above, we have reclassified that amount from investing activities to financing activities in the 2009 comparatives to this year's statement. This resulted in a change in net cash from investing activities from £498 million inflow to £432 million outflow, and from financing activities from £1,501 million outflow to £571 million outflow.

A2 – Exchange rates

The Group's principal overseas operations during the year were located within the Eurozone and the United States. The results and cash flows of these operations have been translated into sterling at an average rate for the year of €1 = £0.85 *(2009: €1 = £0.88)* and £1 = US$1.55 *(2009: £1= US$1.57)*. Assets and liabilities have been translated at the year end rate of €1 = £0.86 *(2009: €1 = £0.88)* and £1 = US$1.57 *(2009: £1= US$1.61)*.

Total foreign currency movements during 2010 resulted in a gain recognised in the income statement of £34 million *(2009: £154 million gain)*.

A3 – Subsidiaries

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

(a) Acquisitions

(i) River Road Asset Management

On 24 February 2010, the Group acquired 100% of River Road Asset Management ("River Road"), a US equity manager, to support the expansion of Aviva Investors' third party institutional asset management business. The total consideration was estimated as £83 million (US$128 million), of which £37 million (US$57 million) was paid in cash on completion. The balance comprises undiscounted contingent consideration.

The contingent consideration arrangement requires the Group to pay additional amounts, based on a multiple of the earnings (1.0792 times) during the next five years, up to a maximum of £70 million (US$108 million). The potential undiscounted amount of all future payments that the Group could be required to make under the contingent consideration arrangement is between £26 million (US$41 million) and £53 million (US$82 million). A fair value liability of £24 million, using a discount rate of 17%, has been recognised for potential consideration that is payable in 2014, 2015 and 2016.

The acquisition has given rise to goodwill of £29 million, calculated as follows:

	£m
Purchase cost:	
Cash paid	37
Contingent consideration arrangement (fair value)	24
Total consideration	61

The estimated book and fair values of the assets and liabilities at the acquisition date were:

	Book value £m	Fair value and accounting policy adjustments £m	Fair value £m
Assets			
Intangible assets	**—**	**31**	**31**
Receivables and other assets	**3**	**—**	**3**
Total assets	**3**	**31**	**34**
Liabilities			
Payables and other liabilities	**(2)**	**—**	**(2)**
Total liabilities	**(2)**	**—**	**(2)**
Total identifiable net assets	**1**	**31**	**32**
Goodwill arising on acquisition			**29**

The fair value adjustment for intangible assets relates to customer relationships acquired. Goodwill of £29 million arising from this acquisition consists largely of the expected benefits from new business and new product introductions.

The results of River Road have been included in the consolidated financial statements of the Group with effect from 24 February 2010, and have contributed £10 million revenues and £4 million loss to the consolidated profit before tax. Had it been consolidated from 1 January 2010, River Road would have contributed £12 million revenues and £5 million loss to the consolidated profit before tax.

(ii) RBS Life Investments Limited

During the year, the Group reviewed its relationship with RBS Group plc ("RBSG") which comprised interests in two associates, RBS Life Investments Limited ("RBS Life") and RBSG Collective Investments Limited ("RBS Collective"), and a distribution arrangement for the products of these companies. The parties agreed that, with effect from 31 December 2010, the Group would take ownership of the back book of RBS Life in exchange for RBSG taking 100% ownership of RBS Collective through a share-for-share exchange. Separately, a new distribution agreement would be signed between our UK Life business and RBSG, with the new structure providing more flexibility in our long-term business operations.

On 31 December 2010, the Group acquired 50.01% of the shares of RBS Life from RBSG. Combined with our existing 49.99% interest, the Group now owns all the ordinary shares of that entity, and has full control. It is being consolidated as a subsidiary from that date.

A3 – Subsidiaries continued

As consideration for the acquisition, the Group transferred its 49.99% shareholding in RBS Collective to RBSG, together with cash of £3 million for 2010 performance variance. In addition, the existing distribution agreement ceased. Because of the nature of the transaction, the Group's pre-existing interests in RBS Life and RBS Collective were re-measured to fair value as at the transaction date.

This transaction has given rise to a profit of £128 million, arising from the difference between the values of both interests prior to the exchange and their carrying values, calculated as follows:

	£m
Deemed consideration for existing 49.99% interests (equal to fair value of 100% of RBS Life)	**727**
Carrying value of RBS Collective and RBS Life prior to transaction	**(586)**
Cash consideration	**(3)**
Attributable costs	**(10)**
Total profit on disposal and remeasurement arising from transaction	**128**

The disposal of the Group's interest in RBS Collective and the acquisition of a controlling stake in RBS Life are linked transactions and are therefore taken together in determining the profit arising from the restructuring, as we believe this most appropriately reflects the commercial substance of the arrangement. The fair value of RBS Life was estimated using MCEV principles and with regard to current market conditions.

The estimated book and fair values of the assets and liabilities of RBS Life at the acquisition date were:

	Book value £m	Fair value and accounting policy adjustments £m	Fair value £m
Assets			
Acquired value of in-force business	—-	203	203
Financial investments	2,565	—	2,565
Other investments	161	—	161
Reinsurance assets	304	—	304
Receivables	58	—	58
Prepayments and accrued income	12	—	12
Cash and cash equivalents	767	—	767
Other assets	80	—	80
Total assets	**3,947**	**203**	**4,150**
Liabilities			
Insurance liabilities	(1,349)	—	(1,349)
Liabilities for investment contracts	(1,905)	—	(1,905)
Payables and other financial liabilities	(60)	—	(60)
Other liabilities	(109)	—	(109)
Total liabilities	**(3,423)**	**—**	**(3,423)**
Total net assets	**524**	**203**	**727**

No goodwill arises from this transaction. There is no potential deferred tax on the acquired value of in-force business. As the acquisition occurred on 31 December 2010, no revenue or profit or loss has been recognised in the consolidated income statement since the acquisition date.

If the acquisition had occurred on 1 January 2010, RBS Life would have contributed £188 million revenues and £56 million profit to the consolidated profit before tax.

(iii) Other goodwill arising

Goodwill arising on all acquisitions was £29 million which arises on the River Road acquisition described above.
There has also been a £4 million reduction in goodwill for changes in contingent consideration payable on previous acquisitions.

(iv) Unaudited pro forma combined revenues and profit

Shown below are unaudited pro forma figures for combined revenues and profit as though the acquisition date for all business combinations effected during the year had been 1 January 2010, after giving effect to purchase accounting adjustments and the elimination of intercompany transactions. This pro forma financial information is not necessarily indicative of the combined results that would have been attained had the acquisitions taken place at 1 January 2010, nor is it necessarily indicative of future results.

	Unaudited 2010 £m
Revenues (net earned premiums and fee income)	**36,308**
Profit before tax attributable to shareholders	**2,455**

A3 – Subsidiaries continued

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

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

	2010 £m	2009 £m
United Kingdom		
RBS Life and RBS Collective	**128**	—
Non-core operations	**4**	—
France (including £24 million described below)	**26**	—
Netherlands	**(4)**	31
Australia	**—**	122
Other small operations	**5**	—
Profit on disposal and remeasurement before tax	**159**	153
Tax on profit on disposal and remeasurement	**—**	—
Profit on disposal and remeasurement after tax	**159**	153

UK non-core operations

On 30 June 2010, the Group sold its wholly-owned subsidiaries, RAC France SA and RAC Service Europe SA, to their executive management for a consideration of £17 million. These companies had total assets of £48 million (comprising investments of £25 million, receivables of £20 million and other assets of £3 million) and total liabilities of £36 million (insurance liabilities of £23 million and other liabilities of £13 million), giving net assets of £12 million and a profit on disposal after transaction costs of £4 million. The Group's French subsidiary, Aviva Assurances SA, has acquired 17.5% of the shares in both companies and the profit is stated after eliminating the effect of this purchase.

France associate

On 17 February 2010, the Group sold its 35% holding in Sogessur SA to that company's main shareholder, Société Générale, for a consideration of £35 million, realising a profit on disposal of £24 million.

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

The assets and liabilities of operations classified as held for sale as at 31 December 2010 relate to a joint venture in Taiwan and are as follows:

	2010 £m	2009 £m
Interest in associate	**14**	6
Investments and property and equipment	**—**	26
Receivables and other financial assets	**—**	20
Prepayments and accrued income	**—**	1
Total assets	**14**	53
Gross insurance liabilities and liabilities for investment contracts	**—**	(20)
Other liabilities	**—**	(13)
Total liabilities	**—**	(33)
Net assets	**14**	20

The operations held for sale at 31 December 2009 comprised the UK non-core operations and an associate in Australia, both of which were sold in 2010.

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 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.

Delta Lloyd
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.

North America
Our activities in North America principally comprise our long-term business operations 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. 2009 comparatives also include Australia (prior to its sale on 1 October 2009).

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. Fund management activities of Delta Lloyd are included in the separate operating segment above.

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.

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 year ended 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
Gross written premiums	6,572	4,405	13,507	4,469	6,680	641	—	—	36,274
Premiums ceded to reinsurers	(673)	(333)	(452)	(124)	(221)	(60)	—	—	(1,863)
Internal reinsurance revenue	—	37	(14)	(5)	(16)	(2)	—	—	—
Net written premiums	5,899	4,109	13,041	4,340	6,443	579	—	—	34,411
Net change in provision for unearned premiums	(12)	(16)	(68)	(2)	29	(6)	—	—	(75)
Net earned premiums	5,887	4,093	12,973	4,338	6,472	573	—	—	34,336
Fee and commission income	302	248	512	332	41	6	341	—	1,782
	6,189	4,341	13,485	4,670	6,513	579	341	—	36,118
Net investment income	10,945	424	3,961	3,244	2,223	211	171	814	21,993
Inter-segment revenue	—	—	—	—	—	—	214	—	214
Share of profit/(loss) of joint ventures and associates	128	—	(14)	(10)	—	33	3	(9)	131
Profit/(loss) on the disposal of subsidiaries and associates	128	5	26	(4)	1	—	—	3	159
Segmental income*	**17,390**	**4,770**	**17,458**	**7,900**	**8,737**	**823**	**729**	**808**	**58,615**
Claims and benefits paid, net of recoveries from reinsurers	(8,144)	(2,829)	(9,413)	(4,234)	(4,069)	(463)	—	—	(29,152)
Change in insurance liabilities, net of reinsurance	(2,923)	237	(687)	(569)	(3,020)	(215)	—	—	(7,177)
Change in investment contract provisions	(3,300)	—	(5,034)	(48)	(129)	—	(230)	—	(8,741)
Change in unallocated divisible surplus	(166)	—	478	(33)	—	50	—	—	329
Amortisation of acquired value of in-force business	—	—	(43)	(12)	(115)	(4)	—	—	(174)
Depreciation and other amortisation expense	(71)	(42)	(54)	(37)	(82)	(5)	(10)	—	(301)
Other operating expenses	(1,300)	(1,636)	(2,060)	(1,226)	(834)	(140)	(425)	(1,101)	(8,722)
Impairment losses**	—	(3)	—	(123)	(81)	—	—	—	(207)
Inter-segment expenses	(125)	(2)	(16)	—	(71)	—	—	—	(214)
Finance costs	(193)	(38)	(18)	(723)	(27)	—	(3)	(420)	(1,422)
Segmental expenses	**(16,222)**	**(4,313)**	**(16,847)**	**(7,005)**	**(8,428)**	**(777)**	**(668)**	**(1,521)**	**(55,781)**
Profit/(loss) before tax	1,168	457	611	895	309	46	61	(713)	2,834
Tax attributable to policyholders' returns	(384)	—	(3)	—	—	(7)	—	—	(394)
Profit/(loss) before tax attributable to shareholders	**784**	**457**	**608**	**895**	**309**	**39**	**61**	**(713)**	**2,440**
Adjusted for non-operating items:									
Reclassification of corporate costs and unallocated interest	99	148	7	12	5	—	12	(283)	—
Investment return variances and economic assumption changes on long-term business	87	—	154	(1,010)	(10)	(12)	—	—	(791)
Short-term fluctuation in return on investments backing non-long-term business	—	(31)	47	44	(44)	—	—	227	243
Economic assumption changes on general insurance and health business	—	60	1	—	—	—	—	—	61
Impairment of goodwill	4	—	9	1	—	1	—	9	24
Amortisation and impairment of intangibles	68	7	37	23	75	1	5	—	216
(Profit)/loss on the disposal of subsidiaries and associates	(128)	(5)	(26)	4	(1)	—	—	(3)	(159)
Integration and restructuring costs	41	35	61	18	32	2	30	24	243
Exceptional items	(99)	(157)	—	549	10	—	(11)	(19)	273
Operating profit/(loss) before tax attributable to shareholders	**856**	**514**	**898**	**536**	**376**	**31**	**97**	**(758)**	**2,550**

* 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 £179 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

(ii) Segmental income statement for the year ended 31 December 2009

	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
Gross written premiums	6,086	4,239	12,936	4,482	6,413	534	—	—	34,690
Premiums ceded to reinsurers	(1,311)	(355)	(468)	(134)	(231)	(77)	—	—	(2,576)
Internal reinsurance revenue	—	28	(13)	(7)	(6)	(2)	—	—	—
Net written premiums	4,775	3,912	12,455	4,341	6,176	455	—	—	32,114
Net change in provision for unearned premiums	2	607	(16)	6	(35)	(5)	—	—	559
Net earned premiums	4,777	4,519	12,439	4,347	6,141	450	—	—	32,673
Fee and commission income	261	272	558	226	55	121	296	—	1,789
	5,038	4,791	12,997	4,573	6,196	571	296	—	34,462
Net investment income	8,199	568	10,196	3,245	2,249	586	157	(45)	25,155
Inter-segment revenue	—	—	—	—	—	—	202	—	202
Share of loss of joint ventures and associates	(416)	—	(36)	(41)	—	(11)	—	—	(504)
Profit on the disposal of subsidiaries and associates	—	—	—	31	—	122	—	—	153
Segmental income*	12,821	5,359	23,157	7,808	8,445	1,268	655	(45)	59,468
Claims and benefits paid, net of recoveries from reinsurers	(7,313)	(3,409)	(8,871)	(3,567)	(4,110)	(279)	—	—	(27,549)
Change in insurance liabilities, net of reinsurance	663	531	(2,321)	(1,448)	(2,895)	(212)	—	—	(5,682)
Change in investment contract provisions	(4,008)	—	(6,451)	(239)	(128)	(148)	(211)	—	(11,185)
Change in unallocated divisible surplus	872	—	(2,280)	(68)	—	(71)	—	—	(1,547)
Amortisation of acquired value of in-force business	(46)	—	(47)	(3)	(149)	(4)	—	—	(249)
Depreciation and other amortisation expense	(45)	(72)	(60)	(35)	(77)	(6)	(5)	—	(300)
Other operating expenses	(1,804)	(1,893)	(2,107)	(1,248)	(653)	(246)	(348)	(306)	(8,605)
Impairment losses**	—	(42)	(17)	(445)	(104)	—	—	—	(608)
Inter-segment expenses	(119)	(6)	(15)	—	(60)	(1)	—	(1)	(202)
Finance costs	(254)	(34)	(25)	(745)	(25)	—	—	(436)	(1,519)
Segmental expenses	(12,054)	(4,925)	(22,194)	(7,798)	(8,201)	(967)	(564)	(743)	(57,446)
Profit/(loss) before tax	767	434	963	10	244	301	91	(788)	2,022
Tax attributable to policyholders' returns	(156)	—	(32)	—	—	(29)	—	—	(217)
Profit/(loss) before tax attributable to shareholders	611	434	931	10	244	272	91	(788)	1,805
Adjusted for non-operating items:									
Reclassification of corporate costs and unallocated interest	1	(10)	13	29	10	—	1	(44)	—
Investment return variances and economic assumption changes on long-term business	83	—	(194)	348	(87)	(75)	—	—	75
Short-term fluctuation in return on investments backing non-long-term business	—	(62)	(92)	23	(79)	—	—	115	(95)
Economic assumption changes on general insurance and health business	—	(55)	2	—	(4)	—	—	—	(57)
Impairment of goodwill	35	—	26	1	—	—	—	—	62
Amortisation and impairment of intangibles	3	18	31	19	69	2	2	—	144
Profit on the disposal of subsidiaries and associates	—	—	—	(31)	—	(122)	—	—	(153)
Integration and restructuring costs	89	114	64	—	—	—	21	(2)	286
Exceptional items	(163)	42	16	—	60	—	—	—	(45)
Operating profit/(loss) before tax attributable to shareholders	659	481	797	399	213	77	115	(719)	2,022

* Total reported income, excluding inter-segment revenue, is split United Kingdom £18,256 million, France £12,890 million, Netherlands £7,808 million, USA £6,350 million and Rest of the World £13,962 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 £482 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 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**

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

(iv) Segmental statement of financial position as at 31 December 2009

	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	Restated Total £m
Goodwill	31	1,208	959	319	812	50	2	—	3,381
Acquired value of in-force business and intangible assets	17	249	1,190	71	1,302	19	12	—	2,860
Interests in, and loans to, joint ventures and associates	1,957	—	348	379	2	277	15	4	2,982
Property and equipment	112	127	105	282	111	5	10	1	753
Investment property	7,369	89	1,342	2,183	6	—	698	735	12,422
Loans	18,348	600	992	18,797	2,177	35	5	125	41,079
Financial investments	73,788	2,477	95,086	32,009	27,371	2,169	1,095	4,684	238,679
Deferred acquisition costs	1,313	717	732	198	2,348	8	—	—	5,316
Other assets	14,942	3,847	19,169	4,364	3,030	379	654	534	46,919
Total assets	117,877	9,314	119,923	58,602	37,159	2,942	2,491	6,083	354,391
Insurance liabilities									
Long-term business and outstanding claims provisions	62,043	5,410	38,422	30,818	27,201	2,062	—	—	165,956
Unearned premiums	173	2,240	956	347	1,040	25	—	—	4,781
Other insurance liabilities	—	79	116	63	98	(1)	—	—	355
Liability for investment contracts	39,322	—	62,477	3,335	2,911	—	1,970	—	110,015
Unallocated divisible surplus	1,849	—	1,787	150	—	80	—	—	3,866
Net asset value attributable to unitholders	875	—	5,257	721	—	—	—	3,041	9,894
External borrowings	2,518	10	141	6,830	183	—	—	5,318	15,000
Other liabilities, including inter-segment liabilities	6,668	(585)	4,282	12,529	2,450	140	320	3,634	29,438
Total liabilities	113,448	7,154	113,438	54,793	33,883	2,306	2,290	11,993	339,305
Total equity									15,086
Total equity and liabilities									354,391
Capital expenditure (excluding business combinations)	38	23	40	24	65	3	4	—	197

A4 – Segmental information continued

(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.

(i) 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*	25,805	10,469	—	—	36,274
Premiums ceded to reinsurers	(1,093)	(770)	—	—	(1,863)
Net written premiums	24,712	9,699	—	—	34,411
Net change in provision for unearned premiums	—	(75)	—	—	(75)
Net earned premiums	24,712	9,624	—	—	34,336
Fee and commission income	644	115	561	462	1,782
	25,356	9,739	561	462	36,118
Net investment income	19,673	633	16	1,671	21,993
Inter-segment revenue	—	—	231	—	231
Share of profit/(loss) of joint ventures and associates	172	—	(5)	(36)	131
Profit on the disposal of subsidiaries and associates	130	1	—	28	159
Segmental income	45,331	10,373	803	2,125	58,632
Claims and benefits paid, net of recoveries from reinsurers	(22,366)	(6,786)	—	—	(29,152)
Change in insurance liabilities, net of reinsurance	(7,611)	434	—	—	(7,177)
Change in investment contract provisions	(8,741)	—	—	—	(8,741)
Change in unallocated divisible surplus	329	—	—	—	329
Amortisation of acquired value of in-force business	(174)	—	—	—	(174)
Depreciation and other amortisation expense	(189)	(35)	(13)	(64)	(301)
Other operating expenses	(3,084)	(3,182)	(583)	(1,873)	(8,722)
Impairment losses	(164)	(3)	—	(40)	(207)
Inter-segment expenses	(221)	(8)	—	(2)	(231)
Finance costs	(262)	(64)	(43)	(1,053)	(1,422)
Segmental expenses	(42,483)	(9,644)	(639)	(3,032)	(55,798)
Profit/(loss) before tax	2,848	729	164	(907)	2,834
Tax attributable to policyholder returns	(394)	—	—	—	(394)
Profit/(loss) before tax attributable to shareholders	2,454	729	164	(907)	2,440
Adjusted for non-operating items	(136)	321	37	(112)	110
Operating profit/(loss) before tax attributable to shareholders' profits	2,318	1,050	201	(1,019)	2,550

* 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.

A4 – Segmental information continued

(ii) Segmental income statement – products and services for the year ended 31 December 2009

	Long-term business £m	General insurance and health** £m	Fund management £m	Other £m	Total £m
Gross written premiums*	24,722	9,968	—	—	34,690
Premiums ceded to reinsurers	(1,801)	(775)	—	—	(2,576)
Net written premiums	22,921	9,193	—	—	32,114
Net change in provision for unearned premiums	—	559	—	—	559
Net earned premiums	22,921	9,752	—	—	32,673
Fee and commission income	703	131	548	407	1,789
	23,624	9,883	548	407	34,462
Net investment (expense)/income	23,148	1,310	10	687	25,155
Inter-segment revenue	—	—	189	—	189
Share of loss of joint ventures and associates	(449)	2	(16)	(41)	(504)
Profit on the disposal of subsidiaries and associates	(4)	—	—	157	153
Segmental income	46,319	11,195	731	1,210	59,455
Claims and benefits paid, net of recoveries from reinsurers	(20,442)	(7,107)	—	—	(27,549)
Change in insurance liabilities, net of reinsurance	(6,229)	547	—	—	(5,682)
Change in investment contract provisions	(11,185)	—	—	—	(11,185)
Change in unallocated divisible surplus	(1,547)	—	—	—	(1,547)
Amortisation of acquired value of in-force business	(249)	—	—	—	(249)
Depreciation and other amortisation expense	(147)	(53)	(7)	(93)	(300)
Other operating expenses	(3,192)	(3,465)	(554)	(1,394)	(8,605)
Impairment losses	(429)	(85)	—	(94)	(608)
Inter-segment expenses	(178)	(11)	—	—	(189)
Finance costs	(300)	(62)	(62)	(1,095)	(1,519)
Segmental expenses	(43,898)	(10,236)	(623)	(2,676)	(57,433)
Profit/(loss) before tax	2,421	959	108	(1,466)	2,022
Tax attributable to policyholder returns	(217)	—	—	—	(217)
Profit/(loss) before tax attributable to shareholders	2,204	959	108	(1,466)	1,805
Adjusted for non-operating items	(317)	1	25	508	217
Operating profit/(loss) before tax attributable to shareholders' profits	1,887	960	133	(958)	2,022

* Gross written premiums includes inward reinsurance premiums assumed from other companies amounting to £207 million, of which £51 million relates to property and liability insurance and £156 million relates to long-term business.
** General insurance and health business segment includes gross written premiums of £841 million relating to health business. The remaining business relates to property and liability insurance.

(iii) 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**
Total assets	**324,729**	**21,817**	**1,828**	**21,733**	**370,107**
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**
Total liabilities	**305,673**	**16,086**	**1,500**	**29,123**	**352,382**
Total equity					**17,725**
Total equity and liabilities					**370,107**

A4 – Segmental information continued

(iv) Segmental statement of financial position – products and services as at 31 December 2009

	Long-term business £m	General insurance and health £m	Fund management £m	Other £m	Restated Total £m
Goodwill	1,616	462	2	1,301	3,381
Acquired value of in-force business and intangible assets	2,396	382	12	70	2,860
Interests in, and loans to, joint ventures and associates	2,851	5	44	82	2,982
Property and equipment	397	48	12	296	753
Investment property	11,138	191	—	1,093	12,422
Loans	26,915	769	5	13,390	41,079
Financial investments	220,660	11,548	65	6,406	238,679
Deferred acquisition costs	4,069	1,227	20	—	5,316
Other assets	38,469	7,014	523	913	46,919
Total assets	308,511	21,646	683	23,551	354,391
Gross insurance liabilities	153,628	17,464	—	—	171,092
Gross liabilities for investment contracts	110,015	—	—	—	110,015
Unallocated divisible surplus	3,866	—	—	—	3,866
Net asset value attributable to unit holders	6,841	13	—	3,040	9,894
Borrowings	3,780	89	—	11,131	15,000
Other liabilities, including inter-segment liabilities	13,064	(606)	414	16,566	29,438
Total liabilities	291,194	16,960	414	30,737	339,305
Total equity					15,086
Total equity and liabilities					354,391

A5 – Tax

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

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

(i) The total tax charge comprises:

	2010 £m	2009 £m
Current tax		
For this year	**590**	617
Prior year adjustments	**(46)**	(164)
Total current tax	**544**	453
Deferred tax		
Origination and reversal of temporary differences	**505**	231
Changes in tax rates or tax laws	**(40)**	2
Write-(back)/down of deferred tax assets	**(67)**	21
Total deferred tax	**398**	254
Total tax charged to income statement	**942**	707

(ii) The Group, as a proxy for policyholders in the UK, Ireland, Singapore and Australia (prior to its disposal in 2009), is required to record taxes on investment income and gains each year. Accordingly, the tax benefit or expense attributable to UK, Irish, Singapore and Australian life insurance policyholder returns is included in the tax charge. The tax charge attributable to policyholders' returns included in the charge above is £394 million *(2009: £217 million)*.

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

	2010 £m	2009 £m
UK tax	**447**	225
Overseas tax	**495**	482
	942	707

(iv) Unrecognised tax losses and temporary differences of previous years were used to reduce current tax expense and deferred tax expense by £34 million and £88 million respectively *(2009: £59 million and £10 million respectively)*.

A5 – Tax continued

(v) Deferred tax charged to the income statement represents movements on the following items:

	2010 £m	2009 £m
Long-term business technical provisions and other insurance items	**235**	(876)
Deferred acquisition costs	**199**	261
Unrealised gains on investments	**97**	963
Pensions and other post-retirement obligations	**50**	(72)
Unused losses and tax credits	**117**	(182)
Subsidiaries, associates and joint ventures	**2**	12
Intangibles and additional value of in-force long-term business	**(114)**	(21)
Provisions and other temporary differences	**(188)**	169
Total deferred tax charged to income statement	**398**	254

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

(i) The total tax charge comprises:

	2010 £m	2009 £m
Current tax		
In respect of pensions and other post-retirement obligations	**(29)**	—
In respect of foreign exchange movements	**(5)**	—
	(34)	—
Deferred tax		
In respect of pensions and other post-retirement obligations	**(23)**	(45)
In respect of fair value losses on owner-occupied properties	**(10)**	—
In respect of unrealised gains on investments	**179**	241
	146	196
Total tax charged to other comprehensive income	**112**	196

(ii) The tax charge attributable to policyholders' returns included above is £nil *(2009: £nil)*.

(c) Tax credited to equity

Tax credited directly to equity in the year amounted to £17 million *(2009: £17 million)*, and is wholly in respect of coupon payments on direct capital instruments.

(d) Tax reconciliation

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

	2010 £m	2009 £m
Profit before tax	**2,834**	2,022
Tax calculated at standard UK corporation tax rate of 28% *(2009: 28%)*	**794**	566
Different basis of tax – policyholders	**272**	82
Adjustment to tax charge in respect of prior years	**(28)**	(113)
Non-assessable income	**(93)**	(105)
Non-taxable profit on sale of subsidiaries and associates	**(44)**	(44)
Disallowable expenses	**142**	279
Different local basis of tax on overseas profits	**95**	50
Reduction in future local statutory tax rates	**(26)**	—
Movement in deferred tax not recognised	**(156)**	(15)
Other	**(14)**	7
Total tax charged to income statement	**942**	707

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 Finance (No. 2) Act 2010 enacted the first of the 1% rate reductions with effect from April 2011, the effect of which is shown in the table above. Subsequent reductions will be dealt with by future legislation. The benefit to the Group's net assets from the further 3% reduction in the rate is estimated as approximately £90 million in total and will be recognised as the legislation is substantively enacted.

A6 – Earnings per share

This note shows how we calculate earnings per share, based both on the present shares in issue (the basic earnings per share) and the potential future shares in issue, including conversion of share options granted to employees (the diluted earnings per share). We have also shown the same calculations based on our operating profit as we believe this gives a better indication of operating performance.

(a) Basic earnings per share

(i) The profit attributable to ordinary shareholders is:

			2010
	Operating profit £m	Adjusting items £m	Total £m
Profit before tax attributable to shareholders' profits	**2,550**	**(110)**	**2,440**
Tax attributable to shareholders' profits	**(625)**	**77**	**(548)**
Profit for the year	**1,925**	**(33)**	**1,892**
Amount attributable to non-controlling interests	**(332)**	**(97)**	**(429)**
Cumulative preference dividends for the year	**(17)**	**—**	**(17)**
Coupon payments in respect of direct capital instruments (DCI) (net of tax)	**(42)**	**—**	**(42)**
Profit attributable to ordinary shareholders	**1,534**	**(130)**	**1,404**

			2009
	Operating profit £m	Adjusting items £m	Total £m
Profit before tax attributable to shareholders' profits	2,022	(217)	1,805
Tax attributable to shareholders' profits	(547)	57	(490)
Profit for the year	1,475	(160)	1,315
Amount attributable to non-controlling interests	(193)	(37)	(230)
Cumulative preference dividends for the year	(17)	—	(17)
Coupon payments in respect of direct capital instruments (DCI) (net of tax)	(44)	—	(44)
Profit attributable to ordinary shareholders	1,221	(197)	1,024

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

			2010
	Before tax £m	Net of tax, non-controlling interests, preference dividends and DCI £m	Per share p
Operating profit attributable to ordinary shareholders	**2,550**	**1,534**	**55.1**
Non-operating items:			
Investment return variances and economic assumption changes on long-term business	**791**	**243**	**8.7**
Short-term fluctuation in return on investments backing non-long-term business	**(243)**	**(167)**	**(6.0)**
Economic assumption changes on general insurance and health business	**(61)**	**(44)**	**(1.6)**
Impairment of goodwill	**(24)**	**(24)**	**(0.9)**
Amortisation and net impairment of intangibles	**(216)**	**(128)**	**(4.6)**
Profit on the disposal of subsidiaries and associates	**159**	**161**	**5.8**
Integration and restructuring costs and exceptional items	**(516)**	**(171)**	**(6.1)**
Profit attributable to ordinary shareholders	**2,440**	**1,404**	**50.4**

A6 – Earnings per share continued

			2009
	Before tax £m	Net of tax, non-controlling interests, preference dividends and DCI £m	Per share p
Operating profit attributable to ordinary shareholders	2,022	1,221	45.1
Non-operating items:			
Investment return variances and economic assumption changes on long-term business	(75)	(120)	(4.4)
Short-term fluctuation in return on investments backing non-long-term business	95	158	5.8
Economic assumption changes on general insurance and health business	57	41	1.5
Impairment of goodwill and other amounts expensed	(62)	(62)	(2.3)
Amortisation and net impairment of intangibles	(144)	(38)	(1.4)
Profit on the disposal of subsidiaries and associates	153	153	5.7
Integration and restructuring costs and exceptional items	(241)	(329)	(12.2)
Profit attributable to ordinary shareholders	1,805	1,024	37.8

(iii) The calculation of basic earnings per share uses a weighted average of 2,784 million *(2009: 2,705 million)* ordinary shares in issue, after deducting shares owned by the employee share trusts. The actual number of shares in issue at 31 December 2010 was 2,820 million *(2009: 2,767 million)* and 2,812 million *(2009:* 2,749 *million)* excluding shares owned by the employee share trusts .

(b) Diluted earnings per share

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

			2010
	Total £m	**Weighted average number of shares m**	**Per share p**
Profit attributable to ordinary shareholders	**1,404**	**2,784**	**50.4**
Dilutive effect of share awards and options	**—**	**47**	**(0.8)**
Diluted earnings per share	**1,404**	**2,831**	**49.6**

			2009
	Total £m	Weighted average number of shares m	Per share p
Profit attributable to ordinary shareholders	1,024	2,705	37.8
Dilutive effect of share awards and options	—	25	(0.3)
Diluted earnings per share	1,024	2,730	37.5

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

			2010
	Total £m	**Weighted average number of shares m**	**Per share p**
Operating profit attributable to ordinary shareholders	**1,534**	**2,784**	**55.1**
Dilutive effect of share awards and options	**—**	**47**	**(0.9)**
Diluted earnings per share	**1,534**	**2,831**	**54.2**

			2009
	Total £m	Weighted average number of shares m	Per share p
Operating profit attributable to ordinary shareholders	1,221	2,705	45.1
Dilutive effect of share awards and options	—	25	(0.3)
Diluted earnings per share	1,221	2,730	44.8

A7 – Dividends and appropriations

This note analyses the total dividends and other appropriations we have paid during the year. The table below does not include the final dividend proposed after the year end because it is not accrued in these financial statements.

	2010 £m	2009 £m
Ordinary dividends declared and charged to equity in the year		
Final 2009 – 15.00 pence per share, paid on 17 May 2010	**415**	—
Final 2008 – 19.91 pence per share, paid on 15 May 2009	**—**	527
Interim 2010 – 9.50 pence per share, paid on 17 November 2010	**266**	—
Interim 2009 – 9.00 pence per share, paid on 17 November 2009	**—**	248
	681	775
Preference dividends declared and charged to equity in the year	**17**	17
Coupon payments on direct capital instruments	**59**	61
	757	853

Subsequent to 31 December 2010, the directors proposed a final dividend for 2010 of 16.0 pence per ordinary share *(2009: 15.0 pence)*, amounting to £451 million *(2009: £415 million)* in total. Subject to approval by shareholders at the AGM, the dividend will be paid on 17 May 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 28.0% *(2009: 28.0%)*.

A8 – Insurance liabilities

This note analyses our insurance contract liabilities by type of product and describes how we calculate these liabilities and what assumptions we have used.

(a) Carrying amount

Insurance liabilities at 31 December comprise:

			2010			2009
	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	**64,043**	**—**	**64,043**	64,702	—	64,702
Unit-linked non-participating	**21,450**	**—**	**21,450**	21,268	—	21,268
Other non-participating	**75,453**	**—**	**75,453**	68,088	—	68,088
	160,946	**—**	**160,946**	154,058	—	154,058
Outstanding claims provisions	**1,078**	**9,528**	**10,606**	921	9,977	10,898
Provision for claims incurred but not reported	**—**	**2,735**	**2,735**	—	2,719	2,719
	1,078	**12,263**	**13,341**	921	12,696	13,617
Provision for unearned premiums	**—**	**4,855**	**4,855**	—	4,781	4,781
Provision arising from liability adequacy tests	**—**	**2**	**2**	—	7	7
Other technical provisions	**—**	**1**	**1**	—	—	—
Total	**162,024**	**17,121**	**179,145**	154,979	17,484	172,463
Less: Obligations to staff pension schemes transferred to provisions	**(1,445)**	**—**	**(1,445)**	(1,351)	—	(1,351)
Amounts classified as held for sale	**—**	**—**	**—**	—	(20)	(20)
	160,579	**17,121**	**177,700**	153,628	17,464	171,092

During 2010, the Group conducted a review of its classification of linked liabilities, following refinement of our policy which now defines unit-linked liabilities as those where all risks attached to the assets held to back those liabilities are borne by the policyholders. The review resulted in a reclassification of £1,890 million of insurance liabilities previously included as unit-linked non-participating liabilities as at 31 December 2009 to other non-participating liabilities. As a result of this reclassification, assets held to cover linked liabilities have also decreased by £1,890 million.

A8 – Insurance liabilities continued

(b) Long-term business liabilities

(i) Business description

The Group underwrites long-term business in a number of countries as follows:

- In the UK mainly in:
  - New With-Profits sub-fund (NWPSF) of Aviva Life & Pensions UK (UKLAP), where the with-profit policyholders are entitled to at least 90% of the distributed profits, the shareholders receiving the balance. Any surplus or deficit emerging in NWPSF that is not distributed as bonus will be transferred from this sub-fund to the Reattributed Inherited Estate External Support Account (RIEESA).
  - Old With-Profits sub-fund (OWPSF), With-Profits sub-fund (WPSF) and Provident Mutual sub-fund (PMSF) of UKLAP, where the with-profit policyholders are entitled to at least 90% of the distributed profits, the shareholders receiving the balance.
  - "Non-profit" funds of Aviva Annuity UK and UKLAP, where shareholders are entitled to 100% of the distributed profits. Shareholder profits on unitised with-profit business written by WPSF and on stakeholder unitised with-profit business are derived from management fees and policy charges, and emerge in the non-profit funds.
  - The RIEESA of UKLAP, which is a non-profit fund where shareholders are entitled to 100% of the distributed profits, but these cannot be distributed until the "lock-in" criteria set by the Reattribution Scheme have been met. RIEESA will be used to write non-profit business and also to provide capital support to NWPSF.
- In France, where the majority of policyholders' benefits are determined by investment performance, subject to certain guarantees, and shareholders' profits are derived largely from management fees. In addition, a substantial number of policies participate in investment returns, with the balance being attributable to shareholders.
- In the Netherlands, the balance of profits, after providing appropriate returns for policyholders and after tax, accrues for the benefit of the shareholders. The bases for determining returns for policyholders are complex, but are consistent with methods and criteria followed generally in the Netherlands. In addition, a substantial number of policies provide benefits that are determined by investment performance, subject to certain guarantees, and shareholders' profits are derived largely from management fees.
- In the United States, there are two main types of business – protection products and accumulation products. Protection products include interest-sensitive whole life, term life, universal life and indexed life insurance policies. The accumulation product segment includes traditional fixed and indexed deferred annuities for individuals and funding agreements for business customers. In addition, there are two closed blocks of participating contracts arising from demutualisations of subsidiary companies. All products are classified as insurance contracts except for the funding agreements and term certain immediate annuities, which are classified as non-participating investment contracts.
- In other overseas operations.

(ii) Group practice

The long-term business provision is calculated separately for each of the Group's life operations. The provisions for overseas subsidiaries have generally been included on the basis of local regulatory requirements, modified where necessary to reflect the requirements of the Companies Act.

Material judgement is required in calculating the provisions and is exercised particularly through the choice of assumptions where discretion is permitted. In turn, the assumptions used depend on the circumstances prevailing in each of the life operations. Provisions are most sensitive to assumptions regarding discount rates and mortality/morbidity rates.

Bonuses paid during the year are reflected in claims paid, whereas those allocated as part of the bonus declaration are included in the movements in the long-term business provision.

(iii) Methodology and assumptions

There are two main methods of actuarial valuation of liabilities arising under long-term insurance contracts – the net premium method and the gross premium method – both of which involve the discounting of projected premiums and claims.

Under the net premium method, the premium taken into account in calculating the provision is determined actuarially, based on the valuation assumptions regarding discount rates, mortality and disability. The difference between this premium and the actual premium payable provides a margin for expenses. This method does not allow for voluntary early termination of the contract by the policyholder, and so no assumption is required for persistency. Explicit provision is made for vested bonuses (including those vesting following the most recent fund valuation), but no such provision is made for future regular or terminal bonuses. However, this method makes implicit allowance for future regular or terminal bonuses already earned, by margins in the valuation discount rate used.

The gross premium method uses the amount of contractual premiums payable and includes explicit assumptions for interest and discount rates, mortality and morbidity, persistency and future expenses. These assumptions can vary by contract type and reflect current and expected future experience. Explicit provision is made for vested bonuses and explicit allowance is also made for future regular bonuses, but not terminal bonuses.

A8 – Insurance liabilities continued

(a) UK

With-profit business

The valuation of with-profit business uses the methodology developed for the Realistic Balance Sheet, adjusted to remove the shareholders' share of future bonuses. The key elements of the Realistic Balance Sheet methodology are the with-profit benefit reserve (WPBR) and the present value of the expected cost of any payments in excess of the WPBR (referred to as the cost of future policy-related liabilities). The realistic liability for any contract is equal to the sum of the WPBR and the cost of future policy-related liabilities. The WPBR for an individual contract is generally calculated on a retrospective basis, and represents the accumulation of the premiums paid on the contract, allowing for investment return, taxation, expenses and any other charges levied on the contract.

For a small proportion of business, a prospective valuation approach is used, including allowance for anticipated future regular and final bonuses.

The items included in the cost of future policy-related liabilities include:

- Maturity Guarantees
- Guaranteed Annuity Options
- GMP underpin on Section 32 transfers
- Expected payments under Mortgage Endowment Promise

In the Provident Mutual and With-Profits sub-funds in UKLAP, this is offset by the expected cost of charges to WPBR to be made in respect of guarantees.

The cost of future policy-related liabilities is determined using a market-consistent approach and, in the main, this is based on a stochastic model calibrated to market conditions at the end of the reporting period. Non-market-related assumptions (for example, persistency, mortality and expenses) are based on experience, adjusted to take into account future trends.

The principal assumptions underlying the cost of future policy related liabilities are as follows:

Future investment return

A "risk-free" rate equal to the spot yield on UK Government securities, plus a margin of 0.1% is used. The rates vary, according to the outstanding term of the policy, with a typical rate as at 31 December 2010 being 3.78% *(2009: 4.35%)* for a policy with 10 years outstanding.

Volatility of investment return

Volatility assumptions are set with reference to implied volatility data on traded market instruments, where available or on a best estimate basis where not. These are term-dependent, with specimen values for 10 year terms as follows:

	Volatility	
	2010	2009
Equity returns	**26.1%**	26.6%
Property returns	**15.0%**	15.0%
Fixed interest yields	**13.2%**	14.4%

The table above shows the volatility of fixed interest yields, set with reference to 20 year at-the-money swaption volatilities.

A8 – Insurance liabilities continued

Future regular bonuses

Annual bonus assumptions for 2011 have been set consistently with the year end 2010 declaration. Future annual bonus rates reflect the principles and practices of the fund. In particular, the level is set with regard to the projected margin for final bonus and the change from one year to the next is limited to a level consistent with past practice.

Mortality

Mortality assumptions are set with regard to recent company experience and general industry trends. The mortality tables used in the valuation are summarised below:

	Mortality table used	
	2010	2009
Assurances, pure endowments and deferred annuities before vesting	**Nil or Axx00 adjusted**	Nil or Axx00 adjusted
Pensions business after vesting and pensions annuities in payment	**PCMA00/PCFA00 adjusted plus allowance for future mortality improvement**	PCMA00/PCFA00 adjusted plus allowance for future mortality improvement

Non-profit business

Conventional non-profit contracts, including those written in the with-profit funds, are valued using gross premium methods which discount projected future cash flows. The cash flows are calculated using the amount of contractual premiums payable, together with explicit assumptions for investment returns, inflation, discount rates, mortality, morbidity, persistency and future expenses. These assumptions vary by contract type and reflect current and expected future experience.

For unit-linked and some unitised with-profit business, the provisions are valued by adding a prospective non-unit reserve to the bid value of units. The prospective non-unit reserve is calculated by projecting the future non-unit cash flows on the assumption that future premiums cease, unless it is more onerous to assume that they continue. Where appropriate, allowance for persistency is based on actual experience.

Valuation discount rate assumptions are set with regard to yields on the supporting assets and the general level of long-term interest rates as measured by gilt yields. An explicit allowance for risk is included by restricting the yields for equities and properties with reference to a margin over long-term interest rates or by making an explicit deduction from the yields on corporate bonds, mortgages and deposits, based on historical default experience of each asset class. A further margin for risk is then deducted for all asset classes.

The provisions held in respect of guaranteed annuity options are a prudent assessment of the additional liability incurred under the option on a basis and method consistent with that used to value basic policy liabilities, and includes a prudent assessment of the proportion of policyholders who will choose to exercise the option.

Valuation discount rates for business in the non-profit funds are as follows:

	Valuation discount rates	
	2010	2009
Assurances		
Life conventional non-profit	**2.8% to 3.5%**	3.0% to 3.8%
Pensions conventional non-profit	**3.5% to 3.7%**	3.8% to 4.0%
Deferred annuities		
Non-profit – in deferment	**3.9%**	4.2%
Non-profit – in payment	**3.5% to 3.7%**	3.8% to 4.0%
Annuities in payment		
Conventional annuity	**3.9% to 5.4%**	4.2% to 5.7%
Non-unit reserves		
Life	**3.1%**	3.3%
Pensions	**3.8%**	4.1%

A8 – Insurance liabilities continued

Mortality assumptions are set with regard to recent company experience and general industry trends. The mortality tables used in the valuation are summarised below:

	Mortality tables used	
	2010	2009
Assurances		
Non-profit	**AM00/AF00 or TM00/TF00 adjusted for smoker status and age/sex specific factors**	AM00/AF00 or TM00/TF00 adjusted for smoker status and age/sex specific factors
Pure endowments and deferred annuities before vesting	**AM00/AF00 adjusted**	AM00/AF00 adjusted
Pensions business after vesting	**PCMA00/PCFA00 adjusted plus allowance for future mortality improvement**	PCMA00/PCFA00 adjusted plus allowance for future mortality improvement
Annuities in payment		
General annuity business	**IML00/IFL00 adjusted plus allowance for future mortality improvement**	IML00/IFL00 adjusted plus allowance for future mortality improvement

(b) France

The majority of reserves arise from a single premium savings product and is based on the accumulated fund value, adjusted to maintain consistency with the value of the assets backing the policyholder liabilities. The net premium method is used for prospective valuations, in accordance with local regulation, where the valuation assumptions depend on the date of issue of the contract. The valuation discount rate also depends on the original duration of the contract and mortality rates are based on industry tables.

	Valuation discount rates	Mortality tables used
	2010 and 2009	2010 and 2009
Life assurances	0% to 4.5%	TD73-77, TD88-90, TH00-02, TGF05/TGH05; H_AVDBS, F_AVDBS, H_SSDBS and F_SSDBS (in 2010)
Annuities	0% to 4.5%	TPRV (prospective table)

(c) Netherlands

On transition to IFRS, the valuation of most long-term insurance and participating investment contracts was changed from existing methods that used historic assumptions to an active basis using current market interest rates. A liability adequacy test is performed in line with IFRS requirements. Where liabilities are based on current market interest rates and assets are valued at market value, the margin in the liability adequacy test is determined by comparison of the liabilities with the present value of best estimate cash flows. The yield curve is constructed from yields on collateralised AAA bonds. Annuitant mortality assumptions were revised in 2010.

	Valuation discount rates	Mortality tables used
	2010 and 2009	2010 and 2009
Life assurances	Market risk-free yield curves, based on iBoxx index for collateralised AAA bonds	GBM 61-65, GBM/V 76-80, GBM 80-85, GBM/V 85-90 and GBM/V 90-95
Annuities in deferment and in payment	Market risk-free yield curves, based on iBoxx index for collateralised AAA bonds	GBM/V 76-80, GBM/V 85-90, GBM/V 95-00, Coll 1993/2003 and DIL 98, plus further allowance for future mortality improvement; CBS2010 (in 2010)

(d) United States

For the major part of our US business, insurance liabilities are measured in accordance with US GAAP as at the date of acquisition.

The liability for future policy benefits for traditional life insurance is computed using the net level method, based on guaranteed interest and mortality rates as used in calculating cash surrender values. Reserve interest assumptions ranged from 2.00% to 7.50% in 2010 *(2009: 2.00% to 7.50%)*. The weighted average interest rate for all traditional life policy reserves in 2010 was 4.50% *(2009: 4.47%)*.

A8 – Insurance liabilities continued

Future policy benefit reserves for universal life insurance, deferred annuity products and funding agreements are computed under a retrospective deposit method and represent policy account balances before applicable surrender charges. For the indexed products, the liability held is calculated based on the option budget method and is equal to the host contract and the calculated value of the derivative. The value of the derivative is based on the present value of the difference between the projected fund value and the underlying fund guarantee. The range of interest crediting rates for deferred annuity products, the largest component of the US business, excluding sales inducement payouts, was 1.00% to 5.20% in 2010 *(2009: 2.00% to 6.00%)*. An additional liability is established for universal life contracts with death or other insurance benefit features, which is determined using an equally-weighted range of scenarios with respect to investment returns, policyholder lapses, benefit election rates, premium payout patterns and mortality. The additional liability represents the present value of future expected benefits based on current product assumptions.

The indexed life and annuity products guarantee the return of principal to the customer, and credit interest based on certain indices. A portion of the premium from each customer is invested in fixed income securities and is intended to cover the minimum guaranteed value. A further portion of the premium is used to purchase derivatives to hedge the growth in interest credited to the customer as a direct result of increases in the related indices. Both the derivatives and the options embedded in the policy are valued at their fair value.

Deferred income reserves are established for fees charged for insurance benefit features which are assessed in a manner that is expected to result in higher profits in earlier years, followed by lower profits or losses in subsequent years. The excess charges are deferred and amortised using the same assumptions and factors used to amortise deferred acquisition costs. Shadow adjustments may be made to deferred acquisition costs, acquired value of in-force business, deferred income reserves and contract liabilities. The shadow adjustments are recognised directly in other comprehensive income so that unrealised gains or losses on investments that are recognised directly in other comprehensive income affect the measurement of the liability, or related assets, in the same way as realised gains or losses.

(e) Other countries

In all other countries, local generally accepted interest rates and published standard mortality tables are used for different categories of business as appropriate. The tables are based on relevant experience and show mortality rates, by age, for specific groupings of people.

(iv) Movements

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

	2010 £m	2009 £m
Carrying amount at 1 January	**154,058**	156,188
Provisions in respect of new business	**12,502**	11,105
Expected change in existing business provisions	**(9,259)**	(7,625)
Variance between actual and expected experience	**1,858**	2,154
Impact of other operating assumption changes	**(520)**	(121)
Impact of economic assumption changes	**1,959**	(404)
Exceptional strengthening of longevity assumptions	**483**	—
Other movements	**(197)**	1,112
Change in liability recognised as an expense	**6,826**	6,221
Effect of portfolio transfers, acquisitions and disposals	**1,117**	(67)
Foreign exchange rate movements	**(1,055)**	(8,284)
Carrying amount at 31 December	**160,946**	154,058

The variance between actual and expected experience of £1.9 billion in 2010 was primarily driven by favourable movements in investment markets, which had a direct or indirect impact on liability values. Equity markets increased, government bond yields fell in major markets and credit spreads on corporate bonds were broadly unchanged. For many types of long-term business, including unit-linked and participating funds, movements in asset values are offset by corresponding changes in liabilities, limiting the net impact on profit. Minor variances arise from differences between actual and expected experience for persistency, mortality and other demographic factors.

The impact of assumption changes in the above analysis shows the resulting movement in the carrying value of insurance liabilities. A strengthening of longevity assumptions was made in the Netherlands, following the publication of new mortality tables, which is separately identified as an exceptional item. The reduction in liabilities from other operating assumption changes mainly relates to assurance mortality assumptions in the UK and Ireland, with a corresponding reduction made to reassurance assets. The £2.0 billion impact of economic assumption changes reflects reductions in valuation interest rates. For participating business, a movement in liabilities is generally offset by a corresponding adjustment to the unallocated divisible surplus and does not impact on profit.

(c) General insurance and health liabilities

(i) Provisions for outstanding claims

Delays occur in the notification and settlement of claims and a substantial measure of experience and judgement is involved in assessing outstanding liabilities, the ultimate cost of which cannot be known with certainty at the statement of financial position date. The reserves for general insurance and health business are based on information currently available. However, it is inherent in the nature of the business written that the ultimate liabilities may vary as a result of subsequent developments.

A8 – Insurance liabilities continued

Provisions for outstanding claims are established to cover the outstanding expected ultimate liability for losses and loss adjustment expenses (LAE) in respect of all claims that have already occurred. The provisions established cover reported claims and associated LAE, as well as claims incurred but not yet reported and associated LAE.

We only establish loss reserves for losses that have already occurred. We therefore do not establish catastrophe equalisation reserves that defer a share of income in respect of certain lines of business from years in which a catastrophe does not occur to future periods in which catastrophes may occur. When calculating reserves, we take into account estimated future recoveries from salvage and subrogation, and a separate asset is recorded for expected future recoveries from reinsurers after considering their collectability.

The table below shows the split of total general insurance and health outstanding claim provisions and IBNR provisions, gross of reinsurance, by major line of business.

	As at 31 December 2010			As at 31 December 2009		
	Outstanding claim provisions £m	**IBNR provisions £m**	**Total claim provisions £m**	Outstanding claim provisions £m	IBNR provisions £m	Total claim provisions £m
Motor	**4,419**	**924**	**5,343**	4,411	753	5,164
Property	**1,669**	**188**	**1,857**	1,697	196	1,893
Liability	**2,388**	**1,303**	**3,691**	2,707	1,379	4,086
Creditor	**77**	**24**	**101**	170	17	187
Other	**975**	**296**	**1,271**	992	374	1,366
	9,528	**2,735**	**12,263**	9,977	2,719	12,696

(ii) Discounting

Outstanding claims provisions are based on undiscounted estimates of future claim payments, except for the following classes of business for which discounted provisions are held:

	Rate		Mean term of liabilities	
Class	**2010**	2009	**2010**	2009
Netherlands Permanent health and injury	**3.75%**	3.48%	**7 years**	8 years
Reinsured London Market business	**3.30%**	4.00%	**12 years**	10 years
Latent claims	**0.88% to 4.18%**	0.82% to 4.84%	**7 to 15 years**	8 to 15 years
Structured settlements	**3.20%**	3.30%	**35 years**	35 years

The gross outstanding claims provision before discounting was £13,179 million *(2009: £13,576 million)*. The period of time which will elapse before the liabilities are settled has been estimated by modelling the settlement patterns of the underlying claims.

The discount rate that has been applied to latent claims reserves is based on the relevant swap curve in the relevant currency having regard to the expected settlement dates of the claims. The range of discount rates used depends on the duration of the claims and is given in the table above. The duration of the claims span over 35 years, with the average duration being between 7 and 15 years depending on the geographical region. Any change in discount rates between the start and the end of the accounting period is reflected below operating profit as an economic assumption change.

During 2010, we have continued to experience an increase in the number of bodily injury claims settled by periodic payment orders (PPOs) or structured settlements, especially in the UK, which are reserved for on a discounted basis.

(iii) Assumptions

Outstanding claims provisions are estimated based on known facts at the date of estimation. Case estimates are generally set by skilled claims technicians, applying their experience and knowledge to the circumstances of individual claims. They take into account all available information and correspondence regarding the circumstances of the claim, such as medical reports, investigations and inspections. Claims technicians set case estimates according to documented claims department policies and specialise in setting estimates for certain lines of business or types of claim. Claims above certain limits are referred to senior claims handlers for authorisation.

A8 – Insurance liabilities continued

No adjustments are made to the claims technicians' case estimates included in booked claim provisions, except for rare occasions when the estimated ultimate cost of a large or unusual claim may be adjusted, subject to internal reserve committee approval, to allow for uncertainty regarding, for example, the outcome of a court case. The ultimate cost of outstanding claims is then estimated by using a range of standard actuarial claims projection techniques, such as the Chain Ladder and Bornhuetter-Ferguson methods. The main assumption underlying these techniques is that a company's past claims development experience can be used to project future claims development and hence ultimate claims costs. As such, these methods extrapolate the development of paid and incurred losses, average costs per claim and claim numbers based on the observed development of earlier years and expected loss ratios. Historical claims development is mainly analysed by accident period, although underwriting or notification period is also used where this is considered appropriate.

Claim development is separately analysed for each geographic area, as well as by each line of business. Certain lines of business are also further analysed by claim type or type of coverage. In addition, large claims are usually separately addressed, either by being reserved at the face value of loss adjuster estimates or separately projected in order to reflect their future development.

The assumptions used in most non-life actuarial projection techniques, including future rates of claims inflation or loss ratio assumptions, are implicit in the historical claims development data on which the projections are based. Additional qualitative judgement is used to assess the extent to which past trends may not apply in the future, for example, to reflect one-off occurrences, changes in external or market factors such as public attitudes to claiming, economic conditions, levels of claims inflation, judicial decisions and legislation, as well as internal factors such as portfolio mix, policy conditions and claims handling procedures in order to arrive at a point estimate for the ultimate cost of claims that represents the likely outcome, from a range of possible outcomes, taking account of all the uncertainties involved. The range of possible outcomes does not, however, result in the quantification of a reserve range.

However, the following explicit assumptions are made which could materially impact the level of booked net reserves:

UK mesothelioma claims

The level of uncertainty associated with latent claims is considerable due to the relatively small number of claims and the long-tail nature of the liabilities. UK mesothelioma claims account for a large proportion of the Group's latent claims. The key assumptions underlying the estimation of these claims include claim numbers, the base average cost per claim, future inflation in the average cost of claims, legal fees and the life expectancy of potential sufferers.

The best estimate of the liabilities reflects the latest available market information and studies. Many different scenarios can be derived by flexing these key assumptions and applying different combinations of the different assumptions. An upper and lower scenario can be derived by making reasonably likely changes to these assumptions, resulting in an estimate £195 million greater than the best estimate, or £85 million lower than the best estimate. These scenarios do not, however, constitute an upper or lower bound on these liabilities.

Interest rates used to discount latent claim liabilities

The discount rates used in determining our latent claim liabilities are based on the relevant swap curve in the relevant currency at the reporting date, having regard to the duration of the expected settlement of latent claims. The range of discount rates used is shown in section (ii) above and depends on the duration of the claim and the reporting date. At 31 December 2010, it is estimated that a 1% fall in the discount rates used would increase net claim reserves by approximately £70 million, excluding the offsetting effect on asset values as assets are not hypothecated across classes of business.

Allowance for risk and uncertainty

The uncertainties involved in estimating loss reserves are allowed for in the reserving process and by the estimation of explicit reserve uncertainty distributions. The reserve estimation basis for non-life claims adopted by the Group at 31 December 2010 requires all non-life businesses to calculate booked claim provisions as the best estimate of the cost of future claim payments, plus an explicit allowance for risk and uncertainty. The allowance for risk and uncertainty is calculated by each business unit in accordance with the requirements of the Group non-life reserving policy, taking into account the risks and uncertainties specific to each line of business and type of claim in that territory. The requirements of the Group non-life reserving policy also seek to ensure that the allowance for risk and uncertainty is set consistently across both business units and reporting periods.

Changes to claims development patterns can materially impact the results of actuarial projection techniques. However, allowance for the inherent uncertainty in the assumptions underlying reserving projections is automatically allowed for in the explicit allowance for risk and uncertainty included when setting booked reserves.

Lump sum payments in settlement of bodily injury claims decided by the UK courts are calculated in accordance with the Ogden Tables. The Ogden Tables contain a discount rate that is set by the Lord Chancellor and that is applied when calculating the present value of loss of earnings for claims settlement purposes.

The Ogden discount rate is currently under review by the Lord Chancellor. The outcome of this review is expected to be announced in 2011 but it is still not clear whether or by how much the rate will change. A reduction in the Ogden discount rates will increase lump sum payments to UK bodily injury claimants.

A8 – Insurance liabilities continued

(iv) Movements

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

	2010 £m	2009 £m
Carrying amount at 1 January	**12,696**	14,360
Impact of changes in assumptions	**26**	(106)
Claim losses and expenses incurred in the current year	**6,908**	7,328
Decrease in estimated claim losses and expenses incurred in prior years	**(358)**	(541)
Exceptional strengthening of general insurance latent claims provisions	**10**	60
Incurred claims losses and expenses	**6,586**	6,741
Less:		
Payments made on claims incurred in the current year	**(3,641)**	(3,922)
Payments made on claims incurred in prior years	**(3,803)**	(3,814)
Recoveries on claim payments	**271**	298
Claims payments made in the year, net of recoveries	**(7,173)**	(7,438)
Unwind of discounting	**64**	41
Other movements in the claims provisions	**(18)**	—
Change in claims reserve recognised as an expense	**(541)**	(656)
Effect of portfolio transfers, acquisitions and disposals	**4**	(649)
Foreign exchange rate movements	**102**	(359)
Other movements	**2**	—
Carrying amount at 31 December	**12,263**	12,696

The exceptional strengthening of reserves is in respect of several specific discontinued commercial liability risks written in Canada a significant number of years ago.

(d) Loss development tables

(i) Description of tables

The tables that follow present the development of claim payments and the estimated ultimate cost of claims for the accident years 2001 to 2010. The upper half of the tables shows the cumulative amounts paid during successive years related to each accident year. For example, with respect to the accident year 2002, by the end of 2010 £5,814 million had actually been paid in settlement of claims.

In addition, as reflected in the lower section of the table, the original estimated ultimate cost of claims of £6,250 million was re-estimated to be £6,035 million at 31 December 2010.

The original estimates will be increased or decreased, as more information becomes known about the individual claims and overall claim frequency and severity.

The Group aims to maintain strong reserves in respect of its general insurance and health business in order to protect against adverse future claims experience and development. As claims develop and the ultimate cost of claims become more certain, the absence of adverse claims experience will result in a release of reserves from earlier accident years, as shown in the loss development tables and movements table (c)(iv) above. However, in order to maintain overall reserve adequacy, the Group establishes strong reserves in respect of the current accident year (2010) where the development of claims is less mature and there is much greater uncertainty attaching to the ultimate cost of claims. Releases from prior accident year reserves are also due to an improvement in the estimated cost of claims.

Key elements of the release from prior accident year general insurance and health net provisions during 2009 were:

- £230 million from the UK, including group reinsurance business, mainly due to an improved view of group reinsurance liabilities, and favourable development on personal and commercial motor claims, and commercial property and commercial liability large claims.
- £237 million from Europe mainly due to favourable development of personal motor and commercial property, especially in respect of large claims.
- £79 million from Canada mainly due to favourable experience on motor and personal property.

Key elements of the release from prior accident year general insurance and health net provisions during 2010 were:

- £101 million from the UK, including group reinsurance business, mainly due to an improved view of group reinsurance liabilities, and favourable development on personal property claims, and commercial property and commercial liability large claims.
- £167 million from Europe mainly due to favourable development of personal and commercial property.
- £44 million from Canada mainly due to favourable experience on motor and commercial liability.

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A8 – Insurance liabilities continued

(ii) Gross figures

Before the effect of reinsurance, the loss development table is:

Accident year	All prior years £m	2001 £m	2002 £m	2003 £m	2004 £m	2005 £m	2006 £m	2007 £m	2008 £m	2009 £m	2010 £m	**Total £m**
Gross cumulative claim payments												
At end of accident year		(3,029)	(2,952)	(2,819)	(2,971)	(3,345)	(3,653)	(4,393)	(4,915)	(3,780)	(3,502)	
One year later		(4,766)	(4,486)	(4,190)	(4,561)	(5,011)	(5,525)	(6,676)	(7,350)	(5,464)		
Two years later		(5,303)	(4,921)	(4,613)	(4,981)	(5,449)	(5,971)	(7,191)	(7,828)			
Three years later		(5,701)	(5,233)	(4,972)	(5,263)	(5,784)	(6,272)	(7,513)				
Four years later		(5,966)	(5,466)	(5,258)	(5,448)	(6,001)	(6,531)					
Five years later		(6,121)	(5,618)	(5,409)	(5,617)	(6,156)						
Six years later		(6,223)	(5,715)	(5,527)	(5,725)							
Seven years later		(6,294)	(5,767)	(5,594)								
Eight years later		(6,350)	(5,814)									
Nine years later		(6,389)										
Estimate of gross ultimate claims												
At end of accident year		6,590	6,250	6,385	6,891	7,106	7,533	8,530	9,508	7,364	6,911	
One year later		6,770	6,372	6,172	6,557	6,938	7,318	8,468	9,322	7,297		
Two years later		6,775	6,287	6,124	6,371	6,813	7,243	8,430	9,277			
Three years later		6,798	6,257	6,036	6,178	6,679	7,130	8,438				
Four years later		6,754	6,205	5,932	6,008	6,603	7,149					
Five years later		6,679	6,122	5,853	6,003	6,605						
Six years later		6,630	6,056	5,813	5,953							
Seven years later		6,576	6,044	5,792								
Eight years later		6,600	6,035									
Nine years later		6,577										
Estimate of gross ultimate claims		6,577	6,035	5,792	5,953	6,605	7,149	8,438	9,277	7,297	6,911	
Cumulative payments		(6,389)	(5,814)	(5,594)	(5,725)	(6,156)	(6,531)	(7,513)	(7,828)	(5,464)	(3,502)	
	3,040	188	221	198	228	449	618	925	1,449	1,833	3,409	**12,558**
Effect of discounting	(747)	(6)	(11)	(29)	(7)	(28)	(27)	(9)	(11)	(24)	(17)	**(916)**
Present value	2,293	182	210	169	221	421	591	916	1,438	1,809	3,392	**11,642**
Cumulative effect of foreign exchange movements	—	29	31	47	52	85	122	111	(16)	17	—	**478**
Effect of acquisitions	—	7	8	50	10	18	15	27	8	—	—	**143**
Present value recognised in the statement of financial position	**2,293**	**218**	**249**	**266**	**283**	**524**	**728**	**1,054**	**1,430**	**1,826**	**3,392**	**12,263**

A8 – Insurance liabilities continued

(iii) Net of reinsurance

After the effect of reinsurance, the loss development table is:

Accident year	All prior years £m	2001 £m	2002 £m	2003 £m	2004 £m	2005 £m	2006 £m	2007 £m	2008 £m	2009 £m	2010 £m	**Total £m**
Net cumulative claim payments												
At end of accident year		(2,970)	(2,913)	(2,819)	(2,870)	(3,281)	(3,612)	(4,317)	(4,808)	(3,650)	(3,386)	
One year later		(4,624)	(4,369)	(4,158)	(4,378)	(4,925)	(5,442)	(6,542)	(7,165)	(5,286)		
Two years later		(5,088)	(4,779)	(4,565)	(4,712)	(5,344)	(5,881)	(7,052)	(7,638)			
Three years later		(5,436)	(5,064)	(4,924)	(4,986)	(5,671)	(6,181)	(7,356)				
Four years later		(5,648)	(5,297)	(5,180)	(5,163)	(5,892)	(6,434)					
Five years later		(5,763)	(5,424)	(5,325)	(5,327)	(6,039)						
Six years later		(5,841)	(5,508)	(5,442)	(5,430)							
Seven years later		(5,896)	(5,552)	(5,502)								
Eight years later		(5,954)	(5,598)									
Nine years later		(5,979)										
Estimate of net ultimate claims												
At end of accident year		6,186	6,037	6,218	6,602	6,982	7,430	8,363	9,262	7,115	6,650	
One year later		6,333	6,038	6,093	6,266	6,818	7,197	8,302	9,104	7,067		
Two years later		6,321	5,997	6,037	6,082	6,688	7,104	8,244	9,028			
Three years later		6,329	5,973	5,942	5,882	6,544	6,996	8,249				
Four years later		6,286	5,912	5,851	5,709	6,476	6,980					
Five years later		6,219	5,855	5,772	5,699	6,448						
Six years later		6,173	5,786	5,683	5,639							
Seven years later		6,109	5,754	5,663								
Eight years later		6,130	5,742									
Nine years later		6,090										
Estimate of net ultimate claims		6,090	5,742	5,663	5,639	6,448	6,980	8,249	9,028	7,067	6,650	
Cumulative payments		(5,979)	(5,598)	(5,502)	(5,430)	(6,039)	(6,434)	(7,356)	(7,638)	(5,286)	(3,386)	
	1,750	111	144	161	209	409	546	893	1,390	1,781	3,264	**10,658**
Effect of discounting	(414)	(3)	(5)	(8)	(3)	(3)	(5)	(9)	(11)	(24)	(16)	**(501)**
Present value	1,336	108	139	153	206	406	541	884	1,379	1,757	3,248	**10,157**
Cumulative effect of foreign exchange movements	—	15	27	42	48	80	116	106	(14)	17	—	**437**
Effect of acquisitions	—	6	7	36	8	13	13	20	8	—	—	**111**
Present value recognised in the statement of financial position	**1,336**	**129**	**173**	**231**	**262**	**499**	**670**	**1,010**	**1,373**	**1,774**	**3,248**	**10,705**

In the loss development tables shown above, the cumulative claim payments and estimates of cumulative claims for each accident year are translated into sterling at the exchange rates that applied at the end of that accident year. The impact of using varying exchange rates is shown at the bottom of each table. Disposals are dealt with by treating all outstanding and IBNR claims of the disposed entity as "paid" at the date of disposal.

The loss development tables above include information on asbestos and environmental pollution claims provisions from business written before 2001. The undiscounted claim provisions, net of reinsurance, in respect of this business at 31 December 2010 were £939 million *(2009: £968 million)*. The movement in the year reflects exceptional strengthening of provisions by £10 million (*2009: £60 million)* in respect of several specific discontinued commercial liability risks written in Canada a significant number of years ago, other strengthening of £66 million *(2009: £62 million release)*, claim payments, reinsurance recoveries and foreign exchange rate movements.

(e) Provision for unearned premiums

Movements

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

	2010 £m	2009 £m
Carrying amount at 1 January	**4,781**	5,493
Premiums written during the year	**10,469**	9,968
Less: Premiums earned during the year	**(10,424)**	(10,613)
Change in UPR recognised as income	**45**	(645)
Gross portfolio transfers and acquisitions	**(14)**	—
Foreign exchange rate movements	**43**	(67)
Carrying amount at 31 December	**4,855**	4,781

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A9 – Liability for investment contracts

This note analyses our investment contract liabilities by type of product and describes how we calculate these liabilities and what assumptions we have used.

(a) Carrying amount

The liability for investment contracts at 31 December comprised:

	2010 £m	2009 £m
Long-term business		
Participating contracts	**69,482**	66,559
Non-participating contracts at fair value	**46,124**	41,289
Non-participating contracts at amortised cost	**2,181**	2,167
	48,305	43,456
Total	**117,787**	110,015

(b) Long-term business investment liabilities

Investment contracts are those that do not transfer significant insurance risk from the contract holder to the issuer, and are therefore treated as financial instruments under IFRS.

Many investment contracts contain a discretionary participation feature in which the contract holder has a contractual right to receive additional benefits as a supplement to guaranteed benefits. These are referred to as participating contracts and are measured according to the methodology and Group practice for long-term business liabilities. They are not measured at fair value as there is currently no agreed definition of fair valuation for discretionary participation features under IFRS. In the absence of such a definition, it is not possible to provide a range of estimates within which a fair value is likely to fall. The IASB has deferred consideration of participating contracts to Phase II of its insurance contracts project.

For participating business, the discretionary participation feature is recognised separately from the guaranteed element and is classified as a liability, referred to as unallocated distributable surplus.

Investment contracts that do not contain a discretionary participation feature are referred to as non-participating contracts and the liability is measured at either fair value or amortised cost.

Of the non-participating investment contracts measured at fair value, £44,631 million are unit-linked in structure and the fair value liability is equal to the unit reserve plus additional non-unit reserves if required on a fair value basis. These contracts are classified as 'Level 1' in the fair value hierarchy, as the unit reserve is calculated as the publicly quoted unit price multiplied by the number units in issue, and any non-unit reserve is insignificant.

For unit-linked business, a deferred acquisition cost asset and deferred income reserve liability are recognised in respect of transaction costs and front-end fees respectively, that relate to the provision of investment management services, and which are amortised on a systematic basis over the contract term.

In the United States, funding agreements consist of one to ten year fixed rate contracts. These contracts may not be cancelled by the holders unless there is a default under the agreement, but may, subject to a call premium, be terminated by Aviva at any time. Aviva issued no new funding agreements in 2010. The weighted average interest rates for fixed-rate and floating-rate funding agreements as at 31 December 2010 were 4.758% and 0.434% respectively. Funding agreements issued before 2008 are measured at fair value equal to the present value of contractual cash flows and, for business issued since 2008, are measured at amortised cost. Most funding agreements are fully collateralised and therefore their fair values are not adjusted for own credit risk. Funding agreements carried at fair value total £1.0 billion and are classified as 'Level 2' in the fair value hierarchy.

There is a small volume of annuity certain business for which the liability is measured at amortised cost using the effective interest method.

The fair value of contract liabilities measured at amortised cost is not materially different from the amortised cost liability.

A9 – Liability for investment contracts continued

(c) Movements in the year

The following movements have occurred in the year:

(i) Participating investment contracts

	2010 £m	2009 £m
Carrying amount at 1 January	**66,559**	65,278
Provisions in respect of new business	**6,169**	5,973
Expected change in existing business provisions	**(2,400)**	(1,256)
Variance between actual and expected experience	**845**	2,469
Impact of operating assumption changes	**36**	(49)
Impact of economic assumption changes	**240**	(57)
Other movements	**(65)**	(1,316)
Change in liability recognised as an expense	**4,825**	5,764
Effect of portfolio transfers, acquisitions and disposals	**—**	(246)
Foreign exchange rate movements	**(1,918)**	(4,256)
Other movements	**16**	19
Carrying amount at 31 December	**69,482**	66,559

The variance between actual and expected experience of £0.8 billion was primarily driven by favourable movements in investment markets in 2010, which had a direct or indirect impact on liability values. Equity markets increased, government bond yields fell in major markets and credit spreads on corporate bonds were broadly unchanged. For many types of long-term business, including unit-linked and participating funds, movements in asset values are offset by corresponding changes in liabilities, limiting the net impact on profit. Minor variances arise from differences between actual and expected experience for persistency, mortality and other demographic factors.

The impact of assumption changes in the above analysis shows the resulting movement in the carrying value of participating investment contract liabilities. The £0.8 billion variance between actual and expected experience is not a change in assumptions. For participating business, a movement in liabilities is generally offset by a corresponding adjustment to the unallocated divisible surplus and does not impact on profit. Where assumption changes do impact on profit, together with the impact of movements in related non-financial assets.

(ii) Non-participating investment contracts

	2010 £m	2009 £m
Carrying amount at 1 January	**43,456**	42,281
Provisions in respect of new business	**4,096**	3,045
Expected change in existing business provisions	**(2,145)**	(1,847)
Variance between actual and expected experience	**1,276**	2,495
Impact of operating assumption changes	**20**	107
Impact of economic assumption changes	**3**	4
Other movements	**53**	370
Change in liability	**3,303**	4,174
Effect of portfolio transfers, acquisitions and disposals	**1,903**	(1,596)
Foreign exchange rate movements	**(357)**	(1,403)
Carrying amount at 31 December	**48,305**	43,456

The variance between actual and expected experience of £1.3 billion was primarily driven by favourable movements in investment markets in 2010, which had a direct or indirect impact on liability values. Equity markets increased, government bond yields fell in major markets and credit spreads on corporate bonds were broadly unchanged. For unit-linked investment contracts, movements in asset values are offset by corresponding changes in liabilities, limiting the net impact on profit. Minor variances arise from differences between actual and expected experience for persistency, mortality and other demographic factors.

The impact of assumption changes in the above analysis shows the resulting movement in the carrying value of non-participating investment contract liabilities. The £1.3 billion variance between actual and expected experience is not a change in assumptions.

A10 – Reinsurance assets

This note details the reinsurance recoverables on our insurance and investment contract liabilities.

(a) Carrying amounts

The reinsurance assets at 31 December comprised:

	2010 £m	2009 £m
Long-term business		
Insurance contracts	**3,650**	4,299
Participating investment contracts	**2**	—
Non-participating investment contracts	**1,463**	1,258
Outstanding claims provisions	**104**	40
	5,219	5,597
General insurance and health		
Outstanding claims provisions	**1,113**	1,194
Provisions for claims incurred but not reported	**445**	449
	1,558	1,643
Provision for unearned premiums	**307**	332
	1,865	1,975
Total	**7,084**	7,572

Of the above total, £4,675 million *(2009: £4,493 million)* is expected to be recovered more than one year after the statement of financial position date.

(b) Assumptions

The assumptions, including discount rates, used for reinsurance contracts follow those used for insurance contracts. Reinsurance assets are valued net of an allowance for their recoverability.

(c) Movements

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

(i) In respect of long-term business provisions

	2010 £m	2009 £m
Carrying amount at 1 January	**5,557**	5,565
Asset in respect of new business	**358**	412
Expected change in existing business asset	**(208)**	(57)
Variance between actual and expected experience	**81**	(35)
Impact of other operating assumption changes	**(443)**	(189)
Impact of economic assumption changes	**(25)**	(250)
Other movements	**(318)**	486
Change in asset	**(555)**	367
Effect of portfolio transfers, acquisitions and disposals	**174**	(41)
Foreign exchange rate movements	**(61)**	(334)
Carrying amount at 31 December	**5,115**	5,557

The impact of assumption changes in the above analysis shows the resulting movement in the carrying value of reinsurance assets. The reduction in the reinsurance asset from assumption changes mainly relates to assurance mortality assumptions in the UK and Ireland, with a corresponding reduction made to gross insurance contract liabilities. For participating businesses, a movement in reinsurance assets is generally offset by a corresponding adjustment to the unallocated divisible surplus and does not impact on profit.

A10 – Reinsurance assets continued

(ii) In respect of general insurance and health outstanding claims provisions and IBNR

	2010 £m	2009 £m
Carrying amount at 1 January	**1,643**	1,766
Impact of changes in assumptions	**17**	(72)
Reinsurers' share of claim losses and expenses		
Incurred in current year	**265**	255
Incurred in prior years	**(46)**	7
Reinsurers' share of incurred claim losses and expenses	**219**	262
Less:		
Reinsurance recoveries received on claims		
Incurred in current year	**(125)**	(138)
Incurred in prior years	**(282)**	(202)
Reinsurance recoveries received in the year	**(407)**	(340)
Unwind of discounting	**23**	22
Change in reinsurance asset recognised as income	**(148)**	(128)
Effect of portfolio transfers, acquisitions and disposals	**34**	57
Foreign exchange rate movements	**28**	(50)
Other movements	**1**	(2)
Carrying amount at 31 December	**1,558**	1,643

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

	2010 £m	2009 £m
Carrying amount at 1 January	**332**	418
Premiums ceded to reinsurers in the year	**770**	775
Less: Reinsurers' share of premiums earned during the year	**(800)**	(861)
Change in reinsurance asset recognised as income	**(30)**	(86)
Reinsurers' share of portfolio transfers and acquisitions	**4**	5
Foreign exchange rate movements	**(2)**	(5)
Other movements	**3**	—
Carrying amount at 31 December	**307**	332

A11 – Effect of changes in assumptions and estimates during the year

Certain estimates and assumptions used in determining our liabilities for insurance and investment contract business were changed from 2009 to 2010, affecting the profit recognised for the year with an equivalent effect on liabilities. This note analyses the effect of the changes. 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 2010 £m	Effect on profit 2009 £m
Assumptions		
Long-term insurance business		
Interest rates	**(796)**	(363)
Expenses	**(1)**	69
Persistency rates	**2**	—
Mortality for assurance contracts	**71**	11
Mortality for annuity contracts	**(637)**	6
Tax and other assumptions	**167**	(49)
Investment contracts		
Interest rates	**1**	20
Expenses	**1**	40
Persistency rates	**(21)**	—
Tax and other assumptions	**(3)**	(89)
General insurance and health business		
Change in loss ratio assumptions	**(4)**	(2)
Change in discount rate assumptions	**(61)**	57
Change in expense ratio and other assumptions	**38**	(21)
Total	**(1,243)**	(321)

The impact of interest rates for long-term business relates primarily to the UK driven by the reduction in 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.

The impact of mortality for annuity contracts relates to the exceptional strengthening in the Netherlands, following the publication of new mortality tables, and to smaller changes in the UK. Other assumptions relate mainly to the move to realistic reserving in Ireland, which reduced insurance liabilities, and changes in the UK.

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 year.

The following movements have occurred in the year:

	2010 £m	2009 £m
Carrying amount at 1 January	**3,866**	2,325
Change in participating contract assets	**(444)**	(1,314)
Change in participating contract liabilities	**169**	3,836
Effect of special bonus to with-profit policyholders	**(58)**	(69)
Effect of reattribution of inherited estate	**—**	(881)
Other movements	**4**	(25)
Change in liability recognised as an expense	**(329)**	1,547
Effect of portfolio transfers, acquisitions and disposals	**(3)**	(4)
Movement in respect of change in pension scheme deficit	**18**	(24)
Foreign exchange rate movements	**(61)**	43
Other movements	**(63)**	(21)
Carrying amount at 31 December	**3,428**	3,866

In Italy and Spain, the UDS balances were £435 million negative in total at 31 December 2010 *(2009: Italy £92 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.

A13 – Borrowings

(e) Movements during the year

Movements in borrowings during the year were:

	Core structural £m	Operational £m	Total 2010 £m
New borrowings drawn down, net of expenses	**2,921**	**726**	**3,647**
Repayment of borrowings	**(2,274)**	**(613)**	**(2,887)**
Net cash inflow	**647**	**113**	**760**
Foreign exchange rate movements	**(77)**	**(801)**	**(878)**
Borrowings acquired/(loans repaid) for non-cash consideration	**—**	**(4)**	**(4)**
Fair value movements	**—**	**59**	**59**
Amortisation of discounts and other non-cash items	**1**	**—**	**1**
Other movements	**6**	**5**	**11**
Movements in the year	**577**	**(628)**	**(51)**
Balance at 1 January	**5,489**	**9,511**	**15,000**
Balance at 31 December	**6,066**	**8,883**	**14,949**

Movements in borrowings during the previous year were:

	Core structural £m	Operational £m	Total 2009 £m
New borrowings drawn down, net of expenses	2,739	1,521	4,260
Repayment of borrowings	(2,546)	(1,307)	(3,853)
Net cash inflow	193	214	407
Foreign exchange rate movements	(232)	(566)	(798)
Fair value movements	—	187	187
Amortisation of discounts and other non-cash items	3	—	3
Movements in the year	(36)	(165)	(201)
Balance at 1 January	5,525	9,676	15,201
Balance at 31 December	5,489	9,511	15,000

All movements in fair value in 2009 and 2010 on securitised mortgage loan notes designated as fair value through profit or loss were attributable to changes in market conditions. These loan notes have external credit ratings which have not changed since the inception of the loans.

A14 – Pension obligations

(a) Pension scheme deficits on consolidated statement of financial position

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

	2010 £m	2009 £m
Deficits in the main staff pension schemes	**527**	1,707
Other obligations to main staff pension schemes – insurance policies issued by Group companies	**1,445**	1,351
Total IAS 19 obligations to main staff pension schemes	**1,972**	3,058
Deficits in other staff pension schemes	**129**	125
Total IAS 19 obligations to staff pension schemes	**2,101**	3,183
Restructuring provisions	**152**	198
Other provisions	**690**	599
Total	**2,943**	3,980

(b) Movements in the scheme deficits and surpluses

Movements in the pension schemes' deficits and surpluses comprise:

	2010 £m	2009 £m
	Pension scheme deficits £m	Pension scheme deficits £m
Deficits in the schemes at 1 January	**(1,707)**	(613)
Employer contributions	**579**	294
Employee contributions	**—**	—
Benefits paid	**—**	—
Current and past service cost	**(170)**	(156)
Gains on curtailments and settlements	**347**	49
Credit/(charge) to finance costs	**(130)**	(125)
Actuarial gains/(losses)	**1,079**	(1,158)
Transfers	**3**	—
Exchange rate movements on foreign plans	**(4)**	2
Net deficits in the schemes at 31 December	**(3)**	(1,707)

IFRS

A14 – Pension obligations continued

(c) Pension expense

The total pension expense for these schemes comprises:

(i) Recognised in the income statement

	2010 £m	2009 £m
Current service cost	**(160)**	(131)
Past service cost	**(10)**	(25)
Gains on curtailments	**347**	38
Gains on settlements	**—**	11
Total pension credit/(cost) charged to net operating expenses	**177**	(107)
Expected return on scheme assets	**522**	466
Less: Income on insurance policy assets accounted for elsewhere	**(65)**	(58)
	457	408
Interest charge on scheme liabilities	**(652)**	(591)
Charge to finance costs	**(195)**	(183)
Total charge to income	**(18)**	(290)

(ii) Recognised in the statement of comprehensive income

	2010 £m	2009 £m
Expected return on scheme assets	**(522)**	(466)
Actual return on these assets	**1,145**	1,009
Actuarial gains on scheme assets	**623**	543
Less: (gains)/losses on insurance policy assets accounted for elsewhere	**(80)**	18
Actuarial gains on admissible assets	**543**	561
Experience gains arising on scheme liabilities	**450**	77
Changes in assumptions underlying the present value of the scheme liabilities	**6**	(1,778)
Actuarial gains/(losses) recognised in other comprehensive income	**999**	(1,140)
Attributable to equity shareholders of Aviva plc	**1,033**	(1,140)
Attributable to non-controlling interests	**(34)**	-
	999	(1,140)

The gain arising from changes in assumptions in 2010 reflects the impact of lower discount rates for liabilities across all but the Irish schemes, together with the impact of changes in mortality assumptions in the UK and Dutch schemes, and changes in the revaluation rate for certain benefits in deferment in the UK schemes as a result of recent government legislation.

The cumulative amount of actuarial gains and losses on the pension schemes recognised in other comprehensive income since 1 January 2004 (the date of transition to IFRS) is a loss of £1,231 million at 31 December 2010 *(2009: cumulative loss of £2,230 million).*

A15 – Cash and cash equivalents

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

	2010 £m	2009 £m
Cash at bank and in hand	**9,740**	10,681
Cash equivalents	**15,715**	14,495
	25,455	25,176
Bank overdrafts	**(760)**	(925)
	24,695	24,251

A16 – Related party transactions

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

Services provided to related parties

	2010		2009	
	Income earned in year £m	**Receivable at year end £m**	Income earned in year £m	Receivable at year end £m
Associates	**47**	**—**	49	3
Joint ventures	**18**	**375**	17	327
Employee pension schemes	**10**	**2**	9	2
	75	**377**	75	332

Income from associates predominantly relates to our investments in the Royal Bank of Scotland (RBS) life and collective investment companies. Under management service agreements with these associates, our UK life insurance companies provided administration services, the cost of which was recharged to the RBS companies. In addition, our fund management companies provided fund management services to these associates, for which they charged fees based on the level of funds under management.

Transactions with joint ventures relate to the property management undertakings. At 31 December 2010, there were 16 such joint ventures. Our interest in these joint ventures comprises a mix of equity and loans, together with the provision of administration services and financial management to many of them. Our UK life insurance companies earn interest on loans advanced to these entities to fund property developments, including shopping, business and distribution centres, and properties in Europe, as well as a film studio development in the UK. Our fund management companies also charge fees to these joint ventures for administration services and for arranging external finance.

Our UK fund management companies manage most of the assets held by the Group's main UK staff pension scheme, for which they charge fees based on the level of funds under management. The main UK scheme and the Dutch scheme hold investments in Group-managed funds and insurance policies with other Group companies.

The related parties' receivables are not secured and no guarantees were received in respect thereof. The receivables will be settled in accordance with normal credit terms.

A17 – Risk management

(a) Risk management framework

The risk management framework (RMF) in Aviva is the collection of processes and tools that have been put in place to ensure that the risks to which we are exposed are identified, measured, managed, monitored and reported on a continuous basis. The RMF is designed to facilitate a common approach to, and language regarding, the management of risk across the Group. The key instruments of the RMF include the risk management policies, risk reports, risk models, the governance and oversight infrastructure and the risk appetite framework.

Risks are usually grouped by risk type: market, credit, liquidity, general insurance, life insurance and operational risk. Risk falling within these types may affect a number of key metrics including those relating to balance sheet strength, liquidity and profit. They may also affect the performance of the products that we deliver to our customers and the service to our customers and distributors, which can be categorised as risks to our brand and reputation.

The Group has a set of formal risk policies that facilitate a consistent approach to the management of all our risks across all businesses and locations in which we operate. These risk policies define our appetite for different, granular risk types and set out risk management and control standards for the Group's world-wide operations.

A top-down key risk identification and assessment process is carried out monthly in the risk function at Group level based on group and regional chief risk officer and functional risk director input. This includes the consideration of emerging risks and is supported by deeper thematic reviews. The risk assessment processes are used to generate risk reports which are shared with the relevant risk committees.

Risk models are an important tool in our measurement of risk and are used to support the monitoring and reporting of the risk profile and in the evaluation of alternative risk management actions. We carry out a range of stress (where one risk factor, such as equity returns, is assumed to vary) and scenario (where combinations of risk factors are assumed to vary) tests to evaluate their impact on the business and the management actions available to respond to the conditions envisaged. Monthly assessments are made of the economic capital available within the business and the economic capital required to cover the current risk profile of the business and these assessments are included in the regular reporting to the risk committees.

A17 – Risk management continued

Board oversight of risk and risk management across the Group is maintained on a regular basis through its Risk Committee. The Board has overall responsibility for determining risk appetite, which is an expression of the risk it is willing to take. The Group's position against risk appetite is monitored and reported to the Board on a monthly basis.

The risk governance framework allocates responsibility for the oversight of risk management to a number of committees at group centre with the Asset Liability Committee (ALCO) and the Operational Risk Committee (ORC) providing a key focus on financial and operational risk. The group centre committees are in turn supported by similar governance structures in the regions.

(b) Market risk

Market risk is the risk of adverse financial impact due to changes in fair values or future cash flows of financial instruments from fluctuations in interest rates, equity prices, property prices, and foreign currency exchange rates. Market risk arises in business units due to fluctuations in both the value of liabilities and the value of investments held. At Group level, it also arises in relation to the overall portfolio of international businesses and in the value of investment assets owned directly by the shareholders.

The Group has established a policy on market risk which sets out the principles that businesses are expected to adopt in respect of management of the key market risks to which the Group is exposed. The Group monitors adherence to this market risk policy and regularly reviews how business units are managing these risks locally, through the Assets Committee and ultimately the Asset Liability Committee (ALCO). For each of the major components of market risk, described in more detail below, the Group has put in place additional processes and procedures to set out how each risk should be managed and monitored, and the approach to setting an appropriate risk appetite.

The management of market risk is undertaken in businesses, regions and at Group level. Businesses manage market risks locally using the group market risk framework and within local regulatory constraints. Businesses may also be constrained by the requirement to meet policyholders' reasonable expectations and to minimise or avoid market risk in a number of areas. The ALM function is responsible for managing market risk at Group level, and a number of investment-related risks, in particular those faced by shareholder funds throughout the Group.

The Group market risk policy sets out the minimum principles and framework for matching liabilities with appropriate assets, the approaches to be taken when liabilities cannot be matched and the monitoring processes that are required. The Group has criteria for matching assets and liabilities for all classes of business to minimise the impact of mismatches between the value of assets and the liabilities due to market movements. The local regulatory environment for each business will also set the conditions under which assets and liabilities are to be matched.

In addition, where the Group's long-term savings businesses have written insurance and investment products where the majority of investment risks are borne by its policyholders, these risks are managed in line with local regulations and marketing literature, in order to satisfy the policyholders' risk and reward objectives.

The Group writes unit-linked business in a number of its operations. In unit-linked business, the policyholder bears the investment risk on the assets held in the unit-linked funds, as the policy benefits are directly linked to the value of the assets in the fund.

The shareholders' exposure to market risk on this business is limited to the extent that income arising from asset management charges is based on the value of assets in the fund.

Equity price risk

The Group is subject to equity price risk due to daily changes in the market values of its equity securities portfolio. The Group's shareholders are exposed to the following sources of equity risk:

- Direct equity shareholdings in shareholder funds and the Group defined benefit pension funds.
- The indirect impact from changes in the value of equities held in policyholders' funds from which management charges or a share of performance are taken; and
- Its interest in the free estate of long-term with profits funds.

At a business unit level, equity price risk is actively managed in order to mitigate anticipated unfavourable market movements where this lies outside the risk appetite of either the company in respect of shareholder assets or the fund in respect of policyholder assets concerned. In addition investment limits and local asset admissibility regulations require that business units hold diversified portfolios of assets thereby reducing exposure to individual equities. The Group does not have material holdings of unquoted equity securities.

Equity risk is also managed using a variety of derivative instruments, including futures and options. Businesses actively model the performance of equities through the use of risk models, in particular to understand the impact of equity performance on guarantees, options and bonus rates.

The Assets Committee actively monitors equity assets owned directly by the Group, which may include some material shareholdings in the Group's strategic business partners.

Property price risk

The Group is subject to property price risk due to holdings of investment properties in a variety of locations worldwide and through investments in mortgages and mortgage backed securities. Investment in property is managed at regional and business level, and will be subject to local regulations on asset admissibility, liquidity requirements and the expectations of policyholders as well as overall risk appetite. The Assets Committee also monitors property assets owned directly by the Group.

As at 31 December 2010, no material derivative contracts had been entered into to mitigate the effects of changes in property prices.

A17 – Risk management continued

Interest rate risk

Interest rate risk arises primarily from the Group's investments in long-term debt and fixed income securities, which are exposed to fluctuations in interest rates.

The Group manages this risk by adopting close asset liability matching criteria, to minimise the impact of mismatches between the value of assets and liabilities from interest rate movements.

A number of policyholder participation features have an influence on the Group's interest rate risk. The major features include guaranteed surrender values, guaranteed annuity options, and minimum surrender and maturity values.

In short-term business such as general insurance business, the Group requires a close matching of assets and liabilities to minimise this risk.

Interest rate risk is managed by the ALM function and monitored and managed by the Assets Committee, and the Asset Liability Committee. Exposure to interest rate risk is monitored through several measures that include value-at-risk analysis, position limits, risk modelling, asset and liability matching using measures such as duration. The impact of exposure to sustained low interest rates is regularly monitored.

Interest rate risk is also managed using a variety of derivative instruments, including futures, options, swaps, caps and floors, in order to provide a degree of hedging against unfavourable market movements in interest rates inherent in the assets backing technical liabilities.

The Group has entered into a number of initiatives, including interest rate swap agreements and changes in asset mix, to mitigate the effects of potential adverse interest rate movements, and to enable closer matching of assets and liabilities.

Currency risk

The Group has minimal exposure to currency risk from financial instruments held by business units in currencies other than their functional currencies, as nearly all such holdings are backing either unit-linked or with-profit contract liabilities or are hedged. For this reason, no sensitivity analysis is given for these holdings.

The Group operates internationally and as a result is exposed to foreign currency exchange risk arising from fluctuations in exchange rates of various currencies. Approximately half of the Group's premium income arises in currencies other than sterling and the Group's net assets are denominated in a variety of currencies, of which the largest are euro, sterling, and US dollars. The Group does not hedge foreign currency revenues as these are substantially retained locally to support the growth of the Group's business and meet local regulatory and market requirements.

The Group's foreign exchange policy requires that each of our subsidiaries maintains sufficient assets in its local currency to meet local currency liabilities. Therefore, capital held by the Group's business units should be able to support local business activities regardless of foreign currency movements. However, such movements may impact the value of the Group's consolidated shareholders' equity which is expressed in sterling. This aspect of foreign exchange risk is monitored and managed centrally, against pre-determined limits. The Group's foreign exchange policy is to manage these exposures by aligning the deployment of regulatory capital by currency with the Group's regulatory capital requirements by currency. Limits are set to control the extent to which the deployment of capital is not aligned fully with the Group's regulatory capital requirement for each major currency. Currency borrowings and derivatives are used to manage exposures within the limits that have been set.

At 31 December 2010, the Group's total equity deployment by currency was:

	Sterling £m	Euro £m	US$ £m	Other £m	Total £m
Capital 31 December 2010	**3,301**	**9,288**	**2,712**	**2,424**	**17,725**
Capital 31 December 2009	1,737	8,781	2,605	1,963	15,086

A 10% change in sterling to euro/US$ foreign exchange rates would have had the following impact on total equity.

	10% increase in sterling/ euro rate £m	10% decrease in sterling/ euro rate £m	10% increase in sterling/ US$ rate £m	10% decrease in sterling/ US$ rate £m
Net assets at 31 December 2010	**(899)**	**833**	**(271)**	**271**
Net assets at 31 December 2009	(802)	802	(228)	228

The changes arise from retranslation of business unit statements of financial position from their functional currencies into sterling, with above movements being taken through the currency translation reserve. These movements in exchange rates therefore have no impact on profit. Net assets are stated after taking account of the effect of currency hedging activities.

A17 – Risk management continued

Derivatives risk

Derivatives are used by a number of the businesses, within policy guidelines agreed by the Board of directors, as set out in the Group policy on derivatives use. Activity is overseen by the Derivatives Approvals Committee, which monitors implementation of the policy, exposure levels and approves large or complex transactions proposed by businesses. Derivatives are primarily used for efficient investment management, risk hedging purposes or to structure specific retail savings products. Derivative transactions are covered by either cash or corresponding assets and liabilities. Speculative activity is prohibited, unless prior approval has been obtained from the Derivatives Approvals Committee. Over the counter derivative contracts are entered into only with approved counterparties and using ISDA documentation and credit support annexes (or equivalent) in accordance with the Group derivatives policy. Adherence to the collateral requirements as set out in the Group derivatives and Group credit policies thereby reduces the risk of credit loss.

The Group applies strict requirements to the administration and valuation processes it uses, and has a control framework that is consistent with market and industry practice for the activity that is undertaken.

Correlation risk

The Group recognises that lapse behaviour and potential increases in consumer expectations are sensitive to and interdependent with market movements and interest rates. These interdependencies are taken into consideration in the ICA in the aggregation of the financial stress tests with the operational risk assessment and in scenario analysis.

(c) Credit risk

Credit risk is the risk of financial loss as a result of the default or failure of third parties to pay on their obligations to Aviva. Our credit risks arise through exposures to debt investments, structured asset investments, derivative counterparties, mortgage lending and reinsurance placement counterparties. We hold these investments for the benefit of both our policyholders and shareholders.

The Group manages its credit risk at business unit, regional and Group levels. All business units and regions are required to implement local credit risk management processes (including limits frameworks), operate specific risk management committees, and ensure detailed reporting and monitoring of their exposures against pre-established risk criteria. At Group level, we manage and monitor all exposures across our business units on a consolidated basis, and operate a group limit framework that must be adhered to by all.

The risk management framework also includes the market related aspect of credit risk. This is the risk of a fall in the value of fixed interest securities from changes in the perceived worthiness of the issuer and is manifested through changes in the fixed interest securities' credit spreads.

Management of credit risk is effected by five core functions:

- The maintenance and adherence of an effective governance structure. This includes clear guidance, scope and frameworks for all aspects of the credit risk function to ensure accountability and clarity. This also includes delegated authority to the Credit Approvals Committee which is authorised to make key decisions within certain risk appetite levels.
- The accurate and timely reporting of detailed exposure information, and their aggregation by counterparty, exposure types, sectors, geography and ratings.
- The implementation of a sophisticated capital charge based credit limit framework that considers and quantifies the key specific attributes of each exposure (eg seniority, maturity etc) and provides a counterparty level aggregation methodology covering all exposures to a counterparty. This is then managed against centrally set limits. Upper limits are also set to ensure that any unexpected jump to default risks are kept within appetite. Additional limit and controls are applied for structured assets and reinsurance counterparty exposures. The limits framework also considers more systemic risk factors such as sector and geographic concentrations, and these are continually assessed throughout our global portfolio.
- Additional committee and credit risk function oversight is provided on all credit risk related matters. This includes regular consideration and review of our key counterparties, monitoring and addressing key credit themes and news that emerge in the markets. The Credit Approvals Committee provides an effective forum to ensure that all key recommendations are considered, and decisions implemented throughout the Group. The regional and Group credit divisions ensure that qualitative aspects of risk management are considered and evaluated to provide further oversight and balance to the quantitative aspects.
- The employment of risk mitigation techniques where and when deemed appropriate. These are utilised where possible to remove residual unwanted risks, as well as bring or keep exposure limits within appetite, and include methods such as collateralisation, purchase of credit protection and diversification strategies.

A17 – Risk management continued

A detailed breakdown of the Group's current credit exposure by credit quality is shown below.

Financial exposures by credit ratings

Financial assets are graded according to current external credit ratings issued. AAA is the highest possible rating. Investment grade financial assets are classified within the range of AAA to BBB ratings. Financial assets which fall outside this range are classified as speculative grade. The following table provides information regarding the aggregated credit risk exposure, for financial assets with external credit ratings, of the Group. Not rated assets capture assets not rated by external ratings agencies.

	Credit rating						
At 31 December 2010	**AAA**	**AA**	**A**	**BBB**	**Speculative grade**	**Not rated**	**Carrying value in the statement of financial position £m**
Debt securities	**36.3%**	**18.1%**	**22.7%**	**15.8%**	**2.5%**	**4.6%**	**167,482**
Reinsurance assets	**0.2%**	**58.8%**	**25.3%**	**1.5%**	**0.1%**	**14.1%**	**7,084**
Other investments	**0.2%**	**1.1%**	**1.4%**	**0.4%**	**0.1%**	**96.8%**	**36,730**
Loans	**3.8%**	**5.8%**	**2.2%**	**0.4%**	**0.7%**	**87.1%**	**43,074**

	Credit rating						
At 31 December 2009	AAA	AA	A	BBB	Speculative grade	Not rated	Carrying value in the statement of financial position £m
Debt securities	38.6%	17.3%	24.0%	12.8%	2.5%	4.8%	161,757
Reinsurance assets	10.5%	52.1%	26.7%	0.4%	0.2%	10.1%	7,572
Other investments	0.2%	3.4%	2.0%	1.2%	—	93.2%	31,518
Loans	6.2%	7.7%	0.9%	0.5%	1.0%	83.7%	41,079

The carrying amount of assets included in the statement of financial position represents the maximum credit exposure. £1,247 million debt securities held by consolidated French mutual funds, previously included within other investments, have been reclassified as debt securities as at 31 December 2009. In addition, certain non-rated debt securities totalling £1,917 million, which at the 31 December 2009 had been classified according to their internal credit ratings, are now presented as non-rated. Carrying values and percentages at 31 December 2009 have been amended accordingly.

Other investments

Other investments include:

- £32,520 million of unit trusts and other investment vehicles. The underlying credit ratings of these assets are not reflected in this analysis.
- Derivative financial instruments of £2,274 million, representing positions to mitigate the impact of adverse market movements.
- Other assets of £1,936 million, includes deposits with credit institutions and minority holdings in property management undertakings.

The Group loan portfolio principally comprises:

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

A17 – Risk management continued

Unit trusts and other investment vehicles

The credit quality of the underlying debt securities within these vehicles is managed by the safeguards built into the investment mandates for these funds. We rely on our understanding that the trusts and their asset managers are only approved if they satisfy certain selection criteria (including due diligence in the form of a questionnaire and/or research by dedicated teams). In addition, the asset managers are mandated to make investments in line with the funds' risk profiles as marketed to prospective customers and policyholders. Accordingly, as part of reviewing the asset quality of unit trusts and other investment vehicles, we monitor the assets within the funds and their performance to ensure they remain in line with the respective investment mandates for these funds.

For certain of the unit trusts in our other investments, we apply minimum requirements affecting both the underlying counterparties and the investments issued by those counterparties such as a minimum size for the counterparty's programme, a limit on the size of the overall exposure to the underlying counterparty and, where appropriate, explicit approval of the counterparty by internal credit risk management teams is required. These criteria are indicators of the asset quality for these investments, as they represent minimum criteria for liquidity and diversification.

A proportion of the assets underlying these investments are represented by equities and so credit ratings are not generally applicable. Equity exposures are managed against agreed benchmarks that are set with reference to overall market risk appetite.

Derivatives

Derivative transactions must comply with Group guidance on the quality of counterparties used and the extent of collateralisation required. The counterparty must have a minimum credit rating from rating agencies (S&P, Moody's and Fitch) and the collateral process must meet certain minimum standards as set out by Group guidelines.

The largest shareholder notional positions are exchange traded, rather than over the counter (OTC), with the added protection that provides (ie the credit risk is mitigated significantly through regular margining and protection offered by the exchange, and is controlled by the Group's local asset management operations).

Loans

The majority of the Group loans portfolio is unrated. However, we use the following metrics to internally monitor our exposure:

- Property collateralisation
- Interest service cost
- Diversity of the tenant base; and
- Existence of government guarantees for some residential mortgages.

Policy loans are loans and advances made to policyholders, and are collateralised by the underlying policies. As such, we believe such collateralisation minimises our risk.

Credit concentration risk

The long-term businesses and general insurance businesses are generally not individually exposed to significant concentrations of credit risk due to the regulations, applicable in most markets, limiting investments in individual assets and asset classes supplemented by the Group credit policy and limits framework. In cases where the business is particularly exposed to credit risk (eg in respect of defaults on mortgages matching annuity liabilities) this risk is translated into a more conservative discount rate used to value the liabilities, creating a greater capital requirement, and this credit risk is actively managed. The impact of aggregation of credit risk is monitored as described above. With the exception of Government bonds the largest aggregated counterparty exposure is approximately 0.9% of the Group's total shareholder assets.

Reinsurance credit exposures

The Group is exposed to concentrations of risk with individual reinsurers, due to the nature of the reinsurance market and the restricted range of reinsurers that have acceptable credit ratings. The Group operates a policy to manage its reinsurance counterparty exposures, by limiting the reinsurers that may be used and applying strict limits to each reinsurer. Reinsurance exposures are aggregated with other exposures to ensure that the overall risk is within appetite. The Credit Approvals Committee has a monitoring role over this risk.

The Group's largest reinsurance counterparty is Swiss Reinsurance Company Ltd (including subsidiaries). At 31 December 2010, the reinsurance asset recoverable, including debtor balances, from Swiss Reinsurance Company Ltd was £1,284 million.

Securities finance

The Group has significant securities financing operations within the UK. The risks within this business are mitigated by over-collateralisation which is designed to result in minimal residual risk. The Group operates strict standards around collateral management and controls.

A17 – Risk management continued

Derivative credit exposures

The Group is exposed to counterparty credit risk through derivative trades. This risk is mitigated through collateralising almost all trades (the exception being certain FX trades where it has historically been the market norm not to collateralise). The Group operates strict standards around collateral management and controls including the requirement that all "Over the Counter" derivatives are supported by credit support annexes and ISDAs.

Unit-linked business

As discussed previously, in unit-linked business the policyholder bears the market risk, including credit risk, on investment assets in the unit funds, and the shareholders' exposure to credit risk is limited to the extent that their income arises from asset management charges based on the value of assets in the fund.

Impairment of financial assets

The following table provides information regarding the carrying value of financial assets that have been impaired and the ageing of financial assets that are past due but not impaired.

At 31 December 2010	Neither past due nor impaired £m	Financial assets that are past due but not impaired: 0-3 months £m	3-6 months £m	6 months-1 year £m	Greater than 1 year £m	Financial assets that have been impaired £m	Carrying value in the statement of financial position £m
Debt securities	**167,334**	—	**3**	**3**	**28**	**114**	**167,482**
Reinsurance assets	**7,084**	—	—	—	—	—	**7,084**
Other investments	**36,671**	**19**	**6**	**15**	**8**	**11**	**36,730**
Loans	**42,045**	**326**	**26**	**11**	**7**	**659**	**43,074**
Receivables and other financial assets	**7,983**	**209**	**36**	**39**	**10**	**18**	**8,295**

At 31 December 2009	Neither past due nor impaired £m	Financial assets that are past due but not impaired: 0-3 months £m	3-6 months £m	6 months-1 year £m	Greater than 1 year £m	Financial assets that have been impaired £m	Carrying value in the statement of financial position £m
Debt securities	161,647	—	—	—	—	110	161,757
Reinsurance assets	7,572	—	—	—	—	—	7,572
Other investments	31,503	—	—	—	—	15	31, 518
Loans	40,039	355	35	17	6	627	41,079
Receivables and other financial assets	8,832	649	61	32	71	7	9,652

£1,247 million debt securities held by consolidated French mutual funds, previously included within other investments, have been reclassified as debt securities as at 31 December 2009. The analysis of financial assets past due at 31 December 2009 has been amended accordingly.

Credit terms are set locally within overall credit limits prescribed by the Group Credit Approvals Committee and within the framework of the Group Credit Policy. The credit quality of financial assets is managed at the local business unit level. Where assets have been classed as "past due and impaired", an analysis is made of the risk of default and a decision is made whether to seek collateral from the counterparty.

There were no material financial assets that would have been past due or impaired had the terms not been renegotiated.

(d) Liquidity risk

At Group level, we maintain a prudent level of liquidity which meets the expectations of the Financial Services Authority (FSA) and the wider investment community. We maintain a buffer of liquid assets, determined by liquidity stress tests, which is designed to cover unforeseen circumstances in any of our businesses.

The Group and Company have a strong liquidity position (£1.5 billion of financial assets held at Group) and through the application of a Group Liquidity policy seek to maintain sufficient financial resources to meet its obligations as they fall due. In addition to this strong liquidity position, the Group and Company maintain significant undrawn committed borrowing facilities (£2.1 billion) from a range of highly rated banks to further mitigate this risk.

Asset liability matching

The Group market risk policy sets out the minimum principles and framework for matching liabilities with appropriate assets, the approaches to be taken when liabilities cannot be matched and the monitoring processes that are required. The Group has criteria for matching assets and liabilities for all classes of business to minimise the impact of mismatches between the value of assets and the liabilities due to market movements. The local regulatory environment for each business will also set the conditions under which assets and liabilities are to be matched. The Asset Liability matching (ALM) methodology develops optimal asset portfolio maturity structures for our businesses which seek to ensure that the cash flows are sufficient to meet the liabilities as they are expected to arise.

A17 – Risk management continued

Where any decision to adopt a position in respect of policyholder assets and liabilities is not closely matched but is within the business unit's investment risk appetite, the impact is monitored through our economic capital measurement process. The decision taken must be justified to the local management board and Group management by a full analysis of the impact of the level of mismatch on both risk and return.

ALM strategy may be determined at a sub-fund level for a block of closely related liabilities. Alternatively, if ALM strategy is determined at a fund or company level, it will usually be appropriate (for pricing, financial reporting and risk management purposes) to develop a hypothecation of assets to notional sub-funds with different liability characteristics. It is for this reason that Group Risk provides a framework of corporate objectives within which the operating businesses develop specific and appropriate ALM methodologies, to seek to ensure that our businesses have sufficient liquidity to settle claims as they are expected to arise.

ALM modelling is based on a projection of both assets and liabilities into the future.
A further tenet of our risk management strategy involves investment strategies, which also take into account the accounting, regulatory, capital and tax issues. The ALM strategy also takes into account the reasonable expectations of policyholders, local best practice and meets relevant regulatory requirements.

Our investment strategies are designed to seek to ensure that sufficient liquidity exists in extreme business scenarios. For example, our investment strategy must consider a scenario of high lapses accompanied by poor investment markets or a general insurance catastrophe event.

Maturity analyses
The following tables show the maturities of our insurance and investment contract liabilities, and of the financial and reinsurance assets to meet them.

(i) Analysis of maturity of insurance and investment contract liabilities
For non-linked insurance business, the following table shows the gross liability at 31 December 2010 analysed by remaining duration. The total liability is split by remaining duration in proportion to the cash-flows expected to arise during that period, as permitted under IFRS 4, *Insurance Contracts*.

Almost all investment contracts may be surrendered or transferred on demand. For such contracts, the earliest contractual maturity date is therefore the current statement of financial position date, for a surrender amount approximately equal to the current statement of financial position liability. We expect surrenders, transfers and maturities to occur over many years, and the tables reflect the expected cash flows for non-linked investment contracts. However, contractually, the total liability for non-linked investment contracts of £63,197 million *(2009: £59,504 million)* would be shown in the "within 1 year" column below. Unit-linked contracts are repayable or transferable on demand and are therefore shown in the "within 1 year" column.

At 31 December 2010	**Total £m**	**On demand or within 1 year £m**	**1-5 years £m**	**5-15 years £m**	**Over 15 years £m**
Long-term business					
Insurance contracts – non-linked	**132,400**	**12,025**	**42,609**	**50,206**	**27,560**
Investment contracts – non-linked	**63,197**	**3,254**	**13,970**	**26,901**	**19,072**
Linked business	**82,769**	**82,769**	**—**	**—**	**—**
General insurance and health	**17,121**	**7,222**	**6,453**	**2,872**	**574**
Total contract liabilities	**295,487**	**105,270**	**63,032**	**79,979**	**47,206**

At 31 December 2009	Total £m	On demand or within 1 year £m	1-5 years £m	5-15 years £m	Over 15 years £m
Long-term business					
Insurance contracts – non-linked	123,933	10,139	38,549	45,181	30,064
Investment contracts – non-linked	59,504	4,304	12,562	24,119	18,519
Linked business	80,206	80,206	—	—	—
General insurance and health	17,484	7,215	6,936	2,865	468
Total contract liabilities	281,127	101,864	58,047	72,165	49,051

A17 – Risk management continued

(ii) Analysis of maturity of financial assets

The following table provides an analysis, by maturity date of the principal, of the carrying value of financial assets which are available to fund the repayment of liabilities as they crystallise.

At 31 December 2010	Total £m	On demand or within 1 year £m	1-5 years £m	Over 5 years £m	No fixed term (perpetual) £m
Debt securities	**167,482**	**20,996**	**46,182**	**100,133**	**171**
Equity securities	**49,076**	**—**	**—**	**—**	**49,076**
Other investments	**36,730**	**32,625**	**1,713**	**956**	**1,436**
Loans	**43,074**	**7,492**	**5,339**	**30,240**	**3**
Cash and cash equivalents	**25,455**	**25,455**	**—**	**—**	**—**
	321,817	**86,568**	**53,234**	**131,329**	**50,686**

At 31 December 2009	Total £m	On demand or within 1 year £m	1-5 years £m	Over 5 years £m	No fixed term (perpetual) £m
Debt securities	161,757	17,309	44,298	98,792	358
Equity securities	45,428	—	—	—	45,428
Other investments	31,517	29,091	414	493	1,519
Loans	41,079	6,867	4,146	30,066	—
Cash and cash equivalents	25,176	25,176	—	—	—
	304,957	78,443	49,858	129,351	47,305

£1,247 million debt securities and £2,085 million equity securities held by consolidated French mutual funds, previously included within other investments, have been reclassified as debt and equity securities as at 31 December 2009. The maturity analysis at 31 December 2009 has been amended accordingly.

The assets above are analysed in accordance with the earliest possible redemption date of the instrument at the initiation of the Group. Where an instrument is transferable back to the issuer on demand, such as most unit trusts or similar types of investment vehicle, it is included in the "On demand or within 1 year" column. Debt securities with no fixed contractual maturity date are generally callable at the option of the issuer at the date the coupon rate is reset under the contractual terms of the instrument. The terms for resetting the coupon are such that we expect the securities to be redeemed at this date, as it would be uneconomic for the issuer not to do so, and for liquidity management purposes we manage these securities on this basis. The first repricing and call date is normally 10 years or more after the date of issuance. Most of the Group's investments in equity securities and fixed maturity securities are market traded and therefore, if required, can be liquidated for cash at short notice.

(e) Insurance risk

(i) Life insurance risk

Types of risk

Life insurance risk in the Group arises through its exposure to mortality and morbidity insurance and exposure to worse than anticipated operating experience on factors such as persistency levels and management and administration expenses.

Risk management framework

The Group has developed a life insurance risk policy and guidelines on the practical application of this policy. Individual life insurance risks are managed at a business unit level but are also monitored at Group level.

The impact of life insurance risks is monitored by the business units as part of the control cycle of business management. Exposure is monitored through the assessment of liabilities, the asset liability management framework, profit reporting (under both IFRS and MCEV), and the ICA process. Significant insurance risks will be reported through the risk management framework and overseen by the Life Insurance Committee. At Group level the overall exposure to life insurance risk is measured through the ICA and other management reporting.

The Life Insurance Committee monitors the application of the risk policy in each business, and receives management information on life insurance risks. The committee considers all areas of life insurance risk, but in particular has a remit to monitor mortality, longevity, morbidity, persistency, product development and pricing, unit pricing and expenses.

The committee also considers the reinsurance coverage across the life businesses. It confirms that guidance and procedures are in place for each of the major components of life insurance risk, and that the businesses mitigate against any life insurance risk outside local appetite, within the parameters for the overall Group risk appetite.

The committee has also developed guidance for business units on management of a number of areas of life insurance risk to ensure best practice is shared throughout the Group and common standards are adopted.

A17 – Risk management continued

Management of life insurance risks

The individual life insurance risks are managed as follows:

- Mortality and morbidity risks are mitigated by use of reinsurance. The Group allows business units to select reinsurers, from those approved by the Group, based on local factors, but assesses the overall programme to manage group-wide risk exposures and monitor the aggregation of risk ceded to individual reinsurers is within appetite for credit risk.
- Longevity risk is carefully monitored against the latest external industry data and emerging trends. Whilst individual businesses are responsible for reserving and pricing for annuity business, the Group monitors the exposure to this risk and the capital implications to manage the impact on the group-wide exposure and the capital funding that businesses may require as a consequence. The Group has used reinsurance solutions to reduce the risks from longevity where possible and desirable and continually monitors and evaluates emerging market solutions to mitigate this risk further.
- Persistency risk is managed at a business unit level through frequent monitoring of company experience, benchmarked against local market information. Generally, persistency risk arises from customers lapsing their policies earlier than has been assumed. Where possible the financial impact of lapses is reduced through appropriate product design. Businesses also implement specific initiatives to improve retention of policies which may otherwise lapse. The Group Life Insurance Committee has developed guidelines on persistency management.
- Product design and pricing risk arises from poorly designed or inadequately priced products and can lead to both financial loss for and reputation damage to the Group. Guidelines have been developed to support the businesses through the complete cycle of the product development process, financial analysis and pricing.
- Expense risk is primarily managed by the business units through the assessment of business unit profitability and frequent monitoring of expense levels.

Apart from the ICA, sensitivity testing is widely used to measure the capital required and volatility in earnings due to exposure to life insurance risks, typically through MCEV reporting (examples of which are contained elsewhere in this report). This assessment is taken at both business unit level and at Group level where the impact of aggregation of similar risks can be measured. This enables the Group to determine whether action is required to reduce risk, or whether that risk is within the overall risk appetite.

Concentration risk

The Group writes a diverse mix of business in worldwide markets that are all subject to similar risks (mortality, persistency etc). The Group assesses the relative exposures to and concentrations of each type of risk through the ICA capital requirements and material issues are escalated to and addressed at the Life Insurance Committee. This analysis enables the Group to assess whether accumulations of risk exceeds risk appetite.

One key concentration of life insurance risk for the Group is improving longevity risk from pensions in payment and deferred annuities in the UK and the Netherlands where the Group has material portfolios. The Group continually monitors this risk and the opportunities for mitigating actions through reinsurance, improved asset liability matching, or innovative solutions that emerge in the market.

When looking at concentrations of risk, for example market risk, the risk within Aviva staff pension schemes is also considered. ICA analysis and MCEV sensitivity testing help identify both concentrations of risk types and the benefits of diversification of risk.

Embedded derivatives

The Group has exposure to a variety of embedded derivatives in its long-term savings business due to product features offering varying degrees of guaranteed benefits at maturity or on early surrender, along with options to convert their benefits into different products on pre-agreed terms. The extent of the impact of these embedded derivatives differs considerably between business units.

Examples of each type of embedded derivative affecting the Group are:

- Options: call, put, surrender and maturity options, guaranteed annuity options, options to cease premium payment, options for withdrawals free of market value adjustment, annuity options, and guaranteed insurability options.
- Guarantees: embedded floor (guaranteed return), maturity guarantee, guaranteed death benefit, and guaranteed minimum rate of annuity payment.
- Other: indexed interest or principal payments, maturity value, loyalty bonus.

The impact of these is reflected in ICA and MCEV reporting and managed as part of the asset liability framework.

(ii) General insurance risk

Types of risk

General insurance risk in the Group arises from:

- Fluctuations in the timing, frequency and severity of claims and claim settlements relative to expectations
- Unexpected claims arising from a single source
- Inaccurate pricing of risks or inappropriate underwriting of risks when underwritten
- Inadequate reinsurance protection or other risk transfer techniques
- Inadequate reserves

A17 – Risk management continued

The majority of the general insurance business underwritten by the Group is of a short tail nature such as motor, household and commercial property insurances. The Group's underwriting strategy and appetite is agreed by the Executive Committee and communicated via specific policy statements and guidelines. Like life insurance risk, general insurance risk is managed primarily at business unit level with oversight at a Group level, through the General Insurance Committee.

The vast majority of the Group's general insurance business is managed and priced in the same country as the domicile of the customer.

Management of general insurance risks

Significant insurance risks will be reported through the risk management framework. Additionally, the ICA is used to assess the risks that each general insurance business unit, and the Group as a whole, is exposed to, quantifying their impact and calculating appropriate capital requirements. Increasingly risk-based capital models are being used to support the quantification of risk under the ICA framework. All general insurance business units undertake a quarterly review of their insurance risks, the output from which is a key input into the ICA and risk-based capital assessments.

The General Insurance Committee monitors and develops the management of insurance risk in the general insurance business units, and assesses the aggregate risk exposure. It is responsible for the development, implementation, and review of the Group policies for underwriting, claims, reinsurance and reserving that operate within the risk management framework.

Business units have developed mechanisms that identify, quantify and manage accumulated exposures to contain them within the limits of the appetite of the Group. The Group has pioneered various developments, such as the Aviva UK Digital Flood Map to effectively manage exposures arising from specific perils. Where appropriate such projects are employed throughout the business units to promote the adoption of best practice as standard.

General insurance claims reserving

Actuarial claims reserving is conducted by local actuaries in the various general insurance business units according to the General Insurance Reserving policy. The General Insurance Committee monitors and maintains the General Insurance Reserving policy, and conducts quarterly reviews of the Group's general insurance claims provisions, and their adequacy. The reviews include peer reviews of the business unit's own conclusions as well as independent analysis to confirm the reasonableness of the local reviews.

The adequacy of the Group's general insurance claims provisions is ultimately overseen by the General Insurance Committee. A number of business units also have periodic external reviews by local consultant actuaries (often as part of the local regulatory requirement).

Reinsurance strategy

Significant reinsurance purchases are reviewed annually at both business unit and Group level, to verify that the levels of protection being bought reflect any developments in exposure and the risk appetite of the Group. Reinsurance purchases must be in line with the strategy set out in our General Insurance Reinsurance policy. The basis of these purchases is underpinned by extensive financial and capital modelling and actuarial analysis to optimise the cost and capital efficiency benefits from our reinsurance program. For the larger business units, this involves utilising externally sourced probabilistic models to verify the accumulations and loss probabilities based on the Group's specific portfolios of business. Where external models are not available, scenarios are developed and tested using the Group's data to determine potential losses and appropriate levels of reinsurance protection.

The reinsurance is placed with providers who meet the Group's counterparty security requirements, and large reinsurance placements may also require approval from the Asset Liability Committee.

Concentration risk

Processes are in place to manage catastrophe risk in individual business units and at a Group level. The Group cedes much of its worldwide catastrophe risk to third party reinsurers but retains a pooled element for its own account gaining diversification benefit. The total Group potential loss from its most concentrated catastrophe exposure zone (Northern Europe) is approximately £300 million, for a one in ten year annual loss scenario, compared to approximately £550 million when measured on a one in a hundred year annual loss scenario.

For the 2010 underwriting year the Group participated in a share of a reinsurer's US property catastrophe reinsurance portfolio. As this exposure does not correlate with the Group's other general insurance exposures this provided a strategic opportunity to diversify the general insurance portfolio with a risk that had a high expected profit margin but also a high potential for loss. The modelled loss from a one in ten year annual loss scenario was £55 million compared to approximately £160 million when measured on a one in a hundred year annual loss scenario.

As a result of better than normal experience the arrangement delivered above average underwriting returns in 2010. Notwithstanding the good return in 2010, we have renewed the arrangement in 2011 on a reduced scale reflecting expected market conditions. The total expected loss from a one in ten year annual loss scenario is £40 million compared to approximately £100 million when measured on a one in hundred year annual loss scenario.

A17 – Risk management continued

(f) Operational risk

Types of operational risk

Operational risk is the risk of loss, arising from inadequate or failed internal processes, or from people and systems, or from external events. Operational risks include business protection, information technology, people, legal and regulatory compliance risks.

Operational risk management

We process a large number of complex transactions across numerous and diverse products, and are highly dependent on the proper functioning of information technology and communications systems. We are partially reliant on the operational processing performance of our outsourced partners including certain servicing and IT functions. The long-term nature of our business means that accurate records have to be maintained for significant periods. Significant resources are devoted to maintaining efficient and effective operations within our framework of corporate responsibility, policies and business ethics code.

Our businesses are primarily responsible for identifying and managing operational risks in line with minimum standards of control set out in our policies. Each operational risk is assessed by considering the potential impact and the probability of the event occurring. Impact assessments are considered against financial, operational and reputation criteria.

Business management teams must be satisfied that all material risks falling outside our risk appetite are being mitigated, monitored and reported to an appropriate level. Any risks with a high potential impact level are monitored centrally on a regular basis. Businesses use key indicator data to help monitor the status of the risk and control environment. They also identify and capture loss events; taking appropriate action to address actual control breakdowns and promote internal learning from these occurrences.

The Operational Risk Committee (ORC) oversees the Group's aggregate operational risk exposure on behalf of the Group Executive Committee. It makes recommendations on the risk appetite that the Group can work within for operational risk, assesses and monitors overall operational risk exposures, identifying any concentrations of operational risk across the Group, and in particular verifies that mitigating action plans are implemented. The ORC operates a number of sub-committees which focus on specific areas of operational risk including customer, brand, business protection, IT, people, legal and regulatory compliance.

(g) Brand and reputation risk

We are 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.

Our success and results are, to a certain extent, dependent on the strength of our global Aviva brand and reputation. While we as a group are well recognised, we are vulnerable to adverse market and customer perception. We operate in an industry where integrity, customer trust and confidence are paramount. We are exposed to the risk that litigation, employee misconduct, operational failures, the outcome of regulatory investigations, media speculation and negative publicity, disclosure of confidential client information, inadequate services, amongst others, whether or not founded, could impact our brands or reputation. Any of our brands or our reputation could also be affected if products or services recommended by us (or any of our intermediaries) do not perform as expected (whether or not the expectations are founded) or the customer's expectations for the product change.

One of the FSA's strategic objectives is to help customers get a fair deal through its "treating customers fairly" principle. Examples of "treating customers fairly" include: products and services targeted to meet customers' needs and which perform in line with what customers have been led to expect; clear information (and advice where relevant); good service; and making sure there are no unfair barriers that prevent customers from getting access to their money, changing products or making a successful insurance claim. The FSA regularly checks that we are meeting the requirement to treat our customers fairly and we make use of various metrics to assess our own performance, including customer advocacy, retention and complaints. Failure to meet these requirements could also impact our brands or reputation.

If we do not manage successfully the perception of our brands and reputation, it could cause existing customers or agents to withdraw from our business and potential customers or agents to be reluctant or elect not to do business with us. This would adversely impact our business and results of operations.

A18 – Long-term business IFRS profit driver analysis

	2010				2009			
	United Kingdom £m	Aviva Europe £m	Rest of the world £m	Total £m	United Kingdom £m	Aviva Europe £m	Rest of the world £m	Total £m
Note (a)								
New business margin (£m)	**499**	**382**	**140**	**1,021**	402	310	101	813
APE (£m)	**1,310**	**1,544**	**1,089**	**3,943**	1,143	1,554	1,049	3,746
As margin on APE (%)	**38%**	**25%**	**13%**	**26%**	35%	20%	10%	22%
New business margin reflects premiums less initial capital reserves								
Note (b)								
Underwriting margin (£m)	**178**	**433**	**270**	**881**	148	433	202	783
Analysed by:								
Expenses (£m)	**90**	**166**	**182**	**438**	83	145	128	356
Mortality and longevity (£m)	**63**	**209**	**81**	**353**	60	227	90	377
Persistency (£m)	**25**	**58**	**7**	**90**	5	61	(16)	50
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								
Note (c)								
Unit-linked margin (£m)	**348**	**541**	**110**	**999**	322	532	84	938
As annual management charge on average reserves (bps)	**94**	**121**	**98**	**108**	99	127	81	111
Average reserves (£bn)	**36.9**	**44.6**	**11.2**	**92.7**	32.4	41.8	10.3	84.5
Unit-linked margin represents the return made on unit-linked business. Average reserves include managed pension fund assets not consolidated in IFRS balance sheet.								
Note (d)								
Participating business (£m)	**147**	**394**	**141**	**682**	176	322	162	660
As bonus on average reserves (bps)	**35**	**65**	**131**	**60**	42	55	153	59
Average reserves (£bn)	**42.5**	**60.9**	**10.8**	**114.2**	42.2	58.2	10.6	111.0
Participating business is shareholders' share of the bonus to policyholders on with profit and other participating business								
Note (e)								
Spread margin (£m)	**173**	**44**	**673**	**890**	166	50	460	676
As spread margin on average reserves (bps)	**61**	**82**	**153**	**114**	65	83	113	94
Average reserves (£bn)	**28.5**	**5.4**	**43.8**	**77.7**	25.7	6.0	40.5	72.2
Spread margin represents the return made on annuity and non-linked investment business								
Note (f)								
Expected return on shareholder assets (£m)	**223**	**138**	**294**	**655**	167	138	286	591
Equity (%)	**7.8%**	**7.2%**	**7.2%**	**7.2%**	7.0%	7.3%	7.3%	7.3%
Property (%)	**6.3%**	**5.7%**	**5.7%**	**5.7%**	5.5%	5.8%	5.8%	5.8%
Bonds (%)	**5.5%**	**4.4%**	**3.6%**	**4.7%**	5.5%	4.7%	4.4%	4.9%
Expected return being the return made on shareholder net assets								
Note (g)								
Acquisition expenses (£m)	**(353)**	**(515)**	**(216)**	**(1,084)**	(320)	(422)	(203)	(945)
APE (£m)	**1,310**	**1,544**	**1,089**	**3,943**	1,143	1,554	1,049	3,746
As acquisition expense ratio on APE (%)	**27%**	**33%**	**20%**	**27%**	28%	27%	19%	25%
Acquisition expenses include commission incurred in writing new business less deferred costs								
Note (h)								
Administrative expenses (£m)	**(333)**	**(515)**	**(512)**	**(1,360)**	(347)	(506)	(555)	(1,408)
As existing business expense ratio on average reserves (bps)	**31**	**46**	**78**	**48**	35	48	90	53
Average reserves (£bn)	**107.9**	**110.9**	**65.8**	**284.6**	100.3	106.0	61.4	267.7
Administrative expenses comprise expenses and renewal commissions incurred in managing the existing book								

A19 – Analysis of general insurance

(i) United Kingdom (excluding group reinsurance and agencies in run-off)

	Net written premium 2010 £m	Net written premium 2009 £m	Underwriting result 2010 £m	Underwriting result 2009 £m	Combined operating ratio 2010 %	Combined operating ratio 2009 %
Personal						
Motor	**1,195**	1,040	**(46)**	1	**103%**	100%
Homeowner	**809**	942	**12**	21	**100%**	99%
Other	**419**	370	**66**	(22)	**89%**	105%
	2,423	2,352	**32**	—	**97%**	100%
Commercial						
Motor	**545**	484	**10**	17	**98%**	97%
Property	**638**	616	**20**	(16)	**99%**	100%
Other	**440**	414	**44**	23	**90%**	95%
	1,623	1,514	**74**	24	**96%**	98%
Total	**4,046**	3,866	**106**	24	**96%**	99%

(ii) France

	Net written premium 2010 £m	Net written premium 2009 £m	Underwriting result 2010 £m	Underwriting result 2009 £m	Combined operating ratio 2010 %	Combined operating ratio 2009 %
Motor	**318**	322	**(14)**	(25)	**104%**	107%
Property and other	**416**	407	**15**	40	**96%**	90%
Total	**734**	729	**1**	15	**99%**	98%

(iii) Ireland

	Net written premium 2010 £m	Net written premium 2009 £m	Underwriting result 2010 £m	Underwriting result 2009 £m	Combined operating ratio 2010 %	Combined operating ratio 2009 %
Motor	**200**	208	**(32)**	19	**117%**	92%
Property and other	**197**	214	**15**	(30)	**92%**	113%
Total	**397**	422	**(17)**	(11)	**105%**	103%

(iv) Delta Lloyd

	Net written premium 2010 £m	Net written premium 2009 £m	Underwriting result 2010 £m	Underwriting result 2009 £m	Combined operating ratio 2010 %	Combined operating ratio 2009 %
Motor	**400**	389	**(31)**	9	**107%**	98%
Property	**328**	324	**(31)**	(28)	**110%**	109%
Liability	**92**	87	**34**	18	**63%**	81%
Other	**357**	363	**88**	39	**72%**	91%
Total	**1,177**	1,163	**60**	38	**95%**	97%

(v) Canada

	Net written premium 2010 £m	Net written premium 2009 £m	Underwriting result 2010 £m	Underwriting result 2009 £m	Combined operating ratio 2010 %	Combined operating ratio 2009 %
Motor	**1,055**	978	**29**	30	**98%**	97%
Property	**654**	595	**(3)**	(61)	**101%**	111%
Liability	**201**	190	**18**	17	**92%**	91%
Other	**48**	37	**16**	10	**62%**	71%
Total	**1,958**	1,800	**60**	(4)	**97%**	100%

A20 – Funds under management

	2010 Life and related businesses £m	2010 General business and other £m	2010 Total £m	2009 Total £m
Total IFRS assets included in the consolidated statement of financial position	**324,729**	**45,378**	**370,107**	354,391
Less: third party funds included within consolidated IFRS assets	**—**	**(9,999)**	**(9,999)**	(9,980)
	324,729	**35,379**	**360,108**	344,411
Third party funds under management			**75,491**	70,388
			435,599	414,799
Non-managed assets			**(33,348)**	(35,388)
Funds under management			**402,251**	379,411

A21 – Operational cost base

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

	2010 £m	2009 £m
Other expenses (as reported)	**3,537**	5,366
Less: Non operating items included above (amortisation and impairments)	**(476)**	(2,032)
Add: Claims handling costs[1]	**658**	673
Non commission acquisition costs[2]	**1,276**	1,137
Operating cost base	**4,995**	5,144

1. As reported within Claims and benefits paid of £29,152 million *(2009: £27,549 million)*
2. As reported within Fee and commissions expense of £5,867 million *(2009: £4,396 million)*

During 2010, the operating cost base decreased by 3% to £4,995 million *(2009: £5,144 million)*. The like-for-like cost base presented below is adjusted for the impact of foreign exchange, businesses acquired/disposed of 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 £4,686 million compared with a 31 December 2009 like-for-like cost base of £4,638 million. This increase in the cost base supports a like-for-like 8% growth in long-term savings sales for our life business (excluding the impact of foreign exchange and disposal of the Australian business) and a 4% growth in net written premiums for our general insurance and health businesses (excluding the impact of foreign exchange).

Movement in operating cost base

	£m
Total operating cost base 2009	**5,144**
Less: restructuring, integration and brand costs for 2009	**(388)**
European levies[1]	**(71)**
Impact of acquisitions and disposals[2]	**(48)**
Foreign exchange	**1**
2009 like-for-like operating cost base	**4,638**
Inflation[3]	**102**
UK Life	**(4)**
UK General Insurance	**(14)**
Aviva Europe	**19**
Delta Lloyd	**(95)**
Other businesses (including group centre)	**40**
2010 like-for-like operating cost base	**4,686**
Restructuring, integration and brand costs 2010	**243**
European levies[1]	**66**
Total operating cost base 2010	**4,995**

1. Levies and sales taxes charged to European Businesses.
2. Impact of acquisitions & disposals – restatement of the 2009 cost base for the impact of acquisitions and disposals in both 2009 and 2010 to achieve a cost base on a like-for-like basis.
3. 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 & integration costs (but including adjustments for acquisitions & disposals). The overall weighted average is calculated at 2.2%.

New Business

In this section

New Business

B1 – Geographical analysis of life, pension and investment sales

	Present value of new business premiums[1]			
			% Growth	
	2010 £m	2009 £m	Sterling	Local[2] currency
Life and pensions business				
United Kingdom	**10,298**	8,914	16%	16%
France	**4,918**	4,891	1%	4%
Ireland	**938**	1,072	(13)%	(9)%
Italy	**4,456**	3,607	24%	28%
Poland	**603**	1,079	(44)%	(47)%
Spain	**2,084**	2,454	(15)%	(12)%
Other Europe	**538**	420	28%	26%
Aviva Europe	**13,537**	13,523	—	3%
Delta Lloyd[3]	**3,178**	3,665	(13)%	(10)%
Europe	**16,715**	17,188	(3)%	—
North America	**4,728**	4,545	4%	3%
China	**436**	340	28%	25%
Hong Kong	**169**	110	54%	52%
India	**96**	79	22%	13%
Singapore	**345**	155	123%	107%
South Korea	**405**	288	41%	27%
Other Asia	**166**	123	35%	26%
Asia Pacific[5]	**1,617**	1,095	48%	39%
Australia[5]	**—**	261	(100)%	(100)%
Total life and pensions	**33,358**	32,003	4%	5%
Investment sales[4]				
United Kingdom	**1,548**	1,049	48%	48%
Aviva Europe	**1,350**	852	58%	63%
Delta Lloyd[3]	**615**	664	(7)%	(5)%
Europe	**1,965**	1,516	30%	34%
Australia (Aviva Investors)	**266**	188	41%	20%
Asia	**223**	385	(42)%	(46)%
Asia Pacific[5]	**489**	573	(15)%	(23)%
Australia[5]	**—**	734	(100)%	(100)%
Total investment sales	**4,002**	3,872	3%	—
Total long-term savings sales	**37,360**	35,875	4%	5%

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. Delta Lloyd, which operates in the Netherlands, Belgium and Germany, is managed independently from our other European businesses
4. Investment sales are calculated as new single premiums plus the annualised value of new regular premiums
5. Asia Pacific excludes the Australian life business that was sold on 1 October 2009

B2 – Product analysis of life and pension sales

	Present value of new business premiums[1]			
			% Growth	
	2010 £m	2009 £m	Sterling	Local[2] currency
Life and pensions business				
Pensions	**4,062**	3,752	8%	8%
Annuities	**3,170**	1,897	67%	67%
Bonds	**1,686**	2,024	(17)%	(17)%
Protection	**944**	965	(2)%	(2)%
Equity release	**436**	276	58%	58%
United Kingdom	**10,298**	8,914	16%	16%
Pensions	**1,598**	2,618	(39)%	(37)%
Savings	**10,899**	9,862	11%	14%
Annuities	**87**	118	(26)%	(24)%
Protection	**953**	925	3%	7%
Aviva Europe	**13,537**	13,523	—	3%
Delta Lloyd[3]	**3,178**	3,665	(13)%	(10)%
Europe	**16,715**	17,188	(3)%	1%
Life	**999**	871	15%	13%
Annuities	**3,729**	3,674	1%	—
Funding agreements	**—**	—	—	—
North America	**4,728**	4,545	4%	3%
Asia Pacific[4]	**1,617**	1,095	48%	39%
Australia	**—**	261	(100)%	(100)%
Total life and pensions sales	**33,358**	32,003	4%	5%

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. Delta Lloyd, which operates in the Netherlands, Belgium and Germany, is managed independently from our other European businesses
4. Asia Pacific excludes the Australian life business that was sold on 1 October 2009

B3 – Analysis of sales via bancassurance channels

	Present value of new business premiums[1]			
			% Growth	
	2010 £m	2009 £m	Sterling	Local[2] currency
Bancassurance				
United Kingdom – RBS	**962**	1,246	(23)%	(23)%
France – Credit du Nord	**1,245**	1,141	9%	13%
Ireland – Allied Irish Bank	**413**	436	(5)%	(2)%
UniCredit Group	**2,248**	1,804	25%	29%
Eurovita	**716**	563	27%	32%
Unione di Banche	**1,080**	983	10%	14%
Other	**263**	142	85%	92%
Italy[6]	**4,307**	3,492	23%	28%
Poland	**58**	18	222%	205%
Bancaja	**509**	704	(28)%	(25)%
Caixa Galicia	**238**	225	6%	10%
Unicaja	**538**	750	(28)%	(26)%
Caja España	**304**	301	1%	4%
Other	**261**	229	14%	18%
Spain	**1,850**	2,209	(16)%	(13)%
Other Europe	**167**	57	193%	178%
Aviva Europe	**8,040**	7,353	9%	13%
Delta Lloyd[3] – ABN Amro	**384**	398	(4)%	—
Europe	**8,424**	7,751	9%	12%
North America	**—**	—	—	—
Asia Pacific	**831**	471	76%	67%
Total life and pensions	**10,217**	9,468	8%	10%
Investment sales[4]				
United Kingdom – RBS[5]	**371**	177	110%	110%
Total bancassurance sales	**10,588**	9,645	10%	11%

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. Delta Lloyd, which operates in the Netherlands, Belgium and Germany, is managed independently from our other European businesses
4. Investment sales are calculated as new single premiums plus annualised value of new regular premiums.
5. Regular premium sales for the 12 months to 31 December 2010 have been capitalised using a weighted average capitalisation factor of 3.2. As such, regular premium sales have produced an overall contribution to investment sales of £215 million.
6. The 2009 figures for sales via the Italy bancassurance channel show a reclassification of £207 million that was previously reported within the retail channel

B4 – Trend analysis of PVNBP – cumulative

	Present value of new business premiums[1]							
	1Q09 YTD £m	2Q09 YTD £m	3Q09 YTD £m	4Q09 YTD £m	1Q10 YTD £m	2Q10 YTD £m	3Q10 YTD £m	4Q10 YTD £m
Life and pensions business								
Pensions	989	2,089	2,893	3,752	941	2,061	3,028	4,062
Annuities	475	833	1,249	1,897	877	1,603	2,291	3,170
Bonds	713	1,219	1,602	2,024	412	828	1,277	1,686
Protection	245	461	707	965	231	507	737	944
Equity release	83	133	213	276	96	195	298	436
United Kingdom	**2,505**	**4,735**	**6,664**	**8,914**	**2,557**	**5,194**	**7,631**	**10,298**
France	1,270	2,440	3,540	4,891	1,550	2,827	3,869	4,918
Ireland	187	426	690	1,072	247	476	680	938
Italy	1,136	2,198	2,849	3,607	1,567	3,052	3,793	4,456
Poland	351	554	743	1,079	206	319	469	603
Spain	737	1,245	1,642	2,454	590	1,060	1,447	2,084
Other Europe	112	208	306	420	125	258	382	538
Aviva Europe	**3,793**	**7,071**	**9,770**	**13,523**	**4,285**	**7,992**	**10,640**	**13,537**
Of which:								
Bancassurance	*2,259*	*4,128*	*5,493*	*7,353*	*2,611*	*4,916*	*6,434*	*8,040*
Retail	*1,534*	*2,943*	*4,277*	*6,170*	*1,674*	*3,076*	*4,206*	*5,497*
Aviva Europe	*3,793*	*7,071*	*9,770*	*13,523*	*4,285*	*7,992*	*10,640*	*13,537*
Delta Lloyd[2]	942	1,780	2,835	3,665	883	1,732	2,462	3,178
Europe	**4,735**	**8,851**	**12,605**	**17,188**	**5,168**	**9,724**	**13,102**	**16,715**
North America	**1,929**	**3,189**	**3,742**	**4,545**	**997**	**2,334**	**3,668**	**4,728**
Asia Pacific[3]	**325**	**532**	**788**	**1,095**	**409**	**794**	**1,153**	**1,617**
Australia	75	166	261	261	—	—	—	—
Total life and pensions	**9,569**	**17,473**	**24,060**	**32,003**	**9,131**	**18,046**	**25,554**	**33,358**
Investment sales[4]	**744**	**1,948**	**3,042**	**3,872**	**1,043**	**2,192**	**3,039**	**4,002**
Total long term saving sales	**10,313**	**19,421**	**27,102**	**35,875**	**10,174**	**20,238**	**28,593**	**37,360**

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. Delta Lloyd, which operates in the Netherlands, Belgium and Germany, is managed independently from our other European businesses
3. Asia Pacific excludes the Australian life business that was sold on 1 October 2009
4. Investment sales are calculated as new single premiums plus the annualised value of new regular premiums

B5 – Trend analysis of PVNBP – discrete

	Present value of new business premiums[1]								
	1Q09 £m	2Q09 £m	3Q09 £m	4Q09 £m	1Q10 £m	2Q10 £m	3Q10 £m	4Q10 £m	% Growth on 3Q10 Sterling
Life and pensions business									
Pensions	989	1,100	804	859	941	1,120	967	1,034	7%
Annuities	475	358	416	648	877	726	688	879	28%
Bonds	713	506	383	422	412	416	449	409	(9)%
Protection	245	216	246	258	231	276	230	207	(10)%
Equity release	83	50	80	63	96	99	103	138	34%
United Kingdom	**2,505**	**2,230**	**1,929**	**2,250**	**2,557**	**2,637**	**2,437**	**2,667**	**9%**
France	1,270	1,170	1,100	1,351	1,550	1,277	1,042	1,049	1%
Ireland	187	239	264	382	247	229	204	258	26%
Italy	1,136	1,062	651	758	1,567	1,485	741	663	(11)%
Poland	351	203	189	336	206	113	150	134	(11)%
Spain	737	508	397	812	590	470	387	637	65%
Other Europe	112	96	98	114	125	133	124	156	26%
Aviva Europe	**3,793**	**3,278**	**2,699**	**3,753**	**4,285**	**3,707**	**2,648**	**2,897**	**9%**
Of which:									
Bancassurance	*2,259*	*1,869*	*1,365*	*1,860*	*2,611*	*2,305*	*1,518*	*1,606*	*6%*
Retail	*1,534*	*1,409*	*1,334*	*1,893*	*1,674*	*1,402*	*1,130*	*1,291*	*14%*
Aviva Europe	*3,793*	*3,278*	*2,699*	*3,753*	*4,285*	*3,707*	*2,648*	*2,897*	*9%*
Delta Lloyd[2]	942	838	1,055	830	883	849	730	716	(2)%
Europe	**4,735**	**4,116**	**3,754**	**4,583**	**5,168**	**4,556**	**3,378**	**3,613**	**7%**
North America	**1,929**	**1,260**	**553**	**803**	**997**	**1,337**	**1,334**	**1,060**	**(21)%**
Asia Pacific[3]	**325**	**207**	**256**	**307**	**409**	**385**	**359**	**464**	**29%**
Australia	75	91	95	—	—	—	—	—	—
Total life and pensions	**9,569**	**7,904**	**6,587**	**7,943**	**9,131**	**8,915**	**7,508**	**7,804**	**4%**
Investment sales[4]	**744**	**1,204**	**1,094**	**830**	**1,043**	**1,149**	**847**	**963**	**14%**
Total long term saving sales	**10,313**	**9,108**	**7,681**	**8,773**	**10,174**	**10,064**	**8,355**	**8,767**	**5%**

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. Delta Lloyd, which operates in the Netherlands, Belgium and Germany, is managed independently from our other European businesses
3. Asia Pacific excludes the Australian life business that was sold on 1 October 2009
4. Investment sales are calculated as new single premiums plus the annualised value of new regular premiums

B6 – Geographical analysis of regular and single premiums – life and pensions sales

	Regular premiums							Single premiums		
	2010 £m	**Local currency growth**	**WACF**	**Present value £m**	2009 £m	WACF	Present value £m	**2010 £m**	2009 £m	Local currency growth
Pensions	**435**	15%	4.7	2,053	379	4.9	1,847	**2,009**	1,905	5%
Annuities	**—**	—	—	—	—	—	—	**3,170**	1,897	67%
Bonds	**—**	—	—	—	—	—	—	**1,686**	2,024	(17)%
Protection	**144**	(5)%	6.6	944	152	6.3	956	**—**	9	(100)%
Equity release	**—**	—	—	—	—	—	—	**436**	276	58%
United Kingdom	**579**	9%	5.2	2,997	531	5.3	2,803	**7,301**	6,111	19%
France	**89**	—	6.3	565	92	6.6	608	**4,353**	4,283	5%
Ireland	**65**	(13)%	4.0	263	78	4.3	337	**675**	735	(5)%
Italy	**50**	(53)%	5.4	270	111	5.3	592	**4,186**	3,015	44%
Poland	**51**	(32)%	9.2	468	71	13.1	927	**135**	152	(15)%
Spain	**109**	(12)%	5.9	648	128	6.1	782	**1,436**	1,672	(11)%
Other Europe	**89**	5%	4.6	412	82	4.5	365	**126**	55	121%
Aviva Europe	**453**	(18)%	5.8	2,626	562	6.4	3,611	**10,911**	9,912	14%
Delta Lloyd[1]	**172**	(14)%	9.3	1,591	207	9.3	1,935	**1,587**	1,730	(5)%
Europe	**625**	(17)%	6.7	4,217	769	7.2	5,546	**12,498**	11,642	11%
North America	**97**	7%	10.2	993	90	9.6	861	**3,735**	3,684	—
Asia Pacific[2]	**240**	21%	4.7	1,132	185	4.5	828	**485**	267	74%
Australia	**—**	(100)%	—	—	49	4.0	196	**—**	65	(100)%
Total life and pensions	**1,541**	(6)%	6.1	9,339	1,624	6.3	10,234	**24,019**	21,769	12%

1. Delta Lloyd, which operates in the Netherlands, Belgium and Germany, is managed independently from our other European businesses
2. Asia Pacific excludes the Australian life business that was sold on 1 October 2009

B7 – Geographical analysis of regular and single premiums – investment sales

	Regular[2]			Single			PVNBP
	2010 £m	2009 £m	Local currency growth	**2010 £m**	2009 £m	Local currency growth	Local currency growth
Investment sales							
United Kingdom	**72**	69	4%	**1,327**	959	38%	48%
Aviva Europe	**6**	5	20%	**1,344**	847	63%	63%
Delta Lloyd[1]	**—**	—	—	**615**	664	(4)%	(5)%
Europe	**6**	5	20%	**1,959**	1,511	34%	34%
Australia	**—**	—	—	**266**	188	20%	20%
Asia	**—**	—	—	**223**	385	(46)%	(46)%
Asia Pacific	**—**	—	—	**489**	573	(23)%	(23)%
Australia[3]	**—**	—	—	**—**	734	(100)%	(100)%
Total investment sales	**78**	74	5%	**3,775**	3,777	(4)%	—

1. Delta Lloyd, which operates in the Netherlands, Belgium and Germany, is managed independently from our other European businesses
2. UK regular premium sales include ISAs and Unit Trusts which are sold through our JV arrangement with RBS which are capitalised. Regular premium sales for the 12 months to 31 December 2010 totalled £67.3 million and have been capitalised using a weighted average capitalisation factor of 3.2. As such, regular premium sales have produced an overall contribution to investment sales of £215 million out of the UK investment sales of £1,548 million.
3. Asia Pacific excludes the Australian life business that was sold on 1 October 2009

B8 – Aviva Europe analysis of bancassurance and retail sales

Cumulative	Bancassurance 2010 £m	Bancassurance 2009 £m	Bancassurance Local currency growth %	Retail 2010 £m	Retail 2009 £m	Retail Local currency growth %	Total 2010 £m	Total 2009 £m	Total Local currency growth %
Life and pensions									
France	**1,245**	1,141	13%	**3,673**	3,750	1%	**4,918**	4,891	4%
Ireland	**413**	436	(2)%	**525**	636	(14)%	**938**	1,072	(9)%
Italy	**4,307**	3,492	28%	**149**	115	34%	**4,456**	3,607	28%
Poland	**58**	18	205%	**545**	1,061	(51)%	**603**	1,079	(47)%
Spain	**1,850**	2,209	(13)%	**234**	245	(1)%	**2,084**	2,454	(12)%
Other Europe	**167**	57	178%	**371**	363	1%	**538**	420	26%
Aviva Europe	**8,040**	7,353	13%	**5,497**	6,170	(9)%	**13,537**	13,523	3%

Discrete quarter	Bancassurance 4Q 2010 £m	Bancassurance 3Q 2010 £m	Bancassurance 2Q 2010 £m	Bancassurance 1Q 2010 £m	Retail 4Q 2010 £m	Retail 3Q 2010 £m	Retail 2Q 2010 £m	Retail 1Q 2010 £m	Total 4Q 2010 £m	Total 3Q 2010 £m	Total 2Q 2010 £m	Total 1Q 2010 £m
Life and pensions												
France	**259**	274	319	393	**790**	768	958	1,157	**1,049**	1,042	1,277	1,550
Ireland	**85**	96	115	117	**173**	108	114	130	**258**	204	229	247
Italy	**636**	710	1,419	1,542	**27**	31	66	25	**663**	741	1,485	1,567
Poland	**26**	26	3	3	**108**	124	110	203	**134**	150	113	206
Spain	**548**	365	407	530	**89**	22	63	60	**637**	387	470	590
Other Europe	**52**	47	42	26	**104**	77	91	99	**156**	124	133	125
Aviva Europe	**1,606**	**1,518**	**2,305**	**2,611**	**1,291**	**1,130**	**1,402**	**1,674**	**2,897**	**2,648**	**3,707**	**4,285**

B9 – Life and pensions new business – net of tax and non-controlling interest

Life and pensions (net of tax and non-controlling interest)	Present value of new business premiums 2010 £m	Present value of new business premiums 2009 £m	Value of new business 2010 £m	Value of new business Restated 2009 £m	New business margin 2010 %	New business margin Restated 2009 %
United Kingdom	**10,298**	8,914	**254**	177	**2.5%**	2.0%
France	**4,340**	4,111	**100**	94	**2.3%**	2.3%
Ireland	**704**	804	**1**	8	**0.1%**	1.0%
Italy	**1,965**	1,614	**42**	38	**2.1%**	2.4%
Poland	**531**	933	**29**	39	**5.5%**	4.2%
Spain	**1,136**	1,326	**43**	51	**3.8%**	3.8%
Other Europe	**538**	420	**15**	8	**2.8%**	1.9%
Aviva Europe	**9,214**	9,208	**230**	238	**2.5%**	2.6%
Delta Lloyd[2]	**1,721**	3,235	**(41)**	(43)	**(2.4)%**	(1.3)%
Europe	**10,935**	12,443	**189**	195	**1.7%**	1.6%
North America	**4,728**	4,545	**(126)**	16	**(2.7)%**	0.4%
Asia Pacific[1]	**1,598**	1,077	**41**	9	**2.6%**	0.8%
Australia[1]	**—**	271	**—**	13	**—**	4.8%
Total life and pensions	**27,559**	27,250	**358**	410	**1.3%**	1.5%

1. Asia Pacific excludes the Australian life business that was sold on 1 October 2009
2. For details of the 2009 Delta Lloyd restatement see basis of preparation in the MCEV Financial Statements

Capital Management

In this section

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 European Commission has published a draft directive (‘Omnibus II’) proposing some changes, including as expected a change to the date for implementation of Solvency II from 31 October 2012 to 31 December 2012. Aviva continues to actively participate in the development of the requirements through the key European industry working groups and engaging with the FSA and HM Treasury to influence the on-going negotiations in Brussels.

The European Commission is now giving further consideration to the wording of the implementing measures and is expected to finalise these during 2011.

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.

	2010 £m	Restated 2009 £m
Long-term savings	**21,793**	20,792
General insurance and health	**5,613**	4,562
Fund management	**465**	269
Other business	**178**	(246)
Corporate[1]	**(1,521)**	(1,327)
Total capital employed	**26,528**	24,050
Financed by		
Equity shareholders' funds	**15,295**	13,092
Non-controlling interests	**3,977**	4,279
Direct capital instrument	**990**	990
Preference shares	**200**	200
Subordinated debt	**4,572**	4,637
External debt	**1,494**	852
Total capital employed	**26,528**	24,050

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 31 December 2010 we had £26.5 billion *(31 December 2009: £24.1 billion)* of total capital employed in our trading operations, measured on an MCEV basis.

Financial leverage, the ratio of external senior and subordinated debt to MCEV capital and reserves, was 31.5% *(31 December 2009: 31.6%)*. 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 9.4 times *(31 December 2009: 8.7 times)*.

At 31 December 2010 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 £7,279 million *(31 December 2009: £6,634 million)*, with a weighted average cost of 4.5% *(31 December 2009: 5.0%)*. The group Weighted Average Cost of Capital (WACC) is 7.8% *(31 December 2009: 8.0%)* 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 31 December 2010 was 9.9% *(31 December 2009: 9.8%)* based on a risk free rate of 3.4% *(31 December 2009: 4.0%)*, an equity risk premium of 4.0% *(31 December 2009: 4.0%)* and a market beta of 1.6 *(31 December 2009: 1.4)*.

C2 – Group capital structure continued

Shareholders' funds, including non-controlling interest

	2010 Closing shareholders' funds			Restated 2009 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
Life assurance						
United Kingdom	**4,805**	**1,756**	**6,561**	4,454	1,343	5,797
France	**1,700**	**1,490**	**3,190**	1,707	1,386	3,093
Ireland	**1,171**	**78**	**1,249**	1,139	201	1,340
Italy	**1,256**	**238**	**1,494**	1,405	290	1,695
Poland	**279**	**1,002**	**1,281**	239	1,073	1,312
Spain	**1,291**	**467**	**1,758**	1,288	662	1,950
Other Europe	**270**	**139**	**409**	435	(87)	348
Aviva Europe	**5,967**	**3,414**	**9,381**	6,213	3,525	9,738
Delta Lloyd	**4,027**	**(1,197)**	**2,830**	2,983	(49)	2,934
Europe	**9,994**	**2,217**	**12,211**	9,196	3,476	12,672
North America	**3,500**	**(1,383)**	**2,117**	3,072	(1,490)	1,582
Asia Pacific	**757**	**147**	**904**	595	146	741
	19,056	**2,737**	**21,793**	17,317	3,475	20,792
General insurance and health						
United Kingdom	**2,895**	**—**	**2,895**	1,876	—	1,876
France	**434**	**—**	**434**	410	—	410
Ireland	**387**	**—**	**387**	450	—	450
Other Europe	**300**	**—**	**300**	329	—	329
Aviva Europe	**1,121**	**—**	**1,121**	1,189	—	1,189
Delta Lloyd	**531**	**—**	**531**	545	—	545
Europe	**1,652**	**—**	**1,652**	1,734	—	1,734
North America	**1,021**	**—**	**1,021**	928	—	928
Asia Pacific	**45**	**—**	**45**	24	—	24
	5,613	**—**	**5,613**	4,562	—	4,562
Fund management	**465**	**—**	**465**	269	—	269
Other business	**178**	**—**	**178**	(246)	—	(246)
Corporate	**(1,521)**	**—**	**(1,521)**	(1,327)	—	(1,327)
Total capital employed	**23,791**	**2,737**	**26,528**	20,575	3,475	24,050
Subordinated debt	**(4,572)**	**—**	**(4,572)**	(4,637)	—	(4,637)
External debt	**(1,494)**	**—**	**(1,494)**	(852)	—	(852)
Total equity	**17,725**	**2,737**	**20,462**	15,086	3,475	18,561
Less:						
Non-controlling interests			**(3,977)**			(4,279)
Direct capital instruments			**(990)**			(990)
Preference capital			**(200)**			(200)
Equity shareholders' funds			**15,295**			13,092
Less: goodwill and intangibles[1]			**(4,473)**			(4,628)
Equity shareholders funds' excluding goodwill and intangibles			**10,822**			8,464

1. Goodwill and intangibles comprise £3,391 million *(31 December 2009: £3,381 million)* of goodwill in subsidiaries, £1,357 million *(31 December 2009: £1,367 million)* of intangibles in subsidiaries, £156 million *(31 December 2009: £150 million)* of goodwill and intangibles in joint ventures and £80 million *(31 December 2009: £264 million)* of goodwill in associates, net of associated deferred tax liabilities of £261 million *(31 December 2009: £271 million)* and the minority share of intangibles of £250 million *(31 December 2009: £263 million)*.

C3 Analysis of return on capital employed

C3 i – Analysis of IFRS return on capital employed

	Operating return[1] Before tax £m	Operating return[1] After tax £m	Opening shareholders' funds including non-controlling interests £m	Return on capital %
				2010
Life assurance	**2,318**	**1,774**	**17,317**	**10.2%**
General insurance and health	**993**	**720**	**4,562**	**15.8%**
Fund management	**201**	**141**	**269**	**52.4%**
Other business	**(220)**	**(155)**	**(246)**	**63.0%**
Corporate[2]	**(419)**	**(322)**	**(1,327)**	**24.3%**
Return on total capital employed	**2,873**	**2,158**	**20,575**	**10.5%**
Subordinated debt	**(290)**	**(209)**	**(4,637)**	**4.5%**
External debt	**(33)**	**(24)**	**(852)**	**2.8%**
Return on total equity	**2,550**	**1,925**	**15,086**	**12.8%**
Less: Non-controlling interests		**(332)**	**(3,540)**	**9.4%**
Direct capital instrument		**(42)**	**(990)**	**4.2%**
Preference capital		**(17)**	**(200)**	**8.5%**
Return on equity shareholders' funds		**1,534**	**10,356**	**14.8%**

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.

	Operating return[1] Before tax £m	Operating return[1] After tax £m	Opening shareholders' funds including non-controlling interests £m	Return on capital %
				2009
Life assurance	1,887	1,405	16,581	8.5%
General insurance and health	919	660	5,516	12.0%
Fund management	133	93	340	27.4%
Other business	(214)	(152)	(199)	76.4%
Corporate[2]	(368)	(290)	(2,140)	13.6%
Return on total capital employed	2,357	1,716	20,098	8.5%
Subordinated debt	(293)	(211)	(4,606)	4.6%
External debt	(42)	(30)	(919)	3.3%
Return on total equity	2,022	1,475	14,573	10.1%
Less: Non-controlling interests		(193)	(2,204)	8.8%
Direct capital instrument		(44)	(990)	4.4%
Preference capital		(17)	(200)	8.5%
Return on equity shareholders' funds		1,221	11,179	10.9%

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 £368 million comprises costs of £108 million, net finance charge on the main UK pension scheme of £74 million and interest on internal lending arrangements of £227 million offset by investment return of £41 million.

C3 Analysis of return on capital employed continued

C3 ii – Analysis of MCEV return on capital employed

	Operating return[1] Before tax £m	Operating return[1] After tax £m	Restated Opening shareholders' funds including non-controlling interests £m	Return on capital %
				2010
Life assurance				
United Kingdom	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%
Aviva Europe	2,013	1,411	9,738	14.5%
Delta Lloyd	83	61	2,934	2.1%
Europe	2,096	1,472	12,672	11.6%
North America	289	188	1,582	11.9%
Asia Pacific	109	85	741	11.5%
	3,579	2,523	20,792	12.1%
General insurance and health				
United Kingdom[2]	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)%
Aviva Europe	109	92	1,189	7.7%
Delta Lloyd	146	106	545	19.4%
Europe	255	198	1,734	11.4%
North America	222	151	928	16.3%
Asia Pacific	(6)	(5)	24	(20.8)%
	993	720	4,562	15.8%
Fund management	125	87	269	32.3%
Other business	(195)	(138)	(246)	56.1%
Corporate[3]	(419)	(322)	(1,327)	24.3%
Return on total capital employed	4,083	2,870	24,050	11.9%
Subordinated debt	(290)	(209)	(4,637)	4.5%
External debt	(33)	(24)	(852)	2.8%
Return on total equity	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%
Return on equity shareholders' funds		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.

C3 Analysis of return on capital employed continued

C3 ii – Analysis of MCEV return on capital employed continued

	Operating return[1] Before tax £m	Operating return[1] After tax £m	Restated 2009 Restated Opening shareholders' funds including non-controlling interests £m	Restated 2009 Return on capital %
Life assurance				
United Kingdom	787	567	5,069	11.2%
France	785	515	2,872	17.9%
Ireland	64	55	1,492	3.7%
Italy	216	147	1,671	8.8%
Poland	499	404	1,415	28.6%
Spain	113	79	2,189	3.6%
Other Europe	27	23	335	6.9%
Aviva Europe	1,704	1,223	9,974	12.3%
Delta Lloyd	640	469	3,005	15.6%
Europe	2,344	1,692	12,979	13.0%
North America	266	266	750	35.5%
Asia Pacific	101	71	981	7.2%
	3,498	2,596	19,779	13.1%
General insurance and health				
United Kingdom[2]	494	356	2,592	13.7%
France	96	63	400	15.8%
Ireland	57	50	545	9.2%
Other Europe	(21)	(15)	377	(4.0)%
Aviva Europe	132	98	1,322	7.4%
Delta Lloyd	143	104	705	14.8%
Europe	275	202	2,027	10.0%
North America	144	98	878	11.2%
Asia Pacific	6	4	19	21.1%
	919	660	5,516	12.0%
Fund management	51	36	340	10.6%
Other business	(173)	(121)	(199)	60.8%
Corporate[3]	(368)	(290)	(2,140)	13.6%
Return on total capital employed	3,927	2,881	23,296	12.4%
Subordinated debt	(293)	(211)	(4,606)	4.6%
External debt	(42)	(30)	(919)	3.3%
Return on total equity	3,592	2,640	17,771	14.9%
Less: Non-controlling interests		(378)	(3,109)	12.2%
Direct capital instrument		(44)	(990)	4.4%
Preference capital		(17)	(200)	8.5%
Return on equity shareholders' funds		2,201	13,472	16.3%

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 £368 million comprises costs of £108 million, net finance charge on the main UK pension scheme of £74 million and interest on internal lending arrangements of £227 million offset by investment return of £41 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 2010 result of £1.7 billion represents a £0.7 billion increase on 2009 and reinforces our confidence in the capital generation position of the Group. This excludes the negative impact of the Delta Lloyd longevity assumption change of £0.2 billion which is included in the MCEV existing business free surplus generated.

Profits from existing life business remain strong, generating £2.1 billion of capital[1] *(31 December 2009: £1.9 billion)*, with a further £0.6 billion *(31 December 2009: £0.6 billion)* generated by the general insurance, fund management and non-insurance businesses. Capital invested in new business has reduced significantly to £1.0 billion *(31 December 2009: £1.5 billion)*, benefiting in particular from management actions to improve capital efficiency in the US business, the utilisation of the RIEESA to finance new business in UK Life and reduced required capital on general insurance business.

	2010 £bn	2009 £bn
Operational capital generation:		
Life in-force profits[1]	**2.1**	1.9
General insurance, fund management and non-insurance profits	**0.6**	0.6
Operational capital generated before investment in new business	**2.7**	2.5
Capital invested in new business	**(1.0)**	(1.5)
Operational capital generated after investment in new business	**1.7**	1.0

1. Life in-force profits 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 the life business this is the impact of initial and required capital on free surplus. For general insurance businesses this reflects the movement in required capital, which we have assumed to equal two times the regulatory minimum. Where appropriate, the movement in capital requirements excludes the impact of foreign exchange movements.

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 £0.6 billion surplus, a strong improvement on the 2009 position.

	2010 £bn	2009 £bn
Operational capital generated after investment in new business	**1.7**	1.0
Interest, corporate and other costs	**(0.6)**	(0.5)
External dividend net of scrip	**(0.5)**	(0.6)
Net operational capital generation after financing	**0.6**	(0.1)

C5 – Capital required to write new business, 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.

2010	Initial capital £m	Required capital £m	Total invested capital £m	IRR %	Payback period years
United Kingdom	**98**	**198**	**296**	**15%**	**7**
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**
Aviva Europe	**182**	**507**	**689**	**13%**	**7**
Delta Lloyd	**106**	**112**	**218**	**6%**	**16**
Europe	**288**	**619**	**907**	**11%**	**9**
North America	**65**	**366**	**431**	**14%**	**4**
Asia Pacific	**62**	**34**	**96**	**11%**	**13**
Total	**513**	**1,217**	**1,730**	**12.5%**	**8**

2009	Initial capital £m	Required capital £m	Total invested capital £m	IRR %	Payback period Years
United Kingdom	109	133	242	14%	8
France	53	169	222	9%	9
Ireland	56	23	79	6%	10
Italy	27	156	183	10%	7
Poland	20	9	29	22%	5
Spain	25	72	97	26%	3
Other Europe	43	7	50	12%	8
Aviva Europe	224	436	660	13%	7
Delta Lloyd	116	140	256	6%	33
Europe	340	576	916	11%	15
North America	162	376	538	7%	14
Asia Pacific	60	59	119	8%	20
Total	**671**	**1,144**	**1,815**	**10.0%**	**14**

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 E12 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:

2010	£m
Total capital invested	**1,730**
Non-controlling interests	**(304)**
Benefit of RIEESA on new business funding	**(104)**
Timing differences (point of sale versus year end basis)	**(72)**
New business impact on free surplus	**1,250**

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	Total 2010 £bn	Total 2009 £bn
Insurance Groups Directive (IGD) capital resources	**6.0**	**10.3**	**16.3**	15.7
Less: capital resource requirement	**(6.0)**	**(6.5)**	**(12.5)**	(11.2)
Insurance Group Directive (IGD) excess solvency	**—**	**3.8**	**3.8**	4.5
Cover over EU minimum (calculated excluding UK life funds)			**1.6 times**	1.7 times

The EU Insurance Groups Directive (IGD) regulatory capital solvency surplus has decreased by £0.7 billion since 31 December 2009 to £3.8 billion. The key movements over the period are set out in the following table:

	£bn
IGD solvency surplus at 31 December 2009	**4.5**
Operating profits net of other income and expenses	**1.0**
Dividends net of scrip	**(0.5)**
Market movements including foreign exchange	**(0.2)**
Pension scheme funding	**(0.3)**
Increase in Capital Resource Requirement	**(0.3)**
Acquisitions (River Road and other small transactions)	**(0.2)**
Other	**(0.2)**
Estimated IGD solvency surplus at 31 December 2010	**3.8**

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

Reconciliation of Group IGD capital resources to FRS 27 capital

The reconciliation below provides analysis of differences between our capital resources and the amounts included in the capital statement made in accordance with FRS 27 and disclosed within our consolidated accounts. The Group Capital Adequacy report is prepared in accordance with the FSA valuation rules and brings in capital in respect of the UK Life valued in accordance with FSA regulatory rules excluding surpluses in with-profit funds. The FRS 27 disclosure brings in the realistic value of UK Life capital resources. As the two bases differ greatly, the reconciliation below is presented by removing the restricted regulatory assets and then replacing them with the unrestricted realistic assets.

	2010 £bn
Total capital and reserves (IFRS basis)	**17.7**
Plus: Other qualifying capital	**5.0**
Plus: UK unallocated divisible surplus	**2.1**
Less: Goodwill, acquired AVIF and intangible assets	**(6.5)**
Less: Adjustments onto a regulatory basis	**(2.0)**
Group Capital Resources on regulatory basis	**16.3**
The Group Capital Resources can be analysed as follows:	
Core Tier 1 Capital	**13.6**
Innovative Tier 1 Capital	**1.0**
Total Tier 1 Capital	**14.6**
Upper Tier 2 Capital	**1.8**
Lower Tier 2 Capital	**3.6**
Group Capital Resources Deductions	**(3.7)**
Group Capital Resources on regulatory basis (Tier 1 & Tier 2 Capital)	**16.3**
Less: UK life restricted regulatory assets	**(7.2)**
Add: UK life unrestricted realistic assets	**6.1**
Add: Overseas UDS – restricted asset	**1.4**
Total FRS 27 capital	**16.6**

C6 – Regulatory capital continued

Regulatory capital – Long-term businesses

For our non-participating worldwide life assurance businesses, our capital requirements, expressed as a percentage of the EU minimum, are 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.

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 non-participating life business, expressed as a percentage of the EU minimum (or equivalent) solvency margin has decreased to 129% *(31 December 2009: 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 31 December 2010 the aggregate regulatory requirements based on the EU minimum test amounted to £6.8 billion *(31 December 2009: £6.1 billion)*. At this date, the actual net worth held in our long-term business was £10.0 billion *(31 December 2009: £9.8 billion)* which represents 147% *(31 December 2009: 159%)* 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 31 December 2010 and 31 December 2009.

						2010	2009
	Estimated realistic assets £bn	**Realistic liabilities[1] £bn**	**Estimated realistic inherited estate[2] £bn**	**Support Arrangement[3] £bn**	**Estimated risk Capital Margin[5] £bn**	**Estimated excess £bn**	Estimated excess £bn
NWPSF	**20.8**	**(20.8)**	**—**	**1.2**	**(0.4)**	**0.8**	0.6
OWPSF	**3.1**	**(2.8)**	**0.3**	**—**	**(0.1)**	**0.2**	0.1
WPSF[4]	**20.4**	**(18.6)**	**1.8**	**—**	**(0.4)**	**1.4**	1.4
Aggregate	**44.3**	**(42.2)**	**2.1**	**1.2**	**(0.9)**	**2.4**	2.1

1. These realistic liabilities include the shareholders' share of future bonuses of £0.7 billion *(31 December 2009: £0.6 billion)*. Realistic liabilities adjusted to eliminate the shareholders' share of future bonuses are £41.5 billion *(31 December 2009: £42.1 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 £1.9 billion, £0.3 billion and £3.1 billion for NWPSF, OWPSF and WPSF respectively *(31 December 2009: £2.2 billion, £0.3 billion and £3.1 billion)*.
2. Estimated realistic inherited estate at 31 December 2009 was £nil, £0.2 billion and £1.6 billion for NWPSF, OWPSF and WPSF respectively.
3. The support arrangement represents the reattributed estate of £1.2 billion at 31 December 2010 *(31 December 2009: £1.1 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 3.7 times covered by the inherited estate and support arrangement.*(31 December 2009: 3.6 times)*.

Investment mix

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

	2010 %	2009 %
Equity	**26%**	21%
Property	**16%**	12%
Fixed interest	**57%**	59%
Other	**1%**	8%

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 ± 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	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Assurance mortality +5%	Annuitant mortality -5% 2010
Insurance participating	(55)	(235)	65	(125)	(45)	(10)	(45)
Insurance non-participating	(220)	265	55	(55)	(20)	(45)	(310)
Investment participating	(15)	15	35	(70)	(15)	—	—
Investment non-participating	(30)	35	15	(15)	(5)	—	—
Assets backing life shareholders' funds	15	(15)	160	(155)	—	—	—
Total	**(305)**	**65**	**330**	**(420)**	**(85)**	**(55)**	**(355)**

Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Assurance mortality +5%	Annuitant mortality -5% 2010
Insurance participating	(85)	(190)	65	(125)	(45)	(10)	(45)
Insurance non-participating	(590)	680	240	(240)	(20)	(45)	(310)
Investment participating	(15)	15	35	(70)	(15)	—	—
Investment non-participating	(110)	125	15	(15)	(5)	—	—
Assets backing life shareholders' funds	(90)	90	280	(275)	—	—	—
Total	**(890)**	**720**	**635**	**(725)**	**(85)**	**(55)**	**(355)**

C7 – IFRS Sensitivity analysis continued

Long-term businesses

Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Assurance mortality +5%	Annuitant mortality -5%
							2009
Insurance participating	(20)	(275)	15	(35)	(15)	(5)	(40)
Insurance non-participating	(190)	270	35	(35)	(25)	(40)	(280)
Investment participating	(65)	(15)	20	(30)	(15)	—	—
Investment non-participating	(30)	45	20	(20)	(5)	—	—
Assets backing life shareholders' funds	(10)	10	135	(140)	—	—	—
Total	(315)	35	225	(260)	(60)	(45)	(320)

Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Assurance mortality +5%	Annuitant mortality -5%
							2009
Insurance participating	(40)	(235)	20	(40)	(15)	(5)	(40)
Insurance non-participating	(380)	535	220	(220)	(25)	(40)	(280)
Investment participating	(65)	(15)	20	(30)	(15)	—	—
Investment non-participating	(80)	125	20	(20)	(5)	—	—
Assets backing life shareholders' funds	(65)	85	215	(215)	—	—	—
Total	(630)	495	495	(525)	(60)	(45)	(320)

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 business in the UK, US and the Netherlands. 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 and the relative durations of assets and liabilities; 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 sensitivity to movements in equity and property market values relates mainly to holdings in the Netherlands, although the impact on IFRS profit is moderated by the classification of equities as available for sale.

Changes in sensitivities between 2009 and 2010 reflect movements in market interest rates, portfolio growth, changes to asset mix and the relative durations of assets and liabilities and asset liability management actions.

Investment variances of £791 million in 2010 include £1,010 million relating to Delta Lloyd. Of this, around £800 million is due to differing movements in asset and liability yield curves while the remainder primarily relates to gains on interest rate derivatives. 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 has not been offset by a corresponding movement in liabilities. The AAA collateralised bond spread movement in the year reflected the perceived risk regarding the curve's components which include bonds issued by Spanish savings banks and a range of other European organisations. If spreads were to reduce, this would increase the insurance liabilities and this increase may not be offset by a corresponding increase in asset values. Changes to the Delta Lloyd curve, which can generate gains or losses, can therefore significantly impact profit before tax and shareholders' equity and the magnitude of this sensitivity is illustrated by the £800 million profit before tax and increase in shareholders' equity experienced in 2010.

The mortality sensitivities relate primarily to the UK.

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

Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Gross loss ratios +5%
						2010
Gross of reinsurance	**(305)**	**300**	**95**	**(100)**	**(135)**	**(325)**
Net of reinsurance	**(360)**	**365**	**95**	**(100)**	**(135)**	**(315)**

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%
						2010
Gross of reinsurance	**(305)**	**300**	**95**	**(100)**	**(35)**	**(325)**
Net of reinsurance	**(360)**	**365**	**95**	**(100)**	**(35)**	**(315)**

Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Gross loss ratios +5%
						2009
Gross of reinsurance	(310)	295	105	(110)	(135)	(345)
Net of reinsurance	(365)	365	105	(110)	(135)	(330)

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%
						2009
Gross of reinsurance	(310)	295	105	(110)	(35)	(345)
Net of reinsurance	(365)	365	105	(110)	(35)	(330)

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

Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%
				2010
Total	**5**	**(5)**	**15**	**35**

Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%
				2010
Total	**(30)**	**40**	**20**	**30**

Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%
				2009
Total	(20)	25	70	(30)

Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%
				2009
Total	(40)	55	80	(50)

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.

C7 – IFRS Sensitivity analysis continued

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

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

2010	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
Goodwill and acquired value of in-force business and intangible assets	**—**	**—**	**6,197**	**6,197**	**—**	**6,197**
Interests in joint ventures and associates	**591**	**519**	**1,541**	**2,651**	**(14)**	**2,637**
Property and equipment	**—**	**124**	**626**	**750**	**—**	**750**
Investment property	**4,015**	**7,062**	**1,987**	**13,064**	**—**	**13,064**
Loans	**35**	**8,314**	**34,725**	**43,074**	**—**	**43,074**
Financial investments						
Debt securities	**16,150**	**85,414**	**65,918**	**167,482**	**—**	**167,482**
Equity securities	**31,441**	**12,308**	**5,327**	**49,076**	**—**	**49,076**
Other investments	**26,814**	**6,608**	**3,308**	**36,730**	**—**	**36,730**
Reinsurance assets	**1,215**	**719**	**5,150**	**7,084**	**—**	**7,084**
Deferred tax assets	**—**	**—**	**288**	**288**	**—**	**288**
Current tax assets	**—**	**—**	**198**	**198**	**—**	**198**
Receivables and other financial assets	**173**	**2,192**	**5,930**	**8,295**	**—**	**8,295**
Deferred acquisition costs and other assets	**123**	**80**	**5,869**	**6,072**	**—**	**6,072**
Prepayments and accrued income	**133**	**1,253**	**2,305**	**3,691**	**—**	**3,691**
Cash and cash equivalents	**4,772**	**12,194**	**8,489**	**25,455**	**—**	**25,455**
Assets of operations classified as held for sale	**—**	**—**	**—**	**—**	**14**	**14**
Total	**85,462**	**136,787**	**147,858**	**370,107**	**—**	**370,107**
Total %	**23.0%**	**37.0%**	**40.0%**	**100.0%**	**—**	**100.0%**
2009	80,796	135,628	137,967	354,391	—	354,391
2009 %	22.8%	38.3%	38.9%	100.0%	—	100.0%

As at 31 December 2010, 40.0% of our total asset base was shareholder assets, 37.0% participating assets where Aviva shareholders have partial exposure, and 23.0% policyholder assets where Aviva shareholders have no exposure. Of the total assets, investment property, loans and financial investments comprised £309.4 billion, compared to £292.2 billion at 2009. As a result of the 2009 investment reclassifications, shareholder assets as a percentage of total assets have increased by 0.5% *(from 38.4% as previously reported in 2009 to 38.9%).*

During 2010, the Group has continued to refine its classification of assets. Where relevant, 2009 comparative amounts in the tables that follow have been adjusted accordingly.

The Group undertook a review of investment classifications during 2010, the allocation of assets between shareholder, participating and policyholder funds, and credit rating classifications, with the following effect on 2009 previously reported amounts:

- In our Spanish business debt securities of £2,362 million and equity securities of £10 million previously recognised as participating fund assets have been reclassified as shareholder assets.
- In our UK Life business, investments and other assets backing indexed linked policies previously recognised as policyholder assets have been reclassified as shareholder assets. Reclassified assets total £1,890 million, split £1,214 million debt securities, £551 million loans, £97 million other investments and £28 million reinsurance assets.
- In our business in France, equity and debt securities held indirectly through majority owned consolidated mutual funds managed by third parties previously presented as unit trusts and other investment vehicles within other investments, are now presented as equity and debt securities. The effect is to increase equity and debt securities by £2,085 million and £1,247 million respectively and decrease unit trusts and other investment vehicles within other investments by £3,332 million. The fair value hierarchy of the reclassified investments remains the same, except for £50 million equity securities considered Level 3, which were previously treated as Level 1 when classified as other investments.
- In our businesses in the UK, the credit ratings of certain non-rated private placements and other bonds totalling £1,917 million have previously been classified according to their internal credit ratings. These are now classified as non-rated.

The net effect of the adjustments above is to increase shareholder assets at 31 December 2009 by £4,262 million and decrease policyholder and participating fund assets by £1,890 million and £2,372 million respectively.

None of these adjustments affect balances reported in the IFRS primary statements.

Where relevant, 2009 comparative amounts in the table above and those that follow in this section have been adjusted accordingly.

D2 – Total assets – Valuation bases/fair value hierarchy

	2010				2009			
Total assets	**Fair value £m**	**Amortised cost £m**	**Equity accounted /tax assets[1] £m**	**Total £m**	Fair value £m	Amortised cost £m	Equity accounted /tax assets[1] £m	Total £m
Goodwill and acquired value of in-force business and intangible assets	**—**	**6,197**	**—**	**6,197**	—	6,241	—	6,241
Interests in joint ventures and associates	**—**	**—**	**2,651**	**2,651**	—	—	2,982	2,982
Property and equipment	**440**	**310**	**—**	**750**	415	340	—	755
Investment property	**13,064**	**—**	**—**	**13,064**	12,430	—	—	12,430
Loans	**21,028**	**22,046**	**—**	**43,074**	20,890	20,189	—	41,079
Financial investments								
Debt securities	**167,482**	**—**	**—**	**167,482**	161,757	—	—	161,757
Equity securities	**49,076**	**—**	**—**	**49,076**	45,427	—	—	45,427
Other investments	**36,730**	**—**	**—**	**36,730**	31,518	—	—	31,518
Reinsurance assets	**—**	**7,084**	**—**	**7,084**	—	7,572	—	7,572
Deferred tax assets	**—**	**—**	**288**	**288**	—	—	218	218
Current tax assets	**—**	**—**	**198**	**198**	—	—	359	359
Receivables and other financial assets	**—**	**8,295**	**—**	**8,295**	—	9,652	—	9,652
Deferred acquisition costs and other assets	**—**	**6,072**	**—**	**6,072**	—	5,621	—	5,621
Prepayments and accrued income	**—**	**3,691**	**—**	**3,691**	—	3,604	—	3,604
Cash and cash equivalents	**25,455**	**—**	**—**	**25,455**	25,176	—	—	25,176
Total	**313,275**	**53,695**	**3,137**	**370,107**	297,613	53,219	3,559	354,391
Total %	**84.6%**	**14.5%**	**0.9%**	**100.0%**	84.0%	15.0%	1.0%	100.0%

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

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

Total assets – Policyholder assets 2010	Fair value £m	Amortised cost £m	Equity accounted/ tax assets[1] £m	Total £m
Goodwill and acquired value of in-force business and intangible assets	—	—	—	—
Interests in joint ventures and associates	—	—	591	591
Property and equipment	—	—	—	—
Investment property	4,015	—	—	4,015
Loans	—	35	—	35
Financial investments				
Debt securities	16,150	—	—	16,150
Equity securities	31,441	—	—	31,441
Other investments	26,814	—	—	26,814
Reinsurance assets	—	1,215	—	1,215
Deferred tax assets	—	—	—	—
Current tax assets	—	—	—	—
Receivables and other financial assets	—	173	—	173
Deferred acquisition costs and other assets	—	123	—	123
Prepayments and accrued income	—	133	—	133
Cash and cash equivalents	4,772	—	—	4,772
Total	**83,192**	**1,679**	**591**	**85,462**
Total %	**97.3%**	**2.0%**	**0.7%**	**100.0%**
2009	77,975	2,465	356	80,796
2009 %	96.5%	3.1%	0.4%	100.0%

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

Total assets – Participating fund assets 2010	Fair value £m	Amortised cost £m	Equity accounted/ tax assets[1] £m	Total £m
Goodwill and acquired value of in-force business and intangible assets	—	—	—	—
Interests in joint ventures and associates	—	—	519	519
Property and equipment	42	82	—	124
Investment property	7,062	—-	—	7,062
Loans	1,062	7,252	—	8,314
Financial investments				
Debt securities	85,414	—	—	85,414
Equity securities	12,308	—	—	12,308
Other investments	6,608	—	—	6,608
Reinsurance assets	—	719	—	719
Deferred tax assets	—	—	—	—
Current tax assets	—	—	—	—
Receivables and other financial assets	—	2,192	—	2,192
Deferred acquisition costs and other assets	—	80	—	80
Prepayments and accrued income	—	1,253	—	1,253
Cash and cash equivalents	12,194	—	—	12,194
Total	**124,690**	**11,578**	**519**	**136,787**
Total %	**91.1%**	**8.5%**	**0.4%**	**100.0%**
2009	122,794	12,237	597	135,628
2009 %	90.5%	9.0%	0.5%	100.0%

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

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

Total assets – Shareholder assets 2010	Fair value £m	Amortised cost £m	Equity accounted/ tax assets[1] £m	Total £m
Goodwill and acquired value of in-force business and intangible assets	—	6,197	—	6,197
Interests in joint ventures and associates	—	—-	1,541	1,541
Property and equipment	398	228	—	626
Investment property	1,987	—	—	1,987
Loans	19,966	14,759	—	34,725
Financial investments				
Debt securities	65,918	—	—	65,918
Equity securities	5,327	—	—	5,327
Other investments	3,308	—	—	3,308
Reinsurance assets	—	5,150	—	5,150
Deferred tax assets	—	—	288	288
Current tax assets	—	—	198	198
Receivables and other financial assets	—	5,930	—	5,930
Deferred acquisition costs and other assets	—	5,869	—	5,869
Prepayments and accrued income	—	2,305	—	2,305
Cash and cash equivalents	8,489	—	—	8,489
Total	**105,393**	**40,438**	**2,027**	**147,858**
Total %	**71.3%**	**27.3%**	**1.4%**	**100.0%**
2009	96,844	38,517	2,606	137,967
2009 %	70.2%	27.9%	1.9%	100.0%

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

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.

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

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

	Fair value hierarchy						
Total assets 2010	**Level 1 £m**	**Level 2 £m**	**Level 3 £m**	**Sub-total fair value £m**	**Amortised cost £m**	**Less: Assets of operations classified as held for sale £m**	**Balance sheet total £m**
Investment properties	—	**13,064**	—	**13,064**	—	—	**13,064**
Loans	—	**21,028**	—	**21,028**	**22,046**	—	**43,074**
Debt securities	**116,577**	**42,196**	**8,709**	**167,482**	—	—	**167,482**
Equity securities	**43,455**	**4,649**	**972**	**49,076**	—	—	**49,076**
Other investments (including derivatives)	**29,982**	**4,080**	**2,668**	**36,730**	—	—	**36,730**
Total	**190,014**	**85,017**	**12,349**	**287,380**	**22,046**	—	**309,426**
Total %	**61.4%**	**27.5%**	**4.0%**	**92.9%**	**7.1%**	—	**100.0%**
2009	181,075	79,637	11,310	272,022	20,189	(31)	292,180
2009 %	62.0%	27.2%	3.9%	93.1%	6.9%	—	100.0%

At 31 December 2010, the proportion of total financial investments, loans and investment properties classified as Level 1 and Level 2 in the fair value hierarchy were broadly level at 61% *(2009: 62%)* and 28% *(2009: 27%)* respectively. At Level 3 (fair valued using models with significant unobservable market parameters) financial investments, loans and investment properties have remained constant at 4% *(2009: 4%).*

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 £655 million of the total £3,391 million of goodwill and £767 million of the total £2,806 million of other intangible assets. These balances primarily represent the value of bancassurance distribution agreements acquired in these business combinations.

As at 31 December 2010, the group has assessed the value of these bancassurance related assets and has not identified a need to impair any of these amounts.

D3 – Analysis of asset quality continued

D3.2 – Investment property

Investment property – Total	2010 Level 1 £m	2010 Level 2 £m	2010 Level 3 £m	2010 Total £m	2009 Level 1 £m	2009 Level 2 £m	2009 Level 3 £m	2009 Total £m
	Fair value hierarchy				Fair value hierarchy			
Lease to third parties under operating leases	—	12,924	—	12,924	—	11,750	—	11,750
Vacant investment property/held for capital appreciation	—	140	—	140	—	680	—	680
Total	—	13,064	—	13,064	—	12,430	—	12,430
Total %	—	100.0%	—	100.0%	—	100.0%	—	100.0%

Investment property – Policyholder assets	2010 Level 1 £m	2010 Level 2 £m	2010 Level 3 £m	2010 Total £m	2009 Level 1 £m	2009 Level 2 £m	2009 Level 3 £m	2009 Total £m
	Fair value hierarchy				Fair value hierarchy			
Lease to third parties under operating leases	—	4,015	—	4,015	—	3,319	—	3,319
Vacant investment property/held for capital appreciation	—	—	—	—	—	555	—	555
Total	—	4,015	—	4,015	—	3,874	—	3,874
Total %	—	100.0%	—	100.0%	—	100.0%	—	100.0%

Investment property – Participating fund assets	2010 Level 1 £m	2010 Level 2 £m	2010 Level 3 £m	2010 Total £m	2009 Level 1 £m	2009 Level 2 £m	2009 Level 3 £m	2009 Total £m
	Fair value hierarchy				Fair value hierarchy			
Lease to third parties under operating leases	—	6,990	—	6,990	—	6,320	—	6,320
Vacant investment property/held for capital appreciation	—	72	—	72	—	18	—	18
Total	—	7,062	—	7,062	—	6,338	—	6,338
Total %	—	100.0%	—	100.0%	—	100.0%	—	100.0%

Investment property – Shareholder assets	2010 Level 1 £m	2010 Level 2 £m	2010 Level 3 £m	2010 Total £m	2009 Level 1 £m	2009 Level 2 £m	2009 Level 3 £m	2009 Total £m
	Fair value hierarchy				Fair value hierarchy			
Lease to third parties under operating leases	—	1,919	—	1,919	—	2,110	—	2,110
Vacant investment property/held for capital appreciation	—	68	—	68	—	108	—	108
Total	—	1,987	—	1,987	—	2,218	—	2,218
Total %	—	100.0%	—	100.0%	—	100.0%	—	100.0%

85% *(2009: 83%)* of investment properties by value are held in unit-linked or participating funds. 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% *(2009: 95%)* 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 2010	**United Kingdom £m**	**Aviva Europe £m**	**Delta Lloyd £m**	**North America £m**	**Asia Pacific £m**	**Total £m**
Policy loans	**40**	**959**	**277**	**439**	**38**	**1,753**
Loans and advances to banks	**4,341**	**—**	**1,343**	**—**	**—**	**5,684**
Mortgage loans	**15,973**	**4**	**13,770**	**2,007**	**—**	**31,754**
Other loans	**53**	**14**	**3,731**	**83**	**2**	**3,883**
Total	**20,407**	**977**	**19,121**	**2,529**	**40**	**43,074**
Total %	**47.4%**	**2.3%**	**44.4%**	**5.9%**	**—**	**100.0%**
2009	19,077	993	18,797	2,177	35	41,079
2009 %	46.5%	2.4%	45.7%	5.3%	0.1%	100.0%

Loans – Total policyholder assets 2010	**United Kingdom £m**	**Aviva Europe £m**	**Delta Lloyd £m**	**North America £m**	**Asia Pacific £m**	**Total £m**
Policy loans	**—**	**—**	**6**	**—**	**—**	**6**
Loans and advances to banks	**—**	**—**	**—**	**—**	**—**	**—**
Mortgage loans	**—**	**—**	**2**	**—**	**—**	**2**
Other loans	**—**	**—**	**27**	**—**	**—**	**27**
Total	**—**	**—**	**35**	**—**	**—**	**35**
Total %	**—**	**—**	**100.0%**	**—**	**—**	**100.0%**
2009	895	—	22	—	—	917
2009 %	97.6%	—	2.4%	—	—	100.0%

Loans – Total participating fund assets 2010	**United Kingdom £m**	**Aviva Europe £m**	**Delta Lloyd £m**	**North America £m**	**Asia Pacific £m**	**Total £m**
Policy loans	**33**	**946**	**20**	**209**	**—**	**1,208**
Loans and advances to banks	**3,420**	**—**	**1,245**	**—**	**—**	**4,665**
Mortgage loans	**1,055**	**3**	**521**	**64**	**—**	**1,643**
Other loans	**—**	**10**	**788**	**—**	**—**	**798**
Total	**4,508**	**959**	**2,574**	**273**	—	**8,314**
Total %	**54.2%**	**11.5%**	**31.0%**	**3.3%**	**—**	**100.0%**
2009	3,637	974	2,687	224	21	7,543
2009 %	48.2%	12.9%	35.6%	3.0%	0.3%	100.0%

D3 – Analysis of asset quality continued

D3.3 – Loans continued

Loans – Total shareholder assets 2010	United Kingdom £m	Aviva Europe £m	Delta Lloyd £m	North America £m	Asia Pacific £m	Total £m
Policy loans	**7**	**13**	**251**	**230**	**38**	**539**
Loans and advances to banks	**921**	**—**	**98**	**—**	**—**	**1,019**
Mortgage loans	**14,918**	**1**	**13,247**	**1,943**	**—**	**30,109**
Other loans	**53**	**4**	**2,916**	**83**	**2**	**3,058**
Total	**15,899**	**18**	**16,512**	**2,256**	**40**	**34,725**
Total %	**45.8%**	**0.1%**	**47.6%**	**6.5%**	**—**	**100.0%**
2009	14,545	19	16,088	1,953	14	32,619
2009 %	44.6%	0.1%	49.3%	6.0%	—	100.0%

The value of the group's loan portfolio (including Policyholder, Participating Fund and Shareholder assets), at 31 December 2010 stood at £43.1 billion *(2009: £41.1 billion)*, an increase of £2.0 billion, primarily due to an increase in loans and advances to banks in the shareholder fund of our UK Life business and an increase in mortgage sales in the shareholder funds of our UK Life and US businesses.

The total shareholder exposure to loans increased to £34.7 billion *(2009: £32.6 billion)*, and represented 81% of the total loan portfolio, with the remaining 19% in participating funds *(£8.3 billion)* and policyholder assets *(£35 million)*.

D3 – Analysis of asset quality continued

D3.3 – Loans continued

Mortgage loans – Shareholder assets

2010	United Kingdom £m	Aviva Europe £m	Delta Lloyd £m	North America £m	Asia Pacific £m	Total £m
Non-securitised mortgage loans						
– Residential	**—**	**1**	**6,843**	**—**	**—**	**6,844**
– Equity release	**2,006**	**—**	**—**	**—**	**—**	**2,006**
– Commercial	**8,206**	**—**	**—**	**1,943**	**—**	**10,149**
– Healthcare	**2,794**	**—**	**—**	**—**	**—**	**2,794**
	13,006	**1**	**6,843**	**1,943**	**—**	**21,793**
Securitised mortgage loans	**1,912**	**—**	**6,404**	**—**	**—**	**8,316**
Total	**14,918**	**1**	**13,247**	**1,943**	**—**	**30,109**
2009	14,380	1	12,730	1,645	—	28,756

Of the group's total loan portfolio (including Policyholder, Participating Fund and Shareholder assets), 74% *(2009: 74%)* is invested in mortgage loans. The group's mortgage loan portfolio spans several business units, primarily UK, Delta Lloyd 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 87% 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, Netherlands (Delta Lloyd) and the United States). Each loan type and region has its own unique characteristic and composition.

Non-securitised mortgage loans – Residential

Delta Lloyd

Gross exposure by loan to value and arrears

2010	>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
Exposures by mortgage type											
– Government guaranteed	**1,119**	**211**	**181**	**152**	**141**	**136**	**113**	**186**	**143**	**305**	**2,687**
– Non-government guaranteed	**383**	**100**	**113**	**182**	**177**	**685**	**274**	**513**	**513**	**1,216**	**4,156**
Total	**1,502**	**311**	**294**	**334**	**318**	**821**	**387**	**699**	**656**	**1,521**	**6,843**
Exposures by interest payment arrears											
Neither past due nor impaired	**1,462**	**303**	**290**	**324**	**309**	**797**	**380**	**684**	**643**	**1,493**	**6,685**
0 – 3 months	**36**	**8**	**4**	**8**	**8**	**20**	**7**	**13**	**11**	**26**	**141**
3 – 6 months	**2**	**—**	**—**	**1**	**—**	**2**	**—**	**1**	**1**	**1**	**8**
6 – 12 months	**1**	**—**	**—**	**—**	**—**	**1**	**—**	**—**	**—**	**—**	**2**
> 12 months	**1**	**—**	**—**	**1**	**1**	**1**	**—**	**1**	**1**	**1**	**7**
Total	**1,502**	**311**	**294**	**334**	**318**	**821**	**387**	**699**	**656**	**1,521**	**6,843**

The total exposure to non-securitised mortgage loans in the Netherlands is £6.8 billion, of which the majority are measured at amortised cost. However, of these, £2.7 billion are Government guaranteed, and so present minimal risk to Aviva shareholders. Of the non-securitised residential mortgages with an LTV >120%, 74.5% are government guaranteed whilst 97.4% are neither past due nor impaired and less than 0.3% (£4.0 million) are more than 3 months in arrears.

D3 – Analysis of asset quality continued

D3.3 – Loans continued

The Government guarantees were introduced in the Netherlands to encourage homeownership, and apply to home mortgages of up to €350,000 (this threshold was raised from €265,000 at 1 July 2009). The guarantees are implemented through the National Mortgage Guarantee Scheme, and ensure that, should the homeowner be forced to sell, and cannot make the repayment on the mortgage, then the residual will be provided for by the Homeownership Guarantee Fund, which in turn is funded by the Government and municipalities through agreements for interest free loans.

In addition to government guarantees, the Dutch residential mortgage market also benefits from the ability for borrowers to deduct mortgage interest payments for tax purposes, thereby helping to reduce the risk of arrears or default.

The total amount of loans for which interest payments are past due is £158 million *(2009: £134 million)*. However, the actual amount of missed payments is £2.1 million *(2009: £2.7 million)*. Delta Lloyd has not made any additional provisions for these loans as it does not consider the amount of potential loss to be significant.

UK Residential

The UK non-securitised residential mortgage portfolio has a total current value of £2.0 billion *(2009: £1.4 billion)*. The 2009 number has been adjusted due to a £551 million reclassification of linked loans to the shareholders fund. The further increase from 2009 to 2010 is primarily due to £451 million of new loans and accrued interest. 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. Due to the low relative levels of equity released in each property, the vast majority currently have a Loan to Value ("LTV") of below 70%, and the average LTV across the portfolio is approximately 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

2010[1]	>120% £m	115–120% £m	110–115% £m	105–110% £m	100–105% £m	95–100% £m	90–95% £m	80–90% £m	70–80% £m	<70% £m	Total £m
Not in arrears	196	168	983	510	2,100	738	594	1,589	738	344	7,960
0 – 3 months	—	—	—	—	—	3	—	2	—	—	5
3 – 6 months	—	—	—	—	—	109	3	—	1	—	113
6 – 12 months	10	32	—	8	—	21	—	—	—	1	72
> 12 months	13	—	—	—	—	38	5	—	—	—	56
Total	219	200	983	518	2,100	909	602	1,591	739	345	8,206

1. During the second half of 2010 refinements to existing Management Information processes have enabled us to more accurately allocate portfolio risk adjustments to individual mortgage loan values. This has resulted in some movement across the LTV bands since they were last reported (high LTVs have generally reduced, low LTVs have generally increased, there has been no impact on portfolio average LTV) and a reduction in unsecured exposure.

Of the £8.2 billion of UK Commercial loans, £7.8 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. Our UK General Insurance business holds the remaining £454 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 year. 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 1.33x due to low levels of material tenant defaults. In addition, mortgage LTV's were little changed over the year whilst the amount of uncovered exposure has reduced (see note to above table).

All loans in arrears have been assessed for impairment. Of the £246 million *(2009: £357 million)* value of loans in arrears, the interest and capital amount in arrears is only £12.3 million. The valuation allowance made in the UK for defaults on corporate bonds and commercial mortgages carried at fair value equates to 63bps and 78bps respectively *(2009: 64bps and 81bps respectively).* This equates to a total valuation allowance of £1.3 billion *(2009: £1.1 billion)* for the life of the UK corporate bond and commercial mortgage portfolios which maintains a strong buffer against potential future losses, the increase being attributable to the growth in the value of the portfolio. In addition, we hold £60 million *(2009: £65 million)* of impairment provisions in our UK General Insurance mortgage portfolio, which is carried at amortised cost. The fall in provisions from 2009 is due to write offs of the specific provisions against amortised cost during 2010.

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.

D3 – Analysis of asset quality continued

D3.3 – Loans continued

UK Primary Healthcare & PFI

Of the £11.0 billion *(2009: £11.1 billion)* UK non-securitised commercial and healthcare mortgage loans in the Shareholders Fund, £2.8 billion *(2009: £2.5 billion)* relates to primary healthcare and 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 92%, although as explained above, we do not consider this to be a key risk driver. Income support from the National Health Service and stability of the sector 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

2010	>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	**10**	**—**	**17**	**18**	**23**	**43**	**56**	**189**	**411**	**1,152**	**1,919**
0 – 3 months	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
3 – 6 months	**24**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**24**
6 – 12 months	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
> 12 months	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Total	**34**	**—**	**17**	**18**	**23**	**43**	**56**	**189**	**411**	**1,152**	**1,943**
Total %	**1.7%**	**—**	**0.9%**	**0.9%**	**1.2%**	**2.2%**	**2.9%**	**9.7%**	**21.2%**	**59.3%**	**100.0%**

Aviva USA currently holds £1.9 billion *(2009: £1.6 billion)* of commercial mortgages under shareholder assets. Of these, 59% *(2009: 51%)* have LTV ratios of below 70%, and 90% *(2009: 85%)* have LTV ratios of below 90%. The mortgage portfolio currently has a total of £92 million (5% of portfolio) in principal balances where the LTV exceeds 100%. Although property prices in the U.S. have decreased, the 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% *(2009: 68%)*;
- 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 less than 5% with LIC below 1.0x.

As at 31 December 2010, the actual amount of payment in arrears was £1.0 million on £23.6 million of unsecured mortgage loans.

Mortgage loan impairments over the year were negligible.

Securitised mortgage loans

Of the total securitised residential mortgages (£8.3 billion), approximately £1.3 billion 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 Delta Lloyd and in the UK.

D3 – Analysis of asset quality continued

D3.4 – Financial investments

Total Assets	2010 Cost/ amortised cost £m	2010 Unrealised gains £m	2010 Impairment and Unrealised losses £m	2010 Fair value £m	2009 Cost/ amortised cost £m	2009 Unrealised gains £m	2009 Impairment and Unrealised losses £m	2009 Fair value £m
Debt securities	**164,266**	**7,507**	**(4,291)**	**167,482**	160,572	5,872	(4,687)	161,757
Equity securities	**44,878**	**7,186**	**(2,988)**	**49,076**	46,479	4,173	(5,225)	45,427
Other investments	**33,957**	**3,391**	**(618)**	**36,730**	30,505	1,940	(927)	31,518
Total	**243,101**	**18,084**	**(7,897)**	**253,288**	237,556	11,985	(10,839)	238,702

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 – Total	2010 Fair value hierarchy Level 1 £m	Level 2 £m	Level 3 £m	Total £m
UK Government	**17,463**	**—**	**—**	**17,463**
Non-UK Government	**43,970**	**5,883**	**667**	**50,520**
Europe	**38,460**	**1,731**	**421**	**40,612**
North America	**786**	**3,379**	**125**	**4,290**
Asia Pacific & Other	**4,724**	**773**	**121**	**5,618**
Corporate bonds – Public utilities	**5,546**	**2,821**	**—**	**8,367**
Corporate convertible bonds	**154**	**388**	**41**	**583**
Other corporate bonds	**45,362**	**26,099**	**7,656**	**79,117**
Other	**4,082**	**7,005**	**345**	**11,432**
Total	**116,577**	**42,196**	**8,709**	**167,482**
Total %	**69.6%**	**25.2%**	**5.2%**	**100.0%**
2009	116,027	36,592	9,138	161,757
2009 %	71.8%	22.6%	5.6%	100.0%

Debt securities – Policyholder assets	2010 Fair value hierarchy Level 1 £m	Level 2 £m	Level 3 £m	Total £m
UK Government	**3,498**	**—**	**—**	**3,498**
Non-UK Government	**3,330**	**184**	**1**	**3,515**
Europe	**2,669**	**172**	**1**	**2,842**
North America	**135**	**—**	**—**	**135**
Asia Pacific & Other	**526**	**12**	**—**	**538**
Corporate bonds – Public utilities	**279**	**1**	**—**	**280**
Corporate convertible bonds	**5**	**—**	**—**	**5**
Other corporate bonds	**4,532**	**2,960**	**102**	**7,594**
Other	**1,018**	**223**	**17**	**1,258**
Total	**12,662**	**3,368**	**120**	**16,150**
Total %	**78.4%**	**20.9%**	**0.7%**	**100.0%**
2009	12,590	3,703	90	16,383
2009 %	76.9%	22.6%	0.5%	100.0%

D3 – Analysis of asset quality continued

D3.4 – Financial investments continued

D3.4.1 – Debt securities continued

Debt securities – Participating fund assets	2010 Fair value hierarchy Level 1 £m	Level 2 £m	Level 3 £m	Total £m
UK Government	**11,842**	**—**	**—**	**11,842**
Non-UK Government	**27,860**	**1,693**	**426**	**29,979**
Europe	**25,008**	**1,286**	**412**	**26,706**
North America	**195**	**22**	**1**	**218**
Asia Pacific & Other	**2,657**	**385**	**13**	**3,055**
Corporate bonds – Public utilities	**2,727**	**234**	**—**	**2,961**
Corporate convertible bonds	**142**	**179**	**41**	**362**
Other corporate bonds	**28,248**	**2,615**	**7,265**	**38,128**
Other	**946**	**1,185**	**11**	**2,142**
Total	**71,765**	**5,906**	**7,743**	**85,414**
Total %	**84.0%**	**6.9%**	**9.1%**	**100.0%**
2009	72,602	5,484	7,262	85,348
2009 %	85.1%	6.4%	8.5%	100.0%

Debt securities – Shareholder assets	2010 Fair value hierarchy Level 1 £m	Level 2 £m	Level 3 £m	Total £m
UK Government	**2,123**	**—**	**—**	**2,123**
Non-UK Government	**12,780**	**4,006**	**240**	**17,026**
Europe	**10,783**	**273**	**8**	**11,064**
North America	**456**	**3,357**	**124**	**3,937**
Asia Pacific & Other	**1,541**	**376**	**108**	**2,025**
Corporate bonds – Public utilities	**2,540**	**2,586**	**—**	**5,126**
Corporate convertible bonds	**7**	**209**	**—**	**216**
Other corporate bonds	**12,582**	**20,524**	**289**	**33,395**
Other	**2,118**	**5,597**	**317**	**8,032**
Total	**32,150**	**32,922**	**846**	**65,918**
Total %	**48.8%**	**49.9%**	**1.3%**	**100.0%**
2009	30,835	27,405	1,786	60,026
2009 %	51.4%	45.6%	3.0%	100.0%

Only 1.3% of shareholder exposure to debt securities (0.8% of shareholder assets recorded at fair value) 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.

49% of shareholder exposure to debt securities is based on quoted prices in an active market *(classified as Fair Value Level 1; 2009: 51%)*. 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 87% *(2009: 88%)*.

The decrease in shareholder exposure to Level 3 debt securities arises as a result of the transfer from Level 3 to 2 of Italian structured bonds and certain debt securities in our UK business for which either values are corroborated against a Level 2 internal model price, new valuation models have been developed, or there has been sufficient market activity in observable inputs to justify Level 2 classification.

D3 – Analysis of asset quality continued

D3.4 – Financial investments continued

D3.4.1 – Debt securities continued

	External ratings						
Debt securities – Total 2010	**AAA £m**	**AA £m**	**A £m**	**BBB £m**	**Less than BBB £m**	**Non-rated £m**	**Total £m**
Government							
UK Government	**17,447**	**—**	**—**	**—**	**—**	**—**	**17,447**
UK local authorities	**1**	**10**	**—**	**—**	**—**	**5**	**16**
Non-UK Government	**27,695**	**15,747**	**4,428**	**1,433**	**632**	**585**	**50,520**
	45,143	**15,757**	**4,428**	**1,433**	**632**	**590**	**67,983**
Corporate							
Public utilities	**76**	**639**	**4,797**	**2,455**	**80**	**320**	**8,367**
Convertibles and bonds with warrants	**5**	**46**	**101**	**329**	**42**	**60**	**583**
Other corporate bonds	**10,373**	**12,340**	**26,687**	**20,657**	**2,897**	**6,163**	**79,117**
	10,454	**13,025**	**31,585**	**23,441**	**3,019**	**6,543**	**88,067**
Certificates of deposits	**—**	**572**	**925**	**1,170**	**—**	**26**	**2,693**
Structured							
RMBS non-agency sub-prime	**—**	**—**	**—**	**—**	**—**	**—**	**—**
RMBS non-agency ALT A	**19**	**9**	**11**	**8**	**131**	**—**	**178**
RMBS non-agency prime	**758**	**21**	**44**	**67**	**30**	**—**	**920**
RMBS agency	**1,762**	**—**	**—**	**—**	**—**	**—**	**1,762**
	2,539	**30**	**55**	**75**	**161**	**—**	**2,860**
CMBS	**1,434**	**281**	**369**	**119**	**181**	**20**	**2,404**
ABS	**1,113**	**256**	**365**	**129**	**63**	**181**	**2,107**
CDO (including CLO)	**97**	**57**	**22**	**17**	**86**	**53**	**332**
ABCP	**—**	**15**	**—**	**—**	**—**	**—**	**15**
ABFRN	**—**	**—**	**—**	**—**	**—**	**—**	**—**
	2,644	**609**	**756**	**265**	**330**	**254**	**4,858**
Wrapped credit	**—**	**288**	**92**	**157**	**55**	**49**	**641**
Other	**27**	**4**	**116**	**—**	**1**	**232**	**380**
Total	**60,807**	**30,285**	**37,957**	**26,541**	**4,198**	**7,694**	**167,482**
Total%	**36.3%**	**18.1%**	**22.7%**	**15.8%**	**2.5%**	**4.6%**	**100.0%**
2009	62,489	28,045	38,747	20,777	3,936	7,763	161,757
2009 %	38.6%	17.3%	24.0%	12.8%	2.5%	4.8%	100.0%

D3 – Analysis of asset quality continued

D3.4 – Financial investments continued

D3.4.1 – Debt securities continued

Debt securities – Policyholder assets 2010	AAA £m	AA £m	A £m	BBB £m	Less than BBB £m	Non-rated £m	Total £m
	External ratings						
Government							
UK Government	**3,497**	**—**	**—**	**—**	**—**	**—**	**3,497**
UK local authorities	**1**	**—**	**—**	**—**	**—**	**—**	**1**
Non-UK Government	**1,951**	**534**	**777**	**162**	**80**	**11**	**3,515**
	5,449	**534**	**777**	**162**	**80**	**11**	**7,013**
Corporate							
Public utilities	**1**	**37**	**170**	**67**	**3**	**2**	**280**
Convertibles and bonds with warrants	**—**	**—**	**—**	**2**	**—**	**3**	**5**
Other corporate bonds	**363**	**981**	**2,603**	**3,138**	**283**	**226**	**7,594**
	364	**1,018**	**2,773**	**3,207**	**286**	**231**	**7,879**
Certificates of deposits	**—**	**362**	**603**	**144**	**—**	**2**	**1,111**
Structured							
RMBS non-agency sub-prime	**—**	**—**	**—**	**—**	**—**	**—**	**—**
RMBS non-agency ALT A	**—**	**—**	**—**	**—**	**—**	**—**	**—**
RMBS non-agency prime	**24**	**2**	**3**	**—**	**—**	**—**	**29**
RMBS agency	**—**	**—**	**—**	**—**	**—**	**—**	**—**
	24	**2**	**3**	**—**	**—**	**—**	**29**
CMBS	**7**	**2**	**—**	**—**	**—**	**—**	**9**
ABS	**18**	**6**	**47**	**3**	**—**	**9**	**83**
CDO (including CLO)	**—**	**—**	**—**	**—**	**—**	**—**	**—**
ABCP	**—**	**—**	**—**	**—**	**—**	**—**	**—**
ABFRN	**—**	**—**	**—**	**—**	**—**	**—**	**—**
	25	**8**	**47**	**3**	**—**	**9**	**92**
Wrapped credit	**—**	**16**	**1**	**2**	**4**	**2**	**25**
Other	**—**	**—**	**1**	**—**	**—**	**—**	**1**
Total	**5,862**	**1,940**	**4,205**	**3,518**	**370**	**255**	**16,150**
Total%	**36.3%**	**12.0%**	**26.0%**	**21.8%**	**2.3%**	**1.6%**	**100.0%**
2009	7,864	2,161	4,277	944	48	1,089	16,383
2009 %	48.0%	13.2%	26.1%	5.8%	0.3%	6.6%	100.0%

D3 – Analysis of asset quality continued

D3.4 – Financial investments continued

D3.4.1 – Debt securities continued

Debt securities – Participating fund assets 2010	AAA £m	AA £m	A £m	BBB £m	Less than BBB £m	Non-rated £m	Total £m
	External ratings						
Government							
UK Government	11,842	—	—	—	—	—	11,842
UK local authorities	—	—	—	—	—	—	—
Non-UK Government	15,357	11,586	2,011	675	350	—	29,979
	27,199	11,586	2,011	675	350	—	41,821
Corporate							
Public utilities	4	280	1,868	767	1	41	2,961
Convertibles and bonds with warrants	—	46	11	266	20	19	362
Other corporate bonds	7,128	6,564	13,237	8,339	1,163	1,697	38,128
	7,132	6,890	15,116	9,372	1,184	1,757	41,451
Certificates of deposits	—	132	208	816	—	—	1,156
Structured							
RMBS non-agency sub-prime	—	—	—	—	—	—	—
RMBS non-agency ALT A	—	—	—	3	2	—	5
RMBS non-agency prime	163	—	5	—	—	—	168
RMBS agency	134	—	—	—	—	—	134
	297	—	5	3	2	—	307
CMBS	128	50	6	16	9	1	210
ABS	88	32	113	53	37	1	324
CDO (including CLO)	—	—	—	—	—	—	—
ABCP	—	—	—	—	—	—	—
ABFRN	—	—	—	—	—	—	—
	216	82	119	69	46	2	534
Wrapped credit	—	74	17	35	4	6	136
Other	—	—	9	—	—	—	9
Total	**34,844**	**18,764**	**17,485**	**10,970**	**1,586**	**1,765**	**85,414**
Total%	**40.8%**	**22.0%**	**20.5%**	**12.8%**	**1.9%**	**2.0%**	**100.0%**
2009	35,262	17,486	18,921	9,376	2,125	2,178	85,348
2009 %	41.3%	20.5%	22.2%	11.0%	2.5%	2.5%	100.0%

D3 – Analysis of asset quality continued

D3.4 – Financial investments continued

D3.4.1 – Debt securities continued

Debt securities – Shareholder assets 2010	External ratings AAA £m	AA £m	A £m	BBB £m	Less than BBB £m	Non-rated £m	Total £m
Government							
UK Government	**2,108**	**—**	**—**	**—**	**—**	**—**	**2,108**
UK local authorities	**—**	**10**	**—**	**—**	**—**	**5**	**15**
Non-UK Government	**10,387**	**3,627**	**1,640**	**596**	**202**	**574**	**17,026**
	12,495	**3,637**	**1,640**	**596**	**202**	**579**	**19,149**
Corporate							
Public utilities	**71**	**322**	**2,759**	**1,621**	**76**	**277**	**5,126**
Convertibles and bonds with warrants	**5**	**—**	**90**	**61**	**22**	**38**	**216**
Other corporate bonds	**2,882**	**4,795**	**10,847**	**9,180**	**1,451**	**4,240**	**33,395**
	2,958	**5,117**	**13,696**	**10,862**	**1,549**	**4,555**	**38,737**
Certificates of deposits	**—**	**78**	**114**	**210**	**—**	**24**	**426**
Structured							
RMBS non-agency sub-prime	**—**	**—**	**—**	**—**	**—**	**—**	**—**
RMBS non-agency ALT A	**19**	**9**	**11**	**5**	**129**	**—**	**173**
RMBS non-agency prime	**571**	**19**	**36**	**67**	**30**	**—**	**723**
RMBS agency	**1,628**	**—**	**—**	**—**	**—**	**—**	**1,628**
	2,218	**28**	**47**	**72**	**159**	**—**	**2,524**
CMBS	**1,299**	**229**	**363**	**103**	**172**	**19**	**2,185**
ABS	**1,007**	**218**	**205**	**73**	**26**	**171**	**1,700**
CDO (including CLO)	**97**	**57**	**22**	**17**	**86**	**53**	**332**
ABCP	**—**	**15**	**—**	**—**	**—**	**—**	**15**
ABFRN	**—**	**—**	**—**	**—**	**—**	**—**	**—**
	2,403	**519**	**590**	**193**	**284**	**243**	**4,232**
Wrapped credit	**—**	**198**	**74**	**120**	**47**	**41**	**480**
Other	**27**	**4**	**106**	**—**	**1**	**232**	**370**
Total	**20,101**	**9,581**	**16,267**	**12,053**	**2,242**	**5,674**	**65,918**
Total%	**30.5%**	**14.5%**	**24.7%**	**18.3%**	**3.4%**	**8.6%**	**100.0%**
2009	19,363	8,399	15,549	10,456	1,762	4,497	60,026
2009 %	32.3%	14.0%	25.9%	17.4%	2.9%	7.5%	100.0%

The overall quality of the book remains strong, despite the continuing downgrade activity by the major rating agencies during 2010. 29% of shareholder exposure to debt securities is in government holdings *(2009: 29%)*. Our corporate debt securities portfolio represents 59% *(2009: 54%)* of total shareholder debt securities. This increase is primarily driven by business growth in our US operations. There has been some overall credit quality deterioration in our debt securities portfolio primarily due the increased proportion of corporate debt securities (as these securities are in general rated lower than our government debt securities) and an increase in non-rated private placement assets to back UK annuity liabilities.

£1.0 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 31 December 2010. A further £1.9 billion of exposures to these governments are held in participating fund assets, although we have limited shareholder risk to these assets. Net of non-controlling interests, our total exposure to these governments is further reduced to £0.7 billion within shareholder assets and £1.5 billion within participating fund assets.

The vast majority of non-rated corporate bonds are held by our businesses in the US, UK and Ireland.

During 2010, the proportion of our shareholder debt securities that are investment grade declined slightly to 88% *(2009: 90%)*. This movement was primarily due to the increase in private placements to back UK annuity liabilities. The remaining 12.0% of shareholder debt securities that do not have an external rating of BBB or higher can be split as follows:

- 3.4% are debt securities that are rated as below investment grade
- 3.0% 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
- 5.6% 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 £1.8 billion (2.7% of total shareholder debt securities) of private placements and other corporate bonds held in our UK Life business 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 85% 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 majority of the remaining U.S. RMBS is backed by fixed rate loans originated in 2005 or before.

The Group has extremely limited exposure to CDOs and CLOs and no exposure to 'Sub-prime' debt securities.

Asset backed securities (ABS) are held primarily by our US business. 88% of the Group's shareholder holdings are investment grade. ABS that either have a rating below BBB or are not rated represent less than 0.3% of shareholder exposure to debt securities.

D3.4.2 – Equity securities

				2010				2009
	Fair value hierarchy				Fair value hierarchy			
Equity securities – Total	**Level 1 £m**	**Level 2 £m**	**Level 3 £m**	**Total £m**	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Public utilities	**4,108**	**—**	**—**	**4,108**	3,666	14	—	3,680
Banks, trusts and insurance companies	**6,391**	**684**	**546**	**7,621**	5,909	926	454	7,289
Industrial miscellaneous and all other	**32,835**	**3,443**	**422**	**36,700**	29,201	4,630	385	34,216
Non-redeemable preferred shares	**121**	**522**	**4**	**647**	34	204	4	242
Total	**43,455**	**4,649**	**972**	**49,076**	38,810	5,774	843	45,427
Total %	**88.5%**	**9.5%**	**2.0%**	**100.0%**	85.4%	12.7%	1.9%	100.0%

				2010				2009
	Fair value hierarchy				Fair value hierarchy			
Equity securities – Policyholder assets	**Level 1 £m**	**Level 2 £m**	**Level 3 £m**	**Total £m**	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Public utilities	**2,689**	**—**	**—**	**2,689**	2,355	—	—	2,355
Banks, trusts and insurance companies	**4,024**	**304**	**3**	**4,331**	3,206	541	—	3,747
Industrial miscellaneous and all other	**21,630**	**2,766**	**6**	**24,402**	18,928	3,596	2	22,526
Non-redeemable preferred shares	**19**	**—**	**—**	**19**	10	—	—	10
Total	**28,362**	**3,070**	**9**	**31,441**	24,499	4,137	2	28,638
Total %	**90.2%**	**9.8%**	**—**	**100.0%**	85.5%	14.5%	—	100.0%

				2010				2009
	Fair value hierarchy				Fair value hierarchy			
Equity securities – Participating fund assets	**Level 1 £m**	**Level 2 £m**	**Level 3 £m**	**Total £m**	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Public utilities	**1,395**	**—**	**—**	**1,395**	1,299	—	—	1,299
Banks, trusts and insurance companies	**1,702**	**144**	**9**	**1,855**	1,549	86	159	1,794
Industrial miscellaneous and all other	**8,935**	**12**	**71**	**9,018**	8,446	52	65	8,563
Non-redeemable preferred shares	**40**	**—**	**—**	**40**	22	—	—	22
Total	**12,072**	**156**	**80**	**12,308**	11,316	138	224	11,678
Total %	**98.1%**	**1.3%**	**0.6%**	**100.0%**	96.9%	1.2%	1.9%	100.0%

				2010				2009
	Fair value hierarchy				Fair value hierarchy			
Equity securities – Shareholder assets	**Level 1 £m**	**Level 2 £m**	**Level 3 £m**	**Total £m**	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Public utilities	**24**	**—**	**—**	**24**	12	14	—	26
Banks, trusts and insurance companies	**665**	**236**	**534**	**1,435**	1,154	299	295	1,748
Industrial miscellaneous and all other	**2,270**	**665**	**345**	**3,280**	1,827	982	318	3,127
Non-redeemable preferred shares	**62**	**522**	**4**	**588**	2	204	4	210
Total	**3,021**	**1,423**	**883**	**5,327**	2,995	1,499	617	5,111
Total %	**56.7%**	**26.7%**	**16.6%**	**100.0%**	58.6%	29.3%	12.1%	100.0%

57% of our shareholder exposure to equity securities is based on quoted prices in an active market and as such is classified as Level 1 *(2009: 59%)*. Level 3 shareholder equities have increased principally because of the transfer of equities held by Delta Lloyd from Level 2 to Level 3 amounting to £155 million and an increase in value of £50 million of these equities. The decrease in Level 2 holdings as a result of this transfer is offset by an increase of £108 million in redeemable preference shares held by our Canadian business unit classified as Level 2, following a strategic decision to invest in this asset class.

Shareholder investments include a strategic holding in UniCredit and other Italian banks of £408 million (£244 million net of non-controlling interest share).

D3 – Analysis of asset quality continued

D3.4 – Financial investments continued

D3.4.3 – Other investments

Other investments – Total	2010 Fair value hierarchy Level 1 £m	Level 2 £m	Level 3 £m	Total £m	2009 Fair value hierarchy Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Unit trusts and other investment vehicles	**29,015**	**983**	**2,522**	**32,520**	24,650	1,258	1,275	27,183
Derivative financial instruments	**181**	**2,083**	**10**	**2,274**	330	1,734	14	2,078
Deposits with credit institutions	**228**	**302**	**28**	**558**	969	—	—	969
Minority holdings in property management undertakings	**—**	**664**	**—**	**664**	—	667	—	667
Other	**558**	**48**	**108**	**714**	291	291	39	621
Total	**29,982**	**4,080**	**2,668**	**36,730**	26,240	3,950	1,328	31,518
Total %	**81.6%**	**11.1%**	**7.3%**	**100.0%**	83.3%	12.5%	4.2%	100.0%

Other investments – Policyholder assets	2010 Fair value hierarchy Level 1 £m	Level 2 £m	Level 3 £m	Total £m	2009 Fair value hierarchy Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Unit trusts and other investment vehicles	**25,661**	**379**	**—**	**26,040**	23,331	595	—	23,926
Derivative financial instruments	**13**	**175**	**—**	**188**	75	71	—	146
Deposits with credit institutions	**28**	**—**	**—**	**28**	307	—	—	307
Minority holdings in property management undertakings	**—**	**11**	**—**	**11**	—	10	—	10
Other	**547**	**—**	**—**	**547**	268	208	—	476
Total	**26,249**	**565**	**—**	**26,814**	23,981	884	—	24,865
Total %	**97.9%**	**2.1%**	**—**	**100.0%**	96.4%	3.6%	—	100.0%

Other investments – Participating fund assets	2010 Fair value hierarchy Level 1 £m	Level 2 £m	Level 3 £m	Total £m	2009 Fair value hierarchy Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Unit trusts and other investment vehicles	**3,079**	**402**	**2,260**	**5,741**	924	442	1,272	2,638
Derivative financial instruments	**35**	**95**	**—**	**130**	179	442	—	621
Deposits with credit institutions	**39**	**—**	**—**	**39**	29	—	—	29
Minority holdings in property management undertakings	**—**	**593**	**—**	**593**	—	605	—	605
Other	**2**	**46**	**57**	**105**	—	41	34	75
Total	**3,155**	**1,136**	**2,317**	**6,608**	1,132	1,530	1,306	3,968
Total %	**47.7%**	**17.2%**	**35.1%**	**100.0%**	28.5%	38.6%	32.9%	100.0%

Other investments – Shareholder assets	2010 Fair value hierarchy Level 1 £m	Level 2 £m	Level 3 £m	Total £m	2009 Fair value hierarchy Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Unit trusts and other investment vehicles	**275**	**202**	**262**	**739**	395	221	3	619
Derivative financial instruments	**133**	**1,813**	**10**	**1,956**	76	1,221	14	1,311
Deposits with credit institutions	**161**	**302**	**28**	**491**	633	—	—	633
Minority holdings in property management undertakings	**—**	**60**	**—**	**60**	—	52	—	52
Other	**9**	**2**	**51**	**62**	23	42	5	70
Total	**578**	**2,379**	**351**	**3,308**	1,127	1,536	22	2,685
Total %	**17.5%**	**71.9%**	**10.6%**	**100.0%**	42.0%	57.2%	0.8%	100.0%

In total 89% *(2009: 99%)* 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. A strategic move in the UK with-profit funds into higher return asset classes has lead to the significant increase in participating funds invested in unit trusts and other investment vehicles, including hedge funds which are classified as Level 3. Level 3 other investments reflect our US business' holdings in hedge funds, which have increased partly as a result of a strategic decision to make further investments in this asset class and also as a result of the transfer of funds from Level 2, reflecting the nature of the underlying investments in these funds, which indicate that a Level 3 classification is more appropriate. The increase in shareholder exposure to Level 2 derivative instruments arises in Delta Lloyd and our US business, principally as a result of valuation increases on index options.

D3 – Analysis of asset quality continued

D3.4 – Financial investments continued

D3.4.4 – Available for sale investments – Impairments and duration and amount of unrealised losses

The total impairment expense for 2010 for AFS debt securities was £79 million *(2009: £93 million)* less reversals of £2 million *(2009: £nil)*, and for AFS equity securities was £100 million *(2009: £384 million)*.

Total unrealised losses on available for sale debt securities at 31 December 2010 were £373 million *(2009: £738 million)*, and available for sale equity securities at 31 December 2010 were £6 million *(2009: £97 million)*. The continuous period for which these available for sale classified securities have been in an unrealised loss position is disclosed below:

	0 – 6 months		7 – 12 months		More than 12 months		Total	
2010	Fair value[1] £m	Gross unrealised £m	Fair value[1] £m	Gross unrealised £m	Fair value[1] £m	Gross unrealised £m	Fair value[1] £m	Gross unrealised £m
Less than 20% loss position:								
Debt securities	**4,849**	**(153)**	**71**	**(4)**	**1,100**	**(70)**	**6,020**	**(227)**
Equity securities	**86**	**(6)**	**—**	**—**	**—**	**—**	**86**	**(6)**
Other investments	**69**	**—**	**—**	**—**	**—**	**—**	**69**	**—**
	5,004	**(159)**	**71**	**(4)**	**1,100**	**(70)**	**6,175**	**(233)**
20%-50% loss position:								
Debt securities	**49**	**(18)**	**—**	**—**	**83**	**(41)**	**132**	**(59)**
Equity securities	**2**	**(1)**	**—**	**—**	**—**	**—**	**2**	**(1)**
Other investments	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
	51	**(19)**	**—**	**—**	**83**	**(41)**	**134**	**(60)**
Greater than 50% loss position:								
Debt securities	**7**	**(9)**	**—**	**(2)**	**25**	**(76)**	**32**	**(87)**
Equity securities	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Other investments	**—**	**—**	**—**	**—**	**—**	**—**	**—**	
	7	**(9)**	**—**	**(2)**	**25**	**(76)**	**32**	**(87)**
Total								
Debt securities	**4,905**	**(180)**	**71**	**(6)**	**1,208**	**(187)**	**6,184**	**(373)**
Equity securities	**88**	**(7)**	**—**	**—**	**—**	**—**	**88**	**(7)**
Other investments	**69**	**—**	**—**	**—**	**—**	**—**	**69**	**—**
	5,062	**(187)**	**71**	**(6)**	**1,208**	**(187)**	**6,341**	**(380)**

1. Only includes AFS classified securities that are in unrealised loss positions.

D3 – Analysis of asset quality continued

D3.4 – Financial investments continued

D3.4.4 – Available for sale investments – Impairments and duration and amount of unrealised losses continued

	0 – 6 months		7 – 12 months		More than 12 months		Total	
2009	Fair value[1] £m	Gross unrealised £m	Fair value[1] £m	Gross unrealised £m	Fair value[1] £m	Gross unrealised £m	Fair value[1] £m	Gross unrealised £m
Less than 20% loss position:								
Debt securities	4,347	(133)	304	(32)	1,970	(179)	6,621	(344)
Equity securities	731	(96)	—	—	—	—	731	(96)
Other investments	—	—	—	—	—	—	—	—
	5,078	(229)	304	(32)	1,970	(179)	7,352	(440)
20%-50% loss position:								
Debt securities	77	(32)	37	(12)	362	(165)	476	(209)
Equity securities	5	(1)	—	—	—	—	5	(1)
Other investments	—	—	—	—	—	—	—	—
	82	(33)	37	(12)	362	(165)	481	(210)
Greater than 50% loss position:								
Debt securities	14	(37)	2	(14)	60	(134)	76	(185)
Equity securities	—	—	—	—	—	—	—	—
Other investments	—	—	—	—	—	—	—	—
	14	(37)	2	(14)	60	(134)	76	(185)
Total								
Debt securities	4,438	(202)	343	(58)	2,392	(478)	7,173	(738)
Equity securities	736	(97)	—	—	—	—	736	(97)
Other investments	—	—	—	—	—	—	—	—
	5,174	(299)	343	(58)	2,392	(478)	7,909	(835)

1. Only includes AFS classified securities that are in unrealised loss positions.

During 2010, there has been a further significant decrease in total unrealised losses for AFS securities, continuing the improvement observed in 2009. We have not recognised an impairment charge in respect of these unrealised losses as we believe the decline in fair value of these securities relative to their amortised cost to be temporary.

At 31 December 2010, 94% of AFS debt securities were held by our US business. In respect of debt securities in an unrealised loss position, we have the intent to hold these securities for a sufficient period to recover their value in full and the ability to hold them to maturity, as they are held to match long-term policyholder liabilities of the same or longer duration. In the US the decrease in unrealised losses experienced during 2010, reflects a general market improvement and further tightening of credit spreads combined with a decrease in the US government treasury yield curve. In addition, a continued reversal of unrealised losses would be expected as bonds purchased at historically low credit spreads pre-financial crisis approach maturity. Where factors specific to an issuer have resulted in an unrealised loss we have considered whether the security is impaired and recognised an impairment charge where necessary.

Of the total AFS debt security impairment expense for 2010, £78 million relates to our U.S. business. This includes £71 million of write downs relating to mortgage backed securities which, while not yet in default, showed continued deterioration in market values, NAIC rating downgrades or defaults on more junior tranches which are considered indicators of impairment. The remaining £7 million impairment charge in the U.S. relates to further impairments on securities impaired in prior years and a corporate bond in breach of its covenants.

At 31 December 2010, 98% of AFS equity securities were held by our business in the Netherlands, invested in a broad range of Dutch and other European equities, which are held for long term investment and include listed as well as unlisted equities. We have recognised impairment for prolonged or significant declines in fair value relative to cost, except where there has been a recovery in value since the financial year-end. While management believes that many of the impaired equity securities will ultimately recover their value, there can be no certainty that this will be the case because, unlike fixed maturity securities, the value of an equity security cannot be recovered in full by holding it to maturity.

Of the total AFS equity security impairment expense for 2010, £99 million relates to equities held by our Netherlands business. Of this amount only £7 million relates to new impairments in the year, with the remainder reflecting further declines in fair value of equity holdings impaired in prior years. The continued recovery of equity markets in 2010 has resulted in £380 million unrealised gains in respect of equities impaired in prior years which are recognised in other comprehensive income.

D3 – Analysis of asset quality continued

D3.5 – Reinsurance assets

The Group assumes and cedes reinsurance in the normal course of business, with retention limits varying by line of business. Reinsurance assets primarily include balances due from both insurance and reinsurance companies for ceded insurance liabilities. Amounts recoverable from reinsurers are estimated in a manner consistent with the outstanding claims provisions or settled claims associated with the reinsured policies and in accordance with the relevant reinsurance contract.

If a reinsurance asset is impaired, the group reduces the carrying amount accordingly and recognises that impairment loss in the income statement. A reinsurance asset is impaired if there is objective evidence, as a result of an event that occurred after initial recognition of the reinsurance asset, that the group may not receive all amounts due to it under the terms of the contract, and the event has a reliably measurable impact on the amounts that the group will receive from the reinsurer.

For the table below, reinsurance asset credit ratings are stated in accordance with the following approach:

- If available, Standard & Poor's rating;
- If the counterparty is not rated by Standard & Poor's, the AM Best rating is used;
- In the absence of a rating from either Standard & Poor's or AM Best, assets have been classified as non-rated.

		Financial assets that are past due but not impaired					
Arrears 2010	Neither past due nor impaired £m	0-3 months £m	3-6 months £m	6 months-1 year £m	Greater than 1 years £m	Financial assets that have been impaired £m	Total £m
Policyholder assets	**1,215**	**—**	**—**	**—**	**—**	**—**	**1,215**
Participating fund assets	**719**	**—**	**—**	**—**	**—**	**—**	**719**
Shareholder assets	**5,150**	**—**	**—**	**—**	**—**	**—**	**5,150**
Total	**7,084**	**—**	**—**	**—**	**—**	**—**	**7,084**
Total %	**100.0%**	**—**	**—**	**—**	**—**	**—**	**100.0%**
2009	7,572	—	—	—	—	—	7,572
2009 %	100.0%	—	—	—	—	—	100.0%

	Rating						
Ratings 2010	AAA £m	AA £m	A £m	BBB £m	Less than BBB £m	Non-rated £m	Total £m
Policyholder assets	**—**	**713**	**2**	**—**	**—**	**500**	**1,215**
Participating fund assets	**—**	**589**	**66**	**6**	**—**	**58**	**719**
Shareholder assets	**14**	**2,837**	**1,718**	**103**	**10**	**468**	**5,150**
Total	**14**	**4,139**	**1,786**	**109**	**10**	**1,026**	**7,084**
Total %	**0.2%**	**58.4%**	**25.3%**	**1.5%**	**0.1%**	**14.5%**	**100.0%**
2009	796	3,943	2,022	28	12	771	7,572
2009 %	10.5%	52.1%	26.7%	0.4%	0.2%	10.1%	100.0%

The decrease in AAA rated exposures is due to the downgrade of Berkshire Hathaway by S&P during 2010. At 31 December 2009 this exposure was £769 million (97% of our AAA rated reinsurance assets). The total exposure to non-rated reinsurance entities increased by £255 million from 2009 to 2010. This is principally due to the year on year increase in the value of reinsurance assets due from the entities that are classified as non-rated.

D3.6 – Receivables and other financial assets

		Financial assets that are past due but not impaired					
Arrears 2010	Neither past due nor impaired £m	0-3 months £m	3-6 months £m	6 months-1 year £m	Greater than 1 years £m	Financial assets that have been impaired £m	Total £m
Policyholder assets	**163**	**10**	**—**	**—**	**—**	**—**	**173**
Participating fund assets	**2,174**	**4**	**2**	**10**	**—**	**2**	**2,192**
Shareholder assets	**5,646**	**195**	**34**	**29**	**10**	**16**	**5,930**
Total	**7,983**	**209**	**36**	**39**	**10**	**18**	**8,295**
Total %	**96.3%**	**2.5%**	**0.4%**	**0.5%**	**0.1%**	**0.2%**	**100.0%**
2009	8,832	649	61	32	71	7	9,652
2009 %	91.6%	6.7%	0.6%	0.3%	0.7%	0.1%	100.0%

D3 – Analysis of asset quality continued

D3.6 – Receivables and other financial assets continued

Credit terms vary from subsidiary to subsidiary, and from country to country, and are set locally within overall credit limits prescribed by the Group Credit Approvals Committee, and within the framework of the Group Credit Risk Policy.

The credit quality of receivables and other financial assets is managed at the local business unit level. Where assets classed as "past due and impaired" exceed local credit limits, and are also deemed at sufficiently high risk of default, an analysis of the asset is performed and a decision is made whether to seek sufficient collateral from the counterparty or to write down the value of the asset as impaired.

The group reviews the carrying value of its receivables at each reporting period. If the carrying value of a receivable or other financial asset is greater than the recoverable amount, the carrying value is reduced through a charge to the income statement in the period of impairment.

D3.7 – Cash and cash equivalents

Cash and cash equivalents consist of cash at banks and in hand, deposits held at call with banks, treasury bills and other short-term highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of change in value. Such investments are normally those with less than three months maturity from the date of acquisition, and include certificates of deposit with maturities of less than three months at date of issue.

Cash and cash equivalents are carried at their face value which by their nature is essentially equal to their fair value.

The Group's Credit Risk Policy includes specific requirements in relation to aggregate counterparty exposures and money market exposure limits which cover assets reported as cash and cash equivalents in the group's balance sheet. The responsibility for monitoring of these limits falls with the Group Credit Approvals Committee and the Business Unit Credit Committee. The aggregate counterparty exposure limits are determined based on the credit rating of the counterparty. The money market exposure limits are determined based on the credit rating of the counterparty and the term of the intended exposure.

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 £160 million and £1,445 million in the UK and Dutch schemes respectively. Where the insurance policies are in segregated funds with specific asset allocations, they are included in the appropriate lines in the table below, otherwise they appear in "Other". The Dutch insurance policies are considered non-transferable under the terms of IAS 19 and so have been excluded as assets of the relevant scheme in this table.

					2010					2009
	United Kingdom £m	**Delta Lloyd £m**	**Canada £m**	**Ireland £m**	**Total £m**	United Kingdom £m	Delta Lloyd £m	Canada £m	Ireland £m	Total £m
Equities	**2,435**	**—**	**54**	**50**	**2,539**	2,285	—	78	28	2,391
Bonds	**5,533**	**—**	**150**	**202**	**5,885**	4,619	—	110	231	4,960
Property	**558**	**—**	**—**	**17**	**575**	403	—	—	18	421
Other	**835**	**7**	**12**	**118**	**972**	835	7	10	130	982
Total	**9,361**	**7**	**216**	**387**	**9,971**	8,142	7	198	407	8,754

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.

In 2010, there has been a reduction in the proportion of assets invested in equities, thereby mitigating the equity risk above. In addition, the trustees have taken further measures to partially mitigate inflation and interest rate risks.

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	**975**
Expiring beyond one year	**1,135**
Total	**2,110**

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

MCEV financial statements

Condensed consolidated income statement – MCEV basis

For the year ended 31 December 2010

2010 €m		2010 £m	Restated 2009 £m
	Operating profit before tax attributable to shareholders' profits		
1,276	United Kingdom	**1,085**	787
2,466	Europe	**2,096**	2,344
340	North America	**289**	266
128	Asia Pacific	**109**	101
4,210	Long-term business	**3,579**	3,498
1,235	General insurance and health	**1,050**	960
147	Fund management[1]	**125**	51
(229)	Other operations and regional costs[2]	**(195)**	(173)
5,363	Regional Operating Profit	**4,559**	4,336
(168)	Corporate centre	**(143)**	(108)
(772)	Group debt costs and other interest	**(656)**	(636)
4,423	**Operating profit before tax attributable to shareholders' profits**	**3,760**	3,592
	Adjusted for the following:		
(120)	Economic variances on long-term business	**(103)**	365
(286)	Short-term fluctuation in return on investments on non-long-term business	**(243)**	95
(72)	Economic assumption changes on general insurance and health business	**(61)**	57
(28)	Impairment of goodwill	**(24)**	(62)
(220)	Amortisation and impairment of intangibles	**(187)**	(135)
187	Profit on the disposal of subsidiaries and associates	**159**	72
(367)	Integration and restructuring costs	**(312)**	(286)
(504)	Exceptional items	**(428)**	(248)
3,013	**Profit before tax**	**2,561**	3,450
(1,321)	Tax on operating profit	**(1,123)**	(952)
362	Tax on other activities	**308**	224
(959)		**(815)**	(728)
2,054	**Profit for the year**	**1,746**	2,722

All profit is from continuing operations.
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

2010	Earnings per share	2010	Restated 2009
	Operating earnings per share on an MCEV basis after tax, attributable to ordinary shareholders of Aviva plc		
90.9c	Basic (pence per share)	**77.3p**	83.0p
89.4c	Diluted (pence per share)	**76.0p**	82.2p
	Earnings after tax on an MCEV basis, attributable to ordinary shareholders of Aviva plc		
69.6c	Basic (pence per share)	**59.2p**	95.8p
67.6c	Diluted (pence per share)	**58.2p**	94.9p

Total MCEV operating profit before shareholder tax was £3,760 million *(2009: £3,592 million)*, an increase of 5%. Within this total the long-term business operating profit before shareholder tax was £3,579 million *(2009: £3,498 million)*, an increase of 2%.

For 2010, the expected profit has been adjusted to reflect an even emergence of risk, calculated by using the Implied Discount Rates to "unwind" the opening balances. The basis for setting the underlying normalised investment returns has not been changed. This change has no impact on total profit.

Condensed consolidated statement of comprehensive income – MCEV basis

For the year ended 31 December 2010

2010 €m		2010 £m	Restated 2009 £m
2,054	**Profit for the year**	**1,746**	2,722
	Other comprehensive income		
(28)	Fair value losses on AFS securities, owner-occupied properties and hedging instruments	**(24)**	(86)
(18)	Fair value gains transferred to profit	**(15)**	(30)
1,175	Actuarial losses on pension schemes	**999**	(1,140)
(21)	Actuarial gains on pension schemes transferred to unallocated divisible surplus and other movements	**(18)**	24
31	Impairment losses	**26**	89
(224)	Foreign exchange rate movements	**(190)**	(1,018)
72	Aggregate tax effect – shareholder tax	**61**	48
987	**Other comprehensive income, net of tax**	**839**	(2,113)
3,041	**Total comprehensive income for the year**	**2,585**	609
	Attributable to:		
3,193	Equity shareholders of Aviva plc	**2,714**	777
(152)	Non-controlling interests	**(129)**	(168)
3,041		**2,585**	609

Condensed consolidated statement of changes in equity – MCEV basis

For the year ended 31 December 2010

2010 €m		2010 £m	Restated 2009 £m
21,581	**Balance at 1 January**	**18,561**	17,771
3,006	Total comprehensive (expense)/income for the year	**2,585**	609
(880)	Dividends and appropriations	**(757)**	(853)
—	Issues of share capital	—	1
243	Shares issued in lieu of dividends	**209**	299
49	Capital contributions from minority shareholders	**42**	6
—	Net increase to total equity following Delta Lloyd IPO	**—**	930
(217)	Minority share of dividends declared in the year	**(187)**	(109)
3	Non-controlling interest in (disposed)/acquired subsidiaries	**3**	(2)
(44)	Changes in non-controlling interest in existing subsidiaries	**(38)**	(111)
(16)	Shares acquired by employee trusts	**(14)**	(53)
48	Reserves credit for equity compensation plans	**41**	56
20	Aggregate tax effect – shareholder tax	**17**	17
23,793	**Total equity**	**20,462**	18,561
(4,624)	Non-controlling interests	**(3,977)**	(4,279)
19,169	**Balance at 31 December**	**16,485**	14,282

Condensed consolidated statement of financial position – MCEV basis

As at 31 December 2010

2010 €m		2010 £m	Restated 2009 £m
	Assets		
3,943	Goodwill	**3,391**	3,381
3,263	Acquired value of in-force business and intangible assets	**2,806**	2,860
3,182	Additional value of in-force long-term business[1]	**2,737**	3,475
2,319	Interests in, and loans to, joint ventures	**1,994**	1,701
748	Interests in, and loans to, associates	**643**	1,281
872	Property and equipment	**750**	753
15,191	Investment property	**13,064**	12,422
50,086	Loans	**43,074**	41,079
294,521	Financial investments	**253,288**	238,679
8,237	Reinsurance assets	**7,084**	7,572
335	Deferred tax assets	**288**	218
230	Current tax assets	**198**	359
9,645	Receivables	**8,295**	9,632
7,060	Deferred acquisition costs and other assets	**6,072**	5,621
4,292	Prepayments and accrued income	**3,691**	3,604
29,599	Cash and cash equivalents	**25,455**	25,176
16	Assets of operations classified as held for sale	**14**	53
433,539	**Total assets**	**372,844**	357, 866
	Equity		
820	Ordinary share capital	**705**	692
5,191	Capital reserves	**4,465**	4,478
2,405	Other reserves	**2,069**	2,042
(37)	Shares held by employee trusts	**(32)**	(68)
6,292	Retained earnings	**5,411**	3,425
3,113	Additional retained earnings on an MCEV basis[1]	**2,677**	2,523
17,784	**Equity attributable to ordinary shareholders of Aviva plc**	**15,295**	13,092
1,384	Preference share capital and direct capital instruments	**1,190**	1,190
4,624	Non-controlling interests[1]	**3,977**	4,279
23,792	**Total equity**	**20,462**	18,561
	Liabilities		
206,628	Gross insurance liabilities	**177,700**	171,092
136,962	Gross liabilities for investment contracts	**117,787**	110,015
3,986	Unallocated divisible surplus	**3,428**	3,866
10,502	Net asset value attributable to unitholders	**9,032**	9,894
3,422	Provisions	**2,943**	3,980
2,044	Deferred tax liabilities	**1,758**	1,038
365	Current tax liabilities	**314**	192
17,383	Borrowings	**14,949**	15,000
23,595	Payables and other financial liabilities	**20,292**	20,542
4,860	Other liabilities	**4,179**	3,653
—	Liabilities of operations classified as held for sale	**—**	33
409,747	**Total liabilities**	**352,382**	339,305
433,539	**Total equity and liabilities**	**372,844**	357,866

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 year ended 31 December 2010

2010 £m	IFRS £m	Adjustment £m	MCEV £m
Ordinary share capital	**705**	**—**	**705**
Capital reserves	**4,465**	**—**	**4,465**
Other reserves	**2,245**	**(176)**	**2,069**
Shares held by employee trusts	**(32)**	**—**	**(32)**
Retained earnings	**5,411**	**—**	**5,411**
Additional retained earnings on an MCEV basis	**—**	**2,677**	**2,677**
Equity attributable to ordinary shareholders of Aviva plc	**12,794**	**2,501**	**15,295**
Preference share capital	**200**	**—**	**200**
Direct capital instruments	**990**	**—**	**990**
Non-controlling interests	**3,741**	**236**	**3,977**
Total equity	**17,725**	**2,737**	**20,462**

2009 £m	IFRS £m	Adjustment £m	Restated MCEV £m
Ordinary share capital	692	—	692
Capital reserves	4,478	—	4,478
Other reserves	1,829	213	2,042
Shares held by employee trusts	(68)	—	(68)
Retained earnings	3,425	—	3,425
Additional retained earnings on an MCEV basis	—	2,523	2,523
Equity attributable to ordinary shareholders of Aviva plc	10,356	2,736	13,092
Preference share capital	200	—	200
Direct capital instruments	990	—	990
Non-controlling interests	3,540	739	4,279
Total equity	15,086	3,475	18,561

Reconciliation of IFRS total equity to MCEV net worth

For the year ended 31 December 2010

	2010 £m	Restated 2009 £m
Net assets on a statutory IFRS net basis	**17,725**	15,086
Adjusting for general business and other net assets on a statutory IFRS net basis	**1,331**	2,231
Life and related businesses net assets on a statutory IFRS net basis	**19,056**	17,317
Goodwill and other intangibles	**(2,356)**	(2,606)
Acquired value of in-force business	**(1,447)**	(1,493)
Adjustment for share of joint ventures and associates	**(120)**	(377)
Adjustment for assets to regulatory value net of tax	**(890)**	(19)
Adjustment for DAC and DIR net of tax	**(2,839)**	(2,653)
Adjustment for differences in technical provisions	**1,303**	1,414
Other accounting and tax differences	**(467)**	630
MCEV net worth	**12,240**	12,213
MCEV value of in-force[1]	**7,024**	6,325
MCEV[2]	**19,264**	18,538

1. Comprises PVFP of £10,180 million *(31 December 2009: £9,417 million)*, FC of £(882) million *(31 December 2009: £(820) million)*, CNHR of £(1,070) million *(31 December 2009: £(788) million), and* TVOG of £(1,204) million *(31 December 2009: £(1,484) million)*.
2. Comprises embedded value of £16,131 million *(31 December 2009: £15,058 million)* and non-controlling interest in long-term business assets of £3,133 million *(31 December 2009: £3,480million)*.

The reduced adjustment for share of joint ventures and associates follows the purchase of the remaining shares in RBS Life. The adjustment for assets to regulatory value relates mainly to the US, where the larger negative adjustment in 2010 reflects the increased market value of bonds under IFRS.

The DAC and DIR adjustment relates mainly to the UK and US, where DAC balances held for IFRS increased. The difference in technical provisions relates mainly to Delta Lloyd and the US, reflecting differences between the IFRS and local solvency reserving bases.

Group MCEV analysis of earnings

2010 £m	Covered business[1] £m A	Non-covered but related to life business[2] £m B	Total life business[3] £m A+B	Non-covered relating to non-life £m C	Total non-covered business £m B+C	Total £m A+B+C
Opening group MCEV	**15,058**	**2,055**	**17,113**	**(2,831)**	**(776)**	**14,282**
Opening adjustments	—	—	—	—	—	—
Adjusted 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)**
Total MCEV earnings	**1,838**	**(63)**	**1,775**	**(67)**	**(130)**	**1,708**
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)**	—
Closing group MCEV	**16,131**	**2,339**	**18,470**	**(1,985)**	**354**	**16,485**
Preference share capital and direct capital instruments						**(1,190)**
Equity attributable to ordinary shareholders of Aviva plc on an MCEV basis						**15,295**

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.

Restated 2009 £m	Covered business[1] £m A	Non-covered but related to life business[2] £m B	Total life business[3] £m A+B	Non-covered relating to non-life £m C	Total non-covered business £m B+C	Total £m A+B+C
Opening group MCEV	14,522	2,639	17,161	(2,499)	140	14,662
Opening adjustments	—	—	—	—	—	—
Adjusted opening group MCEV	14,522	2,639	17,161	(2,499)	140	14,662
Operating MCEV earnings	2,247	—	2,247	15	15	2,262
Non-operating MCEV earnings	942	(99)	843	(496)	(595)	347
Total MCEV earnings	3,189	(99)	3,090	(481)	(580)	2,609
Other movements in IFRS net equity	—	(266)	(266)	(839)	(1,105)	(1,105)
Capital and dividend flows	(250)	—	(250)	(283)	(283)	(533)
Foreign exchange variances	(762)	(218)	(980)	224	6	(756)
Acquired/divested businesses	(1,641)	(1)	(1,642)	1,047	1,046	(595)
Closing group MCEV	15,058	2,055	17,113	(2,831)	(776)	14,282
Preference share capital and direct capital instruments						(1,190)
Equity attributable to ordinary shareholders of Aviva plc on an MCEV basis						13,092

E1 – Basis of preparation

The condensed consolidated income statement and condensed consolidated statement of financial position on pages 134 to 136 present the group's results and financial position for the life and related businesses on the Market Consistent Embedded Value (MCEV) basis and for its non-life 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 2010 and 2009 have been audited by our auditors, Ernst & Young. Their report in respect of 2010 can be found on page 352 in the Report and Accounts.

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 the other 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 arrangement with The Royal Bank of Scotland Group (RBSG) and 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".

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).

From 2010, Aviva has changed the approach to calculating expected returns within operating profit. The expected existing business contribution (in excess of reference rate) is now calculated using the implied discount rates (IDR), which itself is based on the normalised investment returns.

The revised 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 US, where a nil tax rate was used for the 2009 post-tax results, and consequently 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 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.

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 E18.

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 E18.

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 2010 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, which are effectively based upon a parental guarantee that sufficient capital resources would be available if required, have been enacted for business written between 2006 and 2009. Previously credit has been taken for equivalent capital solution transactions only after they have been formally enacted.

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 has been 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 37 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 has been 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. This change aligns local Delta Lloyd and group Aviva reporting for MCEV and Solvency II internal model calculations. This change increases the closing 2010 embedded value by £20 million net of non-controlling interests. Results for 2009 have been restated on a consistent basis leading to an increase in the opening 2009 Embedded Value of £310 million; an increase in 2009 New Business Value of £35 million; an increase in 2009 Expected Return of £34 million and an increase in closing 2009 Embedded Value of £57 million, all net of non-controlling interests.

E2 – Geographical analysis of MCEV operating earnings

2010

	United Kingdom £m	Europe: Aviva Europe £m	Europe: Delta Lloyd £m	North America £m	Asia Pacific £m	Total £m
Value of new business	**354**	**504**	**(92)**	**(194)**	**52**	**624**
Earnings from existing business:						
– expected returns at the reference rate	**169**	**244**	**49**	**20**	**20**	**502**
– expected returns in excess of the reference rate	**425**	**357**	**181**	**401**	**25**	**1,389**
– expected returns	**594**	**601**	**230**	**421**	**45**	**1,891**
– experience variances	**(20)**	**147**	**(16)**	**(7)**	**(28)**	**76**
– operating assumption changes	**(18)**	**338**	**(320)**	**(146)**	**13**	**(133)**
Expected return on shareholders' net worth	**179**	**152**	**124**	**82**	**12**	**549**
Other operating variances	**(4)**	**271**	**157**	**133**	**15**	**572**
Operating earnings before tax	**1,085**	**2,013**	**83**	**289**	**109**	**3,579**

Restated 2009

	United Kingdom £m	Europe: Aviva Europe £m	Europe: Delta Lloyd £m	North America £m	Asia Pacific £m	Total £m
Value of new business	247	521	(48)	16	29	765
Earnings from existing business:						
– expected returns at the reference rate	113	326	43	55	26	563
– expected returns in excess of the reference rate	402	428	324	249	16	1,419
– expected returns	515	754	367	304	42	1,982
– experience variances	(29)	43	(3)	(87)	(23)	(99)
– operating assumption changes	(67)	(8)	171	(38)	(14)	44
Expected return on shareholders' net worth	138	180	88	89	17	512
Other operating variances	(17)	214	65	(18)	50	294
Operating earnings before tax	787	1,704	640	266	101	3,498

United Kingdom

MCEV operating earnings were 38% higher at £1,085 million *(2009: £787 million)* mainly due to increases in the value of new business and expected returns.

Value of new business grew 43% to £354 million *(2009: £247 million),* due to our focus on value maximisation through active management of our new business mix, robust cost control and pricing discipline.

Total expected return increased to £773 million *(2009: £653 million)*, reflecting the additional expected return following the reattribution of the inherited estate partly offset by the adoption of implied discount rates as the basis for determining the expected return.

Experience variances of £20 million adverse *(2009: £29 million adverse)* reflect favourable mortality experience offsetting adverse persistency experience in current economic conditions.

Assumption changes were £18 million adverse *(2009: £67 million adverse)* reflecting a net increase in expense allowances, following the closure of our offshore subsidiary to new business.

Europe

In Europe, operating profit decreased to £2,096 million *(2009: £2,344 million).* Growth in Aviva Europe operating return reflects assumption changes and more favourable operating experience partly offset by lower expected returns. The reduction in Delta Lloyd operating profit mainly reflects adverse assumption changes. 2009 benefited from favourable assumption changes.

E2 – Geographical analysis of MCEV operating earnings continued

Aviva Europe

MCEV operating earnings increased 18% to £2,013 million *(2009: £1,704 million),* as positive operating assumption changes, favourable experience variances and modelling improvements more than offset lower expected returns.

Value of new business was 3% lower at £504 million *(2009: £521 million).* After allowing for movements in currency, this is in line with prior year. This reflects increased contributions from profit-sharing products in France and Italy. These contributions have been offset by the impact of reduced sales in Ireland, Spain and Poland.

Total expected return was 19% lower at £753 million *(2009: £934 million)* reflecting lower assumed rates of return and the adoption of implied discount rates as the basis for determining the expected return.

Experience variances were favourable at £147 million *(2009: £43 million).* The 2010 result reflects positive experience on mortality, as well as the release of short-term lapse provisions and the benefit from policyholders switching to unit linked funds in France. This has been offset by the impact of adverse lapse experience in Spain and Ireland.

Assumption changes on existing business were favourable at £338 million *(2009: £8 million adverse).* This arises from the positive impact of a detailed review of our expense assumptions, as well as the positive impact of mortality changes in France. This is offset by further strengthening of lapse assumptions in Spain and Ireland.

Other operating variances were positive at £271 million *(2009: £214 million).* These largely arose in France and relate to modelling refinements of £164 million as well as £107 million from actions taken to reduce the level of policyholder guarantees on profit-sharing products in France.

Delta Lloyd

MCEV operating earnings decreased to £83 million *(2009: £640 million)* mainly due to adverse operating assumption changes compared to positive assumption changes in 2009.

Value of new business was negative at £(92) million *(2009: £(48) million)* reflecting the continuing impacts of adverse economic assumptions.

Total expected return was lower at £354 million *(2009: £455 million)* due to the adoption of implied discount rates as the basis for determining the expected return.

Operating experience and assumption changes on existing business amounted to £336 million adverse *(2009: £168 million favourable)* as the impact of adopting an industry-standard longevity table was partly offset by favourable expense assumption changes related to planned expense savings following restructuring activities.

Other operating variances of £157 million *(2009: £65 million)* related to various modelling changes, mainly in Delta Lloyd Belgium and Delta Lloyd Life.

North America

MCEV operating earnings increased to £289 million *(2009: £266 million)* as higher earnings from existing business were partly offset by lower value of new business. The improvement in in-force earnings was driven by management actions coupled with disciplined spread management, higher expected returns and modelling refinements.

Value of new business of negative £(194) million *(2009: £16 million positive)* reflected adverse economic movements, particularly in the second half of the year as risk free rates decreased. The impact of economic movements has more than offset the benefits of pricing and product management actions.

Total expected return increased to £503 million *(2009: £393 million)* reflecting the adoption of implied discount rates as the basis for determining expected return and the grossing up for tax in 2010 as a result of the reassessment of the tax paying position.

Operating experience and assumption changes on existing business were £153 million adverse *(2009: £125 million adverse)*. Included within this are positive benefits of disciplined spread management offset by adverse operating assumption changes relating to immediate annuitant mortality strengthening and increased expense loadings.

E2 – Geographical analysis of MCEV operating earnings continued

Other operating variances were £133 million favourable *(2009: £18 million adverse)* reflecting management actions and modelling refinements.

Asia Pacific

MCEV operating earnings were 8% higher at £109 million *(2009: £101 million, £45 million excluding the contribution from Australia)* as higher value of new business was partly offset by lower other operating variances.

Value of new business was 79% higher at £52 million *(2009: £29 million, £11 million excluding the contribution from Australia)*, reflecting improved scale efficiencies, product mix and volumes.

Total expected return was £57 million *(2009: £59 million, £37 million excluding the contribution from Australia)*, benefiting from the adoption of implied discount rates as the basis for determining the expected return.

Operating experience variances, other operating variances and assumption changes on existing business were nil *(2009: £13 million)*, as favourable mortality and assumption changes were offset by experience variances.

E2 – Geographical analysis of MCEV operating earnings continued

Gross of tax and non-controlling interests 2010	UK £m	France £m	Ireland £m	Italy £m	Poland £m	Spain £m	Other Europe £m	Aviva Europe £m	Delta Lloyd £m	Europe £m	North America £m	Asia Pacific £m	Total £m
Value of new business	**354**	**175**	**1**	**142**	**40**	**128**	**18**	**504**	**(92)**	**412**	**(194)**	**52**	**624**
Earnings from existing business													
– expected existing business contribution (reference rate)	**169**	**98**	**12**	**13**	**74**	**34**	**13**	**244**	**49**	**293**	**20**	**20**	**502**
– expected existing business contribution (in excess of reference rate)	**425**	**183**	**30**	**34**	**25**	**76**	**9**	**357**	**181**	**538**	**401**	**25**	**1,389**
Experience variances													
– maintenance expense[1]	**12**	**(25)**	**6**	**(11)**	**5**	**(1)**	**5**	**(21)**	**(21)**	**(42)**	**(16)**	**(2)**	**(48)**
– project and other related expenses[1]	**(8)**	**(5)**	**(2)**	**—**	**—**	**(2)**	**(5)**	**(14)**	**(4)**	**(18)**	**(18)**	**(3)**	**(47)**
– mortality/morbidity[2]	**23**	**27**	**3**	**(4)**	**13**	**2**	**3**	**44**	**13**	**57**	**(7)**	**9**	**82**
– lapses[3]	**(29)**	**27**	**(10)**	**18**	**(1)**	**(11)**	**(11)**	**12**	**5**	**17**	**(3)**	**(27)**	**(42)**
– other[4]	**(18)**	**93**	**(4)**	**12**	**14**	**3**	**8**	**126**	**(9)**	**117**	**37**	**(5)**	**131**
	(20)	**117**	**(7)**	**15**	**31**	**(9)**	**—**	**147**	**(16)**	**131**	**(7)**	**(28)**	**76**
Operating assumption changes:													
– maintenance expense[5]	**83**	**31**	**(3)**	**(11)**	**140**	**132**	**—**	**289**	**220**	**509**	**(88)**	**8**	**512**
– project and other related expenses[5]	**(92)**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**(6)**	**(6)**	**—**	**—**	**(98)**
– mortality/morbidity[6]	**2**	**57**	**7**	**1**	**7**	**(2)**	**—**	**70**	**(470)**	**(400)**	**(64)**	**17**	**(445)**
– lapses[7]	**(3)**	**(12)**	**(17)**	**39**	**13**	**(49)**	**(7)**	**(33)**	**(52)**	**(85)**	**6**	**(12)**	**(94)**
– other	**(8)**	**4**	**—**	**(2)**	**8**	**—**	**2**	**12**	**(12)**	**—**	**—**	**—**	**(8)**
	(18)	**80**	**(13)**	**27**	**168**	**81**	**(5)**	**338**	**(320)**	**18**	**(146)**	**13**	**(133)**
Expected return on shareholders' net worth	**179**	**47**	**20**	**50**	**9**	**18**	**8**	**152**	**124**	**276**	**82**	**12**	**549**
Other operating variances[8]	**(4)**	**271**	**(6)**	**(15)**	**30**	**(9)**	**—**	**271**	**157**	**428**	**133**	**15**	**572**
Earnings before tax and non-controlling interests	**1,085**	**971**	**37**	**266**	**377**	**319**	**43**	**2,013**	**83**	**2,096**	**289**	**109**	**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 MCEV operating earnings continued

Restated Gross of tax and non-controlling interests 2009	UK £m	France £m	Ireland £m	Italy £m	Poland £m	Spain £m	Other Europe £m	Aviva Europe £m	Delta Lloyd £m	Europe £m	North America £m	Asia £m	Australia £m	Asia Pacific £m	Total £m
Value of new business	247	169	12	124	55	151	10	521	(48)	473	16	11	18	29	765
Earnings from existing business															
– expected existing business contribution (reference rate)	113	161	22	15	67	39	22	326	43	369	55	11	15	26	563
– expected existing business contribution (in excess of reference rate)	402	282	18	5	4	119	—	428	324	752	249	15	1	16	1,419
Experience variances															
– maintenance expense[1]	37	—	6	(2)	14	(10)	5	13	(3)	10	—	6	(1)	5	52
– project and other related expenses[1]	(34)	(1)	(7)	—	—	(7)	(7)	(22)	(42)	(64)	(35)	—	—	—	(133)
– mortality/morbidity[2]	6	50	8	2	12	(6)	8	74	(22)	52	5	5	8	13	76
– lapses[3]	(30)	53	(23)	(46)	17	(52)	(17)	(68)	13	(55)	(17)	(38)	—	(38)	(140)
– other[4]	(8)	(80)	1	116	7	1	1	46	51	97	(40)	—	(3)	(3)	46
	(29)	22	(15)	70	50	(74)	(10)	43	(3)	40	(87)	(27)	4	(23)	(99)
Operating assumption changes:															
– maintenance expense[5]	1	(22)	5	(31)	54	(94)	10	(78)	275	197	(9)	(10)	8	(2)	187
– project and other related expenses	—	—	—	—	—	(13)	—	(13)	—	(13)	—	—	—	—	(13)
– mortality/morbidity[6]	5	64	7	12	58	(9)	(1)	131	(4)	127	(20)	(1)	5	4	116
– lapses[7]	(51)	(22)	(9)	(37)	83	(69)	(7)	(61)	(40)	(101)	(105)	(9)	4	(5)	(262)
– other[8]	(22)	3	12	1	(1)	—	(2)	13	(60)	(47)	96	(6)	(5)	(11)	16
	(67)	23	15	(55)	194	(185)	—	(8)	171	163	(38)	(26)	12	(14)	44
Expected return on shareholders' net worth	138	66	16	57	8	26	7	180	88	268	89	11	6	17	512
Other operating variances[9]	(17)	62	(4)	—	121	37	(2)	214	65	279	(18)	50	—	50	294
Earnings before tax and non-controlling interests	787	785	64	216	499	113	27	1,704	640	2,344	266	45	56	101	3,498

1. Maintenance expense experience in the UK relates to profits from existing business administration. Project and other related expenses in the UK reflect project costs associated with strategic initiatives, including developments designed to offer a wider range of products to customers, and the simplification of systems and processes. Project and other related expenses in Delta Lloyd relate to integration costs in Belgium.
2. Mortality experience continues to be better than the assumptions set across a number of our businesses.
3. Persistency experience has been volatile across most of our businesses, in part reflecting wider economic volatility. In France, positive persistency experience including the release of a short-term provision, in line with positive underlying experience. In Poland, lapse experience continued to be better than the long-term assumptions for both Life and Pension products.
4. Other experience is favourable overall. Both France and Italy include one off adjustments reflecting final commission payments from prior years. The favourable impact in Italy reflects to one-off profit sharing on a reinsurance treaty. The favourable impact in Delta Lloyd relates to the revised investment and bonus strategy in Germany following the decision to close this operation to new business. The adverse impact in the USA relates to the cost of enhancing policyholder crediting rates.
5. Favourable expense assumption changes reflect the impact of cost reductions in the Delta Lloyd and Poland, together with the impact of revisions to expense allocations in Delta Lloyd. The adverse impact in Spain relates to the capitalisation of certain governance costs in respect of bancassurance joint ventures.
6. Favourable mortality assumption changes in France and Poland reflecting recent experience. The adverse impact in Delta Lloyd reflects the net impact of using updated mortality tables in the Netherlands, Germany and Belgium, following the issuance of revised advice from the respective actuarial associations.
7. Persistency assumptions have been strengthened across most of our businesses, in light of experience. In Poland, persistency assumptions have been weakened following sustained favourable experience.
8. Other assumption changes in the US primarily relate to the timing of management action in setting policyholder credited rates. In Delta Lloyd, the change represents tax effects resulting from a reallocation of assets
9. Other operating variances in France, Poland and Asia relate to have arisen as a result of more accurate modelling. In Delta Lloyd, these relate to revisions to investment and bonus strategies and expenses in Delta Lloyd Germany following the decision to close this operation to new business. In Spain, these reflect the impact of re-pricing actions on risk products.

E2 – Geographical analysis of MCEV operating earnings continued

Net of tax and non-controlling interests 2010	UK £m	France £m	Ireland £m	Italy £m	Poland £m	Spain £m	Other Europe £m	Aviva Europe £m	Delta Lloyd £m	Europe £m	North America £m	Asia Pacific £m	Total £m
Value of new business	254	100	1	42	29	43	15	230	(41)	189	(126)	41	358
Earnings from existing business													
– expected existing business contribution (reference rate)	122	61	8	4	53	13	11	150	19	169	13	14	318
– expected existing business contribution (in excess of reference rate)	306	115	19	11	18	27	7	197	68	265	261	20	852
Experience variances													
– maintenance expense[1]	8	(16)	5	(6)	3	(3)	4	(13)	(9)	(22)	(10)	(1)	(25)
– project and other related expenses[1]	(6)	(3)	(1)	—	—	(2)	(4)	(10)	(1)	(11)	(12)	(3)	(32)
– mortality/morbidity[2]	17	15	2	(2)	10	—	2	27	3	30	(5)	7	49
– lapses[3]	(21)	19	(7)	6	—	(6)	(9)	3	—	3	(2)	(22)	(42)
– other[4]	(12)	62	(3)	3	10	2	6	80	(3)	77	24	(4)	85
	(14)	77	(4)	1	23	(9)	(1)	87	(10)	77	(5)	(23)	35
Operating assumption changes:													
– maintenance expense[5]	57	21	(2)	(8)	97	83	—	191	89	280	(57)	8	288
– project and other related expenses	(65)	—	—	—	—	—	—	—	(3)	(3)	—	—	(68)
– mortality/morbidity[6]	1	38	5	1	4	—	—	48	(198)	(150)	(42)	13	(178)
– lapses[7]	(2)	(8)	(12)	10	10	(17)	(6)	(23)	(21)	(44)	4	(9)	(51)
– other	(6)	3	—	—	6	—	1	10	(5)	5	—	—	(1)
	(15)	54	(9)	3	117	66	(5)	226	(138)	88	(95)	12	(10)
Expected return on shareholders' net worth	129	27	14	17	6	7	6	77	50	127	53	9	318
Other operating variances[8]	(4)	162	(4)	(2)	20	(4)	—	172	64	236	87	9	328
Earnings after tax and non-controlling interests	**778**	**596**	**25**	**76**	**266**	**143**	**33**	**1,139**	**12**	**1,151**	**188**	**82**	**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.

E2 – Geographical analysis of MCEV operating earnings continued

Restated Net of tax and non-controlling interests 2009	UK £m	France £m	Ireland £m	Italy £m	Poland £m	Spain £m	Other Europe £m	Aviva Europe £m	Delta Lloyd £m	Europe £m	North America £m	Asia £m	Australia £m	Asia Pacific £m	Total £m
Value of new business	177	94	8	38	39	51	8	238	(43)	195	16	9	13	22	410
Earnings from existing business															
– expected existing business contribution (reference rate)	81	100	15	5	47	15	17	199	29	228	55	6	11	17	381
– expected existing business contribution (in excess of reference rate)	289	170	12	2	3	44	—	231	205	436	249	12	—	12	986
Experience variances															
– maintenance expense[1]	27	—	4	(1)	10	(8)	4	9	4	13	—	5	—	5	45
– project and other related expenses[1]	(26)	—	(5)	—	—	(3)	(6)	(14)	(21)	(35)	(35)	—	—	—	(96)
– mortality/morbidity[2]	4	30	5	1	9	(3)	6	48	(17)	31	5	3	5	8	48
– lapses[3]	(22)	36	(16)	(15)	12	(20)	(14)	(17)	5	(12)	(17)	(31)	—	(31)	(82)
– other[4]	(4)	(49)	1	37	5	1	1	(4)	35	31	(40)	(1)	(2)	(3)	(16)
	(21)	17	(11)	22	36	(33)	(9)	22	6	28	(87)	(24)	3	(21)	(101)
Operating assumption changes:															
– maintenance expense[5]	—	(14)	3	(10)	38	(69)	7	(45)	197	152	(9)	(9)	6	(3)	140
– project and other related expenses	—	—	—	—	—	(5)	—	(5)	—	(5)	—	—	—	—	(5)
– mortality/morbidity[6]	4	42	4	4	42	(3)	1	90	1	91	(20)	—	3	3	78
– lapses[7]	(36)	(13)	(6)	(12)	58	(24)	(5)	(2)	(25)	(27)	(105)	(6)	3	(3)	(171)
– other[8]	(16)	2	8	1	(1)	—	(3)	7	(48)	(41)	96	(5)	(3)	(8)	31
	(48)	17	9	(17)	137	(101)	—	45	125	170	(38)	(20)	9	(11)	73
Expected return on shareholders' net worth	100	38	11	18	6	10	6	89	57	146	89	7	4	11	346
Other operating variances[9]	(11)	34	(3)	—	83	12	1	127	14	141	(18)	40	—	40	152
Earnings after tax and non-controlling interests	567	470	41	68	351	(2)	23	951	393	1,344	266	30	40	70	2,247

1. Maintenance expense experience in the UK relates to profits from existing business administration. Project and other related expenses in the UK reflect project costs associated with strategic initiatives, including developments designed to offer a wider range of products to customers, and the simplification of systems and processes. Project and other related expenses in Delta Lloyd relate to integration costs in Belgium.
2. Mortality experience continues to be better than the assumptions set across a number of our businesses.
3. Persistency experience has been volatile across most of our businesses, in part reflecting wider economic volatility. In France, positive persistency experience including the release of a short-term provision, in line with positive underlying experience. In Poland, lapse experience continued to be better than the long-term assumptions for both Life and Pension products.
4. Other experience is favourable overall. The Both France and Italy include one off adjustments reflecting final commission payments from prior years. The favourable impact in Italy reflects to one-off profit sharing on a reinsurance treaty. The favourable impact in Delta Lloyd relates to the revised investment and bonus strategy in Germany following the decision to close this operation to new business. The adverse impact in the USA relates to the cost of enhancing policyholder crediting rates.
5. Favourable expense assumption changes reflect the impact of cost reductions in the Delta Lloyd and Poland, together with the impact of revisions to expense allocations in Delta Lloyd. The adverse impact in Spain relates the capitalisation of certain governance costs in respect of bancassurance joint ventures
6. Favourable mortality assumption changes in France and Poland reflecting recent experience. The adverse impact in Delta Lloyd reflects the net impact of using updated mortality tables in the Netherlands, Germany and Belgium, following the issuance of revised advice from the respective actuarial associations.
7. Persistency assumptions have been strengthened across most of our businesses, in light of experience. In Poland, persistency assumptions have been weakened following sustained favourable experience.
8. Other assumption changes in the US primarily relate to the timing of management action in setting policyholder credited rates. In Delta Lloyd, the change represents tax effects resulting from a reallocation of assets
9. Other operating variances in France, Poland and Asia have arisen as a result of more accurate modelling. In Delta Lloyd, these relate to revisions to investment and bonus strategies and expenses in Delta Lloyd Germany following the decision to close this operation to new business. In Spain, these reflect the impact of re-pricing actions on risk products.

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.

	2010 £m	2009 £m
United Kingdom	**28**	42
Europe	**10**	6
North America	**(8)**	(7)
Asia Pacific	**—**	(1)
Aviva Investors	**30**	40
United Kingdom	**3**	(14)
Aviva Europe[1]	**—**	3
Delta Lloyd	**94**	21
Europe	**94**	24
Asia Pacific[2]	**(2)**	1
Total	**125**	51

1. Aviva Europe included the result from the fund management in Poland in 2009. This business was transferred across to Aviva Investors from 1 January 2010.
2. The Australian Life business was sold on 1 October 2009, included within the 2009 operating earnings is £7 million.

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.

	2010			2009		
	Regional costs £m	**Other operations £m**	**Total £m**	Regional costs £m	Other operations £m	Total £m
United Kingdom	**—**	**(21)**	**(21)**	—	(28)	(28)
Aviva Europe	**(55)**	**(43)**	**(98)**	(36)	(41)	(77)
Delta Lloyd	**—**	**(24)**	**(24)**	—	(30)	(30)
Europe	**(55)**	**(67)**	**(122)**	(36)	(71)	(107)
North America	**(26)**	**6**	**(20)**	(19)	3	(16)
Asia Pacific	**(32)**	**—**	**(32)**	(20)	(2)	(22)
Total	**(113)**	**(82)**	**(195)**	(75)	(98)	(173)

E5 – Exceptional items and Integration and restructuring costs

Exceptional Items of £(428) million (2009: £(248) million) 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 £(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.

Exceptional costs for full year 2009 totalled £(248) million. This included £175 million in respect of the reattribution of the inherited estate in the UK, £(261) million in respect of the change in legislation in Poland restricting charges against pension funds, £(102) million brand migration costs and £(60) million in respect of latent claims reserves in Canada.

Integration and restructuring costs incurred in the year amounted to £312 million *(2009: £286 million).* This includes expenditure relating to the Quantum Leap project in Europe of £40 million, costs associated with preparing the businesses for Solvency II implementation of £114 million and other restructuring exercises across the Group of £123 million. Costs incurred in 2009 related to expenditure on cost savings programmes in the UK life and general insurance businesses and in Europe.

E6 – Segmentation of condensed consolidated statement of financial position

	2010			Restated 2009		
	Life and related businesses £m	**General business and other £m**	**Group £m**	Life and related businesses £m	General business and other £m	Group £m
Total assets before acquired value of in-force long-term business	**323,476**	**45,378**	**368,854**	307,117	45,880	352,997
Acquired additional value of in-force long-term business	**1,253**	**—**	**1,253**	1,394	—	1,394
Total assets included in the IFRS statement of financial position	**324,729**	**45,378**	**370,107**	308,511	45,880	354,391
Liabilities of the long-term business	**(305,673)**	**—**	**(305,673)**	(291,194)	—	(291,194)
Liabilities of the general insurance and other businesses	**—**	**(46,709)**	**(46,709)**	—	(48,111)	(48,111)
Net assets on a statutory IFRS basis	**19,056**	**(1,331)**	**17,725**	17,317	(2,231)	15,086
Additional value of in-force long-term business[1]	**2,737**	**—**	**2,737**	3,475	—	3,475
Net assets on an MCEV basis[2]	**21,793**	**(1,331)**	**20,462**	20,792	(2,231)	18,561
Equity capital, capital reserves, shares held by employee trusts and other reserves			**7,207**			7,144
IFRS basis retained earnings			**5,411**			3,425
Additional MCEV basis retained earnings			**2,677**			2,523
Equity attributable to ordinary shareholders of Aviva plc on an MCEV basis			**15,295**			13,092
Preference share capital and direct capital instruments			**1,190**			1,190
Non-controlling interests			**3,977**			4,279
MCEV basis total equity			**20,462**			18,561

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:

	2010 £m	Restated 2009 £m	Movement in year £m
Group's share included in shareholders' funds	**2,677**	2,523	154
Non-controlling interests' share	**236**	739	(503)
Movements in AFS securities	**(176)**	213	(389)
Additional value of in-force long-term business	**2,737**	3,475	(738)

2. Analysis of net assets on an MCEV basis is made up as follows:

	2010 £m	Restated 2009 £m
Embedded value	**16,131**	15,058
Non-controlling interests	**3,133**	3,480
	19,264	18,538
Goodwill and intangible assets allocated to long-term business[3]	**2,356**	2,606
Notional allocation of IAS19 pension fund surplus/(deficit) to long-term business[4]	**173**	(352)
Long-term business net assets on an MCEV basis	**21,793**	20,792

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 2010	Free surplus £m	Required capital[1] £m	VIF £m	Total MCEV £m
Opening group MCEV	**2,204**	**7,546**	**5,308**	**15,058**
New business value	**(1,250)**	**901**	**707**	**358**
Expected existing business contribution (reference rate)	—	—	**318**	**318**
Expected existing business contribution (in excess of reference rate)	—	—	**852**	**852**
Transfers from VIF and required capital to the free surplus	**1,811**	**(587)**	**(1,224)**	—
Experience variances	**107**	**76**	**(148)**	**35**
Assumption changes	**(147)**	**(21)**	**158**	**(10)**
Expected return on shareholders' net worth	**126**	**192**	—	**318**
Other operating variances	**47**	**7**	**274**	**328**
Operating MCEV earnings	**694**	**568**	**937**	**2,199**
Economic variances	**(175)**	**103**	**228**	**156**
Other non-operating variances[2]	**(59)**	—	**(458)**	**(517)**
Total MCEV earnings	**460**	**671**	**707**	**1,838**
Capital and dividend flows[3]	**(1,020)**	—	—	**(1,020)**
Foreign exchange variances	**(26)**	**(65)**	**(79)**	**(170)**
Acquired/divested business	**23**	**190**	**212**	**425**
Closing MCEV	**1,641**	**8,342**	**6,148**	**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 are described under Exceptional items on page 150.
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.

Acquisitions during the year consist of an increase in the Group's interest in RBS Life Investments Limited, and the purchase of the interests of minority shareholders in two subsidiaries in France and Italy.

Restated Net of tax and non-controlling interests 2009	Free surplus £m	Required capital[1] £m	VIF £m	Total MCEV £m
Opening MCEV	1,348	8,148	5,026	14,522
New business value	(1,571)	983	998	410
Expected existing business contribution (reference rate)	—	—	381	381
Expected existing business contribution (in excess of reference rate)	—	—	986	986
Transfers from VIF and required capital to the free surplus	1,869	(738)	(1,131)	—
Experience variances	(198)	135	(38)	(101)
Assumption changes	48	6	19	73
Expected return on shareholders' net worth	164	182	—	346
Other operating variances	10	(141)	283	152
Operating MCEV earnings	322	427	1,498	2,247
Economic variances	1,317	(324)	(315)	678
Other non-operating variances	(238)	909	(407)	264
Total MCEV earnings	1,401	1,012	776	3,189
Capital and dividend flows[2]	(250)	—	—	(250)
Foreign exchange variances	6	(556)	(183)	(733)
Acquired/divested business	(301)	(1,058)	(311)	(1,670)
Closing MCEV	2,204	7,546	5,308	15,058

1. Required capital is shown net of implicit items permitted by local regulators to cover minimum solvency margins.
2. 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	2010 £m	Restated 2009 £m
Value of new business	**624**	765
Earnings from existing business		
– expected returns at the reference rate	**502**	563
– expected returns in excess of the reference rate	**1,389**	1,419
– expected returns	**1,891**	1,982
– experience variances	**76**	(99)
– operating assumption changes	**(133)**	44
Other operating variance	**572**	294
Expected return on shareholders' net worth	**549**	512
Life and Pensions operating earnings before tax	**3,579**	3,498
Economic Variances	**(103)**	365
Other non-operating variances	**(811)**	364
Life and Pensions earnings before tax	**2,665**	4,227
Tax on operating earnings	**(1,057)**	(903)
Tax on other activities	**202**	(44)
Life and Pensions earnings after tax	**1,810**	3,280

There were no separate development costs reported in these years.

Other non operating variances are described under Exceptional items on page 150.

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

	2010		Restated 2009	
	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	**358**	**624**	410	765
Life and pensions operating return	**2,199**	**3,579**	2,247	3,498
Life and pensions earnings	**1,838**	**2,665**	3,189	4,227

E9 – Present value of life new business premiums

The tables below set out the present value of new business premiums (PVNBP) written by the life and related businesses, the value of new business and the resulting margin, firstly gross and then net of tax and non-controlling interests. 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, and is expressed at the point of sale.

The premium volumes and projection assumptions used to calculate the present value of regular premiums for each product are the same as those used to calculate the value of new business, so the components of the new business margin are on a consistent basis.

The Weighted Average Capitalisation Factor (WACF) is the multiple of the annualised regular premium which gives the present value at point of sale of the regular premiums.

Gross of non-controlling interests 2010	Regular premiums £m	WACF	Present value of regular premiums £m	Single premiums £m	Present value of new business premiums £m
United Kingdom	**579**	**5.2**	**2,997**	**7,301**	**10,298**
France	**89**	**6.3**	**565**	**4,353**	**4,918**
Ireland	**65**	**4.0**	**263**	**675**	**938**
Italy	**50**	**5.4**	**270**	**4,186**	**4,456**
Poland	**51**	**9.2**	**468**	**135**	**603**
Spain	**109**	**5.9**	**648**	**1,436**	**2,084**
Other Europe	**89**	**4.6**	**412**	**126**	**538**
Aviva Europe	**453**	**5.8**	**2,626**	**10,911**	**13,537**
Delta Lloyd	**172**	**9.3**	**1,591**	**1,587**	**3,178**
Europe	**625**	**6.7**	**4,217**	**12,498**	**16,715**
North America	**97**	**10.2**	**993**	**3,735**	**4,728**
Asia Pacific	**240**	**4.7**	**1,132**	**485**	**1,617**
Total life and pensions	**1,541**	**6.1**	**9,339**	**24,019**	**33,358**

Gross of non-controlling interests 2009	Regular premiums £m	WACF	Present value of regular premiums £m	Single premiums £m	Present value of new business premiums £m
United Kingdom	531	5.3	2,803	6,111	8,914
France	92	6.6	608	4,283	4,891
Ireland	78	4.3	337	735	1,072
Italy	111	5.3	592	3,015	3,607
Poland	71	13.1	927	152	1,079
Spain	128	6.1	782	1,672	2,454
Other Europe	82	4.5	365	55	420
Aviva Europe	562	6.4	3,611	9,912	13,523
Delta Lloyd	207	9.3	1,935	1,730	3,665
Europe	769	7.2	5,546	11,642	17,188
North America	90	9.6	861	3,684	4,545
Asia	185	4.5	828	267	1,095
Australia	49	4.0	196	65	261
Asia Pacific	234	4.4	1,024	332	1,356
Total life and pensions	1,624	6.3	10,234	21,769	32,003

In Poland, the WACF has significantly fallen, reflecting the lower proportion of new pension business written following legislative changes making this business less attractive. This business had a high WACF, reflecting the long duration of the business combined with premiums increasing each year.

E10 – Geographical analysis of value of new business

The value generated by new business written during the period is the present value of the projected stream of after tax distributable profit from that business, including expected profit between point of sale and the valuation date. The value of new business has been calculated using economic assumptions at the point of sale which has been implemented with the assumptions being taken as those appropriate to the start of each quarter. For contracts that are re-priced more frequently, weekly or monthly economic assumptions have been used. The operating assumptions are consistent with those used to determine the embedded value. The value of new business is shown after the effect of the frictional costs of holding required capital, and after the effect of the costs of residual non-hedgeable risks on the same basis as for the in-force covered business.

Life and pensions (gross of tax and non-controlling interest)	Present value of new business premiums 2010 £m	2009 £m	Value of new business 2010 £m	Restated 2009 £m	New business margin 2010 %	Restated 2009 %
United Kingdom	**10,298**	8,914	**354**	247	**3.4%**	2.8%
France	**4,918**	4,891	**175**	169	**3.6%**	3.5%
Ireland	**938**	1,072	**1**	12	**0.1%**	1.1%
Italy	**4,456**	3,607	**142**	124	**3.2%**	3.4%
Poland	**603**	1,079	**40**	55	**6.6%**	5.1%
Spain	**2,084**	2,454	**128**	151	**6.1%**	6.2%
Other Europe	**538**	420	**18**	10	**3.3%**	2.4%
Aviva Europe	**13,537**	13,523	**504**	521	**3.7%**	3.9%
Delta Lloyd	**3,178**	3,665	**(92)**	(48)	**(2.9)%**	(1.3)%
Europe	**16,715**	17,188	**412**	473	**2.5%**	2.8%
North America[1]	**4,728**	4,545	**(194)**	16	**(4.1)%**	0.4%
Asia Pacific	**1,617**	1,356	**52**	29	**3.2%**	2.1%
Total life and pensions	**33,358**	32,003	**624**	765	**1.9%**	2.4%

Life and pensions (net of tax and non-controlling interest)	Present value of new business premiums 2010 £m	2009 £m	Value of new business 2010 £m	Restated 2009 £m	New business margin 2010 %	Restated 2009 %
United Kingdom	**10,298**	8,914	**254**	177	**2.5%**	2.0%
France	**4,340**	4,111	**100**	94	**2.3%**	2.3%
Ireland	**704**	804	**1**	8	**0.1%**	1.0%
Italy	**1,965**	1,614	**42**	38	**2.1%**	2.4%
Poland	**531**	933	**29**	39	**5.5%**	4.2%
Spain	**1,136**	1,326	**43**	51	**3.8%**	3.8%
Other Europe	**538**	420	**15**	8	**2.8%**	1.9%
Aviva Europe	**9,214**	9,208	**230**	238	**2.5%**	2.6%
Delta Lloyd	**1,721**	3,235	**(41)**	(43)	**(2.4)%**	(1.3)%
Europe	**10,935**	12,443	**189**	195	**1.7%**	1.6%
North America	**4,728**	4,545	**(126)**	16	**(2.7)%**	0.4%
Asia Pacific	**1,598**	1,348	**41**	22	**2.6%**	1.6%
Total life and pensions	**27,559**	27,250	**358**	410	**1.3%**	1.5%

1 In North America the value of new business of £(194) million reflects adverse economic movements, particularly in the second half of 2010, as risk free rates decreased.

E11 – Post tax internal rate of return and payback period on life and pensions 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 IRR on life and pensions new business for the Group was 12.5% *(2009: 10.0%)*

Gross of non-controlling interests 31 December 2010	**Internal rate of return %**	**Initial capital £m**	**Required capital £m**	**Total invested capital £m**	**Payback period years**
United Kingdom	**15%**	**98**	**198**	**296**	**7**
France	**9%**	**34**	**202**	**236**	**9**
Ireland	**5%**	**34**	**17**	**51**	**11**
Italy	**11%**	**32**	**183**	**215**	**6**
Poland	**25%**	**16**	**9**	**25**	**4**
Spain	**22%**	**25**	**80**	**105**	**4**
Other Europe	**14%**	**41**	**16**	**57**	**6**
Aviva Europe	**13%**	**182**	**507**	**689**	**7**
Delta Lloyd	**6%**	**106**	**112**	**218**	**16**
Europe	**11%**	**288**	**619**	**907**	**9**
North America	**14%**	**65**	**366**	**431**	**4**
Asia Pacific	**11%**	**62**	**34**	**96**	**13**
Total	**12.5%**	**513**	**1,217**	**1,730**	**8**

Gross of non-controlling interests 31 December 2009	Internal rate of return %	Initial capital £m	Required capital £m	Total invested capital £m	Payback period years
United Kingdom	14%	109	133	242	8
France	9%	53	169	222	9
Ireland	6%	56	23	79	10
Italy	10%	27	156	183	7
Poland	22%	20	9	29	5
Spain	26%	25	72	97	3
Other Europe	12%	43	7	50	8
Aviva Europe	13%	224	436	660	7
Delta Lloyd	6%	116	140	256	33
Europe	11%	340	576	916	15
North America	7%	162	376	538	14
Asia	6%	58	25	83	25
Australia	11%	2	34	36	8
Asia Pacific	8%	60	59	119	20
Total	10.0%	671	1,144	1,815	14

E12 – Free surplus emergence

Net of tax and non-controlling interests 2010	Existing 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	New business: Impact on net worth £m	Reduction in free surplus from required capital £m	Total new business surplus generation £m	Total business: Total free surplus generation £m
United Kingdom	**345**	**129**	**208**	**(183)**	**499**	**(43)**	**(95)**	**(138)**	**361**
Aviva Europe	**478**	**77**	**147**	**126**	**828**	**(150)**	**(342)**	**(492)**	**336**
Delta Lloyd	**139**	**50**	**(225)**	**83**	**47**	**(58)**	**(55)**	**(113)**	**(66)**
Europe	**617**	**127**	**(78)**	**209**	**875**	**(208)**	**(397)**	**(605)**	**270**
North America	**210**	**53**	**(56)**	**292**	**499**	**(41)**	**(375)**	**(416)**	**83**
Asia Pacific	**52**	**9**	**(5)**	**15**	**71**	**(57)**	**(34)**	**(91)**	**(20)**
Total	**1,224**	**318**	**69**	**333**	**1,944**	**(349)**	**(901)**	**(1,250)**	**694**

Net of tax and non-controlling interests 2009	Existing 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	New business: Impact on net worth £m	Reduction in free surplus from required capital £m	Total new business surplus generation £m	Total business: Total free surplus generation £m
United Kingdom	220	99	62	(70)	311	(53)	(130)	(183)	128
Aviva Europe	495	89	27	112	723	(177)	(281)	(458)	265
Delta Lloyd	175	57	(124)	55	163	(111)	(124)	(235)	(72)
Europe	670	146	(97)	167	886	(288)	(405)	(693)	193
North America	159	90	(100)	457	606	(192)	(390)	(582)	24
Asia Pacific	82	11	(5)	2	90	(55)	(58)	(113)	(23)
Total	1,131	346	(140)	556	1,893	(588)	(983)	(1,571)	322

E13 – 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.

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**
Delta Lloyd	**517**	**109**	**56**	**(176)**	**(76)**	**430**	**196**
Europe	**2,166**	**1,089**	**631**	**166**	**299**	**4,351**	**3,484**
North America	**56**	**(47)**	**12**	**12**	**9**	**42**	**42**
Asia Pacific	**187**	**94**	**35**	**15**	**3**	**334**	**325**
Total	**2,562**	**1,902**	**1,216**	**480**	**864**	**7,024**	**6,148**

Restated 2009 £m	0-5	6-10	11-15	16-20	20+	Total gross of non-controlling interest	Total net of non-controlling interest
United Kingdom	289	629	490	288	369	2,065	2,065
Aviva Europe	1,613	1,149	656	350	342	4,110	3,271
Delta Lloyd	54	149	177	151	(234)	297	125
Europe	1,667	1,298	833	501	108	4,407	3,396
North America	(238)	(251)	28	13	54	(394)	(394)
Asia Pacific	102	72	29	18	26	247	241
Total	1,820	1,748	1,380	820	557	6,325	5,308

E13 – Maturity profile of business continued

(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.

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**
Delta Lloyd	**(6)**	**21**	**21**	**12**	**(10)**	**38**	**18**
Europe	**251**	**140**	**91**	**43**	**30**	**555**	**396**
North America	**(26)**	**(85)**	**10**	**22**	**(6)**	**(85)**	**(85)**
Asia Pacific	**59**	**22**	**11**	**5**	**3**	**100**	**98**
Total	**362**	**119**	**134**	**83**	**170**	**868**	**707**

Restated 2009 £m	0-5	6-10	11-15	16-20	20+	Total gross of non-controlling interest	Total net of non-controlling interest
United Kingdom	107	30	34	19	40	230	230
Aviva Europe	286	126	80	37	43	572	414
Delta Lloyd	(38)	89	97	75	(138)	85	70
Europe	248	215	177	112	(95)	657	484
North America	20	6	64	52	66	208	208
Asia Pacific	46	14	8	4	5	77	76
Total	421	265	283	187	16	1,172	998

E14 – Segmental analysis of life and related business embedded value

Net of non-controlling interests 2010	Free surplus £m	Required capital[1] £m	VIF £m	Total MCEV £m
United Kingdom	**1,139**	**2,934**	**2,297**	**6,370**
France[2]	**(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**
Delta Lloyd	**356**	**944**	**196**	**1,496**
Europe	**615**	**3,755**	**3,484**	**7,854**
North America[2,3]	**(248)**	**1,437**	**42**	**1,231**
Asia Pacific	**135**	**216**	**325**	**676**
Total	**1,641**	**8,342**	**6,148**	**16,131**

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.

Restated Net of non-controlling interests 2009	Free surplus £m	Required capital[1] £m	VIF £m	Total MCEV £m
United Kingdom[2]	1,270	2,568	2,065	5,903
France[3]	(71)	1,592	1,252	2,773
Ireland	175	226	487	888
Italy	263	268	129	660
Poland	60	131	950	1,141
Spain	135	212	265	612
Other Europe	38	33	188	259
Aviva Europe	600	2,462	3,271	6,333
Delta Lloyd	368	1,095	125	1,588
Europe	968	3,557	3,396	7,921
North America[3,4]	(152)	1,240	(394)	694
Asia	118	181	241	540
Australia	—	—	—	—
Asia Pacific	118	181	241	540
Total	2,204	7,546	5,308	15,058

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 £810 million at 31 December 2009 has been included within non-covered business.

E15 – 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 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**
Delta Lloyd	**580**	**(107)**	**(85)**	**(192)**	**196**
Europe	**4,804**	**(293)**	**(457)**	**(570)**	**3,484**
North America	**607**	**(133)**	**(69)**	**(363)**	**42**
Asia Pacific	**441**	**(26)**	**(58)**	**(32)**	**325**
Total	**8,790**	**(743)**	**(906)**	**(993)**	**6,148**

The Time Value of Options and Guarantees has reduced by £248 million to £993 million, reflecting favourable impacts from model refinements in France and US and the impact of renegotiating the guarantees on AFER in France.

The allowance for Non-hedgeable risks has increased by £(260) million, reflecting the change to the charge from 2.5% to 3.3%.

Restated Net of non-controlling interests 2009	PVFP £m	Frictional costs £m	Non-hedgeable risks £m	Time value of financial options and guarantees £m	VIF £m
United Kingdom	2,572	(285)	(197)	(25)	2,065
France	2,048	(144)	(155)	(497)	1,252
Ireland	517	(9)	(21)	—	487
Italy	189	(22)	(11)	(27)	129
Poland	1,050	(17)	(74)	(9)	950
Spain	326	(16)	(28)	(17)	265
Other Europe	198	(3)	(5)	(2)	188
Aviva Europe	4,328	(211)	(294)	(552)	3,271
Delta Lloyd	544	(129)	(80)	(210)	125
Europe	4,872	(340)	(374)	(762)	3,396
North America	80	(9)	(45)	(420)	(394)
Asia	324	(19)	(30)	(34)	241
Australia	—	—	—	—	—
Asia Pacific	324	(19)	(30)	(34)	241
Total	7,848	(653)	(646)	(1,241)	5,308

E16 – 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.

	2010 **%**	Restated[1] 2009 %
United Kingdom	**8.4%**	10.4%
France	**6.7%**	7.2%
Ireland	**4.4%**	5.1%
Italy	**7.3%**	5.3%
Poland	**7.3%**	7.1%
Spain	**9.6%**	8.4%
Other Europe	**8.0%**	8.9%
Aviva Europe	**6.9%**	6.9%
Delta Lloyd	**14.8%**	10.5%
Europe	**8.7%**	8.1%
North America[2]	**24.5%**	35.6%
Asia Pacific[3]	**5.9%**	7.2%
Total	**9.9%**	10.1%

1. The IDRs have been restated following more detailed review resulting from the change in expected return methodology, which reflected a more appropriate allowance for the impact of the release of required capital and other refinements
2. The US full year 2009 IDR has been revised to reflect the expected future tax paying position of the business. This reduces the IDR from 41.2% to 35.6%. The revised IDR gives the correct expected return allowing for the impact of tax on future cashflows within the IDR calculation and the impact of the tax assumption change on the closing full-year 2009 balance sheet.
3. Asia Pacific excludes Australian life and pensions business sold in October 2009.

E17 – Summary of non-controlling interest in life and related businesses' MCEV results

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**

Restated 2009	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	16	2	47	5	56	126	9	135	—	135	410	545
Life MCEV operating earnings after tax	45	14	79	53	81	272	76	348	1	349	2,247	2,596
Life MCEV (loss)/earnings after tax	51	1	64	17	57	190	(98)	92	—	92	3,189	3,281
Closing covered businesses' embedded value	320	290	762	162	586	2,120	1,346	3,466	14	3,480	15,058	18,538

There are no non-controlling interests in the United Kingdom or North America.

E18 – 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		
	2010	2009	2008
Reference rate			
1 year	**1.0%**	1.2%	2.8%
5 years	**2.7%**	3.5%	3.2%
10 years	**3.7%**	4.3%	3.5%
15 years	**4.1%**	4.6%	3.8%
20 years	**4.2%**	4.6%	3.8%
Expense inflation	**3.3%**	3.3%	2.4%

	Delta Lloyd		
	2010	2009	2008
Reference rate			
1 year	**1.3%**	1.3%	2.5%
5 years	**2.6%**	2.9%	3.3%
10 years	**3.4%**	3.7%	3.8%
15 years	**3.8%**	4.1%	4.0%
20 years	**3.8%**	4.2%	3.9%
Expense inflation	**2.0%**	2.4%	2.5%

	Eurozone (excluding Delta Lloyd)		
	2010	2009	2008
Reference rate			
1 year	**1.3%**	1.3%	2.5%
5 years	**2.5%**	2.8%	3.3%
10 years	**3.4%**	3.7%	3.8%
15 years	**3.8%**	4.1%	3.9%
20 years	**3.8%**	4.2%	3.9%
Expense inflation	**2.1%**	2.5%	2.1%

E18 – Principal assumptions continued

	Poland		
	2010	2009	2008
Reference rate			
1 year	**4.4%**	4.5%	4.4%
5 years	**5.5%**	5.8%	4.3%
10 years	**5.7%**	5.8%	4.2%
15 years	**5.4%**	5.7%	4.1%
20 years	**5.1%**	5.5%	4.0%
Expense inflation	**3.0%**	3.0%	2.9%

	United States		
	2010	2009	2008
Reference rate			
1 year	**0.4%**	0.7%	1.3%
5 years	**2.2%**	3.1%	2.2%
10 years	**3.5%**	4.2%	2.6%
15 years	**4.0%**	4.6%	2.9%
20 years	**4.2%**	4.8%	2.9%
Expense inflation	**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	
	4Q 2010	**3Q 2010**	**Q2 2010**	**Q1 2010**	Restated 4Q 2009	Restated 3Q 2009	Restated 1H 2009	**2010**	Restated 2009
UK[1]	**1.09%/ 0.72%**	**0.87%/ 0.69%**	**0.75%/ 0.70%**	**0.80%/ 0.75%**	0.90%/ 0.45%	1.10%/ 0.95%	1.50%	**1.09%**	1.00%
France	**n/a**	**n/a**	**n/a**	**n/a**	n/a	n/a	n/a	**0.36%**	0.30%
Spain	**0.15%**	**0.12%**	**0.20%**	**0.15%**	0.30%	0.75%	1.00%	**0.36%**	0.30%
Delta Lloyd	**0.38%**	**0.39%**	**0.34%**	**0.43%**	0.61%	1.03%	1.83%	**0.36%**	0.43%
US immediate annuities	**0.76%**	**0.85%**	**0.65%**	**0.65%**	1.05%	1.50%	3.00%	**0.66%**	0.65%
US deferred annuities and all other contracts	**0.64%**	**0.70%**	**0.55%**	**0.55%**	0.90%	1.25%	2.50%	**0.56%**	0.55%

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.

For 2010, the approach to estimating the market level of liquidity premium in corporate bond assets has been simplified to use 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.

The revised approach increases the EV by £0.3 billion due to the release of prudent margins in the previous direct Credit Default Swap-based approach. 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.

E18 – Principal assumptions continued

			All territories
	2010	2009	2008
Equity risk premium	**3.5%**	3.5%	3.5%
Property risk premium	**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[7]		Required capital (% EU minimum or equivalent)
	2010	2009	2008	**2010**	2009
United Kingdom[1]	**27.0%**	28.0%	28.0%	**100%/110%/200%**	100%/110%/200%
France	**34.4%**	34.4%	34.4%	**107.5%**	110%
Ireland[2]	**12.5%**	12.5%	12.5%	**175%/250%**	150%
Italy[3]	**32.4%**	32.4%	32.4%	**111%/165%**	115%/184%
Poland	**19.0%**	19.0%	19.0%	**125.5%**	150%
Spain[4]	**30.0%**	30.0%	30.0%	**130% - 134%/175%**	110%/125%
Delta Lloyd[5]	**25.0%**	25.5%	25.5%	**120%**	139%
United States[6]	**35.0%**	0.0%	0.0%	**325%**	325%

1. The required capital in the United Kingdom under MCEV is 100% for unit-linked and other non-participating business and 110% for 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 175% for bancassurance and 250% for retail business.
3. Required capital in Italy under MCEV is 165% of the EU minimum for Eurovita and 111% 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. Following a more detailed review of the implied tax position of Aviva US, 2010 results have been calculated including the impact of full corporation tax applying to the cash flows and consequently the 2010 results are "grossed up" at the corporation tax rate in line with other businesses.
7. Current tax legislation and rates have been assumed to continue unaltered except where changes in future tax rates have been announced.

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 Finance (No. 2) Act 2010 enacted the first of the 1% rate reductions with effect from April 2011, with subsequent reductions to be dealt with by future legislation. The benefit to the Group's MCEV net assets arising from the 3% reduction of the rate from 27% to 24% is estimated as £160 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".

E18 – 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. Previously the LMM model was used to generate scenarios. 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.

	2010 Swap length				2009 Swap length			
Option length	10 years	15 years	20 years	25 years	10 years	15 years	20 years	25 years
UK sterling								
10 years	**15.3%**	**14.8%**	**14.3%**	**13.6%**	n/a	n/a	14.1%	n/a
15 years	**14.1%**	**13.6%**	**13.1%**	**12.3%**	n/a	n/a	14.6%	n/a
20 years	**13.1%**	**12.5%**	**12.0%**	**11.2%**	n/a	n/a	14.4%	n/a
25 years	**12.3%**	**11.7%**	**11.2%**	**10.4%**	n/a	n/a	14.0%	n/a
Euro								
10 years	**21.2%**	**20.9%**	**20.6%**	**20.3%**	17.9%	17.8%	17.7%	17.6%
15 years	**20.7%**	**20.1%**	**19.5%**	**18.8%**	18.0%	17.6%	17.3%	16.9%
20 years	**19.2%**	**18.5%**	**17.8%**	**16.9%**	17.1%	16.7%	16.3%	15.7%
25 years	**17.8%**	**16.9%**	**16.1%**	**15.2%**	16.2%	15.6%	15.0%	14.4%
Delta Lloyd								
10 years	**17.8%**	**18.1%**	**18.8%**	**19.8%**	14.5%	15.3%	17.3%	18.6%
15 years	**20.5%**	**21.0%**	**21.4%**	**21.7%**	15.2%	15.8%	17.8%	18.9%
20 years	**25.2%**	**25.3%**	**24.3%**	**23.4%**	15.8%	16.7%	18.1%	18.5%
25 years	**28.5%**	**26.4%**	**24.0%**	**22.5%**	16.8%	17.5%	18.2%	18.3%
US dollar								
10 years	**24.0%**	**23.6%**	**22.9%**	**22.2%**	20.0%	18.9%	18.0%	17.3%
15 years	**23.9%**	**23.1%**	**22.2%**	**21.1%**	17.5%	16.4%	15.6%	15.0%
20 years	**23.0%**	**21.9%**	**20.6%**	**19.4%**	15.5%	14.5%	13.8%	13.2%
25 years	**21.7%**	**20.4%**	**19.1%**	**17.8%**	13.7%	12.9%	12.2%	11.6%

For businesses where stochastic scenarios are calibrated before the year end, the closing embedded value has been adjusted for the subsequent decrease in market volatilities up to the year end.

E18 – 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.

	2010							2009						
Option length	UK	France	Italy	Ireland	Delta Lloyd	Spain	US	UK	France	Italy	Ireland	Delta Lloyd	Spain	US
5 years	**24.5%**	**29.0%**	**27.5%**	**27.7%**	**27.2%**	**32.4%**	**28.8%**	25.3%	29.2%	26.9%	27.7%	27.5%	27.0%	26.9%
10 years	**25.5%**	**28.4%**	**27.0%**	**27.6%**	**27.0%**	**31.2%**	**29.1%**	26.6%	29.0%	26.5%	27.3%	29.1%	25.7%	27.8%
15 years	**26.4%**	**29.1%**	**26.1%**	**28.4%**	**26.3%**	**30.2%**	**29.7%**	27.3%	30.0%	26.4%	28.1%	30.5%	26.5%	29.1%

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 31 December 2010 (31 December 2009: 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 opening balance sheet and operating profit, a charge of 2.5% 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. For the closing balance sheet, a charge of 3.3% has been applied.

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.

E18 – 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 31 December 2010 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 £7,279 million *(31 December 2009: £6,634 million)*.

	2010 £m	2009 £m
Borrowings per summarised consolidated statement of financial position – MCEV basis	**14,949**	15,000
Add: amount included within held for sale	**—**	—
Less: Securitised mortgage funding	**(6,332)**	(7,329)
Borrowings excluding non-recourse funding – MCEV basis	**8,617**	7,671
Less: Operational financing by businesses	**(2,551)**	(2,182)
External debt and subordinated debt – MCEV basis	**6,066**	5,489
Add: Preference shares (including General Accident plc) and direct capital instrument	**1,440**	1,440
External debt, subordinated debt, preference shares and direct capital instrument – MCEV basis	**7,506**	6,929
Effect of marking these instruments to market	**(227)**	(295)
Market value of external debt, subordinated debt, preference shares and direct capital instrument	**7,279**	6,634

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.

E19 – 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 Delta Lloyd and US, where there is a significant amount of business with investment return guarantees.

Embedded value

			Interest rates			
2010 Embedded value (net of tax and non-controlling interest)	As reported on page 158 £m	10bp increase in adjustment to risk-free rates £m	1% increase £m	1% decrease £m	2% increase £m	2% decrease £m
United Kingdom	6,370	150	(205)	185	(435)	385
France	2,940	5	(60)	(15)	(140)	(245)
Ireland	827	—	(30)	40	(55)	60
Italy	597	—	(20)	35	(40)	80
Poland	1,119	—	(60)	65	(110)	135
Spain	554	10	(15)	15	(35)	30
Other Europe	321	—	(5)	15	(15)	25
Aviva Europe	6,358	15	(190)	155	(395)	85
Delta Lloyd	1,496	65	350	(480)	580	(1,235)
Europe	7,854	80	160	(325)	185	(1,150)
North America	1,231	170	(180)	65	(460)	60
Asia Pacific	676	—	35	(75)	45	(230)
Total	16,131	400	(190)	(150)	(665)	(935)

E19 – Sensitivity analysis continued

2010 Embedded value (net of tax and non-controlling interest)	As reported on page 158 £m	Equity/property Market values 10% increase £m	10% decrease £m	Volatility 25% increase £m
United Kingdom	6,370	275	(325)	(215)
France	2,940	150	(165)	(125)
Ireland	827	20	(20)	—
Italy	597	—	—	—
Poland	1,119	10	(10)	—
Spain	554	10	(10)	(10)
Other Europe	321	5	—	—
Aviva Europe	6,358	195	(205)	(135)
Delta Lloyd	1,496	255	(260)	(35)
Europe	7,854	450	(465)	(170)
North America	1,231	25	(20)	—
Asia Pacific	676	20	(20)	(5)
Total	16,131	770	(830)	(390)

2010 Embedded value (net of tax and non-controlling interest)	As reported on page 158 £m	Swaption implied volatilities 25% increase £m	Corporate bond credit spread 50bps increase £m	50bps decrease £m	EU minimum capital or equivalent £m
United Kingdom	6,370	(15)	(700)	765	15
France	2,940	(85)	(125)	160	10
Ireland	827	—	—	—	5
Italy	597	—	—	—	5
Poland	1,119	—	—	—	5
Spain	554	(5)	(60)	55	5
Other Europe	321	—	—	—	—
Aviva Europe	6,358	(90)	(185)	215	30
Delta Lloyd	1,496	10	(75)	85	10
Europe	7,854	(80)	(260)	300	40
North America	1,231	(160)	(920)	825	90
Asia Pacific	676	(5)	(15)	15	30
Total	16,131	(260)	(1,895)	1,905	175

New business

2010 Value of new business (net of tax and non-controlling interest)	As reported on page 148 £m	10bp increase in adjustment to risk-free rates £m	Interest rates 1% increase £m	1% decrease £m	2% increase £m	2% decrease £m
United Kingdom	254	25	(22)	28	(39)	65
France	100	—	(6)	6	(15)	6
Ireland	1	—	1	(1)	2	(2)
Italy	42	—	(3)	2	(6)	1
Poland	29	—	(2)	2	(4)	5
Spain	43	1	(2)	2	(4)	1
Other Europe	15	—	(1)	1	(2)	3
Aviva Europe	230	1	(13)	12	(29)	14
Delta Lloyd	(41)	1	11	(12)	17	(31)
Europe	189	2	(2)	—	(12)	(17)
North America	(126)	15	(10)	4	(40)	(16)
Asia Pacific	41	—	13	(20)	22	(61)
Total	358	42	(21)	12	(69)	(29)

E19 – Sensitivity analysis continued

2010 Value of new business (net of tax and non-controlling interest)	As reported on page 148 £m	Equity/property Market values 10% increase £m	Equity/property Market values 10% decrease £m	Equity/property Volatility 25% increase £m
United Kingdom	**254**	**—**	**—**	**—**
France	**100**	**6**	**(7)**	**(3)**
Ireland	**1**	**—**	**—**	**—**
Italy	**42**	**1**	**(1)**	**—**
Poland	**29**	**—**	**—**	**—**
Spain	**43**	**—**	**—**	**—**
Other Europe	**15**	**—**	**—**	**—**
Aviva Europe	**230**	**7**	**(8)**	**(3)**
Delta Lloyd	**(41)**	**6**	**(6)**	**—**
Europe	**189**	**13**	**(14)**	**(3)**
North America	**(126)**	**—**	**—**	**—**
Asia Pacific	**41**	**—**	**—**	**—**
Total	**358**	**13**	**(14)**	**(3)**

2010 Value of new business (net of tax and non-controlling interest)	As reported on page 148 £m	Swaption implied volatilities 25% increase £m	Corporate bond credit spread 50bps increase £m	Corporate bond credit spread 50bps decrease £m	EU minimum capital or equivalent £m
United Kingdom	**254**	**—**	**(58)**	**61**	**2**
France	**100**	**(6)**	**(1)**	**3**	**3**
Ireland	**1**	**—**	**—**	**—**	**—**
Italy	**42**	**—**	**—**	**—**	**1**
Poland	**29**	**—**	**—**	**—**	**—**
Spain	**43**	**—**	**(7)**	**6**	**1**
Other Europe	**15**	**—**	**—**	**—**	**—**
Aviva Europe	**230**	**(6)**	**(8)**	**9**	**5**
Delta Lloyd	**(41)**	**—**	**(1)**	**1**	**1**
Europe	**189**	**(6)**	**(9)**	**10**	**6**
North America	**(126)**	**(17)**	**(76)**	**67**	**15**
Asia Pacific	**41**	**—**	**—**	**—**	**5**
Total	**358**	**(23)**	**(143)**	**138**	**28**

(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.

E19 – Sensitivity analysis continued

Embedded value

2010 Embedded value (net of tax and non-controlling interest)	As reported on page 158 £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
United Kingdom	6,370	185	50	65	(310)
France	2,940	45	35	30	—
Ireland	827	15	25	5	(10)
Italy	597	10	—	5	—
Poland	1,119	25	45	15	—
Spain	554	10	40	10	(5)
Other Europe	321	15	25	5	—
Aviva Europe	6,358	120	170	70	(15)
Delta Lloyd	1,496	210	5	15	(80)
Europe	7,854	330	175	85	(95)
North America	1,231	75	(30)	65	(15)
Asia Pacific	676	30	5	10	—
Total	16,131	620	200	225	(420)

New business

2010 Value of new business (net of tax and non-controlling interest)	As reported on page 148 £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
United Kingdom	254	9	12	4	(23)
France	100	4	7	2	—
Ireland	1	1	1	—	—
Italy	42	2	1	1	—
Poland	29	1	4	2	—
Spain	43	1	7	2	—
Other Europe	15	1	5	1	—
Aviva Europe	230	10	25	8	—
Delta Lloyd	(41)	9	2	1	(3)
Europe	189	19	27	9	(3)
North America	(126)	8	(13)	10	—
Asia Pacific	41	8	4	2	—
Total	358	44	30	25	(26)

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 dependents 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
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.

General terms cont.

Funds under management
Represents all assets actively managed or administered by or on behalf of the Group including those funds managed by third parties.

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.

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 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.

Shareholder services

Shareholder profile

The categories of shareholders and the range and size of shareholding as at 31 December 2010 are set out below:

Analysis of shareholders	No. of shareholders	%	No. of shares	%
Individual	584,732	97.11	257,030,913	9.11
Banks and nominee companies	13,810	2.29	2,508,890,999	88.97
Pension fund managers and insurance companies	84	0.01	106,844	0.00
Other corporate bodies	3,542	0.59	54,119,886	1.92
Total	**602,168**	**100**	**2,820,148,642**	**100**

Range of shareholdings	No. of shareholders	%	No. of shares	%
1–1,000	548,877	91.66	151,469,464	5.37
1,001–5,000	47,710	7.52	89,477,091	3.17
5,001–10,000	2,933	0.41	20,374,662	0.72
10,001–250,000	1,997	0.30	90,938,140	3.23
250,001–500,000	188	0.03	68,921,413	2.45
500,001 and above	462	0.08	2,390,194,136	84.75
American Depositary Receipts (ADRs)	1	0.00	8,773,736+	0.31
Total	**602,168**	**100**	**2,820,148,642**	**100**

+The number of registered ordinary shares represented by ADRs. Please note that each Aviva ADR represents two (2) ordinary Aviva shares.

2011 Financial Calendar

Annual General Meeting	4 May 2011
Announcement of first quarter Interim Management Statement	17 May 2011
Announcement of unaudited half year results	4 August 2011
Announcement of third quarter Interim Management Statement	3 November 2011

Annual General Meeting

The 2011 Aviva Annual General Meeting will be held at The Barbican Centre, Silk Street, London EC2Y 8DS, on Wednesday, 4 May 2011 at 11.00am.

Details of all the resolutions to be considered at the meeting are given in the Notice of AGM, which is available on the Company's website at www.aviva.com/agm.
The voting results for the 2011 AGM, including proxy votes and votes withheld, will be accessible on the website at www.aviva.com/agm shortly after the meeting.

How to ask a question

If you are unable to attend the meeting but would like to ask the Board of Directors a question regarding the business of the meeting, please do so via our website at www.aviva.com/agm or send an email to agm.faq@aviva.com. Answers to the most frequently asked questions will be published on our website shortly after the meeting.

Dividends

Dividends on Aviva ordinary shares are normally paid in May and November; please see the table below for dividend dates in respect of the financial year ended 31 December 2010.

Dividends paid on Aviva preference shares are normally paid in March, June, September and December; please visit www.aviva.com/preferenceshares for the latest dividend payment dates.

Holders of ordinary and preference shares receive any dividends payable in sterling and holders of ADRs will receive any dividends payable in US dollars.

Ordinary shareholders – Have your dividends paid directly into your bank account

Visit www.aviva.com/dividends for further details or contact Equiniti to obtain a form. If your holding is less than 1,500 shares, you can set up a mandate instruction over the telephone.

Ordinary shares – 2010 final dividend dates

Ex-dividend date	23 March 2011
Record date	25 March 2011
Scrip dividend price setting period	23, 24, 25, 28, 29 March 2011
Scrip dividend price announcement date	30 March 2011
Last date for receipt of Scrip elections	15 April 2011
Dividend payment date*	17 May 2011

* Please note that the ADR local payment date will be approximately 5 business days after the proposed dividend date for ordinary shares.

Online Shareholder Services Centre – 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 to allow you to manage your holding in Aviva easily and efficiently.

Within the online centre you will be able to find current and historic ordinary 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 recent Company reports.

There is also a range of frequently asked questions on holding ordinary shares, preference shares and ADRs in Aviva, which include 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. If you would like to find out the price of Aviva preference shares, please visit the London Stock Exchange website at www.londonstockexchange.com.

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, offering free financial advice or offers of free 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/,
- Report the matter to the FSA by calling 0845 606 1234 or visit www.fsa.gov.uk/pages/consumerinformation,
- If the calls persist, hang up.

More detailed information on this can be found on the Consumer Financial Education Body website www.moneymadeclear.org.uk.

Contact Details

Ordinary and preference Shares

Aviva's Registrar is Equiniti. Any queries regarding Aviva shares can be directed to Equiniti by post, telephone or email. Please quote Aviva plc, together with the name and address in which the shares are held and the shareholder reference number, which you will find on your latest dividend stationery.

Equiniti Aspect House Spencer Road Lancing West Sussex BN99 6DA	**Email:** aviva@equiniti.com **Telephone:** 0871 384 2953* + 44 (0) 121 415 7046 (for callers outside of the UK)

Computershare Investor Services PLC will be replacing Equiniti as the Company's Registrar later this year. Further details, including full contact details, will be made available on www.aviva.com/shareholderservices nearer the time and incorporated into all future shareholders communications following the transition.

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 **Telephone**: (00 1) 877 248 4237 (free phone for callers within the US) (00 1) 781 575 4555 (for callers outside the US non free phone) **Fax inquiries:** (00 1) 201 324 3284

For further information about Aviva's ADR programme, please go to 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.

Internet sites

Aviva owns various internet sites, most of which interlink with each other:

Aviva Group
www.aviva.com
UK long-term savings and general insurance
www.aviva.co.uk
Asset management
www.avivainvestors.com
Aviva worldwide internet sites
www.aviva.com/websites

Other useful links for shareholders:

Aviva shareholder services centre
www.aviva.com/shareholderservices
ADR holders
www.aviva.com/adr
Aviva preference shareholders
www.aviva.com/preferenceshares
Dividend information for ordinary shares
www.aviva.com/dividends
Annual general meeting information
www.aviva.com/agm
Electronic voting for annual general meeting†
www.aviva.com/agm
Aviva share price
www.aviva.com/shareprice
Register for electronic communications
www.aviva.com/ecomms

* Calls to 0871 numbers are charged at 8 pence per minute from a BT landline. Charges from other telephone providers may vary. Lines are open from 8.30am to 5.30pm, Monday to Friday.
† This service will only be available until 11am on Thursday, 28 April 2011.