

Notes on the EEV basis results

1 Basis of preparation, methodology and accounting presentation

The EEV basis results have been prepared in accordance with the EEV Principles issued by the European Insurance CFO Forum in May 2004 and expanded by the Additional Guidance on EEV disclosures published in October 2005. Where appropriate, the EEV basis results include the effects of adoption of International Financial Reporting Standards (IFRS).

The directors are responsible for the preparation of the supplementary information in accordance with the EEV Principles.

a Covered business

The EEV results for the Group are prepared for 'covered business', as defined by the EEV Principles. Covered business represents the Group's long-term insurance business for which the value of new and in-force contracts is attributable to shareholders. The EEV basis results for the Group's covered business are then combined with the IFRS basis results of the Group's other operations.

The definition of long-term business operations is consistent with previous practice and comprises those contracts falling under the definition of long-term insurance business for regulatory purposes together with, for US operations, contracts that are in substance the same as guaranteed investment contracts (GICs) but do not fall within the technical definition. Under the EEV Principles, the results for covered business incorporate the projected margins of attaching internal asset management.

With two principal exceptions, covered business comprises the Group's long-term business operations. The principal exceptions are for the closed Scottish Amicable Insurance Fund (SAIF) and for the presentational treatment of the financial position of the Group's principal defined benefit pension scheme, the Prudential Staff Pension Scheme (PSPS). A small amount of UK group pensions business is also not modelled for EEV reporting purposes.

SAIF is a ring-fenced sub-fund of the Prudential Assurance Company (PAC) long-term fund, established by a Court approved Scheme of Arrangement in October 1997. SAIF is closed to new business and the assets and liabilities of the fund are wholly attributable to the policyholders of the fund.

The PSPS deficit funding liability attaching to the shareholder-backed business is included in the total for Other operations, reflecting the fact that the deficit funding is being paid for by the parent company, Prudential plc. The changes in financial position of the Scottish Amicable and M&G pension scheme are reflected in the EEV results for UK insurance operations and Other operations respectively.

b Methodology

(i) Embedded value

Overview

The embedded value is the present value of the shareholders' interest in the earnings distributable from assets allocated to covered business after sufficient allowance has been made for the aggregate risks in that business. The shareholders' interest in the Group's long-term business comprises:

- present value of future shareholder cash flows from in-force covered business (value of in-force business), less deductions for:
 - the cost of locked-in required capital,
 - the time value of cost of options and guarantees,
- locked-in required capital, and
- shareholders' net worth in excess of required capital (free surplus).

The value of future new business is excluded from the embedded value.

Notwithstanding the basis of presentation of results (as explained in note 1(c)(iv)) no smoothing of market or account balance values, unrealised gains or investment return is applied in determining the embedded value or profit before tax. Separately, the analysis of profit is delineated between operating profit based on longer-term investment returns and other constituent items, as explained in note 1(c)(i).

Valuation of in-force and new business

The embedded value results are prepared incorporating best estimate assumptions about all relevant factors including levels of future investment returns, expenses, persistency and mortality. These assumptions are used to project future cash flows. The present value of the future cash flows is then calculated using a discount rate which reflects both the time value of money and the non-diversifiable risks associated with the cash flows that are not otherwise allowed for.

Best estimate assumptions

Best estimate assumptions are used for the cash flow projections, where best estimate is defined as the mean of the distribution of future possible outcomes. The assumptions are reviewed actively and changes are made when evidence exists that material changes in future experience are reasonably certain.

Assumptions required in the calculation of the value of options and guarantees, for example relating to volatilities and correlations, or dynamic algorithms linking liabilities to assets, have been set equal to the best estimates and, wherever material and practical, reflect any dynamic relationships between the assumptions and the stochastic variables.

Notes on the EEV basis results continued

1 Basis of preparation, methodology and accounting presentation continued

Principal economic assumptions

The EEV basis results for the Group's operations have been determined using economic assumptions where the long-term expected rates of return on investments and risk discount rates are set by reference to year end rates of return on government bonds (the 'active' basis).

Expected returns on equity and property asset classes are derived by adding a risk premium, based on the long-term view of Prudential's economists, to the risk-free rate.

The total profit that emerges over the lifetime of an individual contract as calculated using the embedded value basis is the same as that calculated under the IFRS basis. Since the embedded value basis reflects discounted future cash flows, under this methodology the profit emergence is advanced, thus more closely aligning the timing of the recognition of profits with the efforts and risks of current management actions, particularly with regard to business sold during the year.

New business

The contribution from new business represents profits determined by applying operating assumptions as at the end of the year.

In determining the new business contribution for UK immediate annuity business, which is interest rate sensitive, it is appropriate to use assumptions reflecting point of sale market conditions, consistent with how the business is priced. For other business within the Group, end of period economic assumptions are used.

Valuation movements on investments

With the exception of debt securities held by Jackson, investment gains and losses during the year (to the extent that changes in capital values do not directly match changes in liabilities) are included directly in the profit for the year and shareholders' equity as they arise.

The results for any covered business conceptually reflects the aggregate of the IFRS results and the movements on the additional shareholders' interest recognised on the EEV basis. Thus the start point for the calculation of the EEV results for Jackson, as for other businesses, reflects the market value movements recognised on the IFRS basis.

However, in determining the movements on the additional shareholders' interest, the basis for calculating the Jackson EEV result acknowledges that for debt securities backing liabilities the aggregate EEV results reflect the fact that the value of in-force business instead incorporates the discounted value of future spread earnings. This value is not affected generally by short-term market movements on securities that are, broadly speaking, held for the longer-term.

Fixed income securities backing the free surplus and required capital for Jackson are accounted for at fair value. However, consistent with the treatment applied under IFRS for Jackson securities classified as available-for-sale, movements in unrealised appreciation on these securities are accounted for in equity rather than in the income statement, as shown in the movement in shareholders' equity.

Cost of capital

A charge is deducted from the embedded value for the cost of capital supporting the Group's long-term business. This capital is referred to as required capital. The cost is the difference between the nominal value of the capital and the discounted value of the projected releases of this capital allowing for investment earnings (net of tax) on the capital.

The annual result is affected by the movement in this cost from year-to-year which comprises a charge against new business profit and generally a release in respect of the reduction in capital requirements for business in force as this runs off.

Where required capital is held within a with-profits long-term fund, the value placed on surplus assets in the fund is already discounted to reflect its release over time and no further adjustment is necessary in respect of required capital.

Financial options and guarantees

Nature of options and guarantees in Prudential's long-term business

Asian operations

Subject to local market circumstances and regulatory requirements, the guarantee features described below in respect of UK business broadly apply to similar types of participating contracts principally written in the PAC Hong Kong branch, Singapore and Malaysia. Participating products have both guaranteed and non-guaranteed elements.

There are also various non-participating long-term products with guarantees. The principal guarantees are those for whole of life contracts with floor levels of policyholder benefits that accrue at rates set at inception and do not vary subsequently with market conditions.

US operations (Jackson)

The principal options and guarantees in Jackson are associated with the fixed annuity and variable annuity (VA) lines of business.

Fixed annuities provide that, at Jackson's discretion, it may reset the interest rate credited to policyholders' accounts, subject to a guaranteed minimum. The guaranteed minimum return varies from 1.0 per cent to 5.5 per cent (2010: 1.5 per cent to 5.5 per cent), depending on the particular product, jurisdiction where issued, and date of issue. At 31 December 2011, 85 per cent (2010: 83 per cent) of the account values on fixed annuities relates to policies with guarantees of 3 per cent or less. The average guarantee rate is 2.8 per cent for 2011 (2010: 2.9 per cent).

Fixed annuities also present a risk that policyholders will exercise their option to surrender their contracts in periods of rapidly rising interest rates, possibly requiring Jackson to liquidate assets at an inopportune time.

Jackson issues VA contracts where it contractually guarantees to the contract holder either: a) return of no less than total deposits made to the contract adjusted for any partial withdrawals, b) total deposits made to the contract adjusted for any partial withdrawals plus a minimum return, or c) the highest contract value on a specified anniversary date adjusted for any withdrawals following the specified contract anniversary. These guarantees include benefits that are payable at specified dates during the accumulation period (Guaranteed Minimum Withdrawal Benefit (GMWB)), as death benefits (Guaranteed Minimum Death Benefits (GMDB)) or as income benefits (Guaranteed Minimum Income Benefits (GMIB)). Jackson reinsures and hedges these risks using equity options and futures contracts. These guarantees generally protect the policyholder's value in the event of poor equity market performance.

Jackson also issues fixed index annuities that enable policyholders to obtain a portion of an equity-linked return while providing a guaranteed minimum return. The guaranteed minimum returns would be of a similar nature to those described above for fixed annuities.

UK insurance operations

The only significant financial options and guarantees in the UK insurance operations arise in the with-profits fund and SAIF.

With-profits products provide returns to policyholders through bonuses that are smoothed. There are two types of bonuses: annual and final. Annual bonuses are declared once a year and, once credited, are guaranteed in accordance with the terms of the particular product. Unlike annual bonuses, final bonuses are guaranteed only until the next bonus declaration. The with-profits fund also held a provision on the Pillar I Peak 2 basis of £90 million at 31 December 2011 (2010: £24 million) to honour guarantees on a small amount of guaranteed annuity option products.

Beyond the generic features and the provisions held in respect of guaranteed annuities described above, there are very few explicit options or guarantees of the with-profits fund such as minimum investment returns, surrender values, or annuity values at retirement and any granted have generally been at very low levels. At 31 December 2011, guarantees on certain with-profits deferred annuity business were in the money as a result of the low level of interest rates at that date.

The Group's main exposure to guaranteed annuity options in the UK is through SAIF and a provision on the Pillar I Peak 2 basis of £370 million (2010: £336 million) was held in SAIF at 31 December 2011 to honour the guarantees. As SAIF is a separate sub-fund of the PAC long-term fund which is attributable to policyholders of the fund, the movement in the provision has no direct impact on shareholders.

Time value

The value of financial options and guarantees comprises two parts. One is given by a deterministic valuation on best estimate assumptions (the intrinsic value). The other part arises from the variability of economic outcomes in the future (the time value).

Where appropriate, a full stochastic valuation has been undertaken to determine the time value of the financial options and guarantees.

The economic assumptions used for the stochastic calculations are consistent with those used for the deterministic calculations. Assumptions specific to the stochastic calculations reflect local market conditions and are based on a combination of actual market data, historic market data and an assessment of long-term economic conditions. Common principles have been adopted across the Group for the stochastic asset models, for example, separate modelling of individual asset classes but with an allowance for correlation between the various asset classes. Details of the key characteristics of each model are given in note 17(a).

(ii) Level of required capital

In adopting the EEV Principles, Prudential has based required capital on its internal targets for economic capital subject to it being at least the local statutory minimum requirements. Economic capital is assessed using internal models but, when applying the EEV Principles, Prudential does not take credit for the significant diversification benefits that exist within the Group. For with-profits business written in a segregated life fund, as is the case in Asia and the UK, the capital available in the fund is sufficient to meet the required capital requirements. For shareholder-backed business the following capital requirements apply:

- Asian operations: the level of required capital has been set at the higher of local statutory requirements and the economic capital requirement;
- US operations: the level of required capital has been set to an amount at least equal to 235 per cent of the risk-based capital required by the National Association of Insurance Commissioners (NAIC) at the Company Action Level (CAL); and
- UK insurance operations: the capital requirements are set at the higher of Pillar I and Pillar II requirements for shareholder-backed business of UK insurance operations as a whole, which for 2011 and 2010 was Pillar I.

Notes on the EEV basis results continued

1 Basis of preparation, methodology and accounting presentation continued

(iii) Allowance for risk and risk discount rates

Overview

Under the EEV Principles, discount rates used to determine the present value of future cash flows are set equal to risk-free rates plus a risk margin. The risk margin should reflect any non-diversifiable risk associated with the emergence of distributable earnings that is not allowed for elsewhere in the valuation. Prudential has selected a granular approach to better reflect differences in market risk inherent in each product group. The risk discount rate so derived does not reflect an overall Group market beta but instead reflects the expected volatility associated with the cash flows for each product category in the embedded value model.

Since financial options and guarantees are explicitly valued under the EEV methodology, discount rates under EEV are set excluding the effect of these product features.

The risk margin represents the aggregate of the allowance for market risk, additional allowance for credit risk where appropriate, and allowance for non-diversifiable non-market risk. No allowance is required for non-market risks where these are assumed to be fully diversifiable. The majority of non-market and non-credit risks are considered to be diversifiable.

Market risk allowance

The allowance for market risk represents the beta multiplied by an equity risk premium. Except for UK shareholder-backed annuity business (as explained below) such an approach has been used for all of the Group's businesses.

The beta of a portfolio or product measures its relative market risk. The risk discount rates reflect the market risk inherent in each product group and hence the volatility of product cash flows. These are determined by considering how the profits from each product are affected by changes in expected returns on various asset classes. By converting this into a relative rate of return it is possible to derive a product specific beta.

Product level betas reflect the most recent product mix to produce appropriate betas and risk discount rates for each major product grouping.

Additional credit risk allowance

The Group's methodology is to allow appropriately for credit risk. The allowance for total credit risk is to cover:

- expected long-term defaults,
- credit risk premium (to reflect the volatility in downgrade and default levels), and
- short-term downgrades and defaults.

These allowances are initially reflected in determining best-estimate returns and through the market risk allowance described above. However, for those businesses which are largely backed by holdings of debt securities, these allowances in the projected returns and market risk allowances may not be sufficient and an additional allowance may be appropriate.

The practical application of the allowance for credit risk varies depending upon the type of business as described below.

Asian operations

For Asian operations, the allowance for credit risk incorporated in the projected rates of return and the market risk allowance are sufficient. Accordingly, no additional allowance for credit risk is required.

US business (Jackson)

For Jackson business, the allowance for long-term defaults is reflected in the Risk Margin Reserve (RMR) charge which is deducted in determining the projected spread margin between the earned rate on the investments and the policyholder crediting rate.

The risk discount rate incorporates an additional allowance for credit risk premium and short-term downgrades and defaults. In determining this allowance a number of factors have been considered. These factors, in particular, include:

- How much of the credit spread on debt securities represents an increased credit risk not reflected in the RMR long-term default assumptions, and how much is liquidity premium. In assessing this effect, consideration has been given to a number of approaches to estimating the liquidity premium by considering recent statistical data; and
- Policyholder benefits for Jackson fixed annuity business are not fixed. It is possible in adverse economic scenarios to pass on a component of credit losses to policyholders (subject to guarantee features) through lower crediting rates. Consequently, it is only necessary to allow for the balance of the credit risk in the risk discount rate.

After taking these and related factors into account and, based on market conditions from 2009 to 2011, the risk discount rate for general account business includes an additional allowance of 200 basis points (2010: 150 basis points) for credit risk. For VA business, the additional allowance has been set at one-fifth (equivalent to 40 basis points (2010: 30 basis points)) of the non-VA business to reflect the proportion of the VA business that is allocated to holdings of general account debt securities.

The level of the additional allowance is assessed at each reporting period to take account of prevailing credit conditions and as the business in force alters over time.

The level of allowance differs from that for UK annuity business for investment portfolio differences and to take account of the management actions available in adverse economic scenarios to reduce crediting rates to policyholders, subject to guarantee features of the products.

UK business

(1) Shareholder-backed annuity business

For Prudential's UK shareholder-backed annuity business, Prudential has used a market consistent embedded value (MCEV) approach to derive an implied risk discount rate which is then applied to the projected best estimate cash flows.

In the annuity MCEV calculations, the future cash flows are discounted using the swap yield curve plus an allowance for liquidity premium based on Prudential's assessment of the expected return on the assets backing the annuity liabilities after allowing for expected long-term defaults, a credit risk premium, an allowance for a 1 notch downgrade of the portfolio subject to credit risk and an allowance for short-term defaults. For the purposes of presentation in the EEV results, the results on this basis are reconfigured. Under this approach the projected earned rate of return on the debt securities held is determined after allowing for expected long-term defaults and, where necessary, an additional allowance for an element of short-term downgrades and defaults to bring the allowance in the earned rate up to best estimate levels. The allowances for credit risk premium and the remaining element of short-term downgrade and default allowances are incorporated into the risk margin included in the discount rate, as shown in note 17(a).

(2) With-profit fund non-profit annuity business

For UK non-profit annuity business including that written by Prudential Annuities Limited (PAL) the basis for determining the aggregate allowance for credit risk is consistent with that applied for UK shareholder-backed annuity business (as described above). The allowance for credit risk in PAL is taken into account in determining the projected cash flows to the with-profits fund, which are in turn discounted at the risk discount rate applicable to all of the projected cash flows of the fund.

(3) With-profit fund holdings of debt securities

The UK with-profits fund holds debt securities as part of its investment portfolio backing policyholder liabilities and unallocated surplus. The assumed earned rate for with-profit holdings of corporate bonds is defined as the risk-free rate plus an assessment of the long-term spread over gilts, net of expected long-term defaults. This approach is similar to that applied for equities and properties for which the projected earned rate is defined as the risk-free rate plus a long-term risk premium.

Allowance for non-diversifiable non-market risks

Finance theory cannot be used to determine the appropriate component of beta for non-diversifiable non-market risks since there is no observable risk premium associated with it that is akin to the equity risk premium. Recognising this, a pragmatic approach has been applied.

A base level allowance of 50 basis points is applied to cover the non-diversifiable non-market risks associated with the Group's businesses. For the Group's US business and UK business other than shareholder-backed annuity, no additional allowance is necessary. For UK shareholder-backed annuity business a further allowance of 50 basis points is used to reflect the longevity risk which is of particular relevance. For the Group's Asian operations in China, India, Indonesia, Philippines, Taiwan, Thailand and Vietnam, additional allowances are applied for emerging market risk ranging from 100 to 250 basis points.

(iv) Management actions

In deriving the time value of financial options and guarantees, management actions in response to emerging investment and fund solvency conditions have been modelled. Management actions encompass, but are not confined to investment allocation decisions, levels of reversionary and terminal bonuses and credited rates. Bonus rates are projected from current levels and varied in accordance with assumed management actions applying in the emerging investment and fund solvency conditions.

In all instances, the modelled actions are in accordance with approved local practice and therefore reflect the options actually available to management. For the PAC with-profits fund, the actions assumed are consistent with those set out in the Principles and Practices of Financial Management.

(v) With-profits business and the treatment of the estate

The proportion of surplus allocated to shareholders from the PAC with-profits fund has been based on the present level of 10 per cent. The value attributed to the shareholders' interest in the estate is derived by increasing final bonus rates (and related shareholder transfers) so as to exhaust the estate over the lifetime of the in-force with-profits business. In any scenarios where the total assets of the life fund are insufficient to meet policyholder claims in full, the excess cost is fully attributed to shareholders. Similar principles apply, where appropriate, for other with-profit funds of the Group's Asian operations.

Notes on the EEV basis results continued

1 Basis of preparation, methodology and accounting presentation continued

(vi) Pension costs

The Group operates three defined benefit schemes in the UK. The largest scheme is the PSPS. The other two, smaller schemes are the Scottish Amicable and M&G scheme.

Under IFRS the surpluses or deficits attaching to these schemes are accounted for in accordance with the provisions of IAS 19 that apply the principles of IFRIC 14, providing guidance on assessing the limit in IAS 19 on the amount of surplus in a defined benefit pension scheme that can be recognised as an asset.

Under the EEV basis the IAS 19 basis surpluses (to the extent not restricted under IFRIC 14) or deficits are initially allocated in the same manner. The shareholders' 10 per cent interest in the PAC with-profits fund estate is determined after inclusion of the portion of the IAS 19 basis surpluses or deficits attributable to the fund. Adjustments under EEV in respect of accounting for surpluses or deficits on the Scottish Amicable Pension Scheme are reflected as part of UK long-term business operations and for other defined benefit schemes the adjustments are reflected as part of Other operations, as shown in note 7.

Separately, the projected cash flows of in-force covered business include the cost of contributions to the defined benefit schemes for future service based on the contribution basis applying to the schemes at the time of the preparation of the results.

(vii) Debt capital

Core structural debt liabilities are carried at market value. As the liabilities are generally held to maturity or for the long-term, no deferred tax asset or liability has been established on the difference, compared to the IFRS carrying value. Accordingly, no deferred tax credit or charge is recorded in the results for the reporting period in respect of the mark to market value adjustment.

(viii) Foreign currency translation

Foreign currency profits and losses have been translated at average exchange rates for the year. Foreign currency assets and liabilities have been translated at year end rates of exchange. The purpose of translating the profits and losses at average exchange rates, notwithstanding the fact that EEV profit represents the incremental value added on a discounted cash flow basis, is to maintain consistency with the methodology applied for IFRS basis reporting.

c Accounting presentation

(i) Analysis of profit before tax

To the extent applicable, the presentation of the EEV profit for the year is consistent with the basis that the Group applies for analysis of IFRS basis profits before shareholder taxes between operating and non-operating results. Operating results reflect the underlying results including longer-term investment returns (which are determined as described in note 1(c)(ii) below) and incorporate the following:

- new business contribution, as defined in note 1(b)(i),
- unwind of discount on the value of in-force business and other expected returns, as described in note 1(c)(iv) below,
- the impact of routine changes of estimates relating to non-economic assumptions, as described in note 1(c)(iii) below, and
- non-economic experience variances, as described in note 1(c)(v) below.

Non-operating results comprise the recurrent items of short-term fluctuations in investment returns, the shareholders' share of actuarial and other gains and losses on defined benefit pension schemes, the mark to market value movements on core borrowings and the effect of changes in economic assumptions.

In addition, for 2010 the Company incurred costs associated with the terminated AIA transaction and the Group's holding in PruHealth was diluted. The effect of both of these items has been shown separately from operating profits based on longer-term investment returns.

(ii) Operating profit

For the investment element of the assets covering the net worth of long-term insurance business, investment returns are recognised in operating results at the expected long-term rate of return. These expected returns are calculated by reference to the asset mix of the portfolio. For the purpose of calculating the longer-term investment return to be included in the operating result of the PAC with-profits fund of UK operations, where assets backing the liabilities and unallocated surplus are subject to market volatility, asset values at the beginning of the reporting period are adjusted to remove the effects of short-term market movements as explained in note 1(c)(iv) below.

For the purpose of determining the long-term returns for debt securities of US operations for fixed annuity and other general account business, a risk margin charge is included which reflects the expected long-term rate of default based on the credit quality of the portfolio. For Jackson, interest-related realised gains and losses are amortised to the operating results over the maturity period of the sold bonds and for equity-related investments, a long-term rate of return is assumed, which reflects the aggregation of end of year risk-free rates and equity risk premium. For US variable annuity separate account business, operating profit includes the unwind of discount on the opening value of in-force adjusted to reflect end of year projected rates of return with the excess or deficit of the actual return recognised within non-operating profit, together with the related hedging activity.

For UK annuity business, rebalancing of the asset portfolio backing the liabilities to policyholders may, from time to time, take place to align it more closely with the internal benchmark of credit quality that management applies. Such rebalancing will result in a change in the projected yield on the asset portfolio and the allowance for default risk. The net effect of these changes is reflected in the result for the year. In general, the effect is booked in operating results.

(iii) Effect of changes in operating assumptions

Operating profit includes the effect of changes to operating assumptions on the value of in-force at the end of the period. For presentational purposes, the effect of change is delineated to show the effect on the opening value of in force with the experience variance being determined by reference to the end of period assumptions.

(iv) Unwind of discount and other expected returns

The unwind of discount and other expected returns is determined by reference to the value of in-force business, required capital and surplus assets at the start of the period as adjusted for the effect of changes in economic and operating assumptions reflected in the current period.

For UK insurance operations the amount included within operating results based on longer-term investment returns represents the unwind of discount on the value of in-force business at the beginning of the period (adjusted for the effect of current period assumption changes), the unwind of discount on additional value representing the shareholders' share of smoothed surplus assets retained within the PAC with-profits fund (as explained in note 1(b)(v) above), and the expected return on shareholders' assets held in other UK long-term business operations. Surplus assets retained within the PAC with-profits fund are smoothed for this purpose to remove the effects of short-term investment volatility from operating results. In the summary statement of financial position and for total profit reporting, asset values and investment returns are not smoothed.

(v) Operating experience variances

Operating profits include the effect of experience variances on non-economic assumptions, which are calculated with reference to the embedded value assumptions at the end of the reporting year, such as persistency, mortality and morbidity, expenses and other factors. Further details are shown in note 17(b).

(vi) Pension costs

Profit before tax

Movements on the shareholders' share of surpluses (to the extent not restricted by IFRIC 14) and deficits of the Group's defined benefit pension schemes adjusted for contributions paid in the year are recorded within the income statement. Consistent with the basis of distribution of bonuses and the treatment of the estate described in note 1(b)(iv) and (v), the shareholders' share incorporates 10 per cent of the proportion of the financial position attributable to the PAC with-profits fund. The financial position is determined by applying the requirements of IAS 19.

Actuarial and other gains and losses

For pension schemes in which the IAS 19 position reflects the difference between the assets and liabilities of the scheme, actuarial and other gains and losses comprise:

- the difference between actual and expected return on the scheme assets,
- experience gains and losses on scheme liabilities,
- the impact of altered economic and other assumptions on the discounted value of scheme liabilities, and
- for pension schemes where the IAS 19 position reflects a deficit funding obligation, actuarial and other gains and losses includes the movement in estimates of deficit funding requirements.

These items are recorded in the income statement but, consistent with the IFRS basis of presentation, are excluded from operating results based on longer-term investment returns.

(vii) Effect of changes in economic assumptions

Movements in the value of in-force business at the beginning of the period caused by changes in economic assumptions, net of the related change in the time value of cost of option and guarantees, are recorded in non-operating results.

(viii) Taxation

The profit for the year for covered business is in most cases calculated initially at the post-tax level. The post-tax profit for covered business is then grossed up for presentation purposes at the rates of tax applicable to the countries and periods concerned. In the UK the rate applied for 2011 is 25 per cent (2010: 27 per cent). For Jackson, the US federal tax rate of 35 per cent is applied to gross up movements on the value of in-force business. The overall tax rate includes the impact of tax effects determined on a local regulatory basis. For Asia, similar principles apply subject to the availability of taxable profits. Tax payments and receipts included in the projected cash flows to determine the value of in-force business are calculated using rates that have been substantively enacted by the end of the reporting period. Possible future changes of rate are not anticipated.

Notes on the EEV basis results continued

1 Basis of preparation, methodology and accounting presentation continued

(ix) Inter-company arrangements

The EEV results for covered business incorporate the effect of the reinsurance arrangement of non-profit immediate pension annuity liabilities of SAIF (which is not covered business) to PRIL. In addition, the analysis of free surplus and value of in-force business takes account of the impact of contingent loan arrangements between Group companies.

(x) Foreign exchange rates

Foreign currency results have been translated as discussed in note 1(b)(viii), for which the principal exchange rates are as follows:

Local currency: £	Closing rate at 31 Dec 2011	Average rate for 2011	Closing rate at 31 Dec 2010	Average rate for 2010	Opening rate at 1 Jan 2010
China	9.78	10.37	10.32	10.46	11.02
Hong Kong	12.07	12.48	12.17	12.01	12.52
India	82.53	74.80	70.01	70.66	75.15
Indonesia	14,091.80	14,049.41	14,106.51	14,033.41	15,171.52
Korea	1,790.32	1,775.98	1,776.86	1,786.23	1,880.45
Malaysia	4.93	4.90	4.83	4.97	5.53
Singapore	2.02	2.02	2.01	2.11	2.27
Taiwan	47.06	47.12	45.65	48.65	51.65
Vietnam	32,688.16	33,139.22	30,526.26	29,587.63	29,832.74
US	1.55	1.60	1.57	1.55	1.61

2 Analysis of new business contribution^{note (iv)}

	2011						
	New business premiums		Annual premium and contribution equivalents (APE) note (i) £m	Present value of new business premiums (PVNBP) note (i) £m	Pre-tax new business contribution notes (ii), (iii) £m	New business margin note (i)	
	Single	Regular				(APE)	(PVNBP)
	£m	£m	£m	£m	£m	%	%
Asian operations	1,456	1,514	1,660	8,910	1,076	65	12.1
US operations	12,562	19	1,275	12,720	815	64	6.4
UK insurance operations ^{note (vii)}	4,871	259	746	6,111	260	35	4.3
Total	18,889	1,792	3,681	27,741	2,151	58	7.8

	2010						
	New business premiums		Annual premium and contribution equivalents (APE) note (i) £m	Present value of new business premiums (PVNBP) note (i) £m	Pre-tax new business contribution notes (ii), (iii) £m	New business margin note (i)	
	Single	Regular				(APE)	(PVNBP)
	£m	£m	£m	£m	£m	%	%
Asian operations ^{notes (v), (vi)}	1,104	1,391	1,501	7,493	902	60	12.0
US operations	11,417	22	1,164	11,572	761	65	6.6
UK insurance operations ^{note (vii)}	5,656	254	820	6,842	365	45	5.3
Total	18,177	1,667	3,485	25,907	2,028	58	7.8

	New business margin (APE %)	
	2011	2010
Asian operations: ^{note(v)}		
China	46	47
Hong Kong	66	74
India	20	20
Indonesia	87	75
Korea	43	31
Taiwan	19	13
Other	76	79
Weighted average for all Asian operations	65	60

Notes

- (i) New business margins are shown on two bases, namely the margins by reference to Annual Premium Equivalents (APE) and the Present Value of New Business Premiums (PVNBP) and are calculated as the ratio of the value of new business profit to APE and PVNBP. APE are calculated as the aggregate of regular new business amounts and one-tenth of single new business amounts. PVNBP are calculated as equalling single premiums plus the present value of expected premiums of new regular premium business, allowing for lapses and other assumptions made in determining the EEV new business contribution.
- (ii) In determining the EEV basis value of new business, premiums are included in projected cash flows on the same basis of distinguishing annual and single premium business as set out for statutory basis reporting.
- (iii) New business contributions represent profits determined by applying operating assumptions as at the end of the year. In general, the use of point of sale or end of period economic assumptions is not significant in determining the new business contribution for different types of business and across financial reporting periods. However, to obtain proper measurement of the new business contribution for business which is interest rate sensitive, it is appropriate to use assumptions reflecting point of sale market conditions, consistent with how the business was priced. In practice, the only area within the Group where this has a material effect is for UK shareholder-backed annuity business. For other business within the Group end of period economic assumptions are used.
- (iv) The amounts shown in the tables are translated at average exchange rates for the year.
- (v) The tables for 2010 exclude new business sales and contributions for Japanese insurance operations in which the Company ceased selling new business from 15 February 2010.
- (vi) The new business contribution in 2010 of £902 million for Asian operations includes a benefit of around £5 million arising from the application of the 'active' basis of economic assumption setting rather than the previously applied basis of an assessment of longer-term economic conditions, as described in note 17a(v).
- (vii) The new business margin for UK operations for 2010 of 45 per cent reflects the signing of bulk annuity buy-in insurance agreements with an APE of £93 million and new business profit of £106 million. In 2011 the new business margin of 35 per cent includes bulk annuity agreements with an APE of £33 million and new business profit of £28 million.

Notes on the EEV basis results continued

3 Operating profit from business in force

Group summary

	2011 £m			
	Asian operations note (i)	US operations note (ii)	UK insurance operations note (iii)	Total
Unwind of discount and other expected returns	613	349	485	1,447
Effect of change in operating assumptions	10	14	79	103
Experience variances and other items	65	253	29	347
Total	688	616	593	1,897

	2010 £m			
	Asian operations note (i)	US operations note (ii)	UK insurance operations note (iii)	Total
Unwind of discount and other expected returns	573	369	550	1,492
Effect of change in operating assumptions	(23)	3	(3)	(23)
Experience variances and other items	(1)	325	24	348
Total	549	697	571	1,817

Notes

Analysis by business unit

(i) Asian operations

	2011 £m	2010 note (j) £m
Unwind of discount and other expected returns ^{note(a)}	613	573
Effect of change in operating assumptions:		
Mortality and morbidity ^{note(b)}	126	89
Expense ^{note(c)}	11	(62)
Persistency and withdrawals ^{note(d)}	(140)	(75)
Other ^{note(e)}	13	25
	10	(23)
Experience variance and other items:		
Mortality and morbidity ^{note(f)}	58	45
Expense ^{note(g)}	(31)	(39)
Persistency and withdrawals ^{note(h)}	10	(48)
Other ^{note(i)}	28	41
	65	(1)
Total Asian operations	688	549

Notes

- (a) The increase in unwind of discount and other expected returns to £613 million in 2011 from £573 million in 2010 mainly arises from the growth in the opening value of the in-force book, partially offset by the effect of the reduction in interest rates.
- (b) The credit of £126 million in 2011 for mortality and morbidity assumption changes arises as follows:

	2011 £m
Malaysia ^{note(1)}	69
Indonesia ^{note(2)}	33
Singapore	19
Other	5
	126

(1) The credit in Malaysia of £69 million relates to revised mortality and morbidity assumptions, reflecting recent experience.

(2) The credit in Indonesia of £33 million represents the effect of revised morbidity assumptions of £48 million, the revision of reinsurance rates of £8 million, offset by modelling enhancements for the cost of reinsurance of £(23) million.

The credit of £89 million in 2010 for mortality and morbidity assumption changes mainly arose in Indonesia of £72 million comprising £36 million for relaxation of morbidity assumptions and £36 million to reflect recent experience in relation to protection benefits provided by unit-linked policies.

- (c) The credit of £11 million in 2011 for expense assumption changes mainly arises from altered assumptions for maintenance expenses, reflecting recent experience, principally in Singapore of £34 million and Indonesia of £11 million, partly offset by a charge in India of £(30) million.

The charge of £(62) million in 2010 for expense assumption changes includes a charge in Korea of £(40) million to reflect higher policy maintenance costs and a charge of £(16) million in Malaysia relating to altered maintenance expense assumptions.

- (d) The charge of £(140) million in 2011 for persistency and withdrawals assumption changes arises as follows:

	2011 £m
Malaysia ^{note(1)}	(106)
India ^{note(2)}	(21)
Indonesia	(13)
Singapore	(4)
Other	4
	(140)

- (1) The charge of £(106) million in Malaysia includes £(108) million for the effect of strengthening partial withdrawal assumptions on PruSaver product riders to reflect recent experience. Policyholders' pattern and frequency of withdrawals from this savings rider is different from that of the underlying 'host' contract, where both persistency and premium payment experience remains in line with assumptions.
- (2) The charge in India of £(21) million reflects lower persistency assumptions for paid-up policies for unit-linked business. The charge of £(75) million for 2010 for the effect of changes in persistency and withdrawals assumptions mainly arises in Indonesia of £(33) million, Malaysia of £(26) million and India of £(24) million partly offset by a credit in Hong Kong of £16 million. The charge in Indonesia of £(33) million primarily relates to Shariah and single premium policies for which lower renewal rates had been experienced. The charge in Malaysia of £(26) million reflects altered premium holiday and other lapse assumptions and the charge in India of £(24) million represents changes in persistency assumptions on linked business.
- (e) The credit of £13 million in 2011 for other operating assumptions principally represents the combined effect of a favourable change in assumed asset management margins, a reduction in investment expenses for Indonesia resulting from a growth in the asset portfolio, a decrease in policyholder bonuses in the Philippines, partly offset by the effect of altered profit sharing arrangements in relation to participating business in Vietnam.
- (f) The favourable effect of mortality and morbidity experience in 2011 of £58 million and in 2010 of £45 million reflects better than expected experience, principally arising in Hong Kong, Indonesia, Singapore and Malaysia.
- (g) The negative expense experience variance of £(31) million in 2011 (2010: £(39) million) comprises a charge of £(26) million (2010: £(18) million) for expense overruns for operations which are at a relatively early stage of development, for which actual expenses are in excess of those factored into the product pricing, together with £(6) million (2010: £(9) million) in Taiwan and £1 million (2010: £(12) million) of variance for other operations.
- (h) The positive persistency and withdrawals experience variance of £10 million in 2011 reflects a combination of favourable experience in Hong Kong and Indonesia, partially offset by individually small negative variances in other territories.
The negative persistency and withdrawals experience variance of £(48) million in 2010 mainly arises in India of £(27) million relating to higher paid-ups and surrenders on unit-linked business and in Malaysia of £(26) million for higher partial withdrawals on unit-linked business as customers sought to monetise a proportion of their funds following two years of exceptional returns.
- (i) The credit of £28 million in 2011 for other experience and other items primarily arises in Indonesia of £24 million. The credit of £41 million in 2010 includes a credit of £24 million arising in Indonesia for the impact of additional riders being added to in-force policies during the year, funded from the policyholder unit-linked account balances.
- (j) The in-force operating profit for 2010 of £549 million reflects the effect of setting economic assumptions on an 'active' basis rather than the previously applied 'passive' basis as described in note 17a(v), the impact of which was to lower in-force operating profits in 2010 by £(58) million, principally for altered unwind of discount.

Notes on the EEV basis results continued

3 Operating profit from business in force continued

(ii) US operations	2011 £m	2010 £m
Unwind of discount and other expected returns ^{note(a)}	349	369
Effect of changes in operating assumptions:		
Persistency ^{note(b)}	29	4
Variable Annuity (VA) fees ^{note(c)}	24	27
Mortality ^{note(d)}	(36)	10
Other ^{note(e)}	(3)	(38)
	14	3
Experience variances and other items:		
Spread experience variance ^{note(f)}	152	158
Amortisation of interest-related realised gains and losses ^{note(g)}	84	82
Other ^{note(h)}	17	85
	253	325
Total US operations	616	697

Notes

- (a) The decrease in unwind of discount and other expected returns from £369 million for 2010 to £349 million for 2011 mainly reflects lower unwind of discount driven by the reduction in the 10-year US treasury rate, partly offset by an increase in opening value of in-force business.
- (b) The credit of £29 million for the effect of changes in persistency assumptions in 2011 arises on variable annuity business of a credit of £15 million and £14 million on other business. The credit of £15 million for VA business represents a credit of £32 million to reflect a decrease in lapse rates for selected product and policy duration combinations, partially offset by a charge of £(17) million to increase partial withdrawal rates in line with experience. The credit of £14 million for other business reflects updated persistency assumptions for life and fixed annuity business.
- (c) The effect of the change of assumption for VA fees represents the capitalised value of the change in the projected level of policyholder advisory fees, which vary according to the size and mix of VA funds. The credit of £24 million for 2011 (2010: £27 million) reflects an increase in the projected level of fees paid by policyholders, according to the current fund size and mix.
- (d) The charge of £(36) million for 2011 for updated mortality assumptions primarily arises on variable annuity business to reflect recent mortality experience. The credit of £10 million for 2010 represents a credit of £29 million for business other than variable annuity, reflecting recent experience, partially offset by a negative effect on variable annuity business of £(19) million for a change in the modelling of mortality rates.
- (e) The charge of £(38) million for other operating assumption changes in 2010 includes the net effect of a number of items including a charge of £(19) million for the altered projection of life reserves run-off.
- (f) The spread assumption for Jackson is determined on a longer-term basis, net of provision for defaults. The spread experience variance in 2011 of £152 million (2010: £158 million) includes the positive effect of transactions undertaken in 2010 and 2011 to more closely match the overall asset and liability duration.
- (g) The amortisation of interest-related gains and losses reflects the same treatment applied to the supplementary analysis of IFRS profit. When bonds that are neither impaired nor deteriorating are sold and reinvested there will be a consequent change in the investment yield. The realised gain or loss is amortised into the result over the period when the bonds would have otherwise matured to better reflect the long-term returns included in operating profits.
- (h) Other experience variances and other items arise as follows:

	2011 £m	2010 £m
Mortality experience variance ^{note(1)}	(6)	21
Expense experience variance ^{note(2)}	12	32
Persistency experience variance ^{note(3)}	21	23
Other	(10)	9
	17	85

- (1) The negative mortality experience variance of £(6) million in 2011 includes a provision of £(16) million in respect of unclaimed property for deceased policyholders. The positive mortality experience variance of £21 million in 2010 primarily relates to life products.
- (2) The positive expense experience variances of £12 million in 2011 and £32 million in 2010 primarily represents favourable experience variance relating to marketing expenses.
- (3) The positive persistency experience variance of £21 million in 2011 mainly arises on annuity business and in 2010, the favourable experience variance of £23 million primarily arises on annuity and institutional business.

(iii) UK insurance operations

	2011 £m	2010 £m
Unwind of discount and other expected returns ^{note(a)}	485	550
Effect of change in UK corporate tax rate ^{note(b)}	79	41
Updated mortality assumptions, net of release of margins ^{note(c)}	–	(40)
Other items ^{note(d)}	29	20
Total UK insurance operations	593	571

Notes

- (a) The decrease in unwind of discount and other expected returns from £550 million for 2010 to £485 million for 2011 mainly arises from lower unwind on with-profits business, reflecting a decrease in both the risk discount rate and opening in-force value (as adjusted for the effects of changes in operating and economic assumptions).
- (b) In 2011 a change to reduce the UK corporate tax rate to 25 per cent with effect from 1 April 2012 was enacted. The effect of the change in tax rate of £79 million in 2011 represents the pre-tax benefit of the reduction in tax rate from 27 per cent to 25 per cent, arising from the increase in the present value of the post-tax projected cash flows of the in-force business, grossed up for notional tax. The effect of the change in tax rate of £41 million for 2010 represents the pre-tax benefit of the reduction in the tax rate from 28 per cent to 27 per cent.
- (c) In 2010 the Continuous Mortality Investigation (CMI) model and Core Projection parameters were reviewed and a custom parameterisation of the CMI model was made where some aspects of the pattern of convergence from current rates of improvements to long-term rates of improvement were altered. The assumption change shown above for 2010 of a charge of £(40) million represents the effect of the implementation of the custom parameterisation on the opening value of in-force business at 1 January 2010, offset by the effects of other mortality assumption changes and the release of margins on the base mortality assumptions.
- (d) Other items of £29 million for 2011 includes £45 million for the effects of annuity portfolio rebalancing. In 2010, other items of £20 million includes a credit of £37 million for changes in operating expense assumptions relating to renewal expense assumptions on shareholder-backed annuity business.

4 Costs of terminated AIA transaction in 2010

In 2010, pre-tax costs of £377 million (post tax £284 million) were incurred in relation to the proposed, and subsequently terminated transaction, to purchase AIA Group Limited and related rights issue.

5 Short-term fluctuations in investment returns

Short-term fluctuations in investment returns, net of the related change in the time value of cost of options and guarantees, arise as follows:

Group summary

	2011 £m	2010 £m
Insurance operations:		
Asia ^{note(i)}	(155)	287
US ^{note(ii)}	(491)	(678)
UK ^{note(iii)}	(141)	336
	(787)	(55)
Other operations^{note(iv)}	(120)	25
Total	(907)	(30)

Notes

Analysis by business unit

(i) Asian operations

For 2011, short-term fluctuations in investment returns in Asian operations of £(155) million are driven by lower equity markets reducing future expected fee income, mainly arising in Singapore £(105) million and Korea £(22) million. The 2011 short-term fluctuations in investment returns also include £(28) million of adverse variance arising in other territories. This principally comprises fluctuations arising in India of £(53) million reflecting lower equity market returns, in Vietnam of £(33) million for unrealised losses on bonds and equities and Taiwan of £(30) million for losses on bonds and CDOs, partially offset by a credit in Hong Kong of £96 million primarily relating to positive returns on bonds backing participating business.

For 2010, short-term fluctuations in investment returns in Asian operations of £287 million primarily reflect the favourable performance in equity markets across the territories, primarily arising in Indonesia £55 million, Hong Kong £51 million, Taiwan £40 million, Malaysia £37 million and Singapore £16 million. Also included for 2010 is an unrealised gain of £30 million on the Group's 8.66 per cent stake in China Life Insurance Company of Taiwan, which at 31 December 2010 was valued at £100 million.

Notes on the EEV basis results continued

5 Short-term fluctuations in investment returns continued

(ii) US operations

The short-term fluctuations in investment returns for US operations comprise the following items:

	2011 £m	2010 £m
Debt securities investment return related experience ^{note(a)}	(74)	(351)
Investment return related impact due primarily to changed expectation of profits on in-force variable annuity business in future periods based on current period equity returns, net of related hedging activity for equity related products ^{note(b)}	(418)	(332)
Actual less long-term return on equity based investments and other items	1	5
Total Jackson	(491)	(678)

Notes

(a) The charge relating to fixed income securities comprises the following elements:

- the excess of actual realised losses over the amortisation of interest related realised losses recorded in the profit and loss account,
- credit loss experience (versus the longer-term assumption), and
- the impact of de-risking activities within the portfolio, which accounts for the majority of the 2010 charge.

(b) This item reflects the net impact of:

- (1) variances in projected future fees arising from the effect of market fluctuations on the growth in separate account asset values in the current reporting period, and
- (2) related hedging activity.

In 2011 there was a negative 0.5 per cent rate of return for the variable annuity separate account assets. This compared with an assumed longer-term rate of return of 5.4 per cent. Consequently the asset values, and therefore projected future fees at 31 December 2011, were lower than assumed. As a consequence of this lower level of return, net of the impact of relating hedging effects, there was a short-term fluctuation of £(418) million.

In 2010 there was a 14.5 per cent return which compared with an assumed longer-term rate of return of 6.8 per cent. However, despite this excess return, there was an overall charge of £(332) million which arose from the effects of related hedging activity.

(iii) UK insurance operations

The short-term fluctuations in investment returns for UK insurance operations represents:

	2011 £m	2010 £m
With-profits ^{note(a)}	(201)	218
Shareholder-backed annuity ^{note(b)}	56	84
Unit-linked and other ^{note(c)}	4	34
	(141)	336

Notes

(a) For with-profits business the amounts reflect the excess (deficit) of the actual investment return on the investments of the PAC with-profits fund (covering policyholder liabilities and unallocated surplus) against the assumed long-term rate for the year. For 2011 the charge of £(201) million reflects the actual investment return of 3.2 per cent against the assumed long-term rate of 5.1 per cent, primarily reflecting the fall in equity markets and widening of corporate bond credit spreads, partially offset by the increase in asset values as a result of the reduction in bond yields. For 2010 the credit of £218 million reflects the actual investment return of 12.0 per cent against the assumed long-term rate of 6.7 per cent.

(b) Short-term fluctuations in investment returns for shareholder-backed annuity business comprise: (1) gains on surplus assets reflecting reductions in corporate bond and gilt yields in 2011 and 2010, and (2) the effect of mismatching for assets and liabilities of different durations and other short-term fluctuations in investment returns.

(c) The short-term fluctuations in investment returns for unit-linked business represents the increase in capitalised value of future fees arising from the positive movements in market values experienced during the year.

(iv) Other operations

Short-term fluctuations in investment returns for other operations in 2011 of £(120) million (2010: £25 million) represent unrealised value movements on investments, principally on centrally held swaps to manage foreign exchange and certain macro-economic exposures of the Group.

6 Effect of changes in economic assumptions

The effects of changes in economic assumptions for in-force business, net of the related change in the time value of cost of options and guarantees, included within profit before tax (including actual investment returns) arise as follows:

Group summary

	2011 £m	2010 £m
Asian operations ^{note (i)}	279	(71)
US operations ^{note (ii)}	(144)	(1)
UK insurance operations ^{note (iii)}	(293)	62
Total	(158)	(10)

Notes

Analysis by business unit

(i) Asian operations

The effect of changes in economic assumptions for Asian operations in 2011 of a credit of £279 million principally arises in Singapore £160 million, Malaysia £97 million and Indonesia £94 million, primarily reflecting the positive impact of discounting health and protection profits at lower rates, driven by the decrease in risk-free rates as shown in note 17a. There is a partial offset arising in Hong Kong of £(57) million, primarily reflecting the reduction in fund earned rates for participating business.

For 2010, the effect of changes in economic assumptions in Asian operations of £(71) million primarily represents the effect of derisking certain asset portfolios in Hong Kong and Singapore totalling £(73) million, together with the effects of routine adjustments for changes in economic factors and the effect of altering the basis of setting economic assumptions to the 'active' basis as described in note 17a(v).

(ii) US operations

The effect of changes in economic assumptions for US operations reflects the following:

	2011 £m	2010 £m
Effect of changes in 10-year treasury rates, beta and equity risk premium: ^{note(a)}		
Fixed annuity and other general account business	282	111
Variable Annuity (VA) business	(333)	(112)
Increase in risk margin allowance for credit risk ^{note(b)}	(93)	-
	(144)	(1)

Notes

(a) For Jackson, the charge for the effect of changes in economic assumptions represents the aggregate of the effects of changes to projected returns and the risk discount rate. The risk discount rate, as discussed in note 1(b)(iii), represents the aggregate of the risk-free rate and margin for market risk, credit risk and non-diversifiable non-market risk.

For fixed annuity and other general account business the effect of changes to the risk-free rate, which is defined as the 10-year treasury rate, is reflected in the risk discount rate. This discount rate is in turn applied to projected cash flows which principally reflect projected spread, which is largely insensitive to changes in the risk-free rate. Secondary effects on the cash flows also result from changes to assumed future yield and resulting policyholder behaviour. For VA business, changes to the risk-free rate are also reflected in determining the risk discount rate. However, the projected cash flows are also reassessed for altered investment returns on the underlying separate account assets from which fees are charged. For 2011, the effect of these changes resulted in an overall credit for fixed annuity and other general account business of £282 million (2010: £111 million) and a charge for VA business of £(333) million (2010: £(112) million) reflecting the reduction of 1.4 per cent (2010: a reduction of 0.6 per cent) in the risk-free rate (as shown in note 17a).

(b) For 2011 the effect of £(93) million for the increase in the risk margin allowance within the risk discount rate for credit risk represents 50 basis points increase in the risk discount rate for spread business (from 150 basis points in 2010 to 200 basis points in 2011), and 10 basis points for VA business (from 30 basis points in 2010 to 40 basis points in 2011), representing the proportion of business invested in the general account, as described in note 1b(iii).

Notes on the EEV basis results continued

6 Effect of changes in economic assumptions continued

(iii) UK insurance operations

The effect of changes in economic assumptions of a charge of £(293) million for UK insurance operations for 2011 comprises the effect of:

	2011 £m			2010 £m		
	Shareholder-backed annuity business note (a)	With-profits and other business note (b)	Total	Shareholder-backed annuity business note (a)	With-profits and other business note (b)	Total
Effect of changes in expected long-term rates of return	58	(1,113)	(1,055)	(102)	(80)	(182)
Effect of changes in risk discount rates	240	627	867	55	183	238
Other changes	(20)	(85)	(105)	(6)	12	6
	278	(571)	(293)	(53)	115	62

Notes

- (a) For shareholder-backed annuity business the overall effect of changes in expected long-term rates of return and risk discount rates for the years shown above reflect the combined effects of the changes in assumptions which incorporate a default allowance for both best estimate defaults and in respect of the additional credit risk provisions, as shown in note 17a.
- (b) For with-profits and other business the charge in 2011 of £(1,113) million for the effect of changes in expected long-term rates of return arises from the reduction in fund earned rates as shown in note 17a, driven by the (1.5) per cent decrease in gilt rates and reduction in additional returns assumed on corporate bonds, reflecting changes in asset mix. The credit in 2011 of £627 million for the effect of changes in risk discount rates reflects the (1.35) per cent reduction in the risk discount rate as shown in note 17(a), driven by the (1.5) per cent decrease in gilt rates, partly offset by the impact of an increase in beta for with-profits business.

7 Shareholders' equity (excluding non-controlling interests) - segmental analysis

	Note	2011 £m	2010 £m
Asian operations			
Long-term business:			
Net assets of operations – EEV basis shareholders' equity ^{note(iii)}		8,510	7,445
Acquired goodwill ^{note(i)}		235	236
		8,745	7,681
Eastspring Investments: ^{note(i)}			
Net assets of operations		211	197
Acquired goodwill		61	61
		272	258
		9,017	7,939
US operations			
Jackson – EEV basis shareholders' equity (net of surplus note borrowings of £177 million (2010: £172 million))		5,082	4,799
Broker-dealer and asset management operations: ^{note(i)}			
Net assets of operations		113	106
Acquired goodwill		16	16
		129	122
		5,211	4,921
UK operations			
Insurance operations:			
Long-term business operations:			
Smoothed shareholders' equity		6,097	5,911
Actual shareholders' equity less smoothed shareholders' equity		(39)	59
EEV basis shareholders' equity		6,058	5,970
Other ^{note(i)}		29	33
		6,087	6,003
M&C: ^{note(i)}			
Net assets of operations		229	254
Acquired goodwill		1,153	1,153
		1,382	1,407
		7,469	7,410
Other operations			
Holding company net borrowings at market value	9	(2,188)	(2,212)
Other net assets ^{note(i)}		128	149
		(2,060)	(2,063)
Total		19,637	18,207

Notes on the EEV basis results continued

7 Shareholders' equity (excluding non-controlling interests) - segmental analysis continued

	2011 £m			2010 £m		
	Statutory IFRS basis shareholders' equity	Additional retained profit on an EEV basis	EEV basis shareholders' equity	Statutory IFRS basis shareholders' equity	Additional retained profit on an EEV basis	EEV basis shareholders' equity
Representing:						
Asian operations	2,349	6,396	8,745	2,149	5,532	7,681
US operations	4,271	811	5,082	3,815	984	4,799
UK insurance operations	2,552	3,506	6,058	2,115	3,855	5,970
Total long-term business operations	9,172	10,713	19,885	8,079	10,371	18,450
Other operations ^{note(ii)}	(55)	(193)	(248)	(48)	(195)	(243)
Group total	9,117	10,520	19,637	8,031	10,176	18,207

Notes

- (i) With the exception of the share of the Prudential Staff Pension Scheme (PSPS) deficit (as explained below), the amounts shown for net assets of non-covered business, together with acquired goodwill, have been determined on the statutory IFRS basis. The share of the PSPS deficit attributable to the PAC with-profits fund is included in 'other operations' net assets. The overall pension scheme deficit, net of tax, attributable to shareholders relating to PSPS is determined as shown below:

	2011 £m	2010 £m
IFRS basis deficit (relating to shareholder-backed operations)	(5)	(10)
Additional EEV deficit (relating to shareholders' 10 per cent share of the IFRS basis deficit attributable to the PAC with-profits fund)	(1)	(3)
EEV basis	(6)	(13)

- (ii) The additional retained profit on an EEV basis for Other operations primarily represents the mark to market value difference on holding company net borrowings of a charge of £(187) million (2010: £(177) million), as shown in note 9.
- (iii) The EEV basis shareholders' equity for Asian long-term business for 2010 of £7,445 million includes the £(39) million effect of moving from a passive to an active basis of economic assumption setting as described in note 17a(v).

8 Analysis of movement in free surplus

Free surplus is the excess of the net worth over the capital required to support the covered business. Where appropriate, adjustments are made to the regulatory basis net worth from the local regulatory basis so as to include backing assets movements at fair value rather than cost, so as to comply with the EEV Principles. Prudential has based required capital on its internal targets for economic capital subject to it being at least the local statutory minimum requirements, as described in note 1(b)(ii).

	2011 £m		
	Long-term business note 14	Asset management and UK general insurance commission note (ii)	Free surplus of long-term business, asset management and UK general insurance commission
Long-term business and asset management operations ^{note (i)}			
Underlying movement:			
New business	(553)	–	(553)
Business in force:			
Expected in-force cash flows (including expected return on net assets)	1,972	363	2,335
Effects of changes in operating assumptions, operating experience variances and other operating items	168	–	168
RPI to CPI inflation measure change on defined benefit pension schemes	20	13	33
	1,607	376	1,983
Changes in non-operating items ^{note (iii)}	(507)	(24)	(531)
	1,100	352	1,452
Net cash flows to parent company ^{note (iv)}	(829)	(276)	(1,105)
Exchange movements, timing differences and other items ^{note (v)}	(180)	(84)	(264)
Net movement in free surplus	91	(8)	83
Balance at 1 January 2011	2,748	590	3,338
Balance at 31 December 2011	2,839	582	3,421
Representing:			
Asian operations	1,067	211	1,278
US operations	1,220	113	1,333
UK operations	552	258	810
	2,839	582	3,421
Balance at 1 January 2011			
Representing:			
Asian operations	1,045	197	1,242
US operations	1,163	106	1,269
UK operations	540	287	827
	2,748	590	3,338

Notes

- (i) All figures are shown net of tax.
- (ii) For the purposes of this analysis, free surplus for asset management operations and the UK general insurance commission is taken to be IFRS basis shareholders' equity as shown in note 7.
- (iii) Changes in non-operating items
This represents short-term fluctuations in investment returns, the shareholders' share of actuarial and other gains and losses on defined benefit pension schemes and the effect of changes in economic assumptions for long-term business operations.
Short-term fluctuations in investment returns primarily reflect temporary market movements on the portfolio of investments held by the Group's shareholder-backed operations.
- (iv) Net cash flows to parent company for long-term business operations reflect the flows as included in the holding company cash flow at transaction rates.

Notes on the EEV basis results continued

8 Analysis of movement in free surplus continued

(v) Exchange movements, timing differences and other items represent:

	2011 £m		
	Long-term business	Asset management and UK general insurance commission	Total
Exchange movements ^{note 14}	(15)	(2)	(17)
Mark to market value movements on Jackson assets backing surplus and required capital ^{note 14}	62	–	62
Other ^{note (vi)}	(227)	(82)	(309)
	(180)	(84)	(264)

(vi) Other primarily reflects the effect of repayment of contingent loan funding, as shown in note 14(ii), together with timing differences, intragroup loans and other non-cash items.

9 Net core structural borrowings of shareholder-financed operations

	2011 £m			2010 £m		
	IFRS basis	Mark to market value adjustment note (ii)	EEV basis at market value	IFRS basis	Mark to market value adjustment note (ii)	EEV basis at market value
Holding company* cash and short-term investments	(1,200)	–	(1,200)	(1,232)	–	(1,232)
Core structural borrowings – central funds ^{note (i)}	3,201	187	3,388	3,267	177	3,444
Holding company net borrowings	2,001	187	2,188	2,035	177	2,212
Core structural borrowings – Prudential Capital ^{note (iii)}	250	–	250	250	–	250
Core structural borrowings – Jackson	160	17	177	159	13	172
Net core structural borrowings of shareholder-financed operations	2,411	204	2,615	2,444	190	2,634

* Including central finance subsidiaries.

Notes

(i) EEV basis holding company borrowings comprise:

	2011 £m	2010 £m
Perpetual subordinated capital securities (Innovative Tier 1)	1,813	1,491
Subordinated debt (Lower Tier 2)	949	1,372
Senior debt	626	581
	3,388	3,444

In January 2011, the Company issued US\$550 million perpetual subordinated capital securities which has been used to finance the repayment of the €500 million subordinated debt in December 2011.

In accordance with the EEV Principles, core borrowings are carried at market value. As the liabilities are generally held to maturity or for the long-term, no deferred tax asset or liability has been established on the market value adjustment above.

(ii) The movement in the mark to market value adjustment represents:

Mark to market movement in balance sheet:	2011 £m	2010 £m
Beginning of year	190	30
Change:		
Income statement	14	164
Foreign exchange effects	–	(4)
End of year	204	190

(iii) The core structural borrowing by Prudential Capital of £250 million represents a bank loan taken out in 2010 which was made in two tranches: £135 million maturing in June 2014, and £115 million maturing in December 2012.

Notes on the EEV basis results continued

10 Reconciliation of movement in shareholders' equity (excluding non-controlling interests)

	2011 £m					
	Long-term business operations					
	Asian operations	US operations	UK insurance operations	Total long-term business	Other operations	Group Total
Operating profit (based on longer-term investment returns)						
Long-term business:						
New business ^{note2}	1,076	815	260	2,151	–	2,151
Business in force ^{note3}	688	616	593	1,897	–	1,897
	1,764	1,431	853	4,048	–	4,048
Asia development expenses	(5)	–	–	(5)	–	(5)
UK general insurance commission	–	–	–	–	40	40
M&G	–	–	–	–	357	357
Eastspring Investments	–	–	–	–	80	80
US broker-dealer and asset management	–	–	–	–	24	24
Other income and expenditure	–	–	–	–	(536)	(536)
RPI to CPI inflation measure change on defined benefit pension schemes	–	–	27	27	18	45
Solvency II implementation costs	–	(4)	(8)	(12)	(44)	(56)
Restructuring costs	–	–	(19)	(19)	–	(19)
Operating profit based on longer-term investment returns	1,759	1,427	853	4,039	(61)	3,978
Short-term fluctuations in investment returns ^{note5}	(155)	(491)	(141)	(787)	(120)	(907)
Mark to market value movements on core borrowings ^{note9}	–	(4)	–	(4)	(10)	(14)
Shareholders' share of actuarial and other gains and losses on defined benefit pension schemes	–	–	20	20	3	23
Effect of changes in economic assumptions ^{note6}	279	(144)	(293)	(158)	–	(158)
Profit (loss) before tax (including actual investment returns)	1,883	788	439	3,110	(188)	2,922
Tax (charge) credit attributable to shareholders' profit (loss): ^{note11}						
Tax on operating profit	(402)	(487)	(221)	(1,110)	66	(1,044)
Tax on short-term fluctuations in investment returns	10	157	35	202	8	210
Tax on shareholders' share of actuarial and other gains and losses on defined benefit pension schemes	–	–	(5)	(5)	(1)	(6)
Tax on effect of changes in economic assumptions	(58)	50	72	64	–	64
Total tax (charge) credit	(450)	(280)	(119)	(849)	73	(776)
Non-controlling interests	–	–	–	–	(4)	(4)
Profit (loss) for the year	1,433	508	320	2,261	(119)	2,142

	2011 £m					
	Long-term business operations					
	Asian operations	US operations	UK insurance operations	Total long-term business operations	Other operations	Group total
Other movements						
Exchange movements on foreign operations and net investment hedges ^{note(i)}	(87)	42	–	(45)	(45)	(90)
Related tax	–	–	–	–	(68)	(68)
Intragroup dividends (including statutory transfers) ^{note(iii)}	(302)	(330)	(218)	(850)	850	–
External dividends	–	–	–	–	(642)	(642)
Reserve movements in respect of share-based payments	–	–	–	–	44	44
Investment in operations ^{note(iii)}	32	–	4	36	(36)	–
Other transfers ^{note(iv)}	(11)	1	(18)	(28)	28	–
Movement in own shares held in respect of share-based payment plans	–	–	–	–	(30)	(30)
Movement in Prudential plc shares purchased by unit trusts consolidated under IFRS	–	–	–	–	(5)	(5)
New share capital subscribed	–	–	–	–	17	17
Mark to market value movements on Jackson assets backing surplus and required capital:						
Mark to market value movements arising during the year	–	96	–	96	–	96
Related tax	–	(34)	–	(34)	–	(34)
Net increase (decrease) in shareholders' equity	1,065	283	88	1,436	(6)	1,430
Shareholders' equity at 1 January 2011 ^{notes(ii)and7}	7,445	4,799	5,970	18,214	(7)	18,207
Shareholders' equity at 31 December 2011^{notes(ii)and7}	8,510	5,082	6,058	19,650	(13)	19,637

Notes

- (i) Profits are translated at average exchange rates, consistent with the method applied for statutory IFRS basis results. The amounts recorded above for exchange rate movements reflect the difference between 2011 and 2010 exchange rates as applied to shareholders' equity at 1 January 2011 and the difference between 31 December 2011 and average rates for the year ended 31 December 2011.
- (ii) For the purposes of the table above, goodwill related to Asia long-term operations (as shown in note 7) is included in Other operations.
- (iii) Total intragroup dividends and investment in operations represent:

	Asian operations £m	US operations £m	UK insurance operations £m	Total long-term business operations £m	Other operations £m	Total £m
Intragroup dividends (including statutory transfers) ^{note(a)}	(302)	(330)	(218)	(850)	850	–
Investment in operations ^{note(b)}	32	–	4	36	(36)	–
Total ^{note(c)}	(270)	(330)	(214)	(814)	814	–

Notes

- (a) Intragroup dividends (including statutory transfers) represent dividends that have been declared in the year and amounts accrued in respect of statutory transfers.
- (b) Investment in operations reflects increases in share capital.
- (c) For long-term business operations, the difference between the total above of £814 million for intragroup dividends (including statutory transfers) and investment in operations and the net cash flows to parent company of £829 million (as shown in note 8) primarily relates to timing differences arising on statutory transfers, intragroup loans and other non-cash items.

Notes on the EEV basis results continued

10 Reconciliation of movement in shareholders' equity (excluding non-controlling interests) continued

(iv) Other transfers from long-term business operations to Other operations in 2011 represent:

	Asian operations £m	US operations £m	UK insurance operations £m	Total long-term business operations £m
Adjustment for net of tax asset management projected profits of covered business	(15)	(3)	(22)	(40)
Other adjustments	4	4	4	12
	(11)	1	(18)	(28)

11 Tax attributable to shareholders' profit

The tax charge comprises:

	2011 £m	2010 £m
Tax charge on operating profit based on longer-term investment returns:		
Long-term business:		
Asian operations ^{note (i)}	402	329
US operations	487	509
UK insurance operations ^{note (i)}	221	260
	1,110	1,098
Other operations	(66)	(106)
Total tax charge on operating profit based on longer-term investment returns, excluding exceptional tax credit	1,044	992
Exceptional tax credit ^{note (ii)}	–	(158)
Total tax charge on operating profit based on longer-term investment returns, including exceptional tax credit	1,044	834
Tax credit on items not included in operating profit:		
Tax credit on short-term fluctuations in investment returns ^{note (iii)}	(210)	(222)
Tax charge (credit) on shareholders' share of actuarial and other gains and losses on defined benefit pension schemes	6	(2)
Tax (credit) charge on effect of changes in economic assumptions	(64)	13
Tax credit on costs of terminated AIA transaction	–	(93)
Total tax credit on items not included in operating profit	(268)	(304)
Tax charge on profit attributable to shareholders (including tax on actual investment returns)	776	530

Notes

- (i) Including tax relief on Asia development expenses and restructuring costs borne by UK insurance operations.
(ii) The 2010 tax charge on operating profit based on longer-term investment returns of £834 million included an exceptional tax credit of £158 million which primarily related to the impact of a settlement agreed with the UK tax authorities.
(iii) In 2010, the tax charge on short-term fluctuations in investment returns of £(222) million included a credit of £52 million for a net present value reduction in US deferred tax liabilities following changes to variable annuity reserving in accordance with revised statutory guidance.

12 Earnings per share (EPS)

	2011 £m	2010 £m
Operating EPS:		
Operating profit before tax	3,978	3,696
Tax excluding exceptional tax credit	(1,044)	(992)
Non-controlling interests	(4)	(4)
Operating profit after tax and non-controlling interests excluding exceptional tax credit	2,930	2,700
Exceptional tax credit*	–	158
Operating profit after tax and non-controlling interests including exceptional tax credit	2,930	2,858
Operating EPS (pence) excluding exceptional tax credit	115.7p	106.9p
Exceptional tax credit (pence)	–	6.3p
Operating EPS (pence) including exceptional tax credit	115.7p	113.2p
Total EPS:		
Profit before tax	2,922	3,107
Tax	(776)	(530)
Non-controlling interests	(4)	(4)
Total profit after tax and non-controlling interests	2,142	2,573
Total EPS (pence) including exceptional tax credit	84.6p	101.9p
Average number of shares (millions)	2,533	2,524

* The 2010 tax charge attributable to shareholders' profit included an exceptional tax credit of £158 million which primarily related to the impact of a settlement agreed with the UK tax authorities.

The average number of shares reflects the average number in issue adjusted for shares held by employee trusts and consolidated unit trusts and OEICs which are treated as cancelled.

13 Changes to Group's holdings

2010

On 1 August 2010, Discovery Holdings of South Africa, the Group's joint venture partner in its investment in PruHealth, completed the acquisition of the entire share capital of Standard Life Healthcare, a wholly-owned subsidiary of the Standard Life Group, for £138 million. Discovery funded the purchase of the Standard Life Healthcare transaction, and contributed Standard Life Healthcare to PruHealth as a capital investment on completion. As a result of the transaction, Discovery increased their shareholding in PruHealth from the previous level of 50 per cent to 75 per cent, and Prudential's shareholding was reduced from 50 per cent of the previous joint venture structure to 25 per cent of the new structure with the much enlarged business.

A gain of £3 million arose in 2010 upon the dilution, representing the difference between the fair value of the enlarged 25 per cent investment still held and the book value of the original 50 per cent investment holding.

Notes on the EEV basis results continued

14 Reconciliation of net worth and value of in-force business^{note(i)}

	2011 £m				
	Free surplus note 8	Required capital	Total net worth	Value of in-force business note (vii)	Total long-term business
Group					
Shareholders' equity at 1 January 2011	2,748	3,415	6,163	12,051	18,214
New business contribution ^{notes (iv), (v)}	(553)	406	(147)	1,683	1,536
Existing business – transfer to net worth	1,862	(339)	1,523	(1,523)	–
Expected return on existing business	110	84	194	880	1,074
Changes in operating assumptions and experience variances RPI to CPI inflation measure change on defined benefit pension schemes	168	(42)	126	173	299
Changes in non-operating assumptions and experience variances	20	–	20	–	20
	(507)	(78)	(585)	(83)	(668)
Profit after tax from long-term business	1,100	31	1,131	1,130	2,261
Exchange movements on foreign operations and net investment hedges	(15)	1	(14)	(31)	(45)
Intragroup dividends (including statutory transfers) and investment in operations ^{note (ii)}	(1,028)	–	(1,028)	214	(814)
Mark to market value movements on Jackson assets backing surplus and required capital	62	–	62	–	62
Other transfers from net worth	(28)	–	(28)	–	(28)
Shareholders' equity at 31 December 2011	2,839	3,447	6,286	13,364	19,650
Representing:					
Asian operations					
Shareholders' equity at 1 January 2011	1,045	790	1,835	5,610	7,445
New business contribution ^{note (v)}	(297)	97	(200)	1,011	811
Existing business – transfer to net worth	597	21	618	(618)	–
Expected return on existing business	58	–	58	424	482
Changes in operating assumptions and experience variances	52	(40)	12	52	64
Changes in non-operating assumptions and experience variances	(49)	(3)	(52)	128	76
Profit after tax from long-term business	361	75	436	997	1,433
Exchange movements on foreign operations and net investment hedges	(23)	(5)	(28)	(59)	(87)
Intragroup dividends (including statutory transfers) and investment in operations ^{note (ii)}	(305)	–	(305)	35	(270)
Other transfers from net worth	(11)	–	(11)	–	(11)
Shareholders' equity at 31 December 2011	1,067	860	1,927	6,583	8,510

	2011 £m				
	Free surplus note 8	Required capital	Total net worth	Value of in-force business note (vii)	Total long-term business
US operations					
Shareholders' equity at 1 January 2011	1,163	1,505	2,668	2,131	4,799
New business contribution ^{note (v)}	(202)	232	30	500	530
Existing business – transfer to net worth	754	(288)	466	(466)	–
Expected return on existing business	42	46	88	139	227
Changes in operating assumptions and experience variances	154	2	156	27	183
Changes in non-operating assumptions and experience variances ^{note (iii)}	(432)	(132)	(564)	132	(432)
Profit after tax from long-term business	316	(140)	176	332	508
Exchange movements on foreign operations and net investment hedges	8	6	14	28	42
Intragroup dividends (including statutory transfers) and investment in operations	(330)	–	(330)	–	(330)
Mark to market value movements on Jackson assets backing surplus and required capital	62	–	62	–	62
Other transfers to net worth	1	–	1	–	1
Shareholders' equity at 31 December 2011	1,220	1,371	2,591	2,491	5,082
UK insurance operations					
Shareholders' equity at 1 January 2011	540	1,120	1,660	4,310	5,970
New business contribution ^{note (v)}	(54)	77	23	172	195
Existing business – transfer to net worth	511	(72)	439	(439)	–
Expected return on existing business	10	38	48	317	365
Changes in operating assumptions and experience variances	(38)	(4)	(42)	94	52
RPI to CPI inflation measure change on defined benefit pension schemes	20	–	20	–	20
Changes in non-operating assumptions and experience variances	(26)	57	31	(343)	(312)
Profit after tax from long-term business	423	96	519	(199)	320
Intragroup dividends (including statutory transfers) and investment in operations ^{note (ii)}	(393)	–	(393)	179	(214)
Other transfers from net worth	(18)	–	(18)	–	(18)
Shareholders' equity at 31 December 2011	552	1,216	1,768	4,290	6,058

Notes

- (i) All figures are shown net of tax.
- (ii) The amounts shown in respect of free surplus and the value of in-force business for Asian and UK insurance operations for intragroup dividends (including statutory transfers) and investment in operations include the repayment of contingent loan funding. Contingent loan funding represents amounts whose repayment to the lender is contingent upon future surpluses emerging from certain contracts specified under the arrangement. If insufficient surplus emerges on those contracts, there is no recourse to other assets of the Group and the liability is not payable to the degree of shortfall.
- (iii) For US operations, changes in non-operating assumptions and experience variances for required capital reflects a release to free surplus following a reduction in the required asset risk charges arising from improvements to quality of the investment portfolio.

Notes on the EEV basis results continued

14 Reconciliation of net worth and value of in-force business^{note(i)} continued

(iv) The movements arising from new business contribution are as follows:

	2011 £m	2010 £m
Free surplus invested in new business:		
Excluding Japan	(553)	(643)
Japan ^{note(vi)}	–	(2)
Total ^{note(vi)}	(553)	(645)
Required capital	406	461
Total net worth	(147)	(184)
Value of in-force business	1,683	1,616
Total post-tax new business contribution	1,536	1,432

(v) Free surplus invested in new business is as follows:

	2011 £m					
	Asian operations (excluding Japan) note (vi)	US operations	UK insurance operations	Total long-term business operations (excluding Japan) note (vi)	Japan note (vi)	Total long-term business operations
Pre-tax new business contribution ^{note 2}	1,076	815	260	2,151	–	2,151
Tax	(265)	(285)	(65)	(615)	–	(615)
Post-tax new business contribution	811	530	195	1,536	–	1,536
Free surplus invested in new business	(297)	(202)	(54)	(553)	–	(553)
Post-tax new business contribution per £1 million free surplus invested	2.7	2.6	3.6	2.8	–	2.8
	2010 £m					
	Asian operations (excluding Japan) note (vi)	US operations	UK insurance operations	Total long-term business operations (excluding Japan) note (vi)	Japan note (vi)	Total long-term business operations
Pre-tax new business contribution ^{note 2}	902	761	365	2,028	(1)	2,027
Tax	(230)	(266)	(99)	(595)	–	(595)
Post-tax new business contribution	672	495	266	1,433	(1)	1,432
Free surplus invested in new business	(278)	(300)	(65)	(643)	(2)	(645)
Post-tax new business contribution per £1 million free surplus invested	2.4	1.7	4.1	2.2	(0.5)	2.2

(vi) New business contribution and free surplus invested in new business for the Group's Japanese insurance subsidiary, which ceased selling new business with effect from 15 February 2010, have been presented separately from those of the remainder of the Group.

(vii) The value of in-force business includes the value of future margins from current in-force business less the cost of holding required capital and represents:

	2011 £m			
	Asian operations	US operations	UK insurance operations	Group
Value of in-force business before deduction of cost of capital and of guarantees	6,922	3,222	4,598	14,742
Cost of capital	(317)	(135)	(241)	(693)
Cost of time value of guarantees ^{note(viii)}	(22)	(596)	(67)	(685)
Net value of in-force business	6,583	2,491	4,290	13,364

	2010 £m			
	Asian operations	US operations	UK insurance operations	Group
Value of in-force business before deduction of cost of capital and of guarantees	5,941	2,584	4,635	13,160
Cost of capital	(321)	(183)	(236)	(740)
Cost of time value of guarantees ^{note(viii)}	(10)	(270)	(89)	(369)
Net value of in-force business	5,610	2,131	4,310	12,051

(viii) The change in the cost of time value of guarantees for US operations from £(270) million in 2010 to £(596) million in 2011 primarily relates to VA business, mainly arising from the new business written in the year, reflecting the increase in VA sales, and the reduction in the expected long-term rate of return for US equities of 1.4 per cent, driven by the reduction in US 10-year treasury bond rate, as shown in note 17a.

15 Expected transfer of value of in-force business to free surplus

The discounted value of in-force business and required capital can be reconciled to the 2011 and 2010 totals in the tables below for the emergence of free surplus as follows:

	2011 £m	2010 £m
Required capital ^{note14}	3,447	3,415
Value of in-force (VIF) ^{note14}	13,364	12,051
Add back: deduction for cost of time value of guarantees ^{note14}	685	369
Other items ^{note}	(1,214)	(845)
	16,282	14,990

Note

Other items represent amounts incorporated into VIF where there is no definitive timeframe for when the payments will be made or receipts received. In particular, other items includes the deduction of the value of the shareholders' interest in the estate, the value of which is derived by increasing final bonus rates so as to exhaust the estate over the lifetime of the in-force with-profits business. This is an assumption to give an appropriate valuation. To be conservative this item is excluded from the expected free surplus generation profile below.

Notes on the EEV basis results continued

15 Expected transfer of value of in-force business to free surplus continued

Cash flows are projected on a deterministic basis and are discounted at the appropriate risk discount rate. The modelled cash flows use the same methodology underpinning the Group's embedded value reporting and so is subject to the same assumptions and sensitivities.

The table below shows how the VIF generated by the in-force business and the associated required capital is modelled as emerging into free surplus over future years.

	2011 £m						
	2011 total as shown above	Expected period of conversion of future post-tax distributable earnings and required capital flows to free surplus					
		1-5 years	6-10 years	11-15 years	16-20 years	21-40 years	40+ years
Asian operations	7,387	2,582	1,596	1,012	732	1,262	203
US operations	4,267	2,241	1,287	490	173	76	–
UK insurance operations	4,628	1,864	1,166	743	453	394	8
Total	16,282	6,687	4,049	2,245	1,358	1,732	211
	100%	41%	25%	14%	8%	11%	1%

	2010 £m						
	2010 total as shown above	Expected period of conversion of future post-tax distributable earnings and required capital flows to free surplus					
		1-5 years	6-10 years	11-15 years	16-20 years	21-40 years	40+ years
Asian operations	6,329	2,304	1,407	866	591	1,009	152
US operations	4,078	2,358	1,007	421	173	119	–
UK insurance operations	4,583	1,792	1,173	755	468	389	6
Total	14,990	6,454	3,587	2,042	1,232	1,517	158
	100%	43%	24%	14%	8%	10%	1%

16 Sensitivity of results to alternative assumptions

a Sensitivity analysis - economic assumptions

The tables below show the sensitivity of the embedded value as at 31 December 2011 (31 December 2010) and the new business contribution after the effect of required capital for 2011 and 2010 to:

- 1 per cent increase in the discount rates,
- 1 per cent increase and decrease in interest rates, including all consequential changes (assumed investment returns for all asset classes, market values of fixed interest assets, risk discount rates),
- 1 per cent rise in equity and property yields,
- 10 per cent fall in market value of equity and property assets (embedded value only),
- holding company statutory minimum capital (by contrast to required capital), (embedded value only),
- 5 basis point increase in UK long-term expected defaults, and
- 10 basis point increase in the liquidity premium for UK shareholder-backed annuities.

In each sensitivity calculation, all other assumptions remain unchanged except where they are directly affected by the revised economic conditions.

New business profit per operating profit summary

	2011 £m			
	Asian operations	US operations	UK insurance operations	Total long-term business operations
New business profit for 2011 ^{note 10}	1,076	815	260	2,151
Discount rates – 1% increase	(139)	(45)	(36)	(220)
Interest rates – 1% increase	2	81	5	88
Interest rates – 1% decrease	(72)	(117)	(6)	(195)
Equity/property yields – 1% rise	50	92	11	153
Long-term expected defaults – 5 bps increase	–	–	(8)	(8)
Liquidity premium – 10 bps increase	–	–	16	16
	2010 £m			
	Asian operations	US operations	UK insurance operations	Total long-term business operations
New business profit for 2010	901	761	365	2,027
Discount rates – 1% increase	(111)	(51)	(53)	(215)
Interest rates – 1% increase	(7)	34	(8)	19
Interest rates – 1% decrease	(20)	(40)	8	(52)
Equity/property yields – 1% rise	41	63	12	116
Long-term expected defaults – 5 bps increase	–	–	(13)	(13)
Liquidity premium – 10 bps increase	–	–	26	26

Notes on the EEV basis results continued

16 Sensitivity of results to alternative assumptions continued

Embedded value of long-term business operations

	2011 £m			
	Asian operations	US operations	UK insurance operations	Total long-term business operations
31 December 2011 ^{note 10}	8,510	5,082	6,058	19,650
Discount rates – 1% increase	(771)	(147)	(443)	(1,361)
Interest rates – 1% increase	(376)	(106)	(343)	(825)
Interest rates – 1% decrease	253	58	400	711
Equity/property yields – 1% rise	329	185	205	719
Equity/property market values – 10% fall	(159)	16	(326)	(469)
Statutory minimum capital	114	92	4	210
Long-term expected defaults – 5 bps increase	–	–	(98)	(98)
Liquidity premium – 10 bps increase	–	–	196	196

	2010 £m			
	Asian operations	US operations	UK insurance operations	Total long-term business operations
31 December 2010 ^{note 10}	7,445	4,799	5,970	18,214
Discount rates – 1% increase	(643)	(164)	(437)	(1,244)
Interest rates – 1% increase	(220)	(148)	(254)	(622)
Interest rates – 1% decrease	176	103	336	615
Equity/property yields – 1% rise	308	120	227	655
Equity/property market values – 10% fall	(174)	(5)	(339)	(518)
Statutory minimum capital	104	127	5	236
Long-term expected defaults – 5 bps increase	–	–	(87)	(87)
Liquidity premium – 10 bps increase	–	–	174	174

The sensitivities shown above are for the impact of instantaneous changes on the embedded value of long-term business operations and include the combined effect on the value of in-force business and net assets at the balance sheet dates indicated. If the change in assumption shown in the sensitivities were to occur, then the effect shown above would be recorded within two components of the profit analysis for the following year. These are for the effect of economic assumption changes and, to the extent that asset value changes are included in the sensitivities, within short-term fluctuations in investment returns. In addition to the sensitivity effects shown above, the other components of the profit for the following year would be calculated by reference to the altered assumptions, for example, new business contribution and unwind of discount, together with the effect of other changes such as altered corporate bond spreads.

b Sensitivity analysis - non-economic assumptions

The tables below show the sensitivity of the embedded value as at 31 December 2011 (31 December 2010) and the new business contribution after the effect of required capital for 2011 and 2010 to:

- 10 per cent proportionate decrease in maintenance expenses (a 10 per cent sensitivity on a base assumption of £10 per annum would represent an expense assumption of £9 per annum),
- 10 per cent proportionate decrease in lapse rates (a 10 per cent sensitivity on a base assumption of 5 per cent would represent a lapse rate of 4.5 per cent per annum), and
- 5 per cent proportionate decrease in base mortality and morbidity rates (ie increased longevity).

New business profit per operating profit summary

	2011 £m			
	Asian operations	US operations	UK insurance operations	Total long-term business operations
New business profit for 2011^{note 10}	1,076	815	260	2,151
Maintenance expenses – 10% decrease	26	11	7	44
Lapse rates – 10% decrease	92	24	10	126
Mortality and morbidity – 5% decrease	60	9	(9)	60
Change representing effect on:				
Life business	60	9	3	72
UK annuities	–	–	(12)	(12)
	2010 £m			
	Asian operations	US operations	UK insurance operations	Total long-term business operations
New business profit for 2010	901	761	365	2,027
Maintenance expenses – 10% decrease	27	9	5	41
Lapse rates – 10% decrease	81	31	8	120
Mortality and morbidity – 5% decrease	50	7	(20)	37
Change representing effect on:				
Life business	50	7	1	58
UK annuities	–	–	(21)	(21)

Notes on the EEV basis results continued

16 Sensitivity of results to alternative assumptions continued

Embedded value of long-term business operations

	2011 £m			
	Asian operations	US operations	UK insurance operations	Total long-term business operations
31 December 2011 ^{note 10}	8,510	5,082	6,058	19,650
Maintenance expenses – 10% decrease	117	44	52	213
Lapse rates – 10% decrease	342	157	65	564
Mortality and morbidity – 5% decrease	289	92	(227)	154
Change representing effect on:				
Life business	289	92	12	393
UK annuities	–	–	(239)	(239)
	2010 £m			
	Asian operations	US operations	UK insurance operations	Total long-term business operations
31 December 2010 ^{note 10}	7,445	4,799	5,970	18,214
Maintenance expenses – 10% decrease	104	39	48	191
Lapse rates – 10% decrease	293	158	67	518
Mortality and morbidity – 5% decrease	233	81	(181)	133
Change representing effect on:				
Life business	233	81	12	326
UK annuities	–	–	(193)	(193)

Effect of proposed changes in UK corporation tax rate

The 2011 results include the effect of the change in the UK corporate tax rate that has been enacted to revise the rate to 25 per cent from 1 April 2012. The impact of further reductions in the UK corporate tax rate of 1 per cent per annum to 23 per cent in 2014 would be an increase in the net of tax value of in-force business of UK insurance operations at 31 December 2011 of around £60 million.

17 Assumptions

a Principal economic assumptions

Deterministic assumptions

The tables below summarise the principal financial assumptions:

Assumed investment returns reflect the expected future returns on the assets held and allocated to the covered business at the valuation date.

Equity risk premiums in Asia range from 3.25 per cent to 8.7 per cent for both years. In the US and the UK, the equity risk premium is 4.0 per cent for both years.

Asian operations^{notes (i), (ii), (v)}

	31 December 2011 %											
	China	Hong Kong notes (ii), (iv)	India	Indonesia	Japan	Korea	Malaysia notes (iii), (iv)	Philippines	Singapore note (iv)	Taiwan	Thailand	Vietnam
Risk discount rate:												
New business	10.0	3.85	13.75	11.15	–	7.1	6.4	12.2	3.9	5.0	10.1	19.6
In-force	10.0	3.7	13.75	11.15	4.7	7.1	6.5	12.2	4.65	5.0	10.1	19.6
Expected long-term rate of inflation	2.5	2.25	4.0	5.0	0.0	3.0	2.5	4.0	2.0	1.0	3.0	6.5
Government bond yield	3.5	1.9	8.75	6.1	1.0	3.8	3.7	5.4	1.6	1.3	3.3	12.9
	31 December 2010 %											
	China	Hong Kong notes (ii), (iv)	India	Indonesia	Japan	Korea	Malaysia notes (iii), (iv)	Philippines	Singapore note (iv)	Taiwan	Thailand	Vietnam
Risk discount rate:												
New business	10.45	5.1	13.1	13.0	4.9	7.9	7.0	13.2	5.4	5.0	10.5	18.85
In-force	10.45	5.1	13.1	13.0	4.9	8.1	7.1	13.2	6.1	5.2	10.5	18.85
Expected long-term rate of inflation	2.5	2.25	4.0	5.0	0.0	3.0	2.5	4.0	2.0	1.0	3.0	5.5
Government bond yield	3.95	3.3	8.1	7.75	1.1	4.6	4.0	6.4	2.7	1.6	3.8	12.1
												Asia total %
Weighted risk discount rate: ^{note (i)}												
New business (excluding Japan)											7.4	8.4
In-force											6.9	8.1

Notes

- (i) The weighted risk discount rates for Asian operations shown above have been determined by weighting each country's risk discount rates by reference to the EEV basis new business result and the closing value of in-force business. The risk discount rates for individual Asian territories reflect the movement in government bond yields, together with the effects of movements in the allowance for market risk and changes in product mix.
- (ii) For Hong Kong the assumptions shown are for US dollar denominated business which comprises the largest proportion of the in-force business. For other territories, the assumptions are for local currency denominated business which reflects the largest proportion of the in-force business.
- (iii) The risk discount rate for Malaysia reflects both the Malaysia life and Takaful operations.

Notes on the EEV basis results continued

17 Assumptions continued

(iv) The mean equity return assumptions for the most significant equity holdings in the Asian operations were:

	2011 %	2010 %
Hong Kong	5.9	7.3
Malaysia	9.7	10.0
Singapore	7.7	8.7

To obtain the mean, an average over all simulations of the accumulated return at the end of the projection period is calculated. The annual average return is then calculated by taking the root of the average accumulated return minus one.

(v) In preparing the EEV basis results for 2011 and 2010 the 'active' basis of economic assumption setting has been applied for all Asian operations.

Previously, the EEV basis results for Japan, Korea and US dollar denominated business written in Hong Kong were determined on the 'active' basis. For other Asian countries the investment return assumptions and risk discount rates were based on an assessment of longer-term economic conditions (the 'passive' basis). The altered approach with effect from full year 2010 to determine the EEV basis results for all Asian territories on an 'active basis' of economic assumption setting is in line with the Group's other operations, and reflects the fact that markets in a number of Asian countries are becoming increasingly developed.

The effect of the change in 2010 to move to an 'active' basis for Asia operations was as follows:

Effect on:	2010 £m
Pre-tax operating profits from:	
New business ^{note 2}	5
Business in force ^{note 3}	(58)
Total	(53)
Short-term fluctuations in investment returns and changes in economic assumptions	16
Total profit before tax	(37)
Shareholders' equity as at 31 December 2010	(39)

US operations

	2011 %	2010 %
Assumed new business spread margins: ^{note (iii)}		
Fixed Annuity business ^{*note (i)}	1.75 to 2.0	2.0
Fixed Index Annuity business	2.25	2.5
Institutional business	1.0	–
Risk discount rate: ^{note (iv)}		
Variable annuity	6.7	7.8
Non-variable annuity	4.6	5.6
Weighted average total: ^{note (ii)}		
New business	6.5	7.6
In-force	6.0	6.9
US 10-year treasury bond rate at end of year	1.9	3.3
Pre-tax expected long-term nominal rate of return for US equities	5.9	7.3
Expected long-term rate of inflation	2.0	2.3

* including the proportion of variable annuity business invested in the general account.

Notes

- (i) For new business issuances in 2011, the assumed spread margin for fixed annuity business and for the proportion of variable annuity business invested in the general account is assumed to grade from 1.75 per cent to 2.0 per cent over five years. For new business issuances in 2010, the assumed spread margin for fixed annuity business and for the proportion of variable annuity business invested in the general account applies from inception.
- (ii) The weighted average risk discount rates reflect the mix of business between variable annuity and non-variable annuity business. The decrease in the weighted average risk discount rates from 2010 to 2011 primarily reflects the decrease in the US 10-year Treasury bond rate of 140 basis points, partly offset by the effect of the increase in additional allowance for credit risk (as described in note (iii) below) and the impact of the increase in allowance for market risk.
- (iii) Credit risk treatment
The projected cash flows incorporate the expected long-term spread between the earned rate and the rate credited to policyholders. The projected earned rates reflect book value yields which are adjusted over time to reflect projected reinvestment rates. Positive net cash flows are assumed to be reinvested in a mix of corporate bonds, commercial mortgages and limited partnerships. The yield on those assets is assumed to grade from the current level to a yield that allows for a long-term assumed credit spread on the reinvested assets of 1.25 per cent over 10 years. The yield also reflects an allowance for a RMR, which for 2011 is 27 basis points (2010: 26 basis points) for longer-term defaults as described in note 1b(iii), which represents the allowance as at the valuation date applied in the cash flow projections of the value of the in-force business.
In the event that longer-term default levels are higher, then, unlike for UK annuity business where policyholder benefits are not changeable, Jackson has some discretion to adjust crediting rates, subject to contract guarantee levels and general market competition considerations.
- (iv) For US operations, the risk discount rates shown above include an additional allowance for a combination of credit risk premium and short-term downgrade and default allowance for general account business of 200 basis points (2010: 150 basis points) and for variable annuity business of 40 basis points (2010: 30 basis points) to reflect the fact that a proportion of the variable annuity business is allocated to the general account (as described in note 1b(iii)).

UK insurance operations

	2011 %	2010 %
Shareholder-backed annuity business: ^{note (iv)}		
Risk discount rate:		
New business ^{note (i)}	7.7	7.3
In-force ^{note (ii)}	8.6	9.9
Pre-tax expected long-term nominal rate of return for shareholder-backed annuity business:		
New business:		
Fixed annuities	4.95	4.9
Inflation-linked annuities	4.4	5.1
In-force: ^{note (ii)}		
Fixed annuities	4.5	5.1
Inflation-linked annuities	4.1	5.2
Other business: ^{note (iv)}		
Risk discount rate: ^{note (iii)}		
New business	5.3	6.9
In-force	5.65	7.0
Pre-tax expected long-term nominal rates of investment return:		
UK equities	6.5	8.0
Overseas equities	5.9 to 9.9	7.3 to 10.2
Property	5.2	6.7
Gilts	2.5	4.0
Corporate bonds	4.0	5.7
Expected long-term rate of inflation	3.0	3.55
Post-tax expected long-term nominal rate of return for the PAC with-profits fund:		
Pension business (where no tax applies)	5.1	6.7
Life business	4.4	5.9

Notes

- (i) The new business risk discount rate for shareholder-backed annuity business incorporates a default allowance for best estimate defaults in respect of assets purchased with new business monies received in 2011. The increase in the risk discount rate from 2010 to 2011 reflects the profile of the release of additional credit risk provisions, appropriate to the new business assets, over the projected lifetime of this business. These additional provisions comprise of a credit risk premium, which is derived from Moody's data from 1970 to 2009, an allowance for a 1 notch downgrade of the portfolio subject to credit risk and an allowance for short-term defaults.

Notes on the EEV basis results continued

17 Assumptions continued

- (ii) For shareholder-backed annuity business, the movement in the pre-tax long-term nominal rates of return and the risk discount rates for in-force business reflect the combined effect of changes in asset yields and changes to the aggregate credit risk allowances as shown in note (iv) below.
- (iii) The risk discount rates for new business and business in force for UK insurance operations other than shareholder-backed annuities reflect weighted rates based on the type of business.

(iv) Credit spread treatment

For with-profits business, the embedded value reflects the discounted value of future shareholder transfers. These transfers are directly affected by the level of projected rates of return on investments, including debt securities. The assumed earned rate for with-profit holdings of corporate bonds is defined as the risk-free rate plus an assessment of the long-term spread over gilts, net of expected long-term defaults. This approach is similar to that applied for equities and properties for which the projected earned rate is defined as the risk-free rate plus a long-term risk premium.

For UK shareholder-backed annuity business, different dynamics apply both in terms of the nature of the business and the EEV methodology applied. For this type of business the assets are generally held to maturity to match long duration liabilities. It is therefore appropriate under EEV methodology to include a liquidity premium in the economic basis used. The appropriate EEV risk discount rate is set in order to equate the EEV with a 'market consistent embedded value' including liquidity premium. The liquidity premium in the 'market consistent embedded value' is derived from the yield on the assets held after deducting an appropriate allowance for credit risk. For PRIL, which has approximately 90 per cent of UK shareholder-backed annuity business, the allowance for credit risk for the in-force business at 31 December 2011 is made up of:

- (a) 15 basis points for fixed annuities and 14 basis points for inflation-linked annuities in respect of long-term expected defaults. This is derived by applying Moody's data from 1970 to 2009 and the definition of the credit rating used is the second highest credit rating published by Moody's, Standard and Poor's and Fitch; and
- (b) 52 basis points for fixed annuities and 47 basis points for inflation-linked annuities in respect of additional provisions which comprise a credit risk premium, which is derived from Moody's data from 1970 to 2009, an allowance for a 1 notch downgrade of the portfolio subject to credit risk and an allowance for short-term defaults.

The credit assumptions used and the residual liquidity premium element of the bond spread over swap rates is as follows:

New business ^{note(1)}	2011 (bps)	2010 (bps)
Bond spread over swap rates	139	117
Total credit risk allowance ^{note(2)}	35	38
Liquidity premium	104	79
In-force business	2011 (bps)	2010 (bps)
Bond spread over swap rates	201	160
Credit risk allowance:		
Long-term expected defaults	15	16
Additional provisions	51	52
Total credit risk allowance ^{note(2)}	66	68
Liquidity premium	135	92

Notes

(1) The new business liquidity premium is based on the weighted average of the point of sale liquidity premium.

(2) Specific assets are allocated to the new business for the year with the appropriate allowance for credit risk which was 35 basis points (2010: 38 basis points). The reduced allowance for new business in comparison to that for the in-force book reflects the assets held and other factors that influence the necessary level of provision.

The overall allowance for credit risk is prudent by comparison with historic rates of default and would be sufficient to withstand a wide range of extreme credit events over the expected lifetime of the annuity business.

Stochastic assumptions

The economic assumptions used for the stochastic calculations are consistent with those used for the deterministic calculations described above. Assumptions specific to the stochastic calculations, such as the volatilities of asset returns, reflect local market conditions and are based on a combination of actual market data, historic market data and an assessment of longer-term economic conditions. Common principles have been adopted across the Group for the stochastic asset models, for example, separate modelling of individual asset classes but with allowance for correlation between the various asset classes.

Details are given below of the key characteristics and calibrations of each model.

Asian operations

- The same asset return models as described for UK insurance operations below, appropriately calibrated, have been used for Asian operations. The principal asset classes are government and corporate bonds. Equity holdings are much lower than in the UK while property holdings do not represent a significant investment asset;
- The stochastic cost of guarantees is primarily only of significance for the Hong Kong, Korea, Malaysia and Singapore operations; and
- The mean stochastic returns are consistent with the mean deterministic returns for each country. The expected volatility of equity returns ranges from 18 per cent to 35 per cent, and the volatility of government bond yields ranges from 0.9 per cent to 2.4 per cent for both years.

US operations (Jackson)

- Interest rates are projected using a log-normal generator calibrated to historical US Treasury yield curves;
- Corporate bond returns are based on Treasury securities plus a spread that has been calibrated to current market conditions and varies by credit quality; and
- Variable annuity equity returns and bond interest rates have been stochastically generated using a log-normal model with parameters determined by reference to historical data. The volatility of equity fund returns for 2011 and 2010 ranges from 19 per cent to 32 per cent, depending on the risk class and the class of equity, and the standard deviation of interest rates ranges from 2.1 per cent to 2.4 per cent (2010: 2.0 per cent to 2.4 per cent).

UK insurance operations

- Interest rates are projected using a two-factor model calibrated to the initial market yield curve;
- The risk premium on equity assets is assumed to follow a log-normal distribution;
- The corporate bond return is calculated as the return on a zero-coupon bond plus a spread. The spread process is a mean reverting stochastic process; and
- Property returns are modelled in a similar fashion to corporate bonds, namely as the return on a risk-free bond, plus a risk premium, plus a process representative of the change in residual values and the change in value of the call option on rents.

Mean returns have been derived as the annualised arithmetic average return across all simulations and durations.

For each projection year, standard deviations have been calculated by taking the square root of the annualised variance of the returns over all the simulations. These have been averaged over all durations in the projection. For equity and property, the standard deviations relate to the total return on these assets. The standard deviations applied for all years are as follows:

	2011 %	2010 %
Equities:		
UK	20	18
Overseas	18	18
Property	15	15

Notes on the EEV basis results continued

17 Assumptions continued

b Demographic assumptions

Persistence, mortality and morbidity assumptions are based on an analysis of recent experience but also reflect expected future experience. Where relevant, when calculating the time value of financial options and guarantees, policyholder withdrawal rates vary in line with the emerging investment conditions according to management's expectations.

c Expense assumptions

Expense levels, including those of service companies that support the Group's long-term business operations, are based on internal expense analysis investigations and are appropriately allocated to acquisition of new business and renewal of in-force business. Exceptional expenses are identified and reported separately. It is Prudential's policy not to take credit for future cost reduction programmes until the savings have been delivered.

For Asian life operations, the expenses comprise costs borne directly and recharged costs from the Asian regional head office, that are attributable to covered business. The assumed future expenses for these operations also include projections of these future recharges. Development expenses are charged as incurred.

Corporate expenditure comprises:

- Expenditure for group head office, to the extent not allocated to the PAC with-profits funds, together with Solvency II implementation and restructuring costs, which are charged to the EEV basis results as incurred; and
- Expenditure of the Asian regional head office that is not allocated to the covered business or asset management operations, and is charged as incurred. These costs are primarily for corporate related activities and included within corporate expenditure.

d Taxation and other legislation

Current taxation and other legislation have been assumed to continue unaltered except where changes have been announced and substantively enacted in the year.

18 New business premiums and contributions^{notes (i), (ii)}

	Single		Regular		Annual premium and contribution equivalents (APE)		Present value of new business premiums (PVNBP)	
	2011 £m	2010 £m	2011 £m	2010 £m	2011 £m	2010 £m	2011 £m	2010 £m
Group insurance operations								
Asia – excluding India ^{note (iii)}	1,321	1,019	1,426	1,211	1,559	1,313	8,444	6,911
India	135	85	88	180	101	188	466	582
Asia	1,456	1,104	1,514	1,391	1,660	1,501	8,910	7,493
US	12,562	11,417	19	22	1,275	1,164	12,720	11,572
UK	4,871	5,656	259	254	746	820	6,111	6,842
Group total	18,889	18,177	1,792	1,667	3,681	3,485	27,741	25,907
Group total – excluding India	18,754	18,092	1,704	1,487	3,580	3,297	27,275	25,325
Asian insurance operations								
Hong Kong	180	107	313	276	331	287	2,023	1,693
Indonesia	250	141	338	269	363	283	1,435	1,011
Malaysia	79	58	215	198	223	204	1,225	1,153
Philippines	95	64	20	17	30	23	153	108
Singapore	371	318	198	143	235	175	1,855	1,357
Thailand	11	15	26	25	27	26	102	100
Vietnam	1	1	42	41	42	41	143	148
SE Asian operations including Hong Kong	987	704	1,152	969	1,251	1,039	6,936	5,570
China ^{note (iv)}	46	103	54	48	59	58	294	336
Korea	71	66	94	89	101	96	542	486
Taiwan	217	146	126	105	148	120	672	519
Total Asian operations – excluding India ^{note (iii)}	1,321	1,019	1,426	1,211	1,559	1,313	8,444	6,911
India	135	85	88	180	101	188	466	582
Total Asian operations	1,456	1,104	1,514	1,391	1,660	1,501	8,910	7,493
US insurance operations								
Fixed annuities	472	836	–	–	47	84	472	836
Fixed index annuities	934	1,089	–	–	93	109	934	1,089
Life	10	11	19	22	20	23	168	166
Variable annuities	10,909	9,481	–	–	1,091	948	10,909	9,481
Wholesale	237	–	–	–	24	–	237	–
Total US insurance operations	12,562	11,417	19	22	1,275	1,164	12,720	11,572
UK and Europe insurance operations								
Direct and partnership annuities	328	593	–	–	33	59	328	593
Intermediated annuities	241	221	–	–	24	22	241	221
Internal vesting annuities	1,223	1,235	–	–	122	124	1,223	1,235
Total individual annuities	1,792	2,049	–	–	179	205	1,792	2,049
Corporate pensions	184	228	215	198	233	221	1,224	1,099
Onshore bonds	1,779	1,660	–	–	178	166	1,781	1,660
Other products	780	774	44	56	122	133	978	1,089
Wholesale	336	945	–	–	34	95	336	945
Total UK and Europe insurance operations ^{note (v)}	4,871	5,656	259	254	746	820	6,111	6,842
Group Total	18,889	18,177	1,792	1,667	3,681	3,485	27,741	25,907
Group Total – excluding India	18,754	18,092	1,704	1,487	3,580	3,297	27,275	25,325

Notes on the EEV basis results continued

18 New business premiums and contributions^{notes (i), (ii)} continued

Notes

- (i) The tables shown above are provided as an indicative volume measure of transactions undertaken in the reporting period that have the potential to generate profits for shareholders. The amounts shown are not, and not intended to be, reflective of premium income recorded in the IFRS income statement.
- APE are calculated as the aggregate of regular new business amounts and one-tenth of single new business amounts and are subject to roundings. The PVNBP are calculated as equalling single premiums plus the present value of expected premiums of new regular premium business, allowing for lapses and other assumptions made in determining the EEV new business contribution.
- New business premiums reflect those premiums attaching to covered business, including premiums for contracts classified as investment products for IFRS basis reporting. New business premiums for regular premium products are shown on an annualised basis. Internal vesting business is classified as new business where the contracts include an open market option.
- (ii) For 2010, the table above excludes new business sales for the Group's Japanese insurance subsidiary, which ceased selling new business with effect from 15 February 2010.
- (iii) New business in India is included at Prudential's 26 per cent interest in the India life operation.
- (iv) New business in China is included at Prudential's 50 per cent in the China life operation.
- (v) UK wholesale sales for 2010 and 2011 include amounts for a small number of bulk annuity buy-in insurance agreements with an APE of £93 million and £33 million respectively.

19 Post balance sheet events

On 22 February 2012, M&G completed transactions to: (i) exchange bonus share rights for equity holdings with the employees of PPM South Africa, and (ii) the sale of a 10 per cent holding in the majority of the business to Thesele Group, a minority shareholder, for cash. Following these transactions M&G's holding in the majority of the business reduced from 75 per cent to 47 per cent. Under IFRS requirements the divestment is accounted for as the disposal of the 75 per cent holding and an acquisition of a 47 per cent holding at fair value. As a consequence of the IFRS application, the transactions give rise to a gain on dilution of approximately £40 million. On an EEV basis, consistent with IFRS, this amount will be accounted for in the Group 2012 summarised consolidated income statement as a gain on dilution, excluded from the Group's EEV operating profit based on longer-term investment returns.