

# News Release

Aviva plc  
2012 Preliminary Announcement  
7 March, 2013



**Good progress on disposals and turnaround programme**  
**£3,050m loss principally arising from the sale of the US as previously disclosed**  
**Economic capital surplus increased by £3.5bn to £7.1bn<sup>1</sup>**  
**2012 total dividend 19p from 26p. Final dividend 9p from 16p**  
**Priorities: cashflow and debt reduction**

<b>Results</b>	<ul style="list-style-type: none"><li>■ Total loss after tax £3,050 million (2011: profit of £60 million) including previously announced £3.3 billion writedown on US disposal</li><li>■ Operating profit on an underlying<sup>2</sup> basis of £1,776 million (2011: £1,857 million) after adverse foreign exchange impact of £65 million</li></ul>
<b>Dividend rebased and scrip removed</b>	<ul style="list-style-type: none"><li>■ Final 2012 dividend of 9 pence per share (2011: 16 pence), full-year dividend 19 pence per share, (2011: 26 pence).</li><li>■ Dividend rebased to reduce leverage and increase retained earnings, ensuring dividend distribution is covered by earnings and cashflows</li><li>■ Removal of dilutive scrip: will improve earnings per share and gives clarity to cashflows and dividend</li></ul>
<b>Capital and cashflows</b>	<ul style="list-style-type: none"><li>■ Proforma economic capital surplus<sup>3</sup> £7.1 billion, 172% (2011: £3.6 billion, 130%)</li><li>■ IFRS net asset value of 278p (2011: 435p)</li><li>■ Interdivisional balance between Group and UK General Insurance replaced with an interest bearing loan of which £600 million will be repaid over the next three years</li><li>■ £944 million net cash remittances to Group in 2012 (2011: £778 million)</li></ul>
<b>Status of 2012 turnaround plan</b>	<ul style="list-style-type: none"><li>■ Significant disposals announced: US, Delta Lloyd, Aseval, Malaysia, Sri Lanka, Russia</li><li>■ £275 million annualised cost savings realised</li><li>■ Internal and external leverage have increased and must be reduced</li></ul>

**Mark Wilson, Group Chief Executive Officer, said:**

"2012 was a year of transition at Aviva. There has been solid progress against the turnaround plan set out last year. Our capital strength has improved materially and we have completed the vast proportion of the disposal programme. We have made progress reducing costs and we also have a strong new management team in place.

"The £3 billion loss after tax is driven principally by writedowns we have previously announced due to the agreed sale of our US business. Operating profit levels were healthy across our major businesses, especially in the UK, France and Canada.

"The rebasing of the dividend and the elimination of the dilutive scrip is about giving certainty to shareholders, reducing debt, and putting Aviva in a sound position for the future. This is the right course of action.

"Aviva has many strengths to build on. We have a number of market leading businesses capable of delivering progressive cashflows and other businesses that offer genuine growth potential. My intention is that Aviva will be a simpler business with a robust balance sheet that delivers sustainable cashflows and growth."

<sup>1</sup> On a proforma basis. Includes the benefit of completing the US and Aseval transactions announced in December 2012 and the Delta Lloyd and Malaysia transactions announced in January 2013.

<sup>2</sup> In 2012, operating profit on an underlying basis represents Aviva Group excluding Delta Lloyd and the United States. 2011 operating profit on an underlying basis represents Aviva Group excluding Delta Lloyd, United States and RAC.

<sup>3</sup> The economic capital surplus represents an estimated unaudited position. The capital requirement is based on Aviva's own internal assessment and capital management policies. The term 'economic capital' does not imply capital as required by regulators or other third parties. Pension scheme risk is allowed for through ten years of stressed contributions.

# Chairman's statement

Aviva plc today announced its preliminary results for 2012, the first announcement for our new CEO Mark Wilson. As I held executive responsibility for the last eight months of the year, I thought it appropriate on this occasion, that I join Mark in this earnings announcement.

Mark has started very strongly. His focus going forward is on cash flow, earnings growth, and reducing leverage. This has my full endorsement as well as that of the board.

## Strong progress and momentum in reshaping the group

In mid-2012, we launched a radical repositioning of the group, setting out a relatively ambitious programme to bring the group to a stronger, more stable position with improved earnings performance and operating cash generation in 2014 and beyond:

- Refocus on core, exit 16 non-core segments, and turnaround 27 segments
- Reduce exposure to southern Europe and capital hungry segments
- Improve productivity, performance and operating capital generation
- Strengthen economic capital and reduce leverage

As it turned out, we have had a very active period, but achieved a great deal in a short time.

Boosting capital was our main initial priority and I am pleased we were able to increase the economic capital surplus substantially by £3.5 billion from the end 2011 (130% coverage) to a pro-forma level of £7.1 billion (172% coverage), within our stated target range.

We have since exited seven of the most material "red" cells on time and at respectable prices, better and faster than was generally expected of us and action is being taken on the balance. Specifically, we announced disposal of the US business, our stake in Delta Lloyd, and a number of smaller interests around the world, the settlement of our dispute with Bankia in Spain, a significant reduction in our exposure to Italy and Spain, and the exit of large bulk purchase annuities in the UK.

We also targeted improvement by the end of 2013 in 27 "amber" cells, through revenue increase, cost reduction, loss mitigation, or capital reduction. Seven of these have been brought to "green" status. As we stand, we now have nine red cells, 20 amber cells and 22 green cells.

We also reshaped our top management team, particularly with the appointment of a strong and decisive CEO, and made progress in the renewal of the board.

## Reducing leverage

The announced sale of the US, though strategically imperative, nevertheless resulted in a sharp reduction in net assets per share and a consequent increase in tangible leverage from 41% to 50%, which is high relative to the sector. We have therefore revised our forward plans to bring this to below 40%, by increasing retained earnings and by reducing debt.

On 1<sup>st</sup> January 2013, we began the simplification of the group's legal structure to improve governance over the UK general insurance business. This, when completed by the end of May 2013 is expected to formalise an inter-divisional balance of around £5.8 billion in the form of a collateralized loan. In response to these pressures, we have decided to bring down the level of both internal and external debt to lower, more prudent, levels.

## The decision to reduce the dividend

At the same time, constraints, including regulatory, on capital and liquidity, are putting greater demands on resources, as does our transformation programme, particularly this year. While central liquidity balances are likely to improve with the settlement with Bankia and the completion of the sale of the US business, group resources

nevertheless contain insufficient provision for unknown risks, our desire to pay down internal and external debt, and to maintain prudent capital and liquidity levels.

In the circumstances therefore, we have taken the difficult decision to reduce the dividend to a level that can be cash covered in 2014 and to enhance the availability of resources for important long-term structural requirements.

Accordingly today we declared a final 2012 dividend of 9 pence per share, bringing the full-year dividend down by 27% to 19 pence from 26 pence and the final by 44% from 16 pence.

I regret this has become necessary, but can assure shareholders we took this decision only after examining scrupulously all alternatives. The need to ensure that the current and future dividend is sustainable and covered by operating cash generation is fundamental. The broad transformation of the group in the midst of continuing economic uncertainty also requires that we maintain and grow the level and flexibility of capital and liquid resources.

### **Zero bonuses for Executive Directors**

While we appreciate the considerable progress that has been made on a number of fronts, we do not believe the overall situation of the group warrants bonuses for executive directors for 2012 or pay rises for 2013.

### **Improved Outlook**

The turnaround programme continues apace. We are taking decisive action on costs and in improving business performance. 2013 though remains a transitional year through significant restructuring charges and the loss of earnings from subsidiaries earlier disposed.

We have forward business plans to 2015 that are robust, show significant improvement, and that the new dividend level is cash covered. Increased retained earnings and stronger liquidity should also permit reasonable reduction in internal and external debt levels, thus bringing overall leverage to a more reasonable level.

Management is demonstrating professional execution as well as prudence. I am confident about the future of Aviva, and for our prospects going forward.

A handwritten signature in black ink, appearing to be 'John McFarlane', with a long, sweeping horizontal line extending to the right.

John McFarlane  
Chairman

# Group chief executive officer's review

## FIRST IMPRESSIONS

Aviva is a company with a rich legacy, some strong businesses, an outstanding brand, a large customer base and very talented people.

I joined Aviva because I believe there is significant potential to be unlocked. Aviva is a turnaround story.

In my first few months at Aviva I have had the opportunity to visit a number of our businesses and to speak to many customers. What strikes me is the dedication and professionalism of those colleagues who look after customers' needs every day. Our customer service in many parts of the business is a genuine differentiator.

However in recent years Aviva has not lived up to its potential and has disappointed shareholders. In 2012 our Chairman, John McFarlane, highlighted these issues and set out a clear plan. The actions in 2012 to focus the business, strengthen the balance sheet, and improve performance have been the right ones and progress has been made.

Aviva has delivered a large part of the disposal programme. In line with the plan laid out in July last year, in 2012 we narrowed the focus of our business through the announced sales of our most significant non-core businesses, including the sales of Delta Lloyd, USA, Sri Lanka, Malaysia and lastly Russia. In addition we have agreed to transfer Aseval to Bankia for £500 million.

As a result our capital position has improved markedly, with the economic capital surplus strengthening from £3.6 billion to £7.1 billion, giving a coverage ratio now of 172% on a proforma basis, well within our target range of 160% - 175%.

This plan has successfully addressed the immediate capital and focus issues. We now need to take Aviva to the next phase of its turnaround.

## INVESTMENT THESIS: "CASHFLOW AND GROWTH"

It is clear to me that Aviva has not articulated why investors should buy or hold Aviva shares – what investors should expect of us.

I believe there is a clear space in the market for a simple proposition: a diversified insurer that can provide sustainable and growing cashflows and that has good options for growth. Whilst many will focus on valuation methodologies - such as MCEV, TEV and EV - Aviva will focus the business on progressive cashflow generation.

My intention is that Aviva will have a robust balance sheet with strong and predictable cashflows, diversified earnings and capital, and lower leverage.

Following the progress made on the disposal programme, we are now a more focused portfolio of businesses. Some are cash generators, such as the UK, France and Canada, with upside potential whilst others provide opportunities for growth such as Poland, Turkey, and Singapore.

Put simply, our investment thesis is about progressive cashflow and growth, in that order.

## Cashflow

### Three core businesses

Aviva has scale positions in the three core business lines of life and savings, general insurance and fund management – all under a strong brand. We have businesses in attractive, established markets which generate strong cashflows and which offer cross-sell potential. Aviva is world class in many core areas of insurance. For example, our underwriting, analytics and claims expertise, especially in Canada and UK general insurance, are impressive. And we have clear strengths in distribution including direct, through

intermediaries, and through bancassurance where we have over 100 agreements.

### Focus on cashflow

We will manage the established markets for cash and ensure that the subsidiaries remit progressive cash dividends to the Group. Product development will be driven by a clear focus on sustainable cashflows. For example, in the UK we have managed the volume and pricing of our annuity business so that cashflows are brought forward and capital strain is lowered.

It is also about our scale: we have approximately 34 million customers, annual life and general insurance gross written premiums of around £23 billion and over £300 billion total funds under management.

### Significant diversification benefits

Diversity, spreading the risk from one to many, is a central tenet of insurance. Aviva's diversity across our three core businesses and across selected markets gives earnings stability and capital benefits. For example, product line and geographic diversification brings a significant reduction in our economic capital requirements.

### Robust balance sheet

Our focus is to ensure that we have a robust balance sheet which underpins the cashflows by managing our balance sheet exposures actively, focusing on economic capital as the principal measure. The outstanding issue to be addressed is our internal and external leverage position. We have a clear plan to tackle this.

### Financial simplicity

The insurance business is perceived as complex. Aviva has also for some time been criticised for the complexity of its financial disclosure and business structure, and this problem has been exacerbated by our internal leverage. Our plans to reduce internal leverage and reorganise our structure will provide some of the clarity our shareholders desire.

## Growth

### Insurance expertise and scale drives cashflow growth in our established markets

Our established markets not only provide good cashflows but also offer potential for growth. Managing our substantial back books and focusing on improving persistency levels will increase the value from our existing customer base.

### Valuation upside from gradual UK & European recovery

The majority of Aviva's business is concentrated in the UK and Europe. Over the last 12 months we have spent considerable time improving our risk profile. As a result, we are well positioned to benefit from a gradual UK and European recovery.

### Exposure to growth markets in Europe and Asia

We have a number of businesses which offer growth potential in markets such as Poland, Turkey, and Singapore. These will be managed with a view to value growth under strict capital controls.

### Reducing expenses

We will continue to focus on improving cost efficiencies and, particularly, on reallocating resources to initiatives where we can earn the highest returns and strong cashflows. We will deliver in excess of £400 million cost savings.

### Upside from operational improvement

We have previously highlighted to the market there are elements of the Group which have underperformed for some

time, where cashflows have not been optimised and where our expenses are too high. The turnaround of these amber cell businesses gives opportunity to create value for shareholders.

## BALANCE SHEET

Aviva's corporate structure was overly complex and far from optimal. Our internal leverage through the interdivisional balance was too high and created an unsatisfactory long-term exposure for the UK general insurance business. This internal leverage, together with external leverage, must be addressed.

Pat Regan explains the change to our corporate structure in more detail in his CFO report. In summary, we have replaced the interdivisional balance between Group and UK general insurance with a formal loan and we plan to reduce this by £600 million in total over the next three years.

We have kept the FSA informed of our thinking in relation to these issues and they are supportive of the actions we are taking.

With respect to our external leverage, we have a medium term target ratio of below 40%.

The de-risking and strengthening of our balance sheet is entirely aligned with our investment thesis and cashflow focus.

The immediate priority, therefore, is to reduce the Group's leverage and to pay an appropriate dividend.

## REBASED DIVIDEND

For our cashflow and growth investment thesis to be delivered we must tackle the issue of leverage. As such we have only one course of action. The dividend needs to be rebased with reference to growth in cashflows and earnings.

For analysts covering the stock I am cognisant that there are two schools of thought. On the one hand, we have those that would suggest that with our successful disposal programme we have enough liquidity to pay dividends at the historic rate. Others would suggest that the business earnings are not sufficient to fund the dividend and therefore the dividend is too tight. The reality is that both of these arguments are right – we have enough short term liquidity to be able to pay the dividend, but cashflows from the business are too tight to sustain the historic level.

The recent disposals have resulted in our leverage ratio increasing further with the reduction in net assets. This leverage issue must be addressed and leverage will be reduced.

As a result of this, we have today declared a final 2012 dividend of 9 pence per share, from 16 pence. This brings the full-year dividend down to 19 pence per share, from 26 pence. In addition we have also decided to eliminate the scrip. I acknowledge that whilst rebasing the dividend will disappoint some shareholders, this will be mitigated to some degree by eliminating the dilutive scrip element. This is a difficult decision and is absolutely necessary to ensure Aviva is put on a sound footing for the future.

The removal of the scrip will stop further shareholder dilution, given that the scrip has had a dilutive impact of 16% over the last eight years. This measure improves earnings per share growth, is consistent with improving financial simplicity, and gives clarity to cashflows and the dividend.

Looking ahead, Aviva will have a progressive dividend policy, with reference to growth in cashflows and earnings. We would expect the 2013 interim dividend to rebase in line with the percentage reduction in the 2012 final dividend.

## PEOPLE

Achievement of Aviva's turnaround necessitates a strengthened management team.

The appointment of Nick Amin as Group Transformation Director improves our ability to deliver the turnaround plan. The appointments of David McMillan as CEO of Aviva Europe and Jason Windsor to the Group Executive, strengthen our executive team.

The appointment of Khor Hock Seng as CEO of Aviva Asia, reaffirms our commitment to selected markets in that region and gives us strong Asian leadership with deep market experience. Christine Deputy's appointment as our new Group HR Director gives us the necessary leadership and experience for our cultural change.

In addition, given the economic climate and the recent performance of the Group, I have implemented a pay freeze for the top 400 managers and focused our resources towards other levels. I believe very strongly in paying for performance. Our overall spend on bonuses at senior levels will match the business performance and will be based on rigorous differentiation between performance levels. We will focus the money available on our top performers who made the largest contribution.

## OUR PRIORITIES IN 2013

Our priorities in 2013 are:

### Cashflow

- Focus businesses on cash flows to Group
- Deliver in excess of £400 million cost saves
- Improve operating performance
- Grow the value of life new business and improve general insurance COR

### Simplicity

- Continue to strengthen the management team
- Communicate a clear customer proposition
- Continue the disposal programme
- Strategic realignment of Aviva Investors, a core business

### Strength

- Reduce external and internal leverage
- Maintain economic capital surplus within target range (160% - 175%)
- Actively manage and further reduce balance sheet volatility

## OUTLOOK

To move forward, Aviva has had to make some difficult choices. The decisions we have made are realistic, provide clarity and address the uncertainty that has surrounded our stock. It is now up to Aviva to deliver the performance.

Mark Wilson,  
Group Chief Executive Officer



# Chief financial officer's review

## Overview

We have made good progress improving our capital strength and narrowing the Group's focus so that we now operate in materially fewer countries.

The agreed sale of the US has been a main contributor to a loss after tax of £3.1 billion. Operating performance is broadly in line with the previous year, but with higher restructuring costs as we transform the company. Operating profit on an underlying<sup>5</sup> basis was down 4% in 2012 primarily due to adverse foreign exchange movements.

We have seen improvements in profitability of new business, cashflows to Group and good levels of operating capital generation. The economic capital position has significantly improved but, as a result of the disposals we have made, leverage has increased. We have also taken action to simplify the group's corporate structure, formalising the inter-divisional balance into a loan of which we will pay down £600 million over the next three years.

## Financial strength

The number one priority in 2012 was to improve Aviva's capital position. During the year we have taken a number of management actions and this, combined with market movements, means that our IGD and economic capital solvency surpluses have improved significantly.

We have simplified our portfolio of businesses and as a result Aviva will operate in 18 countries, from 30 three years ago. These changes, including the announced sales of Aviva USA and Delta Lloyd and the settlement of our agreement to transfer Aseval to Bankia in Spain, will result in a positive movement in our economic capital. On a proforma basis the estimated economic capital surplus improved to £7.1 billion with a coverage ratio of 172% as at 31 December 2012 (2011: £3.6 billion; 130% coverage). In addition, we have now made the calculation more prudent to now include the pension deficit funding on a 10 year basis (previously five year basis). The IGD solvency surplus has improved to £3.8 billion as at 31 December 2012 (2011: £2.2 billion).

At the end of February 2013, our estimated pro forma economic capital coverage ratio was 175%.

We also took a number of steps to reduce the volatility of our capital position. In July we reduced our holding in Delta Lloyd from 41% to just under 20% and in January 2013 we sold our remaining stake.

Over the course of the year we also reduced our exposure to Italian sovereign debt with a gross sell down of €6.5 billion<sup>6</sup> this year from our shareholder and participating funds. After taking into account market movements and new business, the value of our net direct shareholder and participating fund holdings (net of NCI) in Italian sovereign debt is now £4.9 billion (2011: £6.4 billion) of which net direct shareholder exposure is £0.4 billion. Of the £4.9 billion Italian sovereign debt 74% is held in Italy.

Aviva's external debt and preference shares stood at £6.9 billion at the end of 2012. As a result of the reduction in net asset value from the disposals the external debt leverage ratio increased to 50%<sup>7</sup>. It is our intention to reduce this to below 40% over the medium term.

## Loss after tax

The overall result for the year was a loss after tax of £3.1 billion (2011: profit after tax £60 million). For continuing operations, the loss after tax was £202 million.

The largest driver of the overall loss is the agreed sale of our US business. At HY12 we recognised an impairment of goodwill and intangibles of £0.9 billion related to that business, and at the full year we recognised a further impairment of £2.4 billion. This was partially offset by positive investment variances of £0.3 billion.

On a continuing basis loss after tax was £202 million. Drivers of this loss after tax are operating profits offset by integration and restructuring costs of £461 million, primarily reflecting the execution of the transformation plan; adverse investment variances of £634 million; net adverse post tax non-operating items in Delta Lloyd of £304 million (principally relating to movements in the Delta Lloyd Group curve), and loss on disposals of £164 million and other goodwill and intangible impairments of £188 million.

Operating profit per share (EPS) on a continuing basis was 39.2p (2011: 47.5p). Total EPS was negative 113.1p (2011: 5.8p) reflecting the loss on the sale of the US business.

## Net asset value

IFRS net asset value per share was 278p (2011: 435p) reflecting the loss after tax, actuarial movements on the pension scheme, payment of the dividend and adverse foreign exchange movements. On a proforma basis (including the transfer of Aseval to Bankia in Spain) IFRS NAV is 284p.

The MCEV net asset value decreased to 422p (2011: 441p) primarily driven by operating profits, positive investment variances, actuarial movements on the pension scheme, payment of the dividend and adverse foreign exchange movements. The impact of the agreement to sell Aviva USA is positive under MCEV and offsets the goodwill and intangible impairments in other markets.

## Operating performance

Operating profit on an underlying basis is £1.8 billion (2011: £1.9 billion), a 4% reduction compared with 2011. This was driven primarily by adverse foreign exchange movements of £65 million. Operating profit on a constant currency basis, excluding Delta Lloyd and RAC, was stable reflecting slightly lower operating profits from our life business partly offset by a small increase in profits from our general insurance and health businesses.

Operating profit on an underlying basis after restructuring costs was £1.3 billion (2011: £1.6 billion). This includes restructuring costs of £461 million relating to our underlying businesses (2011: £261 million) mainly driven by the transformation of the business, the integration of Ireland into the UK business and preparations for Solvency II.

The IFRS return on equity was 10.3% (2011: 12.0%). This was driven by the overall reduction in operating profit for the period.

## Life insurance

IFRS operating profit from our life insurance business fell by 5% to £1,831 million (2011: £1,926 million) primarily as a result of adverse foreign exchange movements.

In the UK, operating profit reduced to £887 million (2011: £917 million). On an underlying basis, excluding net one-off items in 2011 and 2012, operating profit improved by 2%. New business profitability increased by 17% to give an overall increase in new business income of 9%. Key drivers of this were increased protection sales and pricing actions together with lower bulk purchase annuity sales reflecting

5 In 2012, operating profit on an underlying basis represents Aviva Group excluding Delta Lloyd and the United States. 2011 operating profit on an underlying basis represents Aviva Group excluding Delta Lloyd, United States and RAC

6 Gross of non-controlling interests (NCI), purchases and redemptions.

7 External debt and preference shares divided by total tangible capital employed

our focus on improving profitability. There was also a reduction in the proportion of lower margin Irish business following the closure of our joint venture with AIB. We continue to expand our protection business with an exclusive five year agreement with Tesco, building on the strong bancassurance franchise already in place in the UK.

The improvement in new business income has been offset by lower investment returns due to lower opening funds under management, reduced yields on shareholder assets and higher acquisition expenses due to changes in business mix.

Net UK funds under management increased by £2.2 billion in 2012. This was driven by strong sales of individual annuities and GPP giving rise to net inflows of £1.2 billion for our non-profit business. Market and other movements were £5.3 billion, offset by net outflows from the UK with-profits book of £4.3 billion.

In **France**, life operating profit increased to £335 million (2011: £323 million) despite the weakening of the euro during the year. Although new business income reduced to £120 million (2011: £142 million) as a result of volume reductions, we reduced expenses and profitability was broadly stable. Participating business income was stable at £333 million with a small increase in average reserves (on a constant currency basis) and improved profitability.

In **Italy**, overall operating profit increased to £159 million (2011: £140 million). Our continued focus on improving product design and capital efficiency in a tough economic environment impacted both new business volumes and profitability. New business income reduced to £64 million (2011: £121 million). This was more than offset by improved expected return of £65 million (2011: £47 million) and lower expenses of £169 million (2011: £232 million).

In **Spain**, overall life operating profit was stable at £215 million (2011: £216 million) despite the weakening of the Euro during the year. Within this total underwriting margin increased to £142 million (2011: £139 million) offset by a reduction in investment return to £143 million (2011: £158 million). The continuing difficult economic conditions and contraction in the mortgage market have resulted in a significant reduction in new business volumes. However, new business profitability was maintained and there were stable returns from the in-force portfolio. The agreed transfer of the Aseval business to Bankia will reduce new business volumes following the completion of the transaction in 2013.

In our other businesses, income in **Singapore** increased to £65 million (2011: £52 million) driven by growth in both new business volumes and profitability. In **Poland**, operating profit reduced to £153 million (2011: £167 million) although on a local currency basis the overall result remained stable. In our remaining businesses, continued difficult economic conditions resulted in lower operating profits.

The life new business IRR in our continuing operations was 14.9% (2011: 14.5%), with an increase in the UK offsetting reductions in some European markets, in particular Spain and Poland.

The value of new business reduced to £746 million as a result of an increase in the UK offset by reductions in Europe.

### General insurance and health

General insurance and health operating profit increased marginally to £893 million (2011: £935 million, excluding RAC; £860 million). This is due to good performances in both the UK and Canada driven by the continued progress we have made in underwriting, claims and cost management. The combined operating ratio was 97.0% (2011: 97.5%).

In the **UK**, general insurance profit levels improved by 3%, excluding RAC, and the combined operating ratio was stable

at 98% (2011: 98% excluding RAC) despite an increase in weather-related claims of £31 million compared to long-term average and latent claims reserve strengthening of £53 million. Our performance in UK general insurance continues to benefit from our focus on underwriting excellence and active management of claims costs and expenses.

Our general insurance business in **Canada** delivered another strong performance with an improvement in the combined operating ratio to 93% (2011: 95%) and a 9% increase in operating profits to £276 million (2011: £254 million) as a result of favourable prior year developments, continued underwriting discipline and the use of predictive analytics.

### Fund Management

In a challenging investment environment Aviva Investors' operating profit on a continuing basis (which excludes the contribution from Aviva Investors in the USA) was £42 million (2011: £53 million) with lower performance fees partially offset by cost savings from the strategic review.

Investment performance was ahead of target on both benchmark and peer group measures. We maintained or improved client satisfaction, meeting or exceeding our targets on all client surveys in 2012. Net sales fell year-on-year as a result of the refocus of our product offering.

### Capital generation and cashflows

At full year 2012 Aviva generated £2.0 billion of operating capital (2011: £2.1 billion) ahead of the target we set at the start of the year. Operating capital generation from the in-force life portfolio was £2.0 billion (2011: £2.3 billion) while general insurance contributed £0.6 billion (2011: £0.6 billion).

Operating capital generation levels were driven by strong performances in UK Life and Italy which offset the impact of reductions from the sale of Delta Lloyd and our US life and annuities business.

Aviva increased the amount of cash remittances from the businesses to Group to £0.9 billion in 2012 (2011: £0.8 billion). France resumed dividend payments to Group and management actions in UK Life led to a significant increase in cash remitted to Group.

The following table shows operating capital generation and dividends paid to Group by business units.

Total by country	Received in 2012 (£ million)		
	Operational capital generation	Dividend	% remitted to Group
UK Life*	662	150	23%
UK GI	341	150	44%
France	330	202	61%
Canada	190	136	72%
Poland	124	70	56%
Spain	78	68	87%
Singapore	35	17	49%
Italy	75	0	-
Ireland	52	0	-
Other**	72	151	-
<b>Total</b>	<b>1,959</b>	<b>944</b>	<b>48%</b>
Incremental UK Life dividend*		150	
<b>Overall total</b>		<b>1,094</b>	

\*a dividend expected from UK Life of £300 million will be paid in 2013

\*\*includes RAC, Aviva Re, US and Delta Lloyd

We continue to taken a number of actions on capital efficiency and our corporate structures to increase cash remittances going forward.

## Changes to Aviva's capital structure

We are taking action to reduce the complexity of the balance sheet and reduce internal leverage. Prior to 2013 in the Group's corporate structure, AIL (Aviva Insurance Limited) was both the underwriting company for the UK General Insurance business and the holding company for the majority of the Group's overseas subsidiaries. Prior to 2013 an inter-divisional loan balance of around £5 billion was in place between the UK General Insurance business and the Group and this was used over a number of years to purchase overseas subsidiaries and for other general corporate purposes.

This structure was complex from a corporate governance point of view; created the potential for dividend traps and made demonstrating that Aviva has appropriate resolution arrangements in place (a key requirement of the PRA/FSA) more difficult. A more straightforward structure has now been put in place with two separate legal entities — Aviva Group Holdings Ltd (as holding company) and Aviva Insurance Limited (as the general insurance underwriting company). As a result of this change the inter-divisional balance between the Group and UK General Insurance will be formalised into an interest bearing loan of around £5.8 billion between AGH and AIL. We have decided to reduce the size of this loan balance and will pay down £600 million in total over the next three years.

As a result of this change, which the FSA are supportive of, our corporate structure will be more transparent, the Group will have direct ownership of overseas subsidiaries and the exposure of our UK general insurance business to these will be reduced over time.

A handwritten signature in blue ink, appearing to read 'PR', with a long horizontal line extending to the right.

Pat Regan  
Chief Financial Officer



# Market overview

## UK & Ireland life and pensions

- UK Operating profit £887 million (2011: £917 million)
- UK Operating capital generated £662 million (2011: £551 million)
- UK Expense base £723 million (2011: £741 million)
- UK value of new business £420 million (2011: £380 million)
- Cash dividend to Group £300 million<sup>8</sup> (2011: £200 million)
- UK long-term sales, including investment sales, £12,140 million (2011: £12,943 million)
- UK life new business IRR 18% (2011: 15%)

Aviva is the UK's leading life insurer. In the UK life business, operating profit was down 3% to £887 million although on an underlying basis this improved by 2% in the year. We improved our life new business IRR to 18% reflecting our focus on improving profitability and capital allocation.

Capital generation and dividends to Group are key priorities. Capital generation increased over the year together with dividends in respect of 2012. We aim to increase them further in future years. This improvement was a result of the UK life business's focus on capital efficiency, including the withdrawal from large scale bulk purchase annuities and other tail products, pricing actions on core products, cost savings and retention. This resulted in a 20% increase in operating capital generation to £662 million.

Despite difficult market conditions, long term sales, excluding bulk purchase annuities, were up slightly at £11,953 million. This was driven by a strong performance in our core markets of "at retirement" (annuities and equity release) and protection where we grew sales respectively by 12% and 20%, which offset a reduction in bond sales. We continued to expand our distribution footprint, including an exclusive five year agreement with Tesco to distribute protection products. Our health business performed strongly, with net written premiums up 12% at £528 million (2011: £473 million). We were voted Health Insurance Company of the Year for the third year in succession at the 2012 Health Insurance Awards.

Aviva has been campaigning for a long time to bring greater transparency to the annuity market to encourage customers to shop around on the open market to get the best annuity for their retirement. Aviva does not differentiate its pricing between internal and external customers, and we welcome the FSA's thematic review of annuities.

The UK industry is entering an uncertain period as an unprecedented level of regulatory change takes effect, including the Retail Distribution Review, Auto-Enrolment and Gender Directive. We are fully prepared and well-placed to benefit from the changes, with both a broad product range and extensive distribution network.

The integration of Aviva's Irish life business is progressing well, but Ireland remains a difficult market and profitability is not yet at acceptable levels. Ireland IFRS operating profit was down 89% at £5 million and sales were down 31% at £632 million due to the closure of our joint venture with AIB from 31 March 2012. Excluding this joint venture, IFRS operating profits were up 156% to £23 million and sales rose 9% to £530 million.

## UK & Ireland general insurance\*

- UK general insurance operating profit of £448 million (2011: £433 million)
- UK Operating capital generated £341 million (2011: £421 million)
- UK Expense base £775 million (2011: £786 million)
- Cash submitted to Group £150 million (2011: £184 million)
- UK Combined operating ratio of 98% (2011: 98%)
- UK Net written premiums of £4,062 million (2011: £4,110 million)
- Ireland general insurance and health operating profit of £29 million (2011: £44 million) with net written premiums of £428 million (2011: £471 million) and a general insurance combined operating ratio of 102% (2011: 102%)

\*2011 comparatives for UK general insurance are shown excluding RAC

Aviva is the leading general insurer in the UK and Ireland. Although sales were lower, total like for like operating profit increased slightly, demonstrating our focus on disciplined underwriting to maintain profitability ahead of volumes. We delivered a UK general insurance COR of 98% despite the fact that 2012 was the second wettest year on record.

Our operating performance remains our number one priority, with an increasing focus on broker management, pricing analytics, cost control and capital allocation.

These results highlight the strength of our diversified portfolio and our risk selection, which has delivered good profitability in UK personal lines with combined operating ratios of 97% and 93% in motor and homeowner respectively. We have seen further modest growth in the UK motor market where we now have nearly 2.5 million customers. This represents an increase of more than 250,000 customers since the start of 2012 driven by the success of our Quotemehappy and multicar offerings. We are further developing our profitable homeowner business, assisted by a new partnership deal with insurance broker Gallagher Heath.

In UK commercial, the market remains challenging for brokers and customers, due to the ongoing economic conditions. We are focusing on improving our processes to ensure we provide commercial customers with insurance cover at an acceptable price and our shareholders with a good return on their capital.

We are focused on further improving our customer service. We have strengthened our underwriting disciplines and invested in pricing, risk selection and customer and broker facing systems. In 2012 customer advocacy scores improved as we achieved an 18 point improvement in our Relationship Net Promoter Score® and we reduced the number of complaints received by almost 30%. Brokers also recognised our excellent customer service by voting us Insurance Times General Insurer of the Year, for the second year running.

We continue to develop innovative insurance solutions such as 'Aviva Drive', a smartphone app which helps us to tailor insurance prices to customers' driving styles. We also launched 'Fast Track', an online trading platform which provides brokers with the facility to 'quote and buy' online in under five minutes.

<sup>8</sup> Based on full UK 2012 dividend expected to be paid in March 2013.

During the year, we further restructured our Irish general insurance business to improve profitability. Additional actions to make further improvements continue in 2013.

### France

- Life operating profit £335 million (2011: £323 million)
- Operating capital generated £330 million (2011: £320 million)
- Expense base £422 million (2011: £495 million)
- Value of new business £119 million (2011: £142 million)
- Cash dividend to Group £217 million (2011: £0)
- Life new business IRR 11% (2011: 11%)
- Long-term savings sales £3,638 million (2011: £4,047 million)
- General insurance and health operating profit £95 million (2011: £144 million)
- Combined operating ratio of 95% (2011: 90%)
- Net written premiums of £1,002 million (2011: £1,016 million)

Aviva France is the third-largest business in the Aviva group. Despite difficult macro-economic conditions, the business produced a solid performance with operating profit of £422 million (2011: £471 million). Costs have reduced and the business is once again paying dividends to Group after one year of non payment.

Life operating profit increased, and, although sales were 4% lower on a local currency basis, we outperformed the individual life market, which fell 10% over the course of the year. Our joint venture with Crédit du Nord, Antarius, performed strongly with a 2% increase in sales. Life new business IRR was flat. We have taken action to improve the business mix, emphasising the sale of less capital intensive protection products, which grew 9% (17% on a local currency basis).

General insurance sales rose by 6% on a local currency basis, due to an increase in both policy volumes and rates. Although general insurance profits were down as a result of bad weather and lower reserve releases compared to the previous year, the combined operating ratio remained strong at 95%.

Over the course of the year we increased our customer base to 3.2 million and received several awards for both our life and general insurance products.

### Canada

- IFRS operating profit of £276 million (2011: £254 million)
- Operating capital generated £190 million (2011: £162 million)
- Expense base £413 million (2011: £380 million)
- Cash dividend to Group £136 million (2011: £168 million)
- Combined operating ratio of 93% (2011: 95%)
- Net written premiums of £2,176 million (2011: £2,083 million)

Aviva is Canada's second-largest general insurer. The business delivered a good financial result with a strong increase in profit. This performance was due to pricing sophistication, underwriting discipline, improved retention and strong underlying growth in new business. We also maintained a profitable mix of personal and commercial lines business across Canada. Dividend to Group as a proportion of profits remains high.

We use world-class predictive analytics to enhance our underwriting capabilities and further research and development is underway to enhance our pricing for weather-related perils.

The Canadian insurance business, unlike many other businesses in the Group is mostly intermediated; however we continue to address increasing customer demand for choice, simplicity and self-service by working with our brokers to help them compete with other channels.

Aviva Canada is committed to strong distribution relationships and maintained highest-ever satisfaction scores among its broker partners in 2012. Customer service has also improved further. Our claims Net Promoter Score® is +47, a very strong result.

We delivered a strong underwriting result in personal lines due to our disciplined underwriting and lower claims frequency because of a mild winter. Our efforts to transform and improve the profitability of the commercial lines business continued as we initiated actions to address underperforming segments. Increased expenses reflect investment in our business as we continue to drive sustained operating efficiency and productivity, along with higher premium taxes resulting from higher GWP.

### Italy

- Life operating profit £159 million (2011: £140 million)
- Operating capital generated £74 million (2011 operating capital usage £56 million)
- Expense base £98 million (2011: £101 million)
- Value of new business £29 million (2011: £75 million)
- Cash dividend to Group £0 (2011: £0)
- Life new business IRR 12% (2011: 12%)
- Long-term savings sales £1,971 million (2011: £2,993 million)
- General insurance profit £20 million (2011: loss of £35 million)
- Combined operating ratio of 100% (2011: 114%)
- Net written premiums of £357 million (2011: £416 million)

Aviva Italy is the sixth-largest business in the Aviva group. In 2012 operating profit increased despite a fall in GDP and market volatility. We have taken positive steps to maintain profitability putting in place various initiatives in our life and GI businesses which have improved our performance and delivered a marked improvement to operating capital generation.

Life profitability improved due to our focus on products that are less capital intensive and the result has been a favourable change in our product mix. These actions have, along with the adverse economic conditions, led to a drop in the value of new business but the change in business mix improved IRR to 12.4% from 11.5% in 2011.

General insurance profitability improved through pricing actions, disciplined claims management and by pulling out of or reducing our sales in unprofitable lines. Consequently, general insurance sales were 8% lower than the previous year on a local currency basis. However, improvements in our claims management and underwriting processes together with stable prior year development, have improved our combined operating ratio by 13.7 percentage points to 99.8%.

## Spain

- IFRS operating profit £215 million (2011: £216 million)
- Operating capital generated £78 million (2011: £85 million)
- Expense base £56 million (2011: £63 million)
- Value of new business £56 million (2011: £86 million)
- Cash dividend to Group £68 million (2011: £62 million)
- Internal rate of return of 21% (2011: 23%)
- Long-term savings sales of £1,295 million (2011: £1,926 million)

Aviva Spain is the country's fifth largest long-term insurer by gross written premiums. We sell protection, long-term savings and pensions, health and accident insurance both directly and through bancassurance networks.

On a constant currency basis operating profit increased by 7%, while life and pensions sales have decreased by 28%. A substantial part of this reduction has been the result of management action focusing on the efficient use of capital. The business has focused on retaining highly profitable protection business, while developing capital efficient products, including unit linked savings. IRR remains strong at 21% (2011: 23%). The underlying strength of the Spanish business allowed us to pay a dividend to Group of £68 million in 2012.

In December we reached a settlement with Bankia to transfer to them our entire holding in Aseval, a Spanish life insurance company. This agreement generated proceeds of £494 million, a very positive result.

## Poland

- Life operating profit £153 million (2011: £167 million)
- Operating capital generated £124 million (2011: £102 million)
- Expense base £74 million (2011: £83 million)
- Value of new business £35 million (2011: £45 million)
- Cash dividend to Group £70 million (2011: £99 million)
- Life new business IRR 20% (2011: 24%)
- Long-term savings sales £373 million (2011: £487 million)

Aviva is Poland's fourth largest life insurer. A combination of regulatory changes, adverse foreign exchange movements and the impact of the economic environment resulted in lower life insurance sales in 2012. Even so, we focused on becoming more efficient and our profitability in this market remained strong with an IRR of 20%. Regulatory conditions resulted in a lower dividend to Group.

We continued to improve our distribution and our bancassurance agreement with Santander provides us with a strong source of revenue so that we now have a 10% share of the individual life insurance market.

## Singapore

- Life operating profit £65 million (2011: £52 million)
- Operating capital generated £35 million (2011: £6 million)
- Expense base £52 million (2011: £47 million)
- Value of new business £42 million (2011: £34 million)
- Cash dividend to Group £17 million (2011: £34 million)
- Life new business IRR 25% (2011: 31%)
- Long-term savings sales £817 million (2011: £724 million)

Aviva is a top five life insurer in Singapore with over half a million customers, and one of the biggest providers of employee benefits and healthcare insurance. Long term savings sales increased 28% on the previous year with bancassurance sales and sales of retirement products contributing significantly to this growth. Our 11-year relationship with DBS, Singapore's largest bank, continues to go from strength to strength. Life operating profit and value of new business were up significantly on the previous year driven by strong protection sales and increased scale. Dividends to Group have normalised in 2012.

## China

In China, bank interest rates remain high making our savings products less attractive. We have therefore shifted our focus towards the sale of protection products.

## India

In India, despite regulatory changes creating uncertainty in the market, we extended our distribution agreement with Indusind Bank, India's leading private sector bank. We also launched an online sales portal for protection business. Online customers now account for 14% of new customers acquired and 4% of new business premium in India.

## Turkey

In Turkey, our life and general insurance businesses generated an IFRS operating loss of £22 million (2011: £9 million loss). In life insurance we serve two million customers and are well positioned to benefit from our relationship with partner Akbank TAS, and their related banks, Citibank AS and Burgan Bank AS. Protection sales through our bancassurance channel were up by more than 50% compared to 2011.

## Aviva Investors

- Operating profit £42 million (2011: £53 million)
- Net funded external sales £1.7 billion with a further £0.2 billion of committed but unfunded sales (2011: £3.6 billion)
- 69% of institutional funds performed above benchmark (where a benchmark exists) with 68% of funds ahead of peer group.

In a challenging investment environment Aviva Investors' operating profit on a continuing basis (which excludes contribution from asset management activities undertaken for Aviva USA) was £42 million (2011: £53 million) with lower performance fees partially offset by cost savings from the strategic review.

Investment performance was ahead of target on both benchmark and peer group measures. We maintained or improved client satisfaction, meeting or exceeding our targets on all client surveys in 2012. Net sales fell year-on-year as a result of the refocus of our product offering.

## Key financial highlights

IFRS	2012 £m	2011 £m	Sterling % change
Life business	1,831	1,926	(5)%
General insurance and health	893	935	(4)%
Fund management	51	61	(16)%
Other operations	(204)	(204)	—
Corporate centre	(136)	(138)	1%
Group debt and other interest costs	(659)	(648)	(2)%
<b>Operating profit before tax (excluding Delta Lloyd as an associate) – continuing operations</b>	<b>1,776</b>	<b>1,932</b>	<b>(8)%</b>
Share of operating profit (before tax) of Delta Lloyd, as an associate	112	157	(29)%
<b>Operating profit before tax – continuing operations</b>	<b>1,888</b>	<b>2,089</b>	<b>(10)%</b>
Operating profit before tax – discontinued operations <sup>1</sup>	239	414	(42)%
<b>Operating profit before tax</b>	<b>2,127</b>	<b>2,503</b>	<b>(15)%</b>
<b>Operating profit before tax (after restructuring costs) – continuing operations</b>	<b>1,427</b>	<b>1,828</b>	<b>(22)%</b>
<b>(Loss)/Profit after tax – continuing operations</b>	<b>(202)</b>	<b>417</b>	
Earnings per share	(113.1)p	5.8p	
Operating profit per share – continuing operations	39.2p	47.5p	(17)%
(Loss)/Profit after tax	(3,050)	60	
Return on equity	10.3%	12.0%	(1.7)pp
Total dividend per share	19.0p	26.0p	(27)%
Operating capital generation	£2.0bn	£2.1bn	(5)%

<sup>1</sup> Current period represents the results of the United States. Prior period represents the results of the United States and Delta Lloyd up to 6 May 2011.

	End of February 2013 <sup>2</sup>	31 December 2012	31 December 2011	Sterling % Change
Estimated proforma <sup>1</sup> IGD solvency surplus		£3.9bn		
Estimated IGD solvency surplus		£3.8bn	£2.2bn	73%
Estimated proforma economic capital surplus	£7.6bn	£7.1bn		
Estimated economic capital surplus		£5.3bn	£3.6bn	47%
IFRS net asset value per share		278p	435p	(36)%
MCEV net asset value per share <sup>3</sup>		422p	441p	(4)%

<sup>1</sup> Proforma includes the benefit of completing the US and Aseval transactions announced in December 2012 and the Delta Lloyd and Malaysia transactions announced in January 2013. See 'Cautionary statement' in Notes to editors.

<sup>2</sup> Estimated position as at 28 February 2013.

<sup>3</sup> In preparing MCEV information, the directors have done so in accordance with the MCEV Principles with the exception of stating held for sale operations at their expected fair value, as represented by expected sale proceeds, less costs to sell

### Life operating profit – continuing operations

	Operating profit		
	2012 £m	2011 £m	Sterling % change
United Kingdom	887	917	(3)%
Ireland	5	47	(89)%
United Kingdom & Ireland	892	964	(7)%
France	335	323	4%
Spain	215	216	—
Italy	159	140	14%
Other Developed Markets	—	4	(100)%
Poland	153	167	(8)%
Asia	69	108	(36)%
Other Higher growth markets	8	4	100%
<b>Total life operating profit</b>	<b>1,831</b>	<b>1,926</b>	<b>(5)%</b>

### General insurance and health (excluding Delta Lloyd and RAC)

	Operating profit		GI COR
	2012 £m	2011 £m	2012 %
<b>Group</b>	<b>893</b>	<b>860</b>	<b>97%</b>
United Kingdom	462	445	98%
Ireland	29	44	102%
United Kingdom & Ireland	491	489	99%
France	95	144	95%
Canada	276	254	93%



## Notes to editors

All comparators are for the full year 2011 position unless otherwise stated.

Income statements and cashflows of foreign entities are translated at average exchange rates while their assets and liabilities are translated at the closing rates on 31 December 2012. The average rates employed in this announcement are 1 euro = £0.81 (12 months to 31 December 2011: 1 euro = £0.87) and US\$1 = £0.63 (12 months to 31 December 2011: US\$1 = £0.63).

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

## Cautionary statements:

This should be read in conjunction with the documents filed by Aviva plc (the "Company" or "Aviva") with the United States Securities and Exchange Commission ("SEC"). This announcement contains, and we may make other verbal or written "forward-looking statements" with respect to certain of Aviva's plans and current goals and expectations relating to future financial condition, performance, results, strategic initiatives and objectives. Statements containing the words "believes", "intends", "expects", "projects", "plans", "will", "seeks", "aims", "may", "could", "outlook", "estimates" and "anticipates", and words of similar meaning, are forward-looking. By their nature, all forward-looking statements involve risk and uncertainty. Accordingly, there are or will be important factors that could cause actual results to differ materially from those indicated in these statements. Aviva believes factors that could cause actual results to differ materially from those indicated in forward-looking statements in the presentation include, but are not limited to: the impact of ongoing difficult conditions in the global financial markets and the economy generally; the impact of various local political, regulatory and economic conditions; market developments and government actions regarding the sovereign debt crisis in Europe; the effect of credit spread volatility on the net unrealised value of the investment portfolio; the effect of losses due to defaults by counterparties, including potential sovereign debt defaults or restructurings, on the value of our investments; changes in interest rates that may cause policyholders to surrender their contracts, reduce the value of our portfolio and impact our asset and liability matching; the impact of changes in equity or property prices on our investment portfolio; fluctuations in currency exchange rates; the effect of market fluctuations on the value of options and guarantees embedded in some of our life insurance products and the value of the assets backing their reserves; the amount of allowances and impairments taken on our investments; the effect of adverse capital and

credit market conditions on our ability to meet assumptions in pricing and reserving for insurance business (particularly with regard to mortality and morbidity trends, lapse rates and policy renewal rates), longevity and endowments; the impact of catastrophic events on our business activities and results of operations; the inability of reinsurers to meet obligations or unavailability of reinsurance coverage; increased competition in the UK and in other countries where we have significant operations; the effect of the European Union's "Solvency II" rules on our regulatory capital requirements; the impact of actual experience differing from estimates used in valuing and amortising deferred acquisition costs ("DAC") and acquired value of in-force business ("AVIF"); the impact of recognising an impairment of our goodwill or intangibles with indefinite lives; changes in valuation methodologies, estimates and assumptions used in the valuation of investment securities; the effect of legal proceedings and regulatory investigations; the impact of operational risks, including inadequate or failed internal and external processes, systems and human error or from external events; risks associated with arrangements with third parties, including joint ventures; funding risks associated with our participation in defined benefit staff pension schemes; the failure to attract or retain the necessary key personnel; the effect of systems errors or regulatory changes on the calculation of unit prices or deduction of charges for our unit-linked products that may require retrospective compensation to our customers; the effect of simplifying our operating structure and activities; the effect of a decline in any of our ratings by rating agencies on our standing among customers, broker-dealers, agents, wholesalers and other distributors of our products and services; changes to our brand and reputation; changes in government regulations or tax laws in jurisdictions where we conduct business; the inability to protect our intellectual property; the effect of undisclosed liabilities, integration issues and other risks associated with our acquisitions; and the timing/regulatory approval impact and other uncertainties relating to announced acquisitions and pending disposals and relating to future acquisitions, combinations or disposals within relevant industries. For a more detailed description of these risks, uncertainties and other factors, please see Item 3d, "Risk Factors", and Item 5, "Operating and Financial Review and Prospects" in Aviva's most recent Annual Report on Form 20-F as filed with the SEC. Aviva undertakes no obligation to update the forward looking statements in this announcement or any other forward-looking statements we may make. Forward-looking statements in this announcement are current only as of the date on which such statements are made.

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

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Pat Regan +44 (0)20 7662 2228	Andrew Reid +44 (0)20 7662 3131	Analyst presentation 0745 hrs GMT	<b>Financial supplements</b>	
			IFRS	21
			New business	77
			Capital management	85
Charles Barrows +44 (0)20 7662 8115	Sarah Swailes +44 (0)20 7662 6700	Presentation slides available at <a href="http://www.aviva.com">www.aviva.com</a> from 0630 hrs GMT	Analysis of Assets	103
			Glossary	130
			Shareholder services	132
David Elliot +44 (0)207 662 8048		Live webcast <a href="http://www.aviva.com">www.aviva.com</a>	Supplement 2: MCEV	



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## Supplement 2 Financial supplement

The MCEV supplement is published as a separate report

# Group performance – IFRS basis

## Reconciliation of Group operating profit to (loss)/profit after tax – IFRS basis

For the year ended 31 December 2012

			2012 £m			2011 £m
	Continuing Operations	Discontinued Operations <sup>1</sup>	Total	Continuing Operations	Discontinued Operations <sup>1</sup>	Total
<b>Operating profit before tax attributable to shareholders' profits</b>						
Life business						
United Kingdom & Ireland	892	—	892	964	—	964
France	335	—	335	323	—	323
United States	—	200	200	—	197	197
Italy, Spain and Other	374	—	374	360	185	545
Higher growth markets	230	—	230	279	—	279
<b>Total life business (note 1)</b>	<b>1,831</b>	<b>200</b>	<b>2,031</b>	<b>1,926</b>	<b>382</b>	<b>2,308</b>
<b>General insurance and health</b>						
United Kingdom & Ireland	491	—	491	564	—	564
France	95	—	95	144	—	144
Canada	276	—	276	254	—	254
Italy and Other	53	—	53	(2)	1	(1)
Higher growth markets	(22)	—	(22)	(25)	—	(25)
<b>Total general insurance and health (note 5)</b>	<b>893</b>	<b>—</b>	<b>893</b>	<b>935</b>	<b>1</b>	<b>936</b>
<b>Fund management</b>						
Aviva Investors	39	55	94	50	38	88
United Kingdom	11	—	11	11	—	11
Other	1	—	1	—	11	11
<b>Total fund management (note 6)</b>	<b>51</b>	<b>55</b>	<b>106</b>	<b>61</b>	<b>49</b>	<b>110</b>
<b>Other</b>						
Other operations (note 14)	(204)	(4)	(208)	(204)	(5)	(209)
Market operating profit	2,571	251	2,822	2,718	427	3,145
Corporate centre (note 15)	(136)	—	(136)	(138)	—	(138)
Group debt costs and other interest (note 16)	(659)	(12)	(671)	(648)	(13)	(661)
<b>Operating profit before tax attributable to shareholders' profits (excluding Delta Lloyd as an associate)</b>	<b>1,776</b>	<b>239</b>	<b>2,015</b>	<b>1,932</b>	<b>414</b>	<b>2,346</b>
Share of operating profit (before tax) of Delta Lloyd as an associate	112	—	112	157	—	157
<b>Operating profit before tax attributable to shareholders' profits</b>	<b>1,888</b>	<b>239</b>	<b>2,127</b>	<b>2,089</b>	<b>414</b>	<b>2,503</b>
Integration and restructuring costs (note 17)	(461)	(7)	(468)	(261)	(7)	(268)
<b>Operating profit before tax attributable to shareholders' profits after integration and restructuring costs</b>	<b>1,427</b>	<b>232</b>	<b>1,659</b>	<b>1,828</b>	<b>407</b>	<b>2,235</b>
Adjusted for the following:						
Investment return variances and economic assumption changes on life business (note 18)	(620)	342	(278)	(897)	(719)	(1,616)
Short-term fluctuation in return on investments on non-life business (note 19)	7	—	7	(266)	(60)	(326)
Economic assumption changes on general insurance and health business (note 20)	(21)	—	(21)	(90)	—	(90)
Impairment of goodwill, associates and joint ventures and other amounts expensed (note 21)	(60)	(782)	(842)	(392)	—	(392)
Amortisation and impairment of intangibles	(128)	(129)	(257)	(116)	(60)	(176)
(Loss)/profit on the disposal of subsidiaries and associates (note 22)	(164)	(2,359)	(2,523)	565	(32)	533
Exceptional items (note 23)	—	—	—	(57)	—	(57)
<b>Non-operating items before tax (excluding Delta Lloyd as an associate)</b>	<b>(986)</b>	<b>(2,928)</b>	<b>(3,914)</b>	<b>(1,253)</b>	<b>(871)</b>	<b>(2,124)</b>
Share of Delta Lloyd's non-operating items (before tax) as an associate (note 24)	(523)	—	(523)	10	—	10
<b>Non-operating items before tax</b>	<b>(1,509)</b>	<b>(2,928)</b>	<b>(4,437)</b>	<b>(1,243)</b>	<b>(871)</b>	<b>(2,114)</b>
Share of Delta Lloyd's tax expense, as an associate	107	—	107	(34)	—	(34)
<b>(Loss)/profit before tax attributable to shareholders' profits</b>	<b>25</b>	<b>(2,696)</b>	<b>(2,671)</b>	<b>551</b>	<b>(464)</b>	<b>87</b>
Tax on operating profit	(465)	(78)	(543)	(487)	(163)	(650)
Tax on other activities	238	(74)	164	353	270	623
	(227)	(152)	(379)	(134)	107	(27)
<b>(Loss)/profit for the period</b>	<b>(202)</b>	<b>(2,848)</b>	<b>(3,050)</b>	<b>417</b>	<b>(357)</b>	<b>60</b>

<sup>1</sup> Discontinued operations: current period represents the results of the United States and prior period represents the results of the United States and Delta Lloyd up to 6 May 2011.

## (Loss)/earnings per share – IFRS basis

	2012			2011		
	Continuing Operations	Discontinued Operations	Total	Continuing Operations	Discontinued Operations	Total
<b>Operating profit per share on an IFRS basis after tax, attributable to ordinary shareholders of Aviva plc</b>						
Basic (pence per share)	<b>39.2p</b>	<b>5.5p</b>	<b>44.7p</b>	47.5p	6.3p	53.8p
Diluted (pence per share)	<b>38.6p</b>	<b>5.4p</b>	<b>44.0p</b>	46.7p	6.2p	52.9p
<b>(Losses) / earnings after tax on an IFRS basis, attributable to ordinary shareholders of Aviva plc</b>						
Basic (pence per share)	<b>(15.2)p</b>	<b>(97.9)p</b>	<b>(113.1)p</b>	11.1p	(5.3)p	5.8p
Diluted <sup>1</sup> (pence per share)	<b>(15.2)p</b>	<b>(97.9)p</b>	<b>(113.1)p</b>	10.9p	(5.3)p	5.7p

<sup>1</sup> Losses have an anti-dilutive effect. Therefore the basic and diluted earnings have remained the same.

## 1 - Life business adjusted operating profit

	2012 £m	2011 £m
United Kingdom	887	917
Ireland	5	47
United Kingdom & Ireland	892	964
France	335	323
Spain	215	216
Italy	159	140
Other	—	4
<b>Developed markets</b>	<b>1,601</b>	<b>1,647</b>
Poland	153	167
Asia	69	108
Other	8	4
<b>Higher growth markets</b>	<b>230</b>	<b>279</b>
<b>Total - continuing operations</b>	<b>1,831</b>	<b>1,926</b>
<b>Total - discontinued operations</b>	<b>200</b>	<b>382</b>
<b>Total</b>	<b>2,031</b>	<b>2,308</b>

Life business adjusted operating profit before shareholder tax for continuing operations reduced by 5% to £1,831 million (FY11: £1,926 million).

The fall in operating profit was primarily driven by lower unit-linked margins (as a result of reduced opening funds under management), reduced non-recurring items compared to the prior-year (in the UK and in Asia) and weakening of the Euro and Zloty against Sterling. On a constant currency basis there was growth in operating profit in our businesses in continental Europe despite challenging economic and market conditions.

Life adjusted operating profit for discontinued operations includes the full year results for the US life and annuities business for the current and prior periods, and £185 million for Delta Lloyd in the prior period, which represented 100% of Delta Lloyd's result as a subsidiary up to 6 May 2011.

## 2 - Life business profit driver analysis

	United Kingdom & Ireland		France		Italy, Spain and Other		Higher growth markets		Total continuing operations	
	2012 £m	2011 £m	2012 £m	2011 £m	2012 £m	2011 £m	2012 £m	2011 £m	2012 £m	2011 £m
New business income	619	566	120	142	87	158	162	149	988	1,015
Underwriting margin	229	256	61	20	213	217	123	129	626	622
Investment return	854	912	492	534	389	409	270	305	2,005	2,160
<b>Total Income</b>	<b>1,702</b>	<b>1,734</b>	<b>673</b>	<b>696</b>	<b>689</b>	<b>784</b>	<b>555</b>	<b>583</b>	<b>3,619</b>	<b>3,797</b>
Acquisition expenses	(451)	(439)	(111)	(139)	(127)	(223)	(181)	(182)	(870)	(983)
Administration expenses	(412)	(387)	(222)	(216)	(162)	(175)	(116)	(134)	(912)	(912)
<b>Total Expenses</b>	<b>(863)</b>	<b>(826)</b>	<b>(333)</b>	<b>(355)</b>	<b>(289)</b>	<b>(398)</b>	<b>(297)</b>	<b>(316)</b>	<b>(1,782)</b>	<b>(1,895)</b>
<b>DAC, AVIF and Other</b>	<b>53</b>	<b>56</b>	<b>(5)</b>	<b>(18)</b>	<b>(26)</b>	<b>(26)</b>	<b>(28)</b>	<b>12</b>	<b>(6)</b>	<b>24</b>
<b>Total - continuing operations</b>	<b>892</b>	<b>964</b>	<b>335</b>	<b>323</b>	<b>374</b>	<b>360</b>	<b>230</b>	<b>279</b>	<b>1,831</b>	<b>1,926</b>

Total income reduced by 4.7% to £3,619 million (FY11: £3,797 million) while total expenses fell by 6.0% to £1,782 million (FY11: £1,895 million), giving an improvement in cost/income ratio to 49.2% (FY11: 49.9%). In addition, there was a reduction in the overall contribution from DAC and AVIF amortisation and Other items, with an aggregate £6 million charge for the year (FY11: £24 million profit).

## Income: New business income and underwriting margin

	United Kingdom & Ireland		France		Italy, Spain and Other		Higher growth markets		Total continuing operations	
	2012 £m	2011 £m	2012 £m	2011 £m	2012 £m	2011 £m	2012 £m	2011 £m	2012 £m	2011 £m
<b>New business income (£m)</b>	<b>619</b>	<b>566</b>	<b>120</b>	<b>142</b>	<b>87</b>	<b>158</b>	<b>162</b>	<b>149</b>	<b>988</b>	<b>1,015</b>
APE (£m)	1,516	1,638	380	432	395	590	446	465	2,737	3,125
As margin on APE (%)	41%	35%	32%	33%	22%	27%	36%	32%	36%	32%
<b>Underwriting margin</b>	<b>229</b>	<b>256</b>	<b>61</b>	<b>20</b>	<b>213</b>	<b>217</b>	<b>123</b>	<b>129</b>	<b>626</b>	<b>622</b>
Analysed by:										
Expenses	78	102	—	—	85	108	46	48	209	258
Mortality and longevity	87	75	61	20	104	84	66	65	318	244
Persistency	64	79	—	—	24	25	11	16	99	120



**(a) New business income**

New business income decreased to £988 million (*FY11: £1,015 million*). A reduction in sales volumes by 12% (on an APE basis) was partly offset by an improvement in new business profitability to 36% (*FY11: 32%*).

In the UK and Ireland, while new business volumes reduced by 7%, the profitability improved by 17% to give an overall increase in new business income of 9%. The key drivers of this were improved product profitability and changes in mix. Increases in protection sales were offset by lower bulk purchase annuity sales and a reduction in the proportion of lower margin Irish business as a result of the closure of our joint venture with Allied Irish Bank ('AIB') in Ireland.

New business volumes fell significantly in our continental European markets driving a reduction in new business income. In France new business income was down 15% to £120 million with profitability broadly stable. On a constant currency basis volumes were down 5%, with the balance of the adverse variance due to foreign exchange movements. In Italy there was a significant reduction in new business volumes with profitability also reduced as a result of changes in business mix. In higher growth markets, an increase in new business profitability was partly offset by lower sales volumes in some markets.

**(b) Underwriting margin**

The underwriting margin increased to £626 million (*FY11: £622 million*). The increased mortality margin in France was primarily driven by management actions to reduce guaranteed death benefits which generated additional profits of around £29 million (*FY11: £10 million*). This positive variance was partly offset by lower expense and persistency margins in UK and Ireland. In Italy, the underwriting margin increased due to the release of mortality margins through reinsurance of protection business, partly offset by a reduction in expense margin due to an increase in expense reserves in the year. On a constant currency basis the underwriting margin increased in France, Italy and Spain, and was stable in higher growth markets. In addition, underwriting margin reduced due to the sale of certain smaller European businesses in 2012.

**Income: investment return**

	United Kingdom & Ireland		France		Italy, Spain and Other		Higher growth markets		Total continuing operations	
	2012 £m	2011 £m	2012 £m	2011 £m	2012 £m	2011 £m	2012 £m	2011 £m	2012 £m	2011 £m
<b>Unit-linked margin (£m)</b>	<b>425</b>	451	<b>142</b>	173	<b>117</b>	141	<b>208</b>	231	<b>892</b>	996
As annual management charge on average reserves (bps)	<b>95</b>	99	<b>120</b>	122	<b>94</b>	98	<b>139</b>	144	<b>106</b>	110
Average reserves (£bn)	<b>44.9</b>	45.7	<b>11.8</b>	14.2	<b>12.4</b>	14.4	<b>15.0</b>	16.1	<b>84.1</b>	90.4
<b>Participating business (£m)</b>	<b>78</b>	69	<b>333</b>	333	<b>143</b>	140	<b>(8)</b>	3	<b>546</b>	545
As bonus on average reserves (bps)	<b>20</b>	16	<b>72</b>	69	<b>103</b>	94	<b>n/a</b>	25	<b>54</b>	51
Average reserves (£bn)	<b>39.8</b>	42.5	<b>46.3</b>	48.6	<b>13.9</b>	14.9	<b>1.4</b>	1.3	<b>101.4</b>	107.3
<b>Spread margin (£m)</b>	<b>153</b>	165	—	—	<b>37</b>	46	<b>39</b>	37	<b>229</b>	248
As spread margin on average reserves (bps)	<b>39</b>	49	—	—	<b>106</b>	129	<b>197</b>	208	<b>50</b>	62
Average reserves (£bn)	<b>38.8</b>	34.0	<b>1.1</b>	1.0	<b>3.5</b>	3.5	<b>2.0</b>	1.8	<b>45.4</b>	40.3
<b>Expected return on shareholder assets (£m)</b>	<b>198</b>	227	<b>17</b>	28	<b>92</b>	82	<b>31</b>	34	<b>338</b>	371
<b>Total investment return</b>	<b>854</b>	912	<b>492</b>	534	<b>389</b>	409	<b>270</b>	305	<b>2,005</b>	2,160

**(c) Unit-linked margin**

The unit-linked margin fell to £892 million (*FY11: £996 million*). The reduction is primarily due to lower opening funds under management compared to the prior period, following adverse market movements in the second half of 2011, particularly in continental Europe.

The margin as a proportion of average unit-linked reserves was 106 bps (*FY11: 110 bps*), on average reserves of £84 billion (*FY11: £90 billion*). The reduced margin on reserves was driven by the UK, with a shift in business mix from bonds to pensions which have lower average fund charges. Profitability in Poland also declined as a consequence of legislative changes.

**(d) Participating business**

Income from participating business was stable at £546 million (*FY11: £545 million*). In the UK & Ireland, the shareholder transfer from with-profit funds increased to £78 million (*FY11: £69 million*), reflecting terminal bonuses on a higher level of outflows. This increase was offset by reduced income in other markets of £468 million (*FY11: £476 million*), driven by exchange rate movements.

The majority of participating business income is earned in France, where there is a fixed management charge of around 50bps on AFER business, which is the largest single component of the business. After adjusting for the impact of exchange rate movements, there was an increase in participating income in France in the year. In Italy and Spain there was a small increase in participating business income to £143 million (*FY11: £140 million*). Overall reserves were stable on a constant currency basis, with an improvement in overall profitability. In higher growth markets, losses were incurred on our businesses in China and Hong Kong.

**(e) Spread margin**

Spread business income reduced to £229 million (*FY11: £248 million*). Spread margins relate mainly to UK immediate annuity, deferred annuity and equity release business. The reduced margin was driven by the run-off of the higher margin deferred annuity business and an increase in the immediate annuity book, which has a lower margin on reserves. The spread margin on average reserves was 50 bps (*FY11: 62 bps*), on average reserves of £45 billion (*FY11: £40 billion*).

**(f) Expected return on shareholder assets**

Expected returns were £338 million (*FY11: £371 million*), representing investment income on surplus funds. The reduction in income relates mainly to the UK, as a result of lower opening yields, and Ireland, reflecting a change in asset mix. This was partly offset by an increased return in Italy.

**Expenses**

	United Kingdom & Ireland		France		Italy, Spain and Other		Higher growth markets		Total continuing operations	
	2012 £m	2011 £m	2012 £m	2011 £m	2012 £m	2011 £m	2012 £m	2011 £m	2012 £m	2011 £m
<b>Acquisition expenses (£m)</b>	<b>(451)</b>	(439)	<b>(111)</b>	(139)	<b>(127)</b>	(223)	<b>(181)</b>	(182)	<b>(870)</b>	(983)
APE (£m)	<b>1,516</b>	1,638	<b>380</b>	432	<b>395</b>	590	<b>446</b>	465	<b>2,737</b>	3,125
As acquisition expense ratio on APE (%)	<b>30%</b>	27%	<b>29%</b>	32%	<b>32%</b>	38%	<b>41%</b>	39%	<b>32%</b>	31%
<b>Administrative expenses</b>	<b>(412)</b>	(387)	<b>(222)</b>	(216)	<b>(162)</b>	(175)	<b>(116)</b>	(134)	<b>(912)</b>	(912)
As existing business expense ratio on average reserves (bps)	<b>33</b>	32	<b>37</b>	34	<b>54</b>	53	<b>63</b>	70	<b>39</b>	38
Average reserves (£bn)	<b>123.5</b>	122.2	<b>59.2</b>	63.8	<b>29.8</b>	32.8	<b>18.4</b>	19.2	<b>230.9</b>	238.0

**(g) Acquisition expenses**

Acquisition expenses reduced to £870 million (*FY11: £983 million*), driven by lower acquisition costs in European markets. In Italy, there was a significant reduction in sales volumes and, therefore, in acquisition commission, offsetting the decrease in new business income. This reduction was partly offset by higher costs in the UK, reflecting changes in business mix, in particular the increase in protection business sales. The ratio of acquisition expenses to APE was 32% (*FY11: 31%*).

**(h) Administration expenses**

Administration expenses were unchanged at £912 million (*FY11: £912 million*). The expense ratio on average reserves was 39 bps (*FY11: 38 bps*), on lower average reserves of £231 billion (*FY11: £238 billion*).

**(i) DAC, AVIF and other**

DAC, AVIF and other items amounted to an overall charge of £6 million (*FY11: £24 million profit*). DAC and AVIF amortisation charges reduced in UK & Ireland and in France. This was offset by a reduction in positive contribution from other items compared with 2011. In the UK, there was a release of a £90 million annuity longevity transaction reserve no longer required, offset by £16 million adverse impact from capital management actions (*FY11: £93 million benefit from the Part VII transfer of the former RBS JV business and £30 million release of a tax provision associated with the reattribution of the inherited estate*). In other markets, the reduction in contribution compared with 2011 was driven by a number of items including lower distribution company profits in France and prior-year reserve releases of £25 million in Hong Kong.

### 3 - Life business net flows

	Funds under management at 1 Jan 2012 £m	Premiums and deposits, net of reinsurance £m	Claims and redemptions, net of reinsurance £m	Net flows £m	Market and other movements £m	Funds under management at 31 Dec 2012 £m
<b>Life business</b>						
United Kingdom – non profit	75,540	7,946	(6,700)	1,246	4,614	81,400
United Kingdom – with-profits	46,178	830	(5,098)	(4,268)	624	42,534
Ireland	8,861	739	(1,164)	(425)	345	8,781
United Kingdom & Ireland	130,579	9,515	(12,962)	(3,447)	5,583	132,715
France	62,654	3,700	(4,619)	(919)	5,707	67,442
Italy, Spain and Other	26,246	3,306	(5,208)	(1,902)	1,890	26,234
<b>Developed markets</b>	<b>219,479</b>	<b>16,521</b>	<b>(22,789)</b>	<b>(6,268)</b>	<b>13,180</b>	<b>226,391</b>
<b>Higher growth markets</b>	<b>5,446</b>	<b>978</b>	<b>(847)</b>	<b>131</b>	<b>366</b>	<b>5,943</b>
<b>Life business – continuing operations</b>	<b>224,925</b>	<b>17,499</b>	<b>(23,636)</b>	<b>(6,137)</b>	<b>13,546</b>	<b>232,334</b>
Other funds under management included within consolidated IFRS assets	21,637					22,072
Third party funds under management not included within consolidated IFRS assets	52,889					56,587
<b>Funds under management (continuing operations)</b>	<b>299,451</b>					<b>310,993</b>
Discontinued operations	37,110					38,148
<b>Total Funds under management</b>	<b>336,561</b>					<b>349,141</b>

Life business net flows in the table above are shown net of reinsurance and exclude flows relating to UK equity release products.

#### Life business

##### United Kingdom and Ireland

During 2012, the net inflows of £1.2 billion for the UK non-profit business were mainly the result of strong sales of individual annuities (annuities were up 10% on PVNBP basis) and group personal pensions. Net outflows from the UK with-profits book and Ireland, which are largely old legacy products, amounted to £4.3 billion and £0.4 billion respectively.

##### France

Life business net outflows of £0.9 billion are mainly driven by lower sales of savings products reflecting the tough economic environment (sales in the French market<sup>1</sup> decreased 10%), combined with a broadly similar level of redemptions compared to FY11. Other movements reflect adverse foreign exchange movements, driven by the weakening of the euro against sterling, which were more than offset by net positive market movements.

##### Italy, Spain and Other

Net outflows of £1.9 billion are primarily driven by Italy (lower savings sales) and Spain (lower savings sales and higher redemptions) reflecting the challenging market and economic conditions across the Eurozone and changes in product mix. Other movements reflect adverse foreign exchange movements driven by the weakening of the euro against sterling, which were more than offset by net positive market movements.

### 4 - Present value of new business premiums, internal rate of return and payback period

The internal rates of return on new business written during the period are set out below. We manage new business against a target IRR of 13%.

	Present value of new business premiums		IRR %		Payback period years	
	2012	2011	2012	2011	2012	2011
United Kingdom	10,410	11,254	18%	15%	6	7
Ireland	632	917	2%	6%	25	12
United Kingdom & Ireland	11,042	12,171	16%	14%	8	8
France	3,638	4,047	11%	11%	8	8
Spain	1,295	1,926	21%	23%	4	4
Italy	1,971	2,993	12%	12%	6	6
Other	159	262	8%	9%	10	8
<b>Developed markets</b>	<b>18,105</b>	<b>21,399</b>	<b>15%</b>	<b>14%</b>	<b>8</b>	<b>7</b>
Poland	373	487	20%	24%	4	4
Asia	1,765	1,782	11%	13%	11	12
Other	403	320	28%	22%	3	4
<b>Higher growth markets</b>	<b>2,541</b>	<b>2,589</b>	<b>16%</b>	<b>17%</b>	<b>8</b>	<b>9</b>
<b>Total excluding Delta Lloyd and United States</b>	<b>20,646</b>	<b>23,988</b>	<b>14.9%</b>	<b>14.5%</b>	<b>8</b>	<b>7</b>
United States	4,039	3,932	17%	14%	4	5
Delta Lloyd <sup>1</sup>	—	1,085	—	10%	—	10
<b>Total</b>	<b>24,685</b>	<b>29,005</b>	<b>15.5%</b>	<b>14.3%</b>	<b>7</b>	<b>7</b>

<sup>1</sup> Prior period includes the results of Delta Lloyd up to 6 May 2011 only.

Total IRR (excluding Delta Lloyd and United States) improved to 14.9% (FY11: 14.5%). This was driven by an increase in the UK to 18% (FY11: 15%), mainly due to pricing actions in core products and the withdrawal of products not achieving hurdle rates, partly offset by reductions in some other markets reflecting difficult economic conditions.

## General insurance and health

## 5 - General insurance and health

	Underwriting result		Longer-term investment return		Operating profit	
	2012 £m	2011 £m	2012 £m	2011 £m	2012 £m	2011 £m
<b>General insurance - continuing operations</b>						
United Kingdom <sup>1,2</sup>	37	110	431	425	448	508
Ireland <sup>1</sup>	(6)	(5)	27	38	21	32
United Kingdom & Ireland	31	105	458	463	469	540
France	37	70	50	62	87	132
Canada <sup>1</sup>	139	97	146	168	276	254
Italy and Other <sup>3</sup>	25	(36)	28	34	53	(2)
<b>Developed markets</b>	232	236	682	727	885	924
<b>Higher growth markets</b>	(32)	(29)	15	12	(17)	(17)
	200	207	697	739	868	907
<b>Health insurance - continuing operations</b>						
United Kingdom	6	4	8	8	14	12
Ireland	6	10	2	2	8	12
United Kingdom & Ireland	12	14	10	10	22	24
France	8	11	—	1	8	12
<b>Developed markets</b>	20	25	10	11	30	36
<b>Higher growth markets</b>	(6)	(8)	1	—	(5)	(8)
	14	17	11	11	25	28
<b>Total - continuing operations</b>	214	224	708	750	893	935
<b>Total - discontinued operations<sup>4</sup></b>	—	(28)	—	34	—	1
<b>Total</b>	214	196	708	784	893	936

1 Continuing operating profit includes an unfavourable impact of £29 million resulting from a combination of unwind of discount and pension scheme net finance costs (FY11: £39 million). £20 million unfavourable impact relates to UKGI (FY11: £27 million), £nil relating to Ireland (FY11: £1 million), £9 million unfavourable impact relates to Canada (FY11: £11 million).

2 Prior period UK general insurance results included RAC operating profit of £75 million, including an underwriting result of £71 million and longer-term investment return of £4 million.

3 Other includes Aviva Re and agencies in run-off.

4 Discontinued operations relate to the activities of Delta Lloyd prior to its disposal on 6 May 2011.

Net written premiums	2012 £m	2011 £m
<b>General insurance - continuing operations</b>		
United Kingdom	4,062	4,371
Ireland	326	367
United Kingdom & Ireland	4,388	4,738
France	784	789
Canada	2,176	2,083
Italy and Other <sup>1</sup>	424	484
<b>Developed markets</b>	7,772	8,094
<b>Higher growth markets</b>	176	181
	7,948	8,275
<b>Health insurance - continuing operations</b>		
United Kingdom	528	473
Ireland	102	104
United Kingdom & Ireland	630	577
France	218	227
<b>Developed markets</b>	848	804
<b>Higher growth markets</b>	98	83
	946	887
<b>Total - continuing operations</b>	8,894	9,162
<b>Total - discontinued operations<sup>2</sup></b>	—	557
<b>Total</b>	8,894	9,719

1. Other includes Aviva Re and agencies in run-off.

2. Discontinued operations relate to the activities of Delta Lloyd prior to its disposal on 6 May 2011.

## 5 - General insurance and health continued

### Combined operating ratios – general insurance business only

	Claims ratio		Expense ratio		Combined operating ratio	
	2012 %	2011 %	2012 %	2011 %	2012 %	2011 %
United Kingdom <sup>1</sup>	<b>63.3%</b>	62.1%	<b>10.0%</b>	10.3%	<b>98%</b>	96%
Ireland	<b>69.7%</b>	70.7%	<b>21.4%</b>	21.1%	<b>102%</b>	102%
United Kingdom & Ireland	<b>63.8%</b>	62.8%	<b>10.8%</b>	11.1%	<b>99%</b>	97%
France	<b>66.6%</b>	61.2%	<b>9.6%</b>	11.1%	<b>95%</b>	90%
Canada	<b>61.0%</b>	64.1%	<b>12.3%</b>	11.9%	<b>93%</b>	95%
<b>Developed markets</b>	<b>63.9%</b>	64.1%	<b>10.6%</b>	11.0%	<b>97%</b>	96%
<b>Higher growth markets</b>	<b>79.7%</b>	77.9%	<b>23.6%</b>	22.9%	<b>119%</b>	117%
<b>Total - continuing operations</b>	<b>64.2%</b>	64.4%	<b>10.9%</b>	11.3%	<b>97%</b>	97%

<sup>1</sup> United Kingdom excluding Aviva Re and agencies in run-off.

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

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

#### Definitions:

Claims ratio: Incurred claims expressed as a percentage of net earned premiums.

Expense ratio: Written expenses excluding commissions expressed as a percentage of net written premiums.

Combined operating ratio: Aggregate of claims ratio, expense ratio and commission ratio.

Commission ratio: Written commissions expressed as a percentage of net written premiums.

Group operating profit from continuing general insurance and health operations for the period was £893 million (*FY11: £935 million*). Excluding RAC from 2011, total operating profit increased by 4% due to good performances in Canada and the United Kingdom, together with an improvement in Italy.

We continue to apply our reserving policy consistently and to focus on understanding the true cost of claims to ensure that reserves are maintained at a robust level. Prior year reserve movements will vary year to year but our business is predominantly short tail in nature and the loss development experience is generally stable. In 2012, we have had prior year positive development benefiting operating profit by £84 million (*FY11: £36 million strengthening of reserves*).

The worldwide general insurance combined operating ratio was stable at 97% (*FY11: 97%*). The worldwide GI expense ratio has improved by 0.4% at 10.9% (*FY11: 11.3%*) reflecting our continued focus on improving efficiency.

The longer term investment return (LTIR) on continuing general insurance and health business assets was lower at £708 million (*FY11: £750 million*) reflecting lower investment yields compared with the prior period.

#### United Kingdom & Ireland

Operating profit for our general insurance and health business in the UK and Ireland of £491 million (*FY11: £564 million*) comprises:

- £448 million from UK general insurance (*FY11: £508 million, including £75m from RAC*);
- a contribution of £21 million (*FY11: £32 million*) from Ireland general insurance, and;
- £22 million from our UK and Ireland health businesses (*FY11: £24 million*)

All subsequent commentary relates to our UK general insurance businesses.

In the **United Kingdom total operating profit** for the year was £448 million (*FY11: £508 million*). Excluding the RAC contribution of £75 million in 2011, this represented a like for like increase of 3% as we continue to benefit from our focus on underwriting excellence and active management of claims costs and expenses. 2012 was the second wettest year<sup>2</sup> on record and whilst we received more flood claims, overall weather-related claims were broadly in line with the long-term average compared to the favourable weather we experienced in 2011. Prior year reserves were strengthened by £17 million (*FY11: £37 million strengthening*), including an increase of £53 million in latent claims provisions (mainly driven by an increase in deafness claims), partly offset by favourable development in other classes of business including commercial property. Investment return has shown a modest increase to £431 million (*FY11: £425 million*) with the benefit of higher assets (following the sale of RAC) offsetting lower yields in the year.

Our **combined operating ratio** was stable at 98% (*FY11: 98% excluding RAC*), and included an improvement of approximately 2pp in underlying underwriting performance offset by the adverse year-on-year movement in weather experience and latent claims strengthening. The expense ratio improved to 10.0% (*FY11: 10.1% excluding RAC*).

**United Kingdom general insurance net written premiums** of £4,062 million (*FY11: £4,110 million excluding RAC*) reflect our underwriting discipline in challenging market conditions. We have grown in areas where good returns are available including personal motor, corporate and speciality risks and personal speciality lines, but have taken action to reduce exposure in unprofitable business segments, notably in some commercial lines. Personal motor premiums increased by 3% to £1,164 million (*FY11: £1,126 million excluding RAC*) and we have nearly 2.5 million personal motor customers, an increase of over 250,000 since the start of 2012. This is driven by new initiatives such as Quotemehappy and Multicar where our risk selection provides a key differentiator.

We continue to deliver good profitability in personal lines, with a personal motor combined operating ratio of 97% (*FY11: 101% excluding RAC*) in a softening market where we have seen rate reductions of 1%. Homeowner business also continues to be profitable with a combined operating ratio of 93%, despite the wet weather and modest rate increases of 3%.

<sup>2</sup> Source: MET office, January 2013



Conditions in commercial lines continue to be challenging, with rating increases in single digits (6% in motor and 3% in property and liability). Commercial profitability has improved with a combined operating ratio of 104% (FY11: 105%), despite being adversely impacted by the latent claims strengthening and some large losses in commercial motor. Excluding the impact of latent claims, the commercial lines combined operating ratio would have been 101%.

In **Ireland**, general insurance **operating profit** fell to £21 million (FY11: £32 million) driven by an £11 million reduction in investment returns to £27 million (FY11: £38 million) following actions to de-risk the portfolio, together with lower investment yields. The **combined operating ratio** has remained stable at 102% (FY11: 102%). Our disciplined approach to underwriting and the adverse economic conditions have impacted business volumes, with **net written premiums** 11% lower at £326 million (FY11: £367 million), although the reduction was only 5% on a constant currency basis. Progress has been made on the transformation programme with the branch disposal completed, and we are embedding underwriting techniques already in place in the UK into the Irish business to improve performance.

#### France

General insurance and health **net written premiums** were broadly level at £1,002 million (FY11: £1,016 million). This is a 6% increase on a local currency basis, mainly driven by rate increases.

General insurance and health **operating profit** decreased 34% to £95 million (FY11: £144 million). This decrease is due in part to the one-off release in 2011 of surplus reserve margins of £45 million to align with the Group's reserving policy. There was also adverse claims experience from the freeze experienced in February 2012, partly offset by a decrease in personal motor bodily injury claims. Despite these adverse impacts, the **combined operating ratio** remained strong at 95% (FY11: 90%).

#### Canada

In Canada **net written premiums** increased by 4% to £2,176 million (FY11: £2,083 million). This is due to a combination of improved retention levels and rate increases across both personal and commercial lines and new business growth largely in personal lines, contributing to a 2% increase in the number of policies.

The strong **underwriting result** of £139 million (FY11: £97 million) was achieved through the continued benefits of predictive analytics, underwriting and expense management discipline, together with some favourable prior year development, largely relating to the Ontario Auto reform, positively impacting our underwriting performance. As a result, the **combined operating ratio** improved to 93% (FY11: 95%).

#### Italy and Other

Total **net written premiums** for Italy and Other were £424 million (FY11: £484 million).

In **Italy** general insurance **net written premiums** were 14% lower at £357 million (FY11: £416 million), a decrease of 8% on a local currency basis. The decrease compared to prior year is mainly driven by the decline of credit protection insurance on loan and mortgage protection products and reductions in personal motor business where portfolio cleansing has reduced volume but also contributed to an improvement in profitability in 2012.

**Operating profit** improved to £53 million (FY11: £2 million loss) with the prior year result impacted by the reserve strengthening put through in Italy in 2011.

#### Higher growth markets

Overall **net written premiums** in the general insurance and health business rose to £274 million (FY11: £264 million). The general insurance **combined operating ratio** for higher growth markets deteriorated to 119% (FY11: 117%) due to reserve strengthening and poor claims experience in Turkey. This was partly offset by lower claims resulting from underwriting and pricing actions, as well as positive prior year claims development in Poland.

In **Poland**, general insurance net written premiums were stable at £65 million (FY11: £64 million), up 8% on a local currency basis, due to rate and volume increases across the commercial property and motor business portfolio.

In **Asia**, net written premiums in the general insurance and health business increased 11% to £120 million (FY11: £108 million) due to strong business growth in **Singapore** and **Indonesia**. The **operating loss** reduced to £5 million (FY11: £8 million) mainly due to the release of unearned premium reserves resulting from a change in calculation methodology in Indonesia.

In **Turkey** general insurance **net written premiums** decreased by 3% to £89 million (FY11: £92 million), a 3% increase on a local currency basis from rate increases offset by the exit of unprofitable business, which is expected to impact on future year's results.

# Fund management

## 6 - Fund management

### Geographical analysis of fund management adjusted operating profits

	2012 £m	2011 £m
Aviva Investors <sup>1</sup>	39	50
United Kingdom	11	11
Other	1	—
<b>Total - continuing operations</b>	<b>51</b>	<b>61</b>
<b>Total - discontinued operations</b>	<b>55</b>	<b>49</b>
<b>Total</b>	<b>106</b>	<b>110</b>

<sup>1</sup> Aviva Investors operating profit for continuing operations of £39 million (FY11: £50 million) also includes profit from the Aviva Investors pooled pensions business of £3 million (FY11: £3 million), which is included in the life segment.

Worldwide fund management operating profit for continuing operations decreased to £51 million (FY11: £61 million), with the overall total operating profit broadly stable at £106 million (FY11: £110 million).

#### Aviva Investors

Operating profit was lower at £39 million in 2012 (FY11: £50 million). The reduction in operating profit was as a result of lower performance fees, partially offset by lower operating expenditure driven by cost savings.

Investment performance was satisfactory with 69% of institutional funds performing above benchmark (where a benchmark exists) and 68% of funds ahead of peer group. Net funded external sales (excluding liquidity funds) in 2012 were £1.7 billion compared with £3.6 billion for FY11, a decrease of 53%. Sales in the UK were £2.4 billion lower, partly offset by sales in Asia which were £0.6 billion higher.

#### United Kingdom

United Kingdom operating profit of £11 million relates solely to the Aviva UK investment business (FY11: £11 million) which has remained stable year on year.

#### Funds under management

Funds under management at 31 December 2012 were £349 billion (FY11: £337 billion).

	2012					2011
	Aviva Investors £m	Other Aviva and external managers £m	Total £m	Aviva Investors £m	Other Aviva and external managers £m	Total £m
Internal funds under management	220,151	55,876	276,027	210,341	58,663	269,004
Third party funds under management	54,333	18,781	73,114	52,165	15,392	67,557
<b>Funds under management</b>	<b>274,484</b>	<b>74,657</b>	<b>349,141</b>	262,506	74,055	336,561
<b>Discontinued operations</b>	<b>(38,148)</b>	<b>—</b>	<b>(38,148)</b>	(37,110)	—	(37,110)
<b>Total Funds under management (excluding discontinued operations)</b>	<b>236,336</b>	<b>74,657</b>	<b>310,993</b>	225,396	74,055	299,451

Total funds managed by Aviva Investors (including discontinued operations) were up 5% to £274 billion (FY11: £263 billion), with assets managed for external clients increasing 4% to £54 billion (FY11: £52 billion). The growth in funds under management was due to positive third party net flows and capital appreciation, partly offset by negative internal flows.

Further analysis is given within the IFRS supplement, note A21.

# Capital management

## 7 - Capital generation and utilisation

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

Operating capital generation for the full-year 2012 was £2.0 billion. Life businesses generated £2.1 billion of capital (FY11: £2.3 billion), with a further £0.6 billion (FY11: £0.6 billion) generated by the general insurance and fund management businesses and other operations. Capital invested in new business was £0.7 billion (FY11: £0.8 billion), and continues to benefit from management actions to improve capital efficiency. The £0.7 billion of capital investment is primarily in life new business with the impact of capital investment in non-life business broadly neutral over the period.

	2012 £bn	2011 £bn
<b>Operating capital generation:</b>		
Life in-force profits <sup>1</sup>	2.1	2.3
General insurance, fund management and other operations profits	0.6	0.6
<b>Operating capital generated before investment in new business</b>	<b>2.7</b>	<b>2.9</b>
Capital invested in new business	(0.7)	(0.8)
<b>Operating capital generated after investment in new business</b>	<b>2.0</b>	<b>2.1</b>

<sup>1</sup> The Life in-force profits in 2012 exclude the negative impact of a true up relating to a prior estimate of required capital, which is included in the MCEV Free Surplus Emergence, as this does not impact the actual capital generated in 2012.

Operating capital generation comprises the following components:

- Operating Free surplus emergence, including release of required capital, for the life in-force business (net of tax and minorities);
- Operating profits for the general insurance and non-life businesses (net of tax and minorities);
- Capital invested in new business. For life business this is the impact of initial and required capital on free surplus. For general insurance business this reflects the movement in required capital, which has been assumed to equal the regulatory minimum multiplied by the local management target level. Where appropriate movements in capital requirements exclude the impact of foreign exchange and other movements deemed to be non-operating in nature
- Post deconsolidation on 6 May 2011, all Delta Lloyd capital generation, including life business, has been included within general insurance, fund management and other operations profits on an IFRS basis.

The amount of operating capital remitted to Group is dependent upon a number of factors including non-operating items and local regulatory requirements.

## 8 - Economic Capital

The economic capital surplus represents the excess of Available Economic Capital over Required Economic Capital. Available Economic Capital is based on MCEV net assets, adjusted for items to convert to an economic basis. Required economic capital is based on Aviva's own internal assessment and capital management policies. The term 'economic capital' does not imply capital as required by regulators or other third parties.

### Analysis of Change

	2012 £bn
<b>Economic capital surplus position at 31 December 2011</b>	<b>3.6</b>
MCEV operating earnings	0.9
Economic variances	0.7
Other non-operating items	(0.6)
Dividend and appropriations, and shares issued in lieu of dividends	(0.7)
Net impact of fixed rate note issuance/call	0.2
Other	0.4
<b>Change in available economic capital</b>	<b>0.9</b>
Impact of trading operations and other	0.4
Impact of credit hedging	0.2
Capital requirement benefits from Delta Lloyd partial sell-down	0.2
<b>Change in diversified required economic capital</b>	<b>0.8</b>
<b>Estimated economic capital surplus position at 31 December 2012</b>	<b>5.3</b>
Proforma impacts	1.8
<b>Estimated proforma economic capital surplus position at 31 December 2012</b>	<b>7.1</b>

The estimated economic capital position has increased by £1.7 billion to £5.3 billion at 31 December 2012 with a corresponding increase in the cover ratio from 130% to 147%. Including the benefit of transactions announced in December 2012 which are expected to complete in 2013 (the disposal of the US and transfer of Aseval) and transactions announced in January 2013 (the disposal of Delta Lloyd and Malaysia) increases the estimated economic capital position to £7.1 billion with a cover ratio of 172%. The proforma cover ratio is within the Group's external target of between 160% and 175%. The improvement over the year has been driven by an increase in available economic capital (reflecting operating profits, favourable market movements, and the net favourable impact of hybrid issuance) and a reduction in required capital (reflecting primarily the benefit of management actions, including the benefits of hedging activity and the sell-down in Delta Lloyd in July 2012).

## 9 - European Insurance Groups Directive (IGD)

	UK life funds £bn	Other business £bn	31 December 2012 £bn	31 December 2011 £bn
Insurance Groups Directive (IGD) capital resources	5.2	9.2	14.4	14.1
Less: capital resources requirement (CRR)	(5.2)	(5.4)	(10.6)	(11.9)
Insurance Group Directive (IGD) excess solvency	—	3.8	3.8	2.2
Cover over EU minimum (calculated excluding UK life funds)			1.7 times	1.3 times

The EU Insurance Groups Directive (IGD) regulatory capital solvency surplus has increased by £1.6 billion since 31 December 2011 to £3.8 billion. The key movements over the period are set out in the following table:

	£bn
IGD solvency surplus at 31 December 2011	2.2
Operating profits net of other income and expenses	0.9
Dividend and appropriations, net of shares issued in lieu of dividends	(0.7)
Market movements including foreign exchange <sup>1</sup>	1.3
Pension scheme funding	(0.2)
Movement in hybrid debt	0.2
UK reinsurance transactions	0.1
Increase in Capital Resources Requirement	(0.1)
Other regulatory adjustments	(0.1)
<b>Estimated IGD solvency surplus at 31 December 2012</b>	<b>3.8</b>

<sup>1</sup> Market movements include the impact of equity, credit spread, interest rate and foreign exchange movements net of the effect of hedging instruments.

On a proforma basis the estimated IGD solvency surplus at 31 December 2012 is £3.9 billion. The proforma 31 December 2012 position includes the impact of the announced disposals of the Aviva US Life and annuities business and related asset management operations, Malaysia and Aseval held for sale in the Group IFRS balance sheet.

### Group IGD sensitivity

At 31 December 2012 the sensitivity of the Group's proforma IGD surplus to a 10% fall in global equity markets or a rise of 1% in global interest rates is as follows:

	2012 £bn	Equities down 10% £bn	Interest rates up 1% £bn
Proforma IGD Group surplus <sup>1</sup>	3.9	(0.0)	(0.2)

<sup>1</sup> The impact of sensitivities on the pro forma position includes announced Aviva Group disposals effective in 2013 of the Aviva US Life and annuities business and related asset management operations, Malaysia, Aseval and the investment in Delta Lloyd.

The Group proactively manages its balance sheet risk through monitoring, stress analysis and our hedging programme, with exposures to equities and interest rates significantly reducing in the half year. As a result the Group's proforma IGD surplus is resilient to global equity market falls and a 1% global interest rate rise.

The Group's proforma IGD surplus would be approximately £3.8 billion in the event of a 40% fall in equity markets from the 31 December 2012 position, reflecting the reduction in sensitivities as a result of the disposals and the hedging that the Group currently has in place.

The impact of a 1% rise in global interest rates is calculated with reference to the regulatory value of debt securities in continental Europe being capped to local minimum capital requirements in participating funds. This provides the Group's proforma IGD surplus protection from immediate market losses on debt securities.

## 10 - Return on equity and equity sensitivity analysis

On an IFRS basis return on equity shareholders' funds is 10.3% (FY11: 12.0%), falling as a result of the lower operating return.

	2012 %	2011 %
<b>IFRS basis</b>		
Life assurance	13.7%	13.3%
General insurance and health	10.8%	13.8%
Fund management	19.6%	25.5%
Other business	12.3%	124.4%
Corporate <sup>1</sup>	n/a	n/a
<b>Return on total capital employed (excluding Delta Lloyd and United States)</b>	<b>9.2%</b>	<b>10.5%</b>
Delta Lloyd	10.8%	5.7%
United States	5.5%	3.2%
<b>Return on total capital employed</b>	<b>8.7%</b>	<b>8.6%</b>
Subordinated debt	4.9%	4.9%
External debt	2.4%	1.3%
<b>Return on total equity</b>	<b>10.1%</b>	<b>10.2%</b>
Less: Non-controlling interest	12.0%	6.0%
Direct capital instrument and fixed rate tier 1 notes	5.6%	4.3%
Preference capital	8.5%	8.5%
<b>Return on equity shareholders' funds</b>	<b>10.3%</b>	<b>12.0%</b>

<sup>1</sup> The corporate ROCE has been reported as 'n/a' as the opening capital is impacted by movements in the pension scheme, thereby making the percentage incomparable with the prior year.

### Equity sensitivity analysis

The sensitivity of the group's total equity, excluding Delta Lloyd and US, on an IFRS basis and MCEV basis at 31 December 2012 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:

		31 December 2011 £bn	IFRS basis	31 December 2012 £bn	Equities down 10% £bn	Interest rates up 1% £bn	0.5% increased credit spread £bn	
11.2	Long term			11.5	(0.1)	(0.3)	(0.3)	
5.6	General insurance and other			4.6	(0.1)	(0.4)	0.5	
(5.3)	Borrowings <sup>2</sup>			(5.1)	—	—	—	
11.5	Total equity <sup>3</sup>			11.0	(0.2)	(0.7)	0.2	
				Equities down 10%				
		31 December 2011 £bn	MCEV basis	31 December 2012 £bn	Direct £bn	Indirect £bn	Interest rates up 1% £bn	0.5% increased credit spread £bn
14.1	Long term <sup>1</sup>			16.3	(0.1)	(0.3)	(0.2)	(1.1)
5.6	General insurance and other			4.6	(0.1)	—	(0.4)	0.5
(5.3)	Borrowings <sup>2</sup>			(5.1)	—	—	—	—
14.4	Total equity <sup>3</sup>			15.8	(0.2)	(0.3)	(0.6)	(0.6)

<sup>1</sup> Assumes MCEV assumptions adjusted to reflect revised bond yields.

<sup>2</sup> Comprising external and subordinated debt.

<sup>3</sup> Note that total equity excludes the US and Delta Lloyd.

These sensitivities assume a full tax charge/credit on market value assumptions. The interest rate sensitivity also assumes an equivalent movement in both inflation and discount rate (i.e. no change to real interest rates) and therefore incorporates the offsetting effects of these items on the pension scheme liabilities. A 1% increase in the real interest rate has the effect of reducing the pension scheme liability by £1.1 billion.

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



## 11 - Net asset value

At the end of FY12, IFRS net asset value per share was 278 pence (*FY11: 435 pence*). This movement was driven by operating profits offset by adverse investment variances and impairment of goodwill and intangibles in the US, following the agreement to sell Aviva USA's life and annuities business and related asset management operations in December 2012. In addition, integration and restructuring costs, payment of the dividend and actuarial losses on the staff pension scheme also contributed to the decrease in net asset value per share.

MCEV net asset value per share has also decreased to 422 pence (*FY11: 441 pence*). This movement was driven by operating profits and positive investment variances offset by integration and restructuring costs, payment of the dividend and actuarial losses on the staff pension scheme. The impact of the agreement to sell Aviva USA is positive under MCEV and offsets the goodwill and intangible assets impairment in other markets.

	IFRS		MCEV	
	2012 £m	2011 £m	2012 £m	2011 £m
<b>Total equity at 1 January</b>	<b>15,363</b>	<b>17,725</b>	<b>15,495</b>	<b>20,205</b>
Movement in Delta Lloyd equity to 6 May 2011:				
(Loss)/profit after tax recognised in the income statement, excluding loss on disposal	—	(492)	—	(74)
Other comprehensive income, net of tax	—	82	—	131
Other net equity movements	—	(10)	—	(41)
	—	(420)	—	16
Deconsolidation of Delta Lloyd:				
Movement in ordinary shareholders' equity	—	(632)	—	(157)
Movement in non-controlling interests	—	(1,770)	—	(1,484)
	<b>15,363</b>	<b>14,903</b>	<b>15,495</b>	<b>18,580</b>
Operating profit after tax – continuing operations	<b>1,395</b>	1,563	<b>1,469</b>	2,087
Operating profit after tax – discontinued operations	<b>161</b>	85	<b>(256)</b>	154
Non-operating items after tax – continuing operations	<b>(1,597)</b>	(1,146)	<b>305</b>	(4,165)
Non-operating items after tax – discontinued operations	<b>(3,009)</b>	82	<b>241</b>	(862)
Actuarial gains/(losses) on pension schemes	<b>(830)</b>	974	<b>(830)</b>	974
Foreign exchange rate movements	<b>(200)</b>	(254)	<b>(145)</b>	(461)
Other comprehensive income, net of tax – continuing operations	<b>202</b>	(106)	<b>165</b>	(310)
Other comprehensive income, net of tax – discontinued operations	<b>68</b>	—	<b>(14)</b>	—
Dividends and appropriations net of scrip	<b>(720)</b>	(506)	<b>(720)</b>	(506)
Other net equity movements	<b>527</b>	(232)	<b>520</b>	4
<b>Total equity at 31 December</b>	<b>11,360</b>	<b>15,363</b>	<b>16,230</b>	<b>15,495</b>
Preference share capital, direct capital instruments and fixed rate tier 1 notes	<b>(1,582)</b>	(1,190)	<b>(1,582)</b>	(1,190)
Non-controlling interests	<b>(1,574)</b>	(1,530)	<b>(2,214)</b>	(1,476)
<b>Net assets attributable to Ordinary shareholders of Aviva plc at 31 December (excluding preference shares)</b>	<b>8,204</b>	<b>12,643</b>	<b>12,434</b>	<b>12,829</b>
Number of shares	<b>2,946</b>	2,906	<b>2,946</b>	2,906
<b>Net asset value per share</b>	<b>278p</b>	<b>435p</b>	<b>422p</b>	<b>441p</b>

For more information on MCEV reporting please refer to Supplement 2 MCEV Financial Statements.

## 12 - Financial flexibility

The Group's borrowings are primarily comprised of long dated hybrid instruments with maturities spread over many years, minimising refinancing risk. In addition to central liquid asset holdings of £1.4 billion, the majority of which was held within Aviva Insurance Limited at the 2012 year end, the Group also has access to unutilised committed credit facilities of £2.1 billion provided by a range of leading international banks.

## Analysis of assets

### 13 – Exposures to peripheral European sovereign debt

Included in our debt securities and other financial assets are exposures to peripheral European countries. All of these are valued on a mark to market basis under IAS 39, and therefore our statement of financial position and income statement already reflect any reduction in value between the date of purchase and the balance sheet date. The significant majority of these holdings are within our participating funds where the risk to our shareholders is governed by the nature and extent of our participation in those funds.

Net of non-controlling interests, our direct shareholder and participating fund asset exposure to the government (and local authorities and agencies) of Italy is £4.9 billion (FY11: £6.4 billion), a decrease of £1.5 billion. Gross of non-controlling interests, 82% of our shareholder asset exposure to Italy arises from investment exposure of our Italian business.

*Direct sovereign exposures to Greece, Ireland, Portugal, Italy and Spain (net of non-controlling interests, excluding policyholder assets)*

	Participating		Shareholder		Total	
	31 December 2012 £bn	31 December 2011 £bn	31 December 2012 £bn	31 December 2011 £bn	31 December 2012 £bn	31 December 2011 £bn
Greece	—	—	—	—	—	—
Ireland	0.4	0.3	—	0.2	0.4	0.5
Portugal	0.3	0.2	—	—	0.3	0.2
Italy	4.5	5.6	0.4	0.8	4.9	6.4
Spain	0.9	0.8	0.5	0.3	1.4	1.1
<b>Total Greece, Ireland, Portugal, Italy and Spain</b>	<b>6.1</b>	<b>6.9</b>	<b>0.9</b>	<b>1.3</b>	<b>7.0</b>	<b>8.2</b>

*Direct sovereign exposures to Greece, Ireland, Portugal, Italy and Spain (gross of non-controlling interests, excluding policyholder assets)*

	Participating		Shareholder		Total	
	31 December 2012 £bn	31 December 2011 £bn	31 December 2012 £bn	31 December 2011 £bn	31 December 2012 £bn	31 December 2011 £bn
Greece	—	—	—	—	—	—
Ireland	0.4	0.4	—	0.2	0.4	0.6
Portugal	0.3	0.2	—	—	0.3	0.2
Italy	8.5	9.7	0.6	1.1	9.1	10.8
Spain	1.3	1.0	0.9	0.6	2.2	1.6
<b>Total Greece, Ireland, Portugal, Italy and Spain</b>	<b>10.5</b>	<b>11.3</b>	<b>1.5</b>	<b>1.9</b>	<b>12.0</b>	<b>13.2</b>

## Other Operating Profit Items

The following notes provide further detail on components of the Group's other operating profit and loss items.

### 14 - Other operations

	2012 £m	2011 £m
Developed markets	(72)	(47)
Higher growth markets	(7)	(25)
Other Group operations <sup>1</sup>	(125)	(132)
<b>Total - continuing operations</b>	<b>(204)</b>	<b>(204)</b>
<b>Total - discontinued operations</b>	<b>(4)</b>	<b>(5)</b>
<b>Total</b>	<b>(208)</b>	<b>(209)</b>

<sup>1</sup> Other Group operations include Group and regional head office costs.

Other operations relate to non insurance activities and primarily include costs associated with our Group and regional head offices. Total costs in continuing operations have remained flat at £204 million (*FY11: £204 million*). Of the £72 million costs in Developed markets, £54 million arose in the United Kingdom and Ireland, of which £22 million was due to RAC pension scheme expenses and £19 million relates to head office costs in Ireland. Other Group operations incurred costs of £125 million (*FY11: £132 million*) and included £48 million relating to the running costs of Aviva Europe and North America regional offices, which have subsequently both been closed, Group banking and finance charges of £26 million and marketing spend of £22 million.

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

### 15 - Corporate centre

	2012 £m	2011 £m
Project spend	(23)	(19)
Central spend and share award costs	(113)	(119)
<b>Total</b>	<b>(136)</b>	<b>(138)</b>

Corporate centre costs have decreased slightly to £136 million (*FY11: £138 million*). This was driven by a reduction in central spend and share award costs, partly offset by higher project costs, including the impact of meeting greater financial and regulatory requirements.

### 16 - Group debt costs and other interest

	2012 £m	2011 £m
External debt		
Subordinated debt	(294)	(302)
Other	(23)	(22)
Total external debt	(317)	(324)
Internal lending arrangements	(307)	(278)
Net finance charge on main UK pension scheme	(35)	(46)
<b>Total - continuing operations</b>	<b>(659)</b>	<b>(648)</b>
<b>Total - discontinued operations</b>	<b>(12)</b>	<b>(13)</b>
<b>Total</b>	<b>(671)</b>	<b>(661)</b>

Group debt costs and other interest for continuing operations of £659 million (*FY11: £648 million*) included external interest on borrowings (mainly subordinated debt), internal lending arrangements and the net finance charge on the main UK pension scheme. External interest costs decreased to £317 million (*FY11: £324 million*) and interest costs on internal lending arrangements increased to £307 million (*FY11: £278 million*) due to changes in internal debt balances during the year.

The UK pension scheme net charge represents the difference between the expected return on pension scheme assets and the interest charged on pension scheme liabilities. The net pension charge reduced by £11 million to £35 million (*FY11: £46 million*) due to a decrease in the discount rate and significant increase in the value of the assets at the beginning of the year.

## Non-Operating Profit Items

The following notes provide further detail on components of the Group's non-operating profit items.

### 17 - Integration and restructuring costs

Integration and restructuring costs for continuing operations were £461 million (*FY11: £261 million*). This cost relates to restructuring and transformation activity we have taken to align our business operations with our strategy, including the Group's Simplify programme (£165 million), Ireland transformation (£130 million) including the merger of our UK and Ireland businesses, £24 million in relation to the transformation of Aviva Investors and £25 million in respect of other restructuring activities. This also includes a cost of £117 million relating to preparing the business for the implementation of Solvency II.

### 18 - Life Business: Investment return variances and economic assumption changes

#### (a) Definitions

Operating profit for life business is based on expected investment returns on financial investments backing shareholder and policyholder funds over the period, with consistent allowance for the corresponding expected movements in liabilities. Operating profit includes the effect of variance in experience for non-economic items, such as mortality, persistency and expenses, and the effect of changes in non-economic assumptions, where not treated as exceptional. 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 life operating profit are as follows:

	2012 £m	2011 £m
Life business		
Investment variances and economic assumptions - continuing operations	(620)	(897)
Investment variances and economic assumptions - discontinued operations	342	(719)
Investment variances and economic assumptions	(278)	(1,616)

For continuing operations, negative investment variances of £620 million (*2011: £897 million negative*) mainly relate to the UK. The total for the UK includes increasing the allowance for credit risk defaults on UK commercial mortgages together with some adverse current year experience on this portfolio, and the cost of de-risking activity. Elsewhere, positive variances in Spain and France were offset by a negative variance in Italy. In the prior period, the negative variance resulted from market falls and increased volatility in asset values in all major markets.

The positive variance of £342 million for discontinued operations relates to the US, driven by reductions in interest rates and credit spreads and the impact of favourable equity market performance on embedded derivatives. The prior period negative variance (*2011: £719 million negative*) also includes the result for Delta Lloyd up to the partial disposal on 6 May 2011 of £820 million. Liabilities in Delta Lloyd are discounted using a yield curve based on a fully collateralised AAA bond portfolio. Over the period up to the partial disposal, the AAA collateralised bond credit spread narrowed by about 80bps as a result of changes in the underlying bond index, which was the main driver of the negative variance.

#### (c) Assumptions

The expected rate of investment return is determined using consistent assumptions between operations, having regard to local economic and market forecasts of investment return and asset classification under IFRS.

The principal assumptions underlying the calculation of the expected investment return for equities and properties are:

	2012 %	Equities 2011 %	2012 %	Properties 2011 %
United Kingdom	5.8%	7.2%	4.3%	5.7%
Eurozone	5.9%	6.9%	4.4%	5.4%

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

For fixed interest securities classified as fair value through profit or loss, the expected investment returns are based on average prospective yields for the actual assets held less an adjustment for credit risk. Where such securities are classified as available for sale, such as in the United States, the expected investment return comprises the expected interest or dividend payments and amortisation of the premium or discount at purchase.

## 19 - General insurance and health business: Short-term fluctuation in return on investments

	2012 £m	2011 £m
<b>General Insurance and health - continuing operations</b>		
Net Investment Income	<b>823</b>	725
Foreign exchange on unrealised gains/losses and other charges	<b>(97)</b>	(99)
	<b>726</b>	626
Analysed between:		
Longer-term investment return, reported within operating profit	<b>708</b>	750
Short-term fluctuations in investment return, reported outside operating profit	<b>18</b>	(124)
	<b>726</b>	626
Short-term fluctuations on general insurance and health	<b>18</b>	(124)
Short-term fluctuations on other operations <sup>1</sup>	<b>(11)</b>	(142)
<b>Total short-term fluctuations as per Group operating profit - continuing operations</b>	<b>7</b>	(266)
<b>Total short-term fluctuations as per Group operating profit - discontinued operations</b>	<b>—</b>	(60)
<b>Total short-term fluctuations as per Group operating profit</b>	<b>7</b>	(326)

<sup>1</sup> Represents assets backing non-life business in France holding company.

The longer-term investment return is calculated separately for each principal non-life business unit. In respect of equities and properties, the return is calculated by multiplying the opening market value of the investments, adjusted for sales and purchases during the year, by the longer-term rate of investment return. The longer-term rate of investment return is determined using consistent assumptions between operations, having regard to local economic and market forecasts of investment return. The allocated longer-term return for other investments is the actual income receivable for the year. Actual income and longer-term investment return both contain the amortisation of the discounts/premium arising on the acquisition of fixed income securities.

The general insurance and health short-term fluctuation includes the impact of the unrealised and realised gains on Group centre investments, including the centre hedging programme which is designed to economically protect the total Group's capital against adverse equity and foreign exchange movements. The increase in short-term fluctuation in 2012 compared with 2011 is mainly due to an improvement in fixed income security market values.

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

	2012 £m	Restated 2011 £m
Debt securities	<b>9,297</b>	9,371
Equity securities	<b>774</b>	551
Properties	<b>139</b>	152
Cash and cash equivalents	<b>2,535</b>	2,315
Other	<b>5,997</b>	6,476
<b>Assets supporting general insurance and health business</b>	<b>18,742</b>	18,865
Assets supporting other non-life business <sup>1</sup>	<b>206</b>	268
<b>Total assets supporting non-life business</b>	<b>18,948</b>	19,133

Figures for 2011 have been restated to include loan balances supporting general insurance and health business, which contribute to the longer-term investment return

<sup>1</sup> Represents assets in France holding company backing non-life business.

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	
	2012 %	2011 %	2012 %	2011 %
United Kingdom	<b>5.8%</b>	7.2%	<b>4.3%</b>	5.7%
Ireland	<b>5.9%</b>	6.9%	<b>4.4%</b>	5.4%
France	<b>5.9%</b>	6.9%	<b>4.4%</b>	5.4%
Canada	<b>5.8%</b>	7.0%	<b>4.3%</b>	5.5%
Netherlands – Discontinued	<b>—</b>	6.9%	<b>—</b>	5.4%

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

## 20 - General insurance and health business: Economic assumption changes

Economic assumption changes of £21 million adverse (*FY11: £90 million adverse*) arise mainly as a result of the reduction in the swap rates used to discount latent claims reserves.

## 21 - Impairment of goodwill, associates, joint ventures and other amounts expensed

Impairment of goodwill, associates and joint ventures is a charge of £842 million (*FY11: £392 million charge*). This is primarily driven by an impairment of £782 million in relation to goodwill on the US business (recognised at HY12). In addition, impairments have been recognised across a number of businesses reflecting the continuing difficult trading conditions. This includes an impairment of £147 million in respect of the Group's Indian associate, an impairment of £76 million in relation to goodwill on our Spanish businesses, an impairment of £33 million in relation to the Italian business and a small write down of £9 million in respect of the Group's Korean joint venture. These write offs are partly offset by a reversal of the impairment recognised in FY11 in respect of our investment in Delta Lloyd of £205 million.

The total write-down relating to the United States goodwill and intangibles is £911 million, with £782 million within this total and £129 million included within impairment of intangibles.

## 22 – Loss/profit on the disposal and remeasurement of subsidiaries and associates

The total Group loss on disposal and remeasurement of subsidiaries and associates, is £2,523 million (*FY11: profit of £533 million*). Following the agreement to sell Aviva US Life and annuities business and related asset management operations ('US Life') in December 2012, US Life has been remeasured to expected sale proceeds less transaction costs. This has resulted in a charge of £2,359 million within discontinued operations. A charge of £21 million relates to residual costs relating to the sale of RAC in September 2011. The remaining balance principally relates to the disposal of the shares of Delta Lloyd as an associate.

## 23 - Exceptional items

Exceptional items are those items that, in the Directors' view, are required to be separately disclosed by virtue of their nature or incidence to enable a full understanding of the Group's financial performance. There are no exceptional items in 2012 (*FY11: £57 million loss*).

## 24 - Share of the results of Delta Lloyd as an associate

The Group's share of the results of its associate interest in Delta Lloyd for the period is an expense of £304 million. This includes operating profit of £112 million, a non-operating charge of £523 million (which primarily reflects the adverse impact of investment variances relating to differing movements in the asset and liability yield curves used by Delta Lloyd) and a tax credit of £107 million. In addition, as described in note 21 above, an amount previously recognised in FY11 as an impairment of £205 million has been reversed during the year.



# Financial statements IFRS

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## IFRS consolidated financial statements

## Consolidated income statement

For the year ended 31 December 2012

		2012 £m	2011 £m		
		Restated <sup>2</sup>			
	Note	Continuing operations	Discontinued operations <sup>1</sup>	Continuing operations	Discontinued operations <sup>1</sup>
<b>Income</b>					
Gross written premiums		22,744	3,796	26,255	5,863
Premiums ceded to reinsurers		(1,571)	(207)	(1,548)	(200)
Premiums written net of reinsurance		21,173	3,589	24,707	5,663
Net change in provision for unearned premiums		(16)	—	(236)	(56)
Net earned premiums		21,157	3,589	24,471	5,607
Fee and commission income		1,273	23	1,465	111
Net investment income		21,106	2,241	4,341	2,086
Share of (loss)/profit after tax of joint ventures and associates		(277)	—	(123)	28
(Loss)/profit on the disposal and remeasurement of subsidiaries and associates		(164)	(2,359)	565	(32)
		43,095	3,494	30,719	7,800
<b>Expenses</b>					
Claims and benefits paid, net of recoveries from reinsurers		(23,601)	(2,721)	(24,380)	(4,029)
Change in insurance liabilities, net of reinsurance		(430)	(1,566)	(2,284)	(2,523)
Change in investment contract provisions		(4,450)	(77)	1,478	(180)
Change in unallocated divisible surplus		(6,316)	—	2,721	(19)
Fee and commission expense		(4,472)	(498)	(4,326)	(420)
Other expenses		(2,845)	(1,307)	(2,779)	(809)
Finance costs		(735)	(21)	(776)	(284)
		(42,849)	(6,190)	(30,346)	(8,264)
<b>Profit/(loss) before tax</b>		246	(2,696)	373	(464)
Tax attributable to policyholders' returns	A5	(221)	—	178	—
<b>Profit/(loss) before tax attributable to shareholders' profits</b>		25	(2,696)	551	(464)
Tax (expense)/credit	A5	(448)	(152)	44	107
Less: tax attributable to policyholders' returns	A5	221	—	(178)	—
Tax attributable to shareholders' profits		(227)	(152)	(134)	107
<b>(Loss)/profit after tax</b>		(202)	(2,848)	417	(357)
<b>(Loss) from discontinued operations</b>		(2,848)		(357)	
<b>(Loss)/profit for the year</b>		(3,050)		60	
Attributable to:					
Equity shareholders of Aviva plc		(3,218)		225	
Non-controlling interests		168		(165)	
<b>(Loss)/profit for the year</b>		(3,050)		60	
<b>(Loss)/earnings per share</b>	A6				
Basic (pence per share)		(113.1)p		5.8p	
Diluted (pence per share)		(113.1)p		5.7p	
Continuing operations – Basic (pence per share)		(15.2)p		11.1p	
Continuing operations – Diluted (pence per share)		(15.2)p		10.9p	

<sup>1</sup> Discontinued operations in the current period represents the results of the US life and related internal asset management businesses (US Life), and in the prior period represents the results of US Life and Delta Lloyd to 6 May 2011.

<sup>2</sup> Following a review of the classification of contracts issued by the Group's Italian long-term business, certain portfolios have been reclassified from participating insurance to participating investment contracts for all years presented. There is no impact on the result for any year presented as a result of this reclassification.

**Consolidated statement of comprehensive income**

For the year ended 31 December 2012

	2012 £m	2011 £m
<b>(Loss)/profit for the year from continuing operations</b>	<b>(202)</b>	417
<b>(Loss) for the year from discontinued operations<sup>1</sup></b>	<b>(2,848)</b>	(357)
<b>Total (loss)/profit for the year</b>	<b>(3,050)</b>	60
<b>Other comprehensive income/(expense) from continuing operations:</b>		
Investments classified as available for sale		
Fair value gains/(losses)	27	(5)
Fair value gains transferred to profit on disposals	1	1
Impairment losses on assets previously revalued through other comprehensive income now taken to the income statement	—	2
Owner-occupied properties – fair value (losses)/gains	(3)	2
Share of other comprehensive income of joint ventures and associates	14	(134)
Actuarial (losses)/gains on pension schemes	(830)	996
Other pension scheme movements	—	(22)
Foreign exchange rate movements	(200)	(284)
Aggregate tax effect – shareholder tax	163	(160)
<b>Other comprehensive (expense)/income, net of tax from continuing operations</b>	<b>(828)</b>	396
<b>Other comprehensive income, net of tax from discontinued operations<sup>1</sup></b>	<b>68</b>	300
<b>Total other comprehensive (expense)/income, net of tax</b>	<b>(760)</b>	696
<b>Total comprehensive (expense)/income for the year from continuing operations</b>	<b>(1,030)</b>	813
<b>Total comprehensive expense for the year from discontinued operations<sup>1</sup></b>	<b>(2,780)</b>	(57)
<b>Total comprehensive (expense)/income for the year</b>	<b>(3,810)</b>	756
Attributable to:		
Equity shareholders of Aviva plc	(3,942)	923
Non-controlling interests	132	(167)
	<b>(3,810)</b>	756

<sup>1</sup> Discontinued operations in the current period represents the results of the US life and related internal asset management businesses (US Life), and in the prior period represents the results of US Life and Delta Lloyd to 6 May 2011.

**Consolidated statement of changes in equity**

For the year ended 31 December 2012

	Ordinary share capital £m	Preference share capital £m	Share premium £m	Merger reserve £m	Shares held by employee trusts £m	Currency translation reserve £m	Owner- occupied properties reserve £m	Investment valuation reserve £m	Hedging instru- ments reserve £m	Equity compensatio n reserve £m	Retained earnings £m	Equity attributable to shareholders of Aviva plc £m	DCI and Fixed rate tier 1 notes £m	Non controlling interests £m	Total equity £m
<b>Balance at 1 January</b>	<b>726</b>	<b>200</b>	<b>1,173</b>	<b>3,271</b>	<b>(43)</b>	<b>1,530</b>	<b>79</b>	<b>530</b>	<b>(663)</b>	<b>86</b>	<b>5,954</b>	<b>12,843</b>	<b>990</b>	<b>1,530</b>	<b>15,363</b>
(Loss)/profit for the year	—	—	—	—	—	—	—	—	—	—	(3,218)	(3,218)	—	168	(3,050)
Other comprehensive (expense)/income	—	—	—	—	—	(349)	(2)	229	74	—	(676)	(724)	—	(36)	(760)
<b>Total comprehensive (expense)/income for the year</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>(349)</b>	<b>(2)</b>	<b>229</b>	<b>74</b>	<b>—</b>	<b>(3,894)</b>	<b>(3,942)</b>	<b>—</b>	<b>132</b>	<b>(3,810)</b>
Dividends and appropriations	—	—	—	—	—	—	—	—	—	—	(847)	(847)	—	—	(847)
Shares issued in lieu of dividends	9	—	(9)	—	—	—	—	—	—	—	127	127	—	—	127
Capital contributions from non-controlling interests	—	—	—	—	—	—	—	—	—	—	—	—	—	20	20
Non-controlling interests share of dividends declared in the year	—	—	—	—	—	—	—	—	—	—	—	—	—	(102)	(102)
Transfer to profit on disposal of subsidiaries, joint ventures and associates	—	—	—	—	—	91	—	96	—	—	—	187	—	—	187
Changes in non-controlling interests in existing subsidiaries	—	—	—	—	—	—	—	—	—	—	—	—	—	(6)	(6)
Shares acquired by employee trusts	—	—	—	—	(33)	—	—	—	—	—	—	(33)	—	—	(33)
Shares distributed by employee trusts	—	—	—	—	44	—	—	—	—	—	(36)	8	—	—	8
Reserves credit for equity compensation plans	—	—	—	—	—	—	—	—	—	42	—	42	—	—	42
Shares issued under equity compensation plans	1	—	1	—	—	—	—	—	—	(68)	67	1	—	—	1
Aggregate tax effect – shareholder tax	—	—	—	—	—	—	—	—	—	—	18	18	—	—	18
Issue of fixed rate tier 1 notes	—	—	—	—	—	—	—	—	—	—	—	—	392	—	392
<b>Balance at 31 December</b>	<b>736</b>	<b>200</b>	<b>1,165</b>	<b>3,271</b>	<b>(32)</b>	<b>1,272</b>	<b>77</b>	<b>855</b>	<b>(589)</b>	<b>60</b>	<b>1,389</b>	<b>8,404</b>	<b>1,382</b>	<b>1,574</b>	<b>11,360</b>

**Consolidated statement of changes in equity**

For the year ended 31 December 2011

	Ordinary share capital £m	Preference share capital £m	Share premium £m	Merger reserve £m	Shares held by employee trusts £m	Currency translation reserve £m	Owner- occupied properties reserve £m	Investment valuation reserve £m	Hedging instru- ments reserve £m	Equity compensation reserve £m	Retained earnings £m	Equity attributable to shareholders of Aviva plc £m	DCI and Fixed rate tier 1 notes £m	Non controlling interests £m	Total equity £m
Balance at 1 January	705	200	1,194	3,271	(32)	2,183	83	573	(693)	99	5,411	12,994	990	3,741	17,725
Profit/(loss) for the year	—	—	—	—	—	—	—	—	—	—	225	225	—	(165)	60
Other comprehensive (expense)/income	—	—	—	—	—	(165)	4	72	30	—	757	698	—	(2)	696
Total comprehensive (expense)/income for the year	—	—	—	—	—	(165)	4	72	30	—	982	923	—	(167)	756
Owner-occupied properties fair value gains transferred to retained earnings on disposals	—	—	—	—	—	—	(6)	—	—	—	6	—	—	—	—
Dividends and appropriations	—	—	—	—	—	—	—	—	—	—	(813)	(813)	—	—	(813)
Shares issued in lieu of dividends	21	—	(21)	—	—	—	—	—	—	—	307	307	—	—	307
Capital contributions from non-controlling interests	—	—	—	—	—	—	—	—	—	—	—	—	—	68	68
Effect of deconsolidation of Delta Lloyd	—	—	—	—	—	(485)	(2)	(115)	—	—	2	(600)	—	(1,770)	(2,370)
Non-controlling interests' share of dividends declared in the year	—	—	—	—	—	—	—	—	—	—	—	—	—	(126)	(126)
Transfer to profit on disposal of subsidiaries, joint ventures and associates	—	—	—	—	—	(3)	—	—	—	—	—	(3)	—	—	(3)
Changes in non-controlling interests in existing subsidiaries	—	—	—	—	—	—	—	—	—	—	—	—	—	(11)	(11)
Shares acquired by employee trusts	—	—	—	—	(29)	—	—	—	—	—	—	(29)	—	—	(29)
Shares distributed by employee trusts	—	—	—	—	18	—	—	—	—	—	(18)	—	—	—	—
Reserves credit for equity compensation plans	—	—	—	—	—	—	—	—	—	48	—	48	—	—	48
Shares issued under equity compensation plans	—	—	—	—	—	—	—	—	—	(61)	61	—	—	—	—
Reclassification to financial liabilities	—	—	—	—	—	—	—	—	—	—	—	—	—	(205)	(205)
Aggregate tax effect – shareholder tax	—	—	—	—	—	—	—	—	—	—	16	16	—	—	16
Balance at 31 December	726	200	1,173	3,271	(43)	1,530	79	530	(663)	86	5,954	12,843	990	1,530	15,363

**Consolidated statement of financial position**

As at 31 December 2012

	Note	2012 £m	Restated <sup>1</sup> 2011 £m
<b>Assets</b>			
Goodwill		1,520	2,640
Acquired value of in-force business and intangible assets		1,084	2,021
Interests in, and loans to, joint ventures		1,493	1,700
Interests in, and loans to, associates		215	1,118
Property and equipment		391	510
Investment property		10,815	11,638
Loans		24,537	28,116
Financial investments		189,078	216,058
Reinsurance assets	A10	6,684	7,112
Deferred tax assets		188	238
Current tax assets		67	140
Receivables		7,617	7,937
Deferred acquisition costs and other assets		3,799	6,444
Prepayments and accrued income		2,701	3,235
Cash and cash equivalents	A15	22,897	23,043
Assets of operations classified as held for sale		42,603	426
<b>Total assets</b>		<b>315,689</b>	<b>312,376</b>
<b>Equity</b>			
Capital			
Ordinary share capital		736	726
Preference Share Capital		200	200
		936	926
Capital reserves			
Share premium		1,165	1,173
Merger reserve		3,271	3,271
		4,436	4,444
Shares held by employee trusts		(32)	(43)
Other reserves		1,675	1,562
Retained earnings		1,389	5,954
<b>Equity attributable to shareholders of Aviva plc</b>		<b>8,404</b>	<b>12,843</b>
Direct capital instruments and fixed rate tier 1 notes		1,382	990
Non-controlling interests		1,574	1,530
<b>Total equity</b>		<b>11,360</b>	<b>15,363</b>
<b>Liabilities</b>			
Gross insurance liabilities	A8	113,091	147,379
Gross liabilities for investment contracts	A9	110,494	113,366
Unallocated divisible surplus	A12	6,931	650
Net asset value attributable to unitholders		11,146	10,352
Provisions	A14	1,119	992
Deferred tax liabilities		547	1,171
Current tax liabilities		112	232
Borrowings		8,194	8,450
Payables and other financial liabilities		9,441	11,230
Other liabilities		1,843	2,828
Liabilities of operations classified as held for sale		41,411	363
<b>Total liabilities</b>		<b>304,329</b>	<b>297,013</b>
<b>Total equity and liabilities</b>		<b>315,689</b>	<b>312,376</b>

1. Following a review of the classification of contracts issued by the Group's Italian long-term business, certain portfolios have been reclassified from participating insurance to participating investment contracts for all years presented. There is no impact on the result for any year presented as a result of this reclassification.



**Consolidated statement of cash flows**

For the year ended 31 December 2012

	2012 £m	2011 £m
<b>Cash flows from operating activities</b>		
Cash generated from continuing operations	2,676	111
Tax paid	(428)	(425)
<b>Net cash from/(used in) operating activities – continuing operations</b>	<b>2,248</b>	<b>(314)</b>
<b>Net cash from/(used in) operating activities – discontinued operations</b>	<b>46</b>	<b>(28)</b>
<b>Total net cash from/(used in) operating activities</b>	<b>2,294</b>	<b>(342)</b>
<b>Cash flows from investing activities</b>		
Acquisition of, and additions to subsidiaries, joint ventures and associates, net of cash acquired	(129)	(114)
Disposals of subsidiaries, joint ventures and associates, net of cash transferred	421	877
New loans to joint ventures	(4)	(18)
Repayment of loans to joint ventures	12	17
Net new loans to joint ventures	8	(1)
Purchases of property and equipment	(220)	(86)
Proceeds on sale of property and equipment	43	40
Purchases of intangible assets	(128)	(109)
<b>Net cash (used in)/from investing activities – continuing operations</b>	<b>(5)</b>	<b>607</b>
<b>Net cash (used in) investing activities – discontinued operations</b>	<b>(10)</b>	<b>(529)</b>
<b>Total net cash (used in)/from investing activities</b>	<b>(15)</b>	<b>78</b>
<b>Cash flows from financing activities</b>		
Proceeds from issue of ordinary shares and fixed rate tier 1 notes, net of transaction costs	392	—
Treasury shares purchased for employee trusts	(33)	(29)
New borrowings drawn down, net of expenses	2,529	3,423
Repayment of borrowings	(2,513)	(3,359)
Net drawdown of borrowings	16	64
Interest paid on borrowings	(665)	(686)
Preference dividends paid	(17)	(17)
Ordinary dividends paid	(630)	(431)
Coupon payments on direct capital instruments and fixed rate tier 1 notes	(73)	(58)
Capital contributions from non-controlling interests	20	68
Dividends paid to non-controlling interests of subsidiaries	(102)	(126)
<b>Net cash (used in) financing activities – continuing operations</b>	<b>(1,092)</b>	<b>(1,215)</b>
<b>Net cash (used in) financing activities – discontinued operations</b>	<b>(27)</b>	<b>(558)</b>
<b>Total net cash (used in) financing activities</b>	<b>(1,119)</b>	<b>(1,773)</b>
<b>Total net increase/(decrease) in cash and cash equivalents</b>	<b>1,160</b>	<b>(2,037)</b>
Cash and cash equivalents at 1 January	22,401	24,695
Effect of exchange rate changes on cash and cash equivalents	(313)	(257)
<b>Cash and cash equivalents at 31 December</b>	<b>23,248</b>	<b>22,401</b>

# Notes to the consolidated financial statements

## A1 – Basis of preparation

- (a) The results for the year ended 31 December 2012 have been prepared using International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB) and endorsed by the European Union (EU), and those parts of the Companies Act 2006, applicable to those reporting under IFRS. The results in this preliminary announcement have been prepared in accordance with IFRS applicable at 31 December 2012 and have been taken from the Group's Annual Report and Accounts, which will be available on the Company's website on 25 March 2013.

The Group has adopted the following new amendments to standards which became effective for financial years beginning on or after 1 January 2012. Neither of these amendments has a material impact on these financial statements.

- (i) Amendment to IFRS 7, Financial Instruments – Disclosures, relating to the transfer of financial assets.
- (ii) Amendment to IAS 12, Income Taxes, relating to deferred tax.

The preliminary announcement for the year ended 31 December 2012 does not constitute statutory accounts as defined in Section 434 of the Companies Act 2006. The results on an IFRS basis for full year 2012 have been audited by PricewaterhouseCoopers LLP (PwC) and the results for full year 2011 were audited by Ernst & Young LLP (E&Y). PwC and E&Y respectively have reported on the 2012 and 2011 financial statements. Both reports were unqualified and neither contained a statement under section 498 (2) or (3) of the Companies Act 2006. The Group's 2011 Report and Accounts has been filed with the Registrar of Companies.

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

- (b) Items included in the financial statements of each of the Group's entities are measured in the currency of the primary economic environment in which that entity operates (the 'functional currency'). The consolidated financial statements are stated in sterling, which is the Company's functional and presentational currency. Unless otherwise noted, the amounts shown in the financial statements are in millions of pounds sterling (£m).
- (c) As described in note A3c(i), the Group's US life and annuity business and associated investment management operations (together 'US Life'), have been classified as held for sale. As the Group will exit from a major geographical area of operations, previously presented as 'United States' in the segmental reporting note, the results of US Life for the year, as well as those for preceding years, have been classified as discontinued operations.
- The results presented as discontinued operations for 2011 and preceding years also include the results of Delta Lloyd N.V. as a subsidiary, which was deconsolidated during 2011.
- (d) Following the announcement in April 2012 relating to the restructuring of the Group, the Group's operating segments were changed to align them with the revised organisational reporting structure. The Group has determined its operating segments along market reporting lines, reflecting 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. Further details of the reportable segments are given in note A4.
- (e) Following a review of the classification of contracts issued by the Group's Italian long-term business certain portfolios have been reclassified from participating insurance contracts to participating investment contracts. As a result, there has been a reallocation from gross insurance liabilities at 31 December 2011 to gross liabilities for investment contracts of £2,722 million. The change in insurance liabilities net of reinsurance recognised in the income statement for the year to 31 December 2011 has decreased by £168 million, and the change in investment contract provisions has increased by an equal amount. There is no impact on profit for the year or equity reported for the year ended 31 December 2011.
- (f) The long-term nature of much of the Group's operations means that, for management's decision-making and internal performance management, short-term realised and unrealised investment gains and losses are treated as non-operating items. The Group focuses instead on an operating profit measure (also referred to as adjusted operating profit) that incorporates an expected return on investments supporting its long-term and non-long-term businesses. Operating profit for long-term business is based on expected investment returns on financial investments backing shareholder and policyholder funds over the reporting period, with allowance for the corresponding expected movements in liabilities. Variances between actual and expected investment returns, and the impact of changes in economic assumptions on liabilities, are disclosed separately outside operating profit. For non-long-term business, the total investment income, including realised and unrealised gains, is analysed between that calculated using a longer-term return and short-term fluctuations from that level. Operating profit also excludes impairment of goodwill, associates and joint ventures, amortisation and impairment of other intangibles; the profit or loss on disposal and remeasurement of subsidiaries, joint ventures and associates; integration and restructuring costs; and exceptional items.

## A2 – Exchange rates

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

	2012	2011
Eurozone		
– Average rate (€1 equals)	£0.81	£0.87
– Period end rate (€1 equals)	£0.81	£0.84
United States		
– Average rate (\$US1 equals)	£0.63	£0.63
– Period end rate (\$US1 equals)	£0.62	£0.65

Total foreign currency translations from continuing operations amounted to a gain of £128 million (2011: £35 million loss) in the income statement. These result from the settlement of transactions and translations of assets and liabilities denominated in foreign currencies.

## A3 – Subsidiaries

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

### (a) Acquisitions

There have been no material acquisitions during 2012.

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

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

	2012 £m	2011 £m
<b>Continuing operations</b>		
United Kingdom – RAC Limited (see (i) below)	(21)	532
Delta Lloyd associate (see (iii) below)	(129)	—
Australia	—	23
Sri Lanka (see (iv) below)	12	—
Czech Republic, Hungary and Romania (see (ii) below)	7	—
Other small operations	(33)	10
<b>(Loss)/profit on disposal and remeasurement from continuing operations</b>	<b>(164)</b>	<b>565</b>
<b>Loss on disposal and remeasurement from discontinued operations (see note A3c(i) below)</b>	<b>(2,359)</b>	<b>(32)</b>
<b>Total (loss)/profit on disposal and remeasurement</b>	<b>(2,523)</b>	<b>533</b>

No tax arises on the profits and losses on these disposals.

**A3 – Subsidiaries continued****(i) RAC Limited**

The loss in respect of RAC Limited in 2012 arises from residual costs related to the sale of that company in September 2011.

**(ii) Czech Republic, Hungary and Romania life business**

On 31 July 2012, the Group sold its operations in the Czech Republic and Hungary and its Romania life assurance business to MetLife, Inc, for £37 million. Net assets disposed of were £32 million, comprising gross assets of £379 million and liabilities of £347 million, giving a profit on disposal of £3 million after transaction costs. Recycling currency translation reserves of £4 million to the income statement resulted in an overall profit on disposal of £7 million. The sale of our Romania pensions business is still subject to regulatory approval and is expected to complete in the next 12 months, so it has been classified as held for sale (see note A3c(v)).

**(iii) Delta Lloyd associate**

On 5 July 2012, the Group sold 37.2 million shares in Delta Lloyd for £313 million (net of transaction costs), reducing our holding at that date to 19.8% of Delta Lloyd's ordinary share capital, representing 18.6% of shareholder voting rights. As the Group no longer had significant influence over Delta Lloyd, the Group ceased to account for that company as an associate from 5 July 2012. From that date, our holding was classified as a financial investment, held at fair value through profit and loss.

The loss on disposal is calculated as follows:

	2012 £m
Cash consideration, net of transaction costs	313
Fair value of financial investment holding at 5 July 2012	315
<b>Net Consideration</b>	<b>628</b>
Interest in associate	(595)
Currency translation and investment valuation reserves recycled to income statement	(162)
<b>Loss on disposal</b>	<b>(129)</b>

On 8 January 2013 the Group announced the sale of its remaining shareholding in Delta Lloyd, resulting in gross cash proceeds of £353 million.

**(iv) Sri Lanka**

On 4 December 2012, the Group sold its controlling 58.4% interest in Aviva NDB Holdings Lanka (Private) Limited ("Aviva NDB"), to AIA Group Limited for consideration of £31 million. Net assets of the business were £16 million (comprising gross assets of £205 million and liabilities of £189 million). After recycling of currency translation reserves of £3 million the profit on disposal amounted to £12 million.

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

The assets and liabilities of operations classified as held for sale as at 31 December 2012 are as follows:

	2012		2011
	US Life <sup>1</sup> £m	Other £m	Total £m
<b>Assets</b>			
Goodwill	—	183	183
Acquired value of in-force and intangible assets	408	83	491
Interests in, and loans to, joint ventures and associates	—	126	126
Property and equipment	—	2	2
Investment Property	6	12	18
Loans	3,397	—	3,397
Financial investments	31,212	5,203	36,415
Reinsurance assets	644	239	883
Deferred acquisition costs	1,468	70	1,538
Other assets	769	97	866
Cash and cash equivalents	544	373	917
	<b>38,448</b>	<b>6,388</b>	<b>44,836</b>
Additional impairment to write down the disposal group to fair value less costs to sell	(2,233)	—	(2,233)
<b>Total assets</b>	<b>36,215</b>	<b>6,388</b>	<b>42,603</b>
<b>Liabilities</b>			
Gross insurance liabilities	(31,153)	(3,294)	(34,447)
Gross liabilities for investment contracts	(2,197)	(1,857)	(4,054)
Unallocated divisible surplus	—	(55)	(55)
Provisions	(184)	(3)	(187)
Deferred tax liabilities	(672)	(8)	(680)
Borrowings	(145)	—	(145)
Other liabilities	(1,497)	(346)	(1,843)
<b>Total liabilities</b>	<b>(35,848)</b>	<b>(5,563)</b>	<b>(41,411)</b>
<b>Net assets</b>	<b>367</b>	<b>825</b>	<b>1,192</b>

<sup>1</sup> US Life comprises US long term business previously reported under the heading "United States" and associated internal asset management operations previously reported under "Aviva Investors" in note A4 – segmental information.

### A3 – Subsidiaries continued

The businesses classified as held for sale comprise:

#### (i) US long term business

On 8 November 2012 the Group confirmed it was in discussions with external parties with respect to its US life operations, consisting of Aviva Life and Annuity Company and the associated internal asset management operations of Aviva Investors North America, Inc ("US Life") and these have been classified as held for sale. On 21 December 2012 the Group announced that it had agreed to sell US Life to Athene Holding Ltd for consideration of £1.0 billion including the shareholder loan (£1.1 billion including repayment of an external loan). There is uncertainty in the ultimate consideration, which depends on the development of statutory surplus between the announcement of sale and ultimate completion date. The transaction is expected to complete in 2013.

Following classification as held for sale, US Life has been re-measured to fair value less costs to sell resulting in an impairment loss of £2,359 million, recognised within "Loss on the disposal and re-measurement of subsidiaries and associates" in the income statement, as a component of the result of discontinued operations.

An impairment of £126 million has reduced the carrying value of property and equipment, investments in associates and prepayments within US Life to nil. The remaining impairment of £2,233 million reduces the value of the US Life disposal group so that the carrying value of this business is equal to its fair value less costs to sell of £367 million.

As described in Note A1(c), the results of US Life for the year, as well as those for preceding years, have been classified as discontinued operations in the income statement.

Other comprehensive income, net of tax from discontinued operations of £68 million includes £528 million fair value gains on available for sale financial investments, £(235) million fair value gains on available for sale financial investments transferred to the income statement on disposal, £(130) million foreign exchange losses, £12 million of impairment losses transferred to the income statement, and £(107) million aggregate shareholder tax effect.

On completion of the disposal the currency translation reserves and investment valuation reserves relating to the US Life operations, currently recognised within equity, will be recycled to the income statement.

#### (ii) Irish long-term business – Ark Life

Irish long-term business is carried out through a subsidiary, Aviva Life Holdings Ireland Limited ("ALHI"), which is 75% owned by Aviva and 25% owned by Allied Irish Bank ("AIB"). ALHI holds four subsidiaries, one of which is Ark Life Assurance Company Limited ("Ark Life") which carries out bancassurance business via a distribution agreement with AIB. The original distribution agreement was renewable in 2011 but, on 15 December 2011, AIB notified the Group that they did not wish to renew it and the existing shareholders' agreement governing ALHI was terminated. The termination of this agreement triggered the ability for both parties to exercise put and call options that will result in the unwind of the original structure such that the Ark Life business returns 100% to AIB and the Group will purchase the 25% minority stake in ALHI. The formal exercise of these options was approved on 17 January 2012 and, as a result, the Ark Life business became held for sale on that date. Completion of the transaction is subject to agreement of terms with AIB and regulatory approval. Completion is expected in the next 12 months.

Management's current best estimate of the disposal proceeds for the Ark Life business is £232 million net of transaction costs, which is lower than its carrying value following impairments charged in 2011. A further charge to profit of £111 million has been recognised during 2012 reflecting revised expected disposal proceeds.

The exercise of the put options in January 2012 over AIB's non-controlling interest in ALHI led to our reclassifying this non-controlling interest from equity to financial liabilities as at 31 December 2011. Our current estimate of the liability as at 31 December 2012 is £122 million. A credit to the income statement of £76 million has been recognised in 2012 reflecting the revised expected purchase liability.

The net impact of these two movements is a charge to profit of £35 million, before exchange movements, recognised within net investment income. Finalisation of the exit value for Ark Life and the purchase value for the minority share in ALHI is subject to the conclusion of discussions with AIB.

#### (iii) Spanish long-term business – Aseval

On 18 December 2012 Aviva reached a settlement with Bankia S.A. ("Bankia") to transfer the Group's entire holding in Aseval Aseguradora Valenciana, Sociedad Anónima de Seguros y Reaseguros ("Aseval"), a Spanish life assurance company, to Bankia. Aseval was classified as held for sale at this date. The transfer is expected to complete on or before 30 April 2013 with proceeds of £494 million. Aseval is included within the 'Italy, Spain and Other' operating segment at its carrying value.

#### (iv) Russian long-term business

During the year the Group entered into negotiations to dispose of Aviva Russia. On 27 February 2013 the Group announced the sale of the business to Blagosostoyanie for consideration of €35 million. The transaction is expected to complete in the first half of 2013. The business is included in the statement of financial position at its carrying value.

#### (v) Other

Other businesses classified as held for sale comprise joint ventures in Taiwan and Malaysia and the Group's pensions business subsidiary in Romania.

## A4 – Segmental information

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

### (a) Operating segments

Following the announcement in April 2012 relating to the restructuring of the Group, the Group's operating segments were changed to align them with the new management structure. The revised segments are set out below. Results for prior years have been restated to facilitate comparison with this new structure.

#### United Kingdom & Ireland

The United Kingdom and Ireland comprises two operating segments – Life and General Insurance. The principal activities of our UK and Ireland Life operations are life insurance, long-term health and accident insurance, savings, pensions and annuity business and Health in the UK, whilst UK and Ireland General Insurance provides insurance cover to individuals and businesses, for risks associated mainly with motor vehicles, property and liability (such as employers' liability and professional indemnity liability) and medical expenses. UK and Ireland General Insurance business also includes the results of Ireland Health. For the period to its disposal on 30 September 2011, UK and Ireland General Insurance also included the RAC motor recovery business.

#### France

The principal activities of our French operations are long-term business and general insurance. The long-term business offers a range of long-term insurance and savings products, primarily for individuals, with a focus on the unit-linked market. The general insurance business predominantly sells personal and small commercial lines insurance products through agents and a direct insurer.

#### Canada

The principal activity of the Canadian operation is general insurance. In particular it provides personal and commercial lines insurance products through a range of distribution partners.

#### Italy, Spain and Other

These countries are not individually significant at a Group level, so have been aggregated into a single reporting segment in line with IFRS8. This segment includes our operations in Italy and Spain (including Aseval which is held for sale as at 31 December 2012). The principal activities of our Italian operations are long-term business and general insurance. The life business offers a range of long-term insurance and savings products, and the general insurance business provides motor and home insurance products to individuals, as well as small commercial risk insurance to businesses. The principal activity of the Spanish operation is the sale of long-term business, accident and health insurance and a selection of savings products. This segment also includes the results of our Czech, Hungarian and Romanian life businesses up until the date of their sale in July 2012 as well as our Reinsurance and Run Off businesses.

#### Higher growth markets

Activities reported in the higher growth markets operating segment include our businesses in Asia, Poland, Turkey and Russia. Our activities in Asia principally comprise our long-term business operations in China, India, Singapore, Hong Kong, South Korea, Vietnam and Indonesia as well as our life operations in Taiwan and Malaysia which are held for sale as at the balance sheet date and the results of Sri Lanka up until the date of disposal in December 2012. Higher growth also includes general insurance operations in Singapore, Indonesia, Poland and Turkey and long-term business in Poland, Turkey and Russia (which is held for sale at the year-end).

#### Aviva Investors

Aviva Investors operates in most of the markets in which the Group operates, in particular the UK, France 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. The internal asset management operations of Aviva Investors North America are being sold with the Group's US life operations, and are classified as held for sale and as a discontinued operation in these financial statements.

#### Other Group activities

Investment return on centrally held assets and head office expenses, such as Group treasury and finance functions, together with certain taxes and financing costs arising on central borrowings are included in 'Other Group activities', along with central core structural borrowings and certain tax balances in the segmental statement of financial position. Also included here are consolidation and elimination adjustments and the Group's interest in Delta Lloyd, as an associate to 5 July 2012, and as a financial investment after that date.

#### Discontinued operations

In December 2012 the Group announced it had agreed to sell its US life operations (including the related internal asset management operations of Aviva Investors) and therefore it has been classified as a discontinued operation for presentation in the income statement and held for sale in the statement of financial position.

On 6 May 2011 the Group ceased to hold a majority of the shareholder voting rights in Delta Lloyd and therefore the results of Delta Lloyd up to 6 May 2011 are presented as discontinued operations for 2011 and prior years. After this date, the Group ceased to consolidate Delta Lloyd.

#### Measurement basis

The accounting policies of the segments are the same as those for the Group as a whole. Any transactions between the business segments are on normal commercial terms and market conditions. The Group evaluates performance of operating segments on the basis of:

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



## A4 – Segmental information continued

## a (i) Segmental income statement for the year ended 31 December 2012

	Developed Markets										
	United Kingdom & Ireland					Higher growth markets £m	Aviva Investors <sup>3</sup> £m	Other Group activities <sup>4</sup> £m	Continuing operations £m	Discontinued Operations <sup>2</sup> £m	Total £m
	Life £m	GI £m	France £m	Canada £m	Italy, Spain and Other £m						
Gross written premiums	6,363	4,951	4,763	2,248	3,033	1,386	—	—	22,744	3,796	26,540
Premiums ceded to reinsurers	(740)	(450)	(55)	(63)	(127)	(136)	—	—	(1,571)	(207)	(1,778)
Internal reinsurance revenue	—	(11)	(6)	(9)	36	(10)	—	—	—	—	—
Net written premiums	5,623	4,490	4,702	2,176	2,942	1,240	—	—	21,173	3,589	24,762
Net change in provision for unearned premiums	(15)	63	(28)	(31)	3	(8)	—	—	(16)	—	(16)
Net earned premiums	5,608	4,553	4,674	2,145	2,945	1,232	—	—	21,157	3,589	24,746
Fee and commission income	448	188	121	42	125	70	279	—	1,273	23	1,296
	6,056	4,741	4,795	2,187	3,070	1,302	279	—	22,430	3,612	26,042
Net investment income/(expense)	8,639	523	8,042	140	3,140	697	(8)	(67)	21,106	2,241	23,347
Inter-segment revenue	—	—	—	—	—	—	134	—	134	75	209
Share of (loss)/profit of joint ventures and associates	(37)	—	8	—	—	1	7	(256)	(277)	—	(277)
(Loss)/profit on the disposal and remeasurement of subsidiaries and associates	(2)	(21)	—	—	7	12	—	(160)	(164)	(2,359)	(2,523)
<b>Segmental income</b>	<b>14,656</b>	<b>5,243</b>	<b>12,845</b>	<b>2,327</b>	<b>6,217</b>	<b>2,012</b>	<b>412</b>	<b>(483)</b>	<b>43,229</b>	<b>3,569</b>	<b>46,798</b>
Claims and benefits paid, net of recoveries from reinsurers	(9,224)	(2,908)	(5,272)	(1,268)	(3,916)	(1,013)	—	—	(23,601)	(2,721)	(26,322)
Change in insurance liabilities, net of reinsurance	404	(22)	(880)	(40)	400	(292)	—	—	(430)	(1,566)	(1,996)
Change in investment contract provisions	(3,151)	—	(983)	—	(295)	18	(39)	—	(4,450)	(77)	(4,527)
Change in unallocated divisible surplus	(347)	—	(4,359)	—	(1,491)	(119)	—	—	(6,316)	—	(6,316)
Amortisation of acquired value of in-force business	(13)	—	(18)	—	(9)	(3)	—	—	(43)	(183)	(226)
Impairment of goodwill and other intangibles, depreciation and other amortisation expense	(107)	(59)	(3)	(17)	(129)	(7)	(9)	(5)	(336)	(916)	(1,252)
Other operating expenses	(1,505)	(1,944)	(845)	(745)	(432)	(352)	(357)	(678)	(6,858)	(691)	(7,549)
Impairment losses on AVIF and tangible assets <sup>1</sup>	(34)	(43)	(1)	—	(3)	1	—	—	(80)	(15)	(95)
Inter-segment expenses	(122)	(3)	—	(4)	—	(5)	—	—	(134)	(75)	(209)
Finance costs	(261)	(58)	(2)	(9)	(2)	—	(5)	(398)	(735)	(21)	(756)
<b>Segmental expenses</b>	<b>(14,360)</b>	<b>(5,037)</b>	<b>(12,363)</b>	<b>(2,083)</b>	<b>(5,877)</b>	<b>(1,772)</b>	<b>(410)</b>	<b>(1,081)</b>	<b>(42,983)</b>	<b>(6,265)</b>	<b>(49,248)</b>
Profit/(loss) before tax	296	206	482	244	340	240	2	(1,564)	246	(2,696)	(2,450)
Tax attributable to policyholders' returns	(198)	—	—	—	—	(23)	—	—	(221)	—	(221)
<b>Profit/(loss) before tax attributable to shareholders</b>	<b>98</b>	<b>206</b>	<b>482</b>	<b>244</b>	<b>340</b>	<b>217</b>	<b>2</b>	<b>(1,564)</b>	<b>25</b>	<b>(2,696)</b>	<b>(2,671)</b>
Adjusted for non-operating items:											
Reclassification of corporate costs and unallocated interest	7	(1)	25	—	3	—	1	(35)	—	—	—
Investment return variances and economic assumption changes on long-term business	663	—	(28)	—	—	(15)	—	—	620	(342)	278
Short-term fluctuation in return on investments backing non-long-term business	—	(36)	(68)	10	(56)	(1)	—	144	(7)	—	(7)
Economic assumption changes on general insurance and health business	—	20	—	—	1	—	—	—	21	—	21
Impairment of goodwill, associates and joint ventures	(1)	—	—	—	108	—	—	(47)	60	782	842
Amortisation and impairment of intangibles	54	40	—	11	13	4	6	—	128	129	257
(Profit)/loss on the disposal of subsidiaries and associates	2	21	—	—	(7)	(12)	—	160	164	2,359	2,523
Integration and restructuring costs	87	154	11	11	12	9	33	144	461	7	468
Exceptional items	—	—	—	—	—	—	—	—	—	—	—
Share of Delta Lloyd's non-operating items (before tax), as an associate	—	—	—	—	—	—	—	523	523	—	523
Share of Delta Lloyd's tax expense, as an associate	—	—	—	—	—	—	—	(107)	(107)	—	(107)
<b>Operating profit/(loss) before tax attributable to shareholders</b>	<b>910</b>	<b>404</b>	<b>422</b>	<b>276</b>	<b>414</b>	<b>202</b>	<b>42</b>	<b>(782)</b>	<b>1,888</b>	<b>239</b>	<b>2,127</b>

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

2 Discontinued operations represent the operations of the United States Life business and related internal asset management activities.

3 Aviva Investors operating profit includes £3 million profit relating to the Aviva Investors Pooled Pension business.

4 Other group activities include Delta Lloyd as an associate up until 5 July 2012 and as a financial investment thereafter.

## A4 – Segmental information continued

## a (ii) Segmental income statement for the year ended 31 December 2011

	Developed Markets										
	United Kingdom & Ireland			Canada £m	Restated <sup>4</sup> Italy, Spain and Other £m	Higher growth markets £m	Aviva Investors <sup>3</sup> £m	Other Group activities <sup>5</sup> £m	Restated <sup>4</sup> Continuing operations £m	Discontinued Operations <sup>2</sup> £m	Total £m
	Life £m	GI £m	France £m								
Gross written premiums	7,639	5,227	5,305	2,164	4,586	1,334	—	—	26,255	5,863	32,118
Premiums ceded to reinsurers	(816)	(375)	(66)	(70)	(108)	(115)	—	—	(1,550)	(198)	(1,748)
Internal reinsurance revenue	—	(11)	(6)	(11)	34	(4)	—	—	2	(2)	—
Net written premiums	6,823	4,841	5,233	2,083	4,512	1,215	—	—	24,707	5,663	30,370
Net change in provision for unearned premiums	(39)	(78)	(22)	(46)	(25)	(26)	—	—	(236)	(56)	(292)
Net earned premiums	6,784	4,763	5,211	2,037	4,487	1,189	—	—	24,471	5,607	30,078
Fee and commission income	462	240	147	38	174	80	324	—	1,465	111	1,576
Net investment income/(expense)	7,246	5,003	5,358	2,075	4,661	1,269	324	—	25,936	5,718	31,654
Inter-segment revenue	5,495	451	(896)	236	(747)	(158)	79	(119)	4,341	2,086	6,427
Share of (loss)/profit of joint ventures and associates	—	—	—	—	—	—	148	—	148	71	219
Profit/(loss) on the disposal and remeasurement of subsidiaries and associates	(41)	—	9	—	(12)	1	4	(84)	(123)	28	(95)
Segmental income	12,700	5,982	4,508	2,311	3,902	1,112	578	(226)	30,867	7,871	38,738
Claims and benefits paid, net of recoveries from reinsurers	(9,589)	(3,217)	(5,366)	(1,308)	(4,118)	(782)	—	—	(24,380)	(4,029)	(28,409)
Change in insurance liabilities, net of reinsurance	(2,373)	89	62	(1)	(283)	222	—	—	(2,284)	(2,523)	(4,807)
Change in investment contract provisions	949	—	583	—	37	46	(137)	—	1,478	(180)	1,298
Change in unallocated divisible surplus	358	—	1,334	—	1,053	(24)	—	—	2,721	(19)	2,702
Amortisation of acquired value of in-force business	(35)	—	(19)	—	(11)	(5)	—	—	(70)	(200)	(270)
Impairment of goodwill and other intangibles, depreciation and other amortisation expense	(260)	(36)	(7)	(18)	(28)	(8)	(17)	(2)	(376)	(64)	(440)
Other operating expenses	(1,375)	(1,894)	(806)	(673)	(567)	(369)	(384)	(495)	(6,563)	(932)	(7,495)
Impairment losses on AVIF and tangible assets <sup>1</sup>	—	(60)	(4)	—	(31)	—	(1)	—	(96)	(33)	(129)
Inter-segment expenses	(133)	(6)	—	(3)	—	(6)	—	—	(148)	(71)	(219)
Finance costs	(277)	(52)	(18)	(11)	(2)	—	(3)	(413)	(776)	(284)	(1,060)
Segmental expenses	(12,735)	(5,176)	(4,241)	(2,014)	(3,950)	(926)	(542)	(910)	(30,494)	(8,335)	(38,829)
(Loss)/profit before tax	(35)	806	267	297	(48)	186	36	(1,136)	373	(464)	(91)
Tax attributable to policyholders' returns	186	—	—	—	—	(8)	—	—	178	—	178
<b>Profit/(loss) before tax attributable to shareholders</b>	<b>151</b>	<b>806</b>	<b>267</b>	<b>297</b>	<b>(48)</b>	<b>178</b>	<b>36</b>	<b>(1,136)</b>	<b>551</b>	<b>(464)</b>	<b>87</b>
Adjusted for non-operating items:											
Reclassification of corporate costs and unallocated interest	—	2	20	—	2	—	1	(25)	—	—	—
Investment return variances and economic assumption changes	543	—	47	—	285	22	—	—	897	719	1,616
Short term fluctuation in return on investments backing non-long-term business	—	54	140	(64)	62	—	—	74	266	60	326
Economic assumption changes on general insurance and health business	—	86	—	4	—	—	—	—	90	—	90
Impairment of goodwill, associates and joint ventures	149	—	—	—	11	15	—	217	392	—	392
Amortisation and impairment of intangibles	66	9	4	11	12	5	9	—	116	60	176
(Profit)/loss on the disposal of subsidiaries and associates	—	(528)	(37)	—	—	—	(23)	23	(565)	32	(533)
Integration and restructuring costs	46	37	30	6	10	9	30	93	261	7	268
Exceptional items	22	35	—	—	—	—	—	—	57	—	57
Share of Delta Lloyd's non-operating items (before tax), as an associate	—	—	—	—	—	—	—	(10)	(10)	—	(10)
Share of Delta Lloyd's tax expense, as an associate	—	—	—	—	—	—	—	34	34	—	34
<b>Operating profit/(loss) before tax attributable to shareholders</b>	<b>977</b>	<b>501</b>	<b>471</b>	<b>254</b>	<b>334</b>	<b>229</b>	<b>53</b>	<b>(730)</b>	<b>2,089</b>	<b>414</b>	<b>2,503</b>

1 Impairment losses, and reversal of such losses, recognised directly in other comprehensive income were £2 million and £nil respectively.

2 Discontinued operations represent the operations of the United States Life assurance and related asset management activities, and the results of Delta Lloyd up until its deconsolidation in May 2011.

3 Aviva Investors operating profit includes £3 million profit relating to the Aviva Investors Pooled Pension business.

4 Following a review of the classification of contracts issued by the Group's Italian long-term business, certain portfolios have been reclassified from participating insurance to participating investment contracts for all years presented. There is no impact on the result for any year presented as a result of this reclassification.

5 Other group activities include Delta Lloyd as an associate.

**A4 – Segmental information continued****a (iii) Segmental statement of financial position as at 31 December 2012**

	Developed Markets									
	United Kingdom & Ireland			United States £m	Canada £m	Italy, Spain and Other £m	Higher growth markets £m	Aviva Investors £m	Other Group activities £m	Total £m
	Life £m	GI £m	France £m							
Goodwill	—	1,037	—	—	50	342	64	27	—	1,520
Acquired value of in-force business and intangible assets	140	58	133	—	49	633	15	56	—	1,084
Interests in, and loans to, joint ventures and associates	1,185	—	148	—	—	—	371	4	—	1,708
Property and equipment	91	34	220	—	21	5	11	5	4	391
Investment property	7,650	8	1,342	—	—	2	—	1,093	720	10,815
Loans	23,193	299	848	—	83	14	30	—	70	24,537
Financial investments	90,064	3,127	60,001	—	3,766	21,900	5,761	759	3,700	189,078
Deferred acquisition costs	1,422	519	211	—	275	106	35	—	—	2,568
Other assets	16,883	4,122	11,304	—	1,053	2,828	699	436	4,060	41,385
Assets of operations classified as held for sale	3,490	—	—	36,187	—	2,631	267	28	—	42,603
<b>Total assets</b>	<b>144,118</b>	<b>9,204</b>	<b>74,207</b>	<b>36,187</b>	<b>5,297</b>	<b>28,461</b>	<b>7,253</b>	<b>2,408</b>	<b>8,554</b>	<b>315,689</b>
Insurance liabilities										
Long term business and outstanding claims provisions	71,282	5,789	14,194	—	2,494	9,730	4,913	—	—	108,402
Unearned premiums	238	2,274	369	—	1,127	280	153	—	—	4,441
Other insurance liabilities	—	86	61	—	98	2	1	—	—	248
Liability for investment contracts	49,719	—	46,952	—	—	11,893	47	1,883	—	110,494
Unallocated divisible surplus	2,055	—	4,591	—	—	38	247	—	—	6,931
Net asset value attributable to unitholders	1,375	—	3,383	—	—	205	—	—	6,183	11,146
External borrowings	2,949	3	—	—	—	101	—	—	5,141	8,194
Other liabilities, including inter-segment liabilities	7,114	(2,545)	2,562	—	467	931	346	255	3,932	13,062
Liabilities of operations classified as held for sale	3,257	—	—	35,835	—	2,188	118	13	—	41,411
<b>Total liabilities</b>	<b>137,989</b>	<b>5,607</b>	<b>72,112</b>	<b>35,835</b>	<b>4,186</b>	<b>25,368</b>	<b>5,825</b>	<b>2,151</b>	<b>15,256</b>	<b>304,329</b>
<b>Total equity</b>										<b>11,360</b>
<b>Total equity and liabilities</b>										<b>315,689</b>
Capital expenditure (excluding business combinations)	63	42	176	29	21	15	7	24	—	377

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

**A4 – Segmental information continued****a (iv) Segmental statement of financial position as at 31 December 2011**

	United Kingdom & Ireland				Developed Markets					
	Life £m	GI £m	France £m	United States £m	Canada £m	Restated <sup>2</sup> Italy, Spain and Other £m	Higher growth markets £m	Aviva Investors £m	Other Group activities <sup>1</sup> £m	Restated <sup>2</sup> Total £m
Goodwill	—	1,040	—	800	50	650	71	29	—	2,640
Acquired value of in-force business and intangible assets	326	67	155	681	47	678	23	44	—	2,021
Interests in, and loans to, joint ventures and associates	1,274	—	152	1	—	—	600	15	776	2,818
Property and equipment	228	45	50	113	19	18	13	16	8	510
Investment property	8,431	20	1,246	6	—	2	—	1,133	800	11,638
Loans	23,440	524	949	3,067	80	16	40	—	—	28,116
Financial investments	90,165	3,268	55,074	30,613	3,683	23,895	5,398	884	3,078	216,058
Deferred acquisition costs	1,594	566	207	1,950	274	129	35	—	—	4,755
Other assets	16,864	3,828	11,856	1,752	1,183	2,366	507	579	4,459	43,394
Assets of operations classified as held for sale	—	—	—	—	—	414	12	—	—	426
<b>Total assets</b>	<b>142,322</b>	<b>9,358</b>	<b>69,689</b>	<b>38,983</b>	<b>5,336</b>	<b>28,168</b>	<b>6,699</b>	<b>2,700</b>	<b>9,121</b>	<b>312,376</b>
Insurance liabilities										
Long term business and outstanding claims provisions	72,513	6,048	13,679	30,697	2,538	12,408	4,732	—	—	142,615
Unearned premiums	350	2,209	353	—	1,122	296	153	—	—	4,483
Other insurance liabilities	—	95	85	—	100	1	—	—	—	281
Liability for investment contracts	48,456	—	47,346	2,833	—	12,543	51	2,137	—	113,366
Unallocated divisible surplus	1,712	—	249	—	—	(1,435)	124	—	—	650
Net asset value attributable to unitholders	1,279	—	3,362	—	—	18	—	—	5,693	10,352
External borrowings	2,945	2	—	159	—	89	—	—	5,255	8,450
Other liabilities, including inter-segment liabilities	8,829	(3,280)	2,538	2,188	456	1,059	232	309	4,122	16,453
Liabilities of operations classified as held for sale	—	—	—	—	—	363	—	—	—	363
<b>Total liabilities</b>	<b>136,084</b>	<b>5,074</b>	<b>67,612</b>	<b>35,877</b>	<b>4,216</b>	<b>25,342</b>	<b>5,292</b>	<b>2,446</b>	<b>15,070</b>	<b>297,013</b>
<b>Total equity</b>										<b>15,363</b>
<b>Total equity and liabilities</b>										<b>312,376</b>
Capital expenditure (excluding business combinations)	55	79	5	21	8	17	9	20	—	214

1. Other group activities include Delta Lloyd as an associate.

2. Following a review of the classification of contracts issued by the Group's Italian long-term business, certain portfolios have been reclassified from participating insurance to participating investment contracts for all years presented. There is no impact on the result for any year presented as a result of this reclassification.

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

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

**Long-term business**

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

**General insurance and health**

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

**Fund management**

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

**Other**

Other includes the RAC non-insurance operations (up to the disposal date of 30 September 2011), service companies, head office expenses, such as Group treasury and finance functions, and certain financing costs and taxes not allocated to business segments.

**Discontinued operations and Delta Lloyd**

In the products and services analysis, the results of US Life (including the related internal asset management business) for all periods presented and Delta Lloyd up to 6 May 2011 are presented as discontinued operations. Between 6 May 2011 and 5 July 2012, the Group's share of the results of its interest in Delta Lloyd as an associate and, from 5 July 2012 to the year-end, as a financial investment, are shown only within other activities within continuing operations.

## A4 – Segmental information continued

## b (i) Segmental income statement – products and services for the year ended 31 December 2012

	Long-term business £m	General insurance and health <sup>2</sup> £m	Fund management £m	Other <sup>3</sup> £m	Total £m
Gross written premiums <sup>1</sup>	13,209	9,535	—	—	22,744
Premiums ceded to reinsurers	(930)	(641)	—	—	(1,571)
Net written premiums	12,279	8,894	—	—	21,173
Net change in provision for unearned premiums	—	(16)	—	—	(16)
Net earned premiums	12,279	8,878	—	—	21,157
Fee and commission income	632	65	331	245	1,273
	12,911	8,943	331	245	22,430
Net investment income/(expense)	20,295	823	6	(18)	21,106
Inter-segment revenue	—	—	127	—	127
Share of (loss)/profit of joint ventures and associates	(27)	1	3	(254)	(277)
(Loss)/profit on the disposal and remeasurement of subsidiaries and associates	(6)	(21)	—	(137)	(164)
<b>Segmental income</b>	<b>33,173</b>	<b>9,746</b>	<b>467</b>	<b>(164)</b>	<b>43,222</b>
Claims and benefits paid, net of recoveries from reinsurers	(17,839)	(5,762)	—	—	(23,601)
Change in insurance liabilities, net of reinsurance	(359)	(71)	—	—	(430)
Change in investment contract provisions	(4,450)	—	—	—	(4,450)
Change in unallocated divisible surplus	(6,316)	—	—	—	(6,316)
Amortisation of acquired value of in-force business	(43)	—	—	—	(43)
Impairment of goodwill and other intangibles, depreciation and other amortisation expense	(236)	(25)	(10)	(65)	(336)
Other operating expenses	(2,477)	(3,170)	(390)	(821)	(6,858)
Impairment losses on AVIF and tangible assets	(37)	(43)	—	—	(80)
Inter-segment expenses	(116)	(11)	—	—	(127)
Finance costs	(215)	(29)	(56)	(435)	(735)
<b>Segmental expenses</b>	<b>(32,088)</b>	<b>(9,111)</b>	<b>(456)</b>	<b>(1,321)</b>	<b>(42,976)</b>
Profit/(loss) before tax from continuing operations	1,085	635	11	(1,485)	246
Tax attributable to policyholder returns	(221)	—	—	—	(221)
Profit/(loss) before tax attributable to shareholders	864	635	11	(1,485)	25
Adjusted for:					
Non-operating items from continuing operations (excluding Delta Lloyd as an associate)	967	258	40	182	1,447
Share of Delta Lloyd's non-operating items (before tax), as an associate	—	—	—	523	523
Share of Delta Lloyd's tax expense, as an associate	—	—	—	(107)	(107)
<b>Operating profit/(loss) before tax attributable to shareholders' profits from continuing operations</b>	<b>1,831</b>	<b>893</b>	<b>51</b>	<b>(887)</b>	<b>1,888</b>
<b>Operating profit/(loss) before tax attributable to shareholders' profits from discontinued operations<sup>4</sup></b>	<b>200</b>	<b>—</b>	<b>55</b>	<b>(16)</b>	<b>239</b>
<b>Operating profit/(loss) before tax attributable to shareholders' profits</b>	<b>2,031</b>	<b>893</b>	<b>106</b>	<b>(903)</b>	<b>2,127</b>

<sup>1</sup> Gross written premiums includes inward reinsurance premiums assumed from other companies amounting to £370 million, of which £130 million relates to property and liability insurance and £240 million relates to long-term business.

<sup>2</sup> General insurance and health business segment includes gross written premiums of £1,164 million relating to health business. The remaining business relates to property and liability insurance.

<sup>3</sup> Other includes Delta Lloyd as an associate to 5 July 2012, head office expenses such as group treasury and finance functions, and certain financing costs and taxes not allocated to business segments.

<sup>4</sup> Discontinued operations represent the operations of the United States Life business and related internal asset management activities.

## A4 – Segmental information continued

## b (ii) Segmental income statement – products and services for the year ended 31 December 2011

	Restated <sup>2</sup> Long-term Business £m	General insurance and health <sup>2</sup> £m	Fund management £m	Other <sup>3</sup> £m	Restated <sup>5</sup> Total £m
Gross written premiums <sup>1</sup>	16,505	9,750	—	—	26,255
Premiums ceded to reinsurers	(960)	(588)	—	—	(1,548)
Net written premiums	15,545	9,162	—	—	24,707
Net change in provision for unearned premiums	—	(236)	—	—	(236)
Net earned premiums	15,545	8,926	—	—	24,471
Fee and commission income	705	54	373	333	1,465
Net investment income/(expense)	16,250	8,980	373	333	25,936
Inter-segment revenue	3,811	725	4	(199)	4,341
Share of (loss)/profit of joint venture and associates	—	—	156	—	156
(Loss)/profit on the disposal and remeasurement of subsidiaries and associates	(10)	—	(2)	(111)	(123)
	—	(28)	24	569	565
<b>Segmental income</b>	<b>20,051</b>	<b>9,677</b>	<b>555</b>	<b>592</b>	<b>30,875</b>
Claims and benefits paid, net of recoveries from reinsurers	(18,435)	(5,945)	—	—	(24,380)
Change in insurance liabilities, net of reinsurance	(2,281)	(3)	—	—	(2,284)
Change in investment contract provisions	1,478	—	—	—	1,478
Change in unallocated divisible surplus	2,721	—	—	—	2,721
Amortisation of acquired value of in-force business on insurance contracts	(70)	—	—	—	(70)
Impairment of goodwill and other intangibles, depreciation and other amortisation expense	(277)	(19)	(16)	(64)	(376)
Other operating expenses	(2,293)	(2,994)	(443)	(833)	(6,563)
Impairment losses on AVIF and tangible assets	(17)	(60)	—	(19)	(96)
Inter-segment expenses	(145)	(11)	—	—	(156)
Finance costs	(205)	(36)	(51)	(484)	(776)
<b>Segmental expenses</b>	<b>(19,524)</b>	<b>(9,068)</b>	<b>(510)</b>	<b>(1,400)</b>	<b>(30,502)</b>
Profit/(loss) before tax from continuing operations	527	609	45	(808)	373
Tax attributable to policyholder returns	178	—	—	—	178
Profit/(loss) before tax attributable to shareholders from continuing operations	705	609	45	(808)	551
Adjusted for:					
Non-operating items from continuing operations (excluding Delta Lloyd as an associate)	1,221	326	16	(49)	1,514
Share of Delta Lloyd's non-operating items (before tax), as an associate	—	—	—	(10)	(10)
Share of Delta Lloyd's tax expense, as an associate	—	—	—	34	34
<b>Operating profit/(loss) before tax attributable to shareholders' profits from continuing operations</b>	<b>1,926</b>	<b>935</b>	<b>61</b>	<b>(833)</b>	<b>2,089</b>
<b>Operating profit/(loss) before tax attributable to shareholders' profits from discontinued operations<sup>4</sup></b>	<b>382</b>	<b>1</b>	<b>49</b>	<b>(18)</b>	<b>414</b>
<b>Operating profit/(loss) before tax attributable to shareholders' profits</b>	<b>2,308</b>	<b>936</b>	<b>110</b>	<b>(851)</b>	<b>2,503</b>

<sup>1</sup> Gross written premiums includes inward reinsurance premiums assumed from other companies amounting to £226 million, of which £110 million relates to property and liability insurance and £116 million relates to long-term business.

<sup>2</sup> General insurance and health business segment includes gross written premiums of £1,107 million relating to health business. The remaining business relates to property and liability insurance.

<sup>3</sup> Other includes the RAC, up to the date of disposal, Delta Lloyd as an associate from 6 May 2011, head office expenses, such as group treasury and finance functions, and certain financing costs and taxes not allocated to business segments.

<sup>4</sup> Discontinued operations represent the operations of the United States Life business and related internal asset management activities and the results of Delta Lloyd up until its deconsolidation in May 2011.

<sup>5</sup> Following a review of the classification of contracts issued by the Group's Italian long-term business, certain portfolios have been reclassified from participating insurance to participating investment contracts for all years presented. There is no impact on the result for any year presented as a result of this reclassification.



## A4 – Segmental information continued

## b (iii) Segmental statement of financial position – products and services as at 31 December 2012

	Long-term business £m	General insurance and health £m	Fund management £m	Other £m	Total £m
Goodwill	361	1,060	27	72	1,520
Acquired value of in-force business and intangible assets	799	146	56	83	1,084
Interests in, and loans to, joint ventures and associates	1,699	5	4	—	1,708
Property and equipment	253	94	5	39	391
Investment property	9,956	139	—	720	10,815
Loans	24,085	433	—	19	24,537
Financial investments	175,846	9,266	39	3,927	189,078
Deferred acquisition costs	1,615	939	14	—	2,568
Other assets	29,307	7,237	453	4,388	41,385
Assets of operations classified as held for sale	42,564	11	28	—	42,603
<b>Total assets</b>	<b>286,485</b>	<b>19,330</b>	<b>626</b>	<b>9,248</b>	<b>315,689</b>
Gross insurance liabilities	98,086	15,005	—	—	113,091
Gross liabilities for investment contracts	110,494	—	—	—	110,494
Unallocated divisible surplus	6,931	—	—	—	6,931
Net asset value attributable to unitholders	4,963	—	—	6,183	11,146
External borrowings	3,034	—	—	5,160	8,194
Other liabilities, including inter-segment liabilities	8,778	(2,661)	334	6,611	13,062
Liabilities of operations classified as held for sale	41,237	2	13	159	41,411
<b>Total liabilities</b>	<b>273,523</b>	<b>12,346</b>	<b>347</b>	<b>18,113</b>	<b>304,329</b>
<b>Total equity</b>					<b>11,360</b>
<b>Total equity and liabilities</b>					<b>315,689</b>

## b (iv) Segmental statement of financial position – products and services as at 31 December 2011

	Restated <sup>2</sup> Long-term Business £m	General insurance and health £m	Fund management £m	Other <sup>1</sup> £m	Restated <sup>2</sup> Total £m
Goodwill	1,466	1,067	29	78	2,640
Acquired value of in-force business and intangible assets	1,742	145	44	90	2,021
Interests in, and loans to, joint ventures and associates	2,035	5	—	778	2,818
Property and equipment	395	34	16	65	510
Investment property	10,686	152	—	800	11,638
Loans	27,511	605	—	—	28,116
Financial investments	203,247	9,391	43	3,377	216,058
Deferred acquisition costs	3,755	986	14	—	4,755
Other assets	31,023	6,717	495	5,159	43,394
Assets of operations classified as held for sale	426	—	—	—	426
<b>Total assets</b>	<b>282,286</b>	<b>19,102</b>	<b>641</b>	<b>10,347</b>	<b>312,376</b>
Gross insurance liabilities	132,138	15,241	—	—	147,379
Gross liabilities for investment contracts	113,366	—	—	—	113,366
Unallocated divisible surplus	650	—	—	—	650
Net asset value attributable to unitholders	4,659	—	—	5,693	10,352
External borrowings	3,016	—	—	5,434	8,450
Other liabilities, including inter-segment liabilities	12,430	(3,170)	374	6,819	16,453
Liabilities of operations classified as held for sale	363	—	—	—	363
<b>Total liabilities</b>	<b>266,622</b>	<b>12,071</b>	<b>374</b>	<b>17,946</b>	<b>297,013</b>
<b>Total equity</b>					<b>15,363</b>
<b>Total equity and liabilities</b>					<b>312,376</b>

<sup>1</sup> "Other" includes Delta Lloyd as an associate.

<sup>2</sup> Following a review of the classification of contracts issued by the Group's Italian long-term business, certain portfolios have been reclassified from participating insurance to participating investment contracts for all years presented. There is no impact on the result for any year presented as a result of this reclassification.

**A5 – Tax**

This note analyses the tax charge/(credit) for the year and explains the factors that affect it.

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

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

	2012 £m	2011 £m
<b>Current tax</b>		
For this year	516	535
Prior year adjustments	(47)	(10)
<b>Total current tax from continuing operations</b>	<b>469</b>	<b>525</b>
<b>Deferred tax</b>		
Origination and reversal of temporary differences	(52)	(599)
Changes in tax rates or tax laws	(12)	(28)
Write-down of deferred tax assets	43	58
<b>Total deferred tax from continuing operations</b>	<b>(21)</b>	<b>(569)</b>
<b>Total tax charged/(credited) to income statement from continuing operations</b>	<b>448</b>	<b>(44)</b>
<b>Total tax charged/(credited) to income statement from discontinued operations</b>	<b>152</b>	<b>(107)</b>
<b>Total tax charged/(credited) to income statement</b>	<b>600</b>	<b>(151)</b>

(ii) The Group, as a proxy for policyholders in the UK, Ireland and Singapore, is required to record taxes on investment income and gains each year. Accordingly, the tax benefit or expense attributable to UK, Irish and Singapore life insurance policyholder returns is included in the tax charge/(credit). The tax charge attributable to policyholders' returns included in the charge above is £221 million (FY11: £178 million credit).

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

	2012 £m	2011 £m
UK tax	(34)	(304)
Overseas tax	634	153
	<b>600</b>	<b>(151)</b>

(iv) Unrecognised tax losses and temporary differences of previous years were used to reduce the current tax expense and deferred tax expense by £7 million and £11 million (FY11: £25 million and £108 million), respectively.

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

	2012 £m	2011 £m
Long-term business technical provisions and other insurance items	(1,868)	916
Deferred acquisition costs	254	(3)
Unrealised gains/(losses) on investments	2,312	(1,265)
Pensions and other post-retirement obligations	(7)	6
Unused losses and tax credits	(30)	22
Subsidiaries, associates and joint ventures	—	1
Intangibles and additional value of in-force long-term business	(12)	(10)
Provisions and other temporary differences	(670)	(236)
<b>Deferred tax credited to income statement from continuing operations</b>	<b>(21)</b>	<b>(569)</b>
<b>Deferred tax charged to income statement from discontinued operations</b>	<b>143</b>	<b>56</b>
<b>Total deferred tax charged/(credited) to income statement</b>	<b>122</b>	<b>(513)</b>

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

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

	2012 £m	2011 £m
<b>Current tax from continuing operations</b>		
In respect of pensions and other post-retirement obligations	(14)	(88)
In respect of foreign exchange movements	(17)	(8)
	<b>(31)</b>	<b>(96)</b>
<b>Deferred tax from continuing operations</b>		
In respect of pensions and other post-retirement obligations	(140)	260
In respect of fair value gains on owner-occupied properties	(1)	(1)
In respect of unrealised gains on investments	9	(3)
	<b>(132)</b>	<b>256</b>
<b>Tax (credited)/charged to other comprehensive income arising from continuing operations</b>	<b>(163)</b>	<b>160</b>
<b>Tax charged to other comprehensive income arising from discontinued operations</b>	<b>107</b>	<b>98</b>
<b>Total tax (credited)/charged to other comprehensive income</b>	<b>(56)</b>	<b>258</b>

**A5 – Tax continued**

(ii) The tax charge attributable to policyholders' returns included above is £nil (*FY11: £nil*).

**(c) Tax credited to equity**

Tax credited directly to equity in the year amounted to £18 million (*FY11: £16 million*), and is wholly in respect of coupon payments on the direct capital instruments and fixed rate tier 1 notes.

**(d) Tax reconciliation**

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

	2012			2011		
	Shareholder £m	Policyholder £m	Total £m	Shareholder £m	Policyholder £m	Total £m
<b>Total (loss)/profit before tax</b>	<b>(2,671)</b>	<b>221</b>	<b>(2,450)</b>	87	(178)	(91)
Tax calculated at standard UK corporation tax rate of 24.5% (2011: 26.5%)	<b>(654)</b>	<b>54</b>	<b>(600)</b>	23	(47)	(24)
Reconciling items						
Different basis of tax – policyholders	—	<b>170</b>	<b>170</b>	—	(129)	(129)
Adjustment to tax charge in respect of prior years	<b>(20)</b>	—	<b>(20)</b>	(25)	—	(25)
Non-assessable income	<b>(86)</b>	—	<b>(86)</b>	(60)	—	(60)
Non-taxable loss/(profit) on sale of subsidiaries and associates	<b>872</b>	—	<b>872</b>	(135)	—	(135)
Disallowable expenses	<b>418</b>	—	<b>418</b>	215	—	215
Different local basis of tax on overseas profits	<b>(141)</b>	<b>(3)</b>	<b>(144)</b>	84	(2)	82
Change in future local statutory tax rates	<b>(12)</b>	—	<b>(12)</b>	(32)	—	(32)
Movement in deferred tax not recognised	<b>(69)</b>	—	<b>(69)</b>	(5)	—	(5)
Tax effect of loss/(profit) from associates and joint ventures	<b>75</b>	—	<b>75</b>	(41)	—	(41)
Other	<b>(4)</b>	—	<b>(4)</b>	3	—	3
<b>Total tax charged/(credited) to income statement</b>	<b>379</b>	<b>221</b>	<b>600</b>	27	(178)	(151)

The tax charge/(credit) attributable to policyholders' returns is removed from the Group's total loss before tax in arriving at the Group's (loss)/profit before tax attributable to shareholders' profits. As the net of tax profits attributable to with-profit and unit-linked policyholders is zero, the Group's pre-tax profit/(loss) attributable to policyholders is an amount equal and opposite to the tax charge/(credit) attributable to policyholders included in the total tax charge/(credit). The difference between the policyholder tax charge/(credit) and the impact of this item in the tax reconciliation can be explained as follows:

	2012 £m	2011 £m
Tax attributable to policyholder returns	<b>221</b>	(178)
UK corporation tax at a rate of 24.5% (2011: 26.5%) in respect of the policyholder tax deduction	<b>(54)</b>	47
Different local basis of tax of overseas profits	<b>3</b>	2
<b>Different basis of tax – policyholders per tax reconciliation</b>	<b>170</b>	(129)

The UK corporation tax rate reduced to 24% from 1 April 2012. A subsequent reduction in the UK corporation tax rate to 23% was substantively enacted on 3 July 2012 and will apply from 1 April 2013. The substantively enacted rate of 23% has been used in the calculation of the UK's deferred tax assets and liabilities.

As announced in the 2012 Autumn Statement, the rate is expected to reduce further to 21% from 1 April 2014. The aggregate impact of the reduction in rate from 23% to 21% would reduce the deferred tax assets and liabilities and increase IFRS net assets by approximately £31 million and will be recognised when the legislation is substantively enacted.

Finance Act 2012 included initial legislation introducing considerable changes to the regime for taxing UK life insurance companies applicable from 1 January 2013. The impact of the legislation has been included in the results of the Group for the year ended 31 December 2012 but has not had a material impact.

**A6 – (Loss)/earnings per share**

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

**(a) Basic (loss)/earnings per share**

(i) The (loss)/profit attributable to ordinary shareholders is:

	2012			2011		
	Operating profit £m	Non-operating items £m	Total £m	Operating profit £m	Non-operating items £m	Total £m
<b>Continuing operations</b>						
Profit/(loss) before tax attributable to shareholders' profits	1,888	(1,970)	(82)	2,089	(1,504)	585
Share of Delta Lloyd's tax expense as an associate	(28)	135	107	(39)	5	(34)
Profit/(loss) before tax	1,860	(1,835)	25	2,050	(1,499)	551
Tax attributable to shareholders' profit/(loss)	(465)	238	(227)	(487)	353	(134)
Profit/(loss) for the year	1,395	(1,597)	(202)	1,563	(1,146)	417
Amount attributable to non-controlling interests	(184)	16	(168)	(150)	109	(41)
Cumulative preference dividends for the year	(17)	—	(17)	(17)	—	(17)
Coupon payments in respect of direct capital instruments (DCI) and fixed rate tier 1 notes (net of tax)	(55)	—	(55)	(43)	—	(43)
<b>Profit/(loss) attributable to ordinary shareholders from continuing operations</b>	<b>1,139</b>	<b>(1,581)</b>	<b>(442)</b>	<b>1,353</b>	<b>(1,037)</b>	<b>316</b>
<b>Profit/(loss) attributable to ordinary shareholders from discontinued operations</b>	<b>161</b>	<b>(3,009)</b>	<b>(2,848)</b>	<b>178</b>	<b>(329)</b>	<b>(151)</b>
<b>Profit/(loss) attributable to ordinary shareholders</b>	<b>1,300</b>	<b>(4,590)</b>	<b>(3,290)</b>	<b>1,531</b>	<b>(1,366)</b>	<b>165</b>

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

	2012			2011		
	Before tax £m	Net of tax, non-controlling interests, preference dividends and DCI <sup>1</sup> £m	Per share p	Before tax £m	Net of tax, non-controlling interests, preference dividends and DCI £m	Per share p
<b>Continuing operations</b>						
Operating profit attributable to ordinary shareholders	1,888	1,139	39.2	2,089	1,353	47.6
Non-operating items:						
Investment return variances and economic assumption changes on long-term business	(620)	(499)	(17.2)	(897)	(599)	(21.1)
Short-term fluctuation in return on investments backing non-long-term business	7	9	0.3	(266)	(198)	(7.0)
Economic assumption changes on general insurance and health business	(21)	(16)	(0.6)	(90)	(67)	(2.3)
Impairment of goodwill, associates and joint ventures	(60)	(60)	(2.1)	(392)	(359)	(12.6)
Amortisation and net impairment of intangibles	(128)	(84)	(2.9)	(116)	(141)	(5.1)
(Loss)/profit on disposal of subsidiaries and associates	(164)	(164)	(5.6)	565	552	19.5
Integration and restructuring costs and exceptional items	(461)	(379)	(13.0)	(318)	(240)	(8.4)
Share of Delta Lloyd's non-operating items (before tax) as an associate	(523)	(388)	(13.3)	10	15	0.5
Share of Delta Lloyd's tax expense, as an associate	107	—	—	(34)	—	—
<b>(Loss)/profit attributable to ordinary shareholders from continuing operations</b>	<b>25</b>	<b>(442)</b>	<b>(15.2)</b>	<b>551</b>	<b>316</b>	<b>11.1</b>
<b>(Loss)/profit attributable to ordinary shareholders from discontinued operations</b>	<b>(2,696)</b>	<b>(2,848)</b>	<b>(97.9)</b>	<b>(464)</b>	<b>(151)</b>	<b>(5.3)</b>
<b>(Loss)/profit attributable to ordinary shareholders</b>	<b>(2,671)</b>	<b>(3,290)</b>	<b>(113.1)</b>	<b>87</b>	<b>165</b>	<b>5.8</b>

1. DCI includes direct capital instruments and fixed rate tier 1 notes

(iii) The calculation of basic (loss)/earnings per share uses a weighted average of 2,910 million (FY11: 2,845 million) ordinary shares in issue, after deducting shares owned by the employee share trusts. The actual number of shares in issue at 31 December 2012 was 2,946 million (FY11: 2,906 million) and 2,936 million (FY11: 2,892 million) excluding shares owned by the employee share trusts.

**A6 – (Loss)/earnings per share continued****(b) Diluted (loss)/earnings per share**

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

	2012			2011		
	Total £m	Weighted average number of shares million	Per share p	Total £m	Weighted average number of shares million	Per share p
(Loss)/profit attributable to ordinary shareholders	(442)	2,910	(15.2)	316	2,845	11.1
Dilutive effect of share awards and options	—	44	—	—	50	(0.2)
<b>Diluted (loss)/earnings per share from continuing operations<sup>1</sup></b>	<b>(442)</b>	<b>2,954</b>	<b>(15.2)</b>	<b>316</b>	<b>2,895</b>	<b>10.9</b>
(Loss)/profit attributable to ordinary shareholders	(2,848)	2,910	(97.9)	(151)	2,845	(5.3)
Dilutive effect of share awards and options	—	44	—	—	50	—
<b>Diluted (loss)/earnings per share from discontinued operations<sup>1</sup></b>	<b>(2,848)</b>	<b>2,954</b>	<b>(97.9)</b>	<b>(151)</b>	<b>2,895</b>	<b>(5.3)</b>
<b>Diluted (loss)/earnings per share<sup>1</sup></b>	<b>(3,290)</b>	<b>2,954</b>	<b>(113.1)</b>	<b>165</b>	<b>2,895</b>	<b>5.7</b>

<sup>1</sup> Losses have an anti-dilutive effect. Therefore the basic and diluted earnings for 2012 and the diluted earnings for 2011, have remained the same.

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

	2012			2011		
	Total £m	Weighted average number of shares million	Per share p	Total £m	Weighted average number of shares million	Per share p
Operating profit attributable to ordinary shareholders	1,139	2,910	39.2	1,353	2,845	47.5
Dilutive effect of share awards and options	—	44	(0.6)	—	50	(0.8)
<b>Diluted operating profit per share from continuing operations</b>	<b>1,139</b>	<b>2,954</b>	<b>38.6</b>	<b>1,353</b>	<b>2,895</b>	<b>46.7</b>
Operating profit attributable to ordinary shareholders	161	2,910	5.5	178	2,845	6.3
Dilutive effect of share awards and options	—	44	(0.1)	—	50	(0.1)
<b>Diluted operating profit per share from discontinued operations</b>	<b>161</b>	<b>2,954</b>	<b>5.4</b>	<b>178</b>	<b>2,895</b>	<b>6.2</b>
<b>Diluted operating profit per share</b>	<b>1,300</b>	<b>2,954</b>	<b>44.0</b>	<b>1,531</b>	<b>2,895</b>	<b>52.9</b>

**A7 – Dividends and appropriations**

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

	2012 £m	2011 £m
Ordinary dividends declared and charged to equity in the year		
Final 2011 – 16.00 pence per share, paid on 17 May 2012	465	—
Final 2010 – 16.00 pence per share, paid on 17 May 2011	—	451
Interim 2012 – 10.00 pence per share, paid on 16 November 2012	292	—
Interim 2011 – 10.00 pence per share, paid on 17 November 2011	—	287
	<b>757</b>	<b>738</b>
Preference dividends declared and charged to equity in the year	17	17
Coupon payments on direct capital instruments and fixed rate tier 1 notes	73	58
	<b>847</b>	<b>813</b>

Subsequent to 31 December 2012, the directors proposed a final dividend for 2012 of 9.0 pence per ordinary share (2011: 16.0 pence), amounting to £265 million (2011: £465 million) in total. Subject to approval by shareholders at the AGM, the dividend will be paid on 17 May 2013 and will be accounted for as an appropriation of retained earnings in the year ending 31 December 2013.

Interest payments on the direct capital instruments issued in November 2004 and the fixed rate tier 1 notes issued in May 2012 are treated as an appropriation of retained profits and, accordingly, are accounted for when paid. Tax relief is obtained at a rate of 24.5% (2011: 26.5%).

## A8 – Insurance liabilities

This note analyses the Group insurance contract liabilities by type of product and describes how the Group calculates these liabilities and the assumptions the Group used.

### (a) Carrying amount

Insurance liabilities at 31 December comprise:

	2012			2011		
	Long-term business £m	General insurance and health £m	Total £m	Restated <sup>1</sup> Long-term business £m	General insurance and health £m	Restated <sup>1</sup> Total £m
Long-term business provisions						
Participating	49,473	—	49,473	52,872	—	52,872
Unit-linked non-participating	9,936	—	9,936	10,168	—	10,168
Other non-participating	71,781	—	71,781	68,131	—	68,131
	131,190	—	131,190	131,171	—	131,171
Outstanding claims provisions	1,342	7,711	9,053	1,311	8,099	9,410
Provision for claims incurred but not reported	—	2,843	2,843	—	2,646	2,646
	1,342	10,554	11,896	1,311	10,745	12,056
Provision for unearned premiums	—	4,441	4,441	—	4,483	4,483
Provision arising from liability adequacy tests	—	11	11	—	13	13
Other technical provisions	—	—	—	—	—	—
<b>Total</b>	<b>132,532</b>	<b>15,006</b>	<b>147,538</b>	<b>132,482</b>	<b>15,241</b>	<b>147,723</b>
Less: Amounts classified as held for sale	(34,446)	(1)	(34,447)	(344)	—	(344)
	<b>98,086</b>	<b>15,005</b>	<b>113,091</b>	<b>132,138</b>	<b>15,241</b>	<b>147,379</b>

<sup>1</sup> Following a review of the classification of contracts issued by the Group's Italian long-term business, there has been a reallocation from participating insurance liabilities at 31 December 2011 to participating investment contract liabilities of £2,722 million.

### (b) Long-term business liabilities

#### (i) Business description

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

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

## A8 – Insurance liabilities continued

### (ii) Group practice

The long-term business provision is calculated separately for each of the Group's life operations. The provisions for overseas subsidiaries have generally been included on the basis of local regulatory requirements, modified where necessary to reflect the requirements of the Companies Act 2006.

Material judgement is required in calculating the provisions and is exercised particularly through the choice of assumptions where discretion is permitted. In turn, the assumptions used depend on the circumstances prevailing in each of the life operations. Provisions are most sensitive to assumptions regarding discount rates and mortality/morbidity rates. Where discount rate assumptions are based on current market yields on fixed interest securities, allowance is made for default risk implicit in the yields on the underlying assets.

In 2010, a test case was taken to the European Court of Justice to rule on the current law and practice whereby insurers may take into account a person's gender in the assessment of risk and consequently the pricing of insurance products. The ruling was issued on 1 March 2011 and required gender equality for pricing from 21 December 2012. The impact of the ruling on existing long-term business provisions in our UK and European businesses is not considered to be material.

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

For UK with-profit life funds falling within the scope of the FSA realistic capital regime, and hence FRS 27, an amount may be recognised for the present value of future profits (PVFP) on non-participating business written in a with-profit fund where the determination of the realistic value of liabilities in that with-profit fund takes account, directly or indirectly, of this value. For our UK with-profit funds, no adjustment for this value is made to the participating insurance and investment contract liabilities or the unallocated divisible surplus.

### (iii) Methodology and assumptions

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

Under the net premium method, the premium taken into account in calculating the provision is determined actuarially, based on the valuation assumptions regarding discount rates, mortality and disability. The difference between this premium and the actual premium payable provides a margin for expenses. This method does not allow for voluntary early termination of the contract by the policyholder, and so no assumption is required for persistency.

The gross premium method uses the amount of contractual premiums payable and includes explicit assumptions for interest and discount rates, mortality and morbidity, persistency and future expenses. These assumptions can vary by contract type and reflect current and expected future experience.

### (a) UK

#### **With-profit business**

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

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

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

- Maturity Guarantees;
- Guaranteed Annuity Options;
- Guaranteed Minimum Pension underpin on Section 32 transfers; and
- Expected payments under Mortgage Endowment Promise.

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

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

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



## A8 – Insurance liabilities continued

### Future investment return

A 'risk-free' rate equal to the spot yield on UK swaps was used. This replaced the use of a spot yield on UK government securities plus a margin of 0.1%, which was used at 31 December 2011. The rates vary according to the outstanding term of the policy, with a typical rate as at 31 December 2012 of 1.92% (FY11: 2.20%) for a policy with ten years outstanding.

### Volatility of investment return

Volatility assumptions are set with reference to implied volatility data on traded market instruments, where available, or on a best estimate basis where not.

Volatility	2012	2011
Equity returns	<b>26.3%</b>	26.4%
Property returns	<b>15.0%</b>	15.0%
Fixed interest yields	<b>17.1%</b>	18.0%

The equity volatility used depends on term, money-ness and region. The figure shown is for a sample UK equity, at the money, with a ten-year term. Fixed interest yield volatility is also dependent on term and money-ness. The figure shown is for a ten-year swap option with ten-year term, currently at the money.

### Future regular bonuses

Annual bonus assumptions for 2012 have been set consistently with the year-end 2011 declaration. Future annual bonus rates reflect the principles and practices of the fund. In particular, the level is set with regard to the projected margin for final bonus and the change from one year to the next is limited to a level consistent with past practice.

### Mortality

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

Mortality table used	2012	2011
Assurances, pure endowments and deferred annuities before vesting	<b>Nil or Axx00 adjusted</b>	Nil or Axx00 adjusted
Pensions business after vesting and pensions annuities in payment	<b>PCMA00/PCFA00 adjusted plus allowance for future mortality improvement</b>	PCMA00/PCFA00 adjusted plus allowance for future mortality improvement

### Non-profit business

The valuation of non-profit business is based on regulatory requirements, adjusted to remove certain regulatory reserves and margins in assumptions, notably for annuity business. Conventional non-profit contracts, including those written in the with-profit funds, are valued using gross premium methods which discount projected future cash flows. The cash flows are calculated using the amount of contractual premiums payable, together with explicit assumptions for investment returns, inflation, discount rates, mortality, morbidity, persistency and future expenses. These assumptions vary by contract type and reflect current and expected future experience.

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

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

## A8 – Insurance liabilities continued

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

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

Valuation discount rates	2012	2011
Assurances		
Life conventional non-profit	<b>1.8%</b>	1.8% to 1.9%
Pensions conventional non-profit	<b>2.2%</b>	2.6%
Annuities		
Conventional immediate and deferred annuities	<b>2.6% to 4.1%</b>	2.2% to 4.3%
Non-unit reserves on Unit Linked business		
Life	<b>2.1%</b>	1.8% to 2.2%
Pensions	<b>2.5%</b>	2.2% to 2.7%
Income Protection		
Active lives	<b>2.2%</b>	2.4%
Claims in payment – level	<b>3.1%</b>	3.6%
Claims in payment – index linked	<b>(0.7)%</b>	(1.0)%

The above valuation discount rates are after reduction for investment expenses and credit risk. For conventional immediate annuity business the allowance for credit risk comprises long-term assumptions for default and downgrades, which vary by the credit ratings for bonds and mortgages, and short-term supplementary allowances for higher expected defaults during the current economic conditions. The credit risk allowance made for corporate bonds and commercial mortgages, including healthcare mortgages, held by Aviva Annuity UK Limited equated to 56 bps and 89 bps respectively at 31 December 2012 (FY11: 60 bps and 69 bps respectively). For corporate bonds, the allowance represented 30% of the average credit spread for the portfolio (FY11: 26%). The total valuation allowance held by Aviva Annuity UK Limited in respect of corporate bonds and mortgages, including healthcare mortgages, was £1.8 billion (FY11: £1.6 billion) over the remaining term of the UK Life corporate bond and commercial mortgage portfolio. Total liabilities for annuity business were £30 billion at 31 December 2012 (FY11: £27 billion).

Mortality assumptions for non-profit business are set with regard to recent Company experience and general industry trends. The mortality tables used in the valuation are summarised below:

Mortality tables used	2012	2011
<b>Assurances</b>		
Non-profit	<b>AM00/AF00 or TM00/TF00 adjusted for smoker status and age/sex specific factors</b>	AM00/AF00 or TM00/TF00 adjusted for smoker status and age/sex specific factors
Pure endowments and deferred annuities before vesting	<b>AM00/AF00 adjusted</b>	AM00/AF00 adjusted
<b>Annuities in payment</b>		
Pensions business	<b>PCMA00/PCFA00 adjusted plus allowance for future mortality improvement</b>	PCMA00/PCFA00 adjusted plus allowance for future mortality improvement
General annuity business	<b>IML00/IFL00 adjusted plus allowance for future mortality improvement</b>	IML00/IFL00 adjusted plus allowance for future mortality improvement

For pensions annuity business in 2012, the underlying mortality assumptions for Males are 100.5% of PCMA00 with base year 2000, improvements based on CMI\_2011 with a long-term improvement rate of 1.5% and an addition of 0.5% to all future annual improvements; for Females the underlying mortality assumptions are 95.5% of PCFA00 with base year 2000, improvements based on CMI\_2011 with a long-term improvement rate of 1.0% and an addition of 0.5% to all future annual improvements. Year-specific adjustments are made to allow for selection effects due to the development of the Enhanced Annuity market.

### (b) France

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

	Valuation discount rates	Mortality tables used
	2012 and 2011	2012 and 2011
Life assurances	0% to 4.5%	TD73-77, TD88-90,
Annuities	0% to 4.5%	TH00-02, TF00-02 TGF05/TGH05

**A8 – Insurance liabilities continued****(c) United States**

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

The liability for future policy benefits for traditional life insurance is computed using the net level method, based on guaranteed interest and mortality rates as used in calculating cash surrender values. Reserve interest assumptions ranged from 2.00% to 7.50% in 2012 (FY11: 2.00% to 7.50%). The weighted average interest rate for all traditional life policy reserves in 2012 was 4.50% (FY11: 4.50%).

Future policy benefit reserves for universal life insurance, deferred annuity products and funding agreements are computed under a retrospective deposit method and represent policy account balances before applicable surrender charges. For the indexed products, the liability held is calculated based on the option budget method and is equal to the host contract and the calculated value of the derivative. The value of the derivative is based on the present value of the difference between the projected fund value and the underlying fund guarantee. The range of interest crediting rates for deferred annuity products, the largest component of the US business, excluding sales inducement payouts, was 1.00% to 5.20% in 2012 (FY11: 1.00% to 5.20%). An additional liability is established for universal life contracts with death or other insurance benefit features, which is determined using an equally weighted range of scenarios with respect to investment returns, policyholder lapses, benefit election rates, premium payout patterns and mortality. The additional liability represents the present value of future expected benefits based on current product assumptions.

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

Deferred income reserves are established for fees charged for insurance benefit features which are assessed in a manner that is expected to result in higher profits in earlier years, followed by lower profits or losses in subsequent years. The excess charges are deferred and amortised using the same assumptions and factors used to amortise deferred acquisition costs. Deferred income reserves of £85 million in respect of insurance contracts in the United States are included under Other liabilities. Shadow adjustments may be made to deferred acquisition costs, acquired value of in-force business, deferred income reserves and contract liabilities. The shadow adjustments are recognised directly in other comprehensive income so that unrealised gains or losses on investments that are recognised directly in other comprehensive income affect the measurement of the liability, or related assets, in the same way as realised gains or losses.

**(d) Other countries**

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

**(iv) Movements**

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

	2012 £m	Restated <sup>1</sup> 2011 £m
<b>Carrying amount at 1 January</b>	<b>131,171</b>	<b>157,988</b>
Provisions in respect of new business	8,631	10,894
Expected change in existing business provisions	(8,362)	(8,541)
Variance between actual and expected experience	943	(2,279)
Impact of other operating assumption changes	(718)	(61)
Impact of economic assumption changes	1,726	5,663
Other movements	(109)	(623)
Change in liability recognised as an expense	2,111	5,053
Effect of portfolio transfers, acquisitions and disposals	(214)	(6)
Deconsolidation of Delta Lloyd	—	(32,159)
Foreign exchange rate movements	(1,878)	295
<b>Carrying amount at 31 December</b>	<b>131,190</b>	<b>131,171</b>

<sup>1</sup> Following a review of the classification of contracts issued by the Group's Italian long-term business, certain portfolios have been reclassified for participating insurance to participating investment contracts for all years presented. There is no impact on the result for any year presented as a result of this reclassification.

The variance between actual and expected experience of £0.9 billion in 2012 was primarily due to the impact of favourable investment returns on liabilities for unit-linked insurance contracts. For many types of long-term business, including unit-linked and participating funds, movements in asset values are offset by corresponding changes in liabilities, limiting the net impact on profit. Minor variances arise from differences between actual and expected experience for persistency, mortality and other demographic factors.

The impact of assumption changes in the above analysis shows the resulting movement in the carrying value of insurance liabilities. The £1.7 billion impact of economic assumption changes reflects reductions in valuation interest rates, primarily in respect of immediate annuity and participating insurance contracts in the UK. The £0.7 billion impact of operating assumption changes mainly relates to mortality assumption in the UK, with the net impact reduced by movements in corresponding reinsurance assets. For participating business, a movement in liabilities is generally offset by a corresponding adjustment to the unallocated divisible surplus and does not impact on profit. Where assumption changes do impact on profit, these are included in the effect of changes in assumptions and estimates during the year shown in note A11, together with the impact of movements in related non-financial assets.

**A8 – Insurance liabilities continued****(c) General insurance and health liabilities****(i) Provisions for outstanding claims**

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

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

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

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

	As at 31 December 2012			As at 31 December 2011		
	Outstanding claim provisions £m	IBNR provisions £m	Total claim provisions £m	Outstanding claim provisions £m	IBNR provisions £m	Total claim provisions £m
Motor	3,737	1,051	4,788	3,960	995	4,955
Property	1,408	212	1,620	1,392	155	1,547
Liability	2,003	1,394	3,397	2,206	1,321	3,527
Creditor	54	13	67	59	19	78
Other	509	173	682	482	156	638
	7,711	2,843	10,554	8,099	2,646	10,745

**(ii) Discounting**

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

Class	Rate		Mean term of liabilities	
	2012	2011	2012	2011
Reinsured London Market business	2.0%	2.20%	11 years	13 years
Latent claims	0.33% to 3.35%	0.75% to 3.25%	6 to 15 years	7 to 16 years
Structured settlements	2.60%	2.70%	33 years	31 years

The gross outstanding claims provision before discounting was £11,004 million (*FY11: £11,420 million*). The period of time which will elapse before the liabilities are settled has been estimated by modelling the settlement patterns of the underlying claims.

The discount rate that has been applied to latent claims reserves is based on the relevant swap curve in the relevant currency having regard to the expected settlement dates of the claims. The range of discount rates used depends on the duration of the claims and is given in the table above. The duration of the claims span over 35 years, with the average duration being between 6 and 15 years depending on the geographical region. Any change in discount rates between the start and the end of the accounting period is reflected below operating profit as an economic assumption change.

During 2012, the Group has seen a levelling off in the number of new bodily injury claims settled by periodic payment orders (PPOs) or structured settlements, which are reserved for on a discounted basis.

**(iii) Assumptions**

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

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

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

## A8 – Insurance liabilities continued

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

As noted in section A8 (b)(ii) – Group Practice, an area of judgement is the impact of a European Court of Justice ruling in March 2011 on gender equality for the pricing of insurance products. At 31 December 2012, the impact of the ruling on existing general business provisions was not considered to be material.

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

### **UK mesothelioma claims**

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

The best estimate of the liabilities reflects the latest available market information and studies. Many different scenarios can be derived by flexing these key assumptions and applying different combinations of the different assumptions. An upper and lower scenario can be derived by making reasonably likely changes to these assumptions, resulting in an estimate £240 million greater than the best estimate, or £65 million lower than the best estimate. These scenarios do not, however, constitute an upper or lower bound on these liabilities.

### **Interest rates used to discount latent claim liabilities**

The discount rates used in determining our latent claim liabilities are based on the relevant swap curve in the relevant currency at the reporting date, having regard to the duration of the expected settlement of latent claims. The range of discount rates used is shown in section (ii) above and depends on the duration of the claim and the reporting date. At 31 December 2012, it is estimated that a 1% fall in the discount rates used would increase net claim reserves by approximately £95 million, excluding the offsetting effect on asset values as assets are not hypothecated across classes of business. The impact of a 1% fall in interest rates across all assets and liabilities of our general insurance and health businesses is shown in note A17.

### **Allowance for risk and uncertainty**

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

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

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

The timing of the conclusion of this review is unclear and it is still uncertain whether or by how much the rate will change. However an allowance has been included in provisions for a reduction in the Ogden discount rates. A reduction in the Ogden discount rates will increase lump sum payments to UK bodily injury claimants.

**A8 – Insurance liabilities continued****(iv) Movements**

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

	2012 £m	2011 £m
<b>Carrying amount at 1 January</b>	<b>10,745</b>	<b>12,263</b>
Impact of changes in assumptions	61	149
Claim losses and expenses incurred in the current year	6,291	6,520
Decrease in estimated claim losses and expenses incurred in prior years	(199)	(140)
Exceptional strengthening of general insurance latent claims provisions	—	45
Included claims losses and expenses	6,153	6,574
Less:		
Payments made on claims incurred in the current year	(3,243)	(3,393)
Payments made on claims incurred in prior years	(3,104)	(3,514)
Recoveries on claim payments	297	313
Claims payments made in the year, net of recoveries	(6,050)	(6,594)
Unwind of discounting	35	47
Other movements in the claims provisions	2	(12)
Changes in claims reserve recognised as an expense	140	15
Effect of portfolio transfers, acquisitions and disposals	(171)	—
Deconsolidation of Delta Lloyd	—	(1,445)
Foreign exchange rate movements	(158)	(87)
Other movements	(2)	(1)
<b>Carrying amount at 31 December</b>	<b>10,554</b>	<b>10,745</b>

The effect of changes in the main assumptions is given in note A11.

**(d) Loss development tables****(i) Description of tables**

The tables that follow present the development of claim payments and the estimated ultimate cost of claims for the accident years 2003 to 2012. The upper half of the tables shows the cumulative amounts paid during successive years related to each accident year. For example, with respect to the accident year 2003, by the end of 2012 £5,727 million had actually been paid in settlement of claims. In addition, as reflected in the lower section of the table, the original estimated ultimate cost of claims of £6,385 million was re-estimated to be £5,791 million at 31 December 2012.

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

The Group aims to maintain strong reserves in respect of its general insurance and health business in order to protect against adverse future claims experience and development. As claims develop and the ultimate cost of claims become more certain, the absence of adverse claims experience will result in a release of reserves from earlier accident years, as shown in the loss development tables and movements table (c)(iv) above. However, in order to maintain overall reserve adequacy, the Group establishes strong reserves in respect of the current accident year (2012) where the development of claims is less mature and there is much greater uncertainty attaching to the ultimate cost of claims. Releases from prior accident year reserves are also due to an improvement in the estimated cost of claims.

Key elements of the movement in prior accident year general insurance and health net provisions during 2012 were:

- £47 million release from UK & Ireland, including Group reinsurance business, due to favourable development in Group reinsurance, health and across a number of lines of business in Ireland.
- £51 million release from Europe mainly due to favourable development of personal motor and commercial property claims in France.
- £122 million release from Canada mainly due to continued favourable experience on motor, following the legislative changes in Ontario.

Key elements of the release from prior accident year general insurance and health net provisions during 2011 were:

- £42 million strengthening from UK & Ireland, including Group reinsurance business, mainly due to unfavourable development on commercial motor, commercial liability and December 2010 freeze claims in the UK offset by favourable development of personal and commercial motor claims in Ireland.
- £6 million release from Europe mainly due to favourable development of personal and commercial motor claims in France offset by adverse development in Italy and Delta Lloyd.
- £92 million release from Canada mainly due to favourable experience on motor, following the legislative changes in Ontario, and commercial liability.



**A8 – Insurance liabilities continued****(ii) Gross figures**

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

Accident year	All prior years £m	2003 £m	2004 £m	2005 £m	2006 £m	2007 £m	2008 £m	2009 £m	2010 £m	2011 £m	2012 £m	Total £m
Gross cumulative claim payments												
At end of accident year		(2,819)	(2,971)	(3,345)	(3,653)	(4,393)	(4,915)	(3,780)	(3,502)	(3,420)	(3,055)	
One year later		(4,190)	(4,561)	(5,011)	(5,525)	(6,676)	(7,350)	(5,464)	(5,466)	(4,765)		
Two years later		(4,613)	(4,981)	(5,449)	(5,971)	(7,191)	(7,828)	(6,102)	(5,875)			
Three years later		(4,972)	(5,263)	(5,784)	(6,272)	(7,513)	(8,304)	(6,393)				
Four years later		(5,258)	(5,448)	(6,001)	(6,531)	(7,836)	(8,607)					
Five years later		(5,409)	(5,617)	(6,156)	(6,736)	(8,050)						
Six years later		(5,527)	(5,725)	(6,311)	(6,936)							
Seven years later		(5,594)	(5,792)	(6,467)								
Eight years later		(5,660)	(5,826)									
Nine years later		(5,727)										
Estimate of gross ultimate claims												
At end of accident year		6,385	6,891	7,106	7,533	8,530	9,508	7,364	6,911	6,428	6,201	
One year later		6,172	6,557	6,938	7,318	8,468	9,322	7,297	7,006	6,330		
Two years later		6,124	6,371	6,813	7,243	8,430	9,277	7,281	6,950			
Three years later		6,036	6,178	6,679	7,130	8,438	9,272	7,215				
Four years later		5,932	6,008	6,603	7,149	8,409	9,235					
Five years later		5,853	6,003	6,605	7,167	8,446						
Six years later		5,813	5,953	6,591	7,167							
Seven years later		5,792	5,933	6,596								
Eight years later		5,798	5,926									
Nine years later		5,791										
Estimate of gross ultimate claims		5,791	5,926	6,596	7,167	8,446	9,235	7,215	6,950	6,330	6,201	
Cumulative payments		(5,727)	(5,826)	(6,467)	(6,936)	(8,050)	(8,607)	(6,393)	(5,875)	(4,765)	(3,055)	
Effect of discounting	2,798 (479)	64 (4)	100 —	129 18	231 8	396 5	628 2	822 —	1,075 —	1,565 —	3,146 —	<b>10,954 (450)</b>
Present value	2,319	60	100	147	239	401	630	822	1,075	1,565	3,146	<b>10,504</b>
Cumulative effect of foreign exchange movements	—	14	18	24	39	37	(19)	(14)	(34)	(22)	—	<b>43</b>
Effect of acquisitions	—	1	1	1	4	—	—	—	—	—	—	<b>7</b>
Present value recognised in the statement of financial position	<b>2,319</b>	<b>75</b>	<b>119</b>	<b>172</b>	<b>282</b>	<b>438</b>	<b>611</b>	<b>808</b>	<b>1,041</b>	<b>1,543</b>	<b>3,146</b>	<b>10,554</b>



**A8 – Insurance liabilities continued****(iii) Net of reinsurance**

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

Accident year	All prior years £m	2003 £m	2004 £m	2005 £m	2006 £m	2007 £m	2008 £m	2009 £m	2010 £m	2011 £m	2012 £m	Total £m
Net cumulative claim payments												
At end of accident year		(2,819)	(2,870)	(3,281)	(3,612)	(4,317)	(4,808)	(3,650)	(3,386)	(3,300)	(2,925)	
One year later		(4,158)	(4,378)	(4,925)	(5,442)	(6,542)	(7,165)	(5,286)	(5,242)	(4,578)		
Two years later		(4,565)	(4,712)	(5,344)	(5,881)	(7,052)	(7,638)	(5,885)	(5,637)			
Three years later		(4,924)	(4,986)	(5,671)	(6,181)	(7,356)	(8,094)	(6,177)				
Four years later		(5,180)	(5,163)	(5,892)	(6,434)	(7,664)	(8,356)					
Five years later		(5,325)	(5,327)	(6,039)	(6,625)	(7,852)						
Six years later		(5,442)	(5,430)	(6,188)	(6,724)							
Seven years later		(5,502)	(5,491)	(6,245)								
Eight years later		(5,567)	(5,524)									
Nine years later		(5,592)										
Estimate of net ultimate claims												
At end of accident year		6,218	6,602	6,982	7,430	8,363	9,262	7,115	6,650	6,202	5,941	
One year later		6,093	6,266	6,818	7,197	8,302	9,104	7,067	6,751	6,103		
Two years later		6,037	6,082	6,688	7,104	8,244	9,028	7,036	6,685			
Three years later		5,942	5,882	6,544	6,996	8,249	9,007	6,978				
Four years later		5,851	5,709	6,476	6,980	8,210	8,962					
Five years later		5,772	5,699	6,448	6,992	8,221						
Six years later		5,683	5,639	6,397	6,939							
Seven years later		5,663	5,624	6,372								
Eight years later		5,667	5,613									
Nine years later		5,649										
Estimate of net ultimate claims		5,649	5,613	6,372	6,939	8,221	8,962	6,978	6,685	6,103	5,941	
Cumulative payments		(5,592)	(5,524)	(6,245)	(6,724)	(7,852)	(8,356)	(6,177)	(5,637)	(4,578)	(2,925)	
Effect of discounting	1,695 (330)	57 1	89 —	127 19	215 9	369 5	606 3	801 —	1,048 —	1,525 —	3,016 —	<b>9,548</b> <b>(293)</b>
Present value	1,365	58	89	146	224	374	609	801	1,048	1,525	3,016	<b>9,255</b>
Cumulative effect of foreign exchange movements	—	12	16	21	37	35	(19)	(12)	(32)	(20)	—	<b>38</b>
Effect of acquisitions	—	1	1	1	4	—	—	—	—	—	—	<b>7</b>
Present value recognised in the statement of financial position	<b>1,365</b>	<b>71</b>	<b>106</b>	<b>168</b>	<b>265</b>	<b>409</b>	<b>590</b>	<b>789</b>	<b>1,016</b>	<b>1,505</b>	<b>3,016</b>	<b>9,300</b>

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 2003. The undiscounted claim provisions for continuing operations, net of reinsurance, in respect of this business at 31 December 2012 were £1,003 million (*FY11: £929 million*). The movement in the year reflects strengthening of provisions by £8 million in the UK (*FY11: exceptional strengthening of £35 million*), other increases in undiscounted provisions of £51 million (*FY11: £23 million*), reclassification of commercial liability provisions of £55 million, claim payments, reinsurance recoveries and foreign exchange rate movements.

**(e) Provision for unearned premiums****Movements**

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

	2012 £m	2011 £m
<b>Carrying amount at 1 January</b>	<b>4,483</b>	4,855
Premiums written during the year	<b>9,535</b>	10,364
Less: Premiums earned during the year	<b>(9,514)</b>	(10,099)
Change in UPR recognised as income	<b>21</b>	265
Gross portfolio transfers and acquisitions	<b>(6)</b>	(161)
Deconsolidation of Delta Lloyd	<b>—</b>	(424)
Foreign exchange rate movements	<b>(57)</b>	(52)
<b>Carrying amount at 31 December</b>	<b>4,441</b>	4,483

**A9 – Liability for investment contracts**

This note analyses our investment contract liabilities by type of product and describes how the Group calculates these liabilities and the assumptions used.

**(a) Carrying amount**

The liability for investment contracts at 31 December comprised:

	2012 £m	Restated 2011 £m
<b>Long-term business</b>		
Participating contracts	66,849	67,707
Non-participating contracts at fair value	46,299	43,990
Non-participating contracts at amortised cost	1,400	1,669
	47,699	45,659
<b>Total</b>	<b>114,548</b>	<b>113,366</b>
Less: Amounts classified as held for sale	(4,054)	—
	<b>110,494</b>	<b>113,366</b>

Following a review of the classification of contracts issued by the Group's Italian long-term business, there has been a reallocation from participating insurance liabilities at 31 December 2011 to participating investment contract liabilities of £2,722 million.

**(b) Long-term business investment liabilities**

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

Many investment contracts contain a discretionary participation feature in which the contract holder has a contractual right to receive additional benefits as a supplement to guaranteed benefits. These are referred to as participating contracts and are measured according to the methodology and Group practice for long-term business liabilities as described in note A8. They are not measured at fair value as there is currently no agreed definition of fair valuation for discretionary participation features under IFRS. In the absence of such a definition, it is not possible to provide a range of estimates within which a fair value is likely to fall. The IASB has deferred consideration of participating contracts to Phase II of its insurance contracts project.

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

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

Of the non-participating investment contracts measured at fair value, £45,087 million in 2012 are unit linked in structure and the fair value liability is equal to the unit reserve plus additional non-unit reserves, if required, on a fair value basis. These contracts are generally classified as 'Level 1' in the fair value hierarchy, as the unit reserve is calculated as the publicly quoted unit price multiplied by the number units in issue, and any non-unit reserve is insignificant.

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

In the US, funding agreements consist of one to ten year fixed rate contracts. These contracts may not be cancelled by the holders unless there is a default under the agreement, but may, subject to a call premium, be terminated by Aviva at any time. Aviva issued no new funding agreements in 2012. The weighted average interest rates for fixed-rate and floating-rate funding agreements as at 31 December 2012 were 4.688% and 0.305% respectively. Funding agreements issued before 2008 are measured at fair value equal to the present value of contractual cash flows and, for business issued since 2008, are measured at amortised cost. Most funding agreements are fully collateralised and therefore their fair values are not adjusted for own credit risk. Funding agreements carried at fair value total £0.6 billion and are classified as 'Level 2' in the fair value hierarchy.

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

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

**(c) Movements in the year**

The following movements have occurred in the year:

**(i) Participating investment contracts**

	2012 £m	Restated <sup>1</sup> 2011 £m
<b>Carrying amount at 1 January</b>	<b>67,707</b>	<b>72,440</b>
Provisions in respect of new business	2,695	3,688
Expected change in existing business provisions	(2,039)	(2,618)
Variance between actual and expected experience	102	(2,708)
Impact of operating assumption changes	9	(72)
Impact of economic assumption changes	74	631
Other movements	(82)	211
Change in liability recognised as an expense	759	(868)
Foreign exchange rate movements	(1,610)	(1,352)
Deconsolidation of Delta Lloyd	—	(2,523)
Other movements	(7)	10
<b>Carrying amount at 31 December</b>	<b>66,849</b>	<b>67,707</b>

<sup>1</sup> Following a review of the classification of contracts issued by the Group's Italian long-term business, certain portfolios have been reclassified for participating insurance to participating investment contracts for all years presented. There is no impact on the result for any year presented as a result of this reclassification.

**A9 – Liability for investment contracts continued**

For many types of long-term business, including unit-linked and participating funds, movements in asset values are offset by corresponding changes in liabilities, limiting the net impact on profit. Minor variances arise from differences between actual and expected experience for persistency, mortality and other demographic factors.

The impact of assumption changes in the above analysis shows the resulting movement in the carrying value of participating investment contract liabilities. For participating business, a movement in liabilities is generally offset by a corresponding adjustment to the unallocated divisible surplus and does not impact on profit. Where assumption changes do impact on profit, these are included in the effect of changes in assumptions and estimates during the year shown in note A11, together with the impact of movements in related non-financial assets.

**(ii) Non-participating investment contracts**

	2012 £m	2011 £m
<b>Carrying amount at 1 January</b>	<b>45,659</b>	<b>48,305</b>
Provisions in respect of new business	3,851	3,863
Expected change in existing business provisions	(2,531)	(2,558)
Variance between actual and expected experience	982	(2,796)
Impact of operating assumption changes	14	1
Impact of economic assumption changes	4	7
Other movements	104	(123)
Change in liability	2,424	(1,606)
Effect of portfolio transfers, acquisitions and disposals	25	—
Deconsolidation of Delta Lloyd	—	(832)
Foreign exchange rate movements	(404)	(206)
Other movements	(5)	(2)
<b>Carrying amount at 31 December</b>	<b>47,699</b>	<b>45,659</b>

The variance between actual and expected experience of £1.0 billion was primarily driven by favourable movements in investment markets in 2012. The rise in investment markets increased the value of unit linked contracts, which comprise the vast majority of the non-participating investment contract liabilities. For unit-linked investment contracts, movements in asset values are offset by corresponding changes in liabilities, limiting the net impact on profit. Minor variances arise from differences between actual and expected experience for persistency, mortality and other demographic factors.

The impact of assumption changes in the above analysis shows the resulting movement in the carrying value of non-participating investment contract liabilities. The impact of assumption changes on profit are included in the effect of changes in assumptions and estimates during the year shown in note A11, which combines participating and non-participating investment contracts together with the impact of movements in related non-financial assets.

**A10 – Reinsurance assets**

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

**(a) Carrying amounts**

The reinsurance assets at 31 December comprised:

	2012 £m	2011 £m
<b>Long-term business</b>		
Insurance contracts	4,291	3,747
Participating investment contracts	3	—
Non-participating investment contracts <sup>1</sup>	1,678	1,626
	5,972	5,373
Outstanding claims provisions	93	126
	6,065	5,499
<b>General insurance and health</b>		
Outstanding claims provisions	900	974
Provisions for claims incurred but not reported	354	395
	1,254	1,369
Provisions for unearned premiums	248	245
	1,502	1,614
	7,567	7,113
Less: Amounts classified as held for sale	(883)	(1)
<b>Total</b>	<b>6,684</b>	<b>7,112</b>

<sup>1</sup> Balances in respect of all reinsurance treaties are included under reinsurance assets, regardless of whether they transfer significant insurance risk.

Of the above total, (less amounts classified as assets held for sale) £5,251 million (*FY11: £5,086 million*) is expected to be recovered more than one year after the statement of financial position date.

**(b) Assumptions**

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

**(c) Movements**

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

**(i) In respect of long-term business provisions**

	2012 £m	2011 £m
<b>Carrying amount at 1 January</b>	<b>5,373</b>	<b>5,115</b>
Asset in respect of new business	387	187
Expected change in existing business asset	166	7
Variance between actual and expected experience	197	290
Impact of operating assumption changes	(306)	(9)
Impact of economic assumption changes	143	433
Other movements	(137)	(260)
Change in asset	450	648
Effect of portfolio transfers, acquisitions and disposals	197	(2)
Deconsolidation of Delta Lloyd	—	(375)
Foreign exchange rate movements	(48)	(13)
<b>Carrying amount at 31 December</b>	<b>5,972</b>	<b>5,373</b>

The impact of assumption changes in the above analysis shows the resulting movement in the carrying value of reinsurance assets. The changes to the reinsurance asset from assumption changes mainly relates to business in the UK and Ireland, with corresponding movements in gross insurance contract liabilities. For participating businesses, a movement in reinsurance assets is generally offset by a corresponding adjustment to the unallocated divisible surplus and does not impact on profit. Where assumption changes do impact profit, these are included in the effect of changes in assumptions and estimates during the year shown in note A11, together with the impact of movements in related liabilities and other non-financial assets.

**A10 – Reinsurance assets continued****(ii) In respect of general insurance and health outstanding claims provisions and IBNR**

	2012 £m	2011 £m
<b>Carrying amount at 1 January</b>	<b>1,369</b>	<b>1,558</b>
Impact of changes in assumptions	22	87
Reinsurers' share of claim losses and expenses		
Incurred in current year	286	247
Incurred in prior years	13	(84)
Exceptional strengthening of general insurance latent claims provisions	—	10
Reinsurers' share of incurred claim losses and expenses	299	173
Less:		
Reinsurance recoveries received on claims		
Incurred in current year	(138)	(138)
Incurred in prior years	(150)	(196)
Reinsurance recoveries received in the year	(288)	(334)
Unwind of discounting	13	19
Other movements	—	(1)
Change in reinsurance asset recognised as income	46	(56)
Effect of portfolio transfers, acquisitions and disposals	(136)	28
Deconsolidation of Delta Lloyd	—	(153)
Foreign exchange rate movements	(26)	(2)
Other movements	1	(6)
<b>Carrying amount at 31 December</b>	<b>1,254</b>	<b>1,369</b>

**(iii) Reinsurers' share of the provision for UPR**

	2012 £m	2011 £m
<b>Carrying amount at 1 January</b>	<b>245</b>	<b>307</b>
Premiums ceded to reinsurers in the year	641	650
Less: Reinsurers' share of premiums earned during the year	(636)	(678)
Change in reinsurance asset recognised as income	5	(28)
Reinsurers' share of portfolio transfers and acquisitions	3	—
Deconsolidation of Delta Lloyd	—	(30)
Foreign exchange rate movements	(5)	(4)
Other movements	—	—
<b>Carrying amount at 31 December</b>	<b>248</b>	<b>245</b>

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

Certain estimates and assumptions used in determining our liabilities for insurance and investment contract business were changed from 2011 to 2012, affecting the profit recognised for the year with an equivalent effect on liabilities. This note analyses the effect of the changes. This note only allows for the impact on liabilities and related assets, such as unallocated divisible surplus, reinsurance, deferred acquisition costs and AVIF, and does not allow for offsetting movements in the value of backing financial assets.

	Effect on profit 2012 £m	Effect on profit 2011 £m
<b>Assumptions</b>		
<b>Long-term insurance business</b>		
Interest rates	(515)	(2,403)
Expenses	11	5
Persistency rates	—	(4)
Mortality for assurance contracts	—	35
Mortality for annuity contracts	241	(21)
Tax and other assumptions	(207)	99
<b>Investment contracts</b>		
Interest rates	(2)	(82)
Expenses	(1)	—
Persistency rates	—	—
Tax and other assumptions	—	28
<b>General insurance and health business</b>		
Change in loss ratio assumptions	—	5
Change in discount rate assumptions	(21)	(90)
Change in expense ratio and other assumptions	(21)	22
<b>Total</b>	<b>(515)</b>	<b>(2,406)</b>

The impact of interest rates for long-term business relates primarily to the UK and Ireland driven by the reduction in valuation interest rates. This had the effect of increasing liabilities and hence a negative impact on profit. The overall impact on profit also depends on movements in the value of assets backing the liabilities, which is not included in this disclosure. The impact of tax and other assumptions relates mainly to strengthening of credit default assumptions for commercial mortgages backing UK annuity business.

## A12 – Unallocated divisible surplus

An unallocated divisible surplus (UDS) is established where the nature of policy benefits is such that the division between shareholder reserves and policyholder liabilities is uncertain at the reporting date. Therefore the expected duration for settlement of the UDS is not defined.

The following movements have occurred in the year:

	2012 £m	2011 £m
<b>Carrying amount at 1 January</b>	<b>650</b>	<b>3,428</b>
Change in participating contract assets	<b>6,140</b>	(3,016)
Change in participating contract liabilities	<b>253</b>	244
Other movements	<b>(77)</b>	70
Change in liability recognised as an expense	<b>6,316</b>	(2,702)
Effect of portfolio transfers, acquisitions and disposal	<b>1</b>	—
Deconsolidation of Delta Lloyd	<b>—</b>	(144)
Foreign exchange rate movements	<b>24</b>	60
Other movements	<b>(5)</b>	8
<b>Carrying amount at 31 December</b>	<b>6,986</b>	<b>650</b>
Less: Amounts classified as held for sale	<b>(55)</b>	—
	<b>6,931</b>	<b>650</b>

In Italy, the UDS balance was £2 million negative at 31 December 2012 (*FY11: £1,449 million negative*). In Spain, certain participating funds had negative UDS balances at 31 December 2012, although in aggregate the UDS balance was £95 million positive (*FY11: £13 million positive*).

Negative UDS balances result from an accounting mismatch between participating assets carried at market value and participating liabilities measured using local practice. The negative balances were tested for recoverability using embedded value methodology and in line with local accounting practice. Testing is conducted at a participating fund-level within each life entity. The negative balances are considered to be recoverable from margins in the existing participating business liabilities.

In Italy, there was a loss of £9 million for negative UDS considered irrecoverable (*FY11: £17 million loss*), and in Spain a reversal of £33 million of previous losses (*FY11: £49 million loss*).

In Italy the estimation of the recoverable negative UDS balance uses a real-world embedded value method, with a risk-discount rate of 6.25%. (*FY11: 7.05%*). The embedded value method includes implicit allowance for the time value of options and guarantees. If the risk discount rate were increased by 1% it is estimated that the recoverable negative UDS balance would be unchanged.

In Spain, the estimation of the recoverable negative UDS balance uses a market-consistent embedded value method.

## A13 – Borrowings

Our borrowings are either core structural borrowings or operational borrowings. This note shows the carrying values and contractual maturity amounts of each type, and explains their main features and movements during the year.

### Movements during the year

Movements in borrowings during the year were:

	2012			2011		
	Core Structural £m	Operational £m	Total £m	Core Structural £m	Operational £m	Total £m
New borrowings drawn down, including commercial paper, net of expenses	<b>2,200</b>	<b>452</b>	<b>2,652</b>	3,853	1,042	4,895
Repayment of borrowings, including commercial paper	<b>(2,295)</b>	<b>(347)</b>	<b>(2,642)</b>	(3,848)	(1,283)	(5,131)
Net cash (outflow)/inflow	<b>(95)</b>	<b>105</b>	<b>10</b>	5	(241)	(236)
Foreign exchange rate movements	<b>(54)</b>	<b>(130)</b>	<b>(184)</b>	9	193	202
Borrowings acquired for non-cash consideration	—	—	—	—	34	34
Fair value movements	—	<b>43</b>	<b>43</b>	—	8	8
Amortisation of discounts and other non-cash items	<b>1</b>	<b>(13)</b>	<b>(12)</b>	3	—	3
Deconsolidation of Delta Lloyd	—	—	—	(816)	(5,683)	(6,499)
Movements in debt held by Group companies <sup>1</sup>	<b>32</b>	—	<b>32</b>	(12)	1	(11)
Movements in the year	<b>(116)</b>	<b>5</b>	<b>(111)</b>	(811)	(5,688)	(6,499)
Balance at 1 January	<b>5,255</b>	<b>3,195</b>	<b>8,450</b>	6,066	8,883	14,949
<b>Balance at 31 December</b>	<b>5,139</b>	<b>3,200</b>	<b>8,339</b>	<b>5,255</b>	<b>3,195</b>	<b>8,450</b>

<sup>1</sup> Certain subsidiary companies have purchased issued subordinated notes and securitised loan notes as part of their investment portfolios. In the consolidated statement of financial position, borrowings are shown net of these holdings but movements in such holdings over the year are reflected in the tables above.

All movements in fair value in 2011 and 2012 on securitised mortgage loan notes designated as fair value through profit or loss were attributable to changes in market conditions.

## A14 – Pension obligations

### (a) Carrying amounts

	2012 £m	2011 £m
Total IAS 19 obligations to main staff pension schemes	651	406
Deficits in other staff pension schemes	88	86
Total IAS 19 obligations to staff pension schemes	739	492
Restructuring provisions	144	106
Other provisions	423	398
<b>Total</b>	<b>1,306</b>	<b>996</b>
Less: Amounts classified as held for sale	(187)	(4)
	<b>1,119</b>	<b>992</b>

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

Movements in the pension schemes' surpluses and deficits comprise:

	Scheme assets £m	Scheme liabilities £m	Pension scheme net surplus/ (deficit) £m	Adjust for Group insurance policies £m	IAS 19 pensions net surplus/ (deficit) £m
<b>2012</b>					
<b>Net surplus in the schemes at 1 January</b>	<b>11,791</b>	<b>(10,527)</b>	<b>1,264</b>	<b>—</b>	<b>1,264</b>
Employer contributions	250	—	250	—	250
Employee contributions	2	(2)	—	—	—
Benefits paid	(357)	357	—	—	—
Current and past service cost	—	(19)	(19)	—	(19)
Gain on curtailments and settlements	—	15	15	—	15
Credit(charge) to finance costs	427	(509)	(82)	—	(82)
Actuarial gains/(losses)	184	(1,014)	(830)	—	(830)
Exchange rate movements on foreign plans	(16)	24	8	—	8
<b>Net surplus in the schemes at 31 December</b>	<b>12,281</b>	<b>(11,675)</b>	<b>606</b>	<b>—</b>	<b>606</b>
<b>2011</b>					
<b>Net deficits in the schemes at 1 January</b>	<b>11,416</b>	<b>(11,419)</b>	<b>(3)</b>	<b>(1,445)</b>	<b>(1,448)</b>
Employer contributions	452	—	452	(66)	386
Employee contributions	12	(12)	—	(9)	(9)
Benefits paid	(356)	356	—	15	15
Current and past service cost	—	(58)	(58)	—	(58)
Credit(charge) to finance costs	465	(565)	(100)	(13)	(113)
Actuarial gains/(losses)	1,347	(356)	991	16	1,007
Disposals	(23)	30	7	—	7
Deconsolidation of Delta Lloyd	(1,589)	1,558	(31)	1,582	1,551
Exchange rate movements on foreign plans	67	(61)	6	(80)	(74)
<b>Net surplus in the schemes at 31 December</b>	<b>11,791</b>	<b>(10,527)</b>	<b>1,264</b>	<b>—</b>	<b>1,264</b>

1. Relates to non-transferrable insurance policies treated as other obligations to staff pension schemes in the Delta Lloyd subsidiary, which was deconsolidated in 2011.

The fall in the pension schemes' net surplus during 2012 is mainly attributable to losses arising from changes in actuarial assumptions, which primarily reflect the impact of lower discount rates for liabilities.

### (c) Pension expense

The total pension expense comprises:

**Recognised in the income statement**

	2012 £m	2011 £m
<b>Continuing operations</b>		
Current service cost	(19)	(51)
Gains on curtailments	15	—
Total pension cost from continuing operations	(4)	(51)
Total pension cost from discontinued operations	—	(7)
<b>Total pension cost charged to net operating expenses</b>	<b>(4)</b>	<b>(58)</b>
Expected return on scheme assets	427	452
Interest charge on scheme liabilities	(509)	(539)
Charge to finance costs from continuing operations	(82)	(87)
Charge to finance costs from discontinued operations	—	(26)
<b>Total charge to finance costs</b>	<b>(82)</b>	<b>(113)</b>
<b>Total charge to income arising from continuing operations</b>	<b>(86)</b>	<b>(138)</b>
<b>Total charge to income arising from discontinued operations</b>	<b>—</b>	<b>(33)</b>
<b>Total charge to income</b>	<b>(86)</b>	<b>(171)</b>

The gains on curtailments in 2012 arose from restructuring activities in Ireland.



**A14 – Pension obligations continued****Recognised in the statement of comprehensive income**

	2012 £m	2011 £m
<b>Continuing operations</b>		
Expected return on scheme assets	(427)	(452)
Actual return on these assets	611	1,815
Actuarial gains on scheme assets	184	1,363
Experience losses arising on scheme liabilities	(100)	(46)
Changes in assumptions underlying the present value of the scheme liabilities	(914)	(321)
<b>Actuarial (losses)/gains from continuing operations</b>	<b>(830)</b>	<b>996</b>
<b>Actuarial gains from discontinued operations</b>	<b>—</b>	<b>11</b>
<b>Total actuarial (losses)/gains recognised in other comprehensive income</b>	<b>(830)</b>	<b>1,007</b>
Attributable to equity shareholders of Aviva plc	(830)	1,002
Attributable to non-controlling interests	—	5
	<b>(830)</b>	<b>1,007</b>

The loss arising from changes in assumptions in 2012 primarily reflects the impact of lower discount rates for liabilities.

The cumulative amount of actuarial gains and losses on the pension schemes recognised in other comprehensive income since 1 January 2004 (the date of transition to IFRS) is a loss of £1,054 million at 31 December 2012 (2011: cumulative loss of £224 million).

**A15 – Cash and cash equivalents****Cash and cash equivalents in the statement of cash flows at 31 December comprised:**

	2012 £m	2011 £m
Cash at bank and in hand	13,020	8,854
Cash equivalents	10,794	14,215
	<b>23,814</b>	<b>23,069</b>
Bank overdrafts	(566)	(668)
	<b>23,248</b>	<b>22,401</b>

Cash and cash equivalents reconciles to the statement of financial position as follows:

	2012 £m	2011 £m
Cash and cash equivalents (excluding bank overdrafts)	23,814	23,069
Less: Assets classified as held for sale	(917)	(26)
	<b>22,897</b>	<b>23,043</b>

**A16 – Related party transactions**

This note gives details of the transactions between Group companies and related parties which comprise our joint ventures, associates and staff pension schemes.

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

**Services provided to, and by related parties**

	2012				2011			
	Income earned in period £m	Expenses incurred in period £m	Payable at period end £m	Receivable at period end £m	Income earned in period £m	Expenses incurred in period £m	Payable at period end £m	Receivable at period end £m
Associates	—	(4)	—	—	—	(3)	(49)	—
Joint ventures	23	(1)	—	103	23	—	—	125
Employee pension schemes	12	—	—	6	13	—	—	9
	<b>35</b>	<b>(5)</b>	<b>—</b>	<b>109</b>	<b>36</b>	<b>(3)</b>	<b>(49)</b>	<b>134</b>

Transactions with joint ventures in the UK relate to the property management undertakings. Our interest in these joint ventures comprises a mix of equity and loans, together with the provision of administration services and financial management to many of them. Our UK life insurance companies earn interest on loans advanced to these entities.

Our fund management companies also charge fees to these joint ventures for administration services and for arranging external finance.

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

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

## A17 – Risk management

This note sets out the major risks our businesses and its shareholders face and describes the Group's approach to managing these. It also gives sensitivity analyses around the major economic and non-economic assumptions that can cause volatility in the Group's earnings and capital position.

### (a) Risk management framework

The risk management framework (RMF) in Aviva forms an integral part of the management and Board processes and decision-making framework across the Group. The key elements of our risk management framework comprise risk appetite; risk governance, including risk policies and business standards, risk oversight committees and roles and responsibilities; and the processes we use to identify, measure, manage, monitor and report (IMMMR) risks, including the use of our risk models and stress and scenario testing.

For the purposes of risk identification and measurement, and aligned to Aviva's risk policies, risks are usually grouped by risk type: credit, market, liquidity, life insurance, general insurance, asset management and operational risk. Risks falling within these types may affect a number of metrics including those relating to balance sheet strength, liquidity and profit. They may also affect the performance of the products we deliver to our customers and the service to our customers and distributors, which can be categorised as risks to our brand and reputation.

To promote a consistent and rigorous approach to risk management across all businesses we have a set of risk policies and business standards which set out the risk strategy, appetite, framework and minimum requirements for the Group's worldwide operations. On a semi-annual basis the business chief executive officers and chief risk officers sign-off compliance with these policies and standards, providing assurance to the relevant oversight committees that there is a consistent framework for managing our business and the associated risks.

A regular top-town key risk identification and assessment process is carried out by the risk function. This includes the consideration of emerging risks and is supported by deeper thematic reviews. This process is replicated at the business unit level. The risk assessment processes are used to generate risk reports which are shared with the relevant risk committees.

Risk models are an important tool in our measurement of risks and are used to support the monitoring and reporting of the risk profile and in the consideration of the risk management actions available. We carry out a range of stress (where one risk factor, such as equity returns, is assumed to vary) and scenario (where combinations of risk factors are assumed to vary) tests to evaluate their impact on the business and the management actions available to respond to the conditions envisaged.

Roles and responsibilities for risk management in Aviva are based around the 'three lines of defence model' where ownership for risk is taken at all levels in the Group. Line management in the business is accountable for risk management, including the implementation of the risk management framework and embedding of the risk culture. The risk function is accountable for quantitative and qualitative oversight and challenge of the IMMMR process and for developing the risk management framework. Internal Audit provides an independent assessment of the risk framework and internal control processes.

Board oversight of risk and risk management across the Group is maintained on a regular basis through its Risk Committee. The Board has overall responsibility for determining risk appetite, which is an expression of the risk the business is willing to take. Risk appetites are set relative to capital, liquidity and franchise value at Group and in the business units. Economic capital risk appetites are also set for each risk type. The Group's position against risk appetite is monitored and reported to the Board on a regular basis. The oversight of risk and risk management at the Group level is supported by the Asset Liability Committee (ALCO), which focuses on business and financial risks, and the Operational Risk Reputation Committee (ORRC) which focuses on operational and reputational risks. Similar committee structures with equivalent terms of reference exist in the business units. Further information on the types and management of specific risk types is given in sections (b) - (j) below.

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

### (b) Credit risk

Credit risk is the risk of financial loss as a result of the default or failure of third parties to meet their payment obligations to Aviva, or variations in market values as a result of changes in expectations related to these risks. Credit risk is an area where we can provide the returns required to satisfy policyholder liabilities and to generate returns for our shareholders. In general we prefer to take credit risk over equity and property risks, due to the better expected risk adjusted return, our credit risk analysis capability and the structural investment advantages conferred to insurers with long-dated, relatively illiquid liabilities.

Our approach to managing credit risk recognises that there is a risk of adverse financial impact resulting from fluctuations in credit quality of third parties including default, rating transition and credit spread movements. Our credit risks arise principally through exposures to debt security investments, structured asset investments, bank deposits, derivative counterparties, mortgage lending and reinsurance counterparties.

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

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

## A17 – Risk management continued

### Financial exposures by credit ratings

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

As at 31 December 2012	AAA	AA	A	BBB	Speculative grade	Not rated	Carrying value including held for sale	Less assets classified as held for sale	Carrying value £m
Debt securities	24.4%	16.9%	23.8%	25.4%	4.2%	5.3%	161,623	(33,617)	128,006
Reinsurance assets	0.4%	63.4%	30.1%	0.7%	0.1%	5.3%	7,567	(883)	6,684
Other investments	0.1%	0.2%	2.3%	2.0%	1.5%	93.9%	30,093	(1,550)	28,543
Loans	5.8%	8.2%	1.2%	0.1%	0.7%	84.0%	27,934	(3,397)	24,537
<b>Total</b>							<b>227,217</b>	<b>(39,447)</b>	<b>187,770</b>

  

As at 31 December 2011	AAA	AA	A	BBB	Speculative grade	Not rated	Carrying value including held for sale	Less assets classified as held for sale	Carrying value £m
Debt securities	32.3%	13.2%	29.9%	16.3%	2.8%	5.4%	153,345	(93)	153,252
Reinsurance assets	0.0%	70.1%	23.2%	0.0%	0.4%	6.3%	7,113	(1)	7,112
Other investments	0.2%	0.8%	1.4%	2.3%	0.4%	94.9%	30,377	(217)	30,160
Loans	0.9%	1.3%	1.2%	0.2%	0.8%	95.6%	28,116	—	28,116
<b>Total</b>							<b>218,951</b>	<b>(311)</b>	<b>218,640</b>

The carrying amount of assets included in the statement of financial position represents the maximum credit exposure.

The impact of collateral held on the net credit exposure is shown below.

At 31 December 2012	2012			Restated <sup>1</sup> 2011		
	Carrying value in the statement of financial position £m	Collateral held £m	Net credit exposure £m	Carrying value in the statement of financial position £m	Collateral held £m	Net credit exposure £m
Debt securities	161,623	(33)	161,590	153,345	(31)	153,314
Reinsurance assets	7,567	(21)	7,546	7,113	(443)	6,670
Other investments	30,093	(1,224)	28,869	30,377	(465)	29,912
Loans	27,934	(26,893)	1,041	28,116	(26,957)	1,159
<b>Total</b>	<b>227,217</b>	<b>(28,171)</b>	<b>199,046</b>	<b>218,951</b>	<b>(27,896)</b>	<b>191,055</b>
Less: Assets classified as held for sale	(39,447)	3,958	(35,489)	(311)	—	(311)
<b>Total (excluding held for sale)</b>	<b>187,770</b>	<b>(24,213)</b>	<b>163,557</b>	<b>218,640</b>	<b>(27,896)</b>	<b>190,744</b>

<sup>1</sup> Following a review of the collateral reported, the total net credit exposure (excluding assets classified as held for sale) at 31 December 2011 has decreased by £1,045 million.

To the extent that collateral held is greater than the amount receivable that it is securing, the table above shows only an amount equal to the latter. In the event of default, any over-collateralised security would be returned to the relevant counterparty.

### Financial exposures to peripheral European countries

Included in our debt securities and other financial assets, are exposures to peripheral European countries. Gross of non-controlling interests, our direct shareholder assets exposure to the governments (and local authorities and agencies) of Greece, Ireland, Portugal, Italy and Spain has reduced since 2011 and is detailed in note D3.4.5. We continue to monitor closely the situation in the eurozone and have had additional restrictions on further investment in place since late 2009 as well as taking actions to reduce exposure to higher risk assets.

### Other investments

Other investments (including assets of operations classified as held for sale) include unit trusts and other investment vehicles; derivative financial instruments, representing positions to mitigate the impact of adverse market movements; and other assets includes deposits with credit institutions and minority holdings in property management undertakings.

The credit quality of the underlying debt securities within investment vehicles is managed by the safeguards built into the investment mandates for these funds which determine the funds' risk profiles. At the Group level, we also monitor the asset quality of unit trusts and other investment vehicles against Group set limits.

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

## A17 – Risk management continued

### Loans

The Group loan portfolio principally comprises:

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

We use loan to value; interest and debt service cover; and diversity and quality of the tenant base metrics to internally monitor our exposures to mortgage loans. We use credit quality, based on dynamic market measures, and collateralisation rules to manage our stock lending activities. Policy loans are loans and advances made to policyholders, and are collateralised by the underlying policies.

### Credit concentration risk

The long-term and general insurance businesses are generally not individually exposed to significant concentrations of credit risk due to the regulations applicable in most markets and the Group credit policy and limits framework, which limit investments in individual assets and asset classes. Credit concentrations are monitored as part of the regular credit monitoring process and are reported to Group ALCO. With the exception of government bonds the largest aggregated counterparty exposure within shareholder assets is approximately 1.5% of the total shareholder assets (gross of held for sale).

### Reinsurance credit exposures

The Group is exposed to concentrations of risk with individual reinsurers due to the nature of the reinsurance market and the restricted range of reinsurers that have acceptable credit ratings. The Group operates a policy to manage its reinsurance counterparty exposures, by limiting the reinsurers that may be used and applying strict limits to each reinsurer. Reinsurance exposures are aggregated with other exposures to ensure that the overall risk is within appetite. The Group risk function has an active monitoring role with escalation to the Chief Financial Officer (CFO), Group ALCO and the Board Risk Committee as appropriate.

The Group's largest reinsurance counterparty is Swiss Reinsurance Company Ltd (including subsidiaries). At 31 December 2012, the reinsurance asset recoverable, including debtor balances, from Swiss Reinsurance Company Ltd was £1,717 million.

### Securities finance

The Group has significant securities financing operations within the UK and smaller operations in some other businesses. The risks within this activity are mitigated by over-collateralisation and minimum counterparty credit quality requirements which are designed to minimise residual risk. The Group operates strict standards around counterparty quality, collateral management, margin calls and controls.

### Derivative credit exposures

The Group is exposed to counterparty credit risk through derivative trades. This risk is mitigated through collateralising almost all trades (the exception being certain foreign exchange trades where it has historically been the market norm not to collateralise). Residual exposures are captured within the Group's credit management framework.

### Unit-linked business

In unit-linked business the policyholder bears the direct market risk and credit risk on investment assets in the unit funds and the shareholders' exposure to credit risk is limited to the extent of the income arising from asset management charges based on the value of assets in the fund.

**A17 – Risk management continued****Impairment of financial assets**

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

	Financial assets that are past due but not impaired					Financial assets that have been impaired £m	Carrying value £m
	Neither past due nor impaired £m	0-3 months £m	3-6 months £m	6 months-1 year £m	Greater than 1 year £m		
<b>At 31 December 2012</b>							
Debt securities	<b>128,006</b>	—	—	—	—	—	<b>128,006</b>
Reinsurance assets	<b>6,684</b>	—	—	—	—	—	<b>6,684</b>
Other investments	<b>28,535</b>	—	—	—	—	<b>8</b>	<b>28,543</b>
Loans	<b>23,770</b>	<b>85</b>	—	—	—	<b>682</b>	<b>24,537</b>
Receivables and other financial assets	<b>7,518</b>	<b>46</b>	<b>13</b>	<b>14</b>	<b>26</b>	—	<b>7,617</b>

	Financial assets that are past due but not impaired					Financial assets that have been impaired £m	Carrying value £m
	Neither past due nor impaired £m	0-3 months £m	3-6 months £m	6 months-1 year £m	Greater than 1 year £m		
<b>At 31 December 2011</b>							
Debt securities	152,988	—	—	—	—	264	153,252
Reinsurance assets	7,112	—	—	—	—	—	7,112
Other investments	30,152	—	—	—	—	8	30,160
Loans	27,582	6	—	—	—	528	28,116
Receivables and other financial assets	7,650	134	148	2	3	—	7,937

Where assets have been classed as 'past due and impaired', an analysis is made of the risk of default and a decision is made whether to seek to mitigate the risk. There were no material financial assets that would have been past due or impaired had the terms not been renegotiated.

**(c) Market risk**

Market risk is the risk of adverse financial impact resulting, directly or indirectly from fluctuations in interest rates, foreign currency exchange rates, equity and property prices. Market risk arises in business units due to fluctuations in both the value of liabilities and the value of investments held. At Group level, it also arises in relation to the overall portfolio of international businesses and in the value of investment assets owned directly by the shareholders. We actively seek some market risks as part of our investment and product strategy however have limited appetite for interest rate risk as we do not believe it is adequately rewarded.

The management of market risk is undertaken at business unit and at Group level. Businesses manage market risks locally using the Group market risk framework and within local regulatory constraints. Group Risk is responsible for monitoring and managing market risk at Group level and has an established criteria for matching assets and liabilities to limit the impact of mismatches due to market movements.

In addition, where the Group's long-term savings businesses have written insurance and investment products where the majority of investment risks are borne by its policyholders, these risks are managed in line with local regulations and marketing literature, in order to satisfy the policyholders' risk and reward objectives. The Group writes unit-linked business in a number of its operations. The shareholders' exposure to market risk on this business is limited to the extent that income arising from asset management charges is based on the value of assets in the fund.

The most material types of market risk that the Group is exposed to are described below.

**Equity price risk**

The Group is subject to equity price risk arising from changes in the market values of its equity securities portfolio.

We continue to limit our direct equity exposure in line with our risk preferences. The reduction of the shareholding in Delta Lloyd has decreased the Group's equity price risk and, in particular, has led to a fall in equity exposures. Our equity hedging programme during 2012 has further reduced our equity exposures. At a business unit level, investment limits and local asset admissibility regulations require that business units hold diversified portfolios of assets thereby reducing exposure to individual equities. The Group does not have material holdings of unquoted equity securities.

Equity risk is also managed using a variety of derivative instruments, including futures and options. Businesses actively model the performance of equities through the use of risk models, in particular to understand the impact of equity performance on guarantees, options and bonus rates. At 31 December 2012 the Group's shareholder funds held £3 billion notional of equity hedges, with up to 12 months to maturity with an average strike of 88% of the prevailing market levels on 31 December 2012.

Sensitivity to changes in equity prices is given in section (j) 'risk and capital management' below.

**A17– Risk management continued****Property price risk**

The Group is subject to property price risk directly due to holdings of investment properties in a variety of locations worldwide and indirectly through investments in mortgages and mortgage backed securities. Investment in property is managed at business unit level, and is subject to local regulations on asset admissibility, liquidity requirements and the expectations of policyholders.

As at 31 December 2012, no material derivative contracts had been entered into to mitigate the effects of changes in property prices.

Sensitivity to changes in property prices is given in section (j) 'risk and capital management' below.

**Interest rate risk**

Interest rate risk arises primarily from the Group's investments in long-term debt and fixed income securities and their movement relative to the value placed on the insurance liabilities. A number of policyholder product features have an influence on the Group's interest rate risk. The major features include guaranteed surrender values, guaranteed annuity options, and minimum surrender and maturity values.

Exposure to interest rate risk is monitored through several measures that include duration, economic capital modelling, sensitivity testing and stress and scenario testing. The impact of exposure to sustained low interest rates is considered within our scenario testing.

The Group typically manages interest rate risk by investing in fixed interest securities which closely match the interest rate sensitivity of the liabilities where this is available. Interest rate risk is also managed in some business units using a variety of derivative instruments, including futures, options, swaps, caps and floors.

Sensitivity to changes in interest rates is given in section (j). Further information on borrowings is included in note A13.

**Inflation risk**

Inflation risk arises primarily from the Group's exposure to general insurance claims inflation, to inflation linked benefits within the defined benefit staff pension schemes and within the UK annuity portfolio and to expense inflation. Increases in long-term inflation expectations are closely linked to long-term interest rates and so are frequently considered with interest rate risk. Exposure to inflation risk is monitored through economic capital modelling, sensitivity testing and stress and scenario testing. The Group typically manages inflation risk through its investment strategy and, in particular, by investing in inflation linked securities and through a variety of derivative instruments, including inflation linked swaps.

**Currency risk**

The Group has minimal exposure to currency risk from financial instruments held by business units in currencies other than their functional currencies, as nearly all such holdings are backing either by unit-linked or with-profit contract liabilities or hedging.

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

Businesses aim to maintain sufficient assets in local currency to meet local currency liabilities, however movements may impact the value of the Group's consolidated shareholders' equity which is expressed in sterling. This aspect of foreign exchange risk is monitored and managed centrally, against pre-determined limits. These exposures are managed by aligning the deployment of regulatory capital by currency with the Group's regulatory capital requirements by currency. Currency borrowings and derivatives are used to manage exposures within the limits that have been set.

At 31 December 2012 and 2011, the Group's total equity deployment by currency including assets 'held for sale' was:

	Sterling £m	Euro £m	US\$ £m	Other £m	Total £m
<b>Capital 31 December 2012</b>	<b>4,445</b>	<b>4,648</b>	<b>(51)</b>	<b>2,318</b>	<b>11,360</b>
Capital 31 December 2011	3,427	6,442	3,237	2,257	15,363

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

	10% increase in sterling/ euro rate £m	10% decrease in sterling/ euro rate £m	10% increase in sterling/ US\$ rate £m	10% decrease in sterling/ US\$ rate £m
<b>Net assets at 31 December 2012</b>	<b>(386)</b>	<b>411</b>	<b>34</b>	<b>(5)</b>
Net assets at 31 December 2011	(524)	632	(323)	323

A 10% change in sterling to euro/US\$ foreign exchange rates would have had the following impact on profit before tax, excluding 'discontinued operations'.

	10% increase in sterling/ euro rate £m	10% decrease in sterling/ euro rate £m	10% increase in sterling/ US\$ rate £m	10% decrease in sterling/ US\$ rate £m
<b>Impact on profit before tax 31 December 2012</b>	<b>(32)</b>	<b>32</b>	<b>1</b>	<b>(1)</b>
Impact on profit before tax 31 December 2011	(84)	11	(4)	17

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



## A17 – Risk management continued

### Derivatives risk

Derivatives are used by a number of the businesses. Activity is overseen by the Group risk function, who monitor exposure levels and approves large or complex transactions. Derivatives are primarily used for efficient investment management, risk hedging purposes, or to structure specific retail savings products.

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

### Correlation risk

The Group recognises that lapse behaviour and potential increases in consumer expectations are sensitive to and interdependent with market movements and interest rates. These interdependencies are taken into consideration in the internal economic capital model and in scenario analysis.

### (d) Liquidity risk

Liquidity risk is the risk of not being able to make payments as they become due because there are insufficient assets in cash form. The relatively illiquid nature of insurance liabilities is a potential source of additional investment return by allowing us to invest in higher yielding, but less liquid assets such as commercial mortgages. The Group seeks to ensure that it maintains sufficient financial resources to meet its obligations as they fall due through the application of a Group liquidity risk policy and business standard. At Group and business unit level, there is a liquidity risk appetite which requires that sufficient liquid resources be maintained to cover net outflows in a stress scenario. The Company's main sources of liquidity are liquid assets held within the Company and Aviva Group Holdings Limited (AGH), and dividends received from the Group's insurance and asset management businesses. Sources of liquidity in normal markets also includes a variety of short and long-term instruments including commercial papers and medium and long-term debt. For 2012 and prior years, the Company's main sources of liquidity also included intercompany loans from Aviva Insurance Limited and Aviva International Insurance Limited, subject to regulatory constraints. In addition to the existing liquid resources and expected inflows, the Group and Company maintain significant undrawn committed borrowing facilities (£2.1 billion) from a range of leading international banks to further mitigate this risk.

### Maturity analyses

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

#### (i) Analysis of maturity of insurance and investment contract liabilities

For non-linked insurance business, the following table shows the gross liability at 31 December 2012 and 2011 analysed by remaining duration. The total liability is split by remaining duration in proportion to the cash-flows expected to arise during that period, as permitted under IFRS 4, *Insurance Contracts*.

Almost all linked business and non-linked investment contracts may be surrendered or transferred on demand. For such contracts, the earliest contractual maturity date is therefore the current statement of financial position date, for a surrender amount approximately equal to the current statement of financial position liability. We expect surrenders, transfers and maturities to occur over many years, and the tables reflect the expected cash flows for these contracts. However, contractually, the total liability for linked business and non-linked investment contracts would be shown in the 'within 1 year' column below, and previously the total liability for linked business was shown in the 'within 1 year' column. Changes in durations between 2011 and 2012 reflect evolution of the portfolio, and changes to the models for projecting cash-flows.

At 31 December 2012	Total £m	On demand or within 1 year £m	1-5 years £m	5-15 years £m	Over 15 years £m
Long-term business					
Insurance contracts – non-linked	117,602	8,303	31,894	44,455	32,950
Investment contracts – non-linked	59,788	2,491	12,390	16,679	28,228
Linked business	69,690	5,667	18,203	21,590	24,230
General insurance and health	15,006	6,166	5,763	2,456	621
<b>Total contract liabilities</b>	<b>262,086</b>	<b>22,627</b>	<b>68,250</b>	<b>85,180</b>	<b>86,029</b>

At 31 December 2011	Total £m	On demand or within 1 year £m	1-5 years £m	5-15 years £m	Over 15 years £m
Long-term business					
Insurance contracts – non-linked (restated) <sup>1</sup>	117,442	9,693	35,403	45,829	26,517
Investment contracts – non-linked (restated) <sup>1</sup>	62,412	6,240	20,208	26,252	9,712
Linked business (restated) <sup>2</sup>	65,994	7,297	20,614	24,324	13,759
General insurance and health	15,241	5,645	5,967	2,913	716
<b>Total contract liabilities</b>	<b>261,089</b>	<b>28,875</b>	<b>82,192</b>	<b>99,318</b>	<b>50,704</b>

<sup>1</sup> Following a review of the classification of contracts issued by the Group's Italian long-term business, certain portfolios have been reclassified from participating insurance to participating investment contracts for all years presented. There is no impact on the result for any year presented as a result of this reclassification.

<sup>2</sup> Linked business maturity profile has been restated to reflect an expected rather than contractual basis. Contractually, the total liability for linked business would be shown in the 'within 1 year column'.



## A17 – Risk management continued

### Analysis of maturity of financial assets

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

	Total £m	On demand or within 1 year £m	1-5 years £m	Over 5 years £m	No fixed term (perpetual) £m
At 31 December 2012					
Debt securities	128,006	16,796	36,009	75,198	3
Equity securities	32,529	—	—	—	32,529
Other investments	28,543	12,638	866	12,508	2,531
Loans	24,537	5,358	1,780	17,329	70
Cash and cash equivalents	22,897	22,897	—	—	—
	236,512	57,689	38,655	105,035	35,133
At 31 December 2011					
Debt securities	153,252	18,698	39,079	95,460	15
Equity securities	32,646	—	—	—	32,646
Other investments	30,160	21,007	1,192	1,016	6,945
Loans	28,116	6,490	2,800	18,825	1
Cash and cash equivalents	23,043	23,043	—	—	—
	267,217	69,238	43,071	115,301	39,607

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

### (e) Life insurance risk

Life insurance risk in the Group arises through its exposure to mortality and morbidity risks and exposure to worse than anticipated operating experience on factors such as persistency levels and management and administration expenses. The Group chooses to take measured amounts of life insurance risk provided that the relevant business has the appropriate core skills to assess and price the risk and adequate returns are available.

The underlying risk profile of our life insurance risks, primarily persistency, longevity, mortality and expense risk, has remained stable during 2012, although the current low levels of interest rates have increased our sensitivity to longevity shocks. Persistency risk remains significant and continues to have a volatile outlook with underlying performance linked to some degree to economic conditions. However, businesses across the Group have continued to make progress with a range of customer retention activities. The Group has continued to write strong volumes of life protection business, and to utilise reinsurance to reduce exposure to potential losses. More generally, life insurance risks are believed to benefit from a significant diversification against other risks in the portfolio. Life insurance risks are modelled within the internal economic capital model and subject to sensitivity and stress and scenario testing. The assumption and management of life insurance risks is governed by the group-wide business standards covering underwriting, pricing, product design and management, in-force management, claims handling, and reinsurance. The individual life insurance risks are managed as follows:

- Mortality and morbidity risks are mitigated by use of reinsurance. The Group allows businesses to select reinsurers, from those approved by the Group, based on local factors, but retains oversight of the overall exposures and monitor that the aggregation of risk ceded is within credit risk appetite.
- Longevity risk and internal experience analysis are monitored against the latest external industry data and emerging trends. Whilst individual businesses are responsible for reserving and pricing for annuity business, the Group monitors the exposure to this risk and any associated capital implications. The Group has used reinsurance solutions to reduce the risks from longevity and continually monitors and evaluates emerging market solutions to mitigate this risk further.
- Persistency risk is managed at a business unit level through frequent monitoring of company experience, and benchmarked against local market information. Generally, persistency risk arises from customers lapsing their policies earlier than has been assumed. Where possible the financial impact of lapses is reduced through appropriate product design. Businesses also implement specific initiatives to improve retention of policies which may otherwise lapse. The Group has developed guidelines on persistency management.
- Expense risk is primarily managed by the business units through the assessment of business unit profitability and frequent monitoring of expense levels.

### Embedded derivatives

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

## A17 – Risk management continued

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

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

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

### (f) General insurance risk

#### Types of risk

General insurance risk in the Group arises from:

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

Aviva has a preference for general insurance risk in measured amounts for explicit reward, in line with our core skills in underwriting and pricing. The majority of the general insurance business underwritten by the Group continues to be short tail in nature such as motor, household and commercial property insurances. The Group's underwriting strategy and appetite is communicated via specific policy statements, related business standards and guidelines. General insurance risk is managed primarily at business unit level with oversight at the Group level. Claims reserving is undertaken by local actuaries in the various general insurance businesses and is also subject to periodic external reviews. Reserving processes are further detailed in note A8 'insurance liabilities'.

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

#### Management of general insurance risks

Significant insurance risks will be reported under the risk management framework. Additionally, the economic capital model is used to assess the risks that each general insurance business unit, and the Group as a whole, is exposed to, quantifying their impact and calculating appropriate capital requirements.

Business units have developed mechanisms that identify, quantify and manage accumulated exposures to contain them within the limits of the appetite of the Group. The business units are assisted by a Business Capability team who provide technical input for major decisions which fall outside individual delegated limits or escalations outside group risk preferences, group risk accumulation, concentration and profitability limits.

#### Reinsurance strategy

Significant reinsurance purchases are reviewed annually at both business unit and Group level to verify that the levels of protection being bought reflect any developments in exposure and the risk appetite of the Group. The basis of these purchases is underpinned by analysis of economic capital, economic gain, earnings volatility, liquidity, retained risk exposure profile and the Group's franchise value.

Detailed actuarial analysis is used to calculate the Group's extreme risk profile and then design cost and capital efficient reinsurance programmes to mitigate these risks to within agreed appetites. For businesses writing general insurance we analyse the natural catastrophe exposure using external probabilistic catastrophe models widely used by the rest of the (re)insurance industry.

The Group cedes much of its worldwide catastrophe risk to third-party reinsurers but retains a pooled element for its own account gaining diversification benefit. The total Group potential loss from its most concentrated catastrophe exposure zone (Northern Europe) is approximately £260 million, for a one in ten year annual loss scenario, compared to approximately £460 million when measured on a one in a hundred year annual loss scenario.

In our 2011 Annual Report & Accounts we reported our participation in a share of Hiscox's US property catastrophe portfolio. This arrangement expired on the 31 December 2012 and remaining exposure will run off during 2013.

### (g) Asset management risk

Asset Management risk arises through exposure to negative investment performance, fund liquidity, and factors that influence franchise value such as product development appropriateness and capability, and client retention. The Group's exposure to asset management risk is informed through regular assessment of the investment management capabilities and proven track record of the investment funds.

Aviva is directly exposed to the risks associated with operating an asset management business through its ownership of Aviva Investors. The underlying risk profile of our asset management risk is derived from investment performance, specialist investment professionals and leadership, product development capabilities, fund liquidity, margin, client retention, regulatory developments, fiduciary and contractual responsibilities. Investment performance has remained strong over 2012 despite some positions being impacted by the volatility of global markets.

## A17 – Risk management continued

Action has been taken during the year to improve the operational infrastructure and enhance the quality of the customer experience including; progressing towards the implementation of the Blackrock Aladdin platform to support our investment process; review of our Business Development capability; and a continued drive to work closely with clients.

### (h) Operational risk

Operational risk is the risk of direct or indirect loss, arising from inadequate or failed internal processes, people and systems, or external events including changes in the regulatory environment. We have limited appetite for operational risk and aim to reduce these risks as far as is commercially sensible.

Our business units are primarily responsible for identifying and managing operational risks within their businesses, within the group-wide operational risk framework including the risk and control self-assessment process. Businesses must be satisfied that all material risks falling outside our risk tolerances are being mitigated, monitored and reported to an appropriate level. Any risks with a high potential impact are monitored centrally on a regular basis. Businesses use key indicator data to help monitor the status of the risk and control environment. They also identify and capture loss events, taking appropriate action to address actual control breakdowns and promote internal learning.

### (i) Brand and reputation risk

We are exposed to the risk that litigation, employee misconduct, operational failures, the outcome of regulatory investigations, media speculation and negative publicity, disclosure of confidential client information, inadequate services, whether or not founded, could impact our brands or reputation. Any of our brands or our reputation could also be affected if products or services recommended by us (or any of our intermediaries) do not perform as expected (whether or not the expectations are founded) or the customer's expectations for the product change. We seek to reduce this risk to as low a level as commercially sensible.

The FSA regularly considers whether we are meeting the requirement to treat our customers fairly and we make use of various metrics to assess our own performance, including customer advocacy, retention and complaints. Failure to meet these requirements could also impact our brands or reputation.

If we do not manage the perception of our brands and reputation successfully, it could cause existing customers or agents to withdraw from our business and potential customers or agents to choose not to do business with us.

### (j) Risk and capital management

#### Sensitivity test analysis

The Group uses a number of sensitivity tests to understand the volatility of earnings, the volatility of its capital requirements, and to manage its capital more efficiently. Sensitivities to economic and operating experience are regularly produced on the Group's key financial performance metrics to inform the Group's decision making and planning processes, and as part of the framework for identifying and quantifying the risks to which each of its business units, and the Group as a whole, are exposed.

For long-term business in particular, sensitivities of market consistent 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.

#### Life insurance and investment contracts

The nature of long-term business is such that a number of assumptions are made in compiling these financial statements. Assumptions are made about investment returns, expenses, mortality rates and persistency in connection with the in-force policies for each business unit. Assumptions are best estimates based on historic and expected experience of the business. A number of the key assumptions for the Group's central scenario are disclosed elsewhere in these statements for both IFRS reporting and reporting under MCEV methodology.

#### General insurance and health business

General insurance and health claim liabilities are estimated by using standard actuarial claims projection techniques. These methods extrapolate the claims development for each accident year based on the observed development of earlier years. In most cases, no explicit assumptions are made as projections are based on assumptions implicit in the historic claims.

#### Sensitivity test results

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

## A17 – Risk management continued

Sensitivity factor	Description of sensitivity factor applied
Interest rate and investment return	The impact of a change in market interest rates by a 1% increase or decrease. The test allows consistently for similar changes to investment returns and movements in the market value of backing fixed interest securities.
Credit spreads	The impact of a 0.5% increase in credit spreads over risk-free interest rates on corporate bonds and other non-sovereign credit assets. The test allows for any consequential impact on liability valuations
Equity/property market values	The impact of a change in equity/property market values by $\pm 10\%$ .
Expenses	The impact of an increase in maintenance expenses by 10%.
Assurance mortality/morbidity (life insurance only)	The impact of an increase in mortality/morbidity rates for assurance contracts by 5%.
Annuitant mortality (life insurance only)	The impact of a reduction in mortality rates for annuity contracts by 5%.
Gross loss ratios (non-life insurance only)	The impact of an increase in gross loss ratios for general insurance and health business by 5%.

## Long-term business

## Sensitivities as at 31 December 2012

2012 Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Assurance mortality +5%	Annuitant mortality -5%
Insurance Participating	(45)	(15)	(110)	60	(95)	(25)	(5)	(50)
Insurance non-participating	(160)	130	(430)	—	—	(75)	(45)	(470)
Investment participating	(55)	45	—	5	(10)	(10)	—	—
Investment non-participating	(40)	35	(5)	10	(15)	(20)	—	—
Assets backing life shareholders' funds	10	(15)	(40)	45	(45)	—	—	—
<b>Total excluding Delta Lloyd and United States</b>	<b>(290)</b>	<b>180</b>	<b>(585)</b>	<b>120</b>	<b>(165)</b>	<b>(130)</b>	<b>(50)</b>	<b>(520)</b>
United States	880	(640)	495	—	—	—	—	—
<b>Total excluding Delta Lloyd</b>	<b>590</b>	<b>(460)</b>	<b>(90)</b>	<b>120</b>	<b>(165)</b>	<b>(130)</b>	<b>(50)</b>	<b>(520)</b>

2012 Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Assurance mortality +5%	Annuitant mortality -5%
Insurance Participating	(45)	(15)	(110)	60	(95)	(25)	(5)	(50)
Insurance non-participating	(165)	125	(430)	—	—	(75)	(45)	(470)
Investment participating	(55)	45	—	5	(10)	(10)	—	—
Investment non-participating	(45)	40	—	10	(15)	(20)	—	—
Assets backing life shareholders' funds	(5)	—	(45)	50	(50)	—	—	—
<b>Total excluding Delta Lloyd and United States</b>	<b>(315)</b>	<b>195</b>	<b>(585)</b>	<b>125</b>	<b>(170)</b>	<b>(130)</b>	<b>(50)</b>	<b>(520)</b>
United States	—	—	—	—	—	—	—	—
<b>Total excluding Delta Lloyd</b>	<b>(315)</b>	<b>195</b>	<b>(585)</b>	<b>125</b>	<b>(170)</b>	<b>(130)</b>	<b>(50)</b>	<b>(520)</b>

## Sensitivities as at 31 December 2011

2011 Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Assurance mortality +5%	Annuitant mortality -5%
Insurance Participating	(45)	(155)	(20)	5	(95)	(45)	(10)	(50)
Insurance non-participating	(180)	130	(385)	30	(35)	(65)	(45)	(470)
Investment participating	(35)	40	(30)	50	(75)	(10)	—	—
Investment non-participating	(15)	20	(5)	15	(15)	(20)	—	—
Assets backing life shareholders' funds	135	(15)	(10)	10	(10)	—	—	—
<b>Total excluding Delta Lloyd and United States</b>	<b>(140)</b>	<b>20</b>	<b>(450)</b>	<b>110</b>	<b>(230)</b>	<b>(140)</b>	<b>(55)</b>	<b>(520)</b>
United States	45	(50)	10	50	(35)	(10)	(15)	—
<b>Total excluding Delta Lloyd</b>	<b>(95)</b>	<b>(30)</b>	<b>(440)</b>	<b>160</b>	<b>(265)</b>	<b>(150)</b>	<b>(70)</b>	<b>(520)</b>

2011 Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Assurance mortality +5%	Annuitant mortality -5%
Insurance Participating	(45)	(155)	(25)	5	(95)	(45)	(10)	(50)
Insurance non-participating	(180)	130	(385)	30	(35)	(65)	(45)	(470)
Investment participating	(35)	40	(30)	50	(75)	(10)	—	—
Investment non-participating	(15)	20	(5)	15	(15)	(20)	—	—
Assets backing life shareholders' funds	125	—	(15)	15	(15)	—	—	—
<b>Total excluding Delta Lloyd and United States</b>	<b>(150)</b>	<b>35</b>	<b>(460)</b>	<b>115</b>	<b>(235)</b>	<b>(140)</b>	<b>(55)</b>	<b>(520)</b>
United States	(540)	455	(350)	50	(35)	(10)	(15)	—
<b>Total excluding Delta Lloyd</b>	<b>(690)</b>	<b>490</b>	<b>(810)</b>	<b>165</b>	<b>(270)</b>	<b>(150)</b>	<b>(70)</b>	<b>(520)</b>

**A17 – Risk management continued**

Changes in sensitivities between 2012 and 2011 reflect movements in market interest rates, portfolio growth, changes to asset mix and the relative durations of assets and liabilities and asset liability management actions. The sensitivities to economic movements (excluding the United States) relate mainly to business in the UK. In general, a fall in market interest rates has a beneficial impact on non-participating business, due to the increase in market value of fixed interest securities and the relative durations of assets and liabilities; similarly a rise in interest rates has a negative impact. The mortality sensitivities also relate primarily to the UK.

In the United States, most debt securities are classified as AFS for which movements in unrealised gains or losses are taken directly to shareholders' equity. This limited the overall sensitivity of IFRS profit to interest rate and credit spread movements. Following the classification of the business as held for sale in 2012 it was remeasured to fair value less costs to sell. It has been assumed that economic movements would not materially impact the fair value less costs to sell and the impact on shareholders' equity is therefore reported as £nil. As a result, were economic movements to occur, the corresponding movements in AFS assets which would be taken directly to shareholders' equity, are reversed out through profit before tax in order to maintain the remeasurement value of the US at fair value less costs to sell.

**General insurance and health business sensitivities as at 31 December 2012**

2012 Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Gross loss ratios +5%
<b>Gross of reinsurance excluding Delta Lloyd</b>	<b>(260)</b>	<b>235</b>	<b>(125)</b>	<b>45</b>	<b>(50)</b>	<b>(120)</b>	<b>(300)</b>
<b>Net of reinsurance excluding Delta Lloyd</b>	<b>(300)</b>	<b>285</b>	<b>(125)</b>	<b>45</b>	<b>(50)</b>	<b>(120)</b>	<b>(285)</b>
2012 Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Gross loss ratios +5%
<b>Gross of reinsurance excluding Delta Lloyd</b>	<b>(260)</b>	<b>235</b>	<b>(125)</b>	<b>50</b>	<b>(50)</b>	<b>(25)</b>	<b>(300)</b>
<b>Net of reinsurance excluding Delta Lloyd</b>	<b>(300)</b>	<b>285</b>	<b>(125)</b>	<b>50</b>	<b>(50)</b>	<b>(25)</b>	<b>(285)</b>

**Sensitivities as at 31 December 2011**

2011 Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Gross loss ratios +5%
<b>Gross of reinsurance excluding Delta Lloyd</b>	<b>(205)</b>	<b>180</b>	<b>(125)</b>	<b>50</b>	<b>(55)</b>	<b>(130)</b>	<b>(300)</b>
<b>Net of reinsurance excluding Delta Lloyd</b>	<b>(275)</b>	<b>275</b>	<b>(125)</b>	<b>50</b>	<b>(55)</b>	<b>(130)</b>	<b>(290)</b>
2011 Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Gross loss ratios +5%
<b>Gross of reinsurance excluding Delta Lloyd</b>	<b>(205)</b>	<b>180</b>	<b>(125)</b>	<b>50</b>	<b>(55)</b>	<b>(30)</b>	<b>(300)</b>
<b>Net of reinsurance excluding Delta Lloyd</b>	<b>(275)</b>	<b>275</b>	<b>(125)</b>	<b>50</b>	<b>(55)</b>	<b>(30)</b>	<b>(290)</b>

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

**A17 – Risk management continued****Fund management and non-insurance business****Sensitivities as at 31 December 2012**

2012 Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%
<b>Total excluding Delta Lloyd</b>	<b>(5)</b>	<b>—</b>	<b>30</b>	<b>(90)</b>	<b>10</b>

2012 Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%
<b>Total excluding Delta Lloyd</b>	<b>(5)</b>	<b>—</b>	<b>30</b>	<b>(90)</b>	<b>10</b>

**Sensitivities as at 31 December 2011**

2011 Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%
<b>Total excluding Delta Lloyd</b>	<b>(10)</b>	<b>10</b>	<b>—</b>	<b>(40)</b>	<b>75</b>

2011 Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%
<b>Total excluding Delta Lloyd</b>	<b>(10)</b>	<b>10</b>	<b>—</b>	<b>(40)</b>	<b>75</b>

**Limitations of sensitivity analysis**

The above tables demonstrate the effect of a change in a key assumption while other assumptions remain unchanged. In reality, there is a correlation between the assumptions and other factors. It should also be noted that these sensitivities are non-linear, and larger or smaller impacts should not be interpolated or extrapolated from these results.

The sensitivity analyses do not take into consideration that the Group's assets and liabilities are actively managed. Additionally, the financial position of the Group may vary at the time that any actual market movement occurs. For example, the Group's financial risk management strategy aims to manage the exposure to market fluctuations.

As investment markets move past various trigger levels, management actions could include selling investments, changing investment portfolio allocation, adjusting bonuses credited to policyholders, and taking other protective action.

A number of the business units use passive assumptions to calculate their long-term business liabilities. Consequently, a change in the underlying assumptions may not have any impact on the liabilities, whereas assets held at market value in the statement of financial position will be affected. In these circumstances, the different measurement bases for liabilities and assets may lead to volatility in shareholder equity. Similarly, for general insurance liabilities, the interest rate sensitivities only affect profit and equity where explicit assumptions are made regarding interest (discount) rates or future inflation.

Other limitations in the above sensitivity analyses include the use of hypothetical market movements to demonstrate potential risk that only represent the Group's view of possible near-term market changes that cannot be predicted with any certainty, and the assumption that all interest rates move in an identical fashion.

## A18 –Subsequent events

In January 2013, the Group announced the sale of its 49% stake in CIMB Aviva Assurance Berhad and CIMB Aviva Takaful Berhad (together "CIMB-Aviva") to Sun Life Assurance Company of Canada for a consideration of £152 million.

On 8 January 2013, the Group sold the remainder of its stake in Delta Lloyd at €12.65 per share resulting in total cash proceeds for Aviva of £353 million.

On 27 February the Group announced the disposal of its Russian business for a consideration of €35 million. This is expected to complete in the first half of 2013.



**A19 – Direct capital instruments and fixed rate tier 1 notes**

Notional amount	2012 £m	2011 £m
5.9021% £500 million direct capital instrument	<b>500</b>	500
4.7291% €700 million direct capital instrument	<b>490</b>	490
	<b>990</b>	990
Issued May 2012		
8.25% US \$650 million fixed rate tier 1 notes	<b>392</b>	—
	<b>1,382</b>	990

The euro and sterling direct capital instruments (the DCIs) were issued on 25 November 2004 and qualify as Innovative Tier 1 capital, as defined by the Financial Services Authority in GENPRU Annex 1 'Capital Resources'. They have no fixed redemption date but the Company may, at its sole option, redeem all (but not part) of the euro and sterling DCIs at their principal amounts on 28 November 2014 and 27 July 2020 respectively, at which dates the interest rates change to variable rates, or on any respective coupon payment date thereafter. In the case of the sterling DCI this variable rate will be the six month sterling deposit rate plus margin while the euro DCI variable rate will be the three month euro deposit rate plus margin.

The fixed rate tier 1 notes (the FxdRNs) were issued on 3 May 2012 and also qualify as Innovative Tier 1 capital. The FxdRNs are perpetual but are subject to a mandatory exchange into non-cumulative preference shares in the Company after 99 years. The Company may, at its sole option, redeem all (but not part) of the FxdRNs at their principal amounts on 3 November 2017, or on any respective coupon payment date thereafter.

On the occurrence of a Capital Disqualification Event as defined in the terms and conditions of the issue for both the DCIs and FxdRNs, the Company may at its sole option substitute at any time not less than all of the DCIs or FxdRNs for, or vary the terms of the DCIs so that they become, Qualifying Tier 1 Securities or Qualifying Upper Tier 2 Securities.

In addition, on the occurrence of a Substitution Event as defined in the terms and conditions of the issue for the DCIs, the Company may at its sole option substitute not less than all of the DCIs for fully paid non-cumulative preference shares in the Company. These preference shares can only be redeemed on 28 November 2014 in the case of the euro DCIs and on 27 July 2020 in the case of the sterling DCIs, or in each case on any dividend payment date thereafter. For the FxdRNs, having given the required notice, the Company has the right to substitute for fully paid non cumulative preference shares at any time. These preference shares can only be redeemed on 3 November 2017, or on any dividend payment date thereafter. The Company has the right to choose whether or not to pay any dividend on the new shares, and any such dividend payment will be non-cumulative.

The Company has the option to defer coupon payments on the DCIs or FxdRNs on any relevant payment date. Deferred coupons relating to the DCIs shall be satisfied only in the following circumstances, all of which occur at the sole option of the Company:

- Redemption; or
- Substitution by, or variation so they become, alternative Qualifying Tier 1 Securities or Qualifying Upper Tier 2 Securities; or
- Substitution by preference shares.

Deferred coupons in respect of the FxdRNs may be satisfied at any time, at the sole option of the Company. The Company is required to satisfy deferred coupons on the FxdRNs only in the following circumstances:

- Redemption; or
- Substitution by preference shares.

No interest will accrue on any deferred coupon. Deferred coupons will be satisfied by the issue and sale of ordinary shares in the Company at their prevailing market value, to a sum as near as practicable to (and at least equal to) the relevant deferred coupons. In the event of any coupon deferral, the Company will not declare or pay any dividend on its ordinary or preference share capital.

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

	Net written premiums		Underwriting result		Combined operating ratio	
	2012 £m	2011 £m	2012 £m	2011 £m	2012 %	2011 %
Personal						
Motor	<b>1,164</b>	1,387	<b>39</b>	58	<b>97%</b>	96%
Motor (excluding RAC)	<b>1,164</b>	1,126	<b>39</b>	(13)	<b>97%</b>	101%
Homeowner	<b>775</b>	797	<b>58</b>	87	<b>93%</b>	89%
Other	<b>458</b>	510	<b>36</b>	39	<b>93%</b>	93%
	<b>2,397</b>	2,694	<b>133</b>	184	<b>94%</b>	91%
<b>Total personal (excluding RAC)</b>	<b>2,397</b>	2,433	<b>133</b>	113	<b>94%</b>	93%
Commercial						
Motor	<b>617</b>	618	<b>(48)</b>	(76)	<b>106%</b>	113%
Property	<b>615</b>	640	<b>(8)</b>	11	<b>101%</b>	99%
Other	<b>433</b>	419	<b>(40)</b>	(9)	<b>107%</b>	102%
	<b>1,665</b>	1,677	<b>(96)</b>	(74)	<b>104%</b>	105%
<b>Total</b>	<b>4,062</b>	4,371	<b>37</b>	110	<b>98%</b>	96%
<b>Total (excluding RAC)</b>	<b>4,062</b>	4,110	<b>37</b>	39	<b>98%</b>	98%

**(ii) France**

	Net written premiums		Underwriting result		Combined operating ratio	
	2012 £m	2011 £m	2012 £m	2011 £m	2012 %	2011 %
Motor	<b>349</b>	347	<b>17</b>	(14)	<b>95%</b>	104%
Property and other	<b>435</b>	442	<b>20</b>	84	<b>95%</b>	80%
<b>Total</b>	<b>784</b>	789	<b>37</b>	70	<b>95%</b>	90%

**(iii) Ireland**

	Net written premiums		Underwriting result		Combined operating ratio	
	2012 £m	2011 £m	2012 £m	2011 £m	2012 %	2011 %
Motor	<b>162</b>	179	<b>(17)</b>	14	<b>111%</b>	93%
Property and other	<b>164</b>	188	<b>11</b>	(19)	<b>94%</b>	111%
<b>Total</b>	<b>326</b>	367	<b>(6)</b>	(5)	<b>102%</b>	102%

**(iv) Canada**

	Net written premiums		Underwriting result		Combined operating ratio	
	2012 £m	2011 £m	2012 £m	2011 £m	2012 %	2011 %
Motor	<b>1,176</b>	1,130	<b>91</b>	89	<b>92%</b>	92%
Property	<b>735</b>	701	<b>19</b>	(14)	<b>97%</b>	102%
Liability	<b>209</b>	204	<b>9</b>	9	<b>95%</b>	96%
Other	<b>56</b>	48	<b>20</b>	13	<b>64%</b>	67%
<b>Total</b>	<b>2,176</b>	2,083	<b>139</b>	97	<b>93%</b>	95%

**A21 – Funds under management**

			2012	2011
	Life and related businesses £m	General business and other £m	Total £m	Total £m
<b>Total IFRS assets included in the consolidated statement of financial position</b>	<b>286,485</b>	<b>29,204</b>	<b>315,689</b>	312,376
Less: third party funds included within consolidated IFRS assets	—	(13,525)	(13,525)	(11,814)
	<b>286,485</b>	<b>15,679</b>	<b>302,164</b>	300,562
Third party funds under management			<b>73,114</b>	67,557
			<b>375,278</b>	368,119
Non-managed assets			<b>(26,137)</b>	(31,558)
<b>Funds under management (including discontinued operations)</b>			<b>349,141</b>	336,561
Discontinued operations			<b>(38,148)</b>	(37,110)
<b>Funds under management</b>			<b>310,993</b>	299,451

**A22 – Operational cost base**

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

	2012 £m	2011 £m
Other expenses (as reported) <sup>1</sup>	<b>2,845</b>	2,779
Less: Non-operating items (including amortisation and impairments)	<b>(455)</b>	(626)
Add: Claims handling costs <sup>1 &amp; 2</sup>	<b>337</b>	539
Non-commission acquisition costs <sup>3</sup>	<b>968</b>	1,112
<b>Operating cost base from continuing operations</b>	<b>3,695</b>	3,804
<b>Operating cost base from discontinued operations</b>	<b>279</b>	675
<b>Operating cost base</b>	<b>3,974</b>	4,479

1. 2011 includes RAC Limited ("RAC"), disposed on 30 September 2011.

2. As reported within Claims and benefits paid of £23,601 million (FY11: £24,380 million).

3. As reported within Fee and commissions expense of £4,472 million (FY11: £4,326 million).

During FY12, the operating cost base from continuing operations decreased by 3% to £3,695 million (FY11: £3,804 million). The like-for-like cost base presented below is adjusted for the impact of foreign exchange, businesses acquired or disposed, Solvency II project costs and elimination of one-off restructuring and integration spend. On a like-for-like basis the cost base decreased by 4% (£132 million) to £3,234 million compared with a 31 December 2011 like-for-like cost base of £3,366 million. This improvement reflects the benefits from cost saving initiatives undertaken during 2012, including the removal of the European and North American regional offices and reducing the number of management levels from nine to five as part of the Group's Simplify programme. These savings have been achieved after absorbing the impact of inflation of £107 million.

**Movement in operating cost base**

	£m
Total operating cost base 2011	<b>4,479</b>
Delta Lloyd costs from 1 January 2011 to 6 May 2011 <sup>1</sup>	<b>(362)</b>
United States costs 2011 <sup>2</sup>	<b>(313)</b>
Total operating cost base from continuing operations 2011	<b>3,804</b>
Less: restructuring and integration costs for 2011	<b>(255)</b>
Impact of acquisitions/disposals <sup>3</sup>	<b>(113)</b>
Foreign exchange	<b>(70)</b>
<b>2011 like-for-like operating cost base<sup>4</sup></b>	<b>3,366</b>
<b>Inflation<sup>5</sup></b>	<b>107</b>
UK & Ireland	<b>(161)</b>
France	<b>(33)</b>
Canada	<b>16</b>
Other Developed Markets	<b>(25)</b>
<b>Developed Markets</b>	<b>(203)</b>
<b>Higher Growth Markets</b>	<b>(23)</b>
<b>Other businesses (including Aviva Investors and Group centre)</b>	<b>(13)</b>
<b>2012 like-for-like operating cost base</b>	<b>3,234</b>
Restructuring and integration costs for 2012	<b>461</b>
Total operating cost base from continuing operations 2012	<b>3,695</b>
United States costs 2012	<b>279</b>
<b>Total operating cost base 2012</b>	<b>3,974</b>

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

2. United States classified as discontinued operations following the disposal announcement.

3. Impact of acquisitions/disposals – restatement of the 2011 cost base for the impact of acquisitions and disposals in both 2011 and 2012 (including the RAC disposal) to achieve a cost base on a like-for-like basis.

4. European Leves have now been included within the like-for-like category as there is minimum year on year variance.

5. Inflation – Notional level of inflation that would have impacted the operating cost base during the period. This is calculated at an individual country level, and applied to operating expenditure i.e. excluding restructuring and integration costs (but including adjustments for acquisitions and disposals). The overall weighted average is calculated at 3.1%.

# New business

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# New business

## B1 – Life and pensions sales

	Present value of new business premiums <sup>1</sup>		Value of new business		New business margin	
	2012 £m	2011 £m	2012 £m	2011 £m	2012 %	2011 %
<b>Gross of tax and non-controlling interest</b>						
United Kingdom	<b>10,410</b>	11,254	<b>420</b>	380	<b>4.0%</b>	3.4%
Ireland	<b>632</b>	917	<b>(8)</b>	(4)	<b>(1.3)%</b>	(0.4)%
United Kingdom & Ireland	<b>11,042</b>	12,171	<b>412</b>	376	<b>3.7%</b>	3.1%
France	<b>3,638</b>	4,047	<b>119</b>	142	<b>3.3%</b>	3.5%
Spain	<b>1,295</b>	1,926	<b>56</b>	86	<b>4.3%</b>	4.5%
Italy	<b>1,971</b>	2,993	<b>29</b>	75	<b>1.5%</b>	2.5%
Other	<b>159</b>	262	<b>—</b>	5	<b>—</b>	1.9%
<b>Developed markets</b>	<b>18,105</b>	21,399	<b>616</b>	684	<b>3.4%</b>	3.2%
Poland	<b>373</b>	487	<b>35</b>	45	<b>9.4%</b>	9.2%
Asia	<b>1,765</b>	1,782	<b>63</b>	71	<b>3.6%</b>	4.0%
Other	<b>403</b>	320	<b>32</b>	20	<b>7.9%</b>	6.3%
<b>Higher growth markets</b>	<b>2,541</b>	2,589	<b>130</b>	136	<b>5.1%</b>	5.3%
<b>Total life and pensions – continuing operations</b>	<b>20,646</b>	23,988	<b>746</b>	820	<b>3.6%</b>	3.4%
<b>Total life and pensions – discontinued operations<sup>2</sup></b>	<b>4,039</b>	5,017	<b>(280)</b>	(130)	<b>(6.9)%</b>	(2.6)%
<b>Total life and pensions</b>	<b>24,685</b>	29,005	<b>466</b>	690	<b>1.9%</b>	2.4%

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

<sup>2</sup> Current period represents the results of the United States and prior period represents the results of the United States and Delta Lloyd up to 6 May 2011.

Total **Life and pensions** sales are £24,685 million (*FY11: £29,005 million*). Excluding discontinued business, total life and pensions sales decreased 14% to £20,646 million (*FY11: £23,988 million*).

The new business margin for continuing business increased to 3.6% (*FY11: 3.4%*), principally driven by the improvement in the UK. Value of new business was £746 million (*FY11: £820 million*) a reduction of 9%, with the impact of the 14% reduction in volume only partially offset by the improvement in new business margin.

New business internal rates of return (IRR) are included in the Capital Management section, note C2ii.

### Developed Markets

#### United Kingdom & Ireland

In the **United Kingdom**, overall new business margin improved to 4.0% (*FY11: 3.4%*) and IRR improved to 18% (*FY11: 15%*) due to pricing actions on our core products and the withdrawal of products not meeting our hurdle rates, including large scale bulk purchase annuities, unit linked guarantee bond and building society partnerships.

Total **life and pension** sales in the United Kingdom were down 7% to £10,410 million (*FY11: £11,254 million*). However, excluding bulk purchase annuities sales increased slightly to £10,223 million (*FY11: £10,179 million*).

**Protection** sales were up 20% to £1,228 million (*FY11: £1,025 million*), benefiting from a full year's sales from our distribution deal with Santander. In 2012 we also secured an exclusive five-year distribution agreement for the sale of protection products with Tesco Bank, with sales starting in the fourth quarter of 2012.

Total sales of **Annuities** were down 16% to £3,211 million (*FY11: £3,832 million*) following our decision to withdraw from the large scale bulk purchase annuity market. However, sales of Individual Annuities were up 10% to £3,024 million despite price increases to manage capital usage and we remain the market leader<sup>1</sup>. Sales of Equity Release were up 37% to £434 million (*FY11: £317 million*) as we deployed risk based pricing expertise, developed in the annuities market, to this product.

**Pensions** sales were down 2% to £5,158 million (*FY11: £5,279 million*). Within this, Group Personal Pensions sales were up 9% to £3,231 million (*FY11: £2,961 million*) as we benefited from high levels of activity in the run up to Retail Distribution Review (RDR) and Auto-Enrolment. Individual Pensions (including SIPP) were down 4% to £1,803 million (*FY11: £1,876 million*) as we maintained a disciplined approach to pricing. SIPP sales on our Platform grew strongly, up 123% to £408 million (*FY11: £183 million*). Corporate Pension sales were £124 million (*FY11: £442 million*).

Sales of **Bonds** were down 53% to £379 million, impacted by changes in distribution channels in advance of RDR.

**Ireland** sales were down 31% to £632 million (*FY11: £917 million*) due to the closure to new business of our joint venture with Allied Irish Bank ("AIB") from April 2012. Our non AIB business sales were £530 million (*FY11: £485 million*), driven by the success of our fixed rate deposit funds and the re-launch of protection business in the second half of 2012.

## B1 – Life and pensions sales continued

### France

Total **life and pensions** sales decreased 10% to £3,638 million (*FY11: £4,047 million*), a reduction of 4% on a local currency basis, with sales in the AFER product declining and sales through the Bancassurance channel remaining broadly flat. This is compared with a 10% fall in the French market<sup>2</sup>, as the tough economic environment and uncertainty around local tax regimes continue to impact consumer confidence. IRR is 11% (*FY11: 11%*) and new business margin is 3.3% (*FY11: 3.5%*)

### Spain

**Life and pensions** sales in Spain decreased by 33% (28% on a local currency basis) to £1,295 million (*FY11: £1,926 million*). A substantial part of this reduction has been the result of management action focusing on the efficient use of capital. The business has directed attention on retaining profitable protection business, whilst developing capital efficient products, including unit linked savings. However, the economic position and the consolidation of the financial sector have meant that mortgage and loan related risk new business is also down on 2011. Despite this, the IRR remains strong at 21% (*FY11: 23%*) and new business margin is broadly stable at 4.3% (*FY11: 4.5%*).

### Italy

Total **life and pensions** sales fell 34% to £1,971 million (*FY11: £2,993 million*), a decrease of 30% on a local currency basis. The weak demand for mortgages has led to a 40% deterioration in protection product sales and the reduced consumer appetite for investment products has resulted in 34% lower savings volumes. In addition, we have taken actions to improve profitability and reduce the level of capital intensive products by shifting the business mix away from with-profit to unit-linked products. However, while the change in business mix has helped to maintain IRR at 12% (*FY11: 12%*) new business margin has reduced to 1.5% (*FY11: 2.5%*).

### Higher growth markets

#### Poland

In **Poland**, life and pension sales decreased by 23% to £373 million (*FY11: £487 million*) a decrease of 17% on a local currency basis, due to a lower appetite for unit-linked products together with a change in regulation to prevent proactive marketing of pension plans. Margin was slightly up at 9.4% (*FY11: 9.2%*) and IRR was 20% (*FY11: 24%*).

### Asia

**Singapore** continued its strong double-digit growth for the third consecutive year increasing to £688 million (*FY11: £538 million*) driven by a positive bancassurance performance through our partnership with Development Bank of Singapore.

In **China**, the economic downturn coupled with high commodity prices led to a weakening of consumer purchasing power. Attractive bank interest rates further reduced demand for traditional longer term saving products and life and pension sales decreased by 22% to £286 million (*FY11: £366 million*).

In **India**, long term savings sales decreased by 14% to £81 million (*FY11: £94 million*), a reduction of 2% on a local currency basis, as regulatory changes continue to disrupt the industry, including new bancassurance regulations and regulatory changes impacting the structure of traditional products. We are one of the first insurers to launch an online insurance sales portal.

In **Hong Kong**, life and pension sales decreased by 21% to £122 million (*FY11: £154 million*) in a difficult market for unit-linked products.

Life and pensions sales in the rest of Asia were £588 million (*FY11: £630 million*).

The overall IRR for our Asia markets was 11% (*FY11: 13%*) and new business margin was 3.6% (*FY11: 4.0%*).

### Other Higher growth markets

In **Other higher growth markets**, life and pension sales increased by 26% to £403 million (*FY11: £320 million*), mainly in **Turkey** where life and pension sales increased by 35% to £312 million (*FY11: £231 million*) as we continue to strengthen bancassurance and direct sales force distribution channels.

### Discontinued Operations – United States

Discontinued operations include life and pensions sales in the **United States** of £4,039 million (*FY11: £3,932 million*). Life sales, which account for over 36% of total sales, were £1,441 million (*FY11: £1,093 million*). Sales of our annuity products declined by 8% to £2,598 million (*FY11: £2,839 million*) as a result of pricing actions we have taken throughout the year in response to the low interest rate environment. The life new business IRR was 17% (*FY11: 14%*), however, new business margin was negative at 6.9% driven particularly by the current low interest rates in the United States.

## B2 – Investment sales

Investment Sales <sup>1</sup>	2012 £m	2011 £m
United Kingdom & Ireland	1,730	1,689
Aviva Investors	2,727	1,598
Higher growth markets	129	186
<b>Total investment sales – continuing operations</b>	<b>4,586</b>	<b>3,473</b>
<b>Total investment sales – discontinued operations<sup>2</sup></b>	<b>—</b>	<b>170</b>
<b>Total investment sales</b>	<b>4,586</b>	<b>3,643</b>

<sup>1</sup> Investment sales are calculated as new single premiums plus the annualised value of new regular premiums.

<sup>2</sup> Current period represents the results of the United States and prior period represents the results of the United States and Delta Lloyd up to 6 May 2011.

Total **investment sales** from continuing operations of £4,586 million were 32% higher than last year (*FY11: £3,473 million*).

**UK & Ireland** investment sales (Collective Investments) increased 2% to £1,730 million (*FY11: £1,689 million*) in difficult trading conditions, supported by growth in sales through our wrap platform, up 151% to £221 million.

**Aviva Investors** investment sales were £2,727 million (*FY11: £1,598 million*). The opening of our distribution offices in Europe contributed to most of this growth together with an increase in higher yield bond sales reflecting new mandates in Taiwan.

Investment sales in **Higher growth markets** were 31% lower at £129 million (*FY11: £186 million*) reflecting lower consumer confidence in the face of volatile investment markets and challenging economic conditions.

## B3 – Geographical analysis of life, pension and investment sales

Present value of new business premiums <sup>1</sup>	2012 £m	2011 £m	% Growth	
			Sterling	Local currency <sup>2</sup>
<b>Life and pensions business</b>				
United Kingdom	10,410	11,254	(7)%	(7)%
Ireland	632	917	(31)%	(26)%
United Kingdom & Ireland	11,042	12,171	(9)%	(9)%
France	3,638	4,047	(10)%	(4)%
Spain	1,295	1,926	(33)%	(28)%
Italy	1,971	2,993	(34)%	(30)%
Other	159	262	(39)%	(34)%
<b>Developed markets</b>	<b>18,105</b>	<b>21,399</b>	<b>(15)%</b>	<b>(13)%</b>
Poland	373	487	(23)%	(17)%
China	286	366	(22)%	(25)%
Hong Kong	122	154	(21)%	(22)%
India	81	94	(14)%	(2)%
Singapore	688	538	28%	25%
South Korea	435	481	(10)%	(9)%
Other	556	469	19%	25%
<b>Higher growth markets</b>	<b>2,541</b>	<b>2,589</b>	<b>(2)%</b>	<b>—</b>
<b>Total life and pensions – continuing operations</b>	<b>20,646</b>	<b>23,988</b>	<b>(14)%</b>	<b>(11)%</b>
<b>Total life and pensions – discontinued operations<sup>3</sup></b>	<b>4,039</b>	<b>5,017</b>	<b>(19)%</b>	<b>(19)%</b>
<b>Total life and pensions</b>	<b>24,685</b>	<b>29,005</b>	<b>(15)%</b>	<b>(13)%</b>
<b>Investment sales<sup>4</sup></b>				
United Kingdom & Ireland	1,730	1,689	2%	2%
Aviva Investors	2,727	1,598	71%	80%
Higher growth markets	129	186	(31)%	(32)%
<b>Total investment sales – continuing operations</b>	<b>4,586</b>	<b>3,473</b>	<b>32%</b>	<b>35%</b>
<b>Total investment sales – discontinued operations<sup>3</sup></b>	<b>—</b>	<b>170</b>	<b>(100)%</b>	<b>(100)%</b>
<b>Total investment sales</b>	<b>4,586</b>	<b>3,643</b>	<b>26%</b>	<b>29%</b>
<b>Total long-term savings sales – continuing operations</b>	<b>25,232</b>	<b>27,461</b>	<b>(8)%</b>	<b>(5)%</b>
<b>Total long-term savings sales – discontinued operations</b>	<b>4,039</b>	<b>5,187</b>	<b>(22)%</b>	<b>(21)%</b>
<b>Total long-term savings sales</b>	<b>29,271</b>	<b>32,648</b>	<b>(10)%</b>	<b>(8)%</b>

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

<sup>2</sup> Growth rates are calculated based on constant rates of exchange.

<sup>3</sup> Current period represents the results of the United States and prior period represents the results of the United States and Delta Lloyd up to 6 May 2011.

<sup>4</sup> Investment sales are calculated as new single premiums plus the annualised value of new regular premiums.



## B4 – Product analysis of life and pensions sales

	2012 £m	2011 £m	Sterling	% Growth Local currency <sup>2</sup>
<b>Present value of new business premiums<sup>1</sup></b>				
<b>Life and pensions business</b>				
Pensions	5,158	5,279	(2)%	(2)%
Annuities	3,211	3,832	(16)%	(16)%
Bonds	379	801	(53)%	(53)%
Protection	1,228	1,025	20%	20%
Equity release	434	317	37%	37%
United Kingdom	10,410	11,254	(7)%	(7)%
Ireland	632	917	(31)%	(26)%
United Kingdom & Ireland	11,042	12,171	(9)%	(9)%
Savings	3,462	3,886	(11)%	(5)%
Protection	176	161	9%	17%
France	3,638	4,047	(10)%	(4)%
Pensions	392	532	(26)%	(21)%
Savings	2,623	4,064	(35)%	(31)%
Annuities	39	54	(28)%	(22)%
Protection	371	531	(30)%	(25)%
Italy, Spain and Other	3,425	5,181	(34)%	(29)%
<b>Developed markets</b>	18,105	21,399	(15)%	(13)%
<b>Higher growth markets</b>	2,541	2,589	(2)%	—
<b>Total life and pensions sales – continuing operations</b>	20,646	23,988	(14)%	(11)%
<b>Total life and pensions sales – discontinued operations<sup>3</sup></b>	4,039	5,017	(19)%	(19)%
<b>Total life and pensions sales</b>	24,685	29,005	(15)%	(13)%

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

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

3. Current period represents the results of the United States and prior period represents the results of the United States and Delta Lloyd up to 6 May 2011.

## B5 – Trend analysis of PVNBP – cumulative

	1Q11 YTD £m	2Q11 YTD £m	3Q11 YTD £m	4Q11 YTD £m	1Q12 YTD £m	2Q12 YTD £m	3Q12 YTD £m	4Q12 YTD £m	% Growth on 4Q11 YTD
<b>Life and pensions business – Present value of new business premiums<sup>1</sup></b>									
Pensions	1,105	2,708	3,963	5,279	1,251	2,762	3,963	5,158	(2)%
Annuities	785	1,610	2,434	3,832	662	1,555	2,459	3,211	(16)%
Bonds	271	466	638	801	128	253	322	379	(53)%
Protection	250	490	749	1,025	300	608	920	1,228	20%
Equity release	83	160	234	317	89	209	338	434	37%
United Kingdom	2,494	5,434	8,018	11,254	2,430	5,387	8,002	10,410	(7)%
Ireland	280	553	757	917	199	342	469	632	(31)%
United Kingdom & Ireland	2,774	5,987	8,775	12,171	2,629	5,729	8,471	11,042	(9)%
France	1,271	2,345	3,224	4,047	1,092	1,944	2,671	3,638	(10)%
Spain	524	1,015	1,425	1,926	402	705	934	1,295	(33)%
Italy	874	1,778	2,517	2,993	673	1,259	1,603	1,971	(34)%
Other	79	155	228	262	50	98	146	159	(39)%
<b>Developed markets</b>	5,522	11,280	16,169	21,399	4,846	9,735	13,825	18,105	(15)%
Poland	149	305	403	487	107	201	274	373	(23)%
Asia	426	902	1,343	1,782	442	913	1,367	1,765	(1)%
Other	91	172	237	320	87	181	277	403	26%
<b>Higher growth markets</b>	666	1,379	1,983	2,589	636	1,295	1,918	2,541	(2)%
<b>Total life and pensions</b>	6,188	12,659	18,152	23,988	5,482	11,030	15,743	20,646	(14)%
<b>Investment sales<sup>2</sup></b>	869	1,830	2,682	3,473	949	1,934	3,400	4,586	32%
<b>Total long-term saving sales – continuing operations</b>	7,057	14,489	20,834	27,461	6,431	12,964	19,143	25,232	(8)%
<b>Total long-term saving sales – discontinued operations<sup>3</sup></b>	1,707	2,913	4,051	5,187	1,034	2,073	3,071	4,039	(22)%
<b>Total long-term saving sales</b>	8,764	17,402	24,885	32,648	7,465	15,037	22,214	29,271	(10)%

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

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

3. Current period represents the results of the United States and prior period represents the results of the United States and Delta Lloyd up to 6 May 2011.

## B6 – Trend analysis of PVNBP – discrete

	1Q11 £m	2Q11 £m	3Q11 £m	4Q11 £m	1Q12 £m	2Q12 £m	3Q12 £m	4Q12 £m	% Growth on 3Q12 Sterling
<b>Life and pensions business – Present value of new business premiums<sup>1</sup></b>									
Pensions	1,105	1,603	1,255	1,316	1,251	1,511	1,201	<b>1,195</b>	—
Annuities	785	825	824	1,398	662	893	904	<b>752</b>	(17)%
Bonds	271	195	172	163	128	125	69	<b>57</b>	(17)%
Protection	250	240	259	276	300	308	312	<b>308</b>	(1)%
Equity release	83	77	74	83	89	120	129	<b>96</b>	(26)%
United Kingdom	2,494	2,940	2,584	3,236	2,430	2,957	2,615	<b>2,408</b>	(8)%
Ireland	280	273	204	160	199	143	127	<b>163</b>	28%
United Kingdom & Ireland	2,774	3,213	2,788	3,396	2,629	3,100	2,742	<b>2,571</b>	(6)%
France	1,271	1,074	879	823	1,092	852	727	<b>967</b>	33%
Spain	524	491	410	501	402	303	229	<b>361</b>	58%
Italy	874	904	739	476	673	586	344	<b>368</b>	7%
Other	79	76	73	34	50	48	48	<b>13</b>	(73)%
<b>Developed markets</b>	5,522	5,758	4,889	5,230	4,846	4,889	4,090	<b>4,280</b>	5%
Poland	149	156	98	84	107	94	73	<b>99</b>	36%
Asia	426	476	441	439	442	471	454	<b>398</b>	(12)%
Other	91	81	65	83	87	94	96	<b>126</b>	31%
<b>Higher growth markets</b>	666	713	604	606	636	659	623	<b>623</b>	—
<b>Total life and pensions</b>	6,188	6,471	5,493	5,836	5,482	5,548	4,713	<b>4,903</b>	4%
<b>Investment sales<sup>2</sup></b>	869	961	852	791	949	985	1,466	<b>1,186</b>	(19)%
<b>Total long-term saving sales – continuing operations</b>	7,057	7,432	6,345	6,627	6,431	6,533	6,179	<b>6,089</b>	(1)%
<b>Total long-term saving sales – discontinued operations<sup>3</sup></b>	1,707	1,206	1,138	1,136	1,034	1,039	998	<b>968</b>	(3)%
<b>Total long-term saving sales</b>	8,764	8,638	7,483	7,763	7,465	7,572	7,177	<b>7,057</b>	(2)%

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

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

3. Current period represents the results of the United States and prior period represents the results of the United States and Delta Lloyd up to 6 May 2011.

## B7 – Geographical analysis of regular and single premiums – life and pensions sales

	Regular premiums								Single premiums		
	2012 £m	Local currency growth	WACF	Present value £m	2011 £m	Local currency growth	WACF	Present value £m	2012 £m	2011 £m	Local currency growth
Pensions	595	(2)%	4.3	2,565	608	40%	4.5	2,750	2,593	2,529	3%
Annuities	—	—	—	—	—	—	—	—	3,211	3,832	(16)%
Bonds	—	—	—	—	—	—	—	1	379	800	(53)%
Protection	176	11%	7.0	1,228	158	10%	6.5	1,025	—	—	—
Equity release	—	—	—	—	—	—	—	—	434	317	37%
United Kingdom	771	1%	4.9	3,793	766	32%	4.9	3,776	6,617	7,478	(12)%
Ireland	33	(34)%	3.8	127	53	(20)%	3.9	205	505	712	(24)%
United Kingdom & Ireland	804	(1)%	4.9	3,920	819	27%	4.9	3,981	7,122	8,190	(13)%
France	74	(3)%	7.9	584	81	(11)%	6.7	540	3,054	3,507	(7)%
Spain	67	(22)%	5.6	375	92	(17)%	5.4	501	920	1,425	(31)%
Italy	54	—	5.9	317	58	14%	5.4	316	1,654	2,677	(34)%
Other	7	(59)%	8.9	62	19	(31)%	8.8	168	97	94	7%
<b>Developed markets</b>	<b>1,006</b>	<b>(4)%</b>	<b>5.2</b>	<b>5,258</b>	<b>1,069</b>	<b>16%</b>	<b>5.2</b>	<b>5,506</b>	<b>12,847</b>	<b>15,893</b>	<b>(16)%</b>
Poland	36	(22)%	7.3	261	50	—	7.3	367	112	120	2%
Asia	282	(4)%	5.3	1,482	295	21%	4.9	1,444	283	338	(17)%
Other	79	22%	3.7	290	68	23%	3.6	246	113	74	61%
<b>Higher growth markets</b>	<b>397</b>	<b>(2)%</b>	<b>5.1</b>	<b>2,033</b>	<b>413</b>	<b>19%</b>	<b>5.0</b>	<b>2,057</b>	<b>508</b>	<b>532</b>	<b>(3)%</b>
<b>Total life and pension sales – continuing operations</b>	<b>1,403</b>	<b>(4)%</b>	<b>5.2</b>	<b>7,291</b>	<b>1,482</b>	<b>17%</b>	<b>5.1</b>	<b>7,563</b>	<b>13,355</b>	<b>16,425</b>	<b>(16)%</b>
<b>Total life and pension sales – discontinued operations<sup>1</sup></b>	<b>130</b>	<b>(27)%</b>	<b>11.1</b>	<b>1,440</b>	<b>182</b>	<b>(32)%</b>	<b>9.6</b>	<b>1,751</b>	<b>2,599</b>	<b>3,266</b>	<b>(20)%</b>
<b>Total life and pension sales</b>	<b>1,533</b>	<b>(6)%</b>	<b>5.7</b>	<b>8,731</b>	<b>1,664</b>	<b>8%</b>	<b>5.6</b>	<b>9,314</b>	<b>15,954</b>	<b>19,691</b>	<b>(17)%</b>

1. Current period represents the results of the United States and prior period represents the results of the United States and Delta Lloyd up to 6 May 2011.

## B8 – Geographical analysis of regular and single premiums – investment sales

Investment sales	Regular				Single		PVNB
	2012 £m	2011 £m	Local currency growth	2012 £m	2011 £m	Local currency growth	Local currency growth
United Kingdom & Ireland	9	6	50%	1,721	1,683	2%	2%
Aviva Investors	5	6	(17)%	2,722	1,592	81%	80%
Higher growth markets	—	—	—	129	186	(32)%	(32)%
<b>Total investment sales – continuing operations</b>	<b>14</b>	<b>12</b>	<b>17%</b>	<b>4,572</b>	<b>3,461</b>	<b>35%</b>	<b>35%</b>
<b>Total investment sales – discontinued operations<sup>1</sup></b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>8</b>	<b>(100)%</b>	<b>(100)%</b>
<b>Total investment sales</b>	<b>14</b>	<b>12</b>	<b>17%</b>	<b>4,572</b>	<b>3,469</b>	<b>35%</b>	<b>29%</b>

1. Current period represents the results of the United States and prior period represents the results of the United States and Delta Lloyd up to 6 May 2011.

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

	Present value of new business premiums		Value of new business		New business margin	
	2012 £m	2011 £m	2012 £m	2011 £m	2012 %	2011 %
<b>Net of tax and non-controlling interest</b>						
United Kingdom	<b>10,410</b>	11,254	<b>319</b>	281	<b>3.1%</b>	2.5%
Ireland	<b>474</b>	688	<b>(6)</b>	(3)	<b>(1.3)%</b>	(0.4)%
United Kingdom & Ireland	<b>10,884</b>	11,942	<b>313</b>	278	<b>2.9%</b>	2.3%
France	<b>2,996</b>	3,376	<b>67</b>	79	<b>2.2%</b>	2.3%
Spain	<b>719</b>	1,054	<b>15</b>	28	<b>2.1%</b>	2.7%
Italy	<b>841</b>	1,336	<b>8</b>	23	<b>1.0%</b>	1.7%
Other	<b>158</b>	262	<b>—</b>	4	<b>—</b>	1.5%
<b>Developed markets</b>	<b>15,598</b>	17,970	<b>403</b>	412	<b>2.6%</b>	2.3%
Poland	<b>339</b>	440	<b>26</b>	34	<b>7.7%</b>	7.7%
Asia	<b>1,748</b>	1,756	<b>50</b>	55	<b>2.9%</b>	3.1%
Other	<b>403</b>	320	<b>26</b>	16	<b>6.5%</b>	5.0%
<b>Higher growth markets</b>	<b>2,490</b>	2,516	<b>102</b>	105	<b>4.1%</b>	4.2%
<b>Total life and pensions – continuing operations</b>	<b>18,088</b>	20,486	<b>505</b>	517	<b>2.8%</b>	2.5%
<b>Total life and pensions – discontinued operations<sup>1</sup></b>	<b>4,039</b>	4,531	<b>(182)</b>	(85)	<b>(4.5)%</b>	(1.9)%
<b>Total life and pensions</b>	<b>22,127</b>	25,017	<b>323</b>	432	<b>1.5%</b>	1.7%

1. Current period represents the results of the United States and prior period represents the results of the United States and Delta Lloyd up to 6 May 2011.

# Capital management

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# Capital management

## C1 – Capital management

### C1i – Capital Management objectives and approach

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

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

In managing capital we seek to:

- maintain sufficient, but not excessive, financial strength in accordance with risk appetite, to support new business growth and satisfy the requirements of our regulators and other stakeholders giving both our customers and shareholders assurance of our financial strength;
- optimise our overall debt to equity structure to enhance our returns to shareholders, subject to our capital risk appetite and balancing the requirements of the range of stakeholders;
- retain financial flexibility by maintaining strong liquidity, including significant unutilised committed credit facilities and access to a range of capital markets;
- allocate capital rigorously across the Group, to drive value adding growth through optimising risk and return; and
- declare dividends with reference to factors including growth in cash flows and earnings.

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

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

### Regulatory capital

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

### Rating agency capital

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

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

The Group's overall financial strength is reflected in our credit ratings. The Group's rating from Standard and Poors is A+ ("strong") with a Stable outlook; Aa3 ("excellent") with a Negative outlook from Moody's; and A ("excellent") with a Stable outlook from AMBest.

## C1 – Capital management continued

### C1 ii Economic capital

We use a risk-based capital model to assess economic capital requirements and to aid in risk and capital management across the Group. The model is based on a framework for identifying the risks to which business units, and the group as a whole, are exposed. Where appropriate, businesses also supplement these with additional risk models and stressed scenarios specific to their own risk profile. When aggregating capital requirements at business unit and group level, we allow for diversification benefits between risks and between businesses, with restrictions to allow for non-fungibility of capital where appropriate. This means that the aggregate capital requirement is less than the sum of capital required to cover all of the individual risks. The capital requirement reflects the cost of mitigating the risk of insolvency to a 99.5% confidence level over a one year time horizon (equivalent to events occurring in 1 out of 200 years) against financial and non-financial tests.

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

### Capital Management

The estimated economic capital surplus represents the excess of Available Economic Capital over Required Economic Capital. Available Economic Capital is based on MCEV<sup>1</sup> net assets, adjusted for items to convert to an economic basis. Required Economic Capital is based on Aviva's own internal assessment and capital management policies. The term 'economic capital' does not imply capital as required by regulators or other third parties.

### Summary analysis of Estimated Economic Capital Position

	2012 £bn	2011 £bn
Available economic capital	16.6	15.7
Standalone required economic capital	(18.1)	(18.9)
Diversification benefit	6.8	6.8
Diversified required economic capital	(11.3)	(12.1)
<b>Estimated economic capital position at 31 December 2012</b>	<b>5.3</b>	<b>3.6</b>
<b>Cover Ratio</b>	<b>147%</b>	<b>130%</b>
Proforma impacts	1.8	n/a
<b>Estimated proforma economic capital position at 31 December 2012</b>	<b>7.1</b>	<b>n/a</b>
<b>Proforma cover ratio</b>	<b>172%</b>	<b>n/a</b>

### Analysis of Change

	2012 £bn
<b>Economic capital position at 31 December 2011</b>	<b>3.6</b>
MCEV operating earnings	0.9
Economic variances	0.7
Other non-operating items	(0.6)
Dividend and appropriations, net of shares issued in lieu of dividends	(0.7)
Net impact of fixed rate note issuance/call	0.2
Other	0.4
<b>Change in available economic capital</b>	<b>0.9</b>
Impact of trading operations and other	0.4
Impact of credit hedging	0.2
Capital requirement benefits from Delta Lloyd partial sell-down	0.2
<b>Change in diversified required economic capital</b>	<b>0.8</b>
<b>Estimated economic capital position at 31 December 2012</b>	<b>5.3</b>
Proforma impacts	1.8
<b>Estimated proforma Economic capital position at 31 December 2012</b>	<b>7.1</b>

<sup>1</sup> MCEV: market consistent embedded value. In preparing the MCEV information, the directors have done so in accordance with the MCEV principles with the exception of stating held for sale operations at their expected fair value, as represented by expected sales proceeds, less costs to sell. For more information on MCEV reporting please refer to Supplement 2 MCEV Financial Statements.



## C1 – Capital management continued

### Summary analysis of Diversified Required Economic Capital

	Proforma 2012 £bn	2011 £bn
Credit risk <sup>1</sup>	2.3	3.5
Equity risk <sup>2</sup>	1.7	2.2
Interest rate risk <sup>3</sup>	0.1	0.2
Other market risk <sup>4</sup>	1.5	1.5
Life insurance risk <sup>5</sup>	1.0	1.1
General insurance risk <sup>6</sup>	0.9	0.7
Other risk <sup>7</sup>	2.4	2.9
<b>Total (FY12 proforma basis)</b>	<b>9.9</b>	<b>12.1</b>
<b>Total (FY12 base results)</b>	<b>11.3</b>	<b>12.1</b>

1 Capital held in respect of credit risk recognises the Group's shareholder exposure to changes in the market value of assets and defaults. Assets captured within this category include corporate bonds and non-domestic sovereign. A range of specific stresses are applied reflecting the difference in assumed risk relative to the investment grade and duration. The reduction in the year primarily reflects the disposal of the US but also includes the benefit of hedging instruments purchased in the year.

2 Capital held in respect of equity risk recognises the Group's shareholder exposure to changes in the market value of assets. The reduction in equity risk during the year primarily reflects the impact of the sell-down in Delta Lloyd.

3 Capital held in respect of interest rate risk recognises the Group's shareholder exposure to changes in the market value of assets. A range of specific stresses are applied reflecting the difference in assumed risk relative to investment grade and duration.

4 Capital held in respect of other market risk recognises the Group's shareholder exposure to changes in the market value of commercial mortgages and property, but also captures risk in association with inflation and foreign exchange.

5 Capital held in respect of life insurance risk recognises the Group's shareholder exposure to life insurance specific risks, such as longevity and lapse.

6 Capital held in respect of general insurance risk recognises the Group's shareholder exposure to general insurance specific risks, such as claims volatility and catastrophe.

7 Capital held in respect of other risk recognises the Group's shareholder exposure to specific risks unique to particular business units. The reduction in the year primarily reflects the disposal of the US.

### Solvency II

Following regulatory delays in finalising the Omnibus II Directive, which underpins Solvency II, it became clear that Solvency II would not come into effect on 1 January 2014. Currently the earliest expected effective date is 2 years later, on 1 January 2016. Aviva has been early adopting a number of Solvency II requirements into the ICA, which is the current economic regulatory basis in the UK. Aviva is well placed for review by the FSA on an "ICA plus" basis ("ICA plus" represents how the FSA is addressing the regulatory uncertainty left in the wake of continuing Solvency II implementation delays). Aviva continues to enhance and develop its economic capital infrastructure for full Solvency II compliance by the effective date and actively participate in developments through the key European industry working groups, and engaging with the FSA and HM Treasury to inform the on-going negotiations in Brussels.

## C2 – Capital performance

### C2 i – Capital generation and utilisation

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

Operating capital generation for the full-year 2012 was £2.0 billion. Life businesses generated £2.1 billion of capital (FY11: £2.3 billion), with a further £0.6 billion (FY11: £0.6 billion) generated by the general insurance and fund management businesses and other operations. Capital invested in new business was £0.7 billion (FY11: £0.8 billion), and continues to benefit from management actions to improve capital efficiency. The £0.7 billion of capital investment is primarily in life new business with the impact of capital investment in non-life business broadly neutral over the period.

	2012 £bn	2011 £bn
<b>Operating capital generation:</b>		
Life in-force profits <sup>1</sup>	2.1	2.3
General insurance, fund management and other operations profits	0.6	0.6
<b>Operating capital generated before investment in new business</b>	<b>2.7</b>	<b>2.9</b>
Capital invested in new business	(0.7)	(0.8)
<b>Operating capital generated after investment in new business</b>	<b>2.0</b>	<b>2.1</b>

<sup>1</sup> The Life in-force profits in 2012 exclude the negative impact of a true up relating to a prior estimate of required capital, which is included in the MCEV Free Surplus Emergence, as this does not impact the actual capital generated in 2012.

Operating capital generation comprises the following components:

- Operating Free surplus emergence, including release of required capital, for the life in-force business (net of tax and non-controlling interests);
- Operating profits for the general insurance and non-life businesses (net of tax and non-controlling interests);
- Capital invested in new business. For life business this is the impact of initial and required capital on free surplus. For general insurance business this reflects the movement in required capital, which has been assumed to equal the regulatory minimum multiplied by the local management target level. Where appropriate movements in capital requirements exclude the impact of foreign exchange and other movements deemed to be non-operating in nature.
- Post deconsolidation on 6 May 2011, all Delta Lloyd capital generation, including life business, has been included within general insurance, fund management and other operations profits on an IFRS basis.

The amount of operating capital remitted to Group is dependent upon a number of factors including non-operating items and local regulatory requirements.

As well as financing new business investment, the operating capital generated is used to finance corporate costs, service the Group's debt capital and to finance shareholder dividend distributions. After taking these items into account the net operating capital generation after financing is £0.5 billion.

	2012 £bn	2011 £bn
<b>Operating capital generated after investment in new business</b>	<b>2.0</b>	<b>2.1</b>
Interest, corporate and other costs	(0.8)	(0.6)
External dividends and appropriations, net of shares issued in lieu of dividends	(0.7)	(0.5)
<b>Net operating capital generation after financing</b>	<b>0.5</b>	<b>1.0</b>

### C2 ii – Capital required to write new business, internal rate of return and payback period

As set out in C2i, the Group generates a significant amount of capital each year. This capital generation supports both shareholder distribution and reinvestment in new business. The new business written requires up front capital investment, due to high set-up costs and capital requirements.

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

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

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

**C2 – Capital performance continued****C2 ii – Capital required to write new business, internal rate of return and payback period continued**

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

Gross of non-controlling interests 2012	Internal rate of return %	Initial capital £m	Required capital £m	Total invested capital £m	New business impact on free surplus	Payback period years
United Kingdom	18%	112	164	276	6	6
Ireland	2%	31	10	41	31	25
United Kingdom & Ireland	16%	143	174	317	37	8
France	11%	33	113	146	125	8
Spain	21%	21	42	63	35	4
Italy	12%	20	69	89	41	6
Other	8%	12	1	13	15	10
<b>Developed markets</b>	<b>15%</b>	<b>229</b>	<b>399</b>	<b>628</b>	<b>253</b>	<b>8</b>
Poland	20%	20	8	28	25	4
Asia	11%	60	29	89	82	11
Other	28%	17	15	32	29	3
<b>Higher growth markets</b>	<b>16%</b>	<b>97</b>	<b>52</b>	<b>149</b>	<b>136</b>	<b>8</b>
<b>Total – excluding United States</b>	<b>14.9%</b>	<b>326</b>	<b>451</b>	<b>777</b>	<b>389</b>	<b>8</b>
<b>Total – United States</b>	<b>17%</b>	<b>24</b>	<b>292</b>	<b>316</b>	<b>319</b>	<b>4</b>
<b>Total</b>	<b>15.5%</b>	<b>350</b>	<b>743</b>	<b>1,093</b>	<b>708</b>	<b>7</b>

Gross of non-controlling interests 2011	Internal rate of return %	Initial capital £m	Required capital £m	Total invested capital £m	New business impact on free surplus	Payback period years
United Kingdom	15%	155	187	342	89	7
Ireland	6%	27	22	49	38	12
United Kingdom & Ireland	14%	182	209	391	127	8
France	11%	45	127	172	153	8
Spain	23%	25	70	95	50	4
Italy	12%	24	117	141	66	6
Other	9%	25	1	26	25	8
<b>Developed markets</b>	<b>14%</b>	<b>301</b>	<b>524</b>	<b>825</b>	<b>421</b>	<b>7</b>
Poland	24%	25	9	34	30	4
Asia	13%	56	31	87	80	12
Other	22%	15	12	27	27	4
<b>Higher growth markets</b>	<b>17%</b>	<b>96</b>	<b>52</b>	<b>148</b>	<b>137</b>	<b>9</b>
<b>Total – excluding Delta Lloyd and United States</b>	<b>14.5%</b>	<b>397</b>	<b>576</b>	<b>973</b>	<b>558</b>	<b>7</b>
<b>Total – Delta Lloyd<sup>1</sup> and United States</b>	<b>14%</b>	<b>53</b>	<b>328</b>	<b>381</b>	<b>376</b>	<b>6</b>
<b>Total</b>	<b>14.3%</b>	<b>450</b>	<b>904</b>	<b>1,354</b>	<b>934</b>	<b>7</b>

<sup>1</sup> Comparative periods include the results of Delta Lloyd up to 6 May 2011.

In Ireland, the closure of Ark Life to new business in the first half of 2012 has adversely impacted IRR and payback period as current expenses are spread over a smaller volume of business.

Total invested capital is gross of non-controlling interests and valued on a point of sale basis. This differs from the new business impact on the free surplus which is stated net of non-controlling interests, valued on a year-end basis and benefits from the writing of new business in the UK Life RIEESA. The reconciliation is as follows:

	2012 £m	2011 £m
Total capital invested	1,093	1,354
Non-controlling interests <sup>1</sup>	(112)	(180)
Benefit of RIEESA on new business funding in UK	(220)	(190)
Timing differences (point of sale versus year end basis) <sup>2</sup>	(53)	(50)
<b>New business impact on free surplus</b>	<b>708</b>	<b>934</b>

<sup>1</sup> Non controlling interests primarily in Italy and Spain

<sup>2</sup> Timing differences across all markets

## C2 – Capital performance continued

## C2 iii – Analysis of IFRS basis return on equity

	Operating return <sup>1</sup>		Opening shareholders' funds including non-controlling interests £m	Return on equity %
	Before Tax £m	After tax £m		
<b>2012</b>				
Life assurance	1,831	1,542	11,237	13.7%
General insurance and health <sup>2</sup>	858	633	5,875	10.8%
Fund management	51	36	184	19.6%
Other business	(193)	(135)	(1,102)	12.3%
Corporate <sup>3</sup>	(466)	(538)	508	n/a
<b>Return on total capital employed (excluding Delta Lloyd and United States)</b>	<b>2,081</b>	<b>1,538</b>	<b>16,702</b>	<b>9.2%</b>
Delta Lloyd	112	84	776	10.8%
United States	251	173	3,140	5.5%
<b>Return on total capital employed (including Delta Lloyd and United States)</b>	<b>2,444</b>	<b>1,795</b>	<b>20,618</b>	<b>8.7%</b>
Subordinated debt	(294)	(222)	(4,550)	4.9%
External debt	(23)	(17)	(705)	2.4%
<b>Return on total equity</b>	<b>2,127</b>	<b>1,556</b>	<b>15,363</b>	<b>10.1%</b>
Less: Non-controlling interests		(184)	(1,530)	12.0%
Direct capital instruments and fixed rate tier 1 notes		(55)	(990)	5.6%
Preference capital		(17)	(200)	8.5%
<b>Return on equity shareholders' funds</b>		<b>1,300</b>	<b>12,643</b>	<b>10.3%</b>

<sup>1</sup> The operating return is based upon Group adjusted operating profit, which is stated before impairment of goodwill, amortisation of intangibles, exceptional items and investment variances.

<sup>2</sup> The general insurance & health return on capital employed reduces when compared to 2011 due to the reallocation of goodwill from other business to general insurance and health upon the sale of RAC in 2011.

<sup>3</sup> The 'Corporate' loss before tax of £466 million comprises costs of £136 million, net finance charge on the main UK pension scheme of £35 million and interest on internal lending arrangements of £319 million offset by investment return of £24 million. The corporate ROCE has been reported as 'n/a' as the opening capital is impacted by movements in the pension scheme, thereby making the percentage incomparable with the prior year.

	Operating return <sup>1</sup>		Opening shareholders' funds including non-controlling interests £m	Return on equity %
	Before Tax £m	After tax £m		
<b>2011</b>				
Life assurance	1,926	1,512	11,356	13.3%
General insurance and health	903	657	4,747	13.8%
Fund management	62	49	192	25.5%
Other business	(207)	(148)	(119)	124.4%
Corporate <sup>2</sup>	(436)	(391)	(232)	n/a
<b>Return on total capital employed (excluding Delta Lloyd and United States)</b>	<b>2,248</b>	<b>1,679</b>	<b>15,944</b>	<b>10.5%</b>
Delta Lloyd	352	288	5,089	5.7%
United States	231	88	2,758	3.2%
<b>Return on total capital employed (including Delta Lloyd and United States)</b>	<b>2,831</b>	<b>2,055</b>	<b>23,791</b>	<b>8.6%</b>
Subordinated debt	(302)	(222)	(4,572)	4.9%
External debt	(26)	(19)	(1,494)	1.3%
<b>Return on total equity</b>	<b>2,503</b>	<b>1,814</b>	<b>17,725</b>	<b>10.2%</b>
Less: Non-controlling interests		(223)	(3,741)	6.0%
Direct capital instruments and fixed rate tier 1 notes		(43)	(990)	4.3%
Preference capital		(17)	(200)	8.5%
<b>Return on equity shareholders' funds</b>		<b>1,531</b>	<b>12,794</b>	<b>12.0%</b>

<sup>1</sup> The operating return is based upon Group adjusted operating profit, which is stated before impairment of goodwill, amortisation of intangibles, exceptional items and investment variances.

<sup>2</sup> The 'Corporate' loss before tax of £436 million comprises costs of £138million, net finance charge on the main UK pension scheme of £46 million and interest on internal lending arrangements of £284 million offset by investment return of £32 million. The corporate ROCE has been reported as 'n/a' as the opening capital is impacted by movements in the pension scheme, thereby making the percentage incomparable with the prior year.

## C2 – Capital performance continued

## C2 iv – Analysis of MCEV basis return on equity

	Operating return <sup>1</sup>		Opening shareholders' funds including non-controlling interests £m	Return on equity %
	Before Tax £m	After tax £m		
<b>2012</b>				
Life assurance	2,206	1,630	14,148	11.5%
General insurance and health	858	633	5,875	10.8%
Fund management	24	17	184	9.2%
Other business	(186)	(130)	(1,102)	11.8%
Corporate <sup>2</sup>	(466)	(538)	508	n/a
<b>Return on total capital employed (excluding Delta Lloyd and United States)</b>	<b>2,436</b>	<b>1,612</b>	<b>19,613</b>	<b>8.2%</b>
Delta Lloyd	112	84	776	10.8%
United States	(378)	(244)	361	(67.6)%
<b>Return on total capital employed (including Delta Lloyd and United States)</b>	<b>2,170</b>	<b>1,452</b>	<b>20,750</b>	<b>7.0%</b>
Subordinated debt	(294)	(222)	(4,550)	4.9%
External debt	(23)	(17)	(705)	2.4%
<b>Return on total equity</b>	<b>1,853</b>	<b>1,213</b>	<b>15,495</b>	<b>7.8%</b>
Less: Non-controlling interests		(336)	(1,476)	22.8%
Direct capital instruments and fixed rate tier 1 notes		(55)	(990)	5.6%
Preference capital		(17)	(200)	8.5%
<b>Return on equity shareholders' funds</b>		<b>805</b>	<b>12,829</b>	<b>6.3%</b>

<sup>1</sup> The operating return is based upon Group adjusted operating profit, which is stated before impairment of goodwill, amortisation of intangibles, exceptional items and investment variance.

<sup>2</sup> The 'Corporate' loss before tax of £466 million comprises costs of £136 million, net finance charge on the main UK pension scheme of £35 million and interest on internal lending arrangements of £319 million offset by investment return of £24 million. The corporate ROCE has been reported as 'n/a' as the opening capital is impacted by movements in the pension scheme, thereby making the percentage incomparable with the prior year.

	Operating return <sup>1</sup>		Opening shareholders' funds including non-controlling interests £m	Return on equity %
	Before Tax £m	After tax £m		
<b>2011</b>				
Life assurance	2,888	2,062	16,673	12.4%
General insurance and health	903	657	4,747	13.8%
Fund management	28	18	192	9.4%
Other business	(204)	(144)	(119)	121.0%
Corporate <sup>2</sup>	(436)	(391)	(232)	n/a
<b>Return on total capital employed (excluding Delta Lloyd and United States)</b>	<b>3,179</b>	<b>2,202</b>	<b>21,261</b>	<b>10.4%</b>
Delta Lloyd	444	331	3,892	8.5%
United States	242	158	1,118	14.1%
<b>Return on total capital employed (including Delta Lloyd and United States)</b>	<b>3,865</b>	<b>2,691</b>	<b>26,271</b>	<b>10.2%</b>
Subordinated debt	(302)	(222)	(4,572)	4.9%
External debt	(26)	(19)	(1,494)	1.3%
<b>Return on total equity</b>	<b>3,537</b>	<b>2,450</b>	<b>20,205</b>	<b>12.1%</b>
Less: Non-controlling interests		(253)	(3,977)	6.4%
Direct capital instruments and fixed rate tier 1 notes		(43)	(990)	4.3%
Preference capital		(17)	(200)	8.5%
<b>Return on equity shareholders' funds</b>		<b>2,137</b>	<b>15,038</b>	<b>14.2%</b>

<sup>1</sup> The operating return is based upon Group adjusted operating profit, which is stated before impairment of goodwill, amortisation of intangibles, exceptional items and investment variance.

<sup>2</sup> The 'Corporate' loss before tax of £436million comprises costs of £138million, net finance charge on the main UK pension scheme of £46 million and interest on internal lending arrangements of £284 million offset by investment return of £32 million. The corporate ROCE has been reported as 'n/a' as the opening capital is impacted by movements in the pension scheme, thereby making the percentage incomparable with the prior year.

### C3 – Group capital structure

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

	2012 £m	2011 £m
Long-term savings	16,337	14,148
General insurance and health	6,089	5,875
Fund management	225	184
Other business	(1,059)	(1,102)
Corporate <sup>1</sup>	(588)	508
Delta Lloyd	—	776
United States	365	361
<b>Total capital employed</b>	<b>21,369</b>	<b>20,750</b>
<b>Financed by</b>		
Equity shareholders' funds	12,434	12,829
Non-controlling interests	2,214	1,476
Direct capital instruments and fixed rate tier 1 notes	1,382	990
Preference shares	200	200
Subordinated debt	4,337	4,550
External debt	802	705
<b>Total capital employed</b>	<b>21,369</b>	<b>20,750</b>

<sup>1</sup> "Corporate" includes centrally held tangible net assets, the staff pension scheme surplus and also reflects internal lending arrangements. These internal lending arrangements, which net out on consolidation, arise in relation to the following:

- Aviva Insurance Limited (AI) acts as both a UK general insurer and as the primary holding company for our foreign subsidiaries. Internal capital management mechanisms in place allocate a portion of the total capital of the company to the UK general insurance operations, giving rise to notional lending between the general insurance and holding company activities. These mechanisms also allow for some of the assets of the general insurance business to be made available for use across the Group.
- Certain subsidiaries, subject to continuing to satisfy stand alone capital and liquidity requirements, loan funds to corporate and holding entities. These loans satisfy arm's-length criteria and all interest payments are made when due.
- Subsequent to the year end, the Group has taken action to improve its access to dividends from the Group's insurance and asset management businesses by undertaking a corporate restructure. This will see the Group's interest in the majority of its overseas businesses move to Aviva Group Holdings Limited from Aviva Insurance Limited.

Total capital employed is financed by a combination of equity shareholders' funds, preference capital, subordinated debt and borrowings. At FY12 we had £21.4 billion (*FY11: £20.8 billion*) of total capital employed in our trading operations measured on an MCEV basis.

In May 2012 we issued US\$650 million of Fixed Rate Tier 1 Notes. The Notes are perpetual and may be called from November 2017. The Notes qualify as Innovative Tier 1 capital under current regulatory rules and are expected to be treated as Fixed Rate Tier 1 capital under Solvency II transitional rules. The transaction had a positive impact on Group IGD solvency and Economic Capital measures. In June 2012 US\$300 million of Lower Tier 2 floating rate notes were redeemed at first call.

Financial leverage, the ratio of external senior and subordinated debt to MCEV capital and reserves, was 35.1% (*FY11: 36.7%*). 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 5.1 times (*FY11: 8.9 times*). The impact of the agreement to sell Aviva USA has meant that financial leverage under IFRS is higher at 52.6% (*FY11: 37.1%*).

At FY12 the market value of our external debt, subordinated debt, preference shares (including both Aviva plc preference shares of £200 million and General Accident plc preference shares, within non-controlling interest, of £250 million), and direct capital instruments and fixed rate tier 1 notes was £7,260 million (*FY11: £5,782 million*), with a weighted average cost, post tax, of 4.4% (*FY11: 6.6%*). The Group Weighted Average Cost of Capital (WACC) is 6.3% (*FY11: 7.1%*) 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 FY12 was 7.5% (*FY11: 7.4%*) based on a risk free rate of 1.9% (*FY11: 2.0%*), an equity risk premium of 4.0% (*FY11: 4.0%*) and a market beta of 1.4 (*FY11: 1.3*).

**C3 – Group capital structure continued**

Shareholders' funds, including non-controlling interests

	2012			2011		
	Closing shareholders' funds			Closing shareholders' funds		
	IFRS net assets £m	Internally generated AVIF £m	Total Equity £m	IFRS net assets £m	Internally generated AVIF £m	Total Equity £m
<b>Life assurance</b>						
United Kingdom	4,905	1,595	6,500	4,794	1,421	6,215
Ireland	735	361	1,096	684	365	1,049
United Kingdom & Ireland	5,640	1,956	7,596	5,478	1,786	7,264
France	2,120	1,329	3,449	1,825	1,091	2,916
Spain	1,113	340	1,453	1,160	384	1,544
Italy	1,276	(317)	959	1,266	(1,405)	(139)
Other	54	13	67	238	(140)	98
<b>Developed markets</b>	10,203	3,321	13,524	9,967	1,716	11,683
Poland	336	1,442	1,778	263	1,063	1,326
Asia	784	28	812	865	58	923
Other	144	79	223	142	74	216
<b>Higher Growth markets</b>	1,264	1,549	2,813	1,270	1,195	2,465
	11,467	4,870	16,337	11,237	2,911	14,148
<b>General Insurance and health</b>						
United Kingdom	3,546	—	3,546	3,394	—	3,394
Ireland	355	—	355	408	—	408
United Kingdom & Ireland	3,901	—	3,901	3,802	—	3,802
France	562	—	562	480	—	480
Canada	1,039	—	1,039	1,034	—	1,034
Other	489	—	489	468	—	468
<b>Developed markets</b>	5,991	—	5,991	5,784	—	5,784
<b>Higher Growth markets</b>	98	—	98	91	—	91
	6,089	—	6,089	5,875	—	5,875
Fund Management	225	—	225	184	—	184
Other business	(1,059)	—	(1,059)	(1,102)	—	(1,102)
Corporate	(588)	—	(588)	508	—	508
<b>Total capital employed (excluding Delta Lloyd and United States)</b>	16,134	4,870	21,004	16,702	2,911	19,613
Delta Lloyd	—	—	—	776	—	776
United States	365	—	365	3,140	(2,779)	361
<b>Total capital employed</b>	16,499	4,870	21,369	20,618	132	20,750
Subordinated debt	(4,337)	—	(4,337)	(4,550)	—	(4,550)
External debt	(802)	—	(802)	(705)	—	(705)
<b>Total equity</b>	11,360	4,870	16,230	15,363	132	15,495
Less:						
Non-controlling interests			(2,214)			(1,476)
Direct capital instruments and fixed rate tier 1 notes			(1,382)			(990)
Preference capital			(200)			(200)
<b>Equity shareholders' funds</b>			12,434			12,829
Less: Goodwill and Intangibles <sup>1</sup>			(2,247)			(3,479)
<b>Equity shareholders' funds excluding goodwill and intangibles</b>			10,187			9,350

<sup>1</sup> Goodwill and intangibles comprise £1,609 million (FY 2011: £2,640 million) of goodwill in subsidiaries, £921 million (FY 2011: £1,062 million) of intangibles in subsidiaries, £119 million (FY 2011: £131 million) of goodwill and intangibles in joint ventures and Enil (FY 2011: £115 million) of goodwill in associates, net of associated deferred tax liabilities of £(188)million (FY 2011: £(241) million) and the non controlling interests share of intangibles of £(214)million (FY 2011: £(228) million). The goodwill figure of £1,609 million includes a £94 million adjustment to impair goodwill which has been reflected in the additional value of in-force long-term business in the MCEV balance sheet.



## C4 – Sources of Liquidity

In managing the Group's liquidity requirements, there are a number of external and internal sources of cash and liquid resources, including:

- external debt issuance;
- funds generated by the sale of businesses;
- liquidity generated by operating subsidiaries, associates and joint ventures;
- internal debt; and
- central assets of cash and securities.

The Group uses these sources of liquidity to fund internal investment, debt repayments and payment of dividends to shareholders.

For Aviva plc the principal source of liquidity is dividends and liquid resources provided by its subsidiaries, associates and joint ventures. The level of dividends remitted is based on two primary factors: the financial performance of operating subsidiaries, associates and joint ventures, and the local solvency and capital requirements of individual entities.

The table below shows liquid resources provided to Group Centre from operating companies, subsidiaries, associates and joint ventures in 2012:

	2012 Amounts received £m
UK life insurance	150
UK general insurance	150
Canada	136
France	217
Spain	68
Poland	70
Other operations	153
	<b>944</b>

Subsequent to the year end, the Group has taken action to improve its access to dividends from the Group's insurance and asset management businesses by undertaking a corporate restructuring whereby Aviva Group Holdings ("AGH") has purchased from Aviva Insurance Limited ("AIL") its interest in the majority of its overseas businesses.

Under UK company law, dividends can only be paid if a company has distributable reserves sufficient to cover the dividend. At 31 December 2012, Aviva plc itself had distributable reserves of £3,037 million, which would have covered three years of historic dividend payments to our shareholders. In UK Life, our largest operating subsidiary, distributable reserves, which could be paid to Aviva plc via its intermediate holding company, are created mainly by the statutory long-term business profit transfer to shareholders. While the UK insurance regulatory laws applicable to UK Life and our other UK subsidiaries impose no statutory restrictions on an insurer's ability to declare a dividend, the rules require maintenance of each insurance company's solvency margin, which might impact their ability to pay dividends to the parent company. Our other life and general insurance, and fund management subsidiaries' ability to pay dividends and make loans to the parent company is similarly restricted by local corporate or insurance laws and regulations. In all jurisdictions, when paying dividends, the relevant subsidiary must take into account its capital position and must set the level of dividend to maintain sufficient capital to meet minimum solvency requirements and any additional target capital expected by local regulators. These minimum solvency requirements, which are consolidated under the European Insurance Group Directive, are discussed later in this section under the heading 'Regulatory capital position'. We do not believe that the legal and regulatory restrictions constitute a material limitation on the ability of our businesses to meet their obligations or to pay dividends to the parent company, Aviva plc.

The Group has received and expects to receive proceeds on completion of the disposals as disclosed in Note A3 – Subsidiaries.

Aviva plc has established two main programmes for the issuance of external debt by Aviva plc. For short-term senior debt issuance we have a £2 billion commercial paper programme which allows debt to be issued in a range of currencies. At 31 December 2012, the outstanding debt issued under this programme was £603 million (*FY11: £506 million excludes commercial paper issued by Delta Lloyd*).

For longer term debt we have established a Euro Medium Term Note (EMTN) programme. This programme has documentation readily available to allow quick issuance of long-term debt with a variety of terms and conditions. Debt issued under this programme may be senior debt or regulatory qualifying debt and may have a fixed or floating interest rate. At FY12, the outstanding debt issued under this programme was £2,076 million (*FY11: £1,894 million*).

## C5 – EEV equivalent embedded value

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

The expected release of future profits and required capital is shown in five-year groups. Projected cash flows are those used for Implied Discount Rate (IDR) calculations for in-force business. Held for sale operations have been stated at expected fair value, as represented by the expected sale proceeds, less cost to sell.

The discount rate applied is 6.25% (FY11: 7.05%), based on a risk-free rate of 2.1%, a risk margin of 3.75% and an allowance for the time value of options and guarantees of 0.4%.

The new business margin on continuing operations (net of tax and non-controlling interests) for business written during the period to 31 December 2012 is 2.9% (MCEV: 2.8%).

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

	Net worth		VIF on traditional embedded value		Embedded value	
	2012 £bn	2011 £bn	2012 £bn	2011 £bn	2012 £bn	2011 £bn
United Kingdom & Ireland	4.2	4.3	3.5	3.6	7.7	7.9
Developed markets excluding United Kingdom & Ireland	3.2	2.7	1.5	1.5	4.7	4.2
<b>Developed markets</b>	<b>7.4</b>	<b>7.0</b>	<b>5.0</b>	<b>5.1</b>	<b>12.4</b>	<b>12.1</b>
<b>Higher Growth markets</b>	<b>0.8</b>	<b>0.7</b>	<b>1.5</b>	<b>1.3</b>	<b>2.3</b>	<b>2.0</b>
<b>Total covered business excluding United States</b>	<b>8.2</b>	<b>7.7</b>	<b>6.5</b>	<b>6.4</b>	<b>14.7</b>	<b>14.1</b>
United States					1.1	2.7
<b>Total Covered business</b>					<b>15.8</b>	<b>16.8</b>
<b>Non-covered business</b>					<b>(0.9)</b>	<b>1.7</b>
<b>Total Group EV</b>					<b>14.9</b>	<b>18.5</b>
<b>Less preference share capital, direct capital instruments and fixed rate tier 1 notes</b>					<b>(1.6)</b>	<b>(1.2)</b>
<b>Equity attributable to ordinary shareholders on an EV basis</b>					<b>13.3</b>	<b>17.3</b>

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

#### Total in-force business

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

2012 £bn	Release of future profits and required capital						Total net of non-controlling interest
	Free surplus	0-5 <sup>1</sup>	6-10	11-15	16-20	20+	
United Kingdom & Ireland	1.3	2.5	2.3	2.5	2.1	4.5	13.9
Developed markets excluding United Kingdom & Ireland	0.1	2.6	1.6	1.2	1.0	2.7	9.1
<b>Developed markets</b>	<b>1.4</b>	<b>5.1</b>	<b>3.9</b>	<b>3.7</b>	<b>3.1</b>	<b>7.2</b>	<b>23.0</b>
<b>Higher Growth markets</b>	<b>0.4</b>	<b>1.0</b>	<b>0.8</b>	<b>0.5</b>	<b>0.4</b>	<b>1.2</b>	<b>3.9</b>
<b>Total excluding United States</b>	<b>1.8</b>	<b>6.1</b>	<b>4.7</b>	<b>4.2</b>	<b>3.5</b>	<b>8.4</b>	<b>26.9</b>
United States	0.3	0.8	—	—	—	—	0.8
<b>Total</b>	<b>2.1</b>	<b>6.9</b>	<b>4.7</b>	<b>4.2</b>	<b>3.5</b>	<b>8.4</b>	<b>27.7</b>

<sup>1</sup> For held for sale operations, cash flow emergence is reported in the 0-5 column.

2011 £bn	Release of future profits and required capital						Total net of non-controlling interest
	Free surplus	0-5	6-10	11-15	16-20	20+	
United Kingdom & Ireland	1.0	3.0	3.1	2.6	2.0	4.5	15.2
Developed markets excluding United Kingdom & Ireland	0.0	2.3	1.7	1.3	1.1	3.2	9.6
<b>Developed markets</b>	<b>1.0</b>	<b>5.3</b>	<b>4.8</b>	<b>3.9</b>	<b>3.1</b>	<b>7.7</b>	<b>24.8</b>
<b>Higher Growth markets</b>	<b>0.3</b>	<b>1.0</b>	<b>0.6</b>	<b>0.4</b>	<b>0.4</b>	<b>1.1</b>	<b>3.5</b>
<b>Total excluding United States</b>	<b>1.3</b>	<b>6.3</b>	<b>5.4</b>	<b>4.3</b>	<b>3.5</b>	<b>8.8</b>	<b>28.3</b>
United States	0.0	1.7	0.9	0.7	0.6	0.8	4.7
<b>Total</b>	<b>1.3</b>	<b>8.0</b>	<b>6.3</b>	<b>5.0</b>	<b>4.1</b>	<b>9.6</b>	<b>33.0</b>

## C6 – Regulatory capital

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

Based on individual guidance from the FSA we recognise surpluses of £0.4 billion as at 31 December 2012 (*FY 2011: £0.2 billion*) in the non-profit funds of our UK Life and pensions businesses which is available for transfer to shareholders.

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

	UK life funds £bn	Other business £bn	Total 2012 £bn	Total 2011 £bn
Insurance Groups Directive (IGD) capital resources	<b>5.2</b>	<b>9.2</b>	<b>14.4</b>	14.1
Less: capital resource requirement	<b>(5.2)</b>	<b>(5.4)</b>	<b>(10.6)</b>	(11.9)
Insurance Group Directive (IGD) excess solvency	—	<b>3.8</b>	<b>3.8</b>	2.2
Cover over EU minimum (calculated excluding UK life funds)			<b>1.7 times</b>	1.3 times

The EU Insurance Groups Directive (IGD) regulatory capital solvency surplus has increased by £1.6 billion since 31 December 2011 to £3.8 billion. The key movements over the period are set out in the following table:

	£bn
IGD solvency surplus at 31 December 2011	<b>2.2</b>
Operating profits net of other income and expenses	<b>0.9</b>
Dividend and appropriations, net of shares issued in lieu of dividends	<b>(0.7)</b>
Market movements including foreign exchange <sup>1</sup>	<b>1.3</b>
Pension scheme funding	<b>(0.2)</b>
Movement in hybrid debt	<b>0.2</b>
UK reinsurance transactions	<b>0.1</b>
Increase in Capital Resources Requirement	<b>(0.1)</b>
Other regulatory adjustments	<b>0.1</b>
<b>Estimated IGD solvency surplus at 31 December 2012</b>	<b>3.8</b>

<sup>1</sup> Market movements include the impact of equity, credit spread, interest rate and foreign exchange movements net of the effect of hedging instruments.

On a proforma basis the estimated IGD solvency surplus at 31 December 2012 is £3.9 billion. The proforma 31 December 2012 position includes the impact of the announced disposals of the Aviva US Life and annuities business and related asset management operations, Malaysia and Aseval held for sale in the Group IFRS balance sheet.

## C6 – Regulatory capital continued

### Reconciliation of Group IGD capital resources to FRS 27 capital

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

	2012 £bn
Total capital and reserves (IFRS basis)	11.4
Plus: Other qualifying capital	4.4
Plus: UK unallocated divisible surplus	2.0
Less: Goodwill, acquired AVIF and intangible assets <sup>1</sup>	(3.4)
Less: Adjustments onto a regulatory basis	—
<b>Group Capital Resources on regulatory basis</b>	<b>14.4</b>
The Group Capital Resources can be analysed as follows:	
Core Tier 1 Capital	10.9
Innovative Tier 1 Capital	1.4
Total Tier 1 Capital	12.3
Upper Tier 2 Capital	1.7
Lower Tier 2 Capital	3.1
Group Capital Resources Deductions	(2.7)
<b>Group Capital Resources on regulatory basis (Tier 1 and Tier 2 Capital)</b>	<b>14.4</b>
Less: UK life restricted regulatory assets	(6.1)
Add: UK life unrestricted realistic assets	5.7
Add: Overseas UDS <sup>2</sup> and Shareholders' share of accrued bonus	5.0
<b>Total FRS 27 capital</b>	<b>19.0</b>

<sup>1</sup> Goodwill and other intangibles includes goodwill of £132million in joint ventures and associates and amounts classified as held for sale.

<sup>2</sup> Unallocated divisible surplus for overseas life operations is included gross of minority interest and amounts disclosed include balances classified as held for sale. 2012 includes a negative balance of £2 million in Italy.

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

The available capital of the with-profit funds is represented by the realistic inherited estate. The estate represents the assets of the long-term with-profit funds less the realistic liabilities for non-profit policies within the funds, less asset shares aggregated across the with-profit policies and any additional amounts expected at the valuation date to be paid to in-force policyholders in the future in respect of smoothing costs, guarantees and promises. Realistic balance sheet information is shown below for the three main UK with-profit funds: New With-Profit Sub Fund (NWPSF), Old With-Profit Sub Fund (OWPSF) and With-Profit Sub-Fund (WPSF). These realistic liabilities have been included within the long-term business provision and the liability for insurance and investment contracts on the Group's IFRS balance sheet at 31 December 2012 and 31 December 2011.

	Estimated realistic assets £bn	Estimated realistic liabilities <sup>1</sup> £bn	Estimated realistic inherited estate <sup>2</sup> £bn	Capital support arrangement <sup>3</sup> £bn	Estimated risk capital margin £bn	2012 Estimated excess available capital £bn	2011 Estimated excess available capital £bn
NWPSF	17.3	(17.3)	—	0.7	(0.4)	0.3	0.7
OWPSF	2.9	(2.6)	0.3	—	(0.1)	0.2	0.2
WPSF <sup>4</sup>	18.3	(16.5)	1.8	—	(0.5)	1.3	1.0
<b>Aggregate</b>	<b>38.5</b>	<b>(36.4)</b>	<b>2.1</b>	<b>0.7</b>	<b>(1.0)</b>	<b>1.8</b>	<b>1.9</b>

<sup>1</sup> These realistic liabilities include the shareholders' share of future bonuses of £0.3 billion (FY 2011: £0.3 billion). Realistic liabilities adjusted to eliminate the shareholders' share of future bonuses are £36.0 billion (FY 2011: £38.8 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 £1.8 billion, £0.3 billion and £3.5 billion for NWPSF, OWPSF and WPSF respectively (FY 2011: £1.9 billion, £0.3 billion and £3.1 billion).

<sup>2</sup> Estimated realistic inherited estate at 31 December 2011 was £nil, £0.3 billion and £1.6 billion for NWPSF, OWPSF and WPSF respectively.

<sup>3</sup> The support arrangement represents the reattributed estate (RIEESA) of £0.7 billion at 31 December 2012 (FY 2011: £1.1 billion).

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

### Investment mix

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

	2012 %	2011 %
Equity	23%	22%
Property	16%	17%
Fixed interest	51%	54%
Other	10%	7%

The equity backing ratios, including property, supporting with-profit asset shares are 71% in NWPSF and OWPSF, and 64% in WPSF.

## C7 – IFRS Sensitivity analysis

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

For long-term business in particular, sensitivities of MCEV performance indicators to changes in both economic and 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 on an MCEV basis in the supplementary section of this report.

### Life insurance and investment contracts

The nature of long-term business is such that a number of assumptions are made in compiling these financial statements. Assumptions are made about investment returns, expenses, mortality rates, and persistency in connection with the in-force policies for each business unit. Assumptions are best estimates based on historic and expected experience of the business. A number of the key assumptions for the Group's central scenario are disclosed elsewhere in these statements for both IFRS reporting and reporting under the MCEV methodology.

### General insurance and health business

General insurance and health claim liabilities are estimated by using standard actuarial claims projection techniques.

These methods extrapolate the claims development for each accident year based on the observed development of earlier years. In most cases, no explicit assumptions are made as projections are based on assumptions implicit in the historic claims.

### Sensitivity test results

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

Sensitivity factor	Description of sensitivity factor applied							
Interest rate and investment return	The impact of a change in market interest rates by a 1% increase or decrease. The test allows consistently for similar changes to investment returns and movements in the market value of backing fixed interest securities.							
Credit Spreads	The impact of a 0.5% increase in credit spreads over risk-free interest rates on corporate bonds and other non-sovereign credit assets. The test allows for any consequential impact on liability valuations.							
Equity/property market values	The impact of a change in equity/property market values by $\pm 10\%$ .							
Expenses	The impact of an increase in maintenance expenses by 10%.							
Assurance mortality/morbidity (life insurance only)	The impact of an increase in mortality/morbidity rates for assurance contracts by 5%.							
Annuitant mortality (life insurance only)	The impact of a reduction in mortality rates for annuity contracts by 5%.							
Gross loss ratios (non-life insurance only)	The impact of an increase in gross loss ratios for general insurance and health business by 5%.							

### Long-term businesses

2012 Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Assurance mortality +5%	Annuitant mortality -5%
Insurance Participating	(45)	(15)	(110)	60	(95)	(25)	(5)	(50)
Insurance non-participating	(160)	130	(430)	—	—	(75)	(45)	(470)
Investment participating	(55)	45	—	5	(10)	(10)	—	—
Investment non-participating	(40)	35	(5)	10	(15)	(20)	—	—
Assets backing life shareholders' funds	10	(15)	(40)	45	(45)	—	—	—
<b>Total excluding Delta Lloyd and United States</b>	<b>(290)</b>	<b>180</b>	<b>(585)</b>	<b>120</b>	<b>(165)</b>	<b>(130)</b>	<b>(50)</b>	<b>(520)</b>
United States	880	(640)	495	—	—	—	—	—
<b>Total excluding Delta Lloyd</b>	<b>590</b>	<b>(460)</b>	<b>(90)</b>	<b>120</b>	<b>(165)</b>	<b>(130)</b>	<b>(50)</b>	<b>(520)</b>

  

2012 Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Assurance mortality +5%	Annuitant mortality -5%
Insurance Participating	(45)	(15)	(110)	60	(95)	(25)	(5)	(50)
Insurance non-participating	(165)	125	(430)	—	—	(75)	(45)	(470)
Investment participating	(55)	45	—	5	(10)	(10)	—	—
Investment non-participating	(45)	40	—	10	(15)	(20)	—	—
Assets backing life shareholders' funds	(5)	—	(45)	50	(50)	—	—	—
<b>Total excluding Delta Lloyd and United States</b>	<b>(315)</b>	<b>195</b>	<b>(585)</b>	<b>125</b>	<b>(170)</b>	<b>(130)</b>	<b>(50)</b>	<b>(520)</b>
United States	—	—	—	—	—	—	—	—
<b>Total excluding Delta Lloyd</b>	<b>(315)</b>	<b>195</b>	<b>(585)</b>	<b>125</b>	<b>(170)</b>	<b>(130)</b>	<b>(50)</b>	<b>(520)</b>

## C7 – IFRS Sensitivity analysis continued

## Long-term businesses continued

2011 Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Assurance mortality +5%	Annuitant mortality -5%
Insurance Participating	(45)	(155)	(20)	5	(95)	(45)	(10)	(50)
Insurance non-participating	(180)	130	(385)	30	(35)	(65)	(45)	(470)
Investment participating	(35)	40	(30)	50	(75)	(10)	—	—
Investment non-participating	(15)	20	(5)	15	(15)	(20)	—	—
Assets backing life shareholders' funds	135	(15)	(10)	10	(10)	—	—	—
<b>Total excluding Delta Lloyd and United States</b>	(140)	20	(450)	110	(230)	(140)	(55)	(520)
United States	45	(50)	10	50	(35)	(10)	(15)	—
<b>Total excluding Delta Lloyd</b>	(95)	(30)	(440)	160	(265)	(150)	(70)	(520)

2011 Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Assurance mortality +5%	Annuitant mortality -5%
Insurance Participating	(45)	(155)	(25)	5	(95)	(45)	(10)	(50)
Insurance non-participating	(180)	130	(385)	30	(35)	(65)	(45)	(470)
Investment participating	(35)	40	(30)	50	(75)	(10)	—	—
Investment non-participating	(15)	20	(5)	15	(15)	(20)	—	—
Assets backing life shareholders' funds	125	—	(15)	15	(15)	—	—	—
<b>Total excluding Delta Lloyd and United States</b>	(150)	35	(460)	115	(235)	(140)	(55)	(520)
United States	(540)	455	(350)	50	(35)	(10)	(15)	—
<b>Total excluding Delta Lloyd</b>	(690)	490	(810)	165	(270)	(150)	(70)	(520)

Changes in sensitivities between 2012 and 2011 reflect movements in market interest rates, portfolio growth, changes to asset mix and the relative durations of assets and liabilities and asset liability management actions. The sensitivities to economic movements (excluding the United States) relate mainly to business in the UK. In general, a fall in market interest rates has a beneficial impact on non-participating business, due to the increase in market value of fixed interest securities and the relative durations of assets and liabilities; similarly a rise in interest rates has a negative impact. The mortality sensitivities also relate primarily to the UK.

In the United States, most debt securities are classified as AFS for which movements in unrealised gains or losses are taken directly to shareholders' equity. This limited the overall sensitivity of IFRS profit to interest rate and credit spread movements. Following the classification of the business as held for sale in 2012 it was remeasured to fair value less costs to sell. It has been assumed that economic movements would not materially impact the fair value less costs to sell and the impact on shareholders' equity is therefore reported as £nil. As a result, were economic movements to occur, the corresponding movements in AFS assets which would be taken directly to shareholders' equity, are reversed out through profit before tax in order to maintain the remeasurement value of the US at fair value less costs to sell.

## C7 – IFRS Sensitivity analysis continued

## General insurance and health businesses

2012 Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Gross loss ratios +5%
<b>Gross of reinsurance excluding Delta Lloyd</b>	<b>(260)</b>	<b>235</b>	<b>(125)</b>	<b>45</b>	<b>(50)</b>	<b>(120)</b>	<b>(300)</b>
<b>Net of reinsurance excluding Delta Lloyd</b>	<b>(300)</b>	<b>285</b>	<b>(125)</b>	<b>45</b>	<b>(50)</b>	<b>(120)</b>	<b>(285)</b>
2012 Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Gross loss ratios +5%
<b>Gross of reinsurance excluding Delta Lloyd</b>	<b>(260)</b>	<b>235</b>	<b>(125)</b>	<b>50</b>	<b>(50)</b>	<b>(25)</b>	<b>(300)</b>
<b>Net of reinsurance excluding Delta Lloyd</b>	<b>(300)</b>	<b>285</b>	<b>(125)</b>	<b>50</b>	<b>(50)</b>	<b>(25)</b>	<b>(285)</b>
2011 Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Gross loss ratios +5%
<b>Gross of reinsurance excluding Delta Lloyd</b>	<b>(205)</b>	<b>180</b>	<b>(125)</b>	<b>50</b>	<b>(55)</b>	<b>(130)</b>	<b>(300)</b>
<b>Net of reinsurance excluding Delta Lloyd</b>	<b>(275)</b>	<b>275</b>	<b>(125)</b>	<b>50</b>	<b>(55)</b>	<b>(130)</b>	<b>(290)</b>
2011 Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%	Expenses +10%	Gross loss ratios +5%
<b>Gross of reinsurance excluding Delta Lloyd</b>	<b>(205)</b>	<b>180</b>	<b>(125)</b>	<b>50</b>	<b>(55)</b>	<b>(30)</b>	<b>(300)</b>
<b>Net of reinsurance excluding Delta Lloyd</b>	<b>(275)</b>	<b>275</b>	<b>(125)</b>	<b>50</b>	<b>(55)</b>	<b>(30)</b>	<b>(290)</b>

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

Fund management and other operations businesses <sup>1</sup>

2012 Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%
<b>Total excluding Delta Lloyd</b>	<b>(5)</b>	<b>—</b>	<b>30</b>	<b>(90)</b>	<b>10</b>
2012 Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%
<b>Total excluding Delta Lloyd</b>	<b>(5)</b>	<b>—</b>	<b>30</b>	<b>(90)</b>	<b>10</b>
2011 Impact on profit before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%
<b>Total excluding Delta Lloyd</b>	<b>(10)</b>	<b>10</b>	<b>—</b>	<b>(40)</b>	<b>75</b>
2011 Impact on shareholders' equity before tax £m	Interest rates +1%	Interest rates -1%	Credit spreads +0.5%	Equity/ property +10%	Equity/ property -10%
<b>Total excluding Delta Lloyd</b>	<b>(10)</b>	<b>10</b>	<b>—</b>	<b>(40)</b>	<b>75</b>

<sup>1</sup> The Fund management and other operations are not shown excluding the United States as their sensitivities are immaterial to the group.



## C7 – IFRS Sensitivity analysis continued

### Delta Lloyd

The full-year 2012 sensitivities contained in the above tables exclude any contribution from Delta Lloyd following deconsolidation of this business.

#### Limitations of sensitivity analysis

The previous tables demonstrate the effect of a change in a key assumption while other assumptions remain unchanged. In reality, there is a correlation between the assumptions and other factors. It should also be noted that these sensitivities are non-linear, and larger or smaller impacts should not be interpolated or extrapolated from these results.

The sensitivity analyses do not take into consideration that the Group's assets and liabilities are actively managed. Additionally, the financial position of the Group may vary at the time that any actual market movement occurs. For example, the Group's financial risk management strategy aims to manage the exposure to market fluctuations.

As investment markets move past various trigger levels, management actions could include selling investments, changing investment portfolio allocation, adjusting bonuses credited to policyholders, and taking other protective action.

A number of the business units use passive assumptions to calculate their long-term business liabilities. Consequently, a change in the underlying assumptions may not have any impact on the liabilities, whereas assets held at market value in the statement of financial position will be affected. In these circumstances, the different measurement bases for liabilities and assets may lead to volatility in shareholders' equity. Similarly, for general insurance liabilities, the interest rate sensitivities only affect profit and equity where explicit assumptions are made regarding interest (discount) rates or future inflation.

Other limitations in the above sensitivity analyses include the use of hypothetical market movements to demonstrate potential risk that only represent the Group's view of possible near-term market changes that cannot be predicted with any certainty, and the assumption that all interest rates move in an identical fashion.

# Analysis of assets

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# Analysis of assets

## D1 – Total assets

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

	Policyholder assets £m	Participating fund assets £m	Shareholder assets £m	Total assets analysed £m	Less assets of operations classified as held for sale £m	Statement of financial position total £m
<b>31 December 2012</b>						
Goodwill and acquired value of in-force business and intangible assets	—	—	3,278	3,278	(674)	2,604
Interests in joint ventures and associates	116	1,239	479	1,834	(126)	1,708
Property and equipment	25	183	185	393	(2)	391
Investment property	4,172	6,079	582	10,833	(18)	10,815
Loans	605	5,562	21,767	27,934	(3,397)	24,537
Financial investments						
Debt securities	16,472	83,497	61,654	161,623	(33,617)	128,006
Equity securities	22,500	9,854	1,423	33,777	(1,248)	32,529
Other investments	23,704	4,258	2,131	30,093	(1,550)	28,543
Reinsurance assets	1,576	542	5,449	7,567	(883)	6,684
Deferred tax assets	—	—	220	220	(32)	188
Current tax assets	—	—	68	68	(1)	67
Receivables and other financial assets	354	2,686	4,990	8,030	(413)	7,617
Deferred acquisition costs and other assets	—	498	4,856	5,354	(1,555)	3,799
Prepayments and accrued income	141	1,242	1,721	3,104	(403)	2,701
Cash and cash equivalents	4,305	10,466	9,043	23,814	(917)	22,897
Additional impairment to write down the disposal group to fair value less costs to sell	—	—	(2,233)	(2,233)	2,233	—
Assets of operations classified as held for sale	—	—	—	—	42,603	42,603
<b>Total</b>	<b>73,970</b>	<b>126,106</b>	<b>115,613</b>	<b>315,689</b>	<b>—</b>	<b>315,689</b>
<b>Total %</b>	<b>23.4%</b>	<b>39.9%</b>	<b>36.7%</b>	<b>100.0%</b>	<b>0.0%</b>	<b>100.0%</b>
FY11 as reported	70,367	124,631	117,378	312,376	—	312,376
FY11 Total %	22.5%	39.9%	37.6%	100.0%	0.0%	100.0%

As at 31 December 2012, 36.7% of Aviva's total asset base was shareholder assets, 39.9% participating assets where Aviva shareholders have partial exposure, and 23.4% policyholder assets where Aviva shareholders have no exposure. Of the total assets (excluding assets held for sale), investment property, loans and financial investments comprised £224.4 billion, compared to £255.8 billion at 31 December 2011.

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

	Fair value £m	Amortised cost £m	Equity accounted/ tax assets <sup>1</sup> £m	Total £m
<b>Total assets – 2012</b>				
Goodwill and acquired value of in-force business and intangible assets	—	3,278	—	3,278
Interests in joint ventures and associates	—	—	1,834	1,834
Property and equipment	244	149	—	393
Investment property	10,833	—	—	10,833
Loans	18,973	8,961	—	27,934
Financial investments				
Debt securities	161,623	—	—	161,623
Equity securities	33,777	—	—	33,777
Other investments	30,093	—	—	30,093
Reinsurance assets	—	7,567	—	7,567
Deferred tax assets	—	—	220	220
Current tax assets	—	—	68	68
Receivables and other financial assets	—	8,030	—	8,030
Deferred acquisition costs and other assets	—	5,354	—	5,354
Prepayments and accrued income	—	3,104	—	3,104
Cash and cash equivalents	23,814	—	—	23,814
Additional impairment to write down the disposal group to fair value less costs to sell	—	(2,233)	—	(2,233)
<b>Total</b>	<b>279,357</b>	<b>34,210</b>	<b>2,122</b>	<b>315,689</b>
<b>Total %</b>	<b>88.5%</b>	<b>10.8%</b>	<b>0.7%</b>	<b>100.0%</b>
Assets of operations classified as held for sale	37,957	4,518	128	42,603
<b>Total (excluding assets held for sale)</b>	<b>241,400</b>	<b>29,692</b>	<b>1,994</b>	<b>273,086</b>
<b>Total % (excluding assets held for sale)</b>	<b>88.4%</b>	<b>10.9%</b>	<b>0.7%</b>	<b>100.0%</b>
FY11 Total	269,812	39,356	3,208	312,376
FY11 Total %	86.4%	12.6%	1.0%	100.0%

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

	Fair value £m	Amortised cost £m	Equity accounted/ tax assets <sup>1</sup> £m	Total £m
<b>Total assets – Policyholder assets 2012</b>				
Goodwill and acquired value of in-force business and intangible assets	—	—	—	—
Interests in joint ventures and associates	—	—	116	116
Property and equipment	—	25	—	25
Investment property	4,172	—	—	4,172
Loans	—	605	—	605
Financial investments				
Debt securities	16,472	—	—	16,472
Equity securities	22,500	—	—	22,500
Other investments	23,704	—	—	23,704
Reinsurance assets	—	1,576	—	1,576
Deferred tax assets	—	—	—	—
Current tax assets	—	—	—	—
Receivables and other financial assets	—	354	—	354
Deferred acquisition costs and other assets	—	—	—	—
Prepayments and accrued income	—	141	—	141
Cash and cash equivalents	4,305	—	—	4,305
<b>Total</b>	<b>71,153</b>	<b>2,701</b>	<b>116</b>	<b>73,970</b>
<b>Total %</b>	<b>96.2%</b>	<b>3.7%</b>	<b>0.1%</b>	<b>100.0%</b>
Assets of operations classified as held for sale	3,021	27	—	3,048
<b>Total (excluding assets held for sale)</b>	<b>68,132</b>	<b>2,674</b>	<b>116</b>	<b>70,922</b>
<b>Total % (excluding assets held for sale)</b>	<b>96.1%</b>	<b>3.8%</b>	<b>0.1%</b>	<b>100.0%</b>
FY11 Total	67,310	2,804	253	70,367
FY11 Total %	95.6%	4.0%	0.4%	100.0%

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

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

	Fair value £m	Amortised cost £m	Equity accounted/ tax assets <sup>1</sup> £m	Total £m
<b>Total assets – Participating fund assets 2012</b>				
Goodwill and acquired value of in-force business and intangible assets	—	—	—	—
Interests in joint ventures and associates	—	—	1,239	1,239
Property and equipment	132	51	—	183
Investment property	6,079	—	—	6,079
Loans	978	4,584	—	5,562
Financial investments				
Debt securities	83,497	—	—	83,497
Equity securities	9,854	—	—	9,854
Other investments	4,258	—	—	4,258
Reinsurance assets	—	542	—	542
Deferred tax assets	—	—	—	—
Current tax assets	—	—	—	—
Receivables and other financial assets	—	2,686	—	2,686
Deferred acquisition costs and other assets	—	498	—	498
Prepayments and accrued income	—	1,242	—	1,242
Cash and cash equivalents	10,466	—	—	10,466
<b>Total</b>	<b>115,264</b>	<b>9,603</b>	<b>1,239</b>	<b>126,106</b>
<b>Total %</b>	<b>91.4%</b>	<b>7.6%</b>	<b>1.0%</b>	<b>100.0%</b>
Assets of operations classified as held for sale	2,788	333	—	3,121
<b>Total (excluding assets held for sale)</b>	<b>112,476</b>	<b>9,270</b>	<b>1,239</b>	<b>122,985</b>
<b>Total % (excluding assets held for sale)</b>	<b>91.5%</b>	<b>7.5%</b>	<b>1.0%</b>	<b>100.0%</b>
FY11 Total	113,287	9,884	1,460	124,631
FY11 Total %	90.9%	7.9%	1.2%	100.0%

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

	Fair value £m	Amortised cost £m	Equity accounted/ tax assets <sup>1</sup> £m	Total £m
<b>Total assets – Shareholders assets 2012</b>				
Goodwill and acquired value of in-force business and intangible assets	—	3,278	—	3,278
Interests in joint ventures and associates	—	—	479	479
Property and equipment	112	73	—	185
Investment property	582	—	—	582
Loans	17,995	3,772	—	21,767
Financial investments				
Debt securities	61,654	—	—	61,654
Equity securities	1,423	—	—	1,423
Other investments	2,131	—	—	2,131
Reinsurance assets	—	5,449	—	5,449
Deferred tax assets	—	—	220	220
Current tax assets	—	—	68	68
Receivables and other financial assets	—	4,990	—	4,990
Deferred acquisition costs and other assets	—	4,856	—	4,856
Prepayments and accrued income	—	1,721	—	1,721
Cash and cash equivalents	9,043	—	—	9,043
Additional impairment to write down the disposal group to fair value less costs to sell	—	(2,233)	—	(2,233)
<b>Total</b>	<b>92,940</b>	<b>21,906</b>	<b>767</b>	<b>115,613</b>
<b>Total %</b>	<b>80.4%</b>	<b>18.9%</b>	<b>0.7%</b>	<b>100.0%</b>
Assets of operations classified as held for sale	32,148	4,158	128	36,434
<b>Total (excluding assets held for sale)</b>	<b>60,792</b>	<b>17,748</b>	<b>639</b>	<b>79,179</b>
<b>Total % (excluding assets held for sale)</b>	<b>76.8%</b>	<b>22.4%</b>	<b>0.8%</b>	<b>100.0%</b>
FY11 Total	89,215	26,668	1,495	117,378
FY11 Total %	76.0%	22.7%	1.3%	100.0%

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

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

### Financial instruments (including derivatives and loans)

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

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

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

### Fair value hierarchy

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

- Inputs to Level 1 fair values are quoted prices (unadjusted) in active markets for identical assets.
- Inputs to Level 2 fair values are inputs other than quoted prices included within Level 1 that are observable for the asset, either directly or indirectly. If the asset has a specified (contractual) term, a Level 2 input must be observable for substantially the full term of the asset.
- Inputs to Level 3 fair values are unobservable inputs for the asset. Unobservable inputs may have been used to measure fair value to the extent that observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset at the measurement date (or market information for the inputs to any valuation models). As such, unobservable inputs reflect the assumptions the business unit considers that market participants would use in pricing the asset. Examples are certain private equity investments and private placements.

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

Total assets 2012	Fair value hierarchy					Less: Assets of operations classified as held for sale £m	Statement of financial position total £m
	Level 1 £m	Level 2 £m	Level 3 £m	Sub-total fair value £m	Amortised cost £m		
Investment property	—	10,833	—	10,833	—	(18)	10,815
Loans	—	18,973	—	18,973	8,961	(3,397)	24,537
Debt securities	107,953	43,588	10,082	161,623	—	(33,617)	128,006
Equity securities	33,074	230	473	33,777	—	(1,248)	32,529
Other investments (including derivatives)	21,704	5,510	2,879	30,093	—	(1,550)	28,543
Assets of operations classified as held for sale	—	—	—	—	—	39,830	39,830
<b>Total</b>	<b>162,731</b>	<b>79,134</b>	<b>13,434</b>	<b>255,299</b>	<b>8,961</b>	<b>—</b>	<b>264,260</b>
<b>Total %</b>	<b>61.6%</b>	<b>29.9%</b>	<b>5.1%</b>	<b>96.6%</b>	<b>3.4%</b>	<b>—</b>	<b>100.0%</b>
Assets of operations classified as held for sale	2,993	32,979	516	36,488	3,342	—	39,830
<b>Total (excluding assets held for sale)</b>	<b>159,738</b>	<b>46,155</b>	<b>12,918</b>	<b>218,811</b>	<b>5,619</b>	<b>—</b>	<b>224,430</b>
<b>Total % (excluding assets held for sale)</b>	<b>71.2%</b>	<b>20.6%</b>	<b>5.8%</b>	<b>97.6%</b>	<b>2.4%</b>	<b>—</b>	<b>100.0%</b>
FY11 Total	156,641	78,520	11,368	246,529	9,630	(347)	255,812
FY11 Total %	61.1%	30.7%	4.4%	96.2%	3.8%	—	100.0%

At 31 December 2012, the proportion of total financial investments, loans and investment properties classified as Level 1 in the fair value hierarchy has remained stable at 61.6% (FY11: 61.1%). Level 2 and Level 3 financial investments, loans and investment properties have also remained relatively stable at 29.9% (FY11: 30.7%) and 5.1% (FY11: 4.4%), respectively. Excluding assets classified as held for sale, the proportion of Level 1 assets at 31 December 2012 increases to 71.2% with Level 2 assets reducing to 20.6% reflecting the impact of the higher proportion of Level 2 debt securities within the US business (see D3.4.1).

## D3 – Analysis of asset quality

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

The Group's goodwill, acquired value of in-force business and the majority of other intangible assets have arisen from the Group's business combinations. These business combinations include several bancassurance arrangements, which have resulted in £512 million of the total £1,703 million of goodwill and £691 million of the total £1,575 million of AVIF and other intangible assets. These balances primarily represent the value of bancassurance distribution agreements acquired in these business combinations and are before the deduction of goodwill and other intangibles held for sale. The Group's total goodwill and intangible balances at FY12 noted above are after impairments recognised during the year.

## D3 – Analysis of asset quality continued

## D3.2 – Investment property

	2012				2011			
	Fair value hierarchy			Total £m	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m		Level 1 £m	Level 2 £m	Level 3 £m	
<b>Investment property – Total</b>								
Lease to third parties under operating leases	—	10,822	—	10,822	—	11,552	—	11,552
Vacant investment property/held for capital appreciation	—	11	—	11	—	86	—	86
<b>Total</b>	—	10,833	—	10,833	—	11,638	—	11,638
<b>Total %</b>	—	100.0%	—	100.0%	—	100.0%	—	100.0%
Assets of operations classified as held for sale	—	18	—	18	—	—	—	—
<b>Total (excluding assets held for sale)</b>	—	10,815	—	10,815	—	11,638	—	11,638
<b>Total % (excluding assets held for sale)</b>	—	100.0%	—	100.0%	—	100.0%	—	100.0%

	2012				2011			
	Fair value hierarchy			Total £m	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m		Level 1 £m	Level 2 £m	Level 3 £m	
<b>Investment property – Policyholder assets</b>								
Lease to third parties under operating leases	—	4,172	—	4,172	—	4,164	—	4,164
Vacant investment property/held for capital appreciation	—	—	—	—	—	4	—	4
<b>Total</b>	—	4,172	—	4,172	—	4,168	—	4,168
<b>Total %</b>	—	100.0%	—	100.0%	—	100.0%	—	100.0%
Assets of operations classified as held for sale	—	12	—	12	—	—	—	—
<b>Total (excluding assets held for sale)</b>	—	4,160	—	4,160	—	4,168	—	4,168
<b>Total % (excluding assets held for sale)</b>	—	100.0%	—	100.0%	—	100.0%	—	100.0%

	2012				2011			
	Fair value hierarchy			Total £m	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m		Level 1 £m	Level 2 £m	Level 3 £m	
<b>Investment property – Participating fund assets</b>								
Lease to third parties under operating leases	—	6,078	—	6,078	—	6,312	—	6,312
Vacant investment property/held for capital appreciation	—	1	—	1	—	72	—	72
<b>Total</b>	—	6,079	—	6,079	—	6,384	—	6,384
<b>Total %</b>	—	100.0%	—	100.0%	—	100.0%	—	100.0%
Assets of operations classified as held for sale	—	—	—	—	—	—	—	—
<b>Total (excluding assets held for sale)</b>	—	6,079	—	6,079	—	6,384	—	6,384
<b>Total % (excluding assets held for sale)</b>	—	100.0%	—	100.0%	—	100.0%	—	100.0%

	2012				2011			
	Fair value hierarchy			Total £m	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m		Level 1 £m	Level 2 £m	Level 3 £m	
<b>Investment property – Shareholder assets</b>								
Lease to third parties under operating leases	—	572	—	572	—	1,076	—	1,076
Vacant investment property/held for capital appreciation	—	10	—	10	—	10	—	10
<b>Total</b>	—	582	—	582	—	1,086	—	1,086
<b>Total %</b>	—	100.0%	—	100.0%	—	100.0%	—	100.0%
Assets of operations classified as held for sale	—	6	—	6	—	—	—	—
<b>Total (excluding assets held for sale)</b>	—	576	—	576	—	1,086	—	1,086
<b>Total % (excluding assets held for sale)</b>	—	100.0%	—	100.0%	—	100.0%	—	100.0%

95% (FY11: 91%) of total investment properties by value are held in unit-linked or participating funds. Shareholder exposure to investment properties is principally through investments in Property Limited Partnerships (PLPs). Depending on the Group's interest in these PLPs, its investments are classified as either interests in joint ventures, unit trusts or consolidated as a subsidiary, in which case the underlying investment properties held by the PLP are included on the balance sheet. The decrease in shareholder exposure to investment properties is mainly a result of disposals and declines in property values at 31 December 2012 compared to 31 December 2011, partly offset by new acquisitions.

Investment properties are stated at their market values as assessed by qualified external independent 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, lease expiry or break option taking into consideration lease incentives, assuming no future growth in the estimated rental value of the property. This uplift and the discount rate are derived from rates implied by recent market transactions on similar properties. The basis of valuation therefore naturally falls to be classified as Level 2. Valuations are typically undertaken on a quarterly (and in some cases monthly) basis. 99.9% (FY11: 99.3%) of total investment properties by value are leased to third parties under operating leases, with the remainder either being vacant or held for capital appreciation.



**D3 – Analysis of asset quality continued****D3.3 – Loans**

The Group loan portfolio is principally made up of:

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

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

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

Loans – Total 2012	United Kingdom & Ireland £m	France £m	United States £m	Canada £m	Italy, Spain and Other £m	Higher growth markets £m	Total £m
Policy loans	28	839	402	—	12	30	1,311
Loans and advances to banks	4,250	—	—	—	—	—	4,250
Mortgage loans	19,187	1	2,994	—	—	—	22,182
Other loans	95	8	1	83	2	2	191
<b>Total</b>	<b>23,560</b>	<b>848</b>	<b>3,397</b>	<b>83</b>	<b>14</b>	<b>32</b>	<b>27,934</b>
<b>Total %</b>	<b>84.3%</b>	<b>3.0%</b>	<b>12.2%</b>	<b>0.3%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>100.0%</b>
Assets of operations classified as held for sale	—	—	3,397	—	—	—	3,397
<b>Total (excluding assets held for sale)</b>	<b>23,560</b>	<b>848</b>	<b>—</b>	<b>83</b>	<b>14</b>	<b>32</b>	<b>24,537</b>
<b>Total % (excluding assets held for sale)</b>	<b>96.0%</b>	<b>3.5%</b>	<b>0.0%</b>	<b>0.3%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>100.0%</b>
FY11 Total	23,964	949	3,067	80	16	40	28,116
FY11 Total %	85.2%	3.4%	10.9%	0.3%	0.1%	0.1%	100.0%

Loans – Policyholders assets 2012	United Kingdom & Ireland £m	France £m	United States £m	Canada £m	Italy, Spain and Other £m	Higher growth markets £m	Total £m
Policy loans	—	—	—	—	—	—	—
Loans and advances to banks	604	—	—	—	—	—	604
Mortgage loans	—	—	—	—	—	—	—
Other loans	—	—	—	—	—	1	1
<b>Total</b>	<b>604</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>1</b>	<b>605</b>
<b>Total %</b>	<b>99.8%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.2%</b>	<b>100.0%</b>
Assets of operations classified as held for sale	—	—	—	—	—	—	—
<b>Total (excluding assets held for sale)</b>	<b>604</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>1</b>	<b>605</b>
<b>Total % (excluding assets held for sale)</b>	<b>99.8%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.2%</b>	<b>100.0%</b>
FY11 Total	917	—	—	—	—	—	917
FY11 Total %	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%

Loans – Participating fund assets 2012	United Kingdom & Ireland £m	France £m	United States £m	Canada £m	Italy, Spain and Other £m	Higher growth markets £m	Total £m
Policy loans	20	839	181	—	—	—	1,040
Loans and advances to banks	3,402	—	—	—	—	—	3,402
Mortgage loans	976	1	135	—	—	—	1,112
Other loans	—	8	—	—	—	—	8
<b>Total</b>	<b>4,398</b>	<b>848</b>	<b>316</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>5,562</b>
<b>Total %</b>	<b>79.1%</b>	<b>15.2%</b>	<b>5.7%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100.0%</b>
Assets of operations classified as held for sale	—	—	316	—	—	—	316
<b>Total (excluding assets held for sale)</b>	<b>4,398</b>	<b>848</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>5,246</b>
<b>Total % (excluding assets held for sale)</b>	<b>83.8%</b>	<b>16.2%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100.0%</b>
FY11 Total	5,197	948	325	—	—	1	6,471
FY11 Total %	80.3%	14.7%	5.0%	0.0%	0.0%	0.0%	100.0%

## D3 – Analysis of asset quality continued

### D3.3 – Loans continued

Loans – Shareholder assets 2012	United Kingdom & Ireland £m	France £m	United States £m	Canada £m	Italy, Spain and Other £m	Higher growth markets £m	Total £m
Policy loans	8	—	221	—	12	30	271
Loans and advances to banks	244	—	—	—	—	—	244
Mortgage loans	18,211	—	2,859	—	—	—	21,070
Other loans	95	—	1	83	2	1	182
<b>Total</b>	<b>18,558</b>	<b>—</b>	<b>3,081</b>	<b>83</b>	<b>14</b>	<b>31</b>	<b>21,767</b>
<b>Total %</b>	<b>85.2%</b>	<b>0.0%</b>	<b>14.2%</b>	<b>0.4%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>100.0%</b>
Assets of operations classified as held for sale	—	—	3,081	—	—	—	3,081
<b>Total (excluding assets held for sale)</b>	<b>18,558</b>	<b>—</b>	<b>—</b>	<b>83</b>	<b>14</b>	<b>31</b>	<b>18,686</b>
<b>Total % (excluding assets held for sale)</b>	<b>99.3%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.4%</b>	<b>0.1%</b>	<b>0.2%</b>	<b>100.0%</b>
FY11 Total	17,849	1	2,743	80	16	39	20,728
FY11 Total %	86.1%	0.0%	13.2%	0.4%	0.1%	0.2%	100.0%

The value of the Group's loan portfolio (including Policyholder, Participating Fund and Shareholder assets), at 31 December 2012 stood at £27.9 billion (*FY11: £28.1 billion*), a decrease of £0.2 billion. Excluding assets held for sale, the Group's loan portfolio amounts to £24.5 billion.

The total shareholder exposure to loans increased to £21.8 billion (*FY11: £20.7 billion*), and represented 78% of the total loan portfolio, with the remaining 22% split between participating funds (£5.6 billion) and policyholder assets (£0.6 billion).

Of the Group's total loan portfolio (including Policyholder, Participating Fund and Shareholder assets), 79% (*FY11: 76%*) is invested in mortgage loans.

#### Mortgage loans – Shareholder assets

2012	United Kingdom & Ireland £m	United States £m	Total £m
Non-securitised mortgage loans			
– Residential (Equity release)	3,172	—	3,172
– Commercial	8,720	2,859	11,579
– Healthcare	4,101	—	4,101
	<b>15,993</b>	<b>2,859</b>	<b>18,852</b>
Securitised mortgage loans	2,218	—	2,218
<b>Total</b>	<b>18,211</b>	<b>2,859</b>	<b>21,070</b>
Assets of operations classified as held for sale	—	2,859	2,859
<b>Total (excluding assets held for sale)</b>	<b>18,211</b>	<b>—</b>	<b>18,211</b>
FY11 Total	17,668	2,507	20,175

The Group's mortgage loan portfolio spans several business units, primarily in the UK and USA, and across various sectors, including residential loans, commercial loans and government supported healthcare loans. Aviva's shareholder exposure to mortgage loans accounts for 96.8% of total shareholder asset loans. This section focuses on explaining the shareholder risk within these exposures.

#### United Kingdom & Ireland (Non-securitised mortgage loans)

##### Residential

The UK non-securitised residential mortgage portfolio has a total current value of £3.2 billion (*FY11: £2.7 billion*). The increase from the prior year is primarily due to £570 million of new loans and accrued interest and £52 million of fair value gains, partly offset by £107 million of redemptions. These mortgages are all in the form of equity release, whereby homeowners mortgage their property to release cash equity. Due to the low relative levels of equity released in each property, they predominantly have a Loan to Value ("LTV") of below 70%, and the average LTV across the portfolio is approximately 29.6% (*FY11: 27.5%*).

##### Healthcare

Primary Healthcare & PFI businesses loans included within shareholder assets are £4.1 billion (*FY11: £3.7 billion*) and are secured against General Practitioner premises, other primary health related premises or other emergency services related premises. For all such loans, government support is provided through either direct funding or reimbursement of rental payments to the tenants to meet income service and provide for the debt to be reduced substantially over the term of the loan. Although the loan principal is not Government guaranteed, the nature of these businesses and premises provides considerable comfort of an ongoing business model and low risk of default.

On a market value basis, we estimate the average LTV of these mortgages to be 96%, although as explained above, we do not consider this to be a key risk indicator. Income support from the Government bodies and the social need for these premises provide sustained income stability. Aviva therefore considers these loans to be low risk and uncorrelated with the strength of the UK or global economy.

**D3 – Analysis of asset quality continued****D3.3 – Loans continued****Commercial**

Gross exposure by loan to value and arrears

*Shareholder assets*

2012	>120% £m	115–120% £m	110–115% £m	105–110% £m	100–105% £m	95–100% £m	90–95% £m	80–90% £m	70–80% £m	<70% £m	Total £m
Not in arrears	<b>341</b>	<b>704</b>	<b>939</b>	<b>843</b>	<b>754</b>	<b>1,233</b>	<b>439</b>	<b>1,290</b>	<b>414</b>	<b>1,317</b>	<b>8,274</b>
0 – 3 months	—	1	36	—	51	9	21	—	3	—	121
3 – 6 months	—	—	—	—	—	55	2	—	—	—	57
6 – 12 months	—	—	—	—	—	47	2	—	—	—	49
> 12 months	—	—	—	—	—	204	15	—	—	—	219
<b>Total</b>	<b>341</b>	<b>705</b>	<b>975</b>	<b>843</b>	<b>805</b>	<b>1,548</b>	<b>479</b>	<b>1,290</b>	<b>417</b>	<b>1,317</b>	<b>8,720</b>

Of the total £8.7 billion of UK non-securitised commercial mortgage loan in the shareholder fund, £8.4 billion are held by our UK Life business, of which £7.7 billion back annuity liabilities, and are stated on a fair value basis. The loan exposures for our UK Life business are calculated on a discounted cash flow basis, and include a risk adjustment through the use of Credit Risk Adjusted Value ("CRAV") methods.

Aviva UK General Insurance hold the remaining £0.3 billion of loans which are stated on an amortised cost basis and are subject to impairment review, using a fair value methodology calibrated to the UK Life approach, adjusted for specific portfolio characteristics.

For the commercial mortgages held by the UK Life and UK General Insurance business, loan service collection ratios, a key indicator of mortgage portfolio performance, remained high during the period. Loan Interest Cover ("LIC"), which is defined as the annual net rental income (including rental deposits and less ground rent) divided by the annual loan interest service, increased to 1.40x (FY11: 1.32x) due to new business being completed with strong cover. Mortgage LTVs decreased during the year from 102% to 95% largely due to new business completing with low LTVs (property values have fallen c3.2% between 2011 and 2012).

All loans in arrears have been assessed for impairment. Of the £446 million (FY11: £418 million) value of loans in arrears included within our shareholder assets, the interest and capital amount in arrears is only £2.4 million.

The valuation allowance (including supplementary allowances) made in the UK Life for corporate bonds and mortgages, including healthcare mortgages, held by Aviva Annuity UK Limited and carried at fair value equates to 56 bps and 89 bps respectively at 31 December 2012 (FY11: 60 bps and 69 bps respectively). The total valuation allowance held by Aviva Annuity UK Limited in respect of corporate bonds and mortgages, including healthcare mortgages, was £1.8 billion (FY11: £1.6 billion) over the remaining term of the UK Life corporate bond and mortgage portfolio. The increase is driven by an increase in the commercial mortgage allowances to reflect up-to-date market information and growth in the corporate bond portfolio.

In addition, we hold £118 million (FY11: £84 million) of impairment provisions in our UK General Insurance mortgage portfolio, which is carried at amortised cost.

The UK portfolio remains well diversified in terms of property type, location and tenants as well as the spread of loans written over time. The risks in commercial mortgages are addressed through several layers of protection with the mortgage risk profile being primarily driven by the ability of the underlying tenant rental income to cover loan interest and amortisation. Should any single tenant default on their rental payment, rental from other tenants backing the same loan often ensures the loan interest cover does not fall below 1.0x. Where there are multiple loans to a single borrower further protection may be achieved through cross-charging (or pooling) such that any single loan is also supported by rents received within other pool loans. Additionally, there may be support provided by the borrower of the loan itself and further loss mitigation from any general floating charge held over 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.

**Securitised mortgage loans**

Of the total securitised residential mortgages (£2.2 billion), approximately £260 million of securities are still held by Aviva shareholder funds. The remaining securities have been sold to third parties, and therefore present little credit risk to Aviva. Securitised residential mortgages held are predominantly issued through vehicles in the UK.

**D3 – Analysis of asset quality continued****D3.3 – Loans continued****United States****(Non-securitised mortgage loans)****Commercial**

Gross exposure by loan to value and arrears

*Shareholder assets*

2012	>120% £m	115–120% £m	110–115% £m	105–110% £m	100–105% £m	95–100% £m	90–95% £m	80–90% £m	70–80% £m	<70% £m	Total £m
Neither past due nor impaired	14	—	2	1	14	23	19	131	516	2,137	2,857
0 – 3 months	—	—	—	—	2	—	—	—	—	—	2
3 – 6 months	—	—	—	—	—	—	—	—	—	—	—
6 – 12 months	—	—	—	—	—	—	—	—	—	—	—
> 12 months	—	—	—	—	—	—	—	—	—	—	—
<b>Total</b>	<b>14</b>	<b>—</b>	<b>2</b>	<b>1</b>	<b>16</b>	<b>23</b>	<b>19</b>	<b>131</b>	<b>516</b>	<b>2,137</b>	<b>2,859</b>

Aviva USA currently holds £2.9 billion (*FY11: £2.5 billion*) of commercial mortgages included within shareholder assets. These mortgages continue to perform well, reflecting:

- Low underwriting LTVs (shall not exceed 80% at the time of issuance), and consequently a portfolio with an average LTV of 61% (*FY11: 64%*);
- A highly diversified portfolio, with strong volumes in many states with more stable economies and related real estate values; and
- Strong LIC ratios, with 98% of the loans having an LIC above 1.0x, and 2.0% with LIC below 1.0x.

As at 31 December 2012, the actual amount of interest payment in arrears was £0.03 million.

## D3 – Analysis of asset quality continued

## D3.4 – Financial investments

	2012				2011			
	Cost/ amortised cost £m	Unrealised gains £m	Impairment and unrealised losses £m	Fair value £m	Cost/ amortised cost £m	Unrealised gains £m	Impairment and unrealised losses £m	Fair value £m
<b>Total assets</b>								
Debt securities	147,220	16,433	(2,030)	161,623	147,537	12,395	(6,587)	153,345
Equity securities	30,898	5,043	(2,164)	33,777	33,055	3,637	(4,009)	32,683
Other investments	28,939	2,308	(1,154)	30,093	30,362	553	(538)	30,377
<b>Total</b>	<b>207,057</b>	<b>23,784</b>	<b>(5,348)</b>	<b>225,493</b>	<b>210,954</b>	<b>16,585</b>	<b>(11,134)</b>	<b>216,405</b>
Assets of operations classified as held for sale	32,834	3,762	(181)	36,415	403	4	(60)	347
<b>Total (excluding assets held for sale)</b>	<b>174,223</b>	<b>20,022</b>	<b>(5,167)</b>	<b>189,078</b>	<b>210,551</b>	<b>16,581</b>	<b>(11,074)</b>	<b>216,058</b>

Aviva holds large quantities of high quality bonds, primarily to match our liability to make guaranteed payments to policyholders. Some credit risk is taken, partly to increase returns to policyholders and partly to optimise the risk/return profile for shareholders. The risks are consistent with the products we offer and the related investment mandates, and are in line with our risk appetite.

The Group also holds equities, the majority of which are held in participating funds and policyholder 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. The vast majority of equity investments are valued at quoted market prices.

## D3.4.1 – Debt securities

Debt securities – Total 2012	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m	
UK Government	18,208	158	—	18,366
Non-UK Government	39,385	5,234	1,757	46,376
Europe	35,950	1,115	1,756	38,821
North America	787	3,779	—	4,566
Asia Pacific & Other	2,648	340	1	2,989
Corporate bonds – Public utilities	5,789	3,299	52	9,140
Corporate convertible bonds	182	107	182	471
Other corporate bonds	39,383	29,028	7,980	76,391
Other	5,006	5,762	111	10,879
<b>Total</b>	<b>107,953</b>	<b>43,588</b>	<b>10,082</b>	<b>161,623</b>
<b>Total %</b>	<b>66.8%</b>	<b>27.0%</b>	<b>6.2%</b>	<b>100.0%</b>
Assets of operations classified as held for sale	1,480	32,017	120	33,617
<b>Total (excluding assets held for sale)</b>	<b>106,473</b>	<b>11,571</b>	<b>9,962</b>	<b>128,006</b>
<b>Total % (excluding assets held for sale)</b>	<b>83.2%</b>	<b>9.0%</b>	<b>7.8%</b>	<b>100.0%</b>
FY11	103,183	42,222	7,940	153,345
FY11 %	67.3%	27.5%	5.2%	100.0%

Debt securities – Policyholders assets 2012	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m	
UK Government	4,180	—	—	4,180
Non-UK Government	2,607	60	1	2,668
Europe	1,846	59	1	1,906
North America	149	—	—	149
Asia Pacific & Other	612	1	—	613
Corporate bonds – Public utilities	284	—	1	285
Corporate convertible bonds	4	—	—	4
Other corporate bonds	5,136	1,922	158	7,216
Other	1,829	285	5	2,119
<b>Total</b>	<b>14,040</b>	<b>2,267</b>	<b>165</b>	<b>16,472</b>
<b>Total %</b>	<b>85.2%</b>	<b>13.8%</b>	<b>1.0%</b>	<b>100.0%</b>
Assets of operations classified as held for sale	190	1,148	—	1,338
<b>Total (excluding assets held for sale)</b>	<b>13,850</b>	<b>1,119</b>	<b>165</b>	<b>15,134</b>
<b>Total % (excluding assets held for sale)</b>	<b>91.5%</b>	<b>7.4%</b>	<b>1.1%</b>	<b>100.0%</b>
FY11	12,492	2,717	86	15,295
FY11 %	81.6%	17.8%	0.6%	100.0%

**D3 – Analysis of asset quality continued****D3.4 – Financial investments continued****D3.4.1 – Debt securities continued**

Debt securities – Participating fund assets 2012	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m	
UK Government	10,643	10	—	10,653
Non-UK Government	29,260	620	1,720	31,600
Europe	27,378	560	1,720	29,658
North America	199	36	—	235
Asia Pacific & Other	1,683	24	—	1,707
Corporate bonds – Public utilities	2,585	254	33	2,872
Corporate convertible bonds	177	25	126	328
Other corporate bonds	24,761	2,310	7,506	34,577
Other	1,494	1,868	105	3,467
<b>Total</b>	<b>68,920</b>	<b>5,087</b>	<b>9,490</b>	<b>83,497</b>
<b>Total %</b>	<b>82.5%</b>	<b>6.1%</b>	<b>11.4%</b>	<b>100.0%</b>
Assets of operations classified as held for sale	633	2,082	—	2,715
<b>Total (excluding assets held for sale)</b>	<b>68,287</b>	<b>3,005</b>	<b>9,490</b>	<b>80,782</b>
<b>Total % (excluding assets held for sale)</b>	<b>84.5%</b>	<b>3.7%</b>	<b>11.8%</b>	<b>100.0%</b>
FY11	67,653	4,504	7,293	79,450
FY11 %	85.2%	5.7%	9.1%	100.0%

  

Debt securities – Shareholder assets 2012	Fair value hierarchy			Total £m
	Level 1 £m	Level 2 £m	Level 3 £m	
UK Government	3,385	148	—	3,533
Non-UK Government	7,518	4,554	36	12,108
Europe	6,726	496	35	7,257
North America	439	3,743	—	4,182
Asia Pacific & Other	353	315	1	669
Corporate bonds – Public utilities	2,920	3,045	18	5,983
Corporate convertible bonds	1	82	56	139
Other corporate bonds	9,486	24,796	316	34,598
Other	1,683	3,609	1	5,293
<b>Total</b>	<b>24,993</b>	<b>36,234</b>	<b>427</b>	<b>61,654</b>
<b>Total %</b>	<b>40.5%</b>	<b>58.8%</b>	<b>0.7%</b>	<b>100.0%</b>
Assets of operations classified as held for sale	657	28,787	120	29,564
<b>Total (excluding assets held for sale)</b>	<b>24,336</b>	<b>7,447</b>	<b>307</b>	<b>32,090</b>
<b>Total % (excluding assets held for sale)</b>	<b>75.8%</b>	<b>23.2%</b>	<b>1.0%</b>	<b>100.0%</b>
FY11	23,038	35,001	561	58,600
FY11 %	39.3%	59.7%	1.0%	100.0%

0.7% (FY11: 1.0%) of shareholder exposure to debt securities and 1.0% excluding assets held for sale is fair valued using models with significant unobservable market parameters (classified as Fair Value Level 3). Where estimates are used, these are based on a combination of independent third party evidence and internally developed models, calibrated to market observable data where possible.

40.5% (FY11: 39.3%) of shareholder exposure to debt securities is based on quoted prices in an active market and are therefore classified as Fair Value Level 1. The majority of the debt instruments in Level 2 are held by our US and Canadian businesses. These debt instruments are valued by independent pricing firms in accordance with usual market practice in that region and consistent with other companies operating in the region are classified as Level 2 in the Fair Value hierarchy. Excluding our US and Canadian businesses, the proportion of shareholder debt securities classified as Level 1 in the Fair Value hierarchy would be 78.9% (FY11: 84.1%); while excluding assets held for sale (including our US business) 75.8% of shareholder debt securities are classified as Level 1.

**D3 – Analysis of asset quality continued****D3.4 – Financial investments continued****D3.4.1 – Debt securities continued**

Debt securities – Total 2012	External ratings						Total £m
	AAA £m	AA £m	A £m	BBB £m	Less than BBB £m	Non-rated £m	
<b>Government</b>							
UK Government	18,025	88	32	—	—	203	18,348
UK local authorities	13	—	—	—	—	5	18
Non-UK Government	11,925	16,693	3,671	12,914	1,071	102	46,376
	29,963	16,781	3,703	12,914	1,071	310	64,742
<b>Corporate</b>							
Public utilities	47	296	5,661	2,879	80	177	9,140
Convertibles and bonds with warrants	6	—	40	397	6	22	471
Other corporate bonds	5,503	8,839	27,179	23,876	3,357	7,637	76,391
	5,556	9,135	32,880	27,152	3,443	7,836	86,002
<b>Certificates of deposits</b>	—	388	517	87	1,054	4	2,050
<b>Structured</b>							
RMBS <sup>1</sup> non-agency prime	169	23	4	—	—	—	196
RMBS <sup>1</sup> agency	907	—	—	—	—	—	907
	1,076	23	4	—	—	—	1,103
CMBS <sup>2</sup>	1,617	369	196	137	120	1	2,440
ABS <sup>3</sup>	595	198	277	53	95	10	1,228
CDO (including CLO) <sup>4</sup>	—	—	—	—	1	5	6
ABCP <sup>5</sup>	58	27	—	—	—	—	85
	2,270	594	473	190	216	16	3,759
Wrapped credit	1	269	94	104	42	47	557
Other	648	193	860	639	917	153	3,410
<b>Total</b>	39,514	27,383	38,531	41,086	6,743	8,366	161,623
<b>Total %</b>	24.4%	16.9%	23.8%	25.4%	4.2%	5.3%	100.0%
Assets of operations classified as held for sale	3,478	3,638	9,424	12,726	1,920	2,431	33,617
<b>Total (excluding assets held for sale)</b>	36,036	23,745	29,107	28,360	4,823	5,935	128,006
<b>Total % (excluding assets held for sale)</b>	28.2%	18.5%	22.7%	22.2%	3.8%	4.6%	100.0%
FY11	49,759	20,167	45,819	24,988	4,252	8,360	153,345
FY11 %	32.3%	13.2%	29.9%	16.3%	2.8%	5.5%	100.0%

1 RMBS – Residential Mortgage Backed Security.

2 CMBS – Commercial Mortgage Backed Security.

3 ABS – Asset Backed Security.

4 CDO – Collateralised Debt Obligation, CLO – Collateralised Loan Obligation.

5 ABCP – Asset Backed Commercial Paper.



**D3 – Analysis of asset quality continued****D3.4 – Financial investments continued****D3.4.1 – Debt securities continued**

Debt securities – Policyholders assets 2012	External ratings						Total £m
	AAA £m	AA £m	A £m	BBB £m	Less than BBB £m	Non-rated £m	
<b>Government</b>							
UK Government	4,177	3	—	—	—	—	4,180
UK local authorities	—	—	—	—	—	—	—
Non-UK Government	564	306	786	772	198	42	2,668
	4,741	309	786	772	198	42	6,848
<b>Corporate</b>							
Public utilities	2	18	152	91	15	7	285
Convertibles and bonds with warrants	—	—	—	1	—	3	4
Other corporate bonds	273	741	3,027	2,568	224	383	7,216
	275	759	3,179	2,660	239	393	7,505
<b>Certificates of deposits</b>	—	239	417	54	275	1	986
<b>Structured</b>							
RMBS <sup>1</sup> non-agency prime	—	—	2	—	—	—	2
RMBS <sup>1</sup> agency	—	—	—	—	—	—	—
	—	—	2	—	—	—	2
CMBS <sup>2</sup>	6	1	—	—	—	—	7
ABS <sup>3</sup>	6	4	39	—	—	—	49
CDO (including CLO) <sup>4</sup>	—	—	—	—	—	—	—
ABCP <sup>5</sup>	—	—	—	—	—	—	—
	12	5	39	—	—	—	56
Wrapped credit	—	11	1	2	2	1	17
Other	201	60	267	198	284	48	1,058
<b>Total</b>	5,229	1,383	4,691	3,686	998	485	16,472
<b>Total %</b>	31.7%	8.4%	28.5%	22.4%	6.1%	2.9%	100.0%
Assets of operations classified as held for sale	48	49	—	1,170	67	4	1,338
<b>Total (excluding assets held for sale)</b>	5,181	1,334	4,691	2,516	931	481	15,134
<b>Total % (excluding assets held for sale)</b>	34.2%	8.8%	31.0%	16.6%	6.2%	3.2%	100.0%
FY11	6,208	1,132	3,912	3,101	371	571	15,295
FY11 %	40.6%	7.4%	25.6%	20.3%	2.4%	3.7%	100.0%

**D3 – Analysis of asset quality continued****D3.4 – Financial investments continued****D3.4.1 – Debt securities continued**

Debt securities – Participating fund assets 2012	External ratings						Total £m
	AAA £m	AA £m	A £m	BBB £m	Less than BBB £m	Non-rated £m	
<b>Government</b>							
UK Government	10,610	4	28	—	—	11	10,653
UK local authorities	—	—	—	—	—	—	—
Non-UK Government	6,779	11,830	1,677	10,471	833	10	31,600
	17,389	11,834	1,705	10,471	833	21	42,253
<b>Corporate</b>							
Public utilities	18	93	1,712	1,012	20	17	2,872
Convertibles and bonds with warrants	—	—	21	284	4	19	328
Other corporate bonds	3,881	4,955	11,902	9,731	1,739	2,369	34,577
	3,899	5,048	13,635	11,027	1,763	2,405	37,777
<b>Certificates of deposits</b>	—	6	42	12	614	—	674
<b>Structured</b>							
RMBS <sup>1</sup> non-agency prime	68	—	2	—	—	—	70
RMBS <sup>1</sup> agency	20	—	—	—	—	—	20
	88	—	2	—	—	—	90
CMBS <sup>2</sup>	152	28	10	25	1	1	217
ABS <sup>3</sup>	50	30	120	22	38	—	260
CDO (including CLO) <sup>4</sup>	—	—	—	—	—	—	—
ABCP <sup>5</sup>	17	—	—	—	—	—	17
	219	58	130	47	39	1	494
Wrapped credit	—	57	12	22	2	—	93
Other	402	120	534	397	570	93	2,116
<b>Total</b>	21,997	17,123	16,060	21,976	3,821	2,520	83,497
<b>Total %</b>	26.3%	20.5%	19.2%	26.3%	4.6%	3.1%	100.0%
Assets of operations classified as held for sale	95	198	666	1,156	534	66	2,715
<b>Total (excluding assets held for sale)</b>	21,902	16,925	15,394	20,820	3,287	2,454	80,782
<b>Total % (excluding assets held for sale)</b>	27.1%	21.0%	19.1%	25.8%	4.0%	3.0%	100.0%
FY11	30,540	11,204	24,004	9,786	1,465	2,451	79,450
FY11 %	38.4%	14.1%	30.2%	12.3%	1.8%	3.2%	100.0%

**D3 – Analysis of asset quality continued****D3.4 – Financial investments continued****D3.4.1 – Debt securities continued**

Debt securities – Shareholder assets 2012	External ratings						Total £m
	AAA £m	AA £m	A £m	BBB £m	Less than BBB £m	Non-rated £m	
<b>Government</b>							
UK Government	3,238	81	4	—	—	192	3,515
UK local authorities	13	—	—	—	—	5	18
Non-UK Government	4,582	4,557	1,208	1,671	40	50	12,108
	7,833	4,638	1,212	1,671	40	247	15,641
<b>Corporate</b>							
Public utilities	27	185	3,797	1,776	45	153	5,983
Convertibles and bonds with warrants	6	—	19	112	2	—	139
Other corporate bonds	1,349	3,143	12,250	11,577	1,394	4,885	34,598
	1,382	3,328	16,066	13,465	1,441	5,038	40,720
<b>Certificates of deposits</b>	—	143	58	21	165	3	390
<b>Structured</b>							
RMBS <sup>1</sup> non-agency prime	101	23	—	—	—	—	124
RMBS <sup>1</sup> agency	887	—	—	—	—	—	887
	988	23	—	—	—	—	1,011
CMBS <sup>2</sup>	1,459	340	186	112	119	—	2,216
ABS <sup>3</sup>	539	164	118	31	57	10	919
CDO (including CLO) <sup>4</sup>	—	—	—	—	1	5	6
ABCP <sup>5</sup>	41	27	—	—	—	—	68
	2,039	531	304	143	177	15	3,209
Wrapped credit	1	201	81	80	38	46	447
Other	45	13	59	44	63	12	236
<b>Total</b>	12,288	8,877	17,780	15,424	1,924	5,361	61,654
<b>Total %</b>	19.9%	14.4%	28.8%	25.0%	3.1%	8.8%	100.0%
Assets of operations classified as held for sale	3,335	3,391	8,758	10,400	1,319	2,361	29,564
<b>Total (excluding assets held for sale)</b>	8,953	5,486	9,022	5,024	605	3,000	32,090
<b>Total % (excluding assets held for sale)</b>	27.9%	17.1%	28.1%	15.7%	1.9%	9.3%	100.0%
FY11	13,011	7,831	17,903	12,101	2,416	5,338	58,600
FY11 %	22.2%	13.4%	30.6%	20.7%	4.1%	9.0%	100.0%

The overall quality of the book remains strong, despite the continuing downgrade activity by the major rating agencies during the year to 2012. 25% of shareholder exposure to debt securities is in government holdings (FY11: 23%). Our corporate debt securities portfolio represents 66% (FY11: 67%) of total shareholder debt securities.

The majority of non-rated corporate bonds are held by our businesses in the US and UK.

At 31 December 2012, the proportion of our shareholder debt securities that are investment grade increased to 88.1% (FY11: 86.9%). The remaining 11.9% of shareholder debt securities that do not have an external rating of BBB or higher can be split as follows:

- 3.1% are debt securities that are rated as below investment grade;
- 3.7% are US private placements which are not rated by the major rating agencies, but are rated as investment grade by the Securities Valuation Office of the National Association of Insurance Commissioners (NAIC), a US national regulatory agency; and,
- 5.1% are not rated by the major rating agencies or the NAIC.

Of the securities not rated by an external agency or NAIC most are allocated an internal rating using a methodology largely consistent with that adopted by an external rating agency, and are considered to be of investment grade credit quality; these include £2.4 billion of debt securities held in our UK Life business, predominantly made up of private placements and other corporate bonds, which have been internally rated as investment grade.

The majority of the Residential Mortgage-Backed Securities (RMBS) are U.S. investments and over 87% of this exposure is backed by one of the U.S. Government Sponsored Entities (GSEs) including Fannie Mae and Freddie Mac which, under the conservatorship arrangements implemented in September 2008, have an implicit guarantee, although they are not expressly backed by the full faith and credit of the U.S. Government.

The Group has extremely limited exposure to CDOs, CLOs and 'Sub-prime' debt securities.

Asset backed securities (ABS) are held primarily by our US and UK businesses. 92.7% of the Group's shareholder holdings in ABS are investment grade. ABS that either have a rating below BBB or are not rated represent approximately 0.1% of shareholder exposure to debt securities.

## D3 – Analysis of asset quality continued

## D3.4 – Financial investments continued

## D3.4.2 – Equity securities

	2012				2011			
	Fair value hierarchy				Fair value hierarchy			
	Level 1 £m	Level 2 £m	Level 3 £m	Total £m	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
<b>Equity securities – Total</b>								
Public utilities	3,684	—	—	3,684	4,132	—	1	4,133
Banks, trusts and insurance companies	6,771	72	415	7,258	5,763	99	403	6,265
Industrial miscellaneous and all other	22,182	158	58	22,398	21,605	174	79	21,858
Non-redeemable preferred shares	437	—	—	437	56	371	—	427
<b>Total</b>	<b>33,074</b>	<b>230</b>	<b>473</b>	<b>33,777</b>	<b>31,556</b>	<b>644</b>	<b>483</b>	<b>32,683</b>
<b>Total %</b>	<b>97.9%</b>	<b>0.7%</b>	<b>1.4%</b>	<b>100.0%</b>	<b>96.6%</b>	<b>2.0%</b>	<b>1.4%</b>	<b>100.0%</b>
Assets of operations classified as held for sale	1,068	180	—	1,248	37	—	—	37
<b>Total (excluding assets held for sale)</b>	<b>32,006</b>	<b>50</b>	<b>473</b>	<b>32,529</b>	<b>31,519</b>	<b>644</b>	<b>483</b>	<b>32,646</b>
<b>Total % (excluding assets held for sale)</b>	<b>98.4%</b>	<b>0.2%</b>	<b>1.4%</b>	<b>100.0%</b>	<b>96.5%</b>	<b>2.0%</b>	<b>1.5%</b>	<b>100.0%</b>

  

	2012				2011			
	Fair value hierarchy				Fair value hierarchy			
	Level 1 £m	Level 2 £m	Level 3 £m	Total £m	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
<b>Equity securities – Policyholder assets</b>								
Public utilities	2,571	—	—	2,571	2,728	—	—	2,728
Banks, trusts and insurance companies	3,902	—	2	3,904	3,386	—	—	3,386
Industrial miscellaneous and all other	15,797	137	1	15,935	14,282	166	7	14,455
Non-redeemable preferred shares	90	—	—	90	33	—	—	33
<b>Total</b>	<b>22,360</b>	<b>137</b>	<b>3</b>	<b>22,500</b>	<b>20,429</b>	<b>166</b>	<b>7</b>	<b>20,602</b>
<b>Total %</b>	<b>99.4%</b>	<b>0.6%</b>	<b>0.0%</b>	<b>100.0%</b>	<b>99.2%</b>	<b>0.8%</b>	<b>0.0%</b>	<b>100.0%</b>
Assets of operations classified as held for sale	1,057	119	—	1,176	34	—	—	34
<b>Total (excluding assets held for sale)</b>	<b>21,303</b>	<b>18</b>	<b>3</b>	<b>21,324</b>	<b>20,395</b>	<b>166</b>	<b>7</b>	<b>20,568</b>
<b>Total % (excluding assets held for sale)</b>	<b>99.9%</b>	<b>0.1%</b>	<b>0.0%</b>	<b>100.0%</b>	<b>99.2%</b>	<b>0.8%</b>	<b>0.0%</b>	<b>100.0%</b>

  

	2012				2011			
	Fair value hierarchy				Fair value hierarchy			
	Level 1 £m	Level 2 £m	Level 3 £m	Total £m	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
<b>Equity securities – Participating fund assets</b>								
Public utilities	1,095	—	—	1,095	1,368	—	—	1,368
Banks, trusts and insurance companies	2,309	—	86	2,395	2,211	—	70	2,281
Industrial miscellaneous and all other	6,274	21	45	6,340	7,048	6	62	7,116
Non-redeemable preferred shares	24	—	—	24	23	—	—	23
<b>Total</b>	<b>9,702</b>	<b>21</b>	<b>131</b>	<b>9,854</b>	<b>10,650</b>	<b>6</b>	<b>132</b>	<b>10,788</b>
<b>Total %</b>	<b>98.5%</b>	<b>0.2%</b>	<b>1.3%</b>	<b>100.0%</b>	<b>98.7%</b>	<b>0.1%</b>	<b>1.2%</b>	<b>100.0%</b>
Assets of operations classified as held for sale	—	—	—	—	1	—	—	1
<b>Total (excluding assets held for sale)</b>	<b>9,702</b>	<b>21</b>	<b>131</b>	<b>9,854</b>	<b>10,649</b>	<b>6</b>	<b>132</b>	<b>10,787</b>
<b>Total % (excluding assets held for sale)</b>	<b>98.5%</b>	<b>0.2%</b>	<b>1.3%</b>	<b>100.0%</b>	<b>98.7%</b>	<b>0.1%</b>	<b>1.2%</b>	<b>100.0%</b>

  

	2012				2011			
	Fair value hierarchy				Fair value hierarchy			
	Level 1 £m	Level 2 £m	Level 3 £m	Total £m	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
<b>Equity securities – Shareholder assets</b>								
Public utilities	18	—	—	18	36	—	1	37
Banks, trusts and insurance companies	560	72	327	959	166	99	333	598
Industrial miscellaneous and all other	111	—	12	123	275	2	10	287
Non-redeemable preferred shares	323	—	—	323	—	371	—	371
<b>Total</b>	<b>1,012</b>	<b>72</b>	<b>339</b>	<b>1,423</b>	<b>477</b>	<b>472</b>	<b>344</b>	<b>1,293</b>
<b>Total %</b>	<b>71.1%</b>	<b>5.1%</b>	<b>23.8%</b>	<b>100.0%</b>	<b>36.9%</b>	<b>36.5%</b>	<b>26.6%</b>	<b>100.0%</b>
Assets of operations classified as held for sale	11	61	—	72	2	—	—	2
<b>Total (excluding assets held for sale)</b>	<b>1,001</b>	<b>11</b>	<b>339</b>	<b>1,351</b>	<b>475</b>	<b>472</b>	<b>344</b>	<b>1,291</b>
<b>Total % (excluding assets held for sale)</b>	<b>74.1%</b>	<b>0.8%</b>	<b>25.1%</b>	<b>100.0%</b>	<b>36.8%</b>	<b>36.6%</b>	<b>26.6%</b>	<b>100.0%</b>

71.1% of our shareholder exposure to equity securities is based on quoted prices in an active market and as such is classified as Level 1 (FY11: 36.9%). The increase in 2012 reflects the classification of our holding in Delta Lloyd as a financial investment from 5 July 2012 and the transfer of non-redeemable preferred shares from Level 2 to 1 as quoted prices in active markets become available. Excluding assets classified as held for sale, 74.1% of shareholder exposure is to equities that are Level 1.

Shareholder investments include a strategic holding in Italian banks of £289 million (£148 million net of any non-controlling interest share in the Group companies that own the investments).

## D3 – Analysis of asset quality continued

## D3.4 – Financial investments continued

## D3.4.3 – Other investments

	2012				2011			
	Fair value hierarchy				Fair value hierarchy			
	Level 1 £m	Level 2 £m	Level 3 £m	Total £m	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
<b>Other investments – Total</b>								
Unit trusts and other investment vehicles	20,341	3,712	2,703	26,756	20,690	3,774	2,796	27,260
Derivative financial instruments	340	1,203	47	1,590	343	1,139	16	1,498
Deposits with credit institutions	702	11	26	739	403	—	24	427
Minority holdings in property management undertakings	—	584	—	584	—	617	—	617
Other	321	—	103	424	466	—	109	575
<b>Total</b>	<b>21,704</b>	<b>5,510</b>	<b>2,879</b>	<b>30,093</b>	<b>21,902</b>	<b>5,530</b>	<b>2,945</b>	<b>30,377</b>
<b>Total %</b>	<b>72.1%</b>	<b>18.3%</b>	<b>9.6%</b>	<b>100.0%</b>	<b>72.1%</b>	<b>18.2%</b>	<b>9.7%</b>	<b>100.0%</b>
Assets of operations classified as held for sale	445	709	396	1,550	217	—	—	217
<b>Total (excluding assets held for sale)</b>	<b>21,259</b>	<b>4,801</b>	<b>2,483</b>	<b>28,543</b>	<b>21,685</b>	<b>5,530</b>	<b>2,945</b>	<b>30,160</b>
<b>Total % (excluding assets held for sale)</b>	<b>74.5%</b>	<b>16.8%</b>	<b>8.7%</b>	<b>100.0%</b>	<b>71.9%</b>	<b>18.3%</b>	<b>9.8%</b>	<b>100.0%</b>

	2012				2011			
	Fair value hierarchy				Fair value hierarchy			
	Level 1 £m	Level 2 £m	Level 3 £m	Total £m	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
<b>Other investments – Policyholder assets</b>								
Unit trusts and other investment vehicles	19,344	3,423	56	22,823	19,299	3,188	59	22,546
Derivative financial instruments	34	7	—	41	16	31	2	49
Deposits with credit institutions	515	—	—	515	158	—	—	158
Minority holdings in property management undertakings	—	14	—	14	—	22	—	22
Other	311	—	—	311	458	—	—	458
<b>Total</b>	<b>20,204</b>	<b>3,444</b>	<b>56</b>	<b>23,704</b>	<b>19,931</b>	<b>3,241</b>	<b>61</b>	<b>23,233</b>
<b>Total %</b>	<b>85.3%</b>	<b>14.5%</b>	<b>0.2%</b>	<b>100.0%</b>	<b>85.8%</b>	<b>13.9%</b>	<b>0.3%</b>	<b>100.0%</b>
Assets of operations classified as held for sale	206	51	—	257	210	—	—	210
<b>Total (excluding assets held for sale)</b>	<b>19,998</b>	<b>3,393</b>	<b>56</b>	<b>23,447</b>	<b>19,721</b>	<b>3,241</b>	<b>61</b>	<b>23,023</b>
<b>Total % (excluding assets held for sale)</b>	<b>85.3%</b>	<b>14.5%</b>	<b>0.2%</b>	<b>100.0%</b>	<b>85.6%</b>	<b>14.1%</b>	<b>0.3%</b>	<b>100.0%</b>

	2012				2011			
	Fair value hierarchy				Fair value hierarchy			
	Level 1 £m	Level 2 £m	Level 3 £m	Total £m	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
<b>Other investments – Participating fund assets</b>								
Unit trusts and other investment vehicles	673	267	2,231	3,171	1,250	486	2,284	4,020
Derivative financial instruments	132	300	—	432	74	288	—	362
Deposits with credit institutions	44	—	—	44	61	—	—	61
Minority holdings in property management undertakings	—	555	—	555	—	579	—	579
Other	—	—	56	56	—	—	56	56
<b>Total</b>	<b>849</b>	<b>1,122</b>	<b>2,287</b>	<b>4,258</b>	<b>1,385</b>	<b>1,353</b>	<b>2,340</b>	<b>5,078</b>
<b>Total %</b>	<b>19.9%</b>	<b>26.4%</b>	<b>53.7%</b>	<b>100.0%</b>	<b>27.3%</b>	<b>26.6%</b>	<b>46.1%</b>	<b>100.0%</b>
Assets of operations classified as held for sale	70	—	—	70	—	—	—	—
<b>Total (excluding assets held for sale)</b>	<b>779</b>	<b>1,122</b>	<b>2,287</b>	<b>4,188</b>	<b>1,385</b>	<b>1,353</b>	<b>2,340</b>	<b>5,078</b>
<b>Total % (excluding assets held for sale)</b>	<b>18.6%</b>	<b>26.8%</b>	<b>54.6%</b>	<b>100.0%</b>	<b>27.3%</b>	<b>26.6%</b>	<b>46.1%</b>	<b>100.0%</b>

	2012				2011			
	Fair value hierarchy				Fair value hierarchy			
	Level 1 £m	Level 2 £m	Level 3 £m	Total £m	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
<b>Other investments – Shareholders assets</b>								
Unit trusts and other investment vehicles	324	22	416	762	141	100	453	694
Derivative financial instruments	174	896	47	1,117	253	820	14	1,087
Deposits with credit institutions	143	11	26	180	184	—	24	208
Minority holdings in property management undertakings	—	15	—	15	—	16	—	16
Other	10	—	47	57	8	—	53	61
<b>Total</b>	<b>651</b>	<b>944</b>	<b>536</b>	<b>2,131</b>	<b>586</b>	<b>936</b>	<b>544</b>	<b>2,066</b>
<b>Total %</b>	<b>30.5%</b>	<b>44.3%</b>	<b>25.2%</b>	<b>100.0%</b>	<b>28.4%</b>	<b>45.3%</b>	<b>26.3%</b>	<b>100.0%</b>
Assets of operations classified as held for sale	169	658	396	1,223	7	—	—	7
<b>Total (excluding assets held for sale)</b>	<b>482</b>	<b>286</b>	<b>140</b>	<b>908</b>	<b>579</b>	<b>936</b>	<b>544</b>	<b>2,059</b>
<b>Total % (excluding assets held for sale)</b>	<b>53.1%</b>	<b>31.5%</b>	<b>15.4%</b>	<b>100.0%</b>	<b>28.1%</b>	<b>45.5%</b>	<b>26.4%</b>	<b>100.0%</b>

In total 74.8% (FY11: 73.7%) of shareholder other investments, are classified as Level 1 or 2 in the fair value hierarchy. The unit trusts and other investment vehicles invest in a variety of assets, which can include cash equivalents, debt, equity and property securities. Excluding assets classified as held for sale, 84.6% of shareholder exposure is to other investments that are Level 1 or 2.

**D3 – Analysis of asset quality continued****D3.4 – Financial investments continued****D3.4.4 – Available for sale investments – Impairments and duration and amount of unrealised losses**

The total impairment expense for 2012 for AFS debt securities was £12 million (*FY11: £19 million*). This expense relates to our US business, of which £7 million relates to corporate bonds and £5 million relates to commercial mortgage backed securities that are not yet in default but showed continued deterioration in market value from the previous impairment value.

We have not recognised an impairment charge in respect of unrealised losses on AFS debt securities and other investments as we believe the decline in fair value of these securities relative to their amortised cost to be temporary.

At 31 December 2012, 98% of the AFS debt securities were held by our US business. In respect of debt securities in an unrealised loss position, we have the intent to hold these securities for a sufficient period to recover their value in full and the ability to hold them to maturity, as they are held to match long-term policyholder liabilities of the same or longer duration. In the US the decrease in unrealised losses experienced during 2012, reflects a decrease in the US government treasury yield curve, partially offset by widening credit spreads. In addition, a continued reversal of unrealised losses would be expected as bonds purchased at historically low credit spreads pre-financial crisis approach maturity. Where factors specific to an issuer have resulted in an unrealised loss we have considered whether the security is impaired and recognised an impairment charge where necessary.

Total unrealised losses on AFS debt securities and other investments at 31 December 2012 were £74 million (*FY11: £229 million*) and £5 million (*FY11: £10 million*), respectively. The continuous period for which these AFS classified securities have been in an unrealised loss position is disclosed below:

	0 – 6 months		7 – 12 months		more than 12 months		Total	
	Fair value <sup>1</sup> £m	Gross unrealised £m	Fair value <sup>1</sup> £m	Gross unrealised £m	Fair value <sup>1</sup> £m	Gross unrealised £m	Fair value <sup>1</sup> £m	Gross unrealised £m
<b>2012</b>								
Less than 20% loss position:								
Debt securities	2,006	(14)	53	(3)	534	(11)	2,593	(28)
Equity securities	—	—	—	—	2	—	2	—
Other investments	8	—	8	—	20	(3)	36	(3)
	2,014	(14)	61	(3)	556	(14)	2,631	(31)
20%-50% loss position:								
Debt securities	—	—	—	—	70	(34)	70	(34)
Equity securities	—	—	—	—	—	—	—	—
Other investments	—	—	2	(1)	2	(1)	4	(2)
	—	—	2	(1)	72	(35)	74	(36)
Greater than 50% loss position:								
Debt securities	—	—	—	—	7	(12)	7	(12)
Equity securities	—	—	—	—	—	—	—	—
Other investments	—	—	—	—	—	—	—	—
	—	—	—	—	7	(12)	7	(12)
Total								
Debt securities	2,006	(14)	53	(3)	611	(57)	2,670	(74)
Equity securities	—	—	—	—	2	—	2	—
Other investments	8	—	10	(1)	22	(4)	40	(5)
	2,014	(14)	63	(4)	635	(61)	2,712	(79)
Assets of operations classified as held for sale	2,014	(14)	63	(4)	231	(58)	2,308	(76)
<b>Total (excluding assets held for sale)</b>	—	—	—	—	404	(3)	404	(3)

<sup>1</sup> Only includes AFS classified securities that are in unrealised loss positions.

**D3 – Analysis of asset quality continued****D3.4 – Financial investments continued****D3.4.4 – Available for sale investments – Impairments and duration and amount of unrealised losses continued**

	0 – 6 months		7 – 12 months		more than 12 months		Total	
	Fair value <sup>1</sup> £m	Gross unrealised £m	Fair value <sup>1</sup> £m	Gross unrealised £m	Fair value <sup>1</sup> £m	Gross unrealised £m	Fair value <sup>1</sup> £m	Gross unrealised £m
2011								
Less than 20% loss position:								
Debt securities	1,781	(52)	353	(23)	540	(33)	2,674	(108)
Equity securities	—	—	—	—	2	—	2	—
Other investments	50	(2)	150	(8)	8	—	208	(10)
	1,831	(54)	503	(31)	550	(33)	2,884	(118)
20%-50% loss position:								
Debt securities	14	(7)	15	(5)	168	(76)	197	(88)
Equity securities	—	—	—	—	—	—	—	—
Other investments	—	—	—	—	—	—	—	—
	14	(7)	15	(5)	168	(76)	197	(88)
Greater than 50% loss position:								
Debt securities	1	(2)	1	(2)	16	(29)	18	(33)
Equity securities	—	—	—	—	—	—	—	—
Other investments	—	—	—	—	—	—	—	—
	1	(2)	1	(2)	16	(29)	18	(33)
Total								
Debt securities	1,796	(61)	369	(30)	724	(138)	2,889	(229)
Equity securities	—	—	—	—	2	—	2	—
Other investments	50	(2)	150	(8)	8	—	208	(10)
	1,846	(63)	519	(38)	734	(138)	3,099	(239)
Assets of operations classified as held for sale	—	—	—	—	—	—	—	—
<b>Total (excluding assets held for sale)</b>	<b>1,846</b>	<b>(63)</b>	<b>519</b>	<b>(38)</b>	<b>734</b>	<b>(138)</b>	<b>3,099</b>	<b>(239)</b>

<sup>1</sup> Only includes AFS classified securities that are in unrealised loss positions.



**D3 – Analysis of asset quality continued****D3.4 – Financial investments continued****D3.4.5 – Exposures to peripheral European countries**

Included in our debt securities and other financial assets are exposures to peripheral European countries. All of these assets are valued on a mark to market basis under IAS 39, and therefore our statement of financial position and income statement already reflect any reduction in value between the date of purchase and the balance sheet date. The significant majority of these holdings are within our participating funds where the risk to our shareholders is governed by the nature and extent of our participation within those funds.

Net of non-controlling interests, our direct shareholder and participating fund asset exposure to the government (and local authorities and agencies) of Italy is £4.9 billion (*FY11: £6.4 billion*), a decrease of £1.5 billion. Gross of non-controlling interests, 82% of our shareholder asset exposure to Italy arises from investment exposure of our Italian business.

*Direct sovereign exposures to Greece, Ireland, Portugal, Italy and Spain (net of non-controlling interests, excluding policyholder assets)*

	Participating		Shareholder		Total	
	31 December 2012 £bn	31 December 2011 £bn	31 December 2012 £bn	31 December 2011 £bn	31 December 2012 £bn	31 December 2011 £bn
Greece	—	—	—	—	—	—
Ireland	<b>0.4</b>	0.3	—	0.2	<b>0.4</b>	0.5
Portugal	<b>0.3</b>	0.2	—	—	<b>0.3</b>	0.2
Italy	<b>4.5</b>	5.6	<b>0.4</b>	0.8	<b>4.9</b>	6.4
Spain	<b>0.9</b>	0.8	<b>0.5</b>	0.3	<b>1.4</b>	1.1
<b>Total Greece, Ireland, Portugal, Italy and Spain</b>	<b>6.1</b>	6.9	<b>0.9</b>	1.3	<b>7.0</b>	8.2

*Direct sovereign exposures to Greece, Ireland, Portugal, Italy and Spain (gross of non-controlling interests, excluding policyholder assets)*

	Participating		Shareholder		Total	
	31 December 2012 £bn	31 December 2011 £bn	31 December 2012 £bn	31 December 2011 £bn	31 December 2012 £bn	31 December 2011 £bn
Greece	—	—	—	—	—	—
Ireland	<b>0.4</b>	0.4	—	0.2	<b>0.4</b>	0.6
Portugal	<b>0.3</b>	0.2	—	—	<b>0.3</b>	0.2
Italy	<b>8.5</b>	9.7	<b>0.6</b>	1.1	<b>9.1</b>	10.8
Spain	<b>1.3</b>	1.0	<b>0.9</b>	0.6	<b>2.2</b>	1.6
<b>Total Greece, Ireland, Portugal, Italy and Spain</b>	<b>10.5</b>	11.3	<b>1.5</b>	1.9	<b>12.0</b>	13.2

**D3 – Analysis of asset quality continued****D3.4 – Financial investments continued****D3.4.6 – Non UK Government Debt Securities (gross of non-controlling interests)**

The following is a summary of non UK government debt by issuer as at 31 December 2012 analysed by policyholder, participating and shareholder funds.

	Policyholder		Participating		Shareholder		Total	
	2012 £m	2011 £m	2012 £m	2011 £m	2012 £m	2011 £m	2012 £m	2011 £m
<b>Non UK Government Debt Securities</b>								
Austria	14	28	634	512	123	58	771	598
Belgium	45	30	1,342	1,029	172	176	1,559	1,235
France	189	215	9,072	7,529	1,944	1,634	11,205	9,378
Germany	217	239	2,389	1,751	957	792	3,563	2,782
Greece	—	—	—	46	—	2	—	48
Ireland	34	33	363	378	26	216	423	627
Italy	263	273	8,517	9,670	617	1,056	9,397	10,999
Netherlands	65	63	1,193	1,284	228	136	1,486	1,483
Poland	672	509	1,012	720	445	329	2,129	1,558
Portugal	—	—	257	204	—	8	257	212
Spain	36	46	1,317	1,046	854	639	2,207	1,731
European Supranational debt	136	114	2,928	2,376	1,470	856	4,534	3,346
Other European countries	235	125	634	410	421	91	1,290	626
<b>Europe</b>	<b>1,906</b>	<b>1,675</b>	<b>29,658</b>	<b>26,955</b>	<b>7,257</b>	<b>5,993</b>	<b>38,821</b>	<b>34,623</b>
Canada	18	18	195	195	2,517	2,342	2,730	2,555
United States	131	129	40	66	1,665	1,631	1,836	1,826
<b>North America</b>	<b>149</b>	<b>147</b>	<b>235</b>	<b>261</b>	<b>4,182</b>	<b>3,973</b>	<b>4,566</b>	<b>4,381</b>
Singapore	7	8	453	309	276	211	736	528
Sri Lanka	2	21	2	2	—	139	4	162
Other	604	391	1,252	1,262	393	227	2,249	1,880
<b>Asia Pacific and other</b>	<b>613</b>	<b>420</b>	<b>1,707</b>	<b>1,573</b>	<b>669</b>	<b>577</b>	<b>2,989</b>	<b>2,570</b>
<b>Total</b>	<b>2,668</b>	<b>2,242</b>	<b>31,600</b>	<b>28,789</b>	<b>12,108</b>	<b>10,543</b>	<b>46,376</b>	<b>41,574</b>
Less: assets of operations classified as held for sale	197	34	556	9	2,274	19	3,027	62
<b>Total (excluding assets held for sale)</b>	<b>2,471</b>	<b>2,208</b>	<b>31,044</b>	<b>28,780</b>	<b>9,834</b>	<b>10,524</b>	<b>43,349</b>	<b>41,512</b>

At 31 December 2012, the Group's total government (non-UK) debt securities stood at £46.4 billion (*FY11: £41.6 billion*), an increase of £4.8 billion. The significant majority of these holdings are within our participating funds where the risk to our shareholders is governed by the nature and extent of our participation within those funds.

Our direct shareholder asset exposure to government (non-UK) debt securities amounts to £12.1 billion (*FY11: £10.5 billion*). The primary exposures, relative to total shareholder (non-UK) government debt exposure, are to French (16%), German (8%), Spanish (7%) and Italian (5%) (non-UK) government debt securities.

The participating funds exposure to (non-UK) government debt amounts to £31.6 billion (*FY11: £28.8 billion*), an increase of £2.8 billion. The primary exposures, relative to total (non-UK) government debt exposures included within our participating funds, are to the (non-UK) government debt securities of France (29%), Italy (27%), Germany (8%), Belgium (4%), Spain (4%), Netherlands (4%) and Poland (3%).

**D3 – Analysis of asset quality continued****D3.4 – Financial investments continued****D3.4.7 – Exposure to worldwide bank debt securities**

*Direct shareholder and participating fund assets exposures to worldwide bank debt securities (net of non-controlling interests, excluding policyholder assets)*

	Shareholder assets			Participating fund assets		
	Total senior debt £bn	Total subordinated debt £bn	Total debt £bn	Total senior debt £bn	Total subordinated debt £bn	Total debt £bn
<b>2012</b>						
Austria	—	—	—	0.3	—	0.3
France	0.1	—	0.1	3.5	0.8	4.3
Germany	0.1	0.1	0.2	0.5	0.5	1.0
Ireland	—	0.1	0.1	—	—	—
Italy	0.1	0.1	0.2	0.3	0.1	0.4
Netherlands	0.4	0.2	0.6	1.9	0.3	2.2
Portugal	—	—	—	0.1	—	0.1
Spain	0.8	0.1	0.9	1.1	0.1	1.2
United Kingdom	0.8	0.5	1.3	1.0	1.2	2.2
United States	1.3	0.8	2.1	1.0	0.1	1.1
Other	0.6	0.4	1.0	2.0	0.8	2.8
<b>Total</b>	<b>4.2</b>	<b>2.3</b>	<b>6.5</b>	<b>11.7</b>	<b>3.9</b>	<b>15.6</b>
Less: assets of operations classified as held for sale	1.3	1.0	2.3	0.1	0.1	0.2
<b>Total (excluding assets held for sale)</b>	<b>2.9</b>	<b>1.3</b>	<b>4.2</b>	<b>11.6</b>	<b>3.8</b>	<b>15.4</b>
FY11 Total	3.7	2.2	5.9	10.6	3.6	14.2

Net of non-controlling interests, our direct shareholder assets exposure to worldwide bank debt securities is £6.5 billion. The majority of our holding (65%) is in senior debt. The primary exposures are to US (32%) and UK (20%) banks. Net of non-controlling interests, our direct shareholder asset exposure to worldwide bank equity securities is £0.2 billion. Our holdings include strategic holdings in Italian banks of £148 million.

Net of non-controlling interests, the participating fund exposures to worldwide bank debt securities, where the risk to our shareholders is governed by the nature and extent of our participation within those funds, is £15.6 billion. The majority of the exposure (75%) is in senior debt. Participating funds are the most exposed to French (28%), UK (14%) and Dutch (14%) banks.

*Direct shareholder and participating fund assets exposures to worldwide bank debt securities (gross of non-controlling interests, excluding policyholder assets)*

	Shareholder assets			Participating fund assets		
	Total senior debt £bn	Total subordinated debt £bn	Total debt £bn	Total senior debt £bn	Total subordinated debt £bn	Total debt £bn
<b>2012</b>						
Austria	—	—	—	0.3	—	0.3
France	0.1	—	0.1	4.0	0.9	4.9
Germany	0.1	0.1	0.2	0.5	0.5	1.0
Ireland	—	0.1	0.1	—	—	—
Italy	0.2	0.1	0.3	0.5	0.2	0.7
Netherlands	0.4	0.2	0.6	2.0	0.3	2.3
Portugal	—	—	—	0.1	—	0.1
Spain	1.2	0.1	1.3	1.5	0.2	1.7
United Kingdom	0.8	0.6	1.4	1.1	1.3	2.4
United States	1.4	0.8	2.2	1.1	0.1	1.2
Other	0.7	0.4	1.1	2.2	0.9	3.1
<b>Total</b>	<b>4.9</b>	<b>2.4</b>	<b>7.3</b>	<b>13.3</b>	<b>4.4</b>	<b>17.7</b>
Less: assets of operations classified as held for sale	1.4	1.1	2.5	0.2	0.1	0.3
<b>Total (excluding assets held for sale)</b>	<b>3.5</b>	<b>1.3</b>	<b>4.8</b>	<b>13.1</b>	<b>4.3</b>	<b>17.4</b>
FY11 Total	4.3	2.3	6.6	12.0	3.9	15.9

Gross of non-controlling interests, our direct shareholder assets exposure to worldwide bank debt securities is £7.3 billion. The majority of our holding (67%) is in senior debt. The primary exposures are to US (30%) and UK (19%) banks. Gross of non-controlling interests, our direct shareholder asset exposure to worldwide bank equity securities is £0.4 billion. Our holdings include strategic holdings in Italian banks of £289 million.

Gross of non-controlling interests, the participating fund exposures to worldwide bank debt securities, where the risk to our shareholders is governed by the nature and extent of our participation within those funds, is £17.7 billion. The majority of the exposure (75%) is in senior debt. Participating funds are the most exposed to French (28%), UK (14%) and Dutch (13%) banks.

## D3 – Analysis of asset quality continued

### D3.5 – Reinsurance assets

The Group assumes and cedes reinsurance in the normal course of business, with retention limits varying by line of business. Reinsurance assets primarily include balances due from both insurance and reinsurance companies for ceded insurance liabilities. Amounts recoverable from reinsurers are estimated in a manner consistent with the outstanding claims provisions or settled claims associated with the reinsured policies and in accordance with the relevant reinsurance contract.

If a reinsurance asset is impaired, the Group reduces the carrying amount accordingly and recognises that impairment loss in the income statement. A reinsurance asset is impaired if there is objective evidence, as a result of an event that occurred after initial recognition of the reinsurance asset, that the Group may not receive all amounts due to it under the terms of the contract, and the event has a reliably measurable impact on the amounts that the Group will receive from the reinsurer.

For the table below, reinsurance asset credit ratings are stated in accordance with information from leading rating agencies.

Arrears 2012	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 months – 1 year £m	Greater than 1 year £m		
Policyholders assets	1,576	—	—	—	—	—	1,576
Participating fund assets	542	—	—	—	—	—	542
Shareholder assets	5,449	—	—	—	—	—	5,449
<b>Total</b>	<b>7,567</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>7,567</b>
<b>Total %</b>	<b>100.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100.0%</b>
Assets of operations classified as held for sale	883	—	—	—	—	—	883
<b>Total (excluding assets held for sale)</b>	<b>6,684</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>6,684</b>
<b>Total % (excluding assets held for sale)</b>	<b>100.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100.0%</b>
FY 2011	7,112	—	—	—	—	—	7,112
FY 2011 %	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%

Ratings 2012	Ratings					Non-rated £m	Total £m
	AAA £m	AA £m	A £m	BBB £m	Less than BBB £m		
Policyholders assets	—	266	1,101	—	—	209	1,576
Participating fund assets	—	141	401	—	—	—	542
Shareholder assets	28	4,388	779	56	5	193	5,449
<b>Total</b>	<b>28</b>	<b>4,795</b>	<b>2,281</b>	<b>56</b>	<b>5</b>	<b>402</b>	<b>7,567</b>
<b>Total %</b>	<b>0.4%</b>	<b>63.4%</b>	<b>30.1%</b>	<b>0.7%</b>	<b>0.1%</b>	<b>5.3%</b>	<b>100.0%</b>
Assets of operations classified as held for sale	—	744	99	20	5	15	883
<b>Total (excluding assets held for sale)</b>	<b>28</b>	<b>4,051</b>	<b>2,182</b>	<b>36</b>	<b>—</b>	<b>387</b>	<b>6,684</b>
<b>Total % (excluding assets held for sale)</b>	<b>0.4%</b>	<b>60.7%</b>	<b>32.6%</b>	<b>0.5%</b>	<b>0.0%</b>	<b>5.8%</b>	<b>100.0%</b>
FY 2011	2	4,983	1,650	—	27	450	7,112
FY 2011 %	0.0%	70.1%	23.2%	0.0%	0.4%	6.3%	100.0%

### D3.6 – Receivables and other financial assets

Arrears 2012	Financial assets that are past due but not impaired					Financial assets that have not been impaired £m	Total £m
	Neither past due nor impaired £m	0-3 months £m	3-6 months £m	6 months – 1 year £m	Greater than 1 year £m		
Policyholders assets	346	8	—	—	—	—	354
Participating fund assets	2,686	—	—	—	—	—	2,686
Shareholder assets	4,899	38	13	14	26	—	4,990
<b>Total</b>	<b>7,931</b>	<b>46</b>	<b>13</b>	<b>14</b>	<b>26</b>	<b>—</b>	<b>8,030</b>
<b>Total %</b>	<b>98.7%</b>	<b>0.6%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.3%</b>	<b>0.0%</b>	<b>100.0%</b>
Assets of operations classified as held for sale	413	—	—	—	—	—	413
<b>Total (excluding assets held for sale)</b>	<b>7,518</b>	<b>46</b>	<b>13</b>	<b>14</b>	<b>26</b>	<b>—</b>	<b>7,617</b>
<b>Total % (excluding held for sale)</b>	<b>98.7%</b>	<b>0.6%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.3%</b>	<b>0.0%</b>	<b>100.0%</b>
FY 2011	7,663	134	148	2	3	—	7,950
FY 2011 %	96.4%	1.7%	1.9%	0.0%	0.0%	0.0%	100.0%

### D3 – Analysis of asset quality continued

#### D3.6 – Receivables and other financial assets continued

Credit terms vary from subsidiary to subsidiary, and from country to country, and are set locally within overall credit limits prescribed by the Group credit limit framework, and in line with the Group 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.

#### D3.7 – Cash and cash equivalents

Cash and cash equivalents consist of cash at banks and in hand, deposits held at call with banks, treasury bills and other short-term highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of change in value. Such investments are normally those with less than three months maturity from the date of acquisition, and include certificates of deposit with maturities of less than three months at date of issue.

### D4 – Pension fund assets

In addition to the assets recognised directly on the Group's balance sheet outlined in the disclosures above, the Group is also exposed to the "Plan assets" that are shown net of the present value of scheme liabilities within the IAS 19 net pension surplus. Pension surpluses are included within other assets and pension deficits are recognised within provisions in the Group's consolidated statement of financial position.

Plan assets comprise:

	2012				2011			
	United Kingdom £m	Ireland £m	Canada £m	Total £m	United Kingdom £m	Ireland £m	Canada £m	Total £m
Equities	909	87	92	1,088	735	46	76	857
Bonds	8,867	260	121	9,248	8,663	233	129	9,025
Property	914	12	—	926	657	13	—	670
Other	957	47	15	1,019	1,135	90	14	1,239
<b>Total</b>	<b>11,647</b>	<b>406</b>	<b>228</b>	<b>12,281</b>	<b>11,190</b>	<b>382</b>	<b>219</b>	<b>11,791</b>

#### Risk management and asset allocation strategy

The long-term investment objectives of the trustees and the employers are to limit the risk of the assets failing to meet the liabilities of the schemes over the long term, and to maximise returns consistent with an acceptable level of risk so as to control the long-term costs of these schemes. To meet these objectives, each scheme's assets are invested in a diversified portfolio, consisting primarily of debt securities, equity securities and property.

#### 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 risks to which the scheme is exposed are interest rate, inflation and equity markets. These are actively mitigated, for example, by using inflation and interest rate swaps. Additionally, the exposure to equities has been reduced over time. There is also an exposure to currency risk where assets are not denominated in the same currency as the liabilities. The majority of this exposure has been removed by the use of hedging instruments.

#### Other schemes

The other schemes are considerably less material but their risks are managed in a similar way to those in the main UK scheme.

## D5 – Available funds

To ensure access to liquidity as and when needed, the Group maintains over £2 billion of undrawn committed central borrowing facilities with various highly rated banks, £0.75 billion of which is allocated to support the credit rating of Aviva plc's £2 billion commercial paper programme. The expiry profile of the undrawn committed central borrowing facilities is as follows:

	2012 £m	2011 £m
Expiring within one year	420	955
Expiring beyond one year	1,725	1,160
	<b>2,145</b>	<b>2,115</b>

## D6 – Guarantees

As a normal part of their operating activities, various Group companies have given guarantees and options, including investment return guarantees, in respect of certain long-term insurance and fund management products.

For the UK Life with-profit business, provisions in respect of these guarantees and options are calculated on a market consistent basis, in which stochastic models are used to evaluate the level of risk (and additional cost) under a number of economic scenarios, which allow for the impact of volatility in both interest rates and equity prices. For UK Life non-profit business, provisions do not materially differ from those determined on a market consistent basis.

In all other businesses, provisions for guarantees and options are calculated on a local basis with sensitivity analysis undertaken where appropriate to assess the impact on provisioning levels of a movement in interest rates and equity levels (typically a 1% decrease in interest rates and 10% decline in equity markets).

## Other information

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# Glossary

## Product definitions

### Annuities

A type of policy that pays out regular amounts of benefit, either immediately and for the remainder of a person's lifetime, or deferred to commence from a future date. Immediate annuities may be purchased for an individual and his or her dependants or on a bulk purchase basis for groups of people. Deferred annuities are accumulation contracts, which may be used to provide benefits in retirement, and may be guaranteed, unit-linked or index-linked.

### Bonds and savings

These are accumulation products with single or regular premiums and unit-linked or guaranteed investment returns.

### Critical illness cover

Pays out a lump sum if the insured person is diagnosed with a serious illness that meets the plan definition.

### Deferred annuities

An annuity (or pension) due to be paid from a future date or when the policyholder reaches a specified age. A deferred annuity may be funded by a policyholder by payment of a series of regular contributions or by a capital sum.

### Group pensions

A pension plan that covers a group of people, which is typically purchased by a company and offered to their employees.

### Guaranteed annuities

A policy that pays out a fixed regular amount of benefit for a defined period.

### Income drawdown

The policyholder can transfer money from any pension fund to an income drawdown plan from which they receive an income. The remainder of the pension fund continues to be invested, giving it the potential for growth.

### Investment sales

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

### ISAs

Individual savings accounts – Tax-efficient plans for investing in stocks and shares, cash deposits or life insurance investment funds, subject to certain limits.

### Mortgage endowment

An insurance contract combining savings and protection elements which is designed to repay the principal of a loan or mortgage.

### Mortgage life insurance

A protection contract designed to pay off the outstanding amount of a mortgage or loan in the event of death of the insured.

### Open ended investment company (OEIC)

An collective investment fund structured as a limited company in which investors can buy and sell shares.

### Pensions

A means of providing income in retirement for an individual and possibly his/her dependants.

### Personal pensions

A pension plan tailored to the individual policyholder, which includes the options to stop, start or change their payments.

### Protection

An insurance contract that protects the policyholder or his/her dependants against financial loss on death or ill-health.

### Regular premium

A series of payments are made by the policyholder, typically monthly or annually, for part of or all of the duration of the contract.

### SICAVs

This is an open-ended investment fund, structured as a legally independent joint stock company, whose units are issued in the form of shares.

### Single premium

A single lump sum is paid by the policyholder at commencement of the contract.

### Stakeholder pensions

Low cost and flexible pension plans available in the UK, governed by specific regulations.

### Term assurance

A simple form of life insurance, offering cover over a fixed number of years during which a lump sum will be paid out if the life insured dies.

### Unit trusts

A form of open ended collective investment constituted under a trust deed, in which investors can buy and sell units.

### Unit-linked annuities

A type of deferred annuity which is invested in units of investment funds, whose value depends directly on the market value of assets in those funds.

### Whole life

A protection policy that remains in force for the insured's whole life. Traditional whole life contracts have fixed premium payments that typically cannot be missed without lapsing the policy. Flexible whole life contracts allow the policyholder to vary the premium and/or amount of life cover, within certain limits.

### With-profits

A type of long-term savings and insurance product sold in the UK under with profits policies premiums are paid into a separate fund. Policyholders receive a return on their policies through bonuses, which "smooth" the investment return from the assets which premiums are invested in. Bonuses are declared on an annual and terminal basis. Shareholders have a participating interest in the with-profit funds and any declared bonuses. Generally, policyholder and shareholder participation in with-profit funds in the UK is split 90:10.

**General terms****Available for sale (AFS)**

Securities that have been acquired neither for short-term sale nor to be held to maturity. These are shown at fair value on the statement of financial position and changes in value are taken straight to equity instead of the income statement.

**Association of British Insurers (ABI)**

A major trade association for UK insurance companies, established in July 1985.

**Acquired value of in force (AVIF)**

The present value of future profits on a portfolio of long-term insurance and investment contracts, acquired either directly or through the purchase of a subsidiary.

**Bancassurance**

An arrangement whereby banks and building societies sell insurance and investment products to their customers on behalf of other financial providers.

**UK Corporate Governance Code**

The code sets out guidance in the form of principles and provisions on how companies should be directed and controlled to follow good governance practice.

**Deferred acquisition costs (DAC)**

The costs directly attributable to the acquisition of new business for insurance and investment contracts may be deferred to the extent that they are expected to be recoverable out of future margins in revenue on these contracts.

**Fair value**

The amount for which an asset can be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction.

**FSA**

The UK's Financial Services Authority – Main regulatory body appointed by the government to oversee the financial services industry in the UK. Since December 2001 it has been the single statutory regulator responsible for savings, insurance and investment business. From 1 April 2013, the FSA will split into two new regulatory bodies: the Prudential Regulation Authority (PRA), which will be a subsidiary of the Bank of England, and the Financial Conduct Authority (FCA).

**Funds under management**

Represents all assets actively managed or administered by or on behalf of the Group including those funds managed by third parties.

**Funds under management by Aviva**

Represents all assets actively managed or administered by the fund management operations of the Group.

**General insurance**

Also known as non-life or property and casualty insurance. Property insurance covers loss or damage through fire, theft, flood, storms and other specified risks. Casualty insurance primarily covers losses arising from accidents that cause injury to other people or damage the property of others.

**Gross written premiums**

The total earnings or revenue generated by sales of insurance products, before any reinsurance is taken into account. Not all premiums written will necessarily be treated as income in the current financial year, because some of them could relate to insurance cover for a subsequent period.

**Independent Financial Advisers (IFAs)**

A person or organisation authorised to give advice on financial matters and to sell the products of all financial service providers.

**IFRS**

International Financial Reporting Standards. These are accounting regulations designed to ensure comparable statement of financial position preparation and disclosure, and are the standards that all publicly listed companies in the European Union are required to use.

**Operating profit**

From continuing operations based on expected investment returns, stated before tax attributable to shareholders' profits, and before non-operating items including impairment of goodwill, exceptional and other items. This is also referred to as adjusted operating profit.

**Inherited estate**

In the UK, the assets of the long-term with-profit funds less the realistic reserves for non-profit policies written within the with-profit 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 and guarantees.

**Long-term and savings business**

Collective term for life insurance, pensions, savings, investments and related business.

**Net written premiums**

Total gross written premiums for the given period, minus premiums paid over or 'ceded' to reinsurers.

**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.

**Present value of new business (PVNBP)**

Present value of new regular premiums plus 100% of single premiums, calculated using assumptions consistent with those used to determine the value of new business under Market Consistent Embedded Value (MCEV) principles published by the CFO Forum.

**Turnbull Guidance on Internal Control**

The Turnbull Guidance sets out best practice on internal controls for UK listed companies, and provides additional guidance in applying certain sections of the UK Corporate Governance Code.

# Shareholder services

## Shareholder profile as at 31 December 2012

By category of shareholder	Number of shareholders	%*	Number of shares	%*
Individual	571,901	96.89	278,168,612	9.44
Banks and nominee companies	15,334	2.60	2,614,092,081	88.73
Pension fund managers and insurance companies	239	0.04	2,788,904	0.09
Other corporate bodies	2,771	0.47	50,922,664	1.73
<b>Total</b>	<b>590,245</b>	<b>100</b>	<b>2,945,972,261</b>	<b>100</b>

By size of shareholding	Number of shareholders	%*	Number of shares	%*
1–1,000	532,678	90.25	148,707,650	5.05
1,001–5,000	51,069	8.65	97,672,281	3.32
5,001–10,000	3,605	0.61	25,063,113	0.85
10,001–250,000	2,304	0.39	97,703,037	3.32
250,001–500,000	162	0.03	58,338,929	1.98
500,001 and above	426	0.07	2,498,907,051	84.82
American Depositary Receipts (ADRs)	1	0.00	19,580,200 <sup>+</sup>	0.66
<b>Total</b>	<b>590,245</b>	<b>100</b>	<b>2,945,972,261</b>	<b>100</b>

<sup>+</sup>The number of registered ordinary shares represented by ADRs. Please note that each Aviva ADR represents two (2) ordinary shares.

\* Percentages do not necessarily add up due to rounding.

## 2013 financial calendar

Annual General Meeting	9 May 2013
Announcement of first quarter Interim Management Statement	16 May 2013
Announcement of unaudited half-year results	8 August 2013
Announcement of third quarter Interim Management Statement	7 November 2013

## 2012 final dividend dates – ordinary shares

Ex-dividend date	20 March 2013
Record date	22 March 2013
Dividend payment date *	17 May 2013

\* Please note that the ADR local payment date will be approximately five business days after the proposed dividend date for ordinary shares.

## Annual General Meeting (AGM)

- The 2013 AGM will be held at The Barbican Centre, Silk Street, London EC2Y 8DS on Thursday, 9 May 2013 at 11am.
- Details of each resolution to be considered at the meeting are provided in the Notice of AGM, which is available on the Company's website at [www.aviva.com/agm](http://www.aviva.com/agm).
- Shareholders can vote electronically at [www.investorcentre.co.uk/eproxy](http://www.investorcentre.co.uk/eproxy), in person by attending the meeting, or by completing and returning the relevant voting card(s) by post.
- The voting results for the 2013 AGM will be accessible on the Company's website at [www.aviva.com/agm](http://www.aviva.com/agm) shortly after the meeting.
- If you are unable to attend the AGM but would like to ask the directors a question in connection with the business of the meeting, you can do so by sending a question to the group company secretary by email to [aviva.shareholders@aviva.com](mailto:aviva.shareholders@aviva.com). We will endeavour to provide you with a response as soon as possible.

## AGM voting instructions

- Completed proxy instructions must be submitted to the Company's Registrar, Computershare Investor Services PLC (Computershare), as soon as possible, but in any event to arrive by no later than:
  - 11am on Tuesday, 7 May 2013 for ordinary shareholders; and
  - 11am on Friday, 3 May 2013 for members of the Aviva Share Account and participants in the Aviva All Employee Share Ownership Plan.

## Dividends

- Dividends on ordinary shares are normally paid in May and November - please see the table above for the key dates in respect of the 2012 final dividend.
- Dividends on preference shares are normally paid in March, June, September and December - please visit [www.aviva.com/preferenceshares](http://www.aviva.com/preferenceshares) for the latest dividend payment dates.
- Holders of ordinary and preference shares will receive any dividends payable in sterling and holders of ADRs will receive any dividends payable in US dollars.

## Direct credit of dividend payments

- If you would like to have your cash dividends paid directly into your bank or building society account, please visit [www.aviva.com/dividendmandate](http://www.aviva.com/dividendmandate) for more information or contact Computershare using the contact details overleaf.

## Overseas global dividend service

- The Global Payments Service provided by Computershare enables shareholders living overseas to elect to receive their dividends in a choice of over 65 international currencies. For further details and fees for this service please visit [www.investorcentre.co.uk/faq](http://www.investorcentre.co.uk/faq) and select the Dividends and Payments tab, followed by Global Payment Service.

**Manage your holdings online**

You can view and manage your shareholding online by visiting [www.aviva.com/ecomms](http://www.aviva.com/ecomms). To log in you will require your 11 digit Shareholder Reference Number (SRN), which you will find on your proxy or voting card, latest dividend stationery, or any share certificate issued since 4 July 2011.

Shareholders can also elect to receive electronic communications by registering their email address online, or by contacting Computershare directly. Making this election will save on printing and distribution costs and has environmental benefits.

**Useful links for shareholders****Online Shareholder Services Centre**

[www.aviva.com/shareholderservices](http://www.aviva.com/shareholderservices)

**Dividend information for ordinary shares**

[www.aviva.com/dividends](http://www.aviva.com/dividends)

**Annual General Meeting information and Electronic Voting**

[www.aviva.com/agm](http://www.aviva.com/agm)

[www.investorcentre.co.uk/eproxy](http://www.investorcentre.co.uk/eproxy)

**Aviva share price**

[www.aviva.com/shareprice](http://www.aviva.com/shareprice)

**ADR holders**

[www.aviva.com/adr](http://www.aviva.com/adr)

**Aviva preference shareholders**

[www.aviva.com/preferenceshares](http://www.aviva.com/preferenceshares)

**Aviva preference share price**

[www.londonstockexchange.com](http://www.londonstockexchange.com)

**Aviva Annual Review**

In response to shareholder feedback, we have reintroduced the Annual Review as an alternative to the full Annual Report and Accounts. The Annual Review provides a summary of Aviva's businesses and performance in an easier to read format, which many of our shareholders found useful in the past. You can find further information and view the Annual Review at [www.aviva.com/reports](http://www.aviva.com/reports). If you prefer to receive hard copy documents and would like to elect to receive a copy of the Annual Review instead of the full Annual Report and Accounts, please contact Computershare.

**Ordinary and preference shares – Computershare**

For any queries regarding your shareholding, or to advise of changes to your personal details, please contact our Registrar, Computershare:



**By telephone:** 0871 495 0105

Lines are open from 8.30am to 5pm (UK time), Monday to Friday (excluding public holidays).

Please call +44 117 378 8361 if calling from outside the UK.



**By email:** [avivaSHARES@computershare.co.uk](mailto:avivaSHARES@computershare.co.uk)



**In writing:** Computershare Investor Services PLC  
The Pavilions, Bridgwater Road, Bristol BS99 6ZZ

**American Depositary Receipts (ADRs) – Citibank**

For any queries regarding Aviva ADRs, please contact Citibank Shareholder Services (Citibank):



**By telephone:** 1 877 248 4237 (1 877-CITI-ADR), or +1 781 575 4555 if you are calling from outside the US. (Lines are open from 8.30am to 6.00pm, Monday to Friday US Eastern Standard Time).



**By email:** [citibank@shareholders-online.com](mailto:citibank@shareholders-online.com)



**In writing:** Citibank Shareholder Services,  
PO Box 43077, Providence, Rhode Island 02940-3077 USA

Please visit [www.citi.com/dr](http://www.citi.com/dr) for further information about Aviva's ADR programme.

**Group Company Secretary**

Shareholders may contact the group company secretary as follows:



**By email:** [aviva.shareholders@aviva.com](mailto:aviva.shareholders@aviva.com)



**In writing:** Kirstine Cooper, Group Company Secretary  
St Helen's, 1 Undershaft, London EC3P 3DQ



**By telephone:** +44 (0)20 7283 2000

**Form 20-F**

Aviva is a foreign private issuer in the United States of America and is subject to certain reporting requirements of the Securities Exchange Commission (SEC). Aviva files its Form 20-F with the SEC, copies of which can be found at [www.aviva.com/reports](http://www.aviva.com/reports).

**Be on your guard – beware of fraudsters!**

Shareholders are advised to be very wary of any unsolicited telephone calls or correspondence offering to buy shares at a discount or offering free financial advice or company reports. Boiler rooms use increasingly sophisticated means to approach investors and often leave their victims out of pocket. The Financial Services Authority (FSA) has found most share fraud victims are experienced investors who lose an average of £20,000. The FSA has provided tips on how to protect your savings which you can find at [www.fsa.gov.uk/scams](http://www.fsa.gov.uk/scams).

- Remember: if it sounds too good to be true, it probably is!
- Keep in mind that genuine companies are very unlikely to call you with an offer to buy or sell shares.
- If the caller persists, hang up.

For more information please visit the warning to shareholders page at: [www.aviva.com/shareholderservices](http://www.aviva.com/shareholderservices).