

News Release

Aviva plc preliminary results for the year ended 31 December 2008



AVIVA MAINTAINS DIVIDEND FOLLOWING STRONG OPERATIONAL PERFORMANCE IN TURBULENT MARKETS

Operating profits up; total return reflects investment markets; dividend maintained	<ul style="list-style-type: none"> IFRS operating profit up 4% to £2,297 million IFRS loss after tax of £885 million IFRS net asset value per share of 416 pence Total dividend per share maintained at 33.00p
MCEV result volatile in current investment markets	<ul style="list-style-type: none"> MCEV operating profit up 10% to £3,358 million MCEV loss after tax of £7,710 million MCEV net asset per share of 486 pence
Strong balance sheet and capital position	<ul style="list-style-type: none"> IGD solvency surplus of £2.0 billion at 31 December 2008 Prudent reserve strengthening undertaken Consistent strategy through global crisis has ensured the financial health of Aviva
Resilient business flows from composite model and geographic spread	<ul style="list-style-type: none"> Life and pensions sales up 11% to £36,283 million General insurance result improved and combined operating ratio on target at 98% Difficult conditions in global markets has reduced asset management result
Transforming Aviva for the future	<ul style="list-style-type: none"> £340 million of £500 million 2010 cost savings target achieved Significant progress in our UK business and launch of Aviva Investors Target to double US new business sales achieved a year early Move to global brand on track Committed to delivery of target to double IFRS earnings per share by 2012

Andrew Moss, chief executive, commented:

"In a tumultuous year, our underlying business has shown great resilience. Operating profits are up and we have maintained our dividend. Bottom line earnings have been affected by investment markets which have predictably created significant unrealised losses during the year.

"Aviva remains financially strong. We've undertaken a thorough review of the value of our assets and liabilities, and have made cautious provision for future losses so that we are in good shape to withstand the ongoing volatility and uncertainty in world markets. Maintaining our capital strength has been a priority for us and remains so this year.

"Meanwhile we continue to transform Aviva for the future. In these markets only the fittest will emerge as winners. Our increased share of the UK life and pensions market in 2008 is a good example of a market where we have growing competitive advantage. Our strategy is well-suited to current markets and our geographic diversity and composite model continues to deliver for us."

Investor contacts	Media contacts	Timings	Contents
Andrew Moss +44 (0)20 7662 2286	Hayley Stimpson +44 (0)20 7662 7544	Newswire conference call 8.15 GMT	News release IFRS 1
Philip Scott +44 (0)20 7662 2264	Sue Winston +44 (0)20 7662 8221	Analyst presentation 9.30 GMT	MCEV 19 Capital management 61
Charles Barrows +44 (0)20 7662 8115	James Murgatroyd/ Conor McClafferty +44 (0)20 7251 3801	Live webcast www.aviva.com	Analysis of assets 77 Costs 106
Jessie Burrows +44 (0)20 7662 2111			IFRS supplement 108

2008 Key financial highlights

	IFRS			MCEV		
	2008 £m	Restated 2007 £m	Growth %	2008 £m	Restated 2007 £m	Growth %
Life MCEV operating return / IFRS long-term business profit	1,694	1,610	5%	2,801	2,544	10%
Fund management	123	179	(31)%	42	90	(53)%
General insurance and health	1,198	1,021	17%	1,198	1,021	17%
Other:						
Other operations and regional costs	(198)	(74)	(168)%	(163)	(70)	(133)%
Corporate centre	(141)	(157)	10%	(141)	(157)	10%
Group debt and other interest costs	(379)	(363)	(4)%	(379)	(363)	(4)%
Operating profit before tax	2,297	2,216	4%	3,358	3,065	10%
(Loss)/profit after tax	(885)	1,498		(7,710)	1,946	
Total dividend per share	33.0p	33.0p		n/a	n/a	
Net asset value per share	416p	494p		486p	763p	
Equity shareholders' funds	£11,052m	£12,946m		£12,912m	£19,998m	
Return on equity shareholders' funds	n/a	n/a		11.0%	10.4%	

Chief executive's statement

Perspective on our markets

2008 has been an exceptional year. While short-term economic conditions have been very challenging, the long-term growth drivers of our business are sound. When times are tough people want to protect what they have, perhaps more than ever. People are living longer and still seeking to save for their long-term financial wellbeing. In some of the more mature markets new business flows are subdued, while in emerging markets there is new growth as prosperity improves, albeit at a slower rate than before.

We remain committed to our vision of 'One Aviva, twice the value' which will unlock value, drive growth and realise the full potential of our existing businesses. The strategy remains well-suited to the current environment with its focus on increasing IFRS earnings and on cost savings. Our long-term view has meant that we have avoided excessive risk and this gives us great confidence as we look to the future.

Operating profits up and dividend maintained

Against the backdrop of some of the toughest markets in modern business history, we have delivered a 4% increase in IFRS operating profit to £2,297 million, demonstrating the underlying strength of our business. This is a solid trading performance with growth in both our life and pensions and general insurance businesses.

The strength of our earnings stream has enabled us to maintain our dividend. We have taken a conservative approach and our dividend is covered 1.9 times by IFRS operating earnings after tax. This is at the top end of the 1.5 to 2.0 times cover range. Our dividend policy remains unchanged.

Our composite model combining life, general insurance and fund management continues to deliver for us. Around 80% of our profits come from our existing life portfolio and our general insurance business. This means that we are less dependent on long-term savings new business earnings and therefore more able to withstand the tough market conditions. This is an important factor in setting our dividend. Our geographic spread across four continents and diverse distribution also brings resilience.

Total return reflects marking to market of investments, reserve strengthening and exceptional costs

Our total result has naturally been impacted by the performance of investment markets, including the fall in equity, property and bond values. Assets are valued at their market value at the year end and the methodology demands that we take a very prudent approach to our valuation. The IFRS operating result after investment variances, but before exceptional costs, was therefore a loss of £153 million, which was a good result in the current environment. This is an unrealised loss and as markets recover, to some degree at some point, these unrealised losses will begin to reverse.

During 2008 we took steps to strengthen our balance sheet for the future. These exceptional costs include £326 million of restructuring costs, which will deliver cost savings of £500 million by 2010, one-off strengthening of general insurance reserves for asbestosis of £304 million and £126 million in respect of compensation for unit-linked insurance policies in the Netherlands. The resulting IFRS return after tax was a loss of £885 million.

Chief executive's statement continued

MCEV result volatile in current investment markets

We are also reporting our results for the first time on the market consistent embedded value basis (MCEV). MCEV principles aim to improve transparency and comparability in embedded value reporting across Europe. This reporting basis is already in use by a number of our competitors in Europe. Aviva is one of the first to adopt it in the UK, with others adopting over time. The MCEV result will be volatile in difficult investment markets and further work is being done by the CFO Forum on the methodology to ensure it remains robust in such market conditions. MCEV reporting does not change the economics of our business, just the timing of when we report the profit we earn from our long-term savings business. On an MCEV basis our operating profit increased 10% to £3,358 million. Our operating loss after investment variances was £9,883 million and the loss after tax was £7,710 million.

Strong balance sheet and capital position

Customers and shareholders want to invest with companies that are financially secure. Our capital position remains strong. Insurers are required to hold a financial buffer over and above regulatory capital requirements. Our IGD solvency surplus was £2.0 billion at the 2008 year end. Over the course of 2008 we took early action to protect our capital position against further falls in equity markets through significant hedging arrangements. If equity markets were to fall a further 40% from 31 December 2008, our solvency surplus would be £1.2 billion. Maintaining this capital strength has been a priority in 2008 and will remain so in 2009.

The quality of our balance sheet continues to be high. We are reporting a net asset value per share of 416 pence on an IFRS basis and 486 pence on an MCEV basis, after marking all financial assets to appropriate market values. Our assets are of high quality and our bond portfolio is well diversified by sector and geography. Our reporting methodology requires us to report the corporate bond portfolio at its market value as at the year end. In current conditions market values are very low. The unrealised losses on our balance sheet equate to 8% of the total bond portfolio. This is significantly above the highest ever actual default losses reported in the last one hundred years. Actual defaults in 2008 were £140 million, including losses on AIG, Lehman, Bradford & Bingley, Freddie Mac, Fannie Mae and Washington Mutual. This total loss represents just 0.2% of our total corporate debt portfolio. In addition, we have made prudent impairment charges of £260 million.

Our UK commercial mortgage portfolio remains strong and defaults since 1992 have been minimal. 23% of the portfolio is effectively government backed and the remainder is well diversified by sector and location. Interest service cover and loan service cover remain strong at 1.3 times and 1.2 times respectively. We have built in significant protection in the event of default to limit our exposure. Our loans to the Dawnay Day group of companies are a good example of this, where we are pleased to report that the position has been resolved at no loss.

Even with such a sound track record, we have increased our short term default provisions in the UK for corporate bonds and commercial mortgages by £300 million and £250 million respectively. Together with our long-term default assumptions, this equates to a provision of £1.13 billion for the life of the corporate bond and commercial mortgage portfolio and creates a strong buffer against potential future losses.

We have also strengthened our general insurance reserves by £304 million, in respect of possible second generation asbestosis claims. This is in line with recent actuarial market studies and provides for estimated claims payments until 2045. Our total general insurance reserves are strong with a margin in excess of best estimates to protect against future deterioration in claims.

Chief executive's statement continued

Resilient business flows

Our long-term savings sales were up 1% to £40,278 million. Within this, core life and pensions sales rose 11%, while investment sales were predictably lower, down 43%. General insurance premium income increased 5% to £11,137 million. Two-thirds of our business now comes from outside the UK and therefore currency appreciation brought us financial benefits. Life new business margins were lower at 2.1% (2007: 2.7%), reflecting a change in business mix towards spread business, such as annuities in the UK and group pensions business in the Netherlands.

Despite the downturn, Aviva continues to be attractive to customers seeking security for their long-term savings. We had a record year in our home market, achieving our highest ever UK life and pensions sales. In the United States we met our target of doubling new business, while maintaining margins, a year earlier than expected. In Asia Pacific we grew life and pensions business on the back of our Chinese joint venture and new ventures in Malaysia, South Korea and Taiwan. In Europe, the markets of central and eastern Europe were the highlight.

While the global banking sector has been under pressure, sales through our 90 bancassurance arrangements have held up well. Around a quarter of our new business sales come through banks and we are comfortable with this position. We believe that banks will give greater focus to their core retail operations in future and therefore insurance earnings will become even more important to them. It is a mark of the strength of our bancassurance franchise that we continue to be successful in this area at a time when some banks are facing great difficulties.

General insurance result improves

General insurance and health profits improved by 17% as a result of more normal weather conditions when compared to the exceptional 2007 UK floods. This was partly offset by lower prior year reserve releases and the impact of increasingly competitive markets. We are pleased to report a combined operating ratio (COR) of 98%. The COR is a measure of the profitability and efficiency of our general insurance business and this result is in line with our 'meet or beat' worldwide COR target of 98%.

Delivering our vision of 'One Aviva, twice the value'

During 2008 we have made significant advances in our agenda to transform Aviva and improve our operational efficiency and service to our 50 million customers. We have made excellent progress against our plan to reduce costs by £500m by 2010, primarily from our UK businesses. We have already delivered £340 million, of which more than 90% has flowed through to the 2008 result. We are on track to deliver the remaining savings on time and within budget. Cost control remains a firm priority for us. We have introduced shared services across a number of markets and our recently announced IT outsourcing arrangement with EDS will provide us with data centre services for UK, France, India and Ireland. We also exited from a number of non-core businesses during the course of the year.

We are pleased with our progress towards a global brand. We already operate as Aviva in most markets around the world. In June this year, Norwich Union will become Aviva in the UK. Name awareness of the change of name in the UK now stands at almost 80% following the first successful phase of advertising. Our businesses in Ireland and Poland have also started their journey to become Aviva in 2010.

The launch of Aviva Investors in September 2008 was another example of our vision in action. We have brought together our fund management operations in 15 countries into a single global business. Our aim is to grow this business significantly and accelerate its contribution to group profits.

In Europe we are reshaping our business under the new leadership of Andrea Moneta, who joined us in the summer as chief executive, Aviva Europe. He has put in place a new senior management team and a pan-European structure. This will transform our business across our 15 markets, bringing improved efficiency and customer focus.

Chief executive's statement continued

Creating value for customers and shareholders into the future

During these tough times we have continued to attract and retain customers wherever we do business, grow our earnings, preserve a strong balance sheet and maintain our dividend. We remain committed to our target to double IFRS earnings per share from 2007 by 2012 at the latest.

The economic outlook is uncertain and top-line sales growth targets are not our priority. Maintaining a strong presence in each of our markets and performing in line with the market is a realistic aim. We have a focus on maintaining our financial strength while transforming our business for the future. This will deliver value for customers and shareholders alike and will ensure that we are well-placed for the future when the world economy picks up again.

Andrew Moss
Chief Executive

Regional performance

United Kingdom

- Life and pension sales up 1% to £11,858 million
- Life IFRS operating profit up 4% to £751 million
- Life MCEV operating profit up 7% to £883 million
- Life new business gross margin down to 1.7% (2007: 2.4%)
- UK general insurance result up 52% to £642 million and COR of 99%

UK Life:

We are pursuing a consistent strategy to transform our UK life business. We are simplifying our systems and reducing costs to give customers even better service. This is generating capital and increased profits, particularly from our existing business. We remain the UK market leader in a highly competitive market and can see our competitive advantage coming through with an increase from 10.4% to 11.3% in 2008 in a declining market and hitting 14% in the final quarter of the year. Our financial strength has meant that we have been able to provide products that are attractive to customers in the current economic climate. This broad product range and diverse distribution contributed to our highest ever life and pensions sales performance in 2008. Our joint venture with the Royal Bank of Scotland continued to perform well with sales up 1% despite banking sector difficulties.

We are ahead of schedule in our aim to reduce costs by £100 million by the end of the 2009, with £60 million already delivered in the year. Key to this is the simplification of our complex systems infrastructure, which is nearing completion. We have turned off over 200 systems to date and transferred the administration of one million legacy policies to Swiss Re through our outsourcing agreement. The delivery of these savings and other initiatives has meant that we have been able to improve customer service and halve our expense overrun in 2008 to £42 million and we plan to eliminate it in 2009. Our UK Life business also generates working capital for Aviva, enabling us to grow in developing markets elsewhere in the world.

Our plans for a potential reattribution of two of our with-profits funds continue. Following substantial reductions in the value of equity and property investments, the inherited estate was £1.4 billion at the year end compared to £2.1 billion at the 30 June 2008. On this basis our original offer no longer meets our criteria of being fair to both policyholders and shareholders. Our negotiations with the Policyholder Advocate to create a restructured offer continue and we hope to be in a position to update policyholders in the next few months. This is in addition to the special bonus of £2.1 billion to policyholders, of which two-thirds has already been added to policies.

We expect the market to remain subdued this year. Our rigorous focus on profit and capital disciplines will drive continued operational and customer service improvements.

UK General Insurance:

We are also transforming our UK general insurance business. We are simplifying our operating model, which has grown out of a number of predecessor companies over a number of years. Our focus is on our core insurance skills to improve customer service and drive profitable growth. We are ahead of plan in the transformation of our customer service centres and the simplification of our policy range.

Our general insurance result improved in 2008. This was driven by more normal levels of weather claims when compared to the severe flooding of 2007 and a significant reduction in costs. In 2008 we delivered cost savings of £265 million including £227 million against our 2010 target of £350 million, resulting in an improved expense ratio of 12.1% (2007: 13.9%). Our plan is to deliver a sub 11% expense ratio by 2010. At the same time we maintained business as usual by being voted General Insurer of the Year for the sixth year running by insurance intermediaries.

In 2008 we focussed on building insurance excellence through risk selection and sophisticated pricing techniques and by reshaping our book as well as delivering on the promise of scale. We have introduced new and innovative customer services, for example our new online motor insurance service gives potential customers our quote alongside those of our competitors, even if a competitor's quote is cheaper. The launch of our RAC panel this January completes the repositioning of our direct customer offering.

Whilst we believe that market conditions will remain challenging into 2009, there are signs of the market hardening and we are seeing rating above claims inflation in all major classes for the first time in five years. This, together with the actions we have put in place in 2008, gives us confidence in delivering a UKGI COR in 2009 in line with our worldwide target of 98% or better.

Chief executive's statement continued

Regional performance continued

Europe

- Life and pension sales up 8% to £16,990 million
- Life IFRS operating profit up 13% to £881 million
- Life MCEV operating profit up 9% to £1,638 million
- Life new business gross margin down to 2.8% (2007: 3.2%)
- COR of 97%

Our European business is an excellent example of Aviva's diversity: we operate in 15 countries across Europe (ex UK) and our 20 million customers are served through a variety of distribution channels, including 31 bank partners, more than 5000 brokers and agents, and a direct sales force of more than 8500 consultants. It is this rich diversity which enabled us to sustain our life and pensions sales in 2008. Growth in the developing economies of central and eastern Europe offset more difficult conditions in the more mature markets of Italy and Ireland. We also saw real benefit from the appreciation of the euro, given the scale of our business in Europe.

In 2008 we continued to develop our business and strengthen our distribution capability in bancassurance in Spain, Italy Poland and Turkey. We also successfully launched a direct motor business in Poland and acquired VIVAS Health in Ireland.

This changing environment brings opportunities for Aviva in Europe. Bancassurance offers a valuable profit stream for banks in these challenging markets. As the leading bancassurer in the region we are well-placed to benefit and our industry leading business in Spain gives us a template for successful rollout to other countries.

Our general insurance combined operating ratio of 97% was ahead of our group target. Operating profit was down 26% reflecting competitive market conditions, investment in our new direct motor business in Poland and higher claims costs in Ireland.

We expect a subdued new business outlook across the region, particularly for long-term savings products where the current economic conditions mean that consumers' propensity to save is relatively low. General insurance markets continue to perform better in terms of volume, although price competition is fierce, particularly in the more mature western European markets.

North America

- Life and pensions sales up 57% to £5,715 million
- Life IFRS operating profit down 80% to £16 million
- Life MCEV operating profit up 62% to £201 million
- Life new business gross margin down to 1.0% (2007: 1.4%)
- COR of 99%

In the US we delivered a second year of record sales growth and achieved our target of doubling the scale of our business a year ahead of plan.

Expanded distribution, marketing programmes and new product launches contributed to strong sales of both our indexed annuity and indexed life products, and we remain the leader in both markets. The guarantees on our products are attractive in these uncertain markets, and we have responded by improving guaranteed income withdrawal benefits and introducing a new bonus index deferred annuity. Our decision to exit certain markets in 2007 to focus on selling higher margin products resulted in a slight decrease in sales of life products in 2008.

The Aviva brand is at the heart of these sales. Our financial strength and global scale have enabled us to grow our distribution fast and continue to expand our distribution network with a focus on larger brokerage general agents. Looking ahead, we will seek to optimise our business mix, growth and margin to deliver further profitable growth in the US. We expect to remain the leader in the indexed annuity and life markets but anticipate that our growth will be more in line with the market as we drive for further capital efficiency, productivity and profitability.

In Canada we are the second largest general insurer, and continue to deliver profitable growth and generate capital. Premiums increased in both personal and commercial business with high retention levels across all lines of business. The combined operating ratio increased slightly in 2007 as good prior year loss development was offset by higher claims following a harsh winter and significant storm claims.

Chief executive's statement continued

Regional performance continued

Asia Pacific

- Life and pension sales up 8% to £1,720 million
- Life IFRS operating profit up 48% to £46 million
- Life MCEV operating profit down by 17% to £79 million
- Life new business gross margin down to 2.5% (2007: 4.1%)

Our footprint in Asia Pacific now extends to nine markets and it remains an attractive region for growth due to low insurance penetration in most countries, an ageing population, a fast expanding middle class and high gross domestic product (GDP) growth.

We are an established player in India and China, where we have gained ground quickly in these highly attractive markets which represent the greatest growth potential in the region. We are already the second largest foreign life insurer in China. Our 2008 sales include the new markets of Taiwan, Malaysia and South Korea, where in each case we are partnered with the country's second largest bank. We have more than 50 bancassurance partners throughout the region as part of our varied distribution mix.

During the year we expanded our distribution network and built our "One Aviva" shared services model to realise synergies across Asia Pacific. We have created a regional product development team to anticipate changes in customer needs and to develop products to roll out across the region.

The Asia Pacific region holds significant potential for us over the long-term. In 2009 we will continue to grow our business in line with the market while ensuring efficient use of capital.

Aviva Investors

- IFRS operating profit down 22% to £114 million
- Group funds under management at 31 December 2008 up 6% to £381 billion
- Funds managed by Aviva Investors at 31 December 2008 were stable at £236 billion

Our launch of Aviva Investors in September 2008 brought together our fund management businesses in 15 countries to create a single global business. We aim to grow the business significantly and accelerate its contribution to group profits. To do this we aim to increase both third party business and cross-border sales. We made a number of key appointments during the year to build our global capability.

The challenging conditions in global financial markets had an impact on both funds under management and our profitability. While the decline during the year in funds under management in local currency terms had an adverse impact on the level of funds, this was offset by currency gains.

Information

Newsires:

There will be a conference call today for wire services at 0815 hours (GMT) on +44 (0)20 7162 0025 Quote: Aviva, Andrew Moss.

Analysts:

A presentation to investors and analysts will take place at 0930 hours (GMT) at St Helens, 1 Undershaft, London, EC3P 3DQ. The investors and analysts presentation is being filmed for live webcast and can be viewed on the Group's website www.aviva.com or on www.cantos.com. In addition a replay will be available on these websites later today.

There will also be a live teleconference link to the investor and analyst meeting on +44(0)20 7806 1966. A replay facility will be available until 19 March 2009 on +44 (0)20 7806 1970. The pass code is 4556391# for the whole presentation including Question & Answer session or 3833842# for Question & Answer session only.

The presentation slides will be available on the group's website, www.aviva.com/investors/presentations.cfm from 0900 hours (GMT).

The Aviva media centre at www.aviva.com/media includes images, company information and news release archive. Photographs are available on the Aviva media centre at www.aviva.com/media.

Notes to editors

- Aviva is a leading provider of life and pension products in Europe with substantial positions in other markets around the world, making it the world's fifth largest insurance group based on gross worldwide premiums at 31 December 2007.
- Aviva's principal business activities are long-term savings, fund management and general insurance, with worldwide total sales* of £51.4 billion at 31 December 2008 and funds under management of £381 billion at 31 December 2008.
 - * Based on life and pensions PVNBP, total investment sales and general insurance and health net written premiums including share of associates' premiums.
- 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 2008.
- The present value of new business premiums (PVNBP) is equal to total single premium sales received in the year plus the discounted value of annual premiums expected to be received over the term of the new contracts, and is expressed at the point of sale.
- All growth rates are quoted in local currency.
- This preliminary announcement may include oral and written "forward-looking statements" with respect to certain of Aviva's plans and its current goals and expectations relating to its future financial condition, performance and results. These forward-looking statements sometimes use words such as 'anticipate', 'target', 'expect', 'estimate', 'intend', 'plan', 'goal', 'believe' or other words of similar meaning. By their nature, all forward-looking statements involve risk and uncertainty because they relate to future events and circumstances which may be beyond Aviva's control, including, among other things, UK domestic and global economic and business conditions, market-related risks such as fluctuations in interest rates and exchange rates, the policies and actions of regulatory authorities, the impact of competition, the possible effects of inflation or deflation, the timing impact and other uncertainties relating to acquisitions by the Aviva Group and relating to other future acquisitions or combinations within relevant industries, the impact of tax and other legislation and regulations in the jurisdictions in which Aviva and its affiliates operate, as well as the other risks and uncertainties set forth in our 2007 Annual Report to Shareholders. As a result, Aviva's actual future financial condition, performance and results may differ materially from the plans, goals and expectations set forth in Aviva's forward-looking statements, and persons receiving this announcement should not place undue reliance on forward-looking statements.
- Aviva undertakes no obligation to update the forward-looking statements made in this announcement or any other forward-looking statements we may make. Forward-looking statements made in this announcement are current only as of the date on which such statements are made.

IFRS Basis

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

For the year ended 31 December 2008

2008 €m		2008 £m	Restated 2007 £m
	Operating profit before tax attributable to shareholders' profits		
2,118	Long-term business (note 3)	1,694	1,610
154	Fund management (note 5)	123	179
1,498	General insurance and health (note 6)	1,198	1,021
	Other:		
(248)	Other operations and regional costs (note 7)	(198)	(74)
(176)	Corporate centre (note 8)	(141)	(157)
(474)	Group debt costs and other interest (note 9)	(379)	(363)
2,872	Operating profit before tax attributable to shareholders' profits	2,297	2,216
	Adjusted for the following:		
(2,038)	Investment return variances and economic assumption changes on long-term business (note 10)	(1,631)	15
(1,024)	Short-term fluctuation in return on investments on non-long-term business (note 11)	(819)	(184)
(118)	Economic assumption changes on general insurance and health business (note 6c)	(94)	2
(83)	Impairment of goodwill (note 12)	(66)	(10)
(146)	Amortisation and impairment of intangibles	(117)	(103)
9	Profit on the disposal of subsidiaries and associates (Appendix D6)	7	49
(408)	Integration and restructuring costs (note 13)	(326)	(153)
(689)	Exceptional items (note 14)	(551)	–
(1,625)	(Loss)/profit before tax	(1,300)	1,832
(609)	Tax on operating profit	(487)	(604)
1,128	Tax on other activities	902	270
519		415	(334)
(1,106)	(Loss)/profit for the year	(885)	1,498

Earnings per share – IFRS operating profit basis

For the year ended 31 December 2008

2008		2008	Restated 2007
78.6c	Basic (pence per share)	62.9p	52.8p
77.9c	Diluted (pence per share)	62.3p	52.3p

Earnings per share – IFRS basis

For the year ended 31 December 2008

2008		2008	Restated 2007
(46.0)c	Basic (pence per share)	(36.8)p	48.9p
(46.0)c	Diluted (pence per share)	(36.8)p	48.5p

Aviva IFRS basis

1 – Basis of preparation

- (a) The results for the year ended 31 December 2008 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 2008 and have been taken from the group's Annual Report and Accounts which will be available on the company's website on 26 March 2009.

The preliminary announcement for the year ended 31 December 2008 does not constitute statutory accounts as defined in section 240 of the Companies Act 1985. The results on an IFRS basis for the full year 2008 and 2007 have been audited by Ernst & Young LLP. The auditor has reported on the 2008 and 2007 financial statements and the report was unqualified and did not contain a statement under section 237(2) or (3) of the Companies Act 1985. The group's 2007 Report and Accounts have been filed with the Registrar of Companies.

The preliminary announcement includes the regulated information required to be made public under DTR 4.1.3, as defined in DTR 6.3.5 of the Transparency Directive.

The directors confirm that, to the best of each person's knowledge:

- (a) the Group financial statements in this report, which have been prepared in accordance with IFRS as adopted by the EU, IFRIC interpretation and those parts of the Companies Act 1985 applicable to companies reporting under IFRS, give a true and fair view of the assets, liabilities, financial position and results of the Group taken as a whole; and
- (b) the commentary contained in this report includes a fair review of the development and performance of the business and the position of the Group taken as a whole, together with a description of the principal risks and uncertainties that they face.

- (b) Restatement of prior period figures

Change to operating segments

In November 2006, the IASB issued IFRS 8, Operating Segments. Although its requirements are applicable for accounting periods beginning on or after 1 January 2009, the Group has decided to adopt IFRS 8 early and reflect its impact in these financial statements.

The Group has determined its operating segments along regional lines and the results for the year are presented on this basis, using UK Life and UK General Insurance within the United Kingdom, Europe, North America, Asia Pacific and Aviva Investors as the main segments.

- (i) The UK general insurance business covers the Group's UK general insurance business and includes the results of Aviva Re, the Group's captive reinsurance business and agencies in run off;
- (ii) The UK Life segment includes the result of the UK health business which it manages;
- (iii) Europe incorporates all European operations excluding the UK as set out above;
- (iv) North America is made up of our life business in the United States and general insurance business in Canada;
- (v) Asia Pacific includes all our Asian and Australian businesses; and,
- (vi) Aviva Investors comprises the Aviva Investors UK, France, the United States, Canada and the international fund management businesses.

Restatement for the change in accounting policy for latent reserves

As part of the Company's aim to continuously improve the relevance and reliability of its external financial reporting, Aviva undertook a review of the group's General Insurance Reserving Policy in 2008.

As part of this review, the group concluded that estimating our latent claim provisions on an undiscounted basis, and discounting back to current values, represented an improvement to the existing estimation technique. This approach is in line with best practice for long-term liabilities and moves the measurement of latent claims onto a more economic basis, consistent with our internal model for economic capital and the measurement model being proposed for both IFRS Phase II and Solvency II. This approach also improves consistency with the reporting of other long-tail classes of business which are already being discounted, namely certain London Market latent claims and our Dutch Permanent Health and Injury Business.

Aviva IFRS basis continued**1 – Basis of preparation continued**

The discount rate that has been applied is based on the relevant swap curve in the relevant currency at the reporting date, having regard to the duration of the expected settlement of the claims. The discount rate is set at the start of the accounting period with any change in rates between the start and end of the accounting period being reflected below operating profit as an economic assumption change. The range of discount rates used depends on the duration of the claim and the reporting date. We estimate that latent claims will be payable for around the next 35 to 40 years with an average duration of 15 years.

The application of discounting to our latent claims reserves represents a change in accounting policy and has therefore been applied retrospectively. The cumulative impact of discounting on our opening reserves as at 1 January 2007 is to reduce insurance liabilities by £214 million and reinsurance assets by £61 million, and to increase retained earnings by £153 million. These have been treated as prior year adjustments in these financial statements.

The impact of the change in accounting policy on the general insurance and health claims provisions and our results for the year ended 31 December 2007 and the opening 1 January 2007 position is set out below.

	Audited 31 December 2007 £m	Audited 1 January 2007 £m
General insurance and health claims provisions		
Carrying amount as reported, net of reinsurance	11,424	10,980
Impact of discounting:		
Prior period adjustment brought forward	(153)	(153)
Impact on operating profit	12	–
Impact on short term fluctuations and economic assumption changes	(2)	–
Impact of foreign exchange movements	(2)	–
	(145)	(153)
Carrying amount restated, net of reinsurance	11,279	10,827

The impact on shareholders' funds after tax was £107 million and £112 million at 31 December 2007 and 1 January 2007 respectively.

Consolidation of managed funds

The Group manages a number of specialised investment vehicles around the world, in which our insurance and investment funds have invested. The Group's percentage ownership in these vehicles can fluctuate from day to day according to the Group's and third party participation in them, and control is determined based on an analysis of the guidance in IAS 27. During 2008, we identified that certain such vehicles required consolidation in accordance with IAS 27 which therefore results in grossing up assets and liabilities for the effect of the third party participation.

As a result, certain balance sheet categories have been restated for the gross up. This resulted in increases to cash and cash equivalents (£315 million), investment property (£314 million), debt securities (£2,375 million), equity securities (£2,811 million), and net asset value attributable to unitholders (£1,671 million), and a decrease to other investments (£4,144 million) as at 31 December 2007. The impact on the 2007 income statement has been to restate net investment income and fee and commission expense by reducing both by £139 million and, in the 2007 cash flow statement, to increase cash flows from operating activities by £101 million.

In addition, certain property investment vehicles, which were consolidated in accordance with IAS 27, required restatement in the year ended 31 December 2007 to reanalyse amounts previously classified as minority interests to net asset value attributable to unitholders. This change recognises that the property investment vehicles are unit trusts and, as a result, the third party holding should have been recognised as a liability rather than as a non-controlling interest. Prior year comparatives have been restated with a reduction in minority interests and an increase in amounts due to unitholders of £758 million at 31 December 2007 and £431 million at 1 January 2007.

None of these adjustments has any impact on profit for the period, operating profit or earnings per share in the full year 2007, nor on retained earnings, net assets or total equity at either 1 January 2007 or 31 December 2007.

1 – Basis of preparation continued

Treatment of shares held by employee trusts

Employee share trusts have purchased the Company's shares in the market to satisfy awards under various share plans. At 31 December 2007, these trusts held shares with a cost of £10 million which, on materiality grounds, were included within other financial assets rather than being shown as a deduction from total shareholders' equity in the consolidated balance sheet. In view of the Company's current policy of purchasing shares in the market rather than issuing new shares, which will lead to larger balances on this account, we have restated the 2007 figures accordingly.

2 – 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 at the average rates for the year and the assets and liabilities have been translated at the year end rates as follows:

	2008	2007
Eurozone		
– Average rate (€1 equals)	£0.80	£0.68
– Period end rate (€1 equals)	£0.97	£0.73
United States		
– Average rate (\$US1 equals)	£0.54	£0.50
– Period end rate (\$US1 equals)	£0.69	£0.50

3 – Geographical analysis of long-term business IFRS operating profit

	2008 £m	Restated ¹ 2007 £m
With-profit	289	178
Non-profit	462	545
United Kingdom	751	723
France	275	243
Ireland	61	73
Italy	48	78
Netherlands (including Belgium and Germany)	196	181
Poland	162	110
Spain	155	119
Other Europe	(16)	(27)
Europe	881	777
North America	16	79
Asia	2	(6)
Australia	44	37
Asia Pacific	46	31
Total	1,694	1,610

1. Following the establishment of Aviva Investors, the fund management portion of the US business has been separately identified and transferred to fund management. This has reduced the life 2007 IFRS operating profit by £24 million.

IFRS long-term business operating profit before shareholder tax was £1,694 million (2007 restated: £1,610 million), an increase of 5%.

United Kingdom

On an IFRS basis, life operating profit increased by 4% to £751 million (2007: £723 million), driven by the with-profits business and supported by £124 million profit relating to the shareholder proportion of the special distribution announced in February 2008.

The non-profit result was £462 million (2007: £545 million). The prior year result included a £167 million benefit from the implementation of the reserving changes introduced by PS06/14 from the reserving changes. Underlying earnings were up £84 million reflecting the cumulative benefits of the recent efficiency programmes of £65 million and lower new business strain.

Aviva IFRS basis continued**3 – Geographical analysis of long-term business IFRS operating profit continued****Europe**

In Europe, life IFRS operating profit increased by 13% to £881 million (2007: £777 million). The result has been impacted by the strengthening of the euro which has had a positive impact on all our major markets.

In France, the operating profit was higher at £275 million (2007: £243 million) with the strength of the euro partly offset by the reduced income from unit-linked sales due to market volatility.

In Ireland operating profit was £61 million (2007: £73 million) reflecting the costs of migrating to new IT systems.

In Italy, operating profit was lower at £48 million (2007: £78 million) reflecting provisions to support customers affected by counterparty defaults on structured bond products.

In the Netherlands operating profit was higher at £196 million (2007: £181 million) with the strengthening of the euro and expense savings being offset by a higher new business strain.

In Poland, operating profit was £162 million (2007: £110 million) reflecting higher management fees and cost efficiencies.

In Spain, operating profit increased to £155 million (2007: £119 million) primarily driven by higher profits on protection business. This is due to improved claims experience and growth in the underlying portfolio. In addition, protection profits were further enhanced by the acquisition of Cajamurcia in the fourth quarter of 2007.

The operating loss from our other European businesses improved to £16 million (2007: £27 million loss) reflecting the ongoing development of our central and eastern European businesses.

North America

Life operating profit was £16 million (2007 restated: £79 million) driven by lower annuity margins and lower yield on variable rate investments. Annuity margins were adversely impacted by increased option costs and lower account value, driven by underperformance of the equity markets and higher lapse rates.

Asia Pacific

Life operating profit increased in 2008 to £46 million (2007: £31 million), reflecting lower new business strain from sales and business mix.

4 – Margin on assets

We are committed to improving the explanation of our results to generalist investors. A number of requests have been received to present our long-term business result as a function of funds under management, consistent with practices elsewhere in the savings industry. This disclosure provides an additional perspective on the long-term business performance, as part of our intention to continuously improve the external presentation of our IFRS result and enable these results to be better understood.

This disclosure presents the overall profit from the long-term business as if generated by a margin on the income-bearing assets supporting that business. In the analysis which follows two net margin figures are highlighted. Firstly, the operating profit margin is based on our definition of life operating profit, which excludes the effect of economic volatility in the period. Secondly, the margin based on profit before shareholder tax includes the impact of economic volatility and other non-operating items.

2008	As margin on average assets (basis points)						
	Average assets (£bn)	Operating revenue	Acquisition & Admin costs	Operating profit	Economic items	Other non-operating items	Profit before shareholder tax
UK	119.4	265	(202)	63	(58)	(6)	(1)
France	58.4	112	(65)	47	(15)	–	32
Netherlands	35.9	294	(239)	55	20	(42)	33
Other	48.0	233	(147)	86	(80)	(5)	1
Europe	142.3	199	(137)	62	(28)	(12)	22
North America	22.1	207	(200)	7	(196)	(25)	(215)
Asia Pacific	4.9	452	(358)	94	(213)	–	(119)
Total	288.7	231	(172)	59	(57)	(11)	(8)

4 – Margin on assets continued

Restated 2007	As margin on average assets (basis points)						
	Average assets (£bn)	Operating revenue	Acquisition & Admin costs	Operating profit	Economic items	Other non- operating items	Profit before shareholder tax
UK	124.0	189	(131)	58	(9)	(1)	49
France	49.2	122	(72)	49	17	–	66
Netherlands	28.8	269	(206)	63	81	(2)	141
Other	40.7	274	(187)	87	(1)	(5)	80
Europe	118.7	210	(144)	65	26	(2)	89
North America	16.5	210	(162)	48	(111)	(33)	(96)
Asia Pacific	5.0	323	(261)	62	2	(3)	61
Total	264.2	202	(141)	61	1	(3)	59

The above tables are based on the IFRS income statement and balance sheet for the long-term business segment:

- (i) average assets is the arithmetic average of the opening and closing balance sheet value of assets, together with non-consolidated funds under management and excluding certain non-financial assets; excluded assets are goodwill, acquired value of in-force business (AVIF) and other intangibles, reinsurance assets, deferred acquisition costs and other assets, and prepayments and accrued income;
- (ii) operating revenue items include premium and investment income, claims and movements in liabilities, based on expected investment returns on financial investments backing shareholder and policyholder funds;
- (iii) acquisition and administration costs include fee and commission expense, other operating expenses and finance costs;
- (iv) operating profit is equal to operating revenue less acquisition and administration costs;
- (v) economic items include the effect of variances between actual and expected investment returns and the impact of changes in economic assumptions on liabilities, which are excluded from operating profit;
- (vi) other non-operating items include impairment of goodwill, amortisation of intangibles other than AVIF, profit on disposal of subsidiaries and integration and restructuring costs; and
- (vii) the final column is based on profit before tax attributable to shareholders' profits, which combines the operating profit, economic items and other non-operating items.

Reconciliation of net margins to segmental result and balance sheet

	2008			Restated 2007		
	Profit £m	Average assets £bn	Net margin bps	Profit £m	Average assets £bn	Net margin bps
Long-term business result before tax	(1,310)			1,549		
less: tax attributable to policyholder returns	1,068			(15)		
Result after policyholder tax	(242)	288.7	(8)	1,534	264.2	59
Operating profit before tax attributable to shareholders' profits	1,694	288.7	59	1,610	264.2	61

	2008			Restated 2007		
	Closing £bn	Average £bn	Opening £bn	Closing £bn	Average £bn	Opening £bn
Segment assets	307.9		280.4	280.4		255.9
Adjusted for:						
Additional funds under management	13.3		11.7	11.7		8.5
Goodwill and other intangibles	(5.4)		(4.0)	(4.0)		(3.6)
Other excluded assets	(15.5)		(11.2)	(11.2)		(9.5)
Asset base	300.3	288.7	276.9	276.9	264.2	251.3

The total operating profit margin on assets reduced from 61 bps in 2007 to 59 bps in 2008. The margin increased in the UK and Asia Pacific regions, with a small reduction in Europe and a larger fall in the USA. The overall margin movement of 2 bps can be further analysed between an increase of 3 bps for growth in operating profit less a reduction of 5 bps to allow for the increased asset base.

Aviva IFRS basis continued**4 – Margin on assets continued**

The deepening global financial crisis has led to significantly negative investment variances in 2008, equating to 57 bps of average assets. The variances primarily relate to debt securities, where the unprecedented widening of credit spreads drove down market values, and to a lesser extent from falling equity and property values. For with-profit and unit-linked business the decline in asset values is largely offset by a corresponding reduction in liabilities. However for other non-profit business and surplus shareholder funds, the reduction in asset values was only partly mitigated by movements in liabilities. The economic items include additional credit default provisions for corporate bonds and commercial mortgages. Although equity markets suffered major downturns, the profit impact was limited by hedging activity in the Netherlands and limited shareholder exposure elsewhere in the Group.

This compares to a broadly neutral net impact of economic items on profit in 2007, with favourable investment variances in the Europe region offset by negative effects in the USA and UK.

The non-operating items relate mainly to reorganisation costs in the UK and Netherlands and amortisation of other intangibles arising from the acquisition in the USA in 2006.

For the UK business, the operating profit margin increased from 58 bps in 2007 to 63 bps in 2008. The 2008 margin includes 10 bps from recognition of the first tranche of a special with-profit bonus distribution, while a lower result from non-participating business reduced the overall margin by 7 bps.

The negative economic variance in the UK incorporates the effect of a £550 million allowance for future defaults in respect of corporate bonds and commercial mortgages supporting our £16 billion UK annuity business. The increase has the effect of doubling the total allowance for credit defaults with respect of these securities which is equivalent to a default allowance of 85 bps over the lifetime of the assets. Also included are specific default provisions of £53 million in relation to corporate bonds and commercial mortgages which have been offset by the annual allowances which we have for these types of securities of £60 million.

The UK margins on assets are blended margins combining our participating (with-profit) and non-participating business. Average assets of the UK with-profits business were £59.9 billion (*2007 restated: £63.4 billion*) with operating profit of 48 bps (*2007 restated: 28 bps*). This apparently low return reflects IFRS accounting for the share of bonuses accruing to policyholders, rather than the underlying performance within the participating funds. Average assets of the UK non-participating business were £59.5 billion (*2007 restated: £60.6 billion*) with operating profit of 75 bps (*2007: 89 bps*).

The French long-term business shows a stable operating margin progression, based on its well-established portfolios of AFER and other unit-linked investment contracts. The negative economic item in 2008 largely relates to minimum death benefit guarantees affected by market conditions.

In the Netherlands, the reduced operating profit margin was affected by new business strain on corporate pensions business (15 bps) and from strengthening annuitant mortality assumptions (13 bps). Positive economic variances were the result of investment hedging activity.

For this disclosure, Other Europe includes our well-established and profitable operations in Ireland, Italy, Poland and Spain as well as newer developing businesses in central and eastern Europe. Operating margins were generally stable, boosted by high margins on protection business portfolios in Poland and Spain. The newer smaller operations currently make a negative net contribution to margins due to the effect of the low asset base and development costs. Negative economic items were driven by credit spread widening, particularly in Spain.

The North America operating profit margin reduced from 48 bps in 2007 to 7 bps in 2008, with adverse economic conditions leading to investment margin compression, higher DAC amortisation and DAC unlocking.

The negative economic variance of 196 bps in the USA were driven by realised and unrealised losses on investments as a result of the widening of credit spreads on assets predominantly relating to funding agreement business (122 bps). The assets and liabilities for pre-2008 funding agreements are both carried at fair value, are matched in terms of duration, and the assets are of high quality. However, a temporary accounting mismatch has arisen due to the widening of credit spreads. This has resulted in a temporary adverse movement in the assets not matched by a corresponding movement in the liabilities, which it is anticipated will reverse prior to settlement of the contracts. Asset write-downs represent a further 74 bps of the variance.

The Asia Pacific region combines our well-established profitable business in Australia, which shows high stable operating profit margins, and the new and rapidly developing Asian operations.

From 2009 we intend to provide further disclosure of IFRS profit drivers, using a format similar to the embedded value analysis of movements. We consider that this will provide more relevant information on the sources of profit for all types of long-term business. In the meantime, however, we believe there is merit in presenting this "margin on average assets" disclosure as an additional perspective on the financial results of our life businesses.

5 – Geographical analysis of fund management

	2008 £m	Restated ¹ 2007 £m
United Kingdom	64	70
Europe	35	43
North America ²	14	27
Asia Pacific	1	7
Aviva Investors	114	147
United Kingdom	(18)	(10)
Netherlands	10	23
Other Europe	4	4
Europe	14	27
Asia Pacific	13	15
Total	123	179

1 Full year 2007 has been restated to reflect the new management structure to include France, USA and Canada. Norwich Union's retail investment business and the collective investment business with RBSG do not form part of Aviva Investors UK operations.

2 Following the establishment of Aviva Investors, the fund management portion of the US business has been separately identified and transferred to fund management. This has increased the North America 2007 IFRS operating profit by £24 million.

Our worldwide fund management operating profit decreased by 31% to £123 million (2007 restated: £179 million) on an IFRS basis.

Aviva Investors

On 28 February 2008, as part of the "one Aviva, twice the value" vision, we announced our plans to combine the asset management companies within Aviva to create a single, globally integrated asset manager to be known as Aviva Investors.

The combined Aviva Investors businesses achieved a reported operating profit of £114 million (2007 restated: £147 million) in a year of unprecedented investment market volatility with all regions experiencing downward pressure on fee income. In the United Kingdom, the decline in operating profit to £64 million (2007: £70 million) was driven by the decline in investment income, partially offset by strong performance fees and higher returns on stock lending activities. The market driven decline in the value of financial investments in North America contributed to the deterioration in the result to £14 million (2007: £27 million). Asia Pacific's result of £1 million (2007: £7 million) was impacted by the costs of developing our distribution reach into this expanding market.

Other fund management businesses

United Kingdom operating loss of £18 million comprises £6 million loss (2007: £1 million) from our Norwich Union retail investment business and £12 million loss (2007: £9 million loss) from our collective investment business with RBSG.

Europe operating profit of £14 million (2007: £27 million) reflected lower investment management fees from funds under management in our Dutch business which has been affected by volatile stock markets.

Asia Pacific, comprising our Navigator business in Australia and Singapore, contributed £13 million (2007: £15 million).

Aviva IFRS basis continued

5 – Geographical analysis of fund management continued

Total funds under management at 31 December 2008 increased by 6% to £381 billion (2007 restated: £359 billion).

			2008	Restated 2007
	Life and related businesses £m	General business and other £m	Total £m	Total £m
Total IFRS assets included in the balance sheet	307,928	46,634	354,562	321,326
Third party funds under management:				
Unit trusts, OEICs, PEPs and ISAs			22,616	24,427
Segregated funds			48,104	50,018
			425,282	395,771
Non-managed assets			(44,176)	(36,342)
Funds under management			381,106	359,429
Managed by:				
Aviva Investors			236,178	235,309
Other Aviva managers			120,054	99,906
Total funds managed by Aviva			356,232	335,215
External fund managers			24,874	24,214
Funds under management			381,106	359,429

Funds managed by Aviva Investors were £236 billion (2007: £235 billion) at 31 December 2008. In common with the asset management industry in general, market factors had an adverse impact on the value of our funds under management. However the fall in equity and property capital values and outflows from some open-ended property funds was more than offset by exchange gains as sterling declined against other major currencies towards the end of the year, increasing the value of our non-sterling investments.

Funds managed by other Aviva managers increased by 20% to £120 billion (2007: £100 billion). The increase is driven by favourable movement in the euro on funds managed in the Netherlands, the funds acquired in Swiss Life and an increase in cash or cash equivalents held by our businesses.

6 – Analysis of general insurance and health

	Net written premiums		Underwriting result		Longer-term investment return		Operating profit	
	2008 £m	Restated 2007 £m	2008 £m	Restated 2007 £m	2008 £m	Restated 2007 £m	2008 £m	Restated 2007 £m
General insurance								
United Kingdom¹	5,024	5,490	63	(221)	579	642	642	421
France	678	574	28	7	53	47	81	54
Ireland	494	474	(4)	101	67	61	63	162
Netherlands	1,028	788	54	120	92	73	146	193
Other	417	308	–	10	45	31	45	41
Europe	2,617	2,144	78	238	257	212	335	450
North America	1,601	1,412	21	18	124	136	145	154
Asia Pacific	6	5	(5)	–	1	–	(4)	–
	9,248	9,051	157	35	961	990	1,118	1,025
Health insurance								
United Kingdom	389	407	8	(5)	6	5	14	–
France	204	159	11	4	15	12	26	16
Ireland	19	–	4	–	1	–	5	–
Netherlands	1,250	929	(11)	(45)	42	21	31	(24)
Europe	1,473	1,088	4	(41)	58	33	62	(8)
Asia Pacific	27	23	4	3	–	1	4	4
	1,889	1,518	16	(43)	64	39	80	(4)
Total	11,137	10,569	173	(8)	1,025	1,029	1,198	1,021

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

The group's net written premiums from its worldwide general insurance and health businesses increased by 5% to £11,137 million for the year (2007 restated: £10,569 million).

Group operating profit from general insurance and health businesses increased by 17% to £1,198 million (2007 restated: £1,021 million). The general insurance and health underwriting result increased to £173 million (2007 restated: £8 million loss) reflecting the absence of adverse weather costs of £475 million in the UK partly offset by lower prior year releases across the group of £840 million (2007: £969 million) and the impact of competitive markets in Ireland and the Netherlands. The worldwide general insurance combined operating ratio (COR) improved to 98% (2007 restated: 100%) in line with the group's 'meet or beat' target.

The worldwide GI expense ratio has decreased to 13.4% (2007 restated: 13.9%), primarily driven by cost savings achieved by the UK, France and the Netherlands.

The longer-term investment return (LTIR) on general insurance and health business assets was slightly lower at £1,025 million (2007 restated: £1,029 million) resulting from changes in asset mix due to equity de-risking that took place in the latter half of 2007 and lower levels of investments following payment of flood claims in the United Kingdom partly offset by higher expected rates of return.

United Kingdom

General insurance and health

The results for the United Kingdom include our general insurer Norwich Union Insurance, our healthcare business, our group captive reinsurer Aviva Re and agencies in run-off. Combined general insurance and health net written premiums reduced by 8% to £5,413 million (2007 restated: £5,897 million). General insurance net written premiums have decreased to £5,024 million (2007 restated: £5,490 million) and to £389 million (2007: £407 million) for health. Operating profit of £642 million (2007 restated: £421 million) includes contributions of £97 million (2007: £53 million) from Aviva Re, which benefited from a one-off commutation of £30 million in the year.

Norwich Union Insurance

Norwich Union insurance continues to be the leading provider of general insurance in the United Kingdom. We provide a range of insurance products focused on personal and small business customers, together with roadside assistance through the RAC.

Aviva IFRS basis continued**6 – Analysis of general insurance and health continued**

The continuing tough market conditions and our focus on sustainable profitability rather than volumes are reflected in our financial performance in 2008. We have seen net written premiums fall 8% to £4,981 million in 2008 (2007: £5,440 million). While all business lines have been affected the decline was most notable in creditor, where volumes have fallen by around 30% reflecting distributor response to the issues with payment protection insurance and the decline in lending.

In personal lines we have achieved motor rating increases of 5% (2007: 6%). Following our initiatives to improve the price competitiveness of our direct channel, we have focused on better quality risks resulting in a reduction in our average premium levels. Homeowner rates have increased by 9% (2007: 7%). While overall rating in personal lines has been marginally better than headline claims inflation, the impact of claims farming and an increase in bodily injury claims have adversely impacted profitability.

The commercial market has remained particularly price competitive. Against this backdrop we have reversed the trend of declining rates seen in the past four years, achieving an overall rate increase in 2008 of 3% (a 5% improvement on the 2% reduction in 2007). Our stance on commercial pricing is underlined by the implementation of the second phase of rating action in the final quarter of the year. While this represents a significant improvement on recent trends, the rating achieved in the year remained below the level of claims inflation and has also contributed to a reduction in volumes.

Operating profit for the year rose to £566 million (2007 restated: £368 million) with an improved combined operating ratio of 99% (2007 restated: 106%). The principal factor in the improved profitability for the general insurance business was that weather related claims were in line with normal expectations compared with a £475 million adverse impact in 2007. This benefit was partly offset by a reduction in the savings on prior year claims development to £285 million (2007 restated: £430 million, including £215 million of a non-recurring nature), the impact of difficult market conditions and a reduction in long-term investment returns to £549 million (2007: £613 million). These factors have outweighed the earned benefits we have derived from our initiatives to deliver cost savings and control claims inflation.

Total prior year releases in 2008 were £285 million. This is down on the £430 million released last year and we would expect future contributions from prior year releases to decline further.

2008 saw a step change in our operational efficiency. Our expense ratio improved from 13.9% in 2007 to 12.1%, despite an overall reduction in business volumes. This has been achieved by £265 million of cost savings in the year, including £200 million from the first phase of our programme announced in October 2007. In June 2008 we announced details of the second phase of the programme to transform our business. This phase will improve service and drive growth and involves the redesign of the operations function, simplification of processes, improvements in customer services and the consolidation of expertise into seven modern insurance centres of excellence in the UK. We expect this phase, together with additional actions being taken in other areas (most notably in the IT function), will deliver further cost savings of £150 million per annum by 2010.

The actions taken to reduce distribution costs and the impact of claims ratio improvements arising from rating and risk selection will result in real improvements in the current year profitability. All this gives us confidence in delivering a UK general insurance COR in 2009 in line with our worldwide “meet or beat” target of 98%, without the benefit of historical levels of prior year support.

Health

Total health insurance operating profit increased to £14 million (2007: £nil) resulting from pricing decisions throughout the year to improve margins, tighter expense controls and exiting unprofitable international markets.

Europe

Aviva Europe's net written premiums increased by 27% to £4,090 million (2007: £3,232 million). Against a backdrop of increasing price competition across a number of countries operating profit decreased to £397 million (2007: £442 million). This result has been favourably impacted the development of new distribution channels, product launches in the year across a number of our businesses and the strengthening of the euro, offset by the current competitive nature of the insurance markets particularly in Ireland and the Netherlands.

In France we recorded net written premiums of £882 million (2007: £733 million) and an operating profit of £107 million (2007: £70 million). An increase in the general insurance underwriting result to £28 million (2007: £7 million) reflected favourable claims experience due to better than expected weather claims and an increase in premiums. The general insurance COR improved to 96% (2007: 99%).

General insurance operating profit in Ireland decreased to £63 million (2007: £162 million) driven by storms in July and August, intensive competitive pressure in the market and the Irish economy slipping into recession. The combined operating ratio worsened to 103% (2007: 80%) reflecting increased claims frequency, some large claims and adverse weather experience, which resulted in an underwriting result of £4 million loss (2007: £101 million profit). Net written premiums were £494 million (2007: £474 million). The health business recorded net written premiums for the first time of £19 million following the acquisition of VIVAS Health, now rebranded to Hibernian Aviva Health. Since acquisition the number of lives insured by Hibernian Aviva Health has grown in excess of 30%, making it the fastest growing health insurer in Ireland.

6- Analysis of general insurance and health continued

In the Netherlands, our general insurance and health business recorded an operating profit of £177 million (2007: £169 million). Net written premiums increased to £2,278 million (2007: £1,717 million) driven by the strength of the euro and competitively priced health products.

The general insurance business in the Netherlands recorded an operating profit of £146 million (2007: £193 million) and the COR worsened to 94% (2007: 85%) reflecting pressure on premium rates and deterioration in claims, particularly motor. The motor portfolio has seen strong price competition in 2008 although rates are now showing signs of recovery pressures on premium rates. The health business reported an operating profit of £31 million (2007: £24 million loss) reflecting rating improvements and favourable prior year run-off. The Dutch health business has been shown as held for sale at 31 December 2008 as we have previously announced the sale of this business to OWM CZ Groep Zorgverkeeraar (CZ). This transaction completed on 1 January 2009. During 2008 Delta Lloyd commenced selling its products to CZ's existing customer base.

Our other general insurance operations in Italy, Turkey and Poland contributed operating profit of £45 million (2007: £41 million) and net written premiums of £417 million (2007: £308 million) with particularly strong growth in Italy reflecting the new bancassurance agreement with Banco Popolare.

North America

Net written premiums of our Canadian business increased by 13% to £1,601 million (2007: £1,412 million) with growth across all lines and the acquisition of National Home Warranty in July 2008. On a constant currency basis, net written premiums increased by 4%.

The underwriting result was higher at £21 million (2007: £18 million) with a COR of 99% (2007: 98%). Favourable prior year development was offset by tough market conditions in the insurance cycle, weather related costs and restructuring and strategic spend.

Operating profit of £145 million (2007: £154 million) was impacted by lower investment income following the equity de-risking that took place in the latter half of 2007.

Asia Pacific

The businesses in Asia Pacific reported an increase in net written premiums to £33 million (2007: £28 million) predominantly driven by the contribution of the Malaysian general insurance business which commenced operations in the latter half of 2007. Operating profit of £4 million (2007: £4 million) from the health business has been offset by a £4 million loss (2007: £nil) in the general insurance business due to costs incurred in closing the Malaysian motor portfolio.

(a) Combined operating profit ratios – general insurance business only

	Claims ratio		Expense ratio		Combined operating ratio	
	2008 %	Restated 2007 %	2008 %	Restated 2007 %	2008 %	Restated 2007 %
United Kingdom ¹	62.0%	65.9%	12.1%	13.9%	99%	106%
France	68.2%	72.7%	9.7%	10.2%	96%	99%
Ireland	74.3%	54.2%	16.9%	14.3%	103%	80%
Netherlands	57.2%	45.1%	18.2%	18.8%	94%	85%
Canada	64.4%	65.9%	15.0%	13.6%	99%	98%
Total	62.6%	63.7%	13.4%	13.9%	98%	100%

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

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.
- Commission ratio – Written commissions expressed as a percentage of net written premiums.
- Combined operating ratio – Aggregate of claims ratio, expense ratio and commission ratio.

Aviva IFRS basis continued

6 – Analysis of general insurance and health continued

(b) Combined operating profit ratio analysis – class of business analysis**(i) United Kingdom (excluding group reinsurance and agencies in run-off)**

	Net written premium		Underwriting result		Combined operating ratio	
	2008 £m	Restated 2007 £m	2008 £m	Restated 2007 £m	2008 %	Restated 2007 %
Personal						
Motor	1,329	1,431	(37)	(25)	103%	102%
Homeowner	1,188	1,223	(57)	(296)	104%	124%
Other	602	797	4	10	103%	100%
	3,119	3,451	(90)	(311)	103%	110%
Commercial						
Motor	577	636	28	61	95%	91%
Property	774	807	(6)	(175)	100%	124%
Other	511	546	85	180	85%	68%
	1,862	1,989	107	66	94%	98%
Total	4,981	5,440	17	(245)	99%	106%

During the year to 31 December 2008, annualised rating increases were as follows: personal motor 5%; homeowner 9%; commercial motor 3%; commercial property 3%; and, commercial liability 2%.

(ii) France

	Net written premium		Underwriting result		Combined operating ratio	
	2008 £m	2007 £m	2008 £m	2007 £m	2008 %	2007 %
Motor	290	254	–	(2)	100%	101%
Property and other	388	320	28	9	93%	97%
Total	678	574	28	7	96%	99%

(iii) Ireland

	Net written premium		Underwriting result		Combined operating ratio	
	2008 £m	2007 £m	2008 £m	2007 £m	2008 %	2007 %
Motor	243	232	9	51	99%	81%
Property and other	251	242	(13)	50	107%	80%
Total	494	474	(4)	101	103%	80%

(iv) Netherlands

	Net written premium		Underwriting result		Combined operating ratio	
	2008 £m	2007 £m	2008 £m	2007 £m	2008 %	2007 %
Motor	323	267	8	42	98%	84%
Property	343	249	(2)	19	98%	93%
Liability	78	61	14	13	81%	79%
Other	284	211	34	46	87%	77%
Total	1,028	788	54	120	94%	85%

6 – Analysis of general insurance and health continued

(b) Combined operating profit ratio analysis – class of business analysis continued

(v) Canada

	Net written premium		Underwriting result		Combined operating ratio	
	2008 £m	2007 £m	2008 £m	2007 £m	2008 %	2007 %
Motor	880	795	47	7	95%	99%
Property	512	450	(50)	10	110%	96%
Liability	166	143	15	(5)	90%	103%
Other	43	24	9	6	73%	68%
Total	1,601	1,412	21	18	99%	98%

(c) Economic assumption changes

The discount rate that has been applied to latent claims reserves is based on the swap rate 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 which span over 35 years, with the average duration being between 9 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. The sharp decline in interest rates in the second half of 2008 has resulted in an increase in the net discounted provision of £94 million.

(d) Exceptional strengthening of latent claims provisions

Separately and in addition to the decision to discount latent claims, our estimation of latent claims reserves in 2008 has been revised to reflect increasing market trends observed in mesothelioma claims. The majority of the Group's latent claims reserves relate to mesothelioma based risks in the UK.

The Institute of Actuaries' Asbestos Working Party report in 2008 contributed to our view that experience variances, which we had previously perceived as normal short-term volatility, reflected a real worsening of expected ultimate claims experience. The market trend in mesothelioma claims has been fully reflected as a significant one-off strengthening of gross latent claims reserves in 2008 of £356 million, with a corresponding increase of £52 million in reinsurance recoverable. The net increase of £304 million comprises £668 million on an undiscounted basis and discounting of £364 million. Due to its size and the fact that this related to discontinued business, this one-off strengthening has been reported as an exceptional item below operating profit.

Whilst this is a significant step change, it should be noted that this reflects the long-term impact of the settlement of latent claims currently running at £30 million per annum, of which £25 million related to mesothelioma. The number of claims is currently predicted to rise slightly in the period to 2015 and then diminish slowly over the next 30 years to 2045.

7 – Analysis of other operations and regional costs

	2008			Restated 2007		
	Regional Costs £m	Other Operations £m	Total £m	Regional Costs £m	Other Operations £m	Total £m
United Kingdom	–	(12)	(12)	–	(8)	(8)
Europe	(28)	(123)	(151)	(11)	(38)	(49)
North America	(14)	2	(12)	(2)	(2)	(4)
Asia Pacific	(23)	–	(23)	(13)	–	(13)
Total	(65)	(133)	(198)	(26)	(48)	(74)

Aviva IFRS basis continued**7 – Analysis of other operations and regional costs continued****United Kingdom**

The £12 million loss for the period (2007: £8 million loss) mainly comprises a £23 million loss arising from the Lifetime wrap platform partly offset by profits from the Norwich Union Insurance non-insurance operations. Following a strategic review of the Lifetime platform, a decision has been made to enter into a strategic partnership with Scottish Friendly to run the Lifetime back office administration and migrate the wrap onto their existing platform.

Europe

Regional costs of £28 million (2007: £11 million) reflects the first full year of regional operations. Other operations losses of £123 million (2007: £38 million) include holding company costs in a number of our markets, principally France, Italy and the Netherlands. Additional costs of £30 million have been incurred this year in relation to the implementation of the global financial strategy and other projects. In addition, Delta Lloyd's banking and retail mortgage divisions reported an operating loss of £22 million (2007: £8 million profit) as a result of the adverse economic climate, and in Italy we incurred a loss of £6 million in our distribution associate Banca Network Investimenti, acquired in December 2007. The 2007 result benefited from a one-off pension scheme adjustment in France of £17 million.

North America

The 2008 loss of £12 million (2007: £4 million loss) is driven by regional costs of £14 million offset by operating profit from the Canadian brokerage business. The increase in regional costs is due to the opening of the regional office late in 2007, and the one-off costs associated with staffing the office.

Asia Pacific

The reported loss of £23 million (2007: £13 million loss) is driven by the regional costs, including one-off costs associated with staffing the offices.

8 – Corporate centre

	2008 £m	2007 £m
Project spend	(34)	(26)
Share awards and other incentive schemes	(10)	(17)
Central spend	(97)	(114)
Total	(141)	(157)

The corporate centre costs for the period reduced to £141 million (2007: £157 million) due to lower central spend and staff incentive costs. Within this total, project spend was £34 million (2007: £26 million), driven by the corporate centre's share of the ongoing implementation of the global finance strategy. This project has allowed us to deliver our results on an MCEV basis and will allow us to deliver Solvency II and comply with Sarbanes-Oxley (which would support a potential US listing). Further expenditure to deliver this project is also included in each region's operating profit.

9 – Group debt cost and other interest

	2008 £m	2007 £m
External		
Subordinated debt	(229)	(179)
Other	(57)	(80)
Internal	(197)	(179)
Net finance income on pensions schemes	104	75
Total	(379)	(363)

Group debt costs and other interest of £379 million (2007: £363 million) comprise internal and external interest on borrowings, subordinated debt and intra-group loans not allocated to local business operations. External interest costs increased to £286 million (2007: £259 million) reflecting higher interest in subordinated debt, due to the hybrid debt issue in May 2008 and August 2008, offset by lower commercial paper interest as proceeds from the issue were used to repay some commercial paper. Internal interest costs increased to £197 million (2007: £179 million) driven by changes to our internal loan balances.

Also included is UK net pension income which represents the expected return on pension scheme assets less the interest charge on pension scheme liabilities. Net pension income increased to £104 million (2007: £75 million) reflecting higher expected rates of return on assets offset by higher discount rates on liabilities.

Interest on the £990 million direct capital instrument issued in 2004 is not included within group debt costs as it is instead treated as an appropriation of profits retained in the period.

10 – Long-term business investment return variances and economic assumption changes

(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. 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	
	2008 £m	2007 £m
Investment variances and economic assumption changes	(1,631)	15

(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.

Where assets are classified as fair value through profit or loss, the group has applied the same 'real-world' economic assumptions for fixed interest securities, equities and properties as are used under MCEV principles. 2007 rates were based on EEV returns. The principal assumptions underlying the calculation of the expected investment return are:

	Fixed interest		Equities		Properties	
	2008 %	2007 %	2008 %	2007 %	2008 %	2007 %
United Kingdom	5.7%	4.6%	9.2%	7.6%	7.7%	6.6%
Eurozone	4.8%	4.0%	8.3%	7.0%	6.8%	6.0%

Where fixed interest 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.

11 - Non-long-term business economic volatility

	Non-long-term business	
	2008 £m	2007 £m
Net investment income	522	1,115
Internal charges included under other headings	(73)	18
	449	1,133
Analysed between:		
Longer term investment return, reported within operating profit	1,268	1,317
Short-term fluctuations in investment return, reported outside operating profit	(819)	(184)
	449	1,133

Actual income and longer-term investment return both contain the amortisation of the discount/premium arising on the acquisition of fixed income securities.

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 period.

Aviva IFRS basis continued**11 - Non-long-term business economic volatility continued**

The Group has calculated the longer-term investment return for its general insurance and health business using the same start of year economic assumptions for equities and properties as those used for MCEV reporting.

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

	2008 £m	2007 £m
Debt securities	11,275	10,757
Equity securities	993	1,195
Properties	278	360
Cash and cash equivalents	3,407	3,178
Other	3,623	2,801
Total	19,576	18,291

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	
	2008 %	2007 %	2008 %	2007 %
United Kingdom	9.2%	7.6%	7.7%	6.6%
France	8.3%	7.0%	6.8%	6.0%
Ireland	8.3%	7.0%	6.8%	6.0%
Netherlands	8.3%	7.0%	6.8%	6.0%
Canada	7.7%	7.1%	6.2%	6.1%

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

12 – Impairment of goodwill

Impairment of goodwill of £66 million (2007: £10 million) is mainly driven by impairments in the Netherlands and on an Italian associate.

13 – Integration and restructuring costs

Integration and restructuring costs incurred in the year amounted to £326 million (2007: £153 million). This includes £287 million for the cost savings initiatives in the UK life and general insurance businesses and Europe, which have delivered £340 million annualised cost savings in the year. Also included are integration costs of £39 million which mainly relate to the work to set up our global asset management operation, Aviva Investors.

14 – Exceptional items

We have reported exceptional items of £551 million (2007: £nil) in the year. These include £142 million for the transfer of the lifetime wrap platform, write-down in preparation for sale of the British School of Motoring in the UK and closure the structured settlement business in the US. The costs also include £304 million after reinsurance for the discounted cost of strengthening our latent claims provisions, mainly in the UK, and £126 million for the settlement agreed by our Netherlands life business for its unit-linked policyholders, following an industry-wide challenge on the level of fees. The remaining balance relates to brand migration costs of £37 million offset by £58 million benefit from settlement of a disputed Australian tax liability and the consequent release of a provision for interest charges.

Under MCEV exceptional items were £754 million, reflecting the higher cost of the Netherlands unit-linked settlement on an MCEV basis.

Aviva MCEV Basis

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Summarised consolidated income statement – MCEV basis

For the year ended 31 December 2008

2008 €m		2008 £m	Restated 2007 £m
Operating profit before tax attributable to shareholders' profits			
3,501	Life MCEV operating earnings (note M4)	2,801	2,544
52	Fund management ¹ (note M5)	42	90
1,498	General insurance and health (IFRS section: note 6)	1,198	1,021
	Other:		
(204)	Other operations and regional costs ² (note M6)	(163)	(70)
(176)	Corporate centre (IFRS section: note 8)	(141)	(157)
(474)	Group debt costs and other interest (IFRS section: note 9)	(379)	(363)
4,197	Operating profit before tax attributable to shareholders' profits	3,358	3,065
	Adjusted for the following:		
(15,526)	Economic variances on long-term business (note M7)	(12,422)	(19)
(1,024)	Short-term fluctuation in return of investments on non-long-term business (IFRS section: note 11)	(819)	(184)
	Economic assumption changes on general insurance and health business (IFRS section: note 6c)	(94)	2
(83)	Impairment of goodwill (IFRS section: note 12)	(66)	(10)
(134)	Amortisation and impairment of intangibles	(108)	(89)
9	Profit on the disposal of subsidiaries and associates (Appendix D6)	7	20
(408)	Integration and restructuring costs (IFRS section: note 13)	(326)	(153)
(943)	Exceptional items (IFRS section: note 14)	(754)	–
(14,030)	(Loss)/profit before tax	(11,224)	2,632
(1,049)	Tax on operating earnings	(839)	(924)
5,441	Tax on other activities	4,353	238
4,392		3,514	(686)
(9,638)	(Loss)/profit for the period	(7,710)	1,946
	Attributable to:		
(9,540)	Equity shareholders of Aviva plc	(7,632)	1,704
(98)	Minority interests	(78)	242
(9,638)		(7,710)	1,946

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 Aviva's 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.

Earnings per share – MCEV basis

2008	Earnings per share	2008	2007
Operating earnings on an MCEV basis after tax, attributable to ordinary shareholders of Aviva plc			
104.3c	Basic (pence per share)	83.4p	70.4p
103.3c	Diluted (pence per share)	82.7p	69.8p
Earnings after tax on an MCEV basis, attributable to ordinary shareholders of Aviva plc			
(363.6)c	Basic (pence per share)	(290.9)p	63.8p
(363.6)c	Diluted (pence per share)	(290.9)p	63.2p

Aviva MCEV basis

M1 – Introduction

The summarised consolidated income statement and balance sheet 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 June 2008 with the exception of the use of an adjusted risk-free yield due to current market conditions for immediate annuities in the UK and Netherlands and for immediate annuities, deferred annuities and all other contracts in the US.

The CFO Forum MCEV Principles were designed during a period of relatively stable market conditions. As announced on 19 December 2008, the CFO Forum has agreed to conduct a review of the impact of turbulent market conditions on the MCEV Principles, the result of which may lead to changes to the published MCEV Principles or the issuance of guidance. The particular areas under review include implied volatilities, the cost of non-hedgeable risks, the use of swap rates as a proxy for risk-free rates and the effect of liquidity premia.

The directors consider that Aviva's 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 prior year comparatives have been restated to MCEV as announced on 4 February 2009.

The results for 2008 and 2007 have been audited by our auditors, Ernst & Young. Their report in respect of 2008 can be found on page 288 in the Report and Accounts.

M2 – 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; 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.

	2008 £m	Restated 2007 £m
Life and pensions MCEV earnings		
Value of new business	780	897
Earnings from existing business		
– expected returns at the reference rate	992	877
– expected returns in excess of the reference rate	446	420
– expected returns	1,438	1,297
– experience variances	(224)	(111)
– operating assumption changes	(165)	(25)
– other operating variances	271	1
Expected return on shareholders' net worth	701	485
Life and pensions operating earnings before tax	2,801	2,544
Economic variances	(12,422)	(19)
Other non-operating variances	(329)	–
Life and pensions (loss)/earnings before tax	(9,950)	2,525
Tax on operating earnings	(821)	(754)
Tax on other activities	3,779	48
Life and pensions (loss)/earnings after tax	(6,992)	1,819

There were no separate development costs reported in these years.

Aviva MCEV basis continued**M2 – Life MCEV operating return continued**

The table on the previous page presents a summarised breakdown of the life and pensions MCEV earnings on a gross of minorities 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 minorities basis as preferred by the CFO Forum Principles.

Key indicators	2008		Restated 2007	
	Net of minorities and tax £m	Gross of minorities and tax £m	Net of minorities and tax £m	Gross of minorities and tax £m
Value of new business	409	780	504	897
Life and pensions operating earnings	1,753	2,801	1,567	2,544
Life and pensions earnings	(6,885)	(9,950)	1,619	2,525

M3 – New business

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 minority 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 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. 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.

(a) Geographical analysis of value of new business

Life and pensions (gross of tax and minority interest)	Present value of new business premiums		Value of new business		New business margin	
	2008 £m	Restated 2007 £m	2008 £m	Restated 2007 £m	2008 %	Restated 2007 %
United Kingdom	11,858	11,797	204	278	1.7%	2.4%
France	3,880	3,790	135	144	3.5%	3.8%
Ireland	1,299	1,780	15	37	1.2%	2.1%
Italy	2,331	2,975	71	77	3.0%	2.6%
Netherlands (including Belgium and Germany)	4,097	3,133	(73)	8	(1.8)%	0.3%
Poland	1,842	1,120	65	48	3.5%	4.3%
Spain	2,527	2,433	236	181	9.3%	7.4%
Other Europe	1,014	453	29	7	2.9%	1.5%
Europe	16,990	15,684	478	502	2.8%	3.2%
North America	5,715	3,646	55	52	1.0%	1.4%
Asia	1,351	1,141	30	49	2.2%	4.3%
Australia	369	454	13	16	3.5%	3.5%
Asia Pacific	1,720	1,595	43	65	2.5%	4.1%
Total life and pensions	36,283	32,722	780	897	2.1%	2.7%

M3 – New business continued

	Present value of new business premiums		Value of new business		New business margin	
	2008 £m	Restated 2007 £m	2008 £m	Restated 2007 £m	2008 %	Restated 2007 %
Life and pensions (net of tax and minority interests)						
United Kingdom	11,858	11,797	147	195	1.2%	1.7%
France	3,281	3,157	79	81	2.4%	2.6%
Ireland	974	1,335	10	26	1.0%	1.9%
Italy	980	1,284	21	20	2.1%	1.6%
Netherlands (including Belgium and Germany)	3,868	2,941	(67)	3	(1.7)%	0.1%
Poland	1,604	966	46	34	2.9%	3.5%
Spain	1,376	1,223	80	57	5.8%	4.7%
Other Europe	1,014	453	24	4	2.4%	0.9%
Europe	13,097	11,359	193	225	1.5%	2.0%
North America	5,715	3,646	36	34	0.6%	0.9%
Asia	1,344	1,133	24	39	1.8%	3.4%
Australia	369	454	9	11	2.4%	2.4%
Asia Pacific	1,713	1,587	33	50	1.9%	3.2%
Total life and pensions	32,383	28,389	409	504	1.3%	1.8%

Life and pension sales increased by 11% to £36,283 million (2007: £32,722 million) gross of tax and minority interests. Total value of new business for 2008 was £780 million (2007: £897 million) resulting in a new business margin of 2.1% (2007: 2.7%).

United Kingdom

In 2008, despite the turmoil in the financial markets and the continued slowdown in the housing market, we delivered record life and pension sales for the third year in a row, up 1% to £11,858 million (2007 restated: £11,797 million). Our results were underpinned by the success of our pensions strategy, 24% growth in annuities and higher sales through our joint venture with RBSG of £1,639 million (2007 restated: £1,615 million).

Value of new business declined 27% in 2008 to £204 million (2007 restated: £278 million) leading to a new business margin of 1.7% in 2008 (2007: 2.4%). As we outlined in February 2009, the reduction in margin in 2008 reflects the volatility inherent in MCEV profit methods at times of economic and financial stress. The reduction in margin in 2008 is attributable to annuity business and reflects non-recognition of asset yields (net of credit default allowances) which we have secured above risk-free rate. In 2008 an estimated 0.5% of additional asset yields has been achieved (net of default allowances) but not recognised. This is equivalent to a pre-tax value of £130 million and will emerge in future years through expected return. The effect in 2007 is less pronounced. Excluding this effect, new business contribution has improved reflecting pricing changes, management of business mix and the benefit of operational efficiencies.

Europe

Our European life and pensions sales increased by 8% to £16,990 million (2007 restated: £15,684 million), supported by the strong euro. On a local currency basis sales were down 7%. Reflecting the challenging conditions and reduced sales volumes our new business margin was 2.8% (2007 restated: 3.2%). Margin has been maintained through increased process efficiency and strong cost management across the region. This will remain a priority in 2009 as new business markets continue to contract across much of the region. In 2009 we will optimise our sales volumes consistent with our focus on prudent capital management and seeking the greatest returns on capital.

In France, sales were up 2% including the beneficial effect of the euro. On a local currency basis sales were down 12%, in line with the market. The decline was a consequence of volatility in the equity markets, which reduced consumer demand for unit-linked contracts. However, this impact was offset by growth in our euro-based business, particularly in products with guarantees which offer customers a safe and attractive investment option in the current market conditions. The value of new business declined to £135 million (2007 restated: £144 million) with margin at 3.5% (2007: 3.8%) due to lower sales of higher margin unit-linked products.

In Ireland our sales were down 27% reflecting reduced demand for unit-linked products across both our retail and bancassurance channels. Consumers were deterred by volatile equity markets and the slowdown in economic growth. Value of new business was down to £15 million (2007 restated: £37 million) with margin declining to 1.2% (2007: 2.1%) reflecting the impact of lower sales and the downturn in economic conditions affecting consumer confidence.

In Italy, our acquisition of Avipop and UBI Vita increased sales of protection and pension products respectively but overall sales were down 22% to £2,331 million (2007 restated: £2,975 million). New business margin of 3.0% (2007 restated: 2.6%), giving a value of new business of £71 million (2007 restated: £77 million), reflected a focus on more profitable credit protection business.

Aviva MCEV basis continued**M3 – New business continued**

Sales in the Netherlands were up 31% to £4,097 million (2007 restated: £3,133 million) including the beneficial effect of the euro. This performance includes a significant increase in corporate pension sales, as a result of our success in securing five large group schemes which contributed a total of £1,106 million. Sales of annuity products were lower due to increased competition from the banking sector, which is now allowed to offer unit-linked savings and pension products on the same terms as insurers. A new business loss of £73 million (2007 restated: £8 million profit) reflected the change in business mix towards corporate pension business. The profits on this business will be recognised as they emerge over the lifetime of the contracts.

In Poland our life and pension sales increased to £1,842 million (2007 restated: £1,120 million) driven by the success of a new individual regular premium product launched in late 2007 and significant volumes of short-term endowment policies sold through Deutsche Bank in the first half of the year. The change in product mix led to an improvement in the margin in the second half of 2008 although full year margin was down at 3.5% (2007 restated: 4.3%).

In Spain, our sales increased by 4% to £2,527 million (2007 restated: 2,433 million), driven by the distribution agreement with Cajamurcia launched in the last quarter of 2007 which contributed £304 million in 2008, including one-off transfers of £151 million. This had a positive impact on the margin improvement to 9.3% (2007 restated: 7.4%) with an increased proportion of higher margin protection business.

Other Europe includes a number of markets which have high potential for future growth, comprising Russia, Turkey, Hungary, Romania and the Czech Republic. Sales in these markets increased by 124% to £1,014 million (2007 restated: £453 million). Romania's performance was significantly higher, largely due to one-off sales of £545 million as part of the introduction of compulsory pensions, which has improved margin to 2.9% (2007 restated: 1.5%).

North America

In the US, our long-term savings sales increased by 57% to £5,715 million (2007 restated: £3,646 million). This was the second consecutive year of record volumes despite significant challenges in the financial markets which have changed the competitive landscape and shaken consumer confidence. We retained our number one sales position in both the indexed annuity and the indexed life insurance markets and have already doubled sales within two years of the acquisition of the former AmerUs business, one year ahead of the stated target.

Expanded distribution, marketing programmes and new product launches contributed to sales of both our annuity and life products. 63% growth in annuity sales was a significant accomplishment given the challenging economic environment. In such times, customers look for guarantees and we responded by improving guaranteed income withdrawal benefits and introducing a new bonus index deferred annuity. Sales of life products, which mainly include indexed universal life and term assurance products, were slightly down on the prior year as growth was offset by the impact of our tactical decision to exit certain markets in late 2007 to focus on selling higher margin products.

Funding agreement sales were very strong as the volatile investment markets created a favourable environment for these large institutional transactions.

Value of new business increased by 6% to £55 million (2007 restated: £52 million). New business margin has decreased to 1.0% (2007: 1.4%) due to increased reference rates offset by a shift in business mix to lower margin annuity business.

Asia Pacific

Our life and pension sales grew by 8% to £1,720 million (2007 restated: £1,595 million). On a local currency basis these sales were 1% down on the prior year. Value of new business for 2008 was down 34% to £43 million (2007: £65 million) resulting in a margin of 2.5% (2007 restated: 4.1%).

In Australia, life and pension sales decreased 19% to £369 million (2007 restated: £454 million). In addition to the impact of a difficult economic climate, sales in 2007 were very strong following a one-off group pension transfer and favourable changes to superannuation legislation. Value of new business was £13 million (2007 restated: £16 million) driven by the lower volumes. New business margin remained unchanged at 3.5% (2007 restated: 3.5%).

Sales of life and pensions products in Asia grew 18% to £1,351 million (2007 restated: £1,141 million). This was driven by 66% growth in China, following significant expansion of our distribution network, and first-time contributions from our new joint ventures in South Korea and Taiwan. This growth was partly offset by results from our other Asian operations. In India and Singapore, regulatory changes had a negative impact on our sales while in Hong Kong our products are mainly investment related and were therefore greatly impacted by the market volatility. Value of new business was down by 39% to £30 million (2007 restated: £49 million) reflecting lower volumes in Hong Kong and changes in lapse assumptions in India, together with the impact of the start-up businesses in South Korea and Taiwan and changes in business mix to lower margin products in China and India. These resulted in a lower new business margin of 2.2% (2007 restated: 4.3%).

M3 – New business continued

(b) Post-tax internal rate of return on life and pensions new business and payback period

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 11.4% (2007 restated: 12.9%)

2008	Internal rate of return %	Initial capital £m	Required capital £m	Total invested capital £m	Payback period Years
United Kingdom	14%	157	136	293	8
France	9%	35	118	153	9
Ireland	8%	53	24	77	9
Italy	14%	9	48	57	6
Netherlands (including Belgium and Germany) ¹	5%	277	244	521	n/a
Poland	21%	31	12	43	4
Spain	37%	28	75	103	3
Other Europe	13%	57	9	66	6
Europe¹	11%	490	530	1,020	7
North America	11%	124	489	613	6
Asia	13%	64	23	87	8
Australia	12%	3	30	33	8
Asia Pacific	12%	67	53	120	8
Total¹	11.4%	838	1,208	2,046	7

1. In the Netherlands, the 2008 value of new business is low on a real world basis and so it is not possible to calculate a meaningful payback period. Consequently, the total and Europe average payback periods exclude the Netherlands. On a comparable basis the total payback period in 2007 is 7 years.

2007	Internal rate of return %	Initial capital £m	Required capital £m	Total invested capital £m	Payback period Years
United Kingdom	13%	256	149	405	8
France	12%	29	107	136	8
Ireland	11%	69	23	92	7
Italy	15%	4	52	56	6
Netherlands (including Belgium and Germany)	6%	78	181	259	22
Poland	23%	18	10	28	4
Spain	28%	24	68	92	3
Other Europe	18%	48	4	52	5
Europe	13%	270	445	715	12
North America	12%	125	280	405	6
Asia	23%	48	11	59	4
Australia	15%	–	23	23	6
Asia Pacific	21%	48	34	82	4
Total	12.9%	699	908	1,607	9

Total initial capital for life and pensions new business of £838 million (2007 restated: £699 million) is expressed at the point of sale. Hence, it is higher than the impact of writing that new business on net worth of £758 million (2007 restated: £624 million) shown on page 38, because the latter amount includes expected profits from the point of sale to the end of the reporting period, partly offset by the cost of holding the initial capital. The fall in IRR reflects the reduction on reference rates and the higher weighting of the Netherlands.

Aviva MCEV basis continued

M4 – Geographical analysis of MCEV operating earnings

Gross of tax and minority interests 2008	UK £m	France £m	Ireland £m	Italy £m	Nether-lands £m	Poland £m	Spain £m	Other Europe £m	Europe £m	North America £m	Asia £m	Australia £m	Asia Pacific £m	Total £m
Value of new business	204	135	15	71	(73)	65	236	29	478	55	30	13	43	780
Earnings from existing business														
– expected existing business contribution (reference rate)	338	188	39	30	107	91	60	19	534	86	9	25	34	992
– expected existing business contribution (in excess of reference rate)	210	38	8	6	95	8	22	–	177	53	4	2	6	446
Experience variances														
– maintenance expense ¹	20	2	(2)	(6)	(35)	6	(1)	(1)	(37)	–	(2)	–	(2)	(19)
– project and other related expenses ¹	(62)	(10)	(7)	–	(26)	–	(6)	(6)	(55)	(14)	–	–	–	(131)
– mortality/morbidity ²	18	42	2	2	19	20	4	1	90	–	5	2	7	115
– lapses ³	(23)	(8)	(7)	(15)	(11)	26	(24)	(10)	(49)	(5)	(4)	3	(1)	(78)
– other ⁴	7	(45)	(42)	(15)	34	(8)	2	(1)	(75)	(31)	(1)	(11)	(12)	(111)
Operating assumption changes:														
– maintenance expenses ⁵	(15)	(12)	(2)	(9)	(167)	4	–	(12)	(198)	(5)	(3)	–	(3)	(221)
– project and other related expenses	13	–	–	–	9	–	–	–	9	–	–	–	–	22
– mortality/morbidity ⁶	54	–	25	11	(79)	4	(1)	–	(40)	–	1	(1)	–	14
– lapses ⁷	(73)	108	7	(9)	–	(10)	(19)	(20)	57	–	(12)	1	(11)	(27)
– other ⁸	16	(1)	23	3	(28)	24	–	13	34	1	(10)	6	(4)	47
Expected return on shareholders' net worth	166	107	34	63	204	13	23	8	452	61	14	8	22	701
Other operating variances ⁹	10	148	(15)	(1)	138	(2)	(10)	3	261	–	–	–	–	271
Earnings before tax and minority interests	883	692	78	131	187	241	286	23	1,638	201	31	48	79	2,801

1. 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. Expenses in the Netherlands reflect an overrun in Belgium following the acquisition of Swiss Life Belgium, and restructuring within the intermediary division.

2. Mortality experience continues to be better than the assumptions set across a number of our businesses.

3. Lapse experience has been volatile, in part reflecting wider economic volatility. In Poland, lapse experience continued to be better than the long-term assumptions for both life and pension products.

4. In France, other experience profits include the reduction in value arising from reductions in fees and commissions received. In Ireland, certain statutory provisions were increased following a review. The movement in the Netherlands reflects changes on group pension scheme contribution. In the USA, other experience reflects the cost of enhancing policyholder crediting rates.

5. In the Netherlands, expense assumptions have been updated following a review of expense allocations.

6. In UK, favourable mortality assumption changes are in respect of mortality and morbidity changes across a range of products. In the Netherlands, mortality assumption changes reflect the impact of using a new industry mortality basis.

7. In the UK, an additional lapse provision has been set up in anticipation of higher short-term recession related withdrawals (pre tax £50m) and higher mortgage and income protection claims (pre tax £20m) to reflect rising unemployment. In France, persistency assumptions have been weakened following continual favourable experience on AFER products.

8. In the UK, other operating assumption changes include the impact of the with-profit special distribution. In Ireland, other assumption changes reflect a reduction in the assumed future tax charges. In Poland, other assumptions reflect a change in the pattern of future mortality charging structure.

9. Other operating variances in France are mainly in respect of the impact of the mutualisation of funds following the merger of two legal entities. In the Netherlands, changes are mainly in respect of aligning the profit sharing policy for existing group business in Belgium, following the acquisition of Swiss Life Belgium.

M4 – Geographical analysis of MCEV operating earnings continued

Gross of tax and minority interests Restated 2007	UK £m	France £m	Ireland £m	Italy £m	Nether-lands £m	Poland £m	Spain £m	Other Europe £m	Europe £m	North America £m	Asia £m	Australia £m	Asia Pacific £m	Total £m
Value of new business	278	144	37	77	8	48	181	7	502	52	49	16	65	897
Earnings from existing business														
– expected existing business contribution (reference rate)	373	148	26	23	96	50	46	10	399	75	10	20	30	877
– expected existing business contribution (in excess of reference rate)	190	31	8	5	132	6	23	-	205	22	2	1	3	420
Experience variances														
– maintenance expense	10	2	(3)	9	(6)	3	(1)	(5)	(1)	(21)	(1)	(3)	(4)	(16)
– project and other related expenses ¹	(87)	10	(4)	-	(16)	-	(3)	(8)	(21)	-	(1)	-	(1)	(109)
– mortality/morbidity ²	12	29	(1)	-	2	14	(4)	2	42	(3)	6	3	9	60
– lapses ³	(11)	7	6	(15)	7	17	-	1	23	-	(11)	-	(11)	1
– other ⁴	(24)	(24)	(6)	-	17	7	7	-	1	(27)	-	3	3	(47)
Operating assumption changes:														
– maintenance expenses ⁵	8	3	(1)	(1)	(9)	5	1	(10)	(12)	(29)	1	-	1	(32)
– project and other related expenses ¹	2	(1)	-	-	(7)	-	-	(11)	(19)	-	-	-	-	(17)
– mortality/morbidity ⁶	29	(2)	-	4	(34)	15	(13)	1	(29)	-	(9)	4	(5)	(5)
– lapses	(16)	1	-	1	4	12	(16)	3	5	(4)	(8)	(2)	(10)	(25)
– other ⁷	(31)	134	-	4	(40)	(4)	-	(14)	80	9	(4)	-	(4)	54
Expected return on shareholders' net worth	93	86	23	40	147	8	14	4	322	51	11	8	19	485
Other operating variances ⁸	(4)	-	-	(10)	15	-	(2)	3	6	(1)	-	-	-	1
Earnings before tax and minority interests	822	568	85	137	316	181	233	(17)	1,503	124	45	50	95	2,544

1. Project and other related expenses in the UK reflect project costs associated with strategic initiatives, including developments designed to offer simpler products to customers, and the simplification of systems and processes. In the Netherlands, project costs mainly represent one-off restructuring costs in the Dutch business.

2. Mortality experience continues to be better than the assumptions set across a range of businesses.

3. Lapse experience in Poland continues to be better than assumptions set across both Life and Pensions businesses.

4. Other experience profits reflect an accumulation of small items, including an increased allowance for operational risk in the USA.

5. Maintenance expense assumptions have been strengthened in the USA following investment to support the growth of the business, and in the Netherlands following a review of expenses.

6. Mortality assumptions in the UK reflect changes to the anti-selection loading on annuities. In the Netherlands, the mortality assumption strengthening reflected a partial implementation of a new industry mortality basis.

7. In France, other operating assumption changes reflect increased profitability driven by product development and the increased proportion of unit-linked assets within managed funds.

8. Other operating variances in the Netherlands relate to changes in asset management fees.

Aviva MCEV basis continued**M4 – Geographical analysis of MCEV operating earnings continued****United Kingdom**

Our operating profit for the year was up 7% to £883 million (*2007 restated: £822 million*) as we improved performance from our in-force book, maintained our focus on the control of persistency experience and continued to deliver on our efficiency saving commitments.

Our continued focus on retention initiatives have enabled us to contain our lapse experience to a loss of £23 million, against a backdrop of changes to capital gains tax rules for bonds and the prevailing economic climate. Furthermore we have established an additional provision of £50 million in anticipation of higher short-term recession related withdrawals and a further £20 million in relation to higher mortgage and income protection claims to reflect rising unemployment.

The adverse expense experience variance was halved in 2008 leaving us on track to achieve our commitment to a zero cost overrun in 2009. In 2008 we achieved £60 million of the £100 million annualised cost savings target announced in October 2007 with £40 million included in the results for the year. The outsourcing of administration to WNS, Swiss Re, Scottish Friendly and IFDS contributed to a reduced and more flexible cost base and allowed us to decommission over 200 systems.

Europe

Operating earnings increased by 9% to £1,638 million (*2007 restated: £1,503 million*). The strengthening of the euro and the Polish Zloty has had a favourable impact on the result. On a local currency basis operating earnings reduced by 6% which was due to a strengthening of allowances for annuitant mortality in the Netherlands and negative experience variances due to the worsening economic climate. This was partly offset by growth across our central and eastern European operations generating increased value of new business in these growing markets and higher expected returns.

In France, operating earnings were £692 million (*2007 restated: £568 million*) reflecting higher expected earnings, and the one-off favourable assumption changes of £71 million on savings business following a detailed review of lapse rates. Furthermore, operating profit benefitted by £104 million from the one-off mutualisation of funds following the merger of two legal entities.

In Ireland, operating earnings reduced by 8% to £78 million (*2007 restated: £85 million*), driven by a lower value of new business and a larger negative experience variance. The impact of this is partially offset by the strengthening of the euro.

In Italy, operating earnings decreased by 4% to £131 million (*2007 restated: £137 million*) largely reflecting an adverse experience variance as we prudently made provisions to support customers affected by counterparty defaults on structured bond products.

In the Netherlands, operating earnings of £187 million (*2007 restated: £316 million*) primarily reflects the lower value of new business due to the large corporate pension schemes and strengthening of annuitant mortality.

In Poland, operating earnings increased by 33% to £241 million (*2007 restated: £181 million*), driven by higher expected return and increased value of new business.

Operating earnings in Spain were £286 million (*2007 restated: £233 million*) driven by increased value of new business, partially offset by negative experience variances and assumptions relating to deteriorating lapse experience in the current economic climate.

Operating earnings from our central and eastern European businesses was a £23 million profit (*2007 restated: £17 million loss*). This excellent performance reflects the increased value of new business and higher expected returns generated in these growing markets, which we are confident offer further potential.

North America

Operating earnings were £201 million (*2007 restated: £124 million*), an increase of 62% driven by improved value of new business, higher expected return from widening credit spreads and less adverse operating assumption changes.

Asia Pacific

Our businesses in Asia Pacific reported a 17% decline in operating earnings to £79 million (*2007 restated: £95 million*). In Australia, operating earnings of £48 million (*2007 restated: £50 million*) slightly decreased from prior year. Operating earnings for Asia of £31 million (*2007 restated: £45 million*) driven by lower value of new business and higher lapses in India, offset by lapse improvements in Hong Kong.

M4 – Geographical analysis of MCEV operating earnings continued

Net of tax and minority interests 2008	UK £m	France £m	Ireland £m	Italy £m	Nether-lands £m	Poland £m	Spain £m	Other Europe £m	Europe £m	North America £m	Asia £m	Australia £m	Asia Pacific £m	Total £m
Value of new business	147	79	10	21	(67)	46	80	24	193	36	24	9	33	409
Earnings from existing business														
– expected existing business contribution (reference rate)	244	115	26	9	74	64	23	15	326	56	10	18	28	654
– expected existing business contribution (in excess of reference rate)	151	24	5	2	68	6	9	–	114	35	2	1	3	303
Experience variances														
– maintenance expense	15	1	(1)	(2)	(22)	4	–	(1)	(21)	–	(3)	–	(3)	(9)
– project and other related expenses	(45)	(7)	(5)	–	(18)	–	(4)	(5)	(39)	(9)	–	–	–	(93)
– mortality/morbidity	13	26	1	1	12	15	–	1	56	–	4	1	5	74
– lapses	(17)	(4)	(5)	(5)	(1)	18	(10)	(9)	(16)	(2)	(3)	2	(1)	(36)
– other	5	(29)	(27)	(6)	29	(6)	1	(1)	(39)	(20)	(1)	(8)	(9)	(63)
Operating assumption changes:														
– maintenance expenses	(11)	(8)	(1)	(3)	(109)	3	–	(10)	(128)	(3)	(3)	–	(3)	(145)
– project and other related expenses	9	–	–	–	4	–	–	–	4	–	–	–	–	13
– mortality/morbidity	39	–	16	4	(77)	3	(1)	–	(55)	–	1	(1)	–	(16)
– lapses	(53)	65	4	(3)	–	(8)	(7)	(16)	35	–	(10)	1	(9)	(27)
– other	12	–	15	1	(13)	18	–	11	32	–	(8)	4	(4)	40
Expected return on shareholders' net worth	119	66	23	20	145	10	10	6	280	39	8	6	14	452
Other operating variances	7	98	(11)	(1)	104	(1)	(4)	2	187	–	3	–	3	197
Earnings after tax and minority interests	635	426	50	38	129	172	97	17	929	132	24	33	57	1,753

Aviva MCEV basis continued

M4 – Geographical analysis of MCEV operating earnings continued

Net of tax and minority interests Restated 2007	UK £m	France £m	Ireland £m	Italy £m	Nether-lands £m	Poland £m	Spain £m	Other Europe £m	Europe £m	North America £m	Asia £m	Australia £m	Asia Pacific £m	Total £m
Value of new business	195	81	26	20	3	34	57	4	225	34	39	11	50	504
Earnings from existing business														
– expected existing business contribution (reference rate)	261	90	17	6	66	36	18	8	241	48	9	14	23	573
– expected existing business contribution (in excess of reference rate)	133	20	5	1	95	5	9	–	135	14	1	1	2	284
Experience variances														
– maintenance expense	7	1	(2)	3	(3)	2	–	(4)	(3)	(13)	(1)	(2)	(3)	(12)
– project and other related expenses	(61)	6	(3)	–	(13)	–	(1)	(7)	(18)	–	(1)	–	(1)	(80)
– mortality/morbidity	8	18	(1)	–	(1)	10	(3)	2	25	(2)	4	2	6	37
– lapses	(9)	5	4	(5)	4	13	(1)	1	21	–	(9)	–	(9)	3
– other	(17)	(14)	(4)	1	12	5	5	1	6	(18)	2	1	3	(26)
Operating assumption changes:														
– maintenance expenses	6	(2)	(2)	–	(12)	4	–	(8)	(20)	(19)	1	–	1	(32)
– project and other related expenses	1	(1)	–	–	(3)	–	–	(9)	(13)	–	–	–	–	(12)
– mortality/morbidity	20	(1)	–	1	(24)	11	(5)	2	(16)	–	(7)	3	(4)	–
– lapses	(11)	–	–	–	2	8	(7)	3	6	(3)	(7)	(1)	(8)	(16)
– other	(22)	85	–	2	(23)	(4)	–	(11)	49	6	(3)	–	(3)	30
Expected return on shareholders' net worth	66	53	15	12	103	5	6	3	197	33	6	6	12	308
Other operating variances	(2)	–	–	(3)	11	–	(3)	3	8	–	–	–	–	6
Earnings after tax and minority interests	575	341	55	38	217	129	75	(12)	843	80	34	35	69	1,567

M5 – 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. As explained in note M21, 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.

	2008 £m	2007 £m
United Kingdom	34	40
Europe	9	15
North America	(3)	3
Asia Pacific	1	6
Aviva Investors	41	64
United Kingdom	(18)	(10)
Netherlands	2	17
Other Europe	4	4
Asia Pacific	13	15
Total	42	90

M6 – 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.

	2008			Restated 2007		
	Regional costs £m	Other operations £m	Total £m	Regional costs £m	Other operations £m	Total £m
United Kingdom	–	(12)	(12)	–	(8)	(8)
Europe	(28)	(88)	(116)	(11)	(34)	(45)
North America	(14)	2	(12)	(2)	(2)	(4)
Asia Pacific	(23)	–	(23)	(13)	–	(13)
Total	(65)	(98)	(163)	(26)	(44)	(70)

M7 – Economic variances on long-term business

Economic variances reflect the impact of actual investment experience differing from the investment returns, (including risk premia) assumed in operating profit, and the impact of changes in economic assumptions.

The pre tax loss of £12,422 million was driven by credit spreads widening significantly, particularly in the final quarter of 2008, equity markets reducing by between 30% and 50% and risk free rates reducing significantly. The poor economic conditions had an adverse impact on net worth, but a greater adverse impact on the value of future profits. The loss includes the impact of the grossing up at the local corporation tax rates.

Aviva MCEV basis – additional information

Aviva MCEV basis – additional information

M8 – Consolidated statement of recognised income and expense – MCEV basis

For the year ended 31 December 2008

2008 €m	2008 £m	Restated 2007 £m
(348) Fair value (losses)/gains on AFS securities, owner-occupied properties and hedging instruments	(278)	45
(10) Fair value gains transferred to profit	(8)	(12)
(1,161) Actuarial (losses)/gains on pension schemes	(929)	648
98 Actuarial gains/(losses) on pension schemes transferred to unallocated divisible surplus and other movements	78	(61)
101 Impairment losses	81	–
3,741 Foreign exchange rate movements	2,993	1,159
83 Aggregate tax effect – shareholder tax	66	(246)
2,504 Net income recognised directly in equity	2,003	1,533
(9,638) (Loss)/profit for the period	(7,710)	1,946
(7,134) Total recognised (expense)/income for the period	(5,707)	3,479
Attributable to:		
(7,889) Equity shareholders of Aviva plc	(6,311)	3,044
755 Minority interests	604	435
(7,134)	(5,707)	3,479

M9 – Reconciliation of movements in shareholders' equity – MCEV basis

For the year ended 31 December 2008

2008 €m	2008 £m	Restated 2007 £m
24,422 Balance at 1 January	23,689	20,443
(5,884) Total recognised (expense)/income for the year	(5,707)	3,479
(1,005) Dividends and appropriations	(975)	(871)
21 Issues of share capital	20	48
175 Shares issued in lieu of dividends	170	301
37 Capital contributions from minority shareholders	36	–
(109) Minority share of dividends declared in the year	(106)	(66)
44 Minority interest in acquired subsidiaries	43	315
(67) Changes in minority interest in existing subsidiaries	(65)	–
(30) Shares acquired by employee trusts	(29)	(10)
40 Reserves credit for equity compensation plans	39	50
17,644 Total equity	17,115	23,689
(3,106) Minority interests	(3,013)	(2,501)
14,538 Balance at 31 December	14,102	21,188

Aviva MCEV basis – additional information continued

M10 – Summarised consolidated balance sheet – MCEV basis

For the year ended 31 December 2008

2008 €m		2008 £m	Restated 2007 £m
Assets			
3,689	Goodwill	3,578	3,082
4,163	Acquired value of in-force business and intangible assets	4,038	3,197
2,751	Additional value of in-force long-term business	2,669	7,758
1,791	Interests in, and loans to, joint ventures	1,737	2,576
1,285	Interests in, and loans to, associates	1,246	1,206
994	Property and equipment	964	942
14,872	Investment property	14,426	15,391
43,543	Loans	42,237	36,193
	Financial investments		
154,902	Debt securities	150,255	121,312
44,692	Equity securities	43,351	58,829
37,233	Other investments	36,116	36,269
8,138	Reinsurance assets	7,894	8,054
2,724	Deferred tax assets	2,642	590
641	Current tax assets	622	376
10,119	Receivables and other financial assets	9,816	8,619
6,337	Deferred acquisition costs and other assets	6,147	4,487
3,878	Prepayments and accrued income	3,762	2,986
24,929	Cash and cash equivalents	24,181	16,089
1,598	Assets of operations classified as held for sale	1,550	1,128
368,279	Total assets	357,231	329,084
Equity			
685	Ordinary share capital	664	655
4,644	Capital reserves	4,505	4,494
3,648	Other reserves	3,539	1,179
(34)	Shares held by employee trusts	(33)	(10)
3,924	Retained earnings	3,806	6,338
444	Additional retained earnings on an MCEV basis	431	7,342
13,311	Equity attributable to ordinary shareholders of Aviva plc	12,912	19,998
1,227	Preference share capital and direct capital instruments	1,190	1,190
3,106	Minority interests	3,013	2,501
17,644	Total equity	17,115	23,689
Liabilities			
180,258	Gross insurance liabilities	174,850	152,839
110,886	Gross liabilities for investment contracts	107,559	98,244
2,397	Unallocated divisible surplus	2,325	6,785
7,132	Net asset value attributable to unitholders	6,918	6,409
3,076	Provisions	2,984	1,937
3,113	Deferred tax liabilities	3,020	2,532
662	Current tax liabilities	642	1,225
15,671	Borrowings	15,201	12,657
21,485	Payables and other financial liabilities	20,840	18,060
4,696	Other liabilities	4,556	3,765
1,259	Liabilities of operations classified as held for sale	1,221	942
350,635	Total liabilities	340,116	305,395
368,279	Total equity and liabilities	357,231	329,084

The summarised consolidated balance sheet presented above is unaltered from the corresponding IFRS summarised consolidated balance sheet, with the exception of the following:

1. Adding the excess of the Life MCEV, including minority interests, over the corresponding Life IFRS net assets represented as the additional value of in-force long-term business
2. Corresponding item within equity represented by the additional retained profit on an MCEV basis.
3. Corresponding adjustments to minority interests.

M11 – Reconciliation between shareholders' equity

2008	IFRS £m	Adjustment £m	MCEV £m
Ordinary share capital	664	–	664
Capital reserves	4,505	–	4,505
Other reserves	2,110	1,429	3,539
Shares held by employee trusts	(33)	–	(33)
Retained earnings	3,806	–	3,806
Additional retained earnings on an MCEV basis	–	431	431
Equity attributable to ordinary shareholders of Aviva plc	11,052	1,860	12,912
Preference share capital	200	–	200
Direct capital instruments	990	–	990
Minority interests	2,204	809	3,013
Total equity	14,446	2,669	17,115
Restated 2007	IFRS £m	Adjustment £m	MCEV £m
Ordinary share capital	655	–	655
Capital reserves	4,494	–	4,494
Other reserves	1,469	(290)	1,179
Shares held by employee trusts	(10)	–	(10)
Retained earnings	6,338	–	6,338
Additional retained earnings on an MCEV basis	–	7,342	7,342
Equity attributable to ordinary shareholders of Aviva plc	12,946	7,052	19,998
Preference share capital	200	–	200
Direct capital instruments	990	–	990
Minority interests	1,795	706	2,501
Total equity	15,931	7,758	23,689

M12 – Reconciliation of IFRS total equity to MCEV net worth

	2008 £m	Restated 2007 £m
Net assets on an statutory IFRS net basis	14,446	15,931
Less: general business and other net assets on an statutory IFRS net basis	2,135	(1,292)
Life and related businesses net assets on an statutory IFRS net basis	16,581	14,639
Goodwill and other intangibles	(2,947)	(2,359)
Acquired value of in-force business	(2,490)	(1,790)
Adjustment for share of JVs & associates	(472)	(380)
Adjustment for assets to regulatory value net of tax	1,474	335
Adjustment for DAC & DIR net of tax	(2,680)	(1,740)
Adjustment for differences in technical provisions	1,265	737
Other accounting and tax differences	78	938
MCEV net worth	10,809	10,380
MCEV value of in-force	5,580	9,716
MCEV¹	16,389	20,096

1. Comprises embedded value of £14,089 million (2007: £18,248 million) and minority interest in long-term business assets of £2,300 million (2007: £1,848 million)

Aviva MCEV basis – additional information continued

M13 – Group MCEV analysis of earnings

2008 (net of tax and minority interests)	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	18,248	2,059	20,307	881	2,940	21,188
Opening adjustments	-	-	-	-	-	-
Adjusted opening Group MCEV	18,248	2,059	20,307	881	2,940	21,188
Operating MCEV earnings	1,753	-	1,753	535	535	2,288
Non-operating MCEV earnings	(8,638)	(53)	(8,691)	(1,229)	(1,282)	(9,920)
Total MCEV earnings	(6,885)	(53)	(6,938)	(694)	(747)	(7,632)
Other movements in IFRS net equity	-	(28)	(28)	(994)	(1,022)	(1,022)
Capital and dividend flows	(63)	-	(63)	(712)	(712)	(775)
Foreign exchange variances	2,702	567	3,269	(926)	(359)	2,343
Acquired/divested businesses	87	94	181	(181)	(87)	-
Closing Group MCEV	14,089	2,639	16,728	(2,626)	13	14,102
Preference share capital and direct capital instruments						(1,190)
Equity attributable to ordinary shareholders of Aviva plc on an MCEV basis						12,912

Restated 2007 (net of tax and minority interests)	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	16,506	1,594	18,100	528	2,122	18,628
Opening adjustments	-	-	-	-	-	-
Adjusted opening Group MCEV	16,506	1,594	18,100	528	2,122	18,628
Operating MCEV earnings	1,567	-	1,567	309	309	1,876
Non-operating MCEV earnings	52	(33)	19	(191)	(224)	(172)
Total MCEV earnings	1,619	(33)	1,586	118	85	1,704
Other movements in IFRS net equity	-	124	124	316	440	440
Capital and dividend flows	(829)	-	(829)	347	347	(482)
Foreign exchange variances	851	61	912	(14)	47	898
Acquired/divested businesses	101	313	414	(414)	(101)	-
Closing Group MCEV	18,248	2,059	20,307	881	2,940	21,188
Preference share capital and direct capital instruments						(1,190)
Equity attributable to ordinary shareholders of Aviva plc on an MCEV basis						19,998

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 minority 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 minority interests is provided on page 37.

3. Net assets for the total life businesses on an MCEV basis presented net of minority interests.

M14 – Segmentation of summarised consolidated balance sheet

	2008			Restated 2007		
	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	305,562	46,634	352,196	278,677	40,951	319,628
Acquired additional value of in-force long-term business	2,366	–	2,366	1,698	–	1,698
Total assets included in the IFRS balance sheet	307,928	46,634	354,562	280,375	40,951	321,326
Liabilities of the long-term business	(291,347)	–	(291,347)	(265,736)	–	(265,736)
Liabilities of the general insurance and other businesses	–	(48,769)	(48,769)	–	(39,659)	(39,659)
Net assets on a statutory IFRS basis	16,581	(2,135)	14,446	14,639	1,292	15,931
Additional value of in-force long-term business ¹	2,669	–	2,669	7,758	–	7,758
Net assets on an MCEV basis²	19,250	(2,135)	17,115	22,397	1,292	23,689
Equity capital, capital reserves, shares held by employee trusts and other reserves			8,675			6,318
IFRS basis retained earnings			3,806			6,338
Additional MCEV basis retained earnings			431			7,342
Equity attributable to ordinary shareholders of Aviva plc on an MCEV basis			12,912			19,998
Preference share capital and direct capital instruments			1,190			1,190
Minority interests			3,013			2,501
MCEV basis total equity			17,115			23,689

1. The analysis between the Group's and minority interests' share of the additional value of in-force long-term business is as follows:

	2008	Restated 2007	Movement in period
Group's share included in shareholders' funds	431	7,342	(6,911)
Minority interests' share	809	706	103
Movements in AFS securities	1,429	(290)	1,719
Additional value of in-force long-term business	2,669	7,758	(5,089)

2. Analysis of net assets on an MCEV basis is made up as follows:

	2008	Restated 2007
Embedded value	14,089	18,248
Minority interests	2,300	1,848
	16,389	20,096
Goodwill and intangible assets allocated to long-term business ³	2,947	2,359
Notional allocation of IAS19 pension fund deficit to long-term business ⁴	(86)	(58)
Long-term business net assets on an MCEV basis	19,250	22,397

3. Goodwill and intangible assets includes amounts related to associated undertakings and joint ventures

4. The value of the Aviva Staff Pension Schemes deficit 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 deficit notionally allocated to long-term business is net of the proportion of funding borne by the UK with-profit funds.

Aviva MCEV basis – additional information continued

M15 – Analysis of life and pensions 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. 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. All figures are shown net of tax and minority interests.

	2008 £m				Restated 2007 £m			
	Earnings on MCEV analysis				Earnings on MCEV analysis			
	Free surplus	Required capital ¹	VIF	Total MCEV	Free surplus	Required capital ¹	VIF	Total MCEV
Opening MCEV	3,204	6,240	8,804	18,248	3,066	5,287	8,153	16,506
New business value	(1,867)	1,109	1,167	409	(1,432)	808	1,128	504
Expected existing business contribution (reference rate)	–	–	654	654	–	–	573	573
Expected existing business contribution (in excess of reference rate)	–	–	303	303	–	–	284	284
Transfers from VIF and required capital to the free surplus	1,926	(637)	(1,289)	–	1,683	(439)	(1,244)	–
Experience variances	154	3	(284)	(127)	271	(13)	(336)	(78)
Assumption changes	563	(114)	(584)	(135)	18	(8)	(40)	(30)
Expected return on shareholders' net worth	270	182	–	452	172	136	–	308
Other operating variance	44	(29)	182	197	2	12	(8)	6
Operating MCEV earnings	1,090	514	149	1,753	714	496	357	1,567
Economic variances	(3,140)	(433)	(4,833)	(8,406)	37	112	(97)	52
Other non-operating variances	(104)	19	(147)	(232)	–	–	–	–
Total MCEV (loss)/ earnings	(2,154)	100	(4,831)	(6,885)	751	608	260	1,619
Capital and dividend flows	(63)	–	–	(63)	(829)	–	–	(829)
Foreign exchange variance	459	1,597	646	2,702	172	308	371	851
Acquired/divested business	(98)	211	(26)	87	44	37	20	101
Closing MCEV	1,348	8,148	4,593	14,089	3,204	6,240	8,804	18,248

1. Required capital is shown net of implicit items permitted by local regulators to cover minimum solvency margins.

M16 – Free surplus emergence

	Existing business					New business			Total business
	Transfer from VIF to net worth £m	Return on net worth £m	Impact of experience variances and assumption changes on net worth £m	Release of required capital to free surplus £m	Total existing business surplus generation £m	Impact on net worth £m	Reduction in free surplus from required capital £m	Total new business surplus generation £m	Total free surplus generation £m
2008									
United Kingdom	403	119	736	85	1,343	(147)	(159)	(306)	1,037
Europe	619	280	(92)	325	1,132	(438)	(422)	(860)	272
North America	194	39	(24)	197	406	(118)	(475)	(593)	(187)
Asia Pacific	73	14	1	(12)	76	(55)	(53)	(108)	(32)
Total	1,289	452	621	595	2,957	(758)	(1,109)	(1,867)	1,090

	Existing business					New business			Total business
	Transfer from VIF to net worth £m	Return on net worth £m	Impact of experience variances and assumption changes on net worth £m	Release of required capital to free surplus £m	Total existing business surplus generation £m	Impact on net worth £m	Reduction in free surplus from required capital £m	Total new business surplus generation £m	Total free surplus generation £m
2007									
United Kingdom	549	66	225	57	897	(245)	(149)	(394)	503
Europe	537	197	42	118	894	(225)	(345)	(570)	324
North America	103	33	19	133	288	(107)	(280)	(387)	(99)
Asia Pacific	55	12	(4)	4	67	(47)	(34)	(81)	(14)
Total	1,244	308	282	312	2,146	(624)	(808)	(1,432)	714

Aviva MCEV basis – additional information continued

M17 – Maturity profile of business

(a) Total in-force business

To show the profile of the VIF emergence, the value of VIF in the consolidated balance sheet has been split into five year tranches depending on the date when the profit is expected to emerge.

2008 £m	0-5	6-10	11-15	16-20	20+	Total gross of minority interest	Total net of minority interest
United Kingdom	634	542	385	279	213	2,053	2,053
Europe	1,560	1,200	741	447	411	4,359	3,380
North America	(66)	(245)	(238)	(211)	(342)	(1,102)	(1,102)
Asia Pacific	108	71	47	28	16	270	262
Total	2,236	1,568	935	543	298	5,580	4,593

2007 Restated £m	0-5	6-10	11-15	16-20	20+	Total gross of minority interest	Total net of minority interest
United Kingdom	1,574	1,209	615	345	524	4,267	4,267
Europe	2,200	1,170	736	412	332	4,850	3,946
North America	168	129	41	16	(24)	330	330
Asia Pacific	130	105	15	8	11	269	261
Total	4,072	2,613	1,407	781	843	9,716	8,804

(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.

2008 £m	0-5	6-10	11-15	16-20	20+	Total gross of minority interest	Total net of minority interest
United Kingdom	91	74	69	50	10	294	294
Europe	219	146	103	73	250	791	630
North America	112	45	8	1	(12)	154	154
Asia Pacific	48	17	10	5	10	90	89
Total	470	282	190	129	258	1,329	1,167

2007 Restated £m	0-5	6-10	11-15	16-20	20+	Total gross of minority interest	Total net of minority interest
United Kingdom	192	114	55	31	48	440	440
Europe	283	140	91	56	29	599	450
North America	85	61	6	(1)	(11)	140	140
Asia Pacific	46	41	5	3	4	99	98
Total	606	356	157	89	70	1,278	1,128

M18 – Segmental analysis of life and related business embedded value

2008	Net worth			Total Embedded value £m
	Free surplus £m	Required capital ¹ £m	VIF £m	
United Kingdom	1,357	1,477	2,053	4,887
France ²	(92)	1,567	1,044	2,519
Ireland	135	252	603	990
Italy	261	235	149	645
Netherlands (including Belgium and Germany)	(333)	2,284	159	2,110
Poland	115	134	979	1,228
Spain	143	225	287	655
Other Europe	43	34	159	236
Europe	272	4,731	3,380	8,383
North America³	(362)	1,528	(1,102)	64
Asia	72	159	193	424
Australia	9	253	69	331
Asia Pacific	81	412	262	755
Total	1,348	8,148	4,593	14,089

1. Required capital is shown net of implicit items permitted by local regulators to cover minimum solvency margins.
2. France, Netherlands and Aviva USA have a positive surplus on a statutory basis.
3. Aviva USA's holding company debt amounting to £1,128 million at 31 December 2008 has been included within non-covered business.

Restated 2007	Net worth			Total Embedded value £m
	Free surplus £m	Required capital ¹ £m	VIF £m	
United Kingdom	1,255	1,389	4,267	6,911
France	28	1,280	1,228	2,536
Ireland	159	201	465	825
Italy	208	156	125	489
Netherlands (including Belgium and Germany)	1,247	1,713	856	3,816
Poland	111	116	816	1,043
Spain	61	175	334	570
Other Europe	32	24	122	178
Europe	1,846	3,665	3,946	9,457
North America²	(70)	946	330	1,206
Asia	124	53	190	367
Australia	49	187	71	307
Asia Pacific	173	240	261	674
Total	3,204	6,240	8,804	18,248

1. Required capital is shown net of implicit items permitted by local regulators to cover minimum solvency margins.
2. Aviva USA's holding company debt amounting to £349 million at 31 December 2007 has been included within non-covered business.

The shareholders' 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. This is split between required capital, net of implicit items, and free surplus.

Aviva MCEV basis – additional information continued

M19 – Risk allowance within present value of in-force (PVIF)

Within the VIF in the tables on page 41, there are additional allowances for risks not included within the basic present value of future profits calculation.

2008	PVFP £m	Frictional costs £m	Non- hedgeable risks £m	Time value of financial options and guarantees £m	VIF £m
United Kingdom	2,470	(176)	(165)	(76)	2,053
France	1,779	(174)	(147)	(414)	1,044
Ireland	637	(10)	(24)	–	603
Italy	196	(22)	(12)	(13)	149
Netherlands (including Belgium and Germany)	856	(246)	(132)	(319)	159
Poland	1,074	(14)	(73)	(8)	979
Spain	355	(18)	(32)	(18)	287
Other Europe	169	(4)	(4)	(2)	159
Europe	5,066	(488)	(424)	(774)	3,380
North America	(864)	(15)	(43)	(180)	(1,102)
Asia	262	(20)	(23)	(26)	193
Australia	132	(27)	(26)	(10)	69
Asia Pacific	394	(47)	(49)	(36)	262
Total	7,066	(726)	(681)	(1,066)	4,593

Restated 2007	PVFP £m	Frictional costs £m	Non- hedgeable risks £m	Time value of financial options and guarantees £m	VIF £m
United Kingdom	4,698	(183)	(154)	(94)	4,267
France	1,713	(132)	(126)	(227)	1,228
Ireland	491	(9)	(16)	(1)	465
Italy	160	(17)	(9)	(9)	125
Netherlands (including Belgium and Germany)	1,422	(263)	(67)	(236)	856
Poland	897	(15)	(60)	(6)	816
Spain	378	(17)	(22)	(5)	334
Other Europe	128	(3)	(3)	–	122
Europe	5,189	(456)	(303)	(484)	3,946
North America	581	(105)	(28)	(118)	330
Asia	210	(7)	(7)	(6)	190
Australia	123	(30)	(16)	(6)	71
Asia Pacific	333	(37)	(23)	(12)	261
Total	10,801	(781)	(508)	(708)	8,804

M20 – 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 for the business equates to the MCEV.

The cashflows projected are the expected future cashflows including expected investment cashflows 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.

	Total in-force business	
	2008 %	2007 %
United Kingdom	7.9%	8.4%
France	6.4%	6.8%
Ireland	4.7%	6.2%
Italy	5.9%	6.5%
Netherlands (including Belgium and Germany) ¹	n/a	9.0%
Poland	6.0%	7.2%
Spain	9.7%	6.5%
Other Europe	9.8%	11.3%
Europe¹	n/a	7.5%
North America¹	n/a	14.3%
Asia	7.2%	9.5%
Australia	7.8%	9.1%
Asia Pacific	7.5%	9.4%
Total	n/a	8.0%

1. Where the value of in-force business is negative, an IDR cannot be calculated consequently an average total IDR is not meaningful

M21 – Analysis of fund management and service company business within embedded value

Aviva's MCEV methodology incorporates the impact of earnings arising from subsidiary undertakings providing administration, fund management and other services where these arise in relation to covered business. The principal subsidiaries of the Aviva Group providing such services include NU Life Services Limited (UK) and Aviva Investors. The following table provides an analysis of the elements within the life and other related business embedded value:

	Fund management £m	Other operations £m	2008	Restated 2007
			Total £m	Total £m
United Kingdom	162	(170)	(8)	2
France	164	48	212	186
Netherlands	131	(154)	(23)	33
United States ¹	209	–	209	84
Other	55	14	69	35
Total	721	(262)	459	340

1. Following the establishment of Aviva Investors the fund management portion of the US business has been separately identified.

The "look-through" value attributable to fund management is based on the level of after-tax profits expected to be earned in the future over the outstanding term of the covered business in respect of services provided to the Group's life operations. The MCEV basis income statement excludes the actual statutory basis profits arising from the provision of fund management services to the Group's life businesses. The MCEV income statement records the experience profit or loss compared to the assumed profitability, the expected return on the in-force value and the effect on the in-force value of changes to economic assumptions.

In the United Kingdom, NU Life Services Limited (NULS) is the main provider of administration services to the UK Life business. NULS incurs substantially all of the UK businesses' operating expenditure, comprising acquisition, maintenance and project costs. Costs are recharged to the UK Life companies (the product companies) on the basis of predetermined Management Services Agreements (MSAs).

Aviva MCEV basis – additional information continued

M22 – Summary of minority interest in life and related businesses' MCEV results

2008	France £m	Ireland £m	Italy £m	Nether- lands £m	Poland £m	Spain £m	Europe £m	Asia Pacific £m	Total £m	Share- holders' interest £m	Group £m
Value of new business, net of tax	9	3	27	12	7	85	143	–	143	409	552
Life MCEV operating earnings after tax	29	17	50	5	24	102	227	–	227	1,753	1,980
Life MCEV (loss)/earnings after tax	18	(21)	(30)	(22)	20	(72)	(107)	–	(107)	(6,885)	(6,992)
Closing covered businesses' embedded value	304	323	727	204	177	550	2,285	15	2,300	14,089	16,389

Restated 2007	France £m	Ireland £m	Italy £m	Nether- lands £m	Poland £m	Spain £m	Europe £m	Asia Pacific £m	Total £m	Share- holders' interest £m	Group £m
Value of new business, net of tax	14	6	27	3	5	70	125	1	126	504	630
Life MCEV operating earnings after tax	32	19	46	19	18	88	222	1	223	1,567	1,790
Life MCEV earnings after tax	24	15	66	13	22	57	197	3	200	1,619	1,819
Closing covered businesses' embedded value	235	266	551	158	154	472	1,836	12	1,848	18,248	20,096

There are no minority interests in the United Kingdom or North America.

M23 – Basis of preparation

When compliance with the European Insurance CFO Forum Market Consistent Embedded Value Principles (MCEV Principles), published in June 2008, is stated, those principles require the directors to prepare supplementary information in accordance with the methodology contained in the MCEV Principles and to disclose and explain any non-compliance with the guidance included in the MCEV Principles.

In preparing this supplementary information, the directors have done so in accordance with these MCEV Principles and have also fully complied with all the guidance included therein, with the exception of the use of an adjusted risk-free yield due to current market conditions for immediate annuities in the UK and Netherlands and all US contracts.

Specifically, the directors have:

- determined assumptions on a realistic basis, having regard to past, current and expected future experience and to relevant external data, and then applied them consistently;
- made estimates that are reasonable and consistent; and,
- provided additional disclosures when compliance with the specific requirements of the MCEV Principles is insufficient to enable users to understand the impact of particular transactions, other events and conditions and the Group's financial position and financial performance.

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".

M23 – Basis of preparation continued

Adjusted risk-free rate

Aviva's MCEV methodology adopts the CFO Forum Principles and Guidance with the exception of the use of an adjusted risk-free yield due to current market conditions for UK and Netherlands immediate annuities and for immediate annuities, deferred annuities and all other contracts in the US. In stable markets, swap curves are an appropriate risk-free rate. However, in the current turbulent market it is possible, for products where backing asset portfolios can be held to maturity, to earn returns in excess of swaps by investing in corporate bonds and credit default swaps (CDS).

The reference rate for these products has been increased above the swap curve to estimate the additional returns available through replicating portfolios where backing assets can be held to maturity in the current market. Due to the limited availability of CDS assets, particularly at the long durations, this is a material area of judgement and sensitivity analysis has been provided on page 53 on the additions to the swap curves.

In current markets, adjustments have been made to the swap rate for UK and Netherlands immediate annuities and all US contracts. Details of adjustments can be found on page 49.

New business premiums

New business premiums include:

- premiums arising from the sale of new contracts during the period;
- non-contractual additional premiums, including future Department of Work and Pensions (DWP) rebate 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, which are generally expressed as one year swap yields plus an asset risk premium. The use of asset risk premiums reflects management's long-term expectations of asset returns in excess of the swap yield from investing in different asset classes. This assumption does not impact the embedded value as asset risk premia are not recognised until earned.

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.

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.

Aviva MCEV basis – additional information continued**M23 – Basis of preparation continued**

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. 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 on page 50.

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 M24.

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.

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.

M23 – Basis of preparation continued

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 US and French business. 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.

Aviva's methodology includes a cost of non-hedgeable risk equivalent to a charge of 2.5% applied to group-diversified capital. The cost has been calculated as a 1.5% charge applied to business unit-level capital, that is, allowing for diversification within a business unit, but not between business units. The charge was set so as to give an aggregate allowance that was 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. 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.

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.

Aviva MCEV basis – additional information continued**M23 – Basis of preparation continued**

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 balance sheets, 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 as follows:

	2008	2007
Eurozone		
– Average rate (€1 equals)	£0.80	£0.68
– Period end rate (€1 equals)	£0.97	£0.73
United States		
– Average rate (US\$1 equals)	£0.54	£0.50
– Period end rate (US\$1 equals)	£0.69	£0.50

M24 – Principal economic 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.

Required capital is shown as a multiple of the EU statutory minimum solvency margin or equivalent.

The adjustments made to swap rates to derive a risk-free rate for UK and Netherlands immediate annuities and immediate annuities, deferred annuities and all other US business are shown below the reference rate table.

The principal economic assumptions used are as follows:

Reference rate and expense inflation

	United Kingdom		Eurozone (excluding the Netherlands)	
	2008	2007	2008	2007
Reference rate – term 1 year	2.8%	5.7%	2.5%	4.8%
Reference rate – term 5 years	3.2%	5.1%	3.3%	4.6%
Reference rate – term 10 years	3.5%	5.0%	3.8%	4.7%
Reference rate – term 15 years	3.8%	4.9%	3.9%	4.9%
Reference rate – term 20 years	3.8%	4.8%	3.9%	4.9%
Expense inflation	3.5%	3.6%	2.1%	2.9%

M24 – Principal economic assumptions continued

	Netherlands ¹		Poland	
	2008	2007	2008	2007
Reference rate – term 1 year	2.5%	4.7%	4.4%	6.2%
Reference rate – term 5 years	3.3%	4.6%	4.3%	5.8%
Reference rate – term 10 years	3.8%	4.7%	4.2%	5.5%
Reference rate – term 15 years	4.0%	4.9%	4.1%	5.4%
Reference rate – term 20 years	3.9%	5.0%	4.0%	5.4%
Expense inflation	2.5%	3.0%	2.9%	4.7%

	United States	
	2008	2007
Reference rate – term 1 year	1.3%	4.2%
Reference rate – term 5 years	2.2%	4.2%
Reference rate – term 10 years	2.6%	4.7%
Reference rate – term 15 years	2.9%	4.9%
Reference rate – term 20 years	2.9%	5.0%
Expense inflation	3.0%	3.5%

1. The economic assumptions used in the Netherlands differ from those in the Eurozone as the Dutch bank swap rate is used in the Netherlands.

For service companies, expense inflation relates to the underlying expenses rather than the fees charged to the life company.

In current markets, the following adjustments are made to the swap rate for UK and Netherlands immediate annuities and all US contracts. The risk-free rate is taken as the swap yield curve for the currency of the liability, adjusted by:

	New business				Embedded value	
	Fourth Quarter		First half	Second half	2008	2007
	2008	2008				
UK and Netherlands immediate annuities	1.45%	0.85%	0.55%	0.25%	1.50%	0.50%
US immediate annuities	2.00%	0.65%	0.55%	0.25%	3.00%	0.50%
US deferred annuities and all other contracts	1.50%	0.65%	0.55%	0.25%	2.50%	0.50%

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, which are generally expressed as one year swap returns plus an asset risk premium. 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 balance sheet 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 one year swap rate to calculate expected returns.

	All territories	
	2008	2007
Equity risk premium	3.5%	3.5%
Property risk premium	2.0%	2.0%

Future returns on corporate fixed interest investments are calculated from prospective yields less an adjustment for credit risk.

Aviva MCEV basis – additional information continued**M24 – Principal economic assumptions continued****Required capital and tax**

	Tax rates ¹		Required capital (% EU minimum or equivalent)	
	2008	2007	2008	2007
United Kingdom	28.0%	28.0%	100% / 110%	100% / 110%
France	34.4%	34.4%	110%	110%
Ireland	12.5%	12.5%	150%	150%
Italy	32.4%	32.4%	115% / 184%	115% / 184%
Netherlands	25.5%	25.5%	168%	188%
Poland	19.0%	19.0%	150%	150%
Spain	30.0%	30.0%	110% / 125%	110% / 125%
United States	35.0%	35.0%	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

2. Required capital in Italy under MCEV is 184% of the EU minimum for Eurovita and 115% for other companies

3. Required capital in the Netherlands is 168%. This capital level is the aggregate capital required for the Netherlands.

4. Required capital in Spain is 125% of the EU minimum for Aviva Vida y Pensiones and 110% for bancassurance companies.

5. Correct tax legislation and rates have been assumed to continue unaltered except where changes in future tax rates have been announced.

Other economic assumptions

Required capital relating to with-profit business is assumed to be covered by the surplus within the with-profit funds and no effect has been attributed to shareholders. 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".

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.

Model – United Kingdom, Europe (excluding Delta Lloyd) and North America

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 Bloomberg. 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 a survey of investment banks.

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 – Netherlands

In the Netherlands, yield curves are based on De Nederlandsche Bank (DNB) yield curve data.

The interest rate model used is a short rate G2++ model. The model is calibrated to the DNB yield curve and the swaption implied volatilities. Swaption implied volatilities are taken from Bloomberg.

The equity model is a Heston model. The model considers an equity volatility surface in the market and covers strike levels between 0.8 and 1.2. The model is calibrated to the same DNB curves used in interest rate model. The option volatilities used for year-end 2007 are DJ Eurostoxx 50-quotes taken from Bloomberg. For 2008 the model was calibrated to DJ Eurostoxx 50-quotes (end August 2008) provided by a market maker.

M24 – Principal economic assumptions continued

The inflation model used is based on the standard Jarrow-Yildirim inflation model which connects real and nominal yields and an inflation index. This is calibrated to ZCII quotes on HICPxT-index.

Asset classes

The significant asset classes for UK participating business are equities, property and long-term fixed rate bonds. The most significant assumption is the distribution of future long-term interest rates, since this is the most important factor in the cost of guaranteed annuity options.

For many businesses, including US, France and Netherlands, the most important assets are fixed rate bonds of various durations.

Summary statistics

Swaption implied volatilities

The implied volatility is that determined by Black-Scholes' formula to reproduce the market price of the option. The following table sets out the model swaption implied volatilities.

Option length	2008 ¹ Swap length				2007 Swap length			
	10 years	15 years	20 years	25 years	10 years	15 years	20 years	25 years
UK sterling								
10 years	n/a	n/a	11.8%	n/a	n/a	n/a	10.9%	n/a
15 years	n/a	n/a	11.9%	n/a	n/a	n/a	10.8%	n/a
20 years	n/a	n/a	12.1%	n/a	n/a	n/a	10.8%	n/a
25 years	n/a	n/a	12.4%	n/a	n/a	n/a	10.9%	n/a
Euro								
10 years	11.7%	11.7%	11.7%	11.8%	11.7%	11.1%	10.6%	10.3%
15 years	10.9%	10.9%	10.4%	10.9%	11.4%	10.9%	10.5%	10.2%
20 years	10.5%	10.4%	10.4%	10.3%	10.6%	10.2%	9.9%	9.7%
25 years	10.0%	10.0%	9.9%	9.5%	10.3%	9.9%	9.6%	9.4%
Netherlands								
10 years	11.6%	11.6%	11.7%	11.7%	11.1%	10.9%	10.7%	10.7%
15 years	10.8%	10.7%	10.6%	10.8%	10.7%	10.4%	10.2%	10.3%
20 years	10.5%	10.3%	10.2%	10.3%	10.3%	10.0%	9.8%	9.8%
25 years	10.0%	9.8%	9.8%	9.7%	10.1%	9.8%	9.4%	9.4%
US dollar								
10 years	15.2%	14.4%	14.0%	14.0%	17.1%	15.0%	13.4%	12.2%
15 years	13.9%	13.0%	12.8%	12.7%	15.0%	13.2%	11.9%	10.9%
20 years	13.3%	12.4%	12.1%	12.1%	13.3%	11.8%	10.7%	10.0%
25 years	12.9%	11.9%	11.6%	11.7%	12.4%	11.2%	10.3%	9.8%

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 sets out the model equity implied volatilities.

2008 ¹ Option length	Country						
	UK	France	Italy	Ireland	Netherlands	Spain	US
5 years	25.8%	24.9%	24.4%	24.5%	26.1%	26.3%	24.6%
10 years	27.2%	26.3%	n/a	26.2%	26.8%	28.8%	27.3%
15 years	27.7%	n/a	n/a	27.0%	27.1%	n/a	25.9%

2007 Option length	Country						
	UK	France	Italy	Ireland	Netherlands	Spain	US
5 years	23.7%	26.2%	23.7%	24.6%	26.5%	25.5%	23.4%
10 years	25.2%	27.5%	26.0%	26.7%	28.9%	27.2%	25.1%
15 years	25.8%	29.1%	26.0%	28.2%	29.5%	28.3%	27.0%

1. Volatilities are calibrated to end August 2008

Aviva MCEV basis – additional information continued**M24 – Principal economic assumptions continued****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 the Netherlands, model property implied volatility is 15% for 31 December 2008 (31 December 2007 :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 outcome 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

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.

(c) Other assumptions**Valuation of debt**

Borrowings in the MCEV consolidated balance sheet are valued on an IFRS basis, consistent with the primary financial statements. At 31 December 2008 the market value of the Group's external debt, subordinated debt, preference shares including General Accident plc preference shares of £250 million (classified as minority interests) and direct capital instrument was £4,911 million (31 December 2007: £5,774 million).

	2008 £m	2007 £m
Borrowings per summarised consolidated balance sheet – MCEV basis	15,201	12,657
Add: amount included within held for sale	–	12
Less: Securitised mortgage funding	(7,785)	(7,295)
Borrowings excluding non-recourse funding – MCEV basis	7,416	5,374
Less: Operational financing by businesses	(1,891)	(1,063)
External debt and subordinated debt – MCEV basis	5,525	4,311
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	6,965	5,751
Effect of marking these instruments to market	(2,054)	23
Market value of external debt, subordinated debt, preference shares and direct capital instrument	4,911	5,774

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.

M25 – Sensitivity analysis

(a) Economic assumptions

The following tables show the sensitivity of the embedded value and the value of new business to:

- using swap yields as the risk-free rate.
- 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; 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.

Sensitivities will also vary according to the current economic assumptions, mainly due to the impact of changes to both the intrinsic cost and time value of options and guarantees. Options and guarantees are the main reason for the asymmetry of the sensitivities where the guarantee impacts to different extents under the different scenarios. This can be seen in the sensitivity of a 1%–2% movement in the interest rate for the Netherlands and US, where there is a significant amount of business with investment return guarantees.

Embedded value

2008 Embedded value (net of tax and minority interest)	Risk free rates					
	As reported on page 41 £m	Risk free rate as swap yields £m	1% increase £m	1% decrease £m	2% increase £m	2% decrease £m
United Kingdom	4,887	(2,117)	(105)	90	(215)	175
France	2,519	–	(70)	(60)	(210)	(360)
Ireland	990	–	(50)	55	(90)	120
Italy	645	–	5	(45)	5	(100)
Netherlands (including Belgium and Germany)	2,110	(120)	560	(805)	900	(1,525)
Poland	1,228	–	(30)	40	(55)	95
Spain	655	–	(15)	20	(35)	40
Other Europe	236	–	(5)	5	(10)	10
Europe	8,383	(120)	395	(790)	505	(1,720)
North America	64	(3,862)	(505)	210	(845)	90
Asia	424	–	20	(35)	30	(175)
Australia	331	–	(15)	15	(25)	30
Asia Pacific	755	–	5	(20)	5	(145)
Total	14,089	(6,099)	(210)	(510)	(550)	(1,600)

Aviva MCEV basis – additional information continued

M25 – Sensitivity analysis continued

Embedded value continued

2008 Embedded value (net of tax and minority interest)	Equity/property			
	As reported on page 41 £m	Market values		Volatility 25% increase £m
		10% increase £m	10% decrease £m	
United Kingdom	4,887	400	(410)	(25)
France	2,519	145	(160)	(150)
Ireland	990	15	(10)	–
Italy	645	–	–	–
Netherlands (including Belgium and Germany)	2,110	410	(385)	(220)
Poland	1,228	15	(15)	–
Spain	655	5	(10)	(10)
Other Europe	236	5	–	–
Europe	8,383	595	(580)	(380)
North America	64	–	–	–
Asia	424	10	(10)	–
Australia	331	5	(5)	–
Asia Pacific	755	15	(15)	–
Total	14,089	1,010	(1,005)	(405)

2008 Embedded value (net of tax and minority interest)	As reported on page 41 £m	Swaption implied volatilities 25% increase £m	Corporate bond credit spreads		EU minimum capital (or equivalent) £m
			50bps increase £m	50bps decrease £m	
			United Kingdom	4,887	
France	2,519	(95)	(120)	125	15
Ireland	990	–	–	–	5
Italy	645	–	–	–	5
Netherlands (including Belgium and Germany)	2,110	(165)	(265)	285	100
Poland	1,228	–	–	–	5
Spain	655	–	(55)	60	5
Other Europe	236	–	–	–	–
Europe	8,383	(260)	(440)	470	135
North America	64	(45)	(625)	660	5
Asia	424	–	(25)	20	15
Australia	331	–	(5)	10	5
Asia Pacific	755	–	(30)	30	20
Total	14,089	(305)	(1,705)	1,930	170

M25 – Sensitivity analysis continued

Value of new business

2008 Value of new business (net of tax and minority interest)	Risk free rates					
	As reported on page 23 £m	Risk free rate as swap yields £m	1% increase	1% decrease	2% increase	2% decrease
			£m	£m	£m	£m
United Kingdom	147	(161)	17	(25)	28	(60)
France	79	–	4	(7)	7	(21)
Ireland	10	–	3	(3)	6	(8)
Italy	21	–	(1)	–	(2)	(1)
Netherlands (including Belgium and Germany)	(67)	(10)	30	(47)	58	(138)
Poland	46	–	(3)	3	(5)	7
Spain	80	–	(4)	4	(8)	8
Other Europe	24	–	(1)	3	(5)	8
Europe	193	(10)	28	(47)	51	(145)
North America	36	(101)	(61)	50	(127)	68
Asia	24	–	5	(9)	8	(31)
Australia	9	–	(2)	4	(5)	7
Asia Pacific	33	–	3	(5)	3	(24)
Total	409	(272)	(13)	(27)	(45)	(161)

2008 Value of new business (net of tax and minority interest)	Equity/property			
	As reported on page 23 £m	Market values		Volatility 25% increase £m
		10% increase £m	10% decrease £m	
United Kingdom	147	5	(5)	(2)
France	79	2	(2)	(3)
Ireland	10	1	(1)	–
Italy	21	–	–	–
Netherlands (including Belgium and Germany)	(67)	–	–	(1)
Poland	46	–	–	–
Spain	80	–	–	–
Other Europe	24	1	(2)	–
Europe	193	4	(5)	(4)
North America	36	–	–	–
Asia	24	–	–	–
Australia	9	–	–	–
Asia Pacific	33	–	–	–
Total	409	9	(10)	(6)

Aviva MCEV basis – additional information continued

M25 – Sensitivity analysis continued

Value of new business continued

2008 Value of new business (net of tax and minority interest)	As reported on page 23 £m	Swaption implied volatilities 25% increase £m	Corporate bond credit spreads		EU minimum capital (or equivalent) £m
			50bps increase £m	50bps decrease £m	
United Kingdom	147	–	(79)	85	1
France	79	(2)	2	(9)	1
Ireland	10	–	–	–	1
Italy	21	–	–	–	–
Netherlands (including Belgium and Germany)	(67)	–	(11)	12	14
Poland	46	–	–	–	–
Spain	80	–	(4)	5	–
Other Europe	24	–	(1)	(1)	2
Europe	193	(2)	(14)	7	18
North America	36	(12)	(67)	72	10
Asia	24	–	–	–	2
Australia	9	–	–	–	–
Asia Pacific	33	–	–	–	2
Total	409	(14)	(160)	164	31

(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.

Embedded value

2008 Embedded value (net of tax)	As reported on page 41 £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	4,887	165	100	70	(190)
France	2,519	50	35	30	–
Ireland	990	20	25	10	(5)
Italy	645	5	5	5	–
Netherlands (including Belgium and Germany)	2,110	195	5	30	(195)
Poland	1,228	40	65	15	–
Spain	655	10	45	15	(5)
Other Europe	236	5	15	–	–
Europe	8,383	325	195	105	(205)
North America	64	85	80	70	(20)
Asia	424	15	5	5	–
Australia	331	10	20	15	–
Asia Pacific	755	25	25	20	–
Total	14,089	600	400	265	(415)

M25 – Sensitivity analysis continued

Value of new business

2008 Value of new business (net of tax)	As reported on page 23 £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	147	18	23	15	(20)
France	79	1	2	1	–
Ireland	10	2	4	–	–
Italy	21	1	–	–	–
Netherlands (including Belgium and Germany)	(67)	15	4	2	(14)
Poland	46	3	5	2	–
Spain	80	2	12	3	–
Other Europe	24	2	6	2	(2)
Europe	193	26	33	10	(16)
North America	36	6	4	7	(3)
Asia	24	5	2	1	–
Australia	9	1	5	2	–
Asia Pacific	33	6	7	3	–
Total	409	56	67	35	(39)

Glossary

Definitions of Group key performance indicators and other 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 and CFO Forum members across Europe have agreed to adopt these for their 2009 published accounts. The principles are a further development of the European Embedded Value principles first launched in May 2004.
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 world-wide 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 Group's 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.
Funds under management by Aviva	Represents all assets actively managed or administered by the fund management operations of the Group.
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.
Holding company	A legal entity with a function of being a consolidating entity for primary financial reporting of covered business.
IFRS operating profit	From continuing operations on an IFRS basis, stated before tax attributable to shareholders' profits, impairment of goodwill and exceptional items.
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.
MCEV	Aviva's Market Consistent Embedded Value methodology which is in accordance with the MCEV Principles published by the CFO Forum in June 2008 with the exception of the use of an adjusted risk-free yield due to current market conditions for immediate annuities in the UK and the Netherlands and for immediate annuity, deferred annuity and all other contracts in the US.
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.
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)	The risk-free return that can be earned on investments in the currency of the liability being valued. 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 1st July 2007, the risk-free rate is taken as swaps except for UK and Netherlands immediate annuities and immediate annuities, deferred annuities and all other US contracts. 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.

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Appendix A – Capital management

A1 – Capital

Capital management objectives

Aviva's capital management philosophy is focused on capital efficiency and effective risk management to support a progressive dividend policy and earnings per share growth. Rigorous capital allocation is one of our primary strategic priorities and is ultimately governed by the Group Executive Committee.

Overall capital risk appetite is set and managed with reference to the requirements of a range of different stakeholders including shareholders, policyholders, regulators and rating agencies. In managing capital we seek to:

- maintain sufficient, but not excessive, financial strength to support new business growth and satisfy the requirements of our regulators and other stakeholders and thus give 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 lines and access to a range of capital markets;
- allocate capital rigorously across the group, to drive value adding growth in accordance with risk appetite; and
- increase the dividend 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.
- following a review by the Board of the operation of the current DRIP, the Company intends to propose a resolution at the forthcoming AGM to reintroduce a SCRIP dividend scheme ("SCRIP Scheme"). The Board has therefore decided to withdraw the DRIP and, subject to shareholder approval, will reintroduce the SCRIP Scheme commencing with the 2008 final dividend in order to provide shareholders with the opportunity to elect to receive their dividends in the form of new shares in the Company instead of in cash.

Capital resources

The primary sources of capital used by the group are equity shareholders' funds, preference shares, subordinated debt and borrowings. We also consider and, where efficient to do so, utilise alternative sources of capital such as reinsurance and securitisation in addition to the more traditional sources of funding. Targets are established in relation to regulatory solvency, ratings, liquidity and dividend capacity and are a key tool in managing capital in accordance with our risk appetite and the requirements of our various stakeholders.

In February, the Standard & Poors (S&P) rating committee downgraded NU Life from AA to AA-, which is now aligned with the other 'core' group subsidiaries. At the same time S&P have changed the outlook on NU Life's ratings from "negative" to "stable". There are no changes to any of the group's other ratings or outlooks. The Group's financial strength rating from Moody's is Aa3 ("excellent") with a stable outlook and A+ ("superior") with a stable outlook from AM Best.

Capital allocation

Capital allocation is undertaken based on a rigorous analysis of a range of financial, strategic, risk and capital factors to ensure that capital is allocated efficiently to value adding business opportunities. A clear management decision-making framework, incorporating ongoing operational and strategic performance review, periodic longer term strategic and financial planning and robust due diligence over capital allocation is in place, governed by the Group Executive Committee and Group Asset Committee. These processes incorporate various capital profitability metrics, including an assessment of return on capital employed and internal rates of return in relation to hurdle rates to ensure capital is allocated efficiently and that excess business unit capital is repatriated where appropriate.

Different measures of capital

In recognition of the requirements of different stakeholders, we measure capital on a number of different bases, all of which are taken into account when managing and allocating capital across the group. These include measures which comply with the regulatory regimes within which we operate and those which the directors consider appropriate for the management of the business. The primary measures are:

(i) Accounting bases

We report our results on both an IFRS and a Market Consistent Embedded Value (MCEV) basis. The directors consider that the MCEV principles provide a more meaningful measure of the long term underlying value of the capital employed in our life and related businesses. This basis allows for the impact of uncertainty in future investment returns more explicitly and is consistent with the way life business is priced and managed. Accordingly, in addition to IFRS, we analyse and measure the net asset value and total capital employed for the group on this basis. This is the basis on which group return on equity is measured.

Appendix A – Capital management continued**A1 – Capital continued****(ii) Regulatory bases**

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. We fully complied with these regulatory requirements during the year.

(iii) Rating agency bases

Agency ratings are an important indicator of financial strength and maintenance of these ratings is one of the key drivers of capital risk appetite. Certain rating agencies have proprietary capital models which they use to assess available capital resources against capital requirements as a component of their overall criteria for assigning ratings. In addition, rating agency measures and targets in respect of gearing and fixed charge cover are also important in evaluating the level of borrowings utilised by the group. While not mandatory external requirements, in practice rating agency capital measures tend to act as one of the primary drivers of capital requirements, reflecting the capital strength required in relation to our target ratings.

(iv) Economic bases

We also measure our capital using an economic capital model that takes into account a more realistic set of financial and non-financial assumptions. This model continues to be developed and is increasingly relevant in the internal management and external assessment of our capital resources. The economic capital model is used to assess capital strength in accordance with the Individual Capital Assessment (ICA) requirements established by the FSA. Further developments are planned to meet the emerging requirements of the Solvency II framework and external agencies.

Accounting basis and capital employed by segment

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

	2008 £m	Restated 2007 £m
Long-term savings	19,250	22,397
General insurance and health	5,516	5,594
Fund management	340	355
Other business	(326)	831
Corporate ¹	(30)	(31)
Total capital employed	24,750	29,146
Financed by		
Equity shareholders' funds	12,912	19,998
Minority interests ²	3,013	2,501
Direct capital instrument	990	990
Preference shares	200	200
Subordinated debt	4,606	3,054
External debt	919	1,257
Net internal debt	2,110	1,146
Total capital employed	24,750	29,146

1. The "corporate" net liabilities represent the element of the pension scheme deficit held centrally.

2. Minority interests have increased to £3,013 million (2007 restated: £2,501 million) due to foreign exchange movement.

At 31 December 2008 we had £24.8 billion (2007: £29.1 billion) of total capital employed in our trading operations, measured on an MCEV basis.

Total capital employed is financed by a combination of equity shareholders' funds, preference capital, subordinated debt and borrowings. In addition to our external funding sources, we have certain internal borrowing arrangements in place which allow some of the assets that support technical liabilities to be invested in a pool of central assets for use across the group. These internal debt balances allow for the capital allocated to business operations to exceed the externally sourced capital resources of the group. Although intra-group in nature, they are included as part of the capital base for the purpose of capital management. These arrangements arise in relation to the following:

- Certain subsidiaries, subject to continuing to satisfy standalone 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.

A1 – Capital continued

– Aviva International Insurance (All) Ltd 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. These mechanisms also allow for some of the assets backing technical liabilities to be made available for use across the group. Balances in respect of these arrangements are also treated as internal debt for capital management purposes.

Net internal debt represents the balance of the above amounts due from corporate and holding entities, less the tangible net assets held by these entities.

On 13 May 2008 we issued £0.8 billion equivalent of Lower Tier 2 hybrid in a dual-tranche transaction (£400 million and €500 million). £0.6 billion of the proceeds was used to repay short-term commercial paper borrowings. On 8 August 2008 we issued a further £0.2 billion of lower tier 2 hybrid debt. These transactions have a positive impact on group IGD solvency and economic capital measures.

Financial leverage, the ratio of external senior and subordinated debt to MCEV capital and reserves was 34.7% (2007: 19.2%). 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 9.2 times (2007: 9.2 times).

At 31 December 2008 the market value of our external debt, subordinated debt, preference shares (including both Aviva plc preference shares and General Accident plc preference shares of £250 million, within minority interest), and direct capital instrument was £4,911 million (2007: £5,774 million), with a weighted average cost of 8.8% (2007: 4.4%). The group WACC is 8.3% 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 2008 was 8.1% based on a risk free rate of 3.0%, an equity risk premium of 4.0% and a market beta of 1.3.

Regulatory bases

Regulatory basis – Group: European Insurance Groups Directive (IGD)

	UK life funds £bn	Other business £bn	2008 £bn	2007 £bn
Insurance Groups Directive (IGD) capital resources	5.7	9.8	15.5	16.2
Less: capital resource requirement	(5.7)	(7.8)	(13.5)	(13.3)
Insurance Group Directive (IGD) excess solvency	–	2.0	2.0	2.9
Cover over EU minimum (calculated excluding UK life funds)			1.3 times	1.5 times

We have a regulatory obligation to have positive solvency on a regulatory IGD basis at all times. Our risk management processes ensure adequate review of this measure. At 31 December 2008, the estimated excess regulatory capital was £2.0 billion (2007: £2.9 billion). 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, Australia and Canada) a risk charge on assets and liabilities approach is used. The IGD is a pure aggregation test with no credit given for the considerable diversification benefits of Aviva.

Our excess solvency of £2.0 billion reflects a net decrease of £0.9 billion since 31 December 2007 reflecting the prevailing challenging market and general insurance trading conditions offset by various capital initiatives undertaken during the year including the issue of hybrid debt. Following individual guidance from the FSA we now recognise surpluses in the non-profit funds of our UK life and pensions business which is available for transfer to shareholders of £0.4 billion, the benefit of which is offset by reserve strengthening elsewhere in the group.

The reconciliation below provides further 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. This reconciliation is given in the second table below.

The Group Capital Adequacy Report is prepared in accordance with the FSA's valuation rules (Peak 1) and brings in capital in respect of the UK life funds equal to the UK Life Capital Resources Requirement. The FRS 27 disclosure brings in the realistic value of with-profit capital resources (Peak 2). As the two bases differ, the reconciliation below is presented by removing the restricted regulatory assets and then replacing them with the unrestricted realistic assets.

Appendix A – Capital management continued

A1 – Capital continued

	2008 £bn
Total capital and reserves (IFRS basis)	14.4
Plus: Other qualifying capital	4.9
Plus: UK unallocated divisible surplus	2.8
Less: Goodwill, acquired AVIF and intangible assets	(8.2)
Add: Adjustments onto a regulatory basis	1.6
Group Capital Resources on regulatory basis	15.5
The Group Capital Resources can be analysed as follows:	
Core Tier 1 Capital	13.3
Tier 1 waiver (implicit items)	0.2
Innovative Tier 1 Capital	1.0
Total Tier 1 Capital	14.5
Upper Tier 2 Capital	1.9
Lower Tier 2 Capital	3.5
Group Capital Resources Deductions	(4.4)
Group Capital Resources on regulatory basis (Tier 1 & Tier 2 Capital)	15.5
Less: UK life restricted regulatory assets	(7.0)
Add: UK life unrestricted realistic assets	5.5
Add: Overseas UDS – restricted asset	(0.4)
Total FRS 27 capital	13.6

Regulatory basis – 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 internal management and embedded value reporting purposes as the higher of:

- Target levels set by reference to internal risk assessment and internal objectives, taking account of the level of operational, demographic, market and currency risk.
- Minimum capital level (i.e. level of solvency capital at which local regulator is empowered to take action).

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 remained stable at 142% (2007: 141%).

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 2008 the aggregate regulatory requirements based on the EU minimum test amounted to £6.0 billion (2007: £4.6 billion). At this date, the actual net worth held in our long-term business was £9.5 billion (2007: £9.4 billion) which represents 157% (2007: 205%) of these minimum requirements.

Regulatory basis – UK Life with-profit 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; CGNU Life, Commercial Union Life Assurance Company (CULAC) and Norwich Union Life & Pensions (NUL&P). 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 2008 and 31 December 2007.

A1 – Capital continued

Regulatory basis – UK life with-profit funds

	2008					2007
	Estimated realistic assets £bn	Realistic liabilities ¹ £bn	Estimated realistic inherited estate ² £bn	Estimated risk capital margin ³ £bn	Estimated excess £bn	Estimated excess £bn
CGNU Life	12.8	(12.1)	0.7	(0.4)	0.3	1.1
CULAC	12.4	(11.7)	0.7	(0.4)	0.3	0.8
NUL&P ⁴	21.4	(20.2)	1.2	(0.7)	0.5	1.3
Aggregate	46.6	(44.0)	2.6	(1.5)	1.1	3.2

- These realistic liabilities include the shareholders' share of future bonuses of £0.8 billion (2007: £1.2 billion). Realistic liabilities adjusted to eliminate the shareholders' share of future bonuses are £43.2 billion (2007: £48.8 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 £1.4 billion, £1.5 billion and £4.1 billion for CGNU Life, CULAC and NUL&P respectively (2007: £0.7 billion, £0.8 billion and £3.0 billion for CGNU Life, CULAC and NUL&P respectively).
- Estimated realistic inherited estate at 31 December 2007 was £1.4 billion, £1.2 billion and £1.9 billion for CGNU Life, CULAC and NUL&P respectively.
- The risk capital margin (RCM) is 1.8 times covered by the inherited estate (2007: 3.5 times).
- The NUL&P fund includes the Provident Mutual (PM) fund which has realistic assets and liabilities of £1.8 billion, and therefore does not impact the realistic inherited estate.

Investment mix

The aggregate investment mix of the assets in the three main with-profit funds at 31 December 2008 was:

	2008	2007
Equity	24%	37%
Property	12%	13%
Fixed interest	56%	37%
Other	8%	13%

The equity backing ratios, including property, supporting with-profit asset shares are 57% in CGNU Life, CULAC and NUL&P. With-profit new business is mainly written through CGNU Life.

Proposed reattribution of inherited estate

In July 2008 following extensive discussions with the Policyholder Advocate, Norwich Union announced a £1 billion offer to one million eligible policy holders in return for giving up the right to the £2.1 billion inherited estate of CGNU Life Assurance Ltd and Commercial Union Life Assurance Company Ltd. Since then, investment market performance has caused the value of the estate to reduce to £1.4 billion meaning that the offer made in July no longer meets our criteria of being fair to both policyholders and shareholders. As a consequence, we are working closely with the Policyholder Advocate to see how we can restructure our offer and expect to be in a position to provide an update to policyholders in the next few months. These developments do not affect the entitlement to receive a £2.1 billion special distribution that we announced in early 2008.

Regulatory basis – Solvency II

Solvency II represents new EU legislation which totally redefines prudential supervision of EU insurers. It aims to establish a new economic risk sensitive approach to capital and solvency calculation and a new harmonized EU supervisory regime which places importance on effective internal governance and risk management practices. Aviva has already recognized that Solvency II offers a blueprint for industry best practice and is fully prepared to meet the challenge that offers. To that end, we are an active participant in the key European industry working groups who provide the voice of industry in ongoing negotiations in Brussels.

It is possible that the first stage of the Solvency II project will reach conclusion by June 2009 if the EU Parliament, Council and Commission are able to reach agreement on the "Level 1 Framework Directive". If this happens, it is envisaged that full implementation of Solvency II requirements could be imposed on EU insurers in the first quarter of 2013.

Appendix A – Capital management continued

A1 – Capital continued

Rating agency bases

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

Economic bases

We use a risk-based capital model to assess economic capital requirements and to aid in risk and capital management across the group. This model is also used to support our Individual Capital Assessments (ICA) which are reported to the FSA for all our UK regulated insurance businesses. 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 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.

For internal management purposes, our economic capital model is calibrated to our target capital adequacy rating. Financial modelling techniques enhance our practice of active risk and capital management, ensuring sufficient capital is available to protect against unforeseen events and adverse scenarios. Our aim continues to be the optimal usage of capital through appropriate allocation to our businesses. 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.

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.

A2 – Group capital structure

Deployment of equity shareholders' funds

In order to better reflect the risk to shareholder funds the following table 'looks through' unitised investments which are classified as "other" within the IFRS balance sheet and makes adjustments for minority holdings that are fully consolidated on the balance sheet. In addition, we have explicitly shown the market risks within the staff pension schemes.

						2008	Restated 2007
	Equities £m	Property £m	Cash, loans & debt securities £m	Other investments £m	Other net assets £m	Total £m	Total £m
Total assets included in the statutory IFRS balance sheet	43,351	15,390	216,673	36,116	43,032	354,562	321,326
Goodwill ¹					(4,017)	(4,017)	(3,502)
Acquired value of in-force business and intangible assets					(4,216)	(4,216)	(3,379)
Liabilities of the long-term, general & other businesses	(37,798)	(12,879)	(207,381)	(32,949)	(49,109)	(340,116)	(305,395)
Pension fund deficit					613	613	178
Debt					7,635	7,635	5,457
Liabilities of the long-term, general & other businesses excluding pension fund deficit and debt	(37,798)	(12,879)	(207,381)	(32,949)	(40,861)	(331,868)	(299,760)
Minorities and other investments reclassification ²	160	106	1,398	(2,457)	793	–	–
Shareholder funds	5,713	2,617	10,690	710	(5,269)	14,461	14,685
Pension fund	3,569	507	4,510	752	(9,951)	(613)	(178)
Adjusted shareholder funds	9,282	3,124	15,200	1,462	(15,220)	13,848	14,507
Goodwill ¹						4,017	3,502
Additional and acquired value of in-force long-term business and intangible assets						6,885	11,137
Assets backing total capital employed in continuing operations						24,750	29,146
Subordinated debt						(4,606)	(3,054)
External debt						(919)	(1,257)
Net internal debt ³						(2,110)	(1,146)
						17,115	23,689
Minority interests						(3,013)	(2,501)
Direct capital instrument						(990)	(990)
Preference capital						(200)	(200)
Equity shareholders' funds						12,912	19,998

1. Includes goodwill relating to the joint ventures and associates including amounts held for sale

2. Minority and other investments reclassification represent the reallocation of unit trusts to their constituent parts net of net asset value attributable to unitholders.

3. Net internal debt represents the upstream of internal loans from business operations to corporate and holding entities net of tangible assets held by those entities.

Appendix A – Capital management continued

A2 – Group capital structure continued

Shareholders' funds, including minority interest

	2008			Restated 2007		
	Closing shareholders' funds			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	3,649	1,420	5,069	3,670	3,484	7,154
France	1,854	970	2,824	1,447	1,323	2,770
Ireland	1,212	280	1,492	943	286	1,229
Italy	1,407	264	1,671	1,020	238	1,258
Netherlands (including Belgium and Germany)	2,979	(665)	2,314	2,994	950	3,944
Poland	310	1,105	1,415	276	926	1,202
Spain	1,373	682	2,055	1,122	624	1,746
Other Europe	369	(34)	335	346	(68)	278
Europe	9,504	2,602	12,106	8,148	4,279	12,427
North America	2,693	(1,599)	1,094	2,202	(227)	1,975
Asia Pacific	735	246	981	619	222	841
	16,581	2,669	19,250	14,639	7,758	22,397
General insurance and health						
United Kingdom	2,592	–	2,592	3,049	–	3,049
France	400	–	400	301	–	301
Ireland	545	–	545	435	–	435
Netherlands	705	–	705	756	–	756
Other Europe	377	–	377	295	–	295
Europe	2,027	–	2,027	1,787	–	1,787
North America	878	–	878	732	–	732
Asia Pacific	19	–	19	26	–	26
	5,516	–	5,516	5,594	–	5,594
Fund management	340	–	340	355	–	355
Other business	(326)	–	(326)	831	–	831
Corporate	(30)	–	(30)	(31)	–	(31)
Subordinated debt	(4,606)	–	(4,606)	(3,054)	–	(3,054)
External debt	(919)	–	(919)	(1,257)	–	(1,257)
Internal debt	(2,110)	–	(2,110)	(1,146)	–	(1,146)
	(7,651)	–	(7,651)	(4,302)	–	(4,302)
Shareholders' funds, including minority interests	14,446	2,669	17,115	15,931	7,758	23,689
Less:						
Minority interests			(3,013)			(2,501)
Direct capital instruments			(990)			(990)
Preference capital			(200)			(200)
Equity shareholders' funds			12,912			19,998
Less: goodwill and intangibles ¹			(4,944)			(4,258)
Equity shareholders funds' excluding goodwill and intangibles			7,968			15,740

1. Goodwill and intangibles comprise £3,583 million (2007: £3,082 million) of goodwill and subsidiaries, £1,557 million (2007: £1,407 million) of intangibles in subsidiaries, £163 million (2007: £162 million) of goodwill and intangibles in joint ventures and £335 million (2007: £310 million) of goodwill in associated, net of associated deferred tax liabilities of £423 million (2007: £419 million) and the minority share of intangibles of £271 million (2007: £284 million).

A2 – Group capital structure continued

Analysis of return on capital employed

Return on capital at business level is calculated on shareholders' funds excluding goodwill and intangibles, with the impact of these items on group shareholders' funds shown separately. This allows for returns on capital at the operational level to be based on tangible capital employed (including value of in-force business), whilst retaining accountability at an aggregate group level for the requirement to generate returns on capital invested in goodwill and intangibles.

	2008				
	Operating return ²		Restated Opening shareholders' funds including minority interests	Restated Opening Shareholders' funds (excluding goodwill and intangibles)	Return on capital %
	Before tax £m	After tax £m	£m	£m	
Life assurance					
United Kingdom	883	635	7,154	6,888	9.2%
France	692	455	2,770	2,770	16.4%
Ireland	78	67	1,229	1,091	6.1%
Italy	131	88	1,258	1,040	8.5%
Netherlands (including Belgium and Germany)	187	134	3,944	3,939	3.4%
Poland	241	196	1,202	1,197	16.4%
Spain	286	199	1,746	1,042	19.1%
Other Europe	23	17	278	177	9.6%
Europe	1,638	1,156	12,427	11,256	10.3%
North America	201	132	1,975	1,206	10.9%
Asia Pacific	79	57	841	688	8.3%
	2,801	1,980	22,397	20,038	9.9%
General insurance and health					
United Kingdom	557	398	3,049	2,557	15.6%
France	107	70	301	301	23.3%
Ireland	68	59	435	353	16.7%
Netherlands	177	129	756	734	17.6%
Other Europe	45	31	295	187	16.6%
Europe	397	289	1,787	1,575	18.3%
North America	145	94	732	729	12.9%
Asia Pacific	–	–	26	26	–
	1,099	781	5,594	4,887	16.0%
Fund management	42	29	355	305	9.5%
Other business	(163)	(114)	831	(595)	19.2%
Corporate	(37)	118	(31)	(31)	(380.6)%
Subordinated debt	(229)	(164)	(3,054)	(3,054)	5.4%
External debt	(57)	(41)	(1,257)	(1,257)	3.3%
Net internal debt ³	(98)	(70)	(1,146)	(1,146)	6.1%
	3,358	2,519	23,689	19,147	13.2%
Less: Minority interests		(257)	(2,501)	(2,217)	11.6%
Direct capital instrument		(40)	(990)	(990)	4.0%
Preference capital		(17)	(200)	(200)	8.5%
Operating return		2,205	19,998	15,740	14.0%
Goodwill and intangibles ¹				4,258	
Operating return (including goodwill and intangibles)		2,205	19,998	19,998	11.0%

1. Goodwill and intangibles comprises £3,082 million of goodwill in subsidiaries, £1,407 million of intangibles in subsidiaries, £162 million goodwill and intangibles in joint ventures, and £310 million of goodwill in associates, net of associated deferred tax liabilities of £419 million and the minority share of intangibles of £284 million.
2. 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.
3. The net internal debt return loss before tax of £98 million comprises investment return of £99 million offset by group internal debt costs and other interest of £197 million.

Appendix A – Capital management continued

A2 – Group capital structure continued

Analysis of return on capital employed

					Restated 2007
	Operating return ²		Opening shareholders' funds including goodwill and intangibles £m	Opening shareholders' funds excluding goodwill and intangibles £m	Return on capital %
	Before tax £m	After tax £m			
Life assurance					
United Kingdom	822	575	6,629	6,394	9.0%
France	568	373	2,355	2,355	15.8%
Ireland	85	74	1,103	977	7.6%
Italy	137	84	852	841	10.0%
Netherlands (including Belgium and Germany)	316	236	3,514	3,508	6.7%
Poland	181	147	946	946	15.5%
Spain	233	163	1,412	894	18.2%
Other Europe	(17)	(12)	132	132	(9.1)%
Europe	1,503	1,065	10,314	9,653	11.0%
North America	124	80	2,078	1,267	6.3%
Asia Pacific	95	70	575	511	13.7%
	2,544	1,790	19,596	17,825	10.0%
General insurance and health					
United Kingdom	294	206	2,984	2,487	8.3%
France	70	45	333	333	13.5%
Ireland	162	142	434	359	39.6%
Netherlands	169	123	684	682	18.0%
Other Europe	41	29	161	161	18.0%
Europe	442	339	1,612	1,535	22.1%
North America	154	101	670	667	15.1%
Asia Pacific	4	3	22	22	13.6%
	894	649	5,288	4,711	13.8%
Fund management	90	63	305	243	25.9%
Other business	(70)	(49)	874	(458)	10.7%
Corporate	(82)	(95)	(19)	(19)	500.0%
Subordinated debt	(179)	(125)	(2,937)	(2,937)	4.3%
External debt	(79)	(55)	(1,258)	(1,258)	4.4%
Net internal debt ³	(53)	(37)	(1,406)	(1,406)	2.6%
	3,065	2,141	20,443	16,701	12.8%
Less: Minority interests		(265)	(1,817)	(1,808)	14.7%
Direct capital instrument		(37)	(990)	(990)	3.7%
Preference capital		(17)	(200)	(200)	8.5%
Operating return		1,822	17,436	13,703	13.3%
Goodwill and intangibles ¹				3,733	
Operating return (including goodwill and intangibles)		1,822	17,436	17,436	10.4%

1. Goodwill and intangibles comprises £2,910 million of goodwill in subsidiaries, £830 million of intangibles in subsidiaries and £280 million of goodwill in associates, net of associated deferred tax liabilities of £278 million and the minority share of intangibles of £9 million.

2. 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.

3. The net internal debt return loss before tax of £53 million comprises investment return of £127 million offset by group internal debt costs and other interest of £180 million.

A2 – Group capital structure continued

Capital Generation and Utilisation

As part of our capital management processes, we regularly review the generation and deployment of capital. The table below demonstrates the net capital generation of the group based on MCEV net worth before and after investment variances.

	2008 £bn	Restated 2007 £bn
Operational capital generation:		
Life in-force profits	2.4	1.8
New business strain	(0.8)	(0.6)
Non-life profits	0.8	0.5
Operational capital generated	2.4	1.7
Increase in capital requirements	(0.4)	(0.4)
Free operational capital generated	2.0	1.3
Interest cost	(0.3)	(0.2)
External dividend	(1.0)	(0.9)
Scrip dividend	0.2	0.3
Capital generation after financing	0.9	0.5
Profit on disposals	–	0.1
Capital raising	1.0	–
Cost of acquisitions	(0.3)	(0.6)
Qualifying assets acquired net of capital requirements	0.1	0.1
Pension funding, restructuring costs and exceptional items	(0.9)	(0.1)
Foreign exchange impact on surplus capital	0.2	0.3
Other	0.1	–
Net capital generated before investment return and economic variances	1.1	0.3
Investment return variances and economic variances	(4.3)	0.1
Net capital (consumed)/generated after investment return and economic variances	(3.2)	0.4

Free operational capital generated represents the net of the following:

- Operating profits emerging in net worth for the life in-force business, net of new business strain, and IFRS operating profits earned by non-life businesses.
- The increase in capital requirements of ongoing businesses. Capital requirements represent target operating capital levels rather than regulatory minimum levels as this is considered a better reflection of capital utilised in the business. For the life businesses this is the capital used in the calculation of embedded value to evaluate the cost of locked in capital. For general insurance businesses we have calculated target capital based on two times the regulatory minimum. Where appropriate, the increase in capital requirements shown has been adjusted for the impact of foreign exchange movements and other one off changes to required capital.

Appendix A – Capital management continued

A3 – Sensitivity analysis and capital management

Sensitivity analysis

The sensitivity of the group's shareholders' funds on an MCEV basis and IFRS basis at 31 December 2008 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:

MCEV basis		2008 £bn	Equities down 10%		Interest rates up 1% £bn	0.5% increased credit spread £bn
2007 £bn	Direct £bn		Indirect £bn			
22.4	Long-term savings ¹	19.2	(0.3)	(0.5)	(0.3)	(1.7)
6.8	General insurance and other	4.4	(0.3)	–	(0.2)	0.3
(5.5)	Borrowings ²	(6.5)	–	–	–	–
23.7	Shareholders' funds	17.1	(0.6)	(0.5)	(0.5)	(1.4)

IFRS basis		2008 £bn	Equities down 10% £bn	Interest rates up 1% £bn	0.5% increased credit spread £bn
2007 £bn					
14.6	Long-term savings	16.5	(0.3)	(0.4)	(0.3)
6.8	General insurance and other	4.4	(0.3)	(0.2)	0.3
(5.5)	Borrowings	(6.5)	–	–	–
15.9	Shareholders' funds	14.4	(0.6)	(0.6)	–

1. Assumes MCEV assumptions adjusted to reflect revised bond yields.

2. Comprising internal, external and subordinated debt, net of corporate tangible net assets.

These sensitivities assume a full tax charge/credit on market value assumptions.

The tables above incorporates the effect on the value of the pension scheme assets and liabilities of a 10% decrease in equity markets, a 1% increase in fixed income bond yields and a 0.5% increase in credit spreads. 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 only has the effect of reducing the pension scheme liability by £1.4 billion thereby enhancing shareholders' funds by £1.0 billion (after deducting tax).

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 2008 the sensitivity to a 10% fall in global equity markets or a rise of 1% in global interest rates is as follows:

	2008 £bn	Equities down 10% £bn	Interest rates up 1% £bn
IGD Group surplus	2.0	(0.2)	(0.1)

We continue to actively manage our equity risk exposures. The sensitivity of the group's IGD surplus to falls in the global equity markets since 31 December 2008 is as follows:

	£bn
Equities down 10%	(0.2)
Equities down 20%	(0.3)
Equities down 30%	(0.5)
Equities down 40%	(0.8)

A3 – Sensitivity analysis and capital management continued

Risk management – Equity hedging

Our risk management processes ensure close and on-going monitoring of all our capital measures. The following table shows the material equity derivatives within the group's shareholder funds at 31 December 2008 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 £bn ^{2,4}	Market fall required before protection starts £bn ^{3,4}	Outstanding duration
(a)	0.5	13%	–	< 3 months
(b)	1.6	17%	–	3-11 months
(c)	1.9	–	17%	12 months

1. The notional represents the notional amount of hedging as at 31 December 2008.
2. The 'Market fall below protection level' shows the percentage the market has fallen below the protection level as at 31 December 2008. Both derivative (a) and (b) are therefore in the money at this date.
3. The 'Market fall required before protection starts' shows the percentage the market would have to fall from the 31 December 2008 positions 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

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, Financial Condition Reporting (a medium term projection of the financial health of the business under a variety of economic and operating scenarios), and increasingly Individual Capital Assessment (ICA) are used. Sensitivities to economic and operating experience are regularly produced on all of our financial performance measurements as part of our decision making and planning process, 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 non-economic 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 in the MCEV section of this announcement.

Life insurance and investment contracts

The nature of long-term business is such that a number of assumptions are made in compiling the 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.

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 development on which the projections are based. As such, in the analysis below, the sensitivity of general insurance claim liabilities is primarily based on the financial impact of changes to the reported loss ratio.

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

Sensitivity Factor	Description of sensitivity factor applied
Interest rate & 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%

Appendix A – Capital management continued

A3 – Sensitivity analysis and capital management continued

Long-term businesses

Impact on profit before tax £m	2008						
	Interest rates	Interest rates	Equity/ property	Equity/ property	Expenses	Assurance mortality	Annuitant mortality
	+1%	-1%	+10%	-10%	+10%	+5%	+5%
Insurance participating	(10)	(165)	85	(90)	(20)	(5)	(10)
Insurance non-participating	(25)	135	90	(90)	(20)	(25)	(310)
Investment participating	(35)	(55)	25	(20)	–	–	–
Investment non-participating	(10)	10	20	(20)	(5)	–	–
Assets backing life shareholders' funds	(20)	30	180	(180)	–	–	–
Total	(100)	(45)	400	(400)	(45)	(30)	(320)

Impact on shareholders' equity before tax £m	2008						
	Interest rates	Interest rates	Equity/ property	Equity/ property	Expenses	Assurance mortality	Annuitant mortality
	+1%	-1%	+10%	-10%	+10%	+5%	+5%
Insurance participating	(30)	(135)	85	(90)	(20)	(5)	(10)
Insurance non-participating	(185)	270	110	(105)	(20)	(25)	(310)
Investment participating	(50)	(40)	30	(25)	–	–	–
Investment non-participating	(210)	230	20	(20)	(5)	–	–
Assets backing life shareholders' funds	(80)	95	190	(190)	–	–	–
Total	(555)	420	435	(430)	(45)	(30)	(320)

Impact on profit before tax £m	2007						
	Interest rates	Interest rates	Equity/ property	Equity/ property	Expenses	Assurance mortality	Annuitant mortality
	+1%	-1%	+10%	-10%	+10%	+5%	+5%
Insurance participating	15	(10)	–	–	(5)	–	–
Insurance non-participating	(205)	165	45	(35)	(5)	(20)	(295)
Investment participating	(5)	(25)	–	–	(5)	–	–
Investment non-participating	(35)	40	65	(60)	–	–	–
Assets backing life shareholders' funds	(115)	140	180	(175)	–	–	–
Total	(345)	310	290	(270)	(15)	(20)	(295)

Impact on shareholders' equity before tax £m	2007						
	Interest rates	Interest rates	Equity/ property	Equity/ property	Expenses	Assurance mortality	Annuitant mortality
	+1%	-1%	+10%	-10%	+10%	+5%	+5%
Insurance participating	(5)	20	–	–	(5)	–	–
Insurance non-participating	(320)	275	105	(95)	(5)	(20)	(295)
Investment participating	(5)	(25)	–	–	(5)	–	–
Investment non-participating	(170)	190	65	(60)	–	–	–
Assets backing life shareholders' funds	(165)	190	460	(455)	–	–	–
Total	(665)	650	630	(610)	(15)	(20)	(295)

A3 – Sensitivity analysis and capital management continued

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.

General insurance and health businesses

	2008					
Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Gross loss ratios +5%
Net of reinsurance	(360)	360	90	(90)	(170)	(425)

	2008					
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%
Net of reinsurance	(360)	360	90	(90)	(40)	(425)

	2007					
Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Gross loss ratios +5%
Net of reinsurance	(255)	290	110	(110)	(150)	(365)

	2007					
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%
Net of reinsurance	(255)	290	110	(110)	(35)	(365)

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

	2008			
Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%
Total	15	(20)	50	(50)

	2008			
Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%
Total	–	(10)	130	(130)

Appendix A – Capital management continued

A3 – Sensitivity analysis and capital management continued

Impact on profit before tax £m	2007			
	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%
Total	(35)	35	55	(55)

Impact on shareholders' equity before tax £m	2007			
	Interest rates +1%	Interest rates -1%	Equity/ property +10%	Equity/ property -10%
Total	(35)	35	55	(55)

Limitations of sensitivity analysis

The above tables demonstrate the effect of a change in a key assumption while other assumptions remain unchanged. In reality, there is 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, our 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, the actual impact of a change in the assumptions may not have any impact on the liabilities, whereas assets are held at market value on the balance sheet. 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.

Appendix B – Analysis of assets

B1 – Key highlights

- The quality of Aviva’s balance sheet asset base continues to be strong, despite challenging economic and market conditions.
- Balance sheet assets have been appropriately valued with 82% of assets (including 100% of financial investments) measured at fair value.
- Except for tax asset and interests in joint ventures and associates (which are equity accounted) the remaining assets are recognised at cost/amortised cost and tested for impairment.
- The principal asset classes are Debt Securities (£151 billion), Equities (£43 billion), Other Financial Investments (£36 billion) and Loans (£42 billion).
- The majority (95%) of debt securities are investment grade (with 1.5% below investment grade and 3.8% not rated).
- The group has very limited exposure to RMBS (Sub prime, Alt A), ABS, Wrapped Credit, CDOs and CLOs; with these investments representing less than 1.0% of total balance sheet assets.
- Of the group’s total asset base of £340 billion analysed in detail in this disclosure, investments (investment property, loans and financial investments) amount to £287 billion. Shareholders are only directly exposed to market and credit risk on £95 billion of these investments.
- Of this, £51 billion (54%) are debt securities, 91% of which are investment grade.
- Only 6% of shareholder assets are held in equities and other financial investments – equities and other financial investments are principally held to back Policyholder liabilities (in unit-linked and participating funds) and as such reflect policyholder investment mandates.
- £31.7 billion of shareholder assets are loans.
- £7.9 billion of these loans are secured through non-recourse borrowings in our UK Life and Dutch business whereby the risk is passed to the note holders.
- 56% of non-securitised mortgages are commercial loans rather than residential mortgages; which are typically held to back annuity liabilities and a further 14% of non-securitised mortgages are to government supported healthcare
- All our USA loan portfolio is commercial loans.
- The group’s loan portfolio continues to perform well with 95% of the portfolio neither past due nor impaired. However, the fall in property values has led to a deterioration in loan to value (LTV) ratios so that now £9 billion loans have an LTV greater than 100%.

B2 – Introduction

With the continued volatility and uncertainty in the credit and equity markets, we are again presenting extensive and transparent disclosure of the quality of the assets recognised on the group’s balance sheet.

This disclosure evidences the quality of the Aviva group’s balance sheet assets by providing:

- an analysis of assets to reflect whether the shareholder or policyholder ultimately bears the underlying credit and market risk;
- details of the valuation bases used, specifically showing the portion of balance sheet assets carried at fair value thereby reflecting the full impact of changes in market conditions;
- a breakdown of debt securities held by product type and credit ratings to demonstrate the risk exposure associated with these investments; and,
- details of the exposure to mortgage loans with loan to value and arrears information.

B3 – Total assets – Shareholder/Policyholder exposure to risk

Within this disclosure, the group’s total assets have been segmented based on where the market and credit risks are held, according to the following guidelines.

Policyholder Assets

The group writes unit-linked business in a number of long-term business operations. In unit-linked business, the policyholder bears the investment risk on the assets in the unit-linked funds, as the policy benefits are directly linked to the value of the assets in the funds. These assets are managed according to the investment mandates of the funds which are consistent with the expectations of the policyholders. By definition, there is a precise match between the investment assets and the policyholder liabilities, and so the market risk and credit risk lie with policyholders. The shareholders’ exposure on this business is limited to the extent that income arising from asset management charges is based on the value of assets in the funds.

Appendix B – Analysis of assets continued

B3 – Total assets – Shareholder/Policyholder exposure to risk continued

Participating Fund Assets

Some insurance and investment contracts in our long-term businesses contain a discretionary participating feature, which is a contractual right to receive additional benefits as a supplement to guaranteed benefits. These are referred to as participating contracts. The market risk and credit risk in relation to assets held within Participating Funds (including 'with-profit' funds) are shared between policyholders and shareholders in differing proportions. In general, the risks and rewards of participating funds rest primarily with the policyholders.

The assets within Participating Funds cover liabilities for participating insurance contracts and participating investment contracts in addition to other liabilities within the participating funds.

Shareholder Assets

Assets held within long-term businesses that are not backing unit-linked liabilities or participating funds, directly expose the shareholders of Aviva plc to market and credit risks. Likewise, assets held within General Insurance & Health, Fund Management and non-insurance businesses also expose our shareholders to market and credit risks. The group has established comprehensive risk management policies to monitor and mitigate these risks.

	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
Assets						
Goodwill and Acquired value of in-force business and intangible assets	–	–	7,630	7,630	(14)	7,616
Interests in joint ventures and associates	194	950	1,839	2,983	–	2,983
Property and equipment	38	93	935	1,066	(102)	964
Investment property	4,126	7,555	2,745	14,426	–	14,426
Loans	1,799	8,702	31,736	42,237	–	42,237
Financial investments						
Debt securities	19,588	79,566	51,437	150,591	(336)	150,255
Equity securities	23,840	13,817	5,754	43,411	(60)	43,351
Other investments	23,527	9,443	3,146	36,116	–	36,116
Reinsurance assets	1,704	803	5,387	7,894	–	7,894
Deferred tax assets	–	–	2,642	2,642	–	2,642
Current tax assets	–	–	622	622	–	622
Receivables and other financial assets	470	2,038	7,694	10,202	(386)	9,816
Deferred acquisition costs and other assets	233	1,011	4,904	6,148	(1)	6,147
Prepayments and accrued income	249	1,355	2,316	3,920	(158)	3,762
Cash and cash equivalents	4,125	9,332	11,217	24,674	(493)	24,181
Assets of operations classified as held for sale	–	–	–	–	1,550	1,550
Total	79,893	134,665	140,004	354,562	–	354,562
Total %	22.5%	38.0%	39.5%			
FY 2007	83,841	123,697	113,788	321,326	–	321,326
FY 2007 %	26.1%	38.5%	35.4%			

As can be seen from the table above, 40% of assets can be directly attributed to shareholders where the apportionment of assets is predominantly weighted towards debt securities and loans. In comparison policyholder and participating funds contain a greater proportion of investment property, equities, and other investments (e.g. unit trusts) reflecting the underlying investment mandates.

Note, the remainder of this disclosure is prepared based on gross assets prior to the adjustment for assets of operations classified as held for sale.

B4 – Total assets – Valuation bases/fair value hierarchy

Valuation Bases

The valuation of the group's assets can be categorised into the following major categories:

- (i) *Fair Value* – Fair value is the amount for which an asset can be exchanged between knowledgeable, willing parties in an arm's length transaction;
- (ii) *Cost/Amortised Cost* – The amortised cost of a financial asset is the amount at which the financial asset is measured at initial recognition less principal repayments, plus or minus the cumulative amortisation (using the effective interest method) of any difference between the initial amount and the maturity amount, and less any reduction for impairment or uncollectibility. The cost/amortised cost of a non-financial asset is the amount at which the asset is initially recognised less any cumulative amortisation/depreciation (if applicable), and less any reduction for impairment.
- (iii) *Equity Accounted and tax assets* – Investments in associates and joint ventures are accounted for using the equity method of accounting. Under this method, the cost of the investment in a given associate or joint venture, together with the group's share of that entity's post-acquisition changes to shareholders' funds, is included as an asset in the consolidated balance sheet. The group's share of their post-acquisition profits or losses is recognised in the income statement and its share of post-acquisition movements in reserves is recognised in reserves. Distributions received from the investee reduce the group's carrying amount of the investment; and

Within the group's balance sheet, 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 in the table below.

	Fair value £m	Amortised cost £m	Equity accounted/ tax assets £m	Total £m
Assets				
Goodwill and Acquired value of in-force business and intangible assets	–	7,630	–	7,630
Interests in joint ventures and associates	–	–	2,983	2,983
Property and equipment	566	500	–	1,066
Investment property	14,426	–	–	14,426
Loans	21,468	20,769	–	42,237
Financial investments				
Debt securities	150,591	–	–	150,591
Equity securities	43,411	–	–	43,411
Other investments	36,116	–	–	36,116
Reinsurance assets	–	7,894	–	7,894
Deferred tax assets	–	–	2,642	2,642
Current tax assets	–	–	622	622
Receivables and other financial assets	–	10,202	–	10,202
Deferred acquisition costs and other assets	–	6,148	–	6,148
Prepayments and accrued income	–	3,920	–	3,920
Cash and cash equivalents	24,674	–	–	24,674
Total	291,252	57,063	6,247	354,562
Total %	82.1%	16.1%	1.8%	
FY 2007	267,124	49,438	4,764	321,326
FY 2007 %	83.1%	15.4%	1.5%	

As shown in the above table, 82% of the group's total assets are carried at fair value (inclusive of cash and cash equivalents).

With such a significant portion of the group's total assets carried at fair value, the impact of market risks and credit risks of these assets has been fully reflected within the group's reported 31 December 2008 financial position. Furthermore, all other assets have been tested for impairment and, in the case of financial assets carried at amortised cost, this has included a specific analysis of the recoverability of the assets by reference to the credit risk of the counterparty.

The carrying values of assets on the different valuation bases are analysed in the tables below between Policyholder, Participating Fund and Shareholder Assets respectively.

Appendix B – Analysis of assets continued

B4 – Total assets – Valuation bases/fair value hierarchy continued

	Fair value £m	Amortised cost £m	Equity accounted/ tax assets £m	Total £m
Assets – Policyholder assets				
Goodwill and Acquired value of in-force business and intangible assets	–	–	–	–
Interests in joint ventures and associates	–	–	194	194
Property and equipment	38	–	–	38
Investment property	4,126	–	–	4,126
Loans	147	1,652	–	1,799
Financial investments				
Debt securities	19,588	–	–	19,588
Equity securities	23,840	–	–	23,840
Other investments	23,527	–	–	23,527
Reinsurance assets	–	1,704	–	1,704
Deferred tax assets	–	–	–	–
Current tax assets	–	–	–	–
Receivables and other financial assets	–	470	–	470
Deferred acquisition costs and other assets	–	233	–	233
Prepayments and accrued income	–	249	–	249
Cash and cash equivalents	4,125	–	–	4,125
Total	75,391	4,308	194	79,893
Total %	94.4%	5.4%	0.2%	
FY 2007	80,187	2,905	749	83,841
FY 2007 %	95.6%	3.5%	0.9%	

	Fair value £m	Amortised cost £m	Equity accounted/ tax assets £m	Total £m
Assets – Participating fund assets				
Goodwill and Acquired value of in-force business and intangible assets	–	–	–	–
Interests in joint ventures and associates	–	–	950	950
Property and equipment	65	28	–	93
Investment property	7,555	–	–	7,555
Loans	1,167	7,535	–	8,702
Financial investments				
Debt securities	79,566	–	–	79,566
Equity securities	13,817	–	–	13,817
Other investments	9,443	–	–	9,443
Reinsurance assets	–	803	–	803
Deferred tax assets	–	–	–	–
Current tax assets	–	–	–	–
Receivables and other financial assets	–	2,038	–	2,038
Deferred acquisition costs and other assets	–	1,011	–	1,011
Prepayments and accrued income	–	1,355	–	1,355
Cash and cash equivalents	9,332	–	–	9,332
Total	120,945	12,770	950	134,665
Total %	89.8%	9.5%	0.7%	
FY 2007	109,109	12,913	1,675	123,697
FY 2007 %	88.2%	10.4%	1.4%	

B4 – Total assets – Valuation bases/fair value hierarchy continued

	Fair value £m	Amortised cost £m	Equity accounted/ tax assets £m	Total £m
Assets – Shareholder assets				
Goodwill and Acquired value of in-force business and intangible assets	–	7,630	–	7,630
Interests in joint ventures and associates	–	–	1,839	1,839
Property and equipment	463	472	–	935
Investment property	2,745	–	–	2,745
Loans	20,154	11,582	–	31,736
Financial investments				
Debt securities	51,437	–	–	51,437
Equity securities	5,754	–	–	5,754
Other investments	3,146	–	–	3,146
Reinsurance assets	–	5,387	–	5,387
Deferred tax assets	–	–	2,642	2,642
Current tax assets	–	–	622	622
Receivables and other financial assets	–	7,694	–	7,694
Deferred acquisition costs and other assets	–	4,904	–	4,904
Prepayments and accrued income	–	2,316	–	2,316
Cash and cash equivalents	11,217	–	–	11,217
Total	94,916	39,985	5,103	140,004
Total %	67.8%	28.6%	3.6%	
FY 2007	77,828	33,620	2,340	113,788
FY 2007 %	68.4%	29.5%	2.1%	

68% of shareholder assets are measured at fair value (inclusive of cash and cash equivalents). The remaining assets include goodwill, loans, reinsurance assets and receivables; all carried at amortised cost and are subject to regular impairment reviews.

Appendix B – Analysis of assets continued**B5 – Analysis of asset quality**

The following sections analyse the quality of various group assets. The table below provides an overview of where additional information is provided.

	Reference	Further analysis £m	No further analysis £m	Total £m
Assets				
Goodwill and Acquired value of in-force business and intangible assets	5.1	7,630	–	7,630
Interests in joint ventures and associates	5.2	2,983	–	2,983
Property and equipment	–	–	1,066	1,066
Investment property	5.3	14,426	–	14,426
Loans	5.4	42,237	–	42,237
Financial investments	5.5			
Debt securities	5.5.1	150,591	–	150,591
Equity securities	5.5.2	43,411	–	43,411
Other investments	5.5.3	36,116	–	36,116
Reinsurance assets	5.6	7,894	–	7,894
Deferred tax assets	–	–	2,642	2,642
Current tax assets	–	–	622	622
Receivables and other financial assets	5.7	10,202	–	10,202
Deferred acquisition costs and other assets	–	–	6,148	6,148
Prepayments and accrued income	–	–	3,920	3,920
Cash and cash equivalents	5.8	24,674	–	24,674
Assets of operations classified as held for sale	–	–	–	–
Total		340,164	14,398	354,562
Total %		95.9%	4.1%	
FY 2007		311,848	9,478	321,326
FY 2007 %		97.1%	2.9%	

As can be seen from the table, the analysis covers 96% of the group's total assets. The remaining assets are not discussed further in the context of this disclosure on the basis that their value and quality will typically not fluctuate based on movements in the credit markets.

Fair Value Hierarchy

To provide further information on the valuation techniques used to measure assets carried at fair value, this disclosure categorises the measurement basis for assets carried at fair value into a 'fair value hierarchy' as follows:

Quoted market prices in active markets – ('Level 1')

Inputs to Level 1 fair values are quoted prices (unadjusted) in active markets for identical assets. An active market is a market in which transactions for the asset occur with sufficient frequency and volume to provide pricing information on an ongoing basis.

Examples are listed equities in active markets, listed debt securities in active markets and quoted unit trusts in active markets.

Valued using models with significant observable market parameters – ('Level 2')

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. Level 2 inputs include the following:

- Quoted prices for similar (i.e. not identical) assets in active markets;
- Quoted prices for identical or similar assets in markets that are not active, the prices are not current, or price quotations vary substantially either over time or among market makers, or in which little information is released publicly;
- Inputs other than quoted prices that are observable for the asset (for example, interest rates and yield curves observable at commonly quoted intervals, volatilities, prepayment speeds, loss severities, credit risks, and default rates); and
- Inputs that are derived principally from, or corroborated by, observable market data by correlation or other means (market-corroborated inputs).

B5 – Analysis of asset quality continued

Examples are securities measured using discounted cash flow models based on market observable swap yields, investment property measured using market observable information and listed debt or equity securities in a market that is inactive.

Valued using models with significant unobservable market parameters – ('Level 3')

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 business unit's own assumptions about the inputs that market participants would use in pricing the asset.

Examples are certain private equity investments and private placements.

5.1. 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 have included several bancassurance transactions which have resulted in £764 million of the total £3,578 million of goodwill and £942 million of the total £4,038 million of other intangible assets which primarily represent the value of bancassurance distribution agreements acquired in these business combinations.

As at 31 December 2008, the group has assessed the value of these bancassurance related assets and has not identified a need to impair any of these amounts.

5.2. Interests in Joint Ventures and Associates

Investments in Joint Ventures and Associates are accounted for using the equity method. Under this method, the cost of the investment in a given associate or joint venture, together with the group's share of that entity's post-acquisition changes to shareholders' funds, is included as an asset in the consolidated balance sheet. The carrying value of both joint ventures and associates includes goodwill identified on their acquisition and any loans that group companies have advanced to them.

Some 79% of the carrying value of joint ventures comprises interests in property limited partnerships (PLPs) which are held in the UK and certain European long-term business policyholder and participating funds as part of their investment strategy. These funds have invested in a number of PLPs, either directly or via property unit trusts (PUTs), through a mix of capital and loans. The PLPs are managed by general partners (GPs), in which the long-term business shareholder companies hold equity stakes and which themselves hold nominal stakes in the PLPs. The PUTs are managed by a group subsidiary. Accounting for the PUTs and PLPs as subsidiaries, joint ventures or other financial investments depends on the shareholdings in the GPs and the terms of each partnership agreement. Where the group exerts control over a PLP, it has been treated as a subsidiary and its assets and liabilities have been consolidated within the appropriate balance sheet headings. Where the partnership is managed by a contractual agreement such that no party exerts control, notwithstanding that the group's partnership share in the PLP (including its indirect stake via the relevant PUT and GP) may be greater than 50%, such PUTs and PLPs have been classified as joint ventures and accounted for using the equity method described above. Where the group holds minority stakes in PLPs, with no disproportionate influence, the relevant investments are carried at fair value through profit and loss within financial investments. The underlying assets of these PLPs are almost entirely investment property which are valued on the same basis as those held directly and shown in section 5.3 of this disclosure.

The group's principal associates are two bancassurance investments with Royal Bank of Scotland Group (RBSG). Their assets are held for the benefit of their policyholders and, as described above, the group equity accounts for its share of net assets and any goodwill on acquisition. The group's investments in the RBSG companies have been tested for impairment by comparing their carrying values with their recoverable amounts, based on value in use calculations. The recoverable amounts exceed the carrying values of these investments, and a reasonably possible change to the key underlying assumptions will not cause the carrying values of the investments to exceed their recoverable amounts.

Appendix B – Analysis of assets continued

B5 – Analysis of asset quality continued

5.3. Investment Property

	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m	
Investment property – Total				
Leased to third parties under operating leases	–	13,764	–	13,764
Vacant investment property/ held for capital appreciation	–	662	–	662
Total	–	14,426	–	14,426
Total %	–	100.0%	–	
FY 2007	–	15,391	–	15,391
FY 2007 %	–	100.0%	–	

	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m	
Investment property – Policyholder assets				
Leased to third parties under operating leases	–	4,053	–	4,053
Vacant investment property/held for capital appreciation	–	73	–	73
Total	–	4,126	–	4,126
Total %	–	100.0%	–	
FY 2007	–	5,699	–	5,699
FY 2007 %	–	100.0%	–	

	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m	
Investment property – Participating fund assets				
Leased to third parties under operating leases	–	7,026	–	7,026
Vacant investment property/ held for capital appreciation	–	529	–	529
Total	–	7,555	–	7,555
Total %	–	100.0%	–	
FY 2007	–	7,818	–	7,818
FY 2007 %	–	100.0%	–	

	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m	
Investment property – Shareholder assets				
Leased to third parties under operating leases	–	2,685	–	2,685
Vacant investment property/ held for capital appreciation	–	60	–	60
Total	–	2,745	–	2,745
Total %	–	100.0%	–	
FY 2007	–	1,874	–	1,874
FY 2007 %	–	100.0%	–	

B5 – Analysis of asset quality continued

5.3. Investment Property continued

Some 81% 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.

Over 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.

5.4. 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 brokers/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.

The group reviews the carrying value of loans at least at each reporting date. If the carrying value of a loan is greater than the recoverable amount, the carrying value is reduced through a charge to the income statement in the period of impairment. Impairment is measured based on the present value of expected future cash flows discounted at the effective rate of interest of the loan, subject to the fair value of the underlying collateral. Reversals of impairments are only recognised where the decrease in the impairment can be objectively related to an event occurring after the write-down (such as an improvement in the debtor's credit rating).

Total Assets

	UK £m	Delta Lloyd £m	North America £m	Europe (Ex DL) £m	Asia £m	Total £m
Policy Loans	49	432	490	1,119	36	2,126
Loans and Advances to Banks	4,572	1,843	–	–	–	6,415
Mortgages	16,330	12,815	1,566	5	15	30,731
Other Loans	38	2,830	74	18	5	2,965
Total	20,989	17,920	2,130	1,142	56	42,237

Policyholder Assets

	UK £m	Delta Lloyd £m	North America £m	Europe (Ex DL) £m	Asia £m	Total £m
Policy Loans	–	–	–	–	–	–
Loans and Advances to Banks	–	–	–	–	–	–
Mortgages	136	1,663	–	–	–	1,799
Other Loans	–	–	–	–	–	–
Total	136	1,663	–	–	–	1,799

Appendix B – Analysis of assets continued

B5 – Analysis of asset quality continued

5.4. Loans continued

Participating Fund Assets

	UK £m	Delta Lloyd £m	North America £m	Europe (Ex DL) £m	Asia £m	Total £m
Policy Loans	49	44	255	1,104	23	1,475
Loans and Advances to Banks	3,697	1,630	–	–	–	5,327
Mortgages	1,157	725	–	4	–	1,886
Other Loans	–	–	–	14	–	14
Total	4,903	2,399	255	1,122	23	8,702

Shareholder Assets

	UK £m	Delta Lloyd £m	North America £m	Europe (Ex DL) £m	Asia £m	Total £m
Policy Loans	–	388	235	15	13	651
Loans and Advances to Banks ¹	875	213	–	–	–	1,088
Mortgages	15,037	10,427	1,566	1	15	27,046
Other Loans	38	2,830	74	4	5	2,951
Total	15,950	13,858	1,875	20	33	31,736

NOTE:

1 Shareholder Assets Loans and Advances to Banks comprises of:

- £875m in the UK relating to cash collateral held on stock lending activity. This is off set by a corresponding Collateral Payment Obligation reported under "Other Financial Liabilities"
- £213m in the Netherlands relating to loans and advances to a range of banks globally

Mortgage loans

Of the group's total loan portfolio (including Policyholder, Participating Fund and Shareholder assets), 72% is invested in mortgage loans. Market developments over the past 2 years have led to an increased focus on this asset class. The group's mortgage loan portfolio spans several business units, primarily UK, USA and Delta Lloyd, and across various sectors, including residential loans, commercial loans and government supported healthcare loans.

Aviva shareholders are exposed predominantly to mortgage loans under Aviva's shareholder balance sheet. These exposures are complex with several levels of protection for the shareholder. This section focuses on explaining the residual shareholder risk within these exposures.

Mortgage Loans – Shareholder Assets

	UK £m	Delta Lloyd £m	North America £m	Europe (Ex DL) £m	Asia £m	Total £m
Total securitised mortgage loans	1,861	6,045	–	–	–	7,906
Non-securitised mortgage loans – residential	–	4,361	–	1	–	4,362
Non-securitised mortgage loans – equity release	1,409	–	–	–	–	1,409
Non-securitised mortgage loans – commercial	9,112	21	1,566	–	15	10,714
Non-securitised mortgage loans – healthcare	2,655	–	–	–	–	2,655
Total non-securitised mortgage loans	13,176	4,382	1,566	1	15	19,140
Total mortgage loans	15,037	10,427	1,566	1	15	27,046

Securitised mortgage loans comprise 29% of total Shareholder mortgage loan assets. They are secured through non-recourse borrowings in our UK Life and Dutch businesses, and comprise primarily of residential assets, including equity release in the UK.

Shareholder exposure to non-securitised mortgage loans is predominantly to commercial, rather than residential, mortgages. These are typically held to back annuity liabilities. Historical data has shown the portfolio to be of very high quality, with minimal realised losses incurred on the large UK portfolio in the last 15 years. With the economic climate deteriorating significantly over the last year, the level of specific bad debt provision has risen modestly and is expected to continue to rise, albeit within risk appetite.

B5 – Analysis of asset quality continued

5.4. Loans continued

In addition to commercial mortgages of £10,714 million (predominantly held in the UK and US), Aviva also holds £2,655 million of mortgage loans made to healthcare related businesses, which receive significant support from the National Health Service (“NHS”).

Of a total of £27,046 million of shareholder asset gross mortgage loan exposure (including securitised), a combined 99% is based within the UK, Delta Lloyd and USA business units. The analysis following therefore focuses on these three business units only.

Securitised Mortgage Loans (UK, Delta Lloyd, Shareholder assets only)

Of a total of £7,906 million of securitised residential mortgages, approximately £1 billion of securities are still held by Aviva. The remaining securities have been sold to third parties, and therefore present no credit risk to Aviva.

Securitised residential mortgages held are predominantly issued through vehicles in the Netherlands and in the UK.

Non-securitised Mortgage Loans (Shareholder assets only)

UK Commercial

Gross Exposures by Loan to Value and Arrears (£m)

	Loan to Value										
	>120%	115–120%	110–115%	105–110%	100–105%	95–100%	90–95%	80–90%	70–80%	<70%	Total
Neither past due nor impaired	900	701	700	1,765	1,214	1,012	405	729	638	402	8,466
0 – 3 months	6	–	1	–	–	–	–	–	–	2	9
3 – 6 months	–	636	–	1	–	–	–	–	–	–	637
6 – 12 months	–	–	–	–	–	–	–	–	–	–	–
> 12 months	–	–	–	–	–	–	–	–	–	–	–
Total	906	1,337	701	1,766	1,214	1,012	405	729	638	404	9,112

Gross Exposures by Loan to Value and Loan Interest Cover Bands (£m)

	Loan to Value										
	>120%	115–120%	110–115%	105–110%	100–105%	95–100%	90–95%	80–90%	70–80%	<70%	Total
Loan Interest Cover Bands											
<1.0x	3	–	–	–	–	1	–	–	–	2	6
1.0x – 1.1x	624	442	310	829	471	90	4	26	7	69	2,872
1.1x – 1.2x	169	520	97	216	115	130	75	2	2	9	1,335
1.2x – 1.3x	25	332	155	289	187	43	13	23	9	11	1,087
1.3x – 1.4x	75	33	69	339	218	617	15	38	60	16	1,480
>1.4x	10	10	70	93	223	131	298	640	560	297	2,332
Total	906	1,337	701	1,766	1,214	1,012	405	729	638	404	9,112

Gross Exposures by Loan to Value and Sector (£m)

	Loan to Value										
	>120%	115–120%	110–115%	105–110%	100–105%	95–100%	90–95%	80–90%	70–80%	<70%	Total
Retail	347	690	354	833	722	758	213	166	163	160	4,406
Offices	194	370	134	335	231	137	123	444	316	171	2,455
Industrial	200	186	150	269	97	21	33	48	87	51	1,142
Leisure	125	78	37	186	35	63	28	20	55	8	635
Other	40	13	26	143	129	33	8	51	17	14	474
Total	906	1,337	701	1,766	1,214	1,012	405	729	638	404	9,112

Of the £5,924 million of loans with LTV above 100%, the amount of exposure uncovered by the underlying security is £700 million.

Of the £9,112 million of UK Commercial loans, £8,465 million are held by the Norwich Union UK Life business to back annuity liabilities, and stated above on a fair value basis. The remaining £647 million of loans are held by Norwich Union UK General Insurance business and stated on an amortised cost basis. The loan exposures for the Norwich Union 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. These consider all the future possible cash flow scenarios for the mortgages, weighting them by their probabilities, and such cash flows are discounted at a risk free rate. For the Norwich Union UK General Insurance business, mortgages are held at amortised cost, and

Appendix B – Analysis of assets continued**B5 – Analysis of asset quality continued****5.4. Loans continued**

subject to impairment review, using a fair value methodology calibrated to the UK Life approach, adjusted for specific portfolio characteristics.

The UK portfolio is well diversified in terms of property type, location and tenants as well as the spread of loans written over time. The UK portfolio has had an excellent track record with minimal defaults in the last 15 years, although the recent economic climate is expected to result in some losses. The risks in commercial mortgages are addressed through several layers of protection. The mortgages risk profile is primarily driven by the ability of the underlying tenant rental income to cover loan interest and amortisation (where applicable). 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. Loan interest cover (“LIC”) is defined as the annual net rental income (including rental deposits and less ground rent) divided by the annual loan interest service. The table above shows that the relative amount of loans below an LIC of 1.0x is minimal, and the portfolio is fairly evenly distributed across LIC bands. Where there are multiple loans to a single borrower further protection may be achieved through cross-charging and loans to a single borrower may be pooled so that any single loan is also supported by payments on the other pool loans. Additionally, there may be support provided by the borrower of the loan itself and further loss mitigation from the general floating charges 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.

The £637 million exposure that is 3-6 months in arrears relates primarily to Aviva’s exposure to Dawnay Day, which was put into administration in 2008. There is currently only one quarters loan payment in arrears for the Dawnay Day loan, which is gradually being reduced from excess rent and asset sale proceeds. Aviva has finalised a restructuring of this loan with negligible shareholder loss. The amount of loans in arrears, excluding the £637 million that is 3-6 months in arrears, is negligible compared to the total portfolio size.

In 2008 Aviva made specific provisions of £29 million in relation to mortgages in arrears, and also an additional provision equivalent to approximately £250 million for the Norwich Union UK Life business and £26 million for the Norwich Union UK General Insurance business. This is based on an additional annual charge of 120bps over the next three years (in addition to the 50bps allowance already held) and factors the combination of a further 20% fall in property values and an increase in tenant defaults, to the levels experienced during the previous financial crisis in the 1990s. Such provisions have been estimated based on experience during the financial period and our current view on future market falls and tenant defaults.

UK Healthcare

Of the total non-securitised mortgage loans of £13,176 million, £2,655 million relate to healthcare businesses and are secured against General Practitioner premises or other health related premises leased to NHS trusts or Primary Care Trusts. For all such loans, Government support is provided through 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 105%, 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 particularly low risk and uncorrelated with the strength of the UK or global economy.

UK Residential

The UK Non-securitised residential mortgage portfolio has a total current value of £1,409 million. These mortgages are all in the form of equity release, whereby elderly homeowners that usually own a fully paid up property will mortgage it to release cash equity. Due to the low relative levels of equity released in each property, they all currently have LTV of below 70%, and the average LTV across the portfolio is approximately 30-35%. We therefore consider these mortgages to be low risk.

Delta Lloyd Commercial

Delta Lloyd currently holds a total of £623 million of commercial mortgages. However, of these, shareholders’ are exposed to only £20 million. The remaining assets are held in the Policyholder and Participating Funds of Delta Lloyd’s German subsidiaries.

B5 – Analysis of asset quality continued

5.4. Loans continued

Delta Lloyd Residential

	Loan to Value										Total £m
	>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	
Exposures by mortgage type											
Government guaranteed residential	252	87	54	44	45	38	30	50	37	150	787
Non-government guaranteed residential	235	268	189	316	257	512	388	406	431	572	3,574
Exposures by interest payment arrears											
Neither past due nor impaired	472	330	232	340	276	508	381	433	433	674	4,079
0 – 3 months	15	23	10	17	20	35	30	19	28	40	237
3 – 6 months	–	–	1	1	–	1	3	1	7	7	21
6 – 12 months	–	1	–	–	6	2	2	2	–	1	14
> 12 months	–	1	–	2	–	4	2	1	–	–	10
Total	487	355	243	360	302	550	418	456	468	722	4,361

The total exposure to non-securitised residential loans in the Netherlands is £4,361 million. However, of these, £787 million are Government guaranteed, and so present minimal risk to Aviva shareholders. Of the £4,361 million of residential loans, £3,645 million are measured on a fair value basis, and the remaining on amortised cost basis.

The Government guarantees were introduced in the Netherlands to encourage homeownership, and apply to home mortgages of up to €265,000. 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 purpose, thereby helping to reduce arrears or default.

The total amount of loans for which interest payments are past due is £282 million. However, the actual amount of missed payments is £5 million. Delta Lloyd has currently not made any additional provisions for these loans as it does not consider the amount of potential loss to be significant.

U.S. Commercial

Gross Exposures by Loan to Value and Arrears

	Loan to Value										Total £m
	>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	
Neither past due nor impaired	8	–	1	2	17	35	50	308	290	855	1,566
0 – 3 months	–	–	–	–	–	–	–	–	–	–	–
3 – 6 months	–	–	–	–	–	–	–	–	–	–	–
6 – 12 months	–	–	–	–	–	–	–	–	–	–	–
> 12 months	–	–	–	–	–	–	–	–	–	–	–
Total	8	–	1	2	17	35	50	308	290	855	1,566

Appendix B – Analysis of assets continued**B5 – Analysis of asset quality continued****5.4. Loans continued**

Gross Exposures by Loan to Value and Loan Interest Cover Bands

	Loan to Value										Total £m
	>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	
Loan Interest Cover Bands											
<1.0x	5	–	–	–	–	–	–	–	–	2	7
1.0x – 1.1x	–	–	–	–	–	–	–	–	–	–	–
1.1x – 1.2x	–	–	–	–	–	–	–	–	–	–	–
1.2x – 1.3x	3	–	1	–	–	–	–	–	–	–	4
1.3x – 1.4x	–	–	–	–	4	6	–	–	–	8	18
>1.4x	–	–	–	2	13	29	50	308	290	845	1,537
Total	8	–	1	2	17	35	50	308	290	855	1,566

Aviva USA currently holds only commercial mortgages under Shareholder Assets. Of a total of £1,566 million of commercial mortgages, 55% have LTV of below 70%, and 93% have LTV of below 90%. The high quality of Aviva USA's mortgage portfolio is reflective of:

- low underwriting LTVs (shall not exceed 80% at the time of issuance);
- A highly diversified portfolio across USA, with strong volumes in many states with more stable economies such as Washington, Texas and Minnesota; and
- The decline in the US real estate market has been most pronounced for residential, and commercial properties have not yet seen as dramatic a fall.

As at 31 December 2008, there had been no loans that were past due or impaired. Aviva USA holds mortgage loans at an amortised cost value, and conducts a regular impairment review process. As at 31 December 2008, there were no provisions applied to the Aviva USA's commercial mortgage portfolio.

5.5. Financial investments

Financial investments are an integral element of an insurance business.

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 boost 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 significant quantities of equities. Many of these 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.

The group's credit risk policy restricts the exposure to individual counterparties across all types of risk.

The fair values of investments are based on quoted bid prices or amounts derived from cash flow models. Fair values for unlisted equity securities are estimated using applicable price/earnings or price/cash flow ratios refined to reflect the specific circumstances of the issuer. Securities, for which fair values cannot be measured reliably, are recognised at cost less impairment.

Where it is determined that the market in which a price is quoted has become inactive, the quoted price is assessed against either independent valuations or internally modelled valuations which take into account other market observable information. Where the quoted price differs sufficiently from these reassessed prices, the fair value recognised on the balance sheet is based on this adjusted valuation. However, if these reassessed prices confirm that the quoted price remains appropriate, then the fair value recognised on the balance sheet continues to be the quoted price.

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. In general, the FV category is used as, in most cases, the group's investment or risk management strategy is to manage its financial investments on a fair value basis. The AFS category is used where the relevant long-term business liability (including shareholders funds) is passively managed.

B5 – Analysis of asset quality continued

5.5. Financial investments continued

Investments classified as FV and AFS are subsequently carried at fair value. Changes in the fair value of FV investments are included in the income statement in the period in which they arise. Changes in the fair value of securities classified as AFS, except for impairment losses, are recorded in a separate investment valuation reserve in equity. Where investments classified as AFS are sold or impaired, the accumulated fair value adjustments are transferred out of the investment valuation reserve to the income statement.

To test for impairment, the group reviews the carrying value of its investments on a regular basis. If the carrying value of an investment is greater than the recoverable amount, the carrying value is reduced through a charge to the income statement in the period of impairment.

For listed investments classified as AFS, the group performs an objective review of the current financial position and prospects of the issuer on a regular basis, to identify whether any impairment provision is required. This review takes into account the likelihood of the current market price recovering to former levels. For unlisted investments classified as AFS, the group considers the current financial position of the issuer and the future prospects in identifying the requirement for an impairment provision. For both listed and unlisted AFS securities identified as being impaired, the cumulative unrealised net loss previously recognised within the AFS reserve is transferred to realised losses for the year.

Cost, unrealised gains and fair value

The following is a summary of the cost/amortised cost, gross unrealised gains and losses and fair value of financial investments:

	2008			
	Cost/ amortised cost £m	Unrealised gains £m	Impairment and unrealised losses £m	Fair value £m
Debt securities	156,097	7,634	(13,140)	150,591
Equity securities	54,518	2,685	(13,792)	43,411
Other investments	34,692	4,243	(2,819)	36,116
	245,307	14,562	(29,751)	230,118
	2007			
	Cost/ amortised cost £m	Unrealised gains £m	Impairment and Unrealised losses £m	Fair value Restated £m
Debt securities	121,973	1,970	(2,551)	121,392
Equity securities	50,635	9,052	(622)	59,065
Other investments	31,746	4,964	(441)	36,269
	204,354	15,986	(3,614)	216,726

Only 1.2% of financial investments (less than 1% of total assets recorded at fair value) are fair valued using models with significant unobservable market parameters. 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. Whilst such valuations are sensitive to estimates it is believed that changing one or more of the assumptions for reasonably possible alternative assumptions would not change the fair value significantly.

The majority of the debt instruments held by our North American businesses are valued by independent pricing firms in accordance with usual market practice. Given the reductions in liquidity in debt markets over 2008, and in accordance with market consensus in North America, we believe that the fair value valuation approach adopted for these securities is best characterised as Level 2. This classification accounts for the majority of the change in fair value hierarchy over 2008.

Appendix B – Analysis of assets continued

B5 – Analysis of asset quality continued

5.5.1. Debt instruments

Fair Value measurement

	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m	
Debt securities – Total				
UK government	18,867	4	–	18,871
Non-UK government	34,210	6,344	228	40,782
Corporate bonds – Public utilities	3,389	2,056	88	5,533
Corporate convertible bonds	339	516	–	855
Other Corporate bonds	44,269	26,038	898	71,205
Other	6,869	5,840	636	13,345
Total	107,943	40,798	1,850	150,591
Total %	71.7%	27.1%	1.2%	
FY 2007	101,342	18,710	1,260	121,312
FY 2007 %	83.5%	15.4%	1.1%	

	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m	
Debt securities – Policyholder assets				
UK government	5,065	4	–	5,069
Non-UK government	3,009	919	–	3,928
Corporate bonds – Public Utilities	39	2	–	41
Corporate convertible bonds	3	–	–	3
Other Corporate bonds	7,414	1,714	27	9,155
Other	1,264	122	6	1,392
Total	16,794	2,761	33	19,588
Total %	85.7%	14.1%	0.2%	
FY 2007	13,808	3,540	12	17,360
FY 2007 %	79.5%	20.4%	0.1%	

	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m	
Debt securities – Participating fund assets				
UK government	12,125	–	–	12,125
Non-UK government	19,172	2,972	101	22,245
Corporate bonds – Public Utilities	2,181	839	88	3,108
Corporate convertible bonds	331	178	–	509
Other Corporate bonds	28,598	9,276	581	38,455
Other	2,608	303	213	3,124
Total	65,015	13,568	983	79,566
Total %	81.7%	17.1%	1.2%	
FY 2007	51,866	8,486	1,197	61,549
FY 2007 %	84.3%	13.8%	1.9%	

B5 – Analysis of asset quality continued

5.5. Financial investments continued

5.5.1. Debt instruments continued

	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m	
Debt securities – Shareholder assets				
UK government	1,677	–	–	1,677
Non-UK government	12,029	2,453	127	14,609
Corporate bonds – Public Utilities	1,169	1,215	–	2,384
Corporate convertible bonds	5	338	–	343
Other Corporate bonds	8,257	15,048	290	23,595
Other	2,997	5,415	417	8,829
Total	26,134	24,469	834	51,437
Total %	50.8%	47.6%	1.6%	
FY 2007	35,668	6,684	51	42,403
FY 2007 %	84.1%	15.8%	0.1%	

51% of shareholder exposure to debt securities is based on quoted prices in an active market. The observed reduction in liquidity during 2008 due to the ongoing uncertainty in the international financial markets has resulted in a higher proportion of debt securities that is based on quoted prices in markets that are not active or where the prices are less current, compared with one year ago.

Ratings / Products

The overall quality of the book is strong and has been maintained, despite the increase in downgrade activity by the major rating agencies during 2008, by taking opportunities to move into higher quality assets. 40% of total debt security holdings are in government bonds. A further 52% of holdings are in corporate bonds with an average rating between AA and A.

'Wrapped credit' is credit exposure that has been insured with monoline insurers to achieve a better credit rating. The monoline insurers suffered downgrades during 2008 and this is reflected in the analysis that follows. The exposure is diversified across several monolines and the underlying bonds are diversified across many different counterparties. In general, we are a long term holder of this debt, although investments continue to be reviewed with reference to the underlying quality and prospects.

The majority of the Residential Mortgage-Backed Securities (RMBS) are US investments and almost 70% of the total exposure is backed by one of the US Government Sponsored Entities (GSEs) including Fannie Mae and Freddie Mac which, under the conservatorship arrangements implemented in September 2008, are now backed by the full faith and credit of the US Government. The majority of the remaining US RMBS is backed by fixed rate loans originated in 2005 or before.

The group has extremely limited exposure to 'Sub-prime' debt securities and also limited exposure to CDOs and CLOs. Investments in structured assets, excluding agency RMBS which is backed by GSEs, represent less than 6% of total debt securities.

The vast majority of the corporate bonds that are not rated represents private placements and corporate bond investments made via unit trusts, where a 'look-through' to the underlying securities has been performed. The private placements are US investments which are not rated by the major rating agencies but which are rated an average equivalent of A- by the Securities Valuation Office of the National Association of Insurance Commissioners (NAIC), a US national regulatory agency.

Excluding the private placements that are rated an average A- by the NAIC, the exposure that is not rated by a major rating agency reduces to less than 3% of total debt securities.

Appendix B – Analysis of assets continued

B5 – Analysis of asset quality continued

5.5. Financial investments continued

5.5.1. Debt instruments continued

	Ratings						Total £m
	AAA £m	AA £m	A £m	BBB £m	Less than BBB £m	Non-rated £m	
Debt securities – Total							
Government							
UK government	18,776	19	59	–	–	–	18,854
UK local authorities	–	17	–	–	–	–	17
Non-UK government	21,660	8,114	9,147	401	274	1,186	40,782
	40,436	8,150	9,206	401	274	1,186	59,653
Corporate							
Public Utilities	2,092	432	1,996	890	84	39	5,533
Convertibles and bonds with warrants	12	65	419	209	78	71	854
Other corporate bonds	14,813	14,596	26,189	10,829	1,727	3,052	71,206
	16,917	15,093	28,604	11,928	1,889	3,162	77,593
Certificates of deposits	363	519	404	3	–	10	1,299
Structured							
RMBS non-agency sub-prime	22	12	1	3	1	–	39
RMBS non-agency ALT A	190	–	–	–	13	5	208
RMBS non-agency prime	1,150	53	31	24	–	140	1,398
RMBS agency	3,059	–	–	–	–	–	3,059
	4,421	65	32	27	14	145	4,704
CMBS	1,427	148	61	31	8	–	1,675
ABS	1,025	202	323	240	3	307	2,100
CDO (including CLO)	120	27	56	11	3	53	270
ABCP	1,009	–	–	–	–	–	1,009
ABFRN	17	1	–	14	–	–	32
	3,598	378	440	296	14	360	5,086
Wrapped credit	231	156	164	67	–	–	618
Other	247	54	450	28	6	853	1,638
Total	66,213	24,415	39,300	12,750	2,197	5,716	150,591
Total %	44.0%	16.2%	26.1%	8.4%	1.5%	3.8%	
FY 2007	54,699	23,297	27,110	9,831	1,269	5,106	121,312
FY 2007 %	45.1%	19.2%	22.3%	8.1%	1.0%	4.2%	

B5 – Analysis of asset quality continued

5.5 Financial investments continued

5.5.1. Debt instruments continued

	Ratings						Total £m
	AAA £m	AA £m	A £m	BBB £m	Less than BBB £m	Non-rated £m	
Debt securities – Policyholders assets							
Government							
UK government	5,050	19	–	–	–	–	5,069
UK local authorities	–	–	–	–	–	–	–
Non-UK government	1,412	887	1,286	99	7	237	3,928
	6,462	906	1,286	99	7	237	8,997
Corporate							
Public Utilities	8	7	18	7	1	1	42
Convertibles and bonds with warrants	–	–	–	2	1	–	3
Other corporate bonds	990	2,114	4,536	768	14	732	9,154
	998	2,121	4,554	777	16	733	9,199
Certificates of deposits	106	148	7	–	–	–	261
Structured							
RMBS non-agency sub-prime	9	1	–	–	–	–	10
RMBS non-agency ALT A	–	–	–	–	–	–	–
RMBS non-agency prime	274	19	3	1	–	3	300
RMBS agency	20	–	–	–	–	–	20
	303	20	3	1	–	3	330
CMBS	25	22	7	–	–	–	54
ABS	33	4	28	10	–	7	82
CDO (including CLO)	5	3	1	–	–	1	10
ABCP	482	–	–	–	–	–	482
ABFRN	12	1	–	11	–	–	24
	557	30	36	21	–	8	652
Wrapped credit	6	10	10	–	–	–	26
Other	102	–	2	6	3	10	123
Total	8,534	3,235	5,898	904	26	991	19,588
Total %	43.6%	16.5%	30.1%	4.6%	0.1%	5.1%	
FY 2007	7,188	3,279	5,462	540	74	817	17,360
FY 2007 %	41.4%	18.9%	31.5%	3.1%	0.4%	4.7%	

Appendix B – Analysis of assets continued

B5 – Analysis of asset quality continued

5.5 Financial investments continued

5.5.1. Debt instruments continued

	Ratings						Total £m
	AAA £m	AA £m	A £m	BBB £m	Less than BBB £m	Non-rated £m	
Debt securities – Participating fund assets							
Government							
UK government	12,068	–	57	–	–	–	12,125
UK local authorities	–	–	–	–	–	–	–
Non-UK government	12,504	3,910	5,311	254	199	67	22,245
	24,572	3,910	5,368	254	199	67	34,370
Corporate							
Public Utilities	1,967	284	677	168	9	2	3,107
Convertibles and bonds with warrants	12	43	285	74	72	24	510
Other corporate bonds	10,808	9,012	12,905	4,667	706	357	38,455
	12,787	9,339	13,867	4,909	787	383	42,072
Certificates of deposits	70	337	390	–	–	–	797
Structured							
RMBS non-agency sub-prime	7	11	–	–	–	–	18
RMBS non-agency ALT A	5	–	–	–	–	–	5
RMBS non-agency prime	404	15	5	–	–	–	424
RMBS agency	133	–	–	–	–	–	133
	549	26	5	–	–	–	580
CMBS	126	55	17	–	–	–	198
ABS	172	55	113	112	–	–	452
CDO (including CLO)	4	–	3	–	–	–	7
ABCP	286	–	–	–	–	–	286
ABFRN	3	–	–	2	–	–	5
	591	110	133	114	–	–	948
Wrapped credit	39	37	23	32	–	–	131
Other	50	7	8	1	–	602	668
Total	38,658	13,766	19,794	5,310	986	1,052	79,566
Total %	48.6%	17.3%	24.9%	6.7%	1.2%	1.3%	
Certificates of deposits	30,939	12,289	13,032	3,968	227	1,094	61,549
Less: assets not recognised as debt securities	50.3%	20.0%	21.2%	6.4%	0.4%	1.8%	

B5 – Analysis of asset quality continued

5.5 Financial investments continued

5.5.1. Debt instruments continued

	Ratings						Total £m
	AAA £m	AA £m	A £m	BBB £m	Less than BBB £m	Non-rated £m	
Debt securities – Shareholder assets							
Government							
UK government	1,658	–	2	–	–	–	1,660
UK local authorities	–	17	–	–	–	–	17
Non-UK government	7,744	3,317	2,550	48	68	882	14,609
	9,402	3,334	2,552	48	68	882	16,286
Corporate							
Public Utilities	117	141	1,301	715	74	36	2,384
Convertibles and bonds with warrants	–	22	134	133	5	47	341
Other corporate bonds	3,015	3,470	8,748	5,394	1,007	1,963	23,597
	3,132	3,633	10,183	6,242	1,086	2,046	26,322
Certificates of Deposits	187	34	7	3	–	10	241
Structured							
RMBS non-agency sub-prime	6	–	1	3	1	–	11
RMBS non-agency ALT A	185	–	–	–	13	5	203
RMBS non-agency prime	472	19	23	23	–	137	674
RMBS agency	2,906	–	–	–	–	–	2,906
	3,569	19	24	26	14	142	3,794
CMBS	1,276	71	37	31	8	–	1,423
ABS	820	143	182	118	3	300	1,566
CDO (including CLO)	111	24	52	11	3	52	253
ABCP	241	–	–	–	–	–	241
ABFRN	2	–	–	1	–	–	3
	2,450	238	271	161	14	352	3,486
Wrapped credit	186	109	131	35	–	–	461
Other	95	47	440	21	3	241	847
Total	19,021	7,414	13,608	6,536	1,185	3,673	51,437
Total %	37.0%	14.4%	26.5%	12.7%	2.3%	7.1%	
FY 2007	16,572	7,729	8,616	5,323	968	3,195	42,403
FY 2007 %	39.1%	18.2%	20.3%	12.6%	2.3%	7.5%	

Appendix B – Analysis of assets continued

B5 – Analysis of asset quality continued

5.5. Financial investments continued

5.5.2 Equity securities

47% of shareholder exposure to equity securities is based on quoted prices in an active market. Similar to the fixed income markets, reduced liquidity in equity markets during 2008 has resulted in a higher proportion of equities that is based on quoted prices in markets that are not active or where the prices are less current, compared with one year ago. Also subject to level 2 valuation are unlisted securities.

Fair Value measurement

	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m	
Equity securities – Total				
Public Utilities	3,917	17	–	3,934
Banks, trusts and insurance companies	6,224	1,038	596	7,858
Industrial miscellaneous and all other	26,131	4,716	332	31,179
Non-redeemable preferred shares	336	100	4	440
Total	36,608	5,871	932	43,411
Total %	84.3%	13.5%	2.2%	
FY 2007	53,888	4,309	632	58,829
FY 2007 %	91.6%	7.3%	1.1%	

	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m	
Equity securities – Policyholder assets				
Public Utilities	1,829	–	–	1,829
Banks, trusts and insurance companies	3,397	597	–	3,994
Industrial miscellaneous and all other	14,911	3,008	–	17,919
Non-redeemable preferred shares	98	–	–	98
Total	20,235	3,605	–	23,840
Total %	91.4%	15.1%	0.0%	
FY 2007	27,711	2,607	–	30,318
FY 2007 %	91.4%	8.6%	0.0%	

	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m	
Equity securities – Participating fund assets				
Public Utilities	2,062	3	–	2,065
Banks, trusts and insurance companies	1,915	13	9	1,937
Industrial miscellaneous and all other	9,522	119	–	9,641
Non-redeemable preferred shares	174	–	–	174
Total	13,673	135	9	13,817
Total %	98.9%	1.0%	0.1%	
FY 2007	22,377	401	48	22,826
FY 2007 %	98.0%	1.8%	0.2%	

B5 – Analysis of asset quality continued

5.5. Financial investments continued

5.5.2 Equity securities continued

	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m	
Equity securities – Shareholder assets				
Public Utilities	26	14	–	40
Banks, trusts and insurance companies	912	428	587	1,927
Industrial miscellaneous and all other	1,698	1,589	332	3,619
Non-redeemable preferred shares	64	100	4	168
Total	2,700	2,131	923	5,754
Total %	46.9%	37.1%	16.0%	
FY 2007	3,800	1,301	584	5,685
FY 2007 %	66.8%	22.9%	10.3%	

Shareholder investment includes a strategic holding in Unicredito of £339 million and holdings in other Italian banks of £348 million, the latter being unquoted and subject to level 3 valuation. These equities have certain guarantees that provide protection to their value.

5.5.3. Other investments

Fair Value measurement

	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m	
Other investments – Total				
Unit trusts and other investment vehicles	23,515	5,470	5	28,990
Derivative financial instruments	359	2,532	20	2,911
Deposits and credit institutions	40	510	–	550
Minority holdings in property management undertakings	–	969	–	969
Other	348	2,308	40	2,696
Total	24,262	11,789	65	36,116
Total %	67.2%	32.6%	0.2%	
FY 2007	26,806	9,144	319	36,269
FY 2007 %	73.9%	25.2%	0.9%	

	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m	
Other investments – Policyholder assets				
Unit trusts and other investment vehicles	20,222	2,606	–	22,828
Derivative financial instruments	9	18	–	27
Deposits and credit institutions	–	–	–	–
Minority holdings in property management undertakings	–	148	–	148
Other	322	202	–	524
Total	20,553	2,974	–	23,527
Total %	87.4%	12.6%	0.0%	
FY 2007	18,637	3,487	16	22,140
FY 2007 %	84.2%	15.7%	0.1%	

Appendix B – Analysis of assets continued

B5 – Analysis of asset quality continued

5.5. Financial investments continued

5.5.3 Other investments continued

	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m	
Other investments – Participating fund				
Unit trusts and other investment vehicles	2,817	2,546	–	5,363
Derivative financial instruments	256	961	–	1,217
Deposits and credit institutions	8	–	–	8
Minority holdings in property management undertakings	–	759	–	759
Other	2	2,058	36	2,096
Total	3,083	6,324	36	9,443
Total %	32.6%	67.0%	0.4%	
FY 2007	7,455	3,654	253	11,362
FY 2007 %	65.6%	32.2%	2.2%	

	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m	
Other investments – Shareholder assets				
Unit trusts and other investment vehicles	476	318	5	799
Derivative financial instruments	94	1,553	20	1,667
Deposits and credit institutions	32	510	–	542
Minority holdings in property management undertakings	–	62	–	62
Other	24	48	4	76
Total	626	2,491	29	3,146
Total %	19.9%	79.2%	0.9%	
FY 2007	714	2,003	50	2,767
FY 2007 %	25.8%	72.4%	1.8%	

Other Investments primarily represents unit trusts and other investment vehicles. Almost all other investments are fair valued with reference to quoted prices in an active market or using market observable information. 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 in the UK and overseas, with a smaller portion being invested in Debt Securities.

Against the backdrop of volatile investment markets the value of derivative financial instruments has appreciated strongly during the year, reflecting gains on positions that include equity hedges, which are in place specifically to mitigate the impact of adverse market movements on the balance sheet.

5.5.4 Summary of investments

A summary of investments according to fair value hierarchy is given below:

	Fair value hierarchy				Sub-total fair value £m	Less: Assets of operations classified as held for sale £m	Total £m
	Level 1 £m	Level 2 £m	Level 3 £m	Amortised cost £m			
Investment properties	–	14,426	–	14,426	–	–	14,426
Loans	–	21,468	–	21,468	20,769	–	42,237
Debt securities	107,943	40,798	1,850	150,591	–	(336)	150,255
Equity securities	36,608	5,871	932	43,411	–	(60)	43,351
Other investments	24,262	11,789	65	36,116	–	–	36,116
Total	168,813	94,352	2,847	266,012	20,769	(396)	286,385

B5 – Analysis of asset quality continued

5.5. Financial investments continued

5.5.4 Analysis of investments continued

The tables below show movements in the assets measured at fair value based on valuation techniques for which any significant input is not based on observable market data (Level 3 only). Total funds are then further analysed between policyholder funds, participating funds and shareholder funds.

	Total £m
Total investments – Total	
Balance as at 1 January 2008	2,211
Total gains or losses	
Recognised in the income statement	(97)
Recognised in the statement of recognised gains and losses	–
Purchases, issues, disposals and settlements (net)	270
Transfers into and/or (out) of Level 3	(209)
Currency translation	672
Balance as at 31 December 2008	2,847

	Total £m
Total investments – Policyholder assets	
Balance as at 1 January 2008	28
Total gains or losses	
Recognised in the income statement	–
Recognised in the statement of recognised gains and losses	–
Purchases, issues, disposals and settlements (net)	13
Transfers into and/or (out) of Level 3	(8)
Currency translation	6
Balance as at 31 December 2008	39

	Total £m
Total investments – Participating fund assets	
Balance as at 1 January 2008	1,498
Total gains or losses	
Recognised in the income statement	(18)
Recognised in the statement of recognised gains and losses	–
Purchases, issues, disposals and settlements (net)	166
Transfers into and/or (out) of Level 3	(858)
Currency translation	240
Balance as at 31 December 2008	1,028

Appendix B – Analysis of assets continued

B5 – Analysis of asset quality continued

5.5. Financial investments continued

5.5.4 Analysis of investments continued

	Total £m
Total investments – Shareholder assets	
Balance as at 1 January 2008	685
Total gains or losses	
Recognised in the income statement	(79)
Recognised in the statement of recognised gains and losses	–
Purchases, issues, disposals and settlements (net)	91
Transfers into and/or (out) of Level 3	657
Currency translation	426
Balance as at 31 December 2008	1,780

5.6. 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.

Arrears

	Financial assets that are past due but not impaired					Financial assets that have been impaired £m	Total £m
	Neither past due nor impaired £m	0 – 3 months £m	3 – 6 months £m	6 month – 1 year £m	Greater than 1 year £m		
Policyholders assets	1,704	–	–	–	–	–	1,704
Participating Fund assets	803	–	–	–	–	–	803
Shareholder assets	5,360	25	–	–	–	2	5,387
Total reinsurance assets	7,867	25	–	–	–	2	7,894
Total %	99.7%	0.3%	0.0%	0.0%	0.0%	0.0%	
FY 2007	8,052	–	–	–	–	2	8,054
FY 2007 %	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Ratings

	Ratings						Total £m
	AAA £m	AA £m	A £m	BBB £m	Less than BBB £m	Non-rated £m	
Policyholders assets	–	1,254	182	–	–	268	1,704
Participating Fund assets	–	425	2	–	1	375	803
Shareholder assets	1,018	3,847	455	32	15	20	5,387
Total reinsurance assets	1,018	5,526	639	32	16	663	7,894
Total %	12.9%	70.0%	8.1%	0.4%	0.2%	8.4%	
FY 2007	1,184	5,460	596	32	97	685	8,054
FY 2007 %	14.7%	67.8%	7.4%	0.4%	1.2%	8.5%	

B5 – Analysis of asset quality continued

5.7. Receivables and other financial assets

	Financial assets that are past due but not impaired						Total £m
	Neither past due nor impaired £m	0 – 3 months £m	3 – 6 months £m	6 month – 1 year £m	Greater than 1 year £m	Financial assets that have been impaired £m	
Policyholder assets	453	17	–	–	–	–	470
Participating fund assets	2,033	4	1	–	–	–	2,038
Shareholder assets	6,796	539	304	35	6	14	7,694
Total Receivables and other financial assets	9,282	560	305	35	6	14	10,202
Total %	91.0%	5.5%	3.0%	0.3%	0.1%	0.1%	
FY 2007	8,901	200	21	13	2	46	9,183
FY 2007 %	96.9%	2.3%	0.2%	0.1%	0.0%	0.5%	

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 Committee, and within the framework of the Group Risk Credit 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.

5.8. 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.

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 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.

Appendix B – Analysis of assets continued**B6 – 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. The net pension deficit is recognised within Provisions on the group's balance sheet.

Plan Assets include investments in group-managed funds in the consolidated balance sheet of £99 million in the UK scheme, and insurance policies of £150 million and £1,402 million in the UK and Dutch schemes respectively. Where the investment and 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.

The total strict IAS 19 assets (i.e. excluding the non-transferable insurance policies) of the schemes are analysed as follows:

	United Kingdom £m	Netherlands £m	Canada £m	Ireland £m	Total £m
Equities	3,002	–	93	182	3,277
Bonds	3,395	–	86	172	3,653
Property	405	–	–	26	431
Other	485	7	3	80	575
Total fair value of assets	7,287	7	182	460	7,936

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.

During 2008, there has been a reduction in the proportion of assets invested in equities, thereby mitigating the equity risk. In addition, the trustees have taken measures to partially mitigate inflation and interest rate risks, including entering into inflation and interest rate swaps.

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.

B7 – Available funds

To ensure access to liquidity as and when needed, the group maintains over £2 billion of undrawn committed central borrowing facilities with various highly rated banks. £1 billion of this 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	815
Expiring beyond one year	1,285
	2,100

B8 – 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% increase in interest rates and 10% decline in equity markets). Refer to section A2 for further details.

Appendix C – Operational cost base and cost savings

C1 – Analysis of operational cost base

The Aviva operating cost base is calculated from total IFRS expenses - with all charges relating to claims (excluding claims handling), commissions, provisions and liabilities, financing, amortisation and impairments, and foreign exchange, removed as set out in the table below:

	2008 £m	Restated 2007 £m
Total reported expenses	21,731	38,659
Less:		
Claims, commissions and changes in provisions and liabilities	(12,885)	(32,115)
IFRS adjustments and amortisation	(1,549)	(332)
Finance costs	(1,547)	(1,217)
Operating cost base	5,750	4,995

During 2008, the operating cost base increased by 15% to £5,750 million (2007: £4,995 million). The table and notes below set out and explain the methodology and inherent assumptions used for the calculation of the like-for-like adjustments and different components which have caused the increase in the operating cost base. These adjustments account for the impact of foreign exchange, impact of businesses acquired/disposed of during the year and adjustments to eliminate the impact of one-off restructuring and integration spend from the cost base in both years. After adjustments, the 2008 operating cost base increased by 2.4% to £5,368 million compared with a 2007 like-for-like cost base of £5,242 million.

Movement in operating costs base

	£m
Total operating cost base 2007	4,995
Less: restructuring and integration spend 2007	(153)
Impact of acquisitions and disposals ¹	32
Costs relating to RAC non-insurance ²	33
Foreign exchange	335
2007 like-for-like operating cost base	5,242
Inflation ³	191
Organic growth ⁴	84
Investment in business ⁵	201
Realised cost savings ⁶	(373)
Other ⁷	23
2008 like-for-like operating cost base	5,368
Restructuring and integration spend 2008	382
Total operating cost base 2008	5,750

1 – Impact of acquisitions & disposals – Represents acquisitions in the European Region and Canada offset by the restructure of Turkey Life as a Joint Venture.

2 – Costs relating to RAC non insurance – These represent the costs of windscreens and other materials relating to the Auto Windscreen business that are a cost of sale and therefore excluded from the operating cost base comparison.

3 – Inflation - Notional level of Inflation that would have impacted the operating cost base during the year. This is calculated using the Consumer Price Index for individual countries, applied to operating expenditure i.e. excluding restructuring & integration costs (but including adjustments for acquisitions & disposals). The overall weighted average is calculated at 3.6%

4 – Organic growth - Increase in the cost base implied by the growth of the organisation in revenue terms (GWP used as proxy for the GI businesses; a combination of PVNBP, business volumes and VIF movements excluding investment variances used for the Life businesses). The growth proxies, adjusted for any acquisitions / disposals, are then applied to operating expenditure i.e. excluding restructuring & integration costs (but including adjustments for acquisitions & disposals).

5 – Investment in business – This represents a net investment in the business and is calculated as the difference between the growth in the cost base implied by the organic growth calculation and the actual change that has taken place. In 2008 this includes investment in regional offices as well as other initiatives and projects across the group.

6 – Realised savings from cost initiatives – Cost savings realised in the year, and attributable to specific initiatives (equivalent run-rate savings may be different). This total saving of £373 million (comprising £64 million for Norwich Union Life, £265 million for Norwich Union Insurance and £44 million for Europe) includes £309 million, being the in year impact of the £340 million annualised savings delivered in 2008 (set out in C2), together with £64 million of savings (£25 million in Norwich Union Life, £39 million in Norwich Union Insurance) arising from actions taken as part of previous cost and efficiency reviews commenced prior to October 2007.

7 - Other - Movements in the Operating Cost Base which are specifically identifiable and one-off in nature.

C2 – Cost savings commitments for targets announced since October 2007

This note provides details of the group's published commitments to deliver cost savings, and represents an update on the information provided at full year 2007.

Movement in Cost Savings target (recurring, annualised savings)	Cost Savings targets b/fwd £m	New targets announced in year £m	Less: Cost savings achieved £m	Changes to the phasing of saving £m	Savings over/ (under) delivered £m	Impact of economic changes on targets c/fwd £m	Cost Savings targets c/fwd £m
Savings expected to be achieved in:							
Year ended 31 December 2008	290	11	(340)	22	13	4	–
Year ended 31 December 2009	60	78	–	(11)	20	5	152
Year ended 31 December 2010	–	61	–	(11)	5	–	55
Savings to be achieved	350	150	(340)	–	38	9	207
Savings achieved in prior years:	–						340
Total savings	350						547

Targets brought forward include £200m for Norwich Union Insurance, £100m for Norwich Union Life and £50 million for Europe. The new target announced in the current year reflects £150m for Norwich Union Insurance.

Movement in initial costs to deliver Cost Savings targets (total expenses incurred)	Costs to deliver b/fwd £m	Cost of delivery of new targets in year £m	Less: Costs incurred in year £m	Changes to the phasing of costs £m	Decrease in costs of delivery £m	Impact of economic changes on targets c/fwd £m	Costs to deliver c/fwd £m
Savings expected to be achieved in:							
Year ended 31 December 2008	178	195	(287)	(79)	(6)	7	8
Year ended 31 December 2009	70	85	–	53	–	3	211
Year ended 31 December 2010	–	10	–	26	(3)	–	33
Costs to be incurred	248	290	(287)	–	(9)	10	252
Costs incurred in prior years:	82						369
Total costs	330						621

All £287 million of costs incurred in the year were classified as restructuring costs in the Income Statement.

1. Cost savings initiatives included in this note are supported by detailed operational implementation plans, which identify the activities, timeframe and expected costs of delivering the planned initiatives.
2. Cost Savings targets brought forward represent commitments made in prior years that are due to be delivered in 2008 or future years. Cost Savings targets brought forward and announced in the year were measured at the value of the relevant recurring costs in the year ended 31 December 2007. All cost saving targets carried forward have been restated to the value of the relevant recurring costs in the year ended 31 December 2008. For 2008 this reflects the effect of exchange rates on European targets.
3. Cost savings "achieved" are the annualised, recurring costs eliminated in the year ended 31 December 2008.
4. "Initial costs to deliver Cost Savings targets" are the total one-off, initial costs that will be required to complete and deliver announced cost savings programmes. They are measured at the real value of the initial costs expected to be incurred.

Appendix D – IFRS additional disclosures

D1 – Consolidated income statement

For the year ended 31 December 2008

2008 €m		2008 £m	Restated 2007 £m
Income			
45,258	Gross written premiums	36,206	30,991
(2,301)	Premiums ceded to reinsurers	(1,841)	(1,658)
42,957	Premiums written net of reinsurance	34,365	29,333
346	Net change in provision for unearned premiums	277	(21)
43,303	Net earned premiums	34,642	29,312
2,356	Fee and commission income	1,885	1,760
(20,054)	Net investment (expense)/income	(16,043)	9,689
(1,410)	Share of loss after tax of joint ventures and associates	(1,128)	(304)
9	Profit on the disposal of subsidiaries and associates	7	49
24,204		19,363	40,506
Expenses			
(36,691)	Claims and benefits paid, net of recoveries from reinsurers	(29,353)	(27,121)
4,856	Change in insurance liabilities, net of reinsurance	3,885	(3,508)
13,286	Change in investment contract provisions	10,629	(2,018)
5,603	Change in unallocated divisible surplus	4,482	2,922
(5,514)	Fee and commission expense	(4,411)	(4,244)
(6,770)	Other expenses	(5,416)	(3,473)
(1,934)	Finance costs	(1,547)	(1,217)
(27,164)		(21,731)	(38,659)
(2,960)	(Loss)/profit before tax	(2,368)	1,847
1,335	Tax attributable to policyholders' returns	1,068	(15)
(1,625)	(Loss)/profit before tax attributable to shareholders' profits	(1,300)	1,832
1,854	Tax credit/(expense)	1,483	(349)
(1,335)	Less: tax attributable to policyholders' returns	(1,068)	15
519	Tax attributable to shareholders' profits	415	(334)
(1,106)	(Loss)/profit for the year	(885)	1,498
Attributable to:			
(1,144)	Equity shareholders of Aviva plc	(915)	1,320
38	Minority interests	30	178
(1,106)		(885)	1,498
Earnings per share			
(46.0)c	Basic (pence per share)	(36.8)p	48.9p
(46.0)c	Diluted (pence per share)	(36.8)p	48.5p

D2 – Consolidated statement of recognised income and expense

For the year ended 31 December 2008

2008 €m		2008 £m	Restated 2007 £m
(2,976)	Fair value (losses)/gains on AFS securities, owner-occupied properties and hedging instruments	(2,381)	172
(158)	Fair value gains transferred to profit	(126)	(391)
1,036	Impairment losses on revalued assets	830	–
(116)	Share of fair value changes in joint ventures and associates taken to equity	(93)	9
(1,161)	Actuarial (losses)/gains on pension schemes	(929)	648
98	Actuarial losses/(gains) on pension schemes transferred to unallocated divisible surplus	78	(61)
3,316	Foreign exchange rate movements	2,653	723
294	Aggregate tax effect – shareholder tax	235	(179)
333	Net income recognised directly in equity	267	921
(1,106)	(Loss)/profit for the year	(885)	1,498
(773)	Total recognised income and expense for the year	(618)	2,419
	Attributable to:		
(1,399)	Equity shareholders of Aviva plc	(1,119)	2,140
626	Minority interests	501	279
(773)		(618)	2,419

D3 – Reconciliation of movements in consolidated shareholders' equity

For the year ended 31 December 2008

2008 €m		2008 £m	Restated 2007 £m
16,424	Balance at 1 January as published	15,931	14,064
–	Prior year adjustment	–	(319)
16,424	Balance at 1 January restated	15,931	13,745
(637)	Total recognised income and expense for the year	(618)	2,419
(1,005)	Dividends and appropriations	(975)	(871)
21	Issues of share capital	20	48
175	Shares issued in lieu of dividends	170	301
37	Capital contributions from minority shareholders	36	–
(109)	Minority share of dividends declared in the year	(106)	(66)
44	Minority interest in acquired subsidiaries	43	315
(67)	Changes in minority interest in existing subsidiaries	(65)	–
(30)	Shares acquired by employee trusts	(29)	(10)
40	Reserves credit for equity compensation plans	39	50
14,893	Balance at 31 December	14,446	15,931

Appendix D – IFRS additional disclosures continued

D4 – Consolidated balance sheet

For the year ended 31 December 2008

2008 €m		2008 €m	Restated 2007 €m
Assets			
3,689	Goodwill	3,578	3,082
4,163	Acquired value of in-force business and intangible assets	4,038	3,197
1,791	Interests in, and loans to, joint ventures	1,737	2,576
1,285	Interests in, and loans to, associates	1,246	1,206
994	Property and equipment	964	942
14,872	Investment property	14,426	15,391
43,543	Loans	42,237	36,193
	Financial investments		
154,902	Debt securities	150,255	121,312
44,692	Equity securities	43,351	58,829
37,233	Other investments	36,116	36,269
236,827		229,722	216,410
8,138	Reinsurance assets	7,894	8,054
2,724	Deferred tax assets	2,642	590
641	Current tax assets	622	376
10,119	Receivables and other financial assets	9,816	8,619
6,337	Deferred acquisition costs and other assets	6,147	4,487
3,878	Prepayments and accrued income	3,762	2,986
24,929	Cash and cash equivalents	24,181	16,089
1,598	Assets of operations classified as held for sale	1,550	1,128
365,528	Total assets	354,562	321,326
Equity			
685	Ordinary share capital	664	655
4,644	Capital reserves	4,505	4,494
(34)	Shares held by employee trusts	(33)	(10)
2,175	Other reserves	2,110	1,469
3,924	Retained earnings	3,806	6,338
11,394	Equity attributable to ordinary shareholders of Aviva plc	11,052	12,946
1,227	Preference share capital and direct capital instrument	1,190	1,190
2,272	Minority interests	2,204	1,795
14,893	Total equity	14,446	15,931
Liabilities			
180,258	Gross insurance liabilities	174,850	152,839
110,886	Gross liabilities for investment contracts	107,559	98,244
2,397	Unallocated divisible surplus	2,325	6,785
7,132	Net asset value attributable to unitholders	6,918	6,409
3,076	Provisions	2,984	1,937
3,113	Deferred tax liabilities	3,020	2,532
662	Current tax liabilities	642	1,225
15,671	Borrowings	15,201	12,657
21,485	Payables and other financial liabilities	20,840	18,060
4,696	Other liabilities	4,556	3,765
1,259	Liabilities of operations classified as held for sale	1,221	942
350,635	Total liabilities	340,116	305,395
365,528	Total equity and liabilities	354,562	321,326

Appendix D – IFRS additional disclosures continued

D5 – Consolidated cash flow statement

For the year ended 31 December 2008

The cash flows presented in this statement cover all the Group's activities and include flows from both policyholder and shareholder activities.

	Long-term business operations £m	Non-long- term business operations £m	Total 2008 £m	Restated Total 2007 £m
Cash flows from operating activities				
Cash-generated from operations	7,920	875	8,795	4,944
Tax paid	(394)	(248)	(642)	(801)
Net cash from operating activities	7,526	627	8,153	4,143
Cash flows from investing activities				
Acquisitions of subsidiaries, joint ventures and associates, net of cash acquired	(93)	(243)	(336)	(769)
Disposals of subsidiaries, joint ventures and associates, net of cash transferred	180	173	353	283
Purchase of minority interest in subsidiary	(65)	–	(65)	–
New loans to joint ventures and associates	(182)	–	(182)	(126)
Repayment of loans to joint ventures and associates	52	–	52	159
Net repayment loans to joint ventures and associates	(130)	–	(130)	33
Purchases of property and equipment	(57)	(159)	(216)	(227)
Proceeds on sale of property and equipment	35	24	59	93
Purchases of intangible assets	(34)	(26)	(60)	(48)
Net cash used in investing activities	(164)	(231)	(395)	(635)
Cash flows from financing activities				
Proceeds from issue of ordinary shares, net of transaction costs	–	20	20	48
Treasury shares purchased for employee trusts	–	(29)	(29)	(10)
New borrowings drawn down, net expenses	1,435	4,080	5,515	6,322
Repayment of borrowings	(1,365)	(3,852)	(5,217)	(6,000)
Net drawdown of borrowings	70	228	298	322
Interest paid on borrowings	(712)	(825)	(1,537)	(1,208)
Preference dividends paid	–	(17)	(17)	(17)
Ordinary dividends paid	–	(732)	(732)	(500)
Coupon payments on direct capital instrument	–	(56)	(56)	(53)
Finance lease payments	–	(14)	(14)	(7)
Capital contributions from minority shareholders	36	–	36	307
Dividends paid to minority interests of subsidiaries	(83)	(23)	(106)	(66)
Non-trading cash flows between operations	(189)	189	–	–
Net cash from financing activities	(878)	(1,259)	(2,137)	(1,184)
Net increase in cash and cash equivalents	6,484	(863)	5,621	2,324
Cash and cash equivalents at 1 January	11,132	4,432	15,564	12,635
Effect of exchange rate changes on cash and cash equivalents	2,525	359	2,884	605
Cash and cash equivalents at 31 December	20,141	3,928	24,069	15,564

Of the total cash and cash equivalents, £493 million (2007: £96 million) was classified as held for sale (see note D6 c (ii)).

Cash and cash equivalents in long-term business operations of £20,141 million (2007: £11,132 million) are primarily held for the benefit of policyholders and so are generally not available for use by the Group.

Appendix D – IFRS additional disclosures continued

D6 – Subsidiaries

(a) Acquisitions

(i) VIVAS Health

On 15 May 2008, the Group's Irish subsidiary, Hibernian Group plc, acquired a 70% holding in VIVAS Group Ltd. (VIVAS Health), an Irish health insurance company, for £26 million. Allied Irish Banks plc (AIB) will continue to hold the remaining 30% equity, further strengthening AIB and Hibernian's existing relationship. The company has since been re-branded as Hibernian Aviva Health. Its health insurance products will be distributed through Hibernian and AIB's distribution channels, including Hibernian Aviva Health's existing direct and non-direct channels.

The acquisition of this shareholding has given rise to goodwill on acquisition of £22 million, calculated as follows:

Purchase cost:	£m
Cash paid	25
Attributable costs	1
Total consideration	26

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

	Book value £m	Fair value and accounting policy adjustments £m	Fair value £m
Assets			
Reinsurance assets	30	–	30
Cash and cash equivalents	27	–	27
Receivables and financial assets	32	–	32
Other assets	2	–	2
Total assets	91	–	91
Liabilities			
Insurance liabilities	(49)	–	(49)
Payables and other financial liabilities	(35)	–	(35)
Other liabilities	(1)	–	(1)
Total liabilities	(85)	–	(85)
Total net assets	6	–	6
Net assets acquired (70%)			4
Goodwill arising on acquisition of this holding			22

The assets and liabilities as at the acquisition date in the table above are stated at their provisional fair values and may be amended in 2009 in accordance with paragraph 62 of IFRS 3, *Business Combinations*. The residual goodwill represents future cost and revenue synergies from integration with Hibernian Group.

The results of VIVAS Health have been included in the consolidated financial statements of the Group with effect from 15 May 2008, and have contributed £5 million profit to the consolidated loss before tax.

(ii) UBI Vita

On 18 June 2008, the Group acquired 50% plus one share in UBI Assicurazioni Vita SpA (UBI Vita), an Italian life insurance company, from Unione di Banche Italiane Scpa (UBI Banca), for a consideration of £52 million. UBI Vita distributes life insurance products through a bancassurance agreement with Banca Popolare di Ancona and other channels.

D6 – Subsidiaries continued

The acquisition of this shareholding has given rise to goodwill on acquisition of £10 million, calculated as follows:

Purchase cost:	£m
Cash paid	51
Attributable costs	1
Total consideration	52

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

	Book value £m	Fair value and accounting policy adjustments £m	Fair value £m
Assets			
Intangible assets	–	41	41
Reinsurance assets	130	–	130
Prepayments and accrued income	20	–	20
Cash and cash equivalents	8	–	8
Debt securities	1,803	(74)	1,729
Other investments	407	–	407
Property and equipment	17	1	18
Receivables and other financial assets	45	–	45
Other assets	2	2	4
Total assets	2,432	(30)	2,402
Liabilities			
Insurance liabilities	(2,267)	67	(2,200)
Borrowings	(31)	–	(31)
Payables and other financial liabilities	(56)	–	(56)
Other liabilities	(12)	(18)	(30)
Total liabilities	(2,366)	49	(2,317)
Total net assets	66	19	85
Net assets acquired (50%)			42
Goodwill arising on acquisition of this holding			10

The assets and liabilities as at the acquisition date in the table above are stated at their provisional fair values and may be amended in 2009 in accordance with paragraph 62 of IFRS 3, *Business Combinations*. The residual goodwill represents expected future revenue and cost synergies.

The results of UBI Vita have been included in the consolidated financial statements of the Group with effect from 18 June 2008, and have contributed £2 million loss to the consolidated loss before tax.

(iii) Swiss Life Belgium

On 30 June 2008, the Group acquired 100% of the shares in Swiss Life Belgium, a multi-line insurer, from SNS REAAL for £112 million. By combining Swiss Life Belgium with our Belgian insurance operation, managed through our Dutch subsidiary Delta Lloyd, the Group will further strengthen its position in the Belgian life insurance market.

The acquisition of this shareholding has given rise to goodwill on acquisition of £48 million, calculated as follows:

Purchase cost:	£m
Cash paid	112
Attributable costs	–
Total consideration	112

Appendix D – IFRS additional disclosures continued

D6 – Subsidiaries continued

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

	Book value £m	Fair value and accounting policy adjustments £m	Fair value £m
Assets			
Acquired value of in-force business on insurance contracts	–	17	17
Reinsurance assets	28	–	28
Prepayments and accrued income	33	–	33
Cash and cash equivalents	60	–	60
Equity securities	464	–	464
Debt securities	1,735	–	1,735
Property and equipment	19	–	19
Investment property	80	–	80
Loans	21	–	21
Receivables and other financial assets	46	–	46
Other assets	19	–	19
Total assets	2,505	17	2,522
Liabilities			
Insurance liabilities	(1,635)	92	(1,543)
Liabilities for investment contracts	(818)	52	(766)
Borrowings	(49)	–	(49)
Payables and other financial liabilities	(41)	–	(41)
Other liabilities	(59)	–	(59)
Total liabilities	(2,602)	144	(2,458)
Total net assets	(97)	161	64
Net assets acquired (100%)			64
Goodwill arising on acquisition			48

The assets and liabilities as at the acquisition date in the table above are stated at their provisional fair values and may be amended in 2009 in accordance with paragraph 62 of IFRS 3, *Business Combinations*. The residual goodwill represents cost and revenue synergies from integrating the business with our existing Belgian operations.

The results of Swiss Life Belgium have been included in the consolidated financial statements of the Group with effect from 30 June 2008, and have contributed £35 million loss to the consolidated loss before tax.

(iv) Material acquisitions summary

	2008 £m
Total net assets of subsidiaries described above	155
Less: Minority interests	(45)
Net assets acquired	110
Cash paid	188
Attributable costs	2
Total consideration	190
Goodwill arising on material acquisitions above	80
Other goodwill arising (see (v) below)	
Addition to existing shareholding in Cajamurcia	3
Other goodwill arising	23
Total goodwill arising in the year	106

D6 – Subsidiaries continued

(v) Other goodwill arising

Addition to existing shareholding in Cajamurcia Vida

As disclosed in the 2007 financial statements, on 6 June 2007 the Group acquired 5% of the share capital of Caja Murcia Vida y Pensiones, de Seguros y Reaseguros SA (Cajamurcia Vida) from the Spanish savings bank Caja de Ahorros de Murcia (Cajamurcia). Cajamurcia Vida was fully consolidated as a subsidiary from that date, as the Group has the power to govern its financial and operating policies, through having the majority vote at meetings of the company's board of directors.

On signing the shareholders' agreement, Cajamurcia granted the Group a call option over a further 45% of the shares in Cajamurcia Vida. On 27 March 2008, the Group exercised this option and acquired 45% of the shares for £81 million. The fair value of the net assets of the company at the date the option was exercised was £176 million, and the acquisition of the additional shareholding gave rise to additional goodwill of £3 million.

Other

Other goodwill has arisen on smaller acquisitions and increases in shareholdings in existing subsidiaries, as well as fair value adjustments to acquisitions made in 2007. None of these is considered material for separate disclosure.

(vi) 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 2008, after giving effect to purchase accounting adjustments and the elimination of intercompany transactions. The 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 2008, nor is it necessarily indicative of future results.

	2008 £m
Revenues (net earned premiums and fee income)	36,620
Loss before tax attributable to shareholders	(1,388)

£32 million of the above pre-tax loss has risen since acquisition.

(b) Disposal of subsidiaries, joint ventures and associates

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

	2008 £m	2007 £m
United Kingdom (see (i) below)	(38)	(7)
Turkey	–	71
Offshore operations (see (iii) below)	14	–
Other small operations	31	(15)
Profit on disposal before tax	7	49
Tax on profit on disposal	–	3
Profit on disposal after tax	7	52

Appendix D – IFRS additional disclosures continued

D6 – Subsidiaries continued

(i) UK non-core operations

As part of its strategy to exit certain UK non-core operations, the Group completed the disposals of HPI Limited to Solera Holdings Inc. and RAC Autowindcreens Limited to Arques Management GmbH in December 2008. The loss on disposal of these wholly-owned subsidiaries was £38 million, calculated as follows:

	2008 £m
Assets	
Goodwill and intangible assets	99
Investments and property and equipment	10
Deferred acquisition costs and other assets	9
Receivables and other financial assets	25
Cash and cash equivalents	37
Total assets	180
Liabilities	
Payables and other financial liabilities	(20)
Other liabilities	(28)
Tax liabilities and other provisions	(17)
Total liabilities	(65)
Net assets disposed of	115
Consideration:	
Cash consideration	67
Non-cash consideration	15
Less: transaction costs	(5)
Total consideration	77
Loss on disposal	(38)

(ii) Luxembourg life operations

On 5 November 2008, the Group's Dutch subsidiary, Delta Lloyd NV, exchanged its 100% holding in Commercial Union International Life SA (CUIL) for a 15% shareholding in NewPEL SA, a Luxembourg-registered investment company. No profit or loss was realised on disposal.

The assets and liabilities of CUIL at the date of disposal were:

	2008 £m
Assets	
Intangible assets	5
Investments	373
Cash and cash equivalents	5
Other assets	16
Total assets	399
Liabilities	
Liability for investment contracts	(372)
Borrowings	(3)
Other liabilities	(10)
Total liabilities	(385)
Net assets disposed of	14
Consideration:	
Non-cash consideration	14
Profit on disposal	–

D6 – Subsidiaries continued

(iii) Sale of offshore operations

On 11 July 2008, the Group sold its offshore operations, administered through Aviva Global Services Singapore Pte Ltd (AGS), to WNS (Holdings) Limited (WNS). As part of this agreement, we have entered into a master services agreement with WNS, who will provide business process services to the Group's UK, Irish and Canadian businesses through to 2016. The consideration for the shares in AGS was £35 million and the relevant net assets of AGS at the disposal date were £21 million, giving rise to a profit on disposal of £14 million.

(c) Operations and assets classified as held for sale

Assets held for sale as at 31 December 2008 comprises:

	2008 £m	2007 £m
Property and equipment held for sale (see (i) below)	102	–
Assets of operations classified as held for sale (see (ii) below)	1,448	1,128
Total assets classified as held for sale	1,550	1,128

(i) Property and equipment held for sale

As part of its restructuring, the UK data centres, presently owned and managed by Norwich Union Central Services Limited, have been classified as held for sale at 31 December 2008 at their fair value of £102 million. In remeasuring the data centres at fair value, an impairment charge of £44 million has been recognised in the income statement within integration and restructuring costs. The data centres were sold on 25 February 2009 at their fair value above.

(ii) 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 2008 relate to our Dutch health insurance business and certain UK non-core operations, and were as follows:

	2008 £m	2007 £m
Goodwill and intangible assets	14	–
Investments and property and equipment	396	316
Receivables and other financial assets	386	554
Deferred acquisition costs and other assets	1	–
Prepayments and accrued income	158	145
Tax assets	–	17
Cash and cash equivalents	493	96
Total assets	1,448	1,128
Gross insurance liabilities	(709)	(627)
Borrowings	–	(12)
Payables and financial liabilities	(22)	(72)
Other liabilities	(478)	(220)
Tax liabilities and other provisions	(12)	(11)
Total liabilities	(1,221)	(942)
Net assets	227	186

The 2007 figures relate to our Dutch health insurance business.

Appendix D – IFRS additional disclosures continued**D6 – Subsidiaries continued****(iii) Dutch health insurance business**

On 16 July 2007, the Group announced that its Dutch subsidiary, Delta Lloyd Group (“DL”), had reached an agreement to sell its health insurance business to OWM CZ Groep Zorgverkeeraar UA (“CZ”), a mutual health insurer, and create a long-term alliance for the cross-selling of insurance products. Under the terms of the agreement, CZ will purchase the DL health insurance business and take on its underwriting risk and policy administration. DL will continue to market and distribute health insurance products from CZ to its existing customers and continue to provide asset management for the transferred business. DL will also have exclusive rights to market life, general insurance and income protection products to CZ’s customers. The transaction completed on 1 January 2009.

The relevant assets and liabilities of the DL health insurance business have been classified as held for sale, at their carrying values, in the consolidated balance sheet as at 31 December 2008.

(iv) UK non-core operations

In 2008, the Group decided to sell, and was actively marketing, certain companies as part of its strategy to exit certain UK non-core operations. As at 31 December 2008, The British School of Motoring Limited and its subsidiaries had yet to be sold and, as a result, their relevant assets and liabilities have been classified as held for sale, at their carrying values, in the consolidated balance sheet as at 31 December 2008. On 11 February 2009, these companies were sold to Arques Consulting GmbH, realising a loss on disposal of £9 million which has been provided for within exceptional items in these financial statements.

(d) Other information

One of the Group’s subsidiaries, Delta Lloyd NV, is subject to the provisions of Dutch corporate law and particularly the Dutch “structure company” regime. Under this regime, Delta Lloyd operates under a Supervisory Board which has a duty to have regard to the interests of a wide variety of stakeholders. The Supervisory Board includes two Aviva Group representatives and is responsible for advising and supervising Delta Lloyd’s Executive Board. The shareholder is one of the most important stakeholders to whom the Supervisory Board has a duty.

Dutch Law changed in October 2004 to ensure that Supervisory Board directors in Dutch companies were henceforth to be elected by a company’s shareholders voting on nominations made by its Supervisory Board and the Works Council. Under the previous system, Supervisory Board directors appointed their own successors. In 2006, Delta Lloyd commenced proceedings against Aviva plc to try to compel the Company to adhere to the system that existed prior to the change in the law, on the basis of agreements they say were entered into in 1973 when the Group acquired Delta Lloyd. The Company disputes these claims and does not expect the litigation, whatever its outcome, to have any adverse effect on the financial or operational performance of Delta Lloyd or the Group. The court gave a judgement in 2008, requiring Aviva to adhere to the previous system of appointment, which Aviva is appealing.

D7 – Segmental information

(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 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. UK GI also includes the RAC motor recovery business, the group reinsurance result and the results of run off business.

Europe

Activities reported in the Europe operating segment exclude operations in the UK and include those in Russia and Turkey. Principal activities are long-term business in France, the Netherlands, Ireland, Italy, Poland and Spain, and general insurance in France, the Netherlands, Ireland and Italy, as well as the fund management activity of Delta Lloyd.

North America

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

Asia Pacific

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

Aviva Investors

Aviva Investors operates in most of the regions in which the Group operates, in particular the UK, France, the United States 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 Europe operating segment.

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 balance sheet. 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.

Appendix D – IFRS additional disclosures continued

D7 – Segmental information continued

(i) Segmental income statement for the year ended 31 December 2008

	United Kingdom		Europe £m	North America £m	Asia Pacific £m	Aviva Investors [†] £m	Other Group activities £m	Total £m
	Life £m	GI [#] £m						
Gross written premiums	8,108	5,496	15,529	6,486	587	–	–	36,206
Premiums ceded to reinsurers	(612)	(498)	(442)	(214)	(75)	–	–	(1,841)
Internal reinsurance revenue	–	26	(21)	(4)	(1)	–	–	–
Net written premiums	7,496	5,024	15,066	6,268	511	–	–	34,365
Net change in provision for unearned premiums	6	344	(21)	(50)	(2)	–	–	277
Net earned premiums	7,502	5,368	15,045	6,218	509	–	–	34,642
Fee and commission income	310	362	711	40	168	294	–	1,885
	7,812	5,730	15,756	6,258	677	294	–	36,527
Net investment income	(8,844)	326	(6,168)	444	(626)	(407)	(768)	(16,043)
Inter-segment revenue	–	–	–	–	–	203	–	203
Share of loss of joint ventures and associates	(1,058)	–	(38)	–	(32)	–	–	(1,128)
Profit on the disposal of subsidiaries and associates	–	(38)	24	–	–	–	21	7
Segmental income*	(2,090)	6,018	9,574	6,702	19	90	(747)	19,566
Claims and benefits paid, net of recoveries from reinsurers	(8,620)	(3,944)	(13,411)	(2,912)	(464)	–	(2)	(29,353)
Change in insurance liabilities, net of reinsurance	2,674	280	3,409	(2,774)	296	–	–	3,885
Change in investment contract provisions	7,240	–	2,765	(126)	401	349	–	10,629
Change in unallocated divisible surplus	2,151	–	2,331	–	–	–	–	4,482
Amortisation of deferred acquisition costs and acquired value of in-force business	–	–	(44)	(285)	(4)	–	–	(333)
Depreciation and other amortisation expense	(70)	(108)	(120)	(51)	(5)	(5)	–	(359)
Other operating expenses	(1,787)	(2,599)	(2,970)	(633)	(296)	(362)	552	(8,095)
Impairment losses**	–	(26)	(814)	(200)	–	–	–	(1,040)
Inter-segment expenses	(137)	(2)	(18)	(42)	(3)	–	(1)	(203)
Finance costs	(541)	(10)	(703)	(17)	–	–	(276)	(1,547)
Segmental expenses	910	(6,409)	(9,575)	(7,040)	(75)	(18)	273	(21,934)
(Loss)/profit before tax	(1,180)	(391)	(1)	(338)	(56)	72	(474)	(2,368)
Tax attributable to policyholders' returns	1,031	–	49	–	(12)	–	–	1,068
(Loss)/profit before tax attributable to shareholders	(149)	(391)	48	(338)	(68)	72	(474)	(1,300)

* Total reported income, excluding inter-segment revenue, is split United Kingdom £3,928 million, France £1,005 million, Netherlands £6,759 million, USA £4,954 million and Rest of the World £2,717 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 equity were £830 million and £nil.

† Aviva Investors comprises the Aviva Investors UK, France, the United States, Canada and International fund management businesses.

United Kingdom GI includes the Group reinsurance business, agency run off business and the non-insurance business for the RAC.

D7 – Segmental information continued

	United Kingdom		Europe £m	North America £m	Asia Pacific £m	Aviva Investors ¹ £m	Other Group activities £m	Total £m
	Life £m	GI £m						
(Loss)/profit before tax attributable to shareholders	(149)	(391)	48	(338)	(68)	72	(474)	(1,300)
Adjusted for non-operating items:								
Reclassification of corporate costs and unallocated interest	7	(71)	54	15	–	–	(5)	–
Investment return variances and economic assumption changes on long-term business	694	–	400	433	104	–	–	1,631
Short-term fluctuation in return on investments backing non-long-term business	–	334	389	(47)	–	–	143	819
Economic assumption changes on general insurance and health business	–	91	3	–	–	–	–	94
Impairment of goodwill	–	–	66	–	–	–	–	66
Amortisation and impairment of intangibles	3	33	34	44	–	3	–	117
(Profit)/loss on the disposal of subsidiaries and associates	–	38	(24)	–	–	–	(21)	(7)
Exceptional item	108	312	133	42	–	6	(50)	551
Integration and restructuring costs	60	195	38	–	–	33	–	326
Operating profit/(loss) before tax attributable to shareholders	723	541	1,141	149	36	114	(407)	2,297

Appendix D – IFRS additional disclosures continued

D7 – Segmental information continued

(ii) Segmental income statement for the year ended 31 December 2007

	United Kingdom		Europe £m	North America £m	Asia Pacific £m	Aviva Investors† £m	Other Group activities £m	Restated Total £m
	Life £m	GI £m						
Gross written premiums	6,128	6,039	13,538	4,628	658	–	–	30,991
Premiums ceded to reinsurers	(444)	(577)	(388)	(195)	(54)	–	–	(1,658)
Internal reinsurance revenue	–	28	(19)	(7)	(2)	–	–	–
Net written premiums	5,684	5,490	13,131	4,426	602	–	–	29,333
Net change in provision for unearned premiums	(18)	60	(22)	(40)	(1)	–	–	(21)
Net earned premiums	5,666	5,550	13,109	4,386	601	–	–	29,312
Fee and commission income	246	385	638	30	168	299	(6)	1,760
	5,912	5,935	13,747	4,416	769	299	(6)	31,072
Net investment income	5,186	699	2,761	875	286	(15)	(103)	9,689
Inter-segment revenue	–	–	–	–	–	199	–	199
Share of profit/(loss) of joint ventures and associates	(304)	3	6	–	(9)	–	–	(304)
Profit/(loss) on the disposal of subsidiaries and associates	–	(7)	(5)	–	–	–	61	49
Segmental income*	10,794	6,630	16,509	5,291	1,046	483	(48)	40,705
Claims and benefits paid, net of recoveries from reinsurers	(9,000)	(4,064)	(11,192)	(2,486)	(377)	–	(2)	(27,121)
Change in insurance liabilities, net of reinsurance	(729)	417	(949)	(1,920)	(327)	–	–	(3,508)
Change in investment contract provisions	(694)	–	(1,091)	(153)	(35)	(45)	–	(2,018)
Change in unallocated divisible surplus	1,882	–	1,040	–	–	–	–	2,922
Amortisation of deferred acquisition costs and acquired value of in-force business	–	–	(35)	(122)	(3)	–	–	(160)
Depreciation and other amortisation expense	(24)	(104)	(53)	(45)	(6)	(17)	–	(249)
Other operating expenses	(1,110)	(2,723)	(2,318)	(545)	(251)	(289)	(15)	(7,251)
Impairment losses**	–	–	(50)	(7)	–	–	–	(57)
Inter-segment expenses	(141)	(4)	(18)	(32)	(3)	–	(1)	(199)
Finance costs	(405)	(10)	(527)	(19)	–	–	(256)	(1,217)
Segmental expenses	(10,221)	(6,488)	(15,193)	(5,329)	(1,002)	(351)	(274)	(38,858)
Profit/(loss) before tax	573	142	1,316	(38)	44	132	(322)	1,847
Tax attributable to policyholders' returns	(9)	–	6	–	(9)	(3)	–	(15)
Profit/(loss) before tax attributable to shareholders	564	142	1,322	(38)	35	129	(322)	1,832

* Total reported income, excluding inter-segment revenue, is split United Kingdom £17,424 million, France £5,731 million, Netherlands £5,922 million, USA £3,777 million and Rest of the World £7,853 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 equity were £nil and £1 million.

† Aviva Investors comprises the Aviva Investors UK, France, the United States, Canada and International fund management businesses.

D7 – Segmental information continued

	United Kingdom		Europe £m	North America £m	Asia Pacific £m	Aviva Investors [†] £m	Other Group activities £m	Restated Total £m
	Life £m	GI £m						
Profit/(loss) before tax attributable to shareholders	564	142	1,322	(38)	35	129	(322)	1,832
Adjusted for non-operating items:								
Reclassification of corporate costs and unallocated interest	(6)	(63)	33	19	–	–	17	–
Investment return variances and economic assumption changes on long-term business	112	–	(309)	181	(1)	2	–	(15)
Short-term fluctuation in return on investments backing non-long-term business	–	86	112	9	–	–	(23)	184
Economic assumption changes on general insurance and health business	–	(1)	–	(1)	–	–	–	(2)
Impairment of goodwill	–	–	1	–	–	9	–	10
Amortisation and impairment of intangibles	4	28	21	40	3	7	–	103
(Profit)/loss on the disposal of subsidiaries and associates	–	7	5	–	–	–	(61)	(49)
Integration and restructuring costs	8	114	12	19	–	–	–	153
Operating profit before tax attributable to shareholders	682	313	1,197	229	37	147	(389)	2,216

Appendix D – IFRS additional disclosures continued

D7 – Segmental information continued

(iii) Segmental balance sheet as at 31 December 2008

	United Kingdom		Europe £m	North America £m	Asia Pacific £m	Aviva investors [†] £m	Other Group activities £m	Total £m
	Life £m	GI £m						
Goodwill	52	1,208	1,357	903	55	3	–	3,578
Acquired value of in-force business and intangible assets	65	265	1,470	2,196	28	14	–	4,038
Interests in, and loans to, joint ventures and associates	2,080	–	604	2	296	–	1	2,983
Property and equipment	123	173	519	106	32	10	1	964
Investment property	8,872	148	3,920	7	21	655	803	14,426
Loans	20,156	833	19,061	2,130	56	1	–	42,237
Financial investments	69,052	2,482	125,329	24,621	3,865	1,454	2,919	229,722
Deferred acquisition costs	1,221	998	1,254	2,627	43	3	1	6,147
Other assets	13,933	4,971	23,867	5,537	627	661	871	50,467
Total assets	115,554	11,078	177,381	38,129	5,023	2,801	4,596	354,562
Insurance liabilities								
Long-term business and outstanding claims provisions	62,070	6,103	72,464	26,939	2,120	–	–	169,696
Unearned premiums	173	2,966	670	959	22	–	–	4,790
Other insurance liabilities	–	91	182	91	–	–	–	364
Liability for investment contracts	35,109	–	65,106	3,403	1,643	2,298	–	107,559
Unallocated divisible surplus	2,727	–	(405)	–	3	–	–	2,325
Net asset value attributable to unitholders	986	–	3,304	–	175	–	2,453	6,918
External borrowings	2,716	11	6,970	163	–	–	5,341	15,201
Other liabilities, including inter- segment liabilities	8,164	(972)	18,635	4,041	190	324	2,881	33,263
Total liabilities	111,945	8,199	166,926	35,596	4,153	2,622	10,675	340,116
Total equity								14,446
Total equity and liabilities								354,562
Capital expenditure (excluding business combinations)	36	93	72	70	4	5	–	280

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

[†] Aviva Investors comprises the Aviva Investors UK, France, the United States, Canada and International fund management businesses.

D7 – Segmental information continued

(iv) Segmental balance sheet as at 31 December 2007

	United Kingdom			North America £m	Asia Pacific £m	Aviva Investors ¹ £m	Other Group activities £m	Restated Total £m
	Life £m	GI £m	Europe £m					
Goodwill	71	1,276	1,053	642	40	–	–	3,082
Acquired value of in-force business and intangible assets	65	349	1,164	1,579	28	12	–	3,197
Interests in, and loans to, joint ventures and associates	2,972	–	594	1	215	–	–	3,782
Property and equipment	177	317	374	28	37	7	2	942
Investment property	10,415	252	3,061	–	25	966	672	15,391
Loans	20,153	900	13,895	1,206	39	–	–	36,193
Financial investments	83,489	3,679	103,430	17,227	3,934	1,993	2,658	216,410
Deferred acquisition costs	1,477	1,212	914	830	45	4	5	4,487
Other assets	10,535	5,157	16,086	2,804	500	667	2,093	37,842
Total assets	129,354	13,142	140,571	24,317	4,863	3,649	5,430	321,326
Insurance liabilities								
Long-term business and outstanding claims provisions	65,017	6,429	56,505	17,335	1,820	–	–	147,106
Unearned premiums	179	3,468	973	815	15	–	–	5,450
Other insurance liabilities	–	92	113	78	–	–	–	283
Liability for investment contracts	41,845	–	49,551	1,756	1,952	3,140	–	98,244
Unallocated divisible surplus	4,944	–	1,838	–	3	–	–	6,785
Net asset value attributable to unitholders	758	–	2,680	–	189	–	2,782	6,409
External borrowings	2,184	12	6,153	133	–	6	4,169	12,657
Other liabilities, including inter-segment liabilities	10,474	(320)	13,129	1,615	160	294	3,109	28,461
Total liabilities	125,401	9,681	130,942	21,732	4,139	3,440	10,060	305,395
Total equity								15,931
Total equity and liabilities								321,326
Capital expenditure (excluding business combinations)	30	140	106	10	5	6	2	299

(b) Further analysis by products and services

The Group's results can be further analysed by products and services which comprise long-term business, fund management, general insurance and health, and non-insurance 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 the Lifetime mortgage business written in the UK.

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.

Appendix D – IFRS additional disclosures continued

D7 – Segmental information continued

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.

Non-insurance

Non-insurance 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 2008

	Long-term business £m	Fund management £m	General Insurance and health** £m	Other† £m	Total £m
Gross written premiums*	24,272	–	11,934	–	36,206
Premiums ceded to reinsurers	(1,044)	–	(797)	–	(1,841)
Net written premiums	23,228	–	11,137	–	34,365
Net change in provision for unearned premiums	–	–	277	–	277
Net earned premiums	23,228	–	11,414	–	34,642
Fee and commission income	753	567	160	405	1,885
	23,981	567	11,574	405	36,527
Net investment (expense)/income	(16,671)	3	425	200	(16,043)
Inter-segment revenue	–	185	–	–	185
Share of loss of joint ventures and associates	(1,089)	(12)	(5)	(22)	(1,128)
Profit on the disposal of subsidiaries and associates	–	–	–	7	7
Segmental income	6,221	743	11,994	590	19,548
Segmental expenses	(7,532)	(662)	(12,100)	(1,622)	(21,916)
Tax attributable to policyholder returns	1,068	–	–	–	1,068
Profit/(loss) before tax attributable to shareholders	(243)	81	(106)	(1,032)	(1,300)
Adjusted for non-operating items	1,937	42	1,304	314	3,597
Operating profit before tax attributable to shareholders' profits	1,694	123	1,198	(718)	2,297

* Gross written premiums includes inward reinsurance premiums assumed from other companies amounting to £255 million, of which £89 million relates to property and liability insurance £131 million to long-term business and the remainder health business.

** General insurance and health business segment includes gross written premiums of £1,945 million and premiums ceded to other companies of £35 million relating to health business. The remaining business relates to property and liability insurance.

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

D7 – Segmental information continued

(ii) Segmental income statement – products and services for the year ended 31 December 2007

	Long-term business £m	Fund management £m	General insurance and health** £m	Other† £m	Restated Total £m
Gross written premiums*	19,622	–	11,369	–	30,991
Premiums ceded to reinsurers	(858)	–	(800)	–	(1,658)
Net written premiums	18,764	–	10,569	–	29,333
Net change in provision for unearned premiums	–	–	(21)	–	(21)
Net earned premiums	18,764	–	10,548	–	29,312
Fee and commission income	692	494	179	395	1,760
	19,456	494	10,727	395	31,072
Net investment income	8,529	45	827	288	9,689
Inter-segment revenue	–	152	–	–	152
Share of (loss)/profit of joint ventures and associates	(297)	(9)	3	(1)	(304)
Profit/(loss) on the disposal of subsidiaries and associates	–	–	(7)	56	49
Segmental income	27,688	682	11,550	738	40,658
Segmental expenses	(26,139)	(521)	(10,843)	(1,308)	(38,811)
Tax attributable to policyholder returns	(15)	–	–	–	(15)
Profit before tax attributable to shareholders	1,534	161	707	(570)	1,832
Adjusted for non-operating items	76	18	314	(24)	384
Operating profit before tax attributable to shareholders' profits	1,610	179	1,021	(594)	2,216

(iii) Segmental balance sheet – products and services as at 31 December 2008

	Long-term business £m	Fund management £m	General insurance and health £m	Other £m	Total £m
Segment assets	307,928	732	25,190	20,712	354,562
Segment liabilities	(291,347)	(392)	(19,552)	(28,825)	(340,116)
Net assets	16,581	340	5,638	(8,113)	14,446

(iv) Segmental balance sheet – products and services as at 31 December 2007

	Long-term business £m	Fund management £m	General insurance and health £m	Other £m	Restated Total £m
Segment assets	280,375	1,871	24,341	14,739	321,326
Segment liabilities	(265,736)	(1,517)	(18,581)	(19,561)	(305,395)
Net assets	14,639	354	5,760	(4,822)	15,931

Appendix D – IFRS additional disclosures continued

D8 – Tax

(a) Tax (credit)/charged to the income statement**(i)** The total tax (credit)/charge comprises:

	2008 £m	Restated 2007 £m
Current tax		
For this year	527	885
Prior year adjustments	(284)	(94)
Total current tax	243	791
Deferred tax		
Origination and reversal of temporary differences	(1,814)	(348)
Changes in tax rates or tax laws	(7)	(88)
Write-down of deferred tax assets	95	(6)
Total deferred tax	(1,726)	(442)
Total tax (credited)/charged to income statement (note 13c)	(1,483)	349

In February 2009 an Australian tax court case was settled in our favour resulting in the release of tax provisions of £63 million which has reduced the tax charge in the income statement.

(ii) The Group, as a proxy for policyholders in the UK, Ireland, Singapore and Australia, 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 credit attributable to policyholders' returns included in the credit above is £1,068 million (2007: £15 million charge).

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

	2008 £m	Restated 2007 £m
UK tax	(1,482)	94
Overseas tax	(1)	255
	(1,483)	349

(iv) Unrecognised tax losses and temporary differences of previous years were used to reduce current tax expense and deferred tax expense by £139 million and £19 million, respectively (2007: £51 million and £6 million, respectively).

D8 – Tax continued

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

	2008 £m	2007 £m
Long-term business technical provisions and other insurance items	591	315
Deferred acquisition costs	224	34
Unrealised losses on investments	(1,706)	(793)
Pensions and other post-retirement obligations	16	40
Unused losses and tax credits	(413)	(272)
Subsidiaries, associates and joint ventures	(199)	(33)
Intangibles and additional value of in-force long-term business	30	(75)
Provisions and other temporary differences	(269)	342
Total deferred tax credited to income statement	(1,726)	(442)

(b) Tax (credited)/charged to equity

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

	2008 £m	2007 £m
Current tax	(16)	(19)
Deferred tax		
In respect of pensions and other post-retirement obligations	(15)	269
In respect of unrealised losses on investments	(204)	(71)
	(219)	198
Total tax (credited)/charged to equity	(235)	179

(ii) The tax credit attributable to policyholders' returns included above is £nil (2007: £nil).

(c) 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:

	2008 £m	Restated 2007 £m
(Loss)/profit before tax	(2,368)	1,847
Tax calculated at standard UK corporation tax rate of 28.5% (2007: 30%)	(675)	554
Different basis of tax - policyholders	(767)	5
Adjustment to tax charge in respect of prior years	(283)	(49)
Non-assessable income	(94)	(124)
Non-taxable profit on sale of subsidiaries and associates	(2)	(18)
Disallowable expenses	95	7
Different local basis of tax on overseas profits	(61)	56
Reduction in future UK tax rate (net of movements in unallocated divisible surplus)	–	(64)
Deferred tax not recognised	292	1
Other	12	(19)
Total tax (credited)/charged to income statement (note 13a)	(1,483)	349

Appendix D – IFRS additional disclosures continued

D9 – Earnings per share

(a) Basic earnings per share

(i) The profit attributable to ordinary shareholders is:

	2008			Restated 2007		
	Operating profit £m	Adjusting items £m	Total £m	Operating profit £m	Adjusting items £m	Total £m
Profit/(loss) before tax attributable to shareholders' profits	2,297	(3,597)	(1,300)	2,216	(384)	1,832
Tax attributable to shareholders' (loss)/profits	(487)	902	415	(604)	270	(334)
Profit/(loss) for the year	1,810	(2,695)	(885)	1,612	(114)	1,498
Amount attributable to minority interests	(91)	61	(30)	(191)	13	(178)
Cumulative preference dividends for the year	(17)	–	(17)	(17)	–	(17)
Coupon payments in respect of direct capital instruments (DCI) (net of tax)	(40)	–	(40)	(37)	–	(37)
Profit/(loss) attributable to ordinary shareholders	1,662	(2,634)	(972)	1,367	(101)	1,266

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

	2008			Restated 2007		
	Before tax £m	Net of tax, minorities, preference dividends and DCI £m	Per share p	Before tax £m	Net of tax, minorities, preference dividends and DCI £m	Per share p
Operating profit attributable to ordinary shareholders	2,297	1,662	62.9	2,216	1,367	52.8
Non-operating items:						
Investment return variances and economic assumption changes on long-term business	(1,631)	(1,280)	(48.4)	15	92	3.6
Short-term fluctuation in return on investments non-long-term business	(819)	(553)	(20.9)	(184)	(51)	(2.0)
Economic assumption changes on general insurance and health business	(94)	(67)	(2.5)	2	2	0.1
Impairment of goodwill	(66)	(66)	(2.5)	(10)	(10)	(0.4)
Amortisation and net impairment of intangibles	(117)	(89)	(3.4)	(103)	(72)	(2.8)
Profit on the disposal of subsidiaries and associates	7	7	0.3	49	52	2.0
Integration and restructuring costs and exceptional items	(877)	(586)	(22.3)	(153)	(114)	(4.4)
(Loss)/profit attributable to ordinary shareholders	(1,300)	(972)	(36.8)	1,832	1,266	48.9

(iii) The calculation of basic earnings per share uses a weighted average of 2,643 million (2007: 2,588 million) ordinary shares in issue, after deducting shares owned by the employee share trusts. The actual number of shares in issue at 31 December 2008 was 2,658 million (2007: 2,622 million).

D9 – Earnings per share continued

(b) Diluted earnings per share

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

	2008			2007		
	Total £m	Weighted average number of shares m	Per share p	Total £m	Weighted average number of shares m	Per share p
(Loss)/profit attributable to ordinary shareholders	(972)	2,643	(36.8)	1,266	2,588	48.9
Dilutive effect of share awards and options	–	24	–	–	24	(0.4)
Diluted (loss)/earnings per share	(972)	2,667	(36.8)	1,266	2,612	48.5

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

	2008			2007		
	Total £m	Weighted average number of shares m	Per share p	Total £m	Weighted average number of shares m	Per share p
Operating profit attributable to ordinary shareholders	1,662	2,643	62.9	1,367	2,588	52.8
Dilutive effect of share awards and options	–	24	(0.6)	–	24	(0.5)
Diluted earnings per share	1,662	2,667	62.3	1,367	2,612	52.3

D10 – Dividends and appropriations

	2008 £m	2007 £m
Ordinary dividends declared and charged to equity in the year		
Final 2007 – 21.10 pence per share, paid on 16 May 2008	554	–
(Final 2006 – 19.18 pence per share, paid on 18 May 2007)	–	492
Interim 2008 – 13.09 pence per share, paid on 17 November 2008	348	–
(Interim 2007 – 11.90 pence per share, paid on 16 November 2007)	–	309
	902	801
Preference dividends declared and charged to equity in the year	17	17
Coupon payments on direct capital instrument	56	53
	975	871

Subsequent to 31 December 2008, the directors proposed a final dividend for 2008 of 19.91 pence per ordinary share (2007: 21.10 pence), amounting to £529 million (2007: £554 million) in total. Subject to approval by shareholders at the AGM, the dividend will be paid on 15 May 2009 and will be accounted for as an appropriation of retained earnings in the year ending 31 December 2009.

Interest on the direct capital instrument 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 28.5% (2007: 30%).

Appendix D – IFRS additional disclosures continued

D11 – Insurance liabilities

(a) Carrying amount

Insurance liabilities at 31 December comprise:

	2008			Restated 2007		
	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	66,863	–	66,863	66,093	–	66,093
Unit-linked non-participating	22,060	–	22,060	20,601	–	20,601
Other non-participating	67,265	–	67,265	48,618	–	48,618
	156,188	–	156,188	135,312	–	135,312
Outstanding claims provisions	907	11,842	12,749	727	10,842	11,569
Provision for claims incurred but not reported	–	2,518	2,518	–	2,099	2,099
	907	14,360	15,267	727	12,941	13,668
Provision for unearned premiums	–	5,493	5,493	–	5,484	5,484
Provision arising from liability adequacy tests	–	13	13	–	24	24
Other technical provisions	–	–	–	–	3	3
Total	157,095	19,866	176,961	136,039	18,452	154,491
Less: Obligations to staff pension schemes transferred to provisions	(1,402)	–	(1,402)	(1,025)	–	(1,025)
Amounts classified as held for sale	–	(709)	(709)	–	(627)	(627)
	155,693	19,157	174,850	135,014	17,825	152,839

(b) Movements in long-term business liabilities

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

	2008 £m	2007 £m
Carrying amount at 1 January	135,312	126,614
Provisions in respect of new business	13,414	10,470
Expected change in existing business provisions	(6,423)	(6,280)
Variance between actual and expected experience	(9,401)	(877)
Effect of adjusting to PS06/14 realistic basis	(40)	(60)
Impact of other operating assumption changes	(812)	95
Impact of economic assumption changes	(604)	(909)
Effect of special bonus to with-profit policyholders	–	1,728
Other movements	(527)	(324)
Change in liability recognised as an expense	(4,393)	3,843
Effect of portfolio transfers, acquisitions and disposals	1,872	571
Foreign exchange rate movements	23,397	4,284
Carrying amount at 31 December	156,188	135,312

D11 – Insurance liabilities continued

(b) Movements in general insurance and health liabilities

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

	2008 £m	Restated 2007 £m
Carrying amount at 1 January – as reported	12,941	12,718
Prior year adjustment – impact of discounting on latent claims	–	(214)
Carrying amount at 1 January restated	12,941	12,504
Impact of changes in assumptions	120	(1)
Claim losses and expenses incurred in the current year	8,720	8,273
Decrease in estimated claim losses and expenses incurred in prior years	(828)	(956)
Exceptional strengthening of general insurance latent claims provisions	356	–
Incurred claims losses and expenses	8,368	7,316
Less:		
Payments made on claims incurred in the current year	(4,682)	(4,408)
Payments made on claims incurred in prior years	(4,307)	(3,686)
Recoveries on claim payments	293	315
Claims payments made in the year, net of recoveries	(8,696)	(7,779)
Unwind of discounting	33	35
Other movements in the claims provisions	(27)	36
Changes in claims reserve recognised as an expense	(322)	(392)
Effect of portfolio transfers, acquisitions and disposals	128	175
Foreign exchange rate movements	1,613	654
Carrying amount at 31 December	14,360	12,941

Prior year releases of £840 million reflect decrease in estimated claim losses and expenses incurred in prior years above of £828 million and £12 million increase of reinsurance.

Exceptional strengthening of £304 million reflects gross amount of £356 million above and £52 million of reinsurance.

Appendix D – IFRS additional disclosures continued

D11 – Insurance liabilities continued

(d) Loss development tables**(i) 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	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)	
One year later		(4,766)	(4,486)	(4,190)	(4,561)	(5,011)	(5,525)	(6,676)		
Two years later		(5,303)	(4,921)	(4,613)	(4,981)	(5,449)	(5,971)			
Three years later		(5,701)	(5,233)	(4,972)	(5,263)	(5,784)				
Four years later		(5,966)	(5,466)	(5,258)	(5,448)					
Five years later		(6,121)	(5,618)	(5,409)						
Six years later		(6,223)	(5,715)							
Seven years later		(6,294)								
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	
One year later		6,770	6,372	6,172	6,557	6,938	7,318	8,468		
Two years later		6,775	6,287	6,124	6,371	6,813	7,243			
Three years later		6,798	6,257	6,036	6,178	6,679				
Four years later		6,754	6,205	5,932	6,008					
Five years later		6,679	6,122	5,853						
Six years later		6,630	6,056							
Seven years later		6,576								
Estimate of gross ultimate claims		6,576	6,056	5,853	6,008	6,679	7,243	8,468	9,508	
Cumulative payments		(6,294)	(5,715)	(5,409)	(5,448)	(5,784)	(5,971)	(6,676)	(4,915)	
	3,600	282	341	444	560	895	1,272	1,792	4,593	13,779
Effect of discounting										
Claims previously discounted										
	(187)	(4)	(4)	(4)	(2)	(3)	(4)	(7)	(12)	(227)
New discounted claims										
	(474)	–	–	–	–	–	–	–	–	(474)
Present value	2,939	278	337	440	558	892	1,268	1,785	4,581	13,078
Cumulative effect of foreign exchange movements										
	–	56	70	129	130	165	240	231	–	1,021
Effect of acquisitions	–	12	12	66	21	31	35	60	24	261
Present value recognised in the balance sheet	2,939	346	419	635	709	1,088	1,543	2,076	4,605	14,360

The effect of discounting on new discounted claims relates to the discounting of latent claims introduced for the first time in 2008.

D11 – Insurance liabilities continued

(ii) 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	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)	
One year later		(4,624)	(4,369)	(4,158)	(4,378)	(4,925)	(5,442)	(6,542)		
Two years later		(5,088)	(4,779)	(4,565)	(4,712)	(5,344)	(5,881)			
Three years later		(5,436)	(5,064)	(4,924)	(4,986)	(5,671)				
Four years later		(5,648)	(5,297)	(5,180)	(5,163)					
Five years later		(5,763)	(5,424)	(5,325)						
Six years later		(5,841)	(5,508)							
Seven years later		(5,896)								
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	
One year later		6,333	6,038	6,093	6,266	6,818	7,197	8,302		
Two years later		6,321	5,997	6,037	6,082	6,688	7,104			
Three years later		6,329	5,973	5,942	5,882	6,544				
Four years later		6,286	5,912	5,851	5,709					
Five years later		6,219	5,855	5,772						
Six years later		6,173	5,786							
Seven years later		6,109								
Estimate of net ultimate claims										
		6,109	5,786	5,772	5,709	6,544	7,104	8,302	9,262	
Cumulative payments										
		(5,896)	(5,508)	(5,325)	(5,163)	(5,671)	(5,881)	(6,542)	(4,808)	
	2,100	213	278	447	546	873	1,223	1,760	4,454	11,894
Effect of discounting										
Claims previously discounted										
	(19)	(4)	(4)	(4)	(2)	(3)	(4)	(6)	(11)	(57)
New discounted claims										
	(390)	–	–	–	–	–	–	–	–	(390)
Present value	1,691	209	274	443	544	870	1,219	1,754	4,443	11,447
Cumulative effect of foreign exchange movements										
	–	42	63	115	123	153	224	220	–	940
Effect of acquisitions										
	–	10	10	43	19	26	29	44	26	207
Present value recognised in the balance sheet										
	1,691	261	347	601	686	1,049	1,472	2,018	4,469	12,594

The effect of discounting on new discounted claims relates to the discounting of latent claims introduced for the first time in 2008.

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 2008 were £1,019 million (2007: £323 million). The movement in the year reflects exceptional strengthening of provisions by £668 million due to the increased market trend in mesothelioma claim notifications, other strengthening of £16 million (2007: £20 million), foreign exchange rate movements and timing differences between claim payments and reinsurance recoveries.

Appendix D – IFRS additional disclosures continued

D12 – Liability for investment contracts**(a) Participating investment contracts**

	2008 £m	2007 £m
Carrying amount at 1 January	53,609	49,400
Provisions in respect of new business	3,391	3,009
Expected change in existing business provisions	(1,909)	(1,978)
Variance between actual and expected experience	(4,661)	(404)
Impact of operating assumption changes	(166)	(3)
Impact of economic assumption changes	244	178
Effect of special bonus to with-profit policyholders	–	399
Other movements	13	(176)
Change in liability recognised as an expense	(3,088)	1,025
Effect of portfolio transfers, acquisitions and disposals	2,181	–
Foreign exchange rate movements	12,576	3,184
Other movements	–	–
Carrying amount at 31 December	65,278	53,609

(b) Non-participating investment contracts

	2008 £m	2007 £m
Carrying amount at 1 January	44,635	38,958
Provisions in respect of new business	5,314	8,575
Expected change in existing business provisions	(2,273)	(1,094)
Variance between actual and expected experience	(9,503)	(3,231)
Impact of operating assumption changes	(28)	(2)
Impact of economic assumption changes	5	20
Other movements	(169)	61
Change in liability	(6,654)	4,329
Effect of portfolio transfers, acquisitions and disposals	(14)	254
Foreign exchange rate movements	4,314	1,094
Carrying amount at 31 December	42,281	44,635

The negative variance between actual and expected experience relates mainly to lower than expected investment returns on unit funds.

D13 – Reinsurance assets

(a) Carrying amounts

The reinsurance assets at 31 December comprised:

	2008 £m	Restated 2007 £m
Long-term business		
Insurance contracts	4,466	4,298
Participating investment contracts	52	22
Non-participating investment contracts	1,047	1,461
Outstanding claims provisions	145	94
	5,710	5,875
General insurance and health		
Outstanding claims provisions	1,737	1,634
Provisions for claims incurred but not reported	29	29
	1,766	1,663
Provision for unearned premiums	418	511
Other technical provisions	–	5
	2,184	2,179
Total	7,894	8,054

Of the above total, £6,097 million (2007: £4,796 million) is expected to be recovered more than one year after the balance sheet 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

	2008 £m	2007 £m
Carrying amount at 1 January	5,781	5,534
Asset in respect of new business	235	216
Expected change in existing business asset	243	(124)
Variance between actual and expected experience	(1,141)	52
Impact of other operating assumption changes	(761)	14
Impact of economic assumption changes	306	(122)
Other movements	(231)	(40)
Change in asset	(1,349)	(4)
Effect of portfolio transfers, acquisitions and disposals	140	24
Foreign exchange rate movements	993	227
Carrying amount at 31 December	5,565	5,781

Appendix D – IFRS additional disclosures continued

D13 – Reinsurance assets continued

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

	2008 £m	Restated 2007 £m
Carrying amount at 1 January as published	1,663	1,738
Prior year adjustment – impact of discounting on latent claims	–	(61)
Carrying amount at 1 January restated	1,663	1,677
Impact of changes in assumptions	21	–
Exceptional strengthening of latent claims provisions (see below)	52	–
Reinsurers' share of claim losses and expenses		
Incurred in current year	228	169
Incurred in prior years	12	12
Reinsurers' share of incurred claim losses and expenses	240	181
Less:		
Reinsurance recoveries received on claims		
Incurred in current year	(107)	(75)
Incurred in prior years	(257)	(223)
Reinsurance recoveries received in the year	(364)	(298)
Unwind of discounting	24	26
Change in reinsurance asset recognised as income	(27)	(91)
Effect of portfolio transfers, acquisitions and disposals	27	39
Foreign exchange rate movements	105	42
Other movements	(2)	(4)
	1,766	1,663

The one-off strengthening of latent claims reserves during 2008 resulted in an increase in the reinsurers' share of claims and losses of £52 million.

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

	2008 £m	2007 £m
Carrying amount at 1 January	511	484
Premiums ceded to reinsurers in the year	798	800
Less: Reinsurers' share of premiums earned during the year	(909)	(797)
Changes in reinsurance asset recognised as income	(111)	3
Reinsurers' share of portfolio transfers and acquisitions	8	18
Foreign exchange rate movements	10	6
Carrying amount at 31 December	418	511

D14 – Effect of changes in assumptions and estimates during the year

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 2008 £m	Effect on profit 2007 £m
Assumptions		
Long-term insurance business		
Interest rates	(521)	850
Expenses	24	(13)
Persistency rates	2	(2)
Mortality for assurance contracts	44	16
Mortality for annuity contracts	26	11
Tax and other assumptions	93	60
Investment contracts		
Interest rates	(75)	12
Expenses	(27)	5
Persistency rates	2	–
Tax and other assumptions	36	7
General insurance and health business		
Change in loss ratio assumptions	(1)	–
Change in discount rate assumptions	(94)	3
Change in expense ratio assumptions	–	(4)
Total	(491)	945

The impact of interest rates for long-term business relates primarily to the UK, Ireland and the Netherlands, driven by the market level of risk-free rates. Lower valuation interest rates in 2008 had the effect of increasing liabilities for traditional business and hence a negative impact on profit. This follows an increase in market interest rates in 2007 which had the reverse effect. The overall impact on profit also depends on movements in the value of assets backing the liabilities, which is not included in this disclosure.

Favourable impacts from expense and mortality assumption changes relate mainly to the UK. Other assumption changes include further implementation of FSA Policy Statement PS06/14 for non-profit business and expense inflation adjustments in the UK, and reserve releases in Asia, partly offset by compensation for unit-linked policies in the Netherlands.

Appendix D – IFRS additional disclosures continued

D15 – Unallocated divisible surplus

(a) Movements

The following movements have occurred in the year:

	2008 £m	2007 £m
Carrying amount at 1 January	6,785	9,465
Change in participating contract assets	(12,022)	2,463
Change in participating contract liabilities	7,699	(3,244)
Effect of special bonus to with-profit policyholders	(89)	(2,127)
Other movements	(70)	(14)
Change in liability recognised as an expense	(4,482)	(2,922)
Effect of portfolio transfers, acquisitions and disposals	–	3
Movement in respect of change in pension scheme deficit	(78)	61
Foreign exchange rate movements	88	173
Other movements	12	5
Carrying amount at 31 December	2,325	6,785

In France, Italy and Spain the unallocated divisible surplus balances were £924 million negative in total at 31 December 2008 (2007: £166 million negative) because of an accounting mismatch between participating assets carried at market value and participating liabilities measured using local practice; in each case the negative balance is considered to be recoverable from margins in the existing participating business liabilities.

(b) Special bonus declared by UK Life business

On 5 February 2008, the Group's UK long-term business operation, Norwich Union Life, announced a one-off, special bonus worth an estimated £2.3 billion, benefiting around 1.1 million with-profit policyholders in its CGNU Life and CULAC with-profit funds. The bonus is being used to enhance policy values by around 10% in total, in three instalments, with the qualifying dates being 1 January 2008, 1 January 2009 and 1 January 2010. In accordance with the way the funds are managed, the bonus distribution is being split on a 90/10 basis between policyholders and shareholders. Over the three years, policyholders will receive a total currently estimated as £2,127 million and shareholders will receive a total currently estimated as £236 million.

As explained in our group's accounting policies F and K, the Group's insurance and participating investment contract liabilities are measured in accordance with IFRS 4, *Insurance Contracts*, and FRS 27, *Life Assurance*. The latter requires liabilities for with-profit funds falling within the scope of the UK's Financial Services Authority's capital regime to be determined in accordance with this regime, adjusted to remove the shareholders' share of future bonuses. This required us to recognise planned discretionary bonuses within policyholder liabilities at 31 December 2007, even if there was no constructive obligation at the time. As a result of the announcement made above, a transfer of £2,127 million was made in 2007 from the UDS in order to increase insurance liabilities by £1,728 million and participating investment contract liabilities by £399 million. Of the £236 million due to shareholders, £89 million has been transferred from the UDS in 2008 (2007: *£nil*).

D16 – Pension obligations

(a) Recognised in the income statement

The total pension expense for these schemes comprises:

	2008 £m	2007 £m
Current service cost	(162)	(173)
Past service cost	(1)	–
Gain on curtailments	(3)	(15)
Total pension cost charged to net operating expenses	(166)	(188)
Expected return on scheme assets	706	614
Less: Income on insurance policy assets accounted for elsewhere (see (iii) above)	(64)	(49)
	642	565
Interest charge on scheme liabilities	(585)	(515)
Credit to investment income	57	50
Total charge to income	(109)	(138)

D16 – Pension obligations continued

(b) Recognised in the statement of recognised income and expense

	2008 £m	2007 £m
Expected return on scheme assets	(706)	(614)
Actual (negative)/positive return on these assets	(1,245)	404
Actuarial losses on scheme assets	(1,951)	(210)
Less: losses on insurance policy assets accounted for elsewhere	58	72
Actuarial losses on admissible assets	(1,893)	(138)
Experience gains/(losses) arising on scheme liabilities	105	(80)
Changes in assumptions underlying the present value of the scheme liabilities	859	902
Loss on acquisitions	–	(36)
Actuarial (losses)/gains recognised in the statement of recognised income and expense	(929)	648

The cumulative amount of actuarial gains and losses on the pension schemes recognised in the statement of recognised income and expense since 1 January 2004 (the date of transition to IFRS) is a loss of £1,090 million at 31 December 2008 (2007: loss of £161 million).

(c) Movements in the scheme deficits and surpluses

Movements in the pension schemes' deficits and surpluses comprise:

	2008				
	Scheme assets £m	Scheme liabilities £m	Pension scheme deficit £m	Adjust for Group insurance policies £m	IAS 19 pensions deficit £m
Net deficits in the schemes at 1 January	9,839	(10,017)	(178)	(1,025)	(1,203)
Employer contributions	620	–	620	(70)	550
Employee contributions	24	(24)	–	(7)	(7)
Benefits paid	(368)	368	–	39	39
Current and past service cost (see (a) above)	(5)	(158)	(163)	–	(163)
Losses on curtailments (see (a) above)	–	(3)	(3)	–	(3)
Credit/(charge) to investment income (see (a) above)	706	(585)	121	(64)	57
Other actuarial gains/(losses) (see (a) above)	(1,951)	964	(987)	58	(929)
Buy-outs and other transfers	(1)	1	–	1	1
Exchange rate movements on foreign plans	474	(497)	(23)	(334)	(357)
Net deficits in the schemes at 31 December	9,338	(9,951)	(613)	(1,402)	(2,015)

The change in the pension schemes' net deficits during 2008 is mainly attributable to the fall in equity and property investment values, partly offset by favourable changes in assumptions underlying the present value of the schemes' liabilities and further deficit contribution payments to the main UK scheme made by the employing companies.

Appendix D – IFRS additional disclosures continued

D16 – Pension obligations continued

	2007				
	Scheme assets £m	Scheme liabilities £m	Pension scheme deficit £m	Adjust for Group insurance policies £m	IAS 19 pensions deficit £m
Net deficits in the schemes at 1 January	9,223	(10,196)	(973)	(1,086)	(2,059)
Employer contributions	297	–	297	(41)	256
Employee contributions	23	(23)	–	(4)	(4)
Benefits paid	(339)	339	–	33	33
Current and past service cost (see (a) above)	(4)	(169)	(173)	–	(173)
Losses on curtailments (see (a) above)	–	(15)	(15)	–	(15)
Credit/(charge) to investment income (see (a) above)	614	(515)	99	(49)	50
Acquisitions	72	(91)	(19)	(15)	(34)
Other actuarial gains/(losses) (see (a) above)	(210)	822	612	72	684
Buy-outs and other transfers	6	(6)	–	(2)	(2)
Changes in asset admissibility	–	–	–	152	152
Exchange rate movements on foreign plans	157	(163)	(6)	(85)	(91)
Net deficits in the schemes at 31 December	9,839	(10,017)	(178)	(1,025)	(1,203)

D17 – Borrowings

(a) Movements during the year

Movements in borrowings during the year were:

	Core structural £m	Operational £m	Total 2008 £m
New borrowings drawn down, net of expenses	3,929	1,586	5,515
Repayment of borrowings	(3,496)	(1,721)	(5,217)
Net cash inflow	433	(135)	298
Foreign exchange rate movements	779	1,779	2,558
Borrowings acquired for non-cash consideration	–	(3)	(3)
Acquisitions	–	81	81
Fair value movements	–	(404)	(404)
Amortisation of discounts and other non-cash items	2	–	2
Movements in the year	1,214	1,318	2,532
Balance at 1 January	4,311	8,358	12,669
Balance at 31 December	5,525	9,676	15,201

D17 – Borrowings continued

(b) Movements in borrowings during the previous year were:

	Core structural £m	Operational £m	Total 2007 £m
New borrowings drawn down, net of expenses	4,780	1,542	6,322
Repayment of borrowings	(4,799)	(1,201)	(6,000)
Net cash inflow	(19)	341	322
Foreign exchange rate movements	133	499	632
Borrowings acquired for non-cash consideration	–	18	18
Acquisitions	–	(174)	(174)
Fair value movements	–	(268)	(268)
Amortisation of discounts and other non-cash items	2	–	2
Movements in the year	116	416	532
Balance at 1 January	4,195	7,942	12,137
Balance at 31 December	4,311	8,358	12,669

All movements in fair value in 2008 and 2007 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.

D18 – Risk management

As a global company, we face a large and diverse number of risks. Each of these risks has the potential to harm our financial performance or hinder the achievement of our strategic objectives. If we don't manage risk effectively we could miss potential opportunities to further develop and expand our business.

What sorts of risks do we face?

We group the type of risks we face into three categories: financial, strategic and operational.

- Financial risks cover market and credit risk, insurance risk, liquidity and capital management.
- Strategic risks include issues such as customer, products and markets as well as any risks to our business model arising from changes in our market and risks arising from mergers and acquisitions.
- Operational risks arise from inadequately controlled internal processes or systems, human error or non-compliance as well as from external events. Operational risks include taxation, reputation and regulatory risks, such as compliance.

Naturally, it's impossible to analyse every single risk we encounter, so instead we set limits to manage our material risks to ensure we stay within our risk appetite (the amount of risk we are willing to accept). To work out how 'material' a risk is to our business we assess its size and scale based on how likely it is that it will occur and what potential impact it would have on our business and our stakeholders if it were to occur. Most importantly, when risks are outside of appetite we agree what actions need to be taken to manage the risks (or groups of risks).

Our Risk Management Framework provides the means for us to identify, assess, measure, manage and monitor all of these different types of risk to provide us with a single picture of the threats, uncertainties and opportunities we face. We're then able to make appropriate decisions to limit and control the impact that all of these risks may have on our strategic objectives.

What risk management activity happens at Aviva?

To ensure that risks are effectively identified and assessed and that appropriate controls and responses are in place, our risk management activity needs to operate through clearly defined and agreed structures and processes.

At Aviva, we coordinate all group-wide risk management activities through a central risk team, led by the Group Chief Risk Officer. In each of our regions, local Chief Risk Officers ensure that the regional risk profiles remain within the limits set centrally. The local Chief Risk Officers work with business unit management to ensure that our risk management framework is being used consistently across all our businesses. They also work with the Group Chief Risk Officer to coordinate and communicate decisions that are taken at a group level.

As well as working with the regions, the central risk team is also responsible for managing group risk governance and oversight.

Appendix D – IFRS additional disclosures continued**D18 – Risk management continued****Our Risk Management Framework**

At Group centre, we monitor risks on a regular basis through our Risk Management Framework. The framework includes all our risk management processes, systems and tools and helps set standards for identifying, managing and reporting risks and establishing minimum standards for our control environment.

This process allows us to:

- assess the overall risk exposures we face as a group;
- identify risk exposures across specific areas of our business or business activities; and
- define the risks we're prepared to accept.

The central risk team monitors these risk exposures on a regular basis, with a specific focus on financial risks via a fortnightly report, and reports the findings to the Executive Committee. As part of the performance management process, senior management review risk management information to ensure the successful delivery of our business objectives.

As well as the ongoing monitoring activities the central risk team produces a formal quarterly risk report for the Risk and Regulatory Committee of the Board and the various risk oversight committees.

Corporate governance and oversight

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

These committees monitor the aggregate risk profile, provide challenge and recommend risk management activity and ensure that our risk policies are used to manage risk to agreed standards.

Board oversight is maintained on a regular basis through its Risk and Regulatory Committee. The Group Chief Risk Officer has a reporting line to the Chief Financial Officer as well as to the Chairman of the Risk & Regulatory Committee, assuring independence of the function.

Policies and procedures

We have 35 policies that deal with the management of all our risks. These policies define our risk appetite and set out risk management and control standards for the group's worldwide operations. The policies also set out the roles and responsibilities of businesses, regions, policy owners, and the risk oversight committees.

As our business needs to change and respond to market conditions and customer needs, we regularly monitor our policies and risk appetite to ensure they remain relevant and up-to-date. This helps to provide assurance to the various governance and risk oversight committees that there are appropriate controls in place for all our core business activities, and that the processes for managing risk are understood and followed consistently across our global businesses.

Risk and economic capital

We continue to develop our economic capital models to allow us to measure, compare and further understand our risks. The results of the modelling are incorporated into our key decision making processes. These models show us the relative impact to economic capital from the risks we face. In turn this allows us to consider appropriate and effective mitigating strategies where risks are outside of appetite

The Financial Services Authority (FSA) requires Aviva to assess its economic capital requirements to ensure that it adequately reflects business and control risks. In turn this analysis supports our strategic planning and decision-making processes.

How are financial, strategic and operational risks managed at Aviva?**Financial Risks**

We're exposed to financial risk as a result of changes in the values of our investments and the value of our insurance liabilities. This risk is caused by potential market movements in equity and property prices, the impact of interest rate changes and inflation expectations, credit risk exposures, foreign exchange rate movements and liquidity demands.

D18 – Risk management continued

Market risk

Aviva is exposed to market risk from owning a portfolio of international insurance businesses. A decline in markets or an increase in market volatility may also adversely affect sales of our investment products and our fund management business. We recognise that market risk is part of the businesses that we run, and that a certain level of market risk is acceptable in order to deliver benefits to both policyholders and shareholders.

We manage market risk by applying our market risk policy to all of the assets under the Group's control. This includes policyholder assets (those assets supporting the technical liabilities) and shareholder assets (the surplus assets held that are not required to meet policyholder benefits and to cover regulatory margins). In practice assets can move between these categories.

To ensure we manage the risks around assets backing technical liabilities, we have set standards for the way businesses should match their liabilities with appropriate assets. Businesses also need to follow a clear decision-making and monitoring process when liabilities cannot be matched or a degree of mismatching is desired. Several of our long term savings businesses sell products where the majority of the market risk is borne by the policyholder. Any market risk attributable to policyholders is managed to satisfy the policyholders' objectives for risk and reward.

We monitor the financial impact of the changes to market values (including our staff pension schemes) through our measurement of economic capital and sensitivities to our key performance measures and set our risk appetite in respect of the amount to be invested in different types of asset.

Equity price risk

Falls in equity prices is our largest market risk exposure. We continually monitor our exposures relative to our risk appetite and have reduced our overall exposures to equity risk during 2008 by extending our portfolio of equity hedges. This is in addition to the significant equity de-risking we performed in 2007 within our main staff pension scheme and General Insurance businesses. These hedges tend to take the form of a portfolio of options designed to provide protection against falls in equity prices at the lowest cost possible. Over the year we have actively managed our portfolio of equity hedges to ensure our equity risk remains within appetite without any adverse liquidity impacts.

'Hedging' is a strategy used to reduce exposures to price risk movements.

Our analysis of equity price risk shows that a 10% decrease in equity prices causes a £382 million pre-tax decrease in the level of shareholders' funds on an IFRS basis and a reduction of embedded value of £650 million, net of tax on an MCEV basis. Sensitivities to increases in equity prices are shown in note 55 and in the section on MCEV reporting. These figures are based on an instantaneous shock and include the impact of the hedges in place.

Interest rate risk

Changes in the level of interest rates affect both the products we sell and the value of our investments. For example, long-term debt and fixed income securities are both exposed to fluctuations in interest rates. We are also exposed to movements in interest rates on business carrying investment return and surrender value guarantees.

A 1% decrease in interest rates would increase shareholders' funds by £420 million pre-tax on an IFRS basis and embedded value would decrease by £465 million, net of tax on an MCEV basis. Sensitivities to increases in interest rates are shown in note 55 and in the section on MCEV reporting.

For some categories of our long-term business, we reduce interest rate risk through the close matching of assets and liabilities. For short-term business such as general insurance, we require a close matching of assets and liabilities by duration to minimise this risk. If we can't entirely remove interest rate exposure through matching, then we may use a variety of derivative instruments in order to hedge against unfavourable market movements.

We have implemented a portfolio of hedges in Delta Lloyd to protect against the interest rate guarantees within the business. This strategy protected our position in the light of the rapidly falling interest rates environment we have witnessed.

Property price risk

We also invest in property assets in different global locations. These assets are also subject to fluctuations in their value. Property investment is managed locally by our business units, recognising any local regulatory restrictions in respect of asset admissibility or liquidity and with reference to the business units' risk appetite.

A 10% decrease in property values would decrease shareholders' funds by £355 million pre-tax on an IFRS basis and embedded value would decrease by £355 million, net of tax on an MCEV basis. Sensitivities to property values are shown in note 55 and in the section on MCEV reporting.

Appendix D – IFRS additional disclosures continued**D18 – Risk management continued*****Credit risk***

We have significant exposures to credit risk through our investments in corporate bonds, commercial mortgages, and other securities. We hold these investments for the benefit of both our policyholders and shareholders.

We manage the exposure to individual counterparties, by measuring exposure against centrally set limits. These limits take account of credit ratings issued by rating agencies such as Standard & Poor's.

We manage the level of risk we're prepared to take via analysis that helps us define the optimal balance between the risk we take and the returns we can earn on the underlying assets, monitoring the types of investment available to us to achieve our aims. We also actively monitor and consider the risk of a fall in the value of fixed interest securities from changes in the perceived credit worthiness of the issuer.

We're also exposed to credit risk through our use of reinsurance. Reinsurance arrangements are only placed with providers who meet our counterparty credit standards.

Foreign exchange risk

As an international business we're exposed to fluctuations in exchange rates in the countries in which we undertake business. Over half of our premium income comes from currencies other than sterling. Generally, we don't hedge these currency risks as profits are retained to support growth in the business units, however significant dividends from overseas business units are hedged as they are declared.

Movements in exchange rates will affect the value of shareholders' funds which are expressed in sterling. This aspect of foreign exchange risk is monitored centrally against limits aimed at aligning capital deployed with capital required. We use currency borrowings and derivatives when necessary to keep currency exposures within these limits. We hedge specific foreign exchange transaction risks when we feel it's appropriate; for example, acquisition or disposal activity. We're also exposed to some exchange risk from assets held in staff pension schemes, as a part of the investment strategy agreed with the scheme trustees.

Derivatives risk

We use derivatives in a number of our businesses to enable efficient investment management or as part of structured retail savings products. In addition we use derivatives to hedge the financial risks discussed above. Derivatives can involve complex financial transactions and, to minimise the risks involved, we set minimum standards of control that we require our businesses to adopt when using derivatives.

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. Speculative activity is prohibited, unless prior approval has been obtained from the Derivatives Approval Committee.

Liquidity risk

We need to ensure that we maintain sufficient liquid assets to meet our cash-flow obligations as they fall due. All our businesses identify their sources of liquidity risk and monitor the potential exposures.

At group level, we maintain a prudent level of liquidity which meets the expectations of the FSA and the wider investment community. We maintain a buffer of liquid assets to cover unforeseen circumstances, including providing temporary funds to any of our business units that may experience temporary liquidity shortfalls. The group maintains significant committed borrowing facilities from a range of banks.

Insurance Risk Management

As an insurance business, we evaluate exposures to determine whether or not to insure risks and set terms and conditions for any insurance products underwritten.

Life insurance risk

Our life insurance businesses are exposed to a range of life insurance risks from various products. These risks are, typically, longevity (the risk that people will live longer than we have assumed), mortality (the death of a policyholder), and morbidity (ill health), as well as experience risks to changes in the underlying assumptions made at the start of the insurance policy, for example duration of the policy and expenses.

Longevity risk

We have a significant exposure to annuity business and our most significant life insurance risk is therefore associated with longevity. We monitor longevity statistics and compare these with emerging industry trends. We use the results of this analysis to decide both the reserving and pricing of annuities.

Inevitably, there remains uncertainty about the development of longevity that cannot be removed. Should our assumptions in respect of annuitant mortality worsen by 5% then shareholders' funds would decrease by £320 million pre-tax on an IFRS basis and decrease embedded value by £380 million on an MCEV basis, net of tax.

D18 – Risk management continued

Mortality and morbidity risk

Our business units manage mortality and morbidity risk arising on insurance products through the setting of limits and the use of reinsurance to transfer excessive risk exposures. Sensitivity tests show that mortality risk is relatively low. A 5% worsening in assurance mortality experience reduces shareholder funds by £30 million on an IFRS basis and decreases embedded value by £265 million on an MCEV basis, net of tax.

Persistency risk

Persistency (or lapse) risk affects all of our life insurance businesses and is managed at a business unit level through frequent monitoring of experience. Where possible, the potential financial impact of lapses is reduced by the product design. Guidelines have been developed on persistency management, sharing best practice in the setting of lapse assumptions, product design requirements, experience monitoring, and required management actions.

Product Design and Pricing risk

Poorly designed or inadequately priced products can lead to both financial loss and reputational damage for Aviva. Guidelines have been developed to support the businesses through the complete cycle of the product development process, financial analysis and pricing.

Expense risk

Expenses are managed and monitored at a business unit level, as part of general day-to-day business management. Expense management is a key part of a business' ability to meet financial targets. Expense risk arises not only from any failure to control the overall level of expenses but also from any deviation of actual experience from the assumptions made in pricing our insurance policies. Expense assumptions are regularly monitored to ensure they remain appropriate.

General Insurance risk

Our general insurance businesses are exposed to a variety of risks, including fluctuations in the timing, frequency and severity of claims and claim settlements, inadequate reinsurance protection and inadequate reserves.

Catastrophe Risk

Our largest general insurance risk is claims incurred from catastrophic events, such as flooding and windstorm. We manage this risk through central monitoring of risk aggregations and, where we do not wish to retain the risk within the group, by purchasing catastrophe cover from third party reinsurers.

We use reinsurance to help reduce the financial impact of a catastrophe and to manage the volatility of our earnings. We use extensive financial modelling and analysis to ensure we understand the catastrophe risk and to ensure we get maximum benefit in terms of cost of providing the catastrophe reinsurance covers.

As catastrophe events become more remote, the amount of risk we retain increases, so that our total potential loss from our most concentrated exposure (northern European wind storm) is approximately £400 million for a one in ten year event, compared to approximately £ 850 million for a one in a hundred year event.

Worsening Claims Ratios

Another material risk is the financial impact of worsening claims ratios. The business units manage this risk through underwriting disciplines, control of claims management and exploring different solutions to the way we measure and price the risks we underwrite. For example, our UK business has developed digital flood mapping to understand better the risk to household insurance from flood damage.

Strategic risks

We are exposed to a number of strategic risks. Our strategy needs to support our vision, purpose and objectives and be responsive to both the external and internal environment, for example changes in the competitive landscape, regulatory changes, merger and acquisition opportunities and emerging trends (such as climate change, pandemic and improving longevity).

Strategic risk is explicitly considered throughout our strategic review and planning process. Developments are assessed during our quarterly performance management process where all aspects of our risk profile are considered.

We actively engage with external bodies to share the benefit of our expertise in supporting responses to emerging risks as well as challenging developments that could be damaging to our business and the industry as a whole.

Operational risks

We're exposed to operational risk arising from inadequately controlled internal processes or systems, human error or non-compliance as well as from external events. Operational risks include taxation, reputation and regulatory risks, such as compliance.

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 against financial, operational and reputation criteria.

Appendix D – IFRS additional disclosures continued**D18 – Risk management continued**

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.

Supplier risk

Within Aviva, we have robust guidelines on how supplier risk should be assessed, mitigated and monitored through our Purchasing and Outsourcing policies. These policies are promoted and endorsed by Aviva's senior management. Aviva's local Procurement and Risk teams, who understand local service issues and concerns, have the responsibility to ensure these are implemented fully at a local level. Performance against these guidelines is then assessed at both regional and group level on an ongoing quarterly basis. Risk is measured against four areas: financial impact, internal service disruption, customer impact and risk to the Aviva brand.

Where we identify any local potential supply risk - detailed actions plans are put in place to resolve and local senior management are informed to ensure appropriate management focus is applied.

In addition we complete regular assessments of our major suppliers and ensure that we have robust alternative supply options available. We assess the ongoing financial health of our major suppliers globally coupled with a review of the business contingency plans to ensure an adequate standard of assurance is maintained.

19 – Related party transactions

The Group received 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

	2008		2007	
	Income earned in year £m	Receivable at year end £m	Income earned in year £m	Receivable at year end £m
Associates	61	–	58	–
Joint ventures	5	3	4	2
Employee pension schemes	24	6	26	6
	90	9	88	8

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. Details of guarantees, indemnities and warranties provided on behalf of related parties are given in note 50(h).

Services provided by related parties

There were no services provided by related parties in either 2007 or 2008.

Details of loans made to joint ventures and associates may be found in notes 18 and 19 respectively.

Key management compensation

The total compensation to those employees classified as key management, being those having authority and responsibility for planning, directing and controlling the activities of the Group, including the executive and non-executive directors is as follows:

	2008 £m	2007 £m
Salary and other short-term benefits	38	40
Post-employment benefits	3	4
Equity compensation plans	9	14
Termination benefits	3	2
Total	53	60

Information concerning individual directors' emoluments, interests and transactions is given in the Directors' remuneration report.

Shareholder services

Managing your shareholding

Our Registrar, Equiniti, maintains the Company's Register of Members and if you have any queries in respect of your shareholding, please contact them directly using the contact details provided on page 150. In addition to assisting with general queries, Equiniti can also help with the following:

Amalgamating your shareholding

If you receive more than one copy of our communications, it could be because you have more than one record on the share register. To avoid duplicate mailings, please contact Equiniti who can arrange for your accounts to be amalgamated.

Dividend payments direct to your bank account

Instead of having your dividends paid by cheque, you can, if you wish, have them credited directly into your bank or building society account on the dividend payment date. This reduces the risk of cheques getting lost in the post and is also quicker and more convenient as payment is credited automatically on the payment date. Your tax voucher will be sent to your registered address as usual. If you would like to set up a dividend mandate, you can do so via our website www.aviva.com/dividendmandate or by contacting Equiniti to request a mandate form.

If you live overseas, an **Overseas Payment Service** is available for certain countries, which may allow you to receive your dividends directly in your bank account in your local currency.*

Consolidated tax vouchers

If you are a private shareholder who currently receives dividends paid directly into your bank or building society account, you will receive one consolidated tax voucher each year instead of a voucher with each dividend payment, unless you request otherwise.

* Please note that a payment charge will be deducted from each dividend payment before conversion into your chosen currency.

Dividend Reinvestment Plan ("DRIP")/Scrip Dividend Scheme

Following a review by the Board of the operation of the current DRIP, the Company intends to propose a resolution at the forthcoming AGM to reintroduce a SCRIP dividend scheme ("SCRIP Scheme"). The Board has therefore decided to withdraw the DRIP and, subject to shareholder approval, will reintroduce the SCRIP Scheme commencing with the 2008 final dividend in order to provide shareholders with the opportunity to elect to receive their dividends in the form of new shares in the Company instead of in cash. All shareholders will be contacted with full details of the relevant terms and conditions of the proposed SCRIP Scheme and details of how to join in due course.

ID fraud/unsolicited mail

Share-related fraud and identity theft still affects many shareholders and we urge you to continue to be vigilant. If you receive any unsolicited mail offering advice, you should inform Equiniti immediately. More information on this can be found on our website at www.aviva.com/shareholderupdates

Corporate nominee

We offer a corporate nominee service, the Aviva Share Account, for shareholders who wish to remain anonymous. If you choose to join the nominee account, your personal details will not be entered on our share register but you will have the same rights as registered shareholders and will receive the same shareholder communications. To join the Aviva Share Account or find out about the terms and conditions, please contact Equiniti.

Our website – www.aviva.com

Visit www.aviva.com/shareholders for up-to-date investor information including our latest financial results and key dates. An electronic copy of current and past Annual and Interim Reports can be downloaded from the website. You can also find our current and historic share prices, sharedealing information, news, updates and when available, presentations from the Group Chief Executive. You can also register to receive future shareholder communications electronically.

A range of frequently asked shareholder questions including practical help on transferring shares and updating personal details is available online at www.aviva.com/shareholderguide

Electronic communications

We have embraced the changes brought about by the Companies Act 2006 which recognises the growing importance of electronic communications. We therefore provide documentation and communications to you via our website unless you have specifically elected to receive a hard copy.

Using electronic communications enables fast receipt of documents, reduces our printing, paper and postage costs and has a positive impact on the environment.

You can also cast your vote for the next AGM online, quickly and easily using the Sharevote service by visiting www.aviva.com/agm for a reliable and environmentally friendly way of voting.

Shareholder services continued

Share dealing

We have arranged the following services that can be used to buy or sell Aviva shares which you may find useful.

	Available to shareholders in	If you hold a share certificate	If your shares are held in the Aviva Share Account
Equiniti Financial Services Limited*	UK only	www.shareview.co.uk/dealing Telephone: 08456 037 037	www.shareview.co.uk/dealing Telephone: 08456 037 037
NatWest Stockbrokers Limited**	UK only	Freephone: 0808 208 4411	Freephone: 0808 208 4422
Barclays Stockbrokers Limited†	UK and overseas	UK shareholders: Telephone: 0870 549 3002† For postal applications: 0870 514 3263† Overseas shareholders: Telephone: +44 (0)141 352 3959‡	UK shareholders: Telephone: 0870 549 3001† Overseas shareholders: Telephone: +44 (0)141 352 3959‡
WH Ireland Limited#	UK and overseas	UK shareholders: Telephone: 0845 603 1470 Email: CSOS@WH-ireland.co.uk Overseas shareholders: Telephone: +44 113 394 6603 Email: CSOS@WH-ireland.co.uk	Not available

Alternatively, if you hold a share certificate, you can also use any bank, building society or stockbroker offering share dealing facilities to buy or sell shares. If you are in any doubt about buying or selling shares, you should seek professional financial advice.

* Equiniti Financial Services Limited is authorised and regulated by the Financial Services Authority of 25 The North Colonnade, Canary Wharf, London E14 5HS (FSA reference 468631). Registered in England and Wales, number 6208699.

** Natwest Stockbrokers Limited (NWS) is a member of the London Stock Exchange and PLUS. NWS is authorised and regulated by the Financial Services Authority registered number 124395. Registered Office: Waterhouse Square, 138-142 Holborn, London EC1N 2TH. Registered in England and Wales, registered number 1959479. NWS is operated by a joint venture between The Royal Bank of Scotland Group plc and The Toronto-Dominion Bank.

† Barclays Stockbrokers is the group name for the businesses of: Barclays Stockbrokers Limited, a member of the London Stock Exchange and PLUS. Registered No. 1986161; Barclays Sharedealing, Registered No. 2092410 and Barclays Bank Trust Company Limited, Registered No. 920880. All companies are registered in England and the registered address is: 1 Churchill Place, London E14 5HP. All companies are authorised and regulated by the Financial Services Authority.

Calls made to 0870 numbers will cost no more than 8p per minute, plus 6p call set-up fee for BT residential customers. The price on non-BT phone lines may be different. You can only use these numbers if you are calling from within the UK. Calls may be recorded to monitor the quality of service, to check instructions and for security purposes.

‡ If you are not UK resident, you will need to provide various documents to Barclays Stockbrokers Limited in order to use this service and details will be provided on registration. Please note that regulations prevent this service from being offered to US, Canadian and Australian residents. Settlement proceeds will be sent to either a UK sterling bank account or by sterling cheque.

WH Ireland Limited is a member of the London Stock Exchange and is authorised and regulated by the Financial Services Authority, registered in England No. 02002044.

Share price

You can access the current share price of Aviva plc ordinary shares at www.aviva.com/investors

or by calling FT Cityline on 09058 171 690.* If you would like to find out the price of Aviva preference shares, please follow the link on the Aviva website to the London Stock Exchange at www.londonstockexchange.com/en-gb/pricesnews

* Calls are currently charged at 75 pence per minute from a BT landline. The average time to access the share price is approximately one minute. Other telephony provider costs may vary.

The Barbican Centre, Silk Street, London EC2Y 8DS on:

29 April 2009 at 11.00am

The Notice of Meeting, together with details of the business to be conducted at the Meeting is available on our website www.aviva.com/agm

If you are unable to attend but would like to ask the directors any questions, please do so via our website www.aviva.com/agm or complete and return the shareholder questions form, which can be found at the back of the Notice of Meeting. Answers to the most frequently asked questions will be circulated at the meeting and published on our website after the meeting.

The voting results for our 2009 AGM, including proxy votes and votes withheld will be available on our website shortly after the meeting at the following address www.aviva.com/agm

Annual General Meeting

Our Annual General Meeting will be held at:

Group financial calendar for 2009

Announcement of financial results for the year ended 31 December 2008	5 March
Annual General Meeting	29 April
Announcement of first quarter interim management statement	30 April
Announcement of unaudited six months' interim results	6 August
Announcement of third quarter interim management statement	4 November

Ordinary shares – 2008 Final dividend

Ex-dividend date	25 March
Record date	27 March
Dividend payment date	15 May

Preference shares

First dividend payment for 83/8% cumulative irredeemable preference shares	31 March
First dividend payment for 83/4% cumulative irredeemable preference shares	30 June
Second dividend payment for 83/8% cumulative irredeemable preference shares	30 September
Second dividend payment for 83/4% cumulative irredeemable preference shares	31 December

Useful contact details

Detailed below are the contact details that shareholders may find useful. Please quote Aviva plc as well as the name and address in which the shares are held in all correspondence. Please quote your shareholder reference number as well, which you will find on your latest dividend stationery.

General shareholding, administration and Aviva Share Account queries

Equiniti
Aspect House
Spencer Road, Lancing, West Sussex BN99 6DA

e-mail: aviva@equiniti.com | Telephone 0871 384 2953*

* Calls to this number are charged at 8p per minute from a BT landline. Other telephony provider costs may vary.

Alternative format

If you would like to request a copy of our Annual Report and Accounts in an alternative format, for example, braille or audio, please contact Equiniti by calling 0871 384 2953*.

Aviva plc details

**Registered in England
Number:** 2468686

Telephone
+44 (0)20 7283 2000

Registered Office:
St Helen's, 1 Undershaft,
London EC3P 3DQ

www.aviva.com

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.norwichunion.com

Asset management
www.avivainvestors.com

Aviva worldwide internet sites
www.aviva.com/websites

**From 1 June 2009, this website will change to www.aviva.co.uk

Other useful links for shareholders:

Dividend information
www.aviva.com/dividend

General shareholder information
www.aviva.com/shareholders

Annual General Meeting information
www.aviva.com/agm

Electronic voting for Annual General Meeting
www.aviva.com/agm

Presentation Slides