Risk and capital management

As a provider of financial services, including insurance, the management of risk lies at the heart of Prudential's business. As a result, effective risk management capabilities represent a key source of competitive advantage for the Group.

The Group's risk framework includes the Group's appetite for risk exposures as well as its approach to risk management. Under this approach, Prudential continuously assesses the Group's top risks and monitors its risk profile against approved limits. Prudential's main strategies for managing and mitigating risk include asset liability management, using derivatives to hedge relevant market risks, and implementing reinsurance and corporate insurance programmes.

A. Group risk appetite

(Audited)

Prudential defines and monitors aggregate risk limits based on financial and non-financial stresses for its earnings volatility, liquidity and capital requirements.

Earnings volatility: the objectives of the limits are to ensure that:

a the volatility of earnings is consistent with the expectations of stakeholders;

b the Group has adequate earnings (and cash flows) to service debt, expected dividends and to withstand unexpected shocks; and

c earnings (and cash flows) are managed properly across geographies and are consistent with funding strategies.

The two measures used to monitor the volatility of earnings are European Embedded Value (EEV) operating profit and International Financial Reporting Standards (IFRS) operating profit, although EEV and IFRS total profits are also considered.

Liquidity: the objective is to ensure that the Group is able to generate sufficient cash resources to meet financial obligations as they fall due in business as usual and stressed scenarios.

Capital requirements: the limits aim to ensure that:

a the Group meets its internal economic capital requirements;

b the Group achieves its desired target rating to meet its business objectives; and

c supervisory intervention is avoided.

The two measures used are the EU Insurance Groups Directive (IGD) capital requirements and internal economic capital requirements. In addition, capital requirements are monitored on both local statutory and future Solvency II regulatory bases.

Prudential's risk appetite framework forms an integral part of its annual business planning cycle. The Group Risk Committee is responsible for reviewing the risks inherent in the Group's business plan and for providing the Board with input on the risk/reward trade offs implicit therein. This review is supported by the Group Risk function, which uses submissions by business units to calculate the Group's aggregated position (allowing for diversification effects between business units) relative to the limits contained within the risk appetite statements.

B. Risk exposures

(Audited)

The Group Risk Framework deploys a common risk language, allowing meaningful comparisons to be made between different business units. Risks are broadly categorised as shown below:

Category	Risk type	Definition
Financial risks	Market risk	The risk of loss for the Group's business, or of adverse change in the financial situation, resulting, directly or indirectly, from fluctuations in the level or volatility of market prices of assets and liabilities.
	Credit risk	The risk of loss for the Group's business or of adverse change in the financial position, resulting from fluctuations in the credit standing of issuers of securities, counterparties and any debtors in the form of default or other significant credit event (eg downgrade or spread widening).
	Insurance risk	The risk of loss for the Group's business or of adverse change in the value of insurance liabilities, resulting from changes in the level, trend, or volatility of a number of insurance risk drivers. This includes adverse mortality, longevity, morbidity, persistency and expense experience.
	Liquidity risk	The risk of the Group being unable to generate sufficient cash resources or to meet financial obligations as they fall due in business as usual and stress scenarios.
Non-financial risks	Operational risk	The risk of loss arising from inadequate or failed internal processes, or from personnel and systems, or from external events other than those covered by business environment risk.
	Business environment risk	Exposure to forces in the external environment that could significantly change the fundamentals that drive the business's overall strategy.
	Strategic risk	Ineffective, inefficient or inadequate senior management processes for the development and implementation of business strategy in relation to the business environment and the Group's capabilities.

The key financial and non-financial risks and uncertainties faced by the Group, that have been considered by the Group Risk Committee, and Prudential's approaches to managing them, are described below:

B.1 Financial risks

a Market risk

i Equity risk

(Audited)

In the UK business, most of Prudential's equity exposure is incurred in the with-profits fund, which includes a large inherited estate estimated at £7.0 billion as at 31 December 2012 (31 December 2011: £6.1 billion). This can absorb market fluctuations and protect the fund's solvency. The inherited estate itself is partially protected against falls in equity markets through an active hedging policy.

In Asia, Prudential's shareholder exposure to equities relates to revenue from unit-linked products and, from a capital perspective, to the effect of falling equity markets on the with-profits businesses.

In the US, where we are a leading provider of variable annuities, there are risks associated with the guarantees embedded in our products. We provide guaranteed minimum death benefits (GMDB) on substantially all policies in this class, guaranteed minimum withdrawal benefits (GMWB) on a significant proportion of the book, and guaranteed minimum income benefits (GMIB) on only 3 per cent. To protect the shareholders against the volatility introduced by these embedded options, we use both a comprehensive hedging programme and reinsurance. The GMIB is no longer offered, with existing coverage being reinsured.

The Jackson IFRS shareholders' equity and US statutory capital are sensitive to the effects of policyholder behaviour on the valuation of GMWB guarantees, but to manageable levels.

In our variable annuity sales activities, we focus on meeting the needs of conservative and risk averse customers who are seeking reliable income in retirement, and who display little tendency to arbitrage their guarantees. These customers generally select conservative investment options. We are able to meet the needs of these customers because of the strength of our operational platform.

It is our philosophy not to compete on price; rather, we seek to sell at a price sufficient to fund the cost we incur to hedge or reinsure our risks and to achieve an acceptable return for our shareholders.

We use a macro approach to hedging that covers the risks inherent across the US business. Within this macro approach we make use of the natural offsets that exist between the variable annuity guarantees and the fixed index annuity book, and then use a combination of over-the-counter (OTC) options and exchange traded derivatives to hedge the remaining risk, considering significant market shocks and limiting the amount of capital we are putting at risk. Internal positions are generally netted before any external hedge positions are considered. The hedging programme also covers the fees on variable annuity guarantees.

Jackson hedges the economics of its products rather than the accounting result. This focus means that we accept a degree of variability in our accounting results in order to ensure we achieve the appropriate economic result. Accordingly, while Jackson's hedges are effective on an economic basis, due to different accounting treatment for the hedges and some of the underlying hedged items on an IFRS basis, the reported income effect is more variable.

ii Interest rate risk

(Audited)

Interest rate risk arises from Prudential's investments in long-term debt and fixed income securities, and also exists in policies that carry investment guarantees on early surrender or at maturity, where claim values can become higher than the value of backing assets as a result of rises or falls in interest rates.

In Asia, the exposure to interest rate risk arises from the guarantees of some non-unit-linked investment products. This exposure arises because it may not be possible to hold assets which will provide cash flows to match exactly those relating to policyholder liabilities. This results in a mismatch due to the duration and uncertainty of the liability cash flows and the lack of sufficient assets of a suitable duration. While this residual asset/liability mismatch risk can be managed, it cannot be eliminated.

In the US, there is interest rate risk across the portfolio. The majority of Jackson's fixed annuity and life liabilities allow for an annual reset of the crediting rate, which provides for a greater level of discretion in determining the amount of interest rate risk to assume. The primary concerns with these liabilities relate to potential surrenders when rates increase and, in a low interest environment, the minimum guarantees required by state law. For variable annuities, interest rate changes will influence the level of reserves held for certain guaranteed benefits. With its large fixed annuity and fixed index annuity books, Jackson has natural offsets for its variable annuity interest-rate related risks. Jackson manages interest rate exposure through a combination of interest rate swaps and interest rate options.

In the UK, the investment policy for the shareholder-backed annuity business is to match the annuity payments with the cash flows from investments. As a result, assets and liabilities are closely matched by duration. The impact on profit of any residual cash flow mismatching can be adversely affected by changes in interest rates; therefore the mismatching position is regularly monitored. The guarantees of the with-profit business give rise to some interest rate discounting risk as falling rates may result in an increase in the cost of guarantees. Except for severe stress scenarios where shareholders' support may be required, this risk is borne by the with-profits fund.

iii Foreign exchange risk

(Audited)

Prudential principally operates in the UK, the US and in Asia. The geographical diversity of its businesses means that Prudential is inevitably subject to the risk of exchange rate fluctuations. Prudential's international operations in the US and Asia, which represent a significant proportion of its operating profit and shareholders' funds, generally write policies and invest in assets denominated in local currency. Although this practice limits the effect of exchange rate fluctuations on local operating results, it can lead to significant fluctuations in Prudential's consolidated financial statements when results are expressed in pounds sterling.

Risk and capital management continued

The Group retains revenues locally to support the growth of the Group's business and capital is held in the local currency of the business to meet local regulatory and market requirements, accepting the balance sheet translation risks this can produce. However, in cases where a surplus arising in an overseas operation supports Group capital or shareholders' interest (ie remittances), this exposure is hedged if it is economically optimal to do so. The Group does not have appetite for significant shareholder exposures to foreign exchange risks in currencies outside the local territory. Currency borrowings, swaps and other derivatives are used to manage exposures.

b Credit risk

(Audited)

In addition to business unit and Group-wide operational limits on credit risk, Prudential monitors closely its counterparty exposures at Group level, highlighting those that are large or of concern. Where appropriate, Prudential will reduce its exposure, purchase credit protection or make use of collateral arrangements to control its levels of credit risk.

The Group's balance sheet held the following total investments at 31 December 2012:

	2012 £bn				2011 £bn
	Participating funds	Unit-linked and variable annuities	Shareholder-backed	Total Group	Total Group
Debt securities	62.0	9.5	68.6	140.1	124.5
Equity	25.1	73.9	1.0	100.0	87.3
Property investments	8.7	0.6	1.6	10.9	10.8
Mortgage loans	1.3	–	4.8	6.1	5.7
Other loans	1.4	–	4.3	5.7	4.0
Deposits	9.5	1.4	1.8	12.7	10.7
Other investments	4.7	–	3.2	7.9	7.6
Total	112.7	85.4	85.3	283.4	250.6

The table below presents the balances of investments related to shareholder-backed operations at 31 December 2012.

	2012 £bn	2011 £bn
Shareholder-backed investments:		
Asia life	8.7	7.1
UK life	31.3	28.5
US life	42.0	34.0
Other	3.3	3.8
Total	85.3	73.4

Shareholders are not directly exposed to value movements on assets backing participating or unit-linked operations, with sensitivity mainly related to shareholder-backed operations.

i Debt portfolio

(Audited)

The investments held by the shareholder-backed operations are predominantly debt securities, of which 95 per cent are rated, either externally or internally, as investment grade (31 December 2011: 95 per cent).

The Group's total debt securities portfolio on an IFRS basis comprised the following at 31 December 2012:

	2012 £bn				2011 £bn
	Participating funds	Unit-linked and variable annuities*	Shareholder-backed	Total Group	Total Group
Insurance operations:					
UK	50.5	6.3	27.1	83.9	78.0
Jackson National Life	–	–	33.0	33.0	27.0
Asia long-term business	11.5	3.2	6.7	21.4	17.7
Other operations	–	–	1.8	1.8	1.8
Total	62.0	9.5	68.6	140.1	124.5

* Jackson's variable annuity separate account assets comprise equity securities and portfolio holdings in unit trusts (including mutual funds), the majority of which are equity based.

UK
The UK's debt portfolio on an IFRS basis is £83.9 billion as at 31 December 2012, including £50.5 billion within the UK with-profits fund. Shareholders' risk exposure to the with-profits fund is limited as the solvency is protected by the large inherited estate. Outside the with-profits fund there is £6.3 billion in unit-linked funds where the shareholders' risk is limited, with the remaining £27.1 billion backing the shareholders' annuity business and other non-linked business (of which 75 per cent is rated AAA to A-, 23 per cent BBB and 2 per cent non-investment grade). The UK shareholder-backed portfolio did not experience any default losses in 2012.

US
At 31 December 2012, Jackson's fixed income debt securities portfolio consisted of:

Summary	**2012** £m	**2011** £m
Corporate and government security and commercial loans:		
Government	4,126	2,163
Publicly traded and SEC Rule 144A securities[note]	19,699	16,281
Non-SEC Rule 144A securities	3,542	3,198
Total	27,367	21,642
Residential mortgage-backed securities (RMBS)	2,400	2,591
Commercial mortgage-backed securities (CMBS)	2,639	2,169
Other debt securities	587	620
Total US debt securities	32,993	27,022

Note
A 1990 SEC rule that facilitates the resale of privately placed securities that are without SEC registration to qualified institutional investors. The rule was designed to develop a more liquid and efficient institutional resale market for unregistered securities.

Of the £23.2 billion of corporate debt, 95 per cent is investment grade. Concentration risk within the corporate debt portfolio is low, with the top ten holdings accounting for approximately 8 per cent of the portfolio. Our largest sector exposures in the investment grade corporate debt portfolio are Energy and Utilities at 15 per cent and 13 per cent, respectively. We actively manage the portfolio and will sell exposures as events dictate.

Within the RMBS portfolio of £2.4 billion, the portion guaranteed by the US government sponsored agencies is 57 per cent. The CMBS portfolio of £2.6 billion is performing strongly, with 40 per cent of the portfolio rated AAA and less than 2 per cent rated below investment grade. The entire portfolio has an average credit enhancement level of 31 per cent. This level provides significant protection, since it means the underlying collateral has to incur a 31 per cent loss, net of recoveries, before our holding is at risk.

Jackson's debt securities experienced total credit-related losses in 2012 of £47 million (2011: £52 million). This includes a loss net of recoveries of £10 million (2011: gains of £10 million) on credit-related sales of impaired bonds. IFRS write-downs on debt securities were £37 million (2011: £62 million). Of this amount of write-downs, £8 million (2011: £21 million) was in respect to RMBS securities. In addition to the amounts for debt securities, there were £5 million (2011: £28 million) of write-downs on Jackson's commercial mortgage loan portfolio. In 2012 and 2011, Jackson did not experience any defaults on its debt securities.

The impairment process reflects a review of every bond and security in our portfolio. Our accounting policy requires us to book full mark to market losses on impaired securities through our balance sheet. However, we would expect only a proportion of these losses eventually to turn into defaults, and some of the impaired securities to recover in price over time.

Unrealised gains and losses on debt securities in the US
Jackson's net unrealised gains from debt securities were £2,807 million at 31 December 2012, compared to £2,057 million at 31 December 2011. The gross unrealised loss position was £178 million at 31 December 2012 (31 December 2011: £246 million). Gross unrealised losses on securities priced at less than 80 per cent of face value totalled £53 million at 31 December 2012 compared to £158 million at 31 December 2011.

Asia
Asia's debt portfolio totalled £21.4 billion at 31 December 2012. Of this, approximately 69 per cent was in unit-linked and with-profits funds with minimal shareholders' risk. The remaining 31 per cent is shareholder exposure and is invested predominantly (65 per cent) in investment grade bonds. The Asian portfolio has performed very well, and did not experience any default losses in 2012.

Asset management
The debt portfolio of the Group's asset management operations of £1.8 billion as at 31 December 2012 is principally related to Prudential Capital operations. Of this amount £1.5 billion were rated AAA to A- by S&P or Aaa by Moody's.

ii Group sovereign debt exposure
(Audited)
Sovereign debt represented 15 per cent or £10.4 billion of the debt portfolio backing shareholder business (excluding unit-linked business) at 31 December 2012 (2011: 16 per cent and £9.2 billion respectively). 38 per cent of this was rated AAA and 92 per cent investment grade (2011: 43 per cent and 94 per cent respectively). Of the Group's holdings in Continental Europe of £564 million, 79 per cent was AAA rated (2011: £690 million and 87 per cent respectively). Shareholder exposure to the Eurozone sovereigns of Portugal, Italy, Ireland, Greece and Spain (PIIGS) is £52 million (2011: £44 million). The Group does not have any sovereign debt exposure to Greece, Portugal or Ireland.

Risk and capital management continued

The exposure of the Group's shareholder and with-profits funds to sovereign debt (including credit default swaps that are referenced to sovereign debt) at 31 December 2012 is as follows.

	31 December 2012 £m		31 December 2011 £m	
	Shareholder sovereign debt	With-profits sovereign debt	Shareholder sovereign debt	With-profits sovereign debt
Continental Europe:				
Italy	51	59	43	52
Spain	1	31	1	33
	52	90	44	85
Germany	444	469	598	602
Other Europe (principally Belgium and Isle of Man)	68	41	48	62
	564	600	690	749
United Kingdom	3,432	2,306	3,254	2,801
United States	3,585	1,169	2,448	2,615
Other, predominantly Asia	2,867	271	2,850	332
Total	10,448	4,346	9,242	6,497

Holdings of UK government debt accounted for £3.4 billion of the shareholder sovereign debt portfolio at 31 December 2012. Post year end, the United Kingdom no longer has a unanimous AAA rating, as Moody's on 22 February 2013 lowered its rating to Aa1. However, given that the vast majority of the debt backs sterling liabilities, the downgrade has not resulted in large price fluctuations in the gilt market and that the rating remains very strong, the downgrade is not expected to significantly impact the Group's balance sheet and earnings.

iii Exposure to bank debt securities

(Audited)

Prudential expects that any second order sovereign credit exposures would most likely be concentrated in the banking sector. The Group's bank exposure is a function of its core investment business, as well as of the hedging and other activities undertaken to manage its various financial risks. Prudential relies on public information and credit research sources to identify banks with large concentrations of indirect exposure.

Prudential has a range of controls and processes to manage credit exposure. In addition to the control frameworks that cover shareholder and policyholder credit risk within each business unit, the Group Credit Risk Committee oversees shareholder credit risk across the Group. The Committee receives comprehensive management information, including details of counterparty and invested credit exposure (including structured credit and loans), secured and unsecured cash balances, top 30 credit exposures, and an analysis of shareholder exposure by industry/country and rating. The business units and the Group Risk function also continually monitor the portfolio for emerging credit risks through various tools and processes.

Prudential actively mitigates the level of Group-wide credit risk (invested credit and counterparty) through a comprehensive system of hard limits, collateralisation agreements and centrally managed 'watch lists'.

Of the £68.6 billion of debt securities backing shareholder business, excluding holdings attributable to external holders of consolidated unit trusts, 3 per cent or £2.2 billion was in Tier 1 and Tier 2 hybrid bank debt. A further £3.2 billion was in the form of senior debt.

In terms of shareholder exposures to the bank debt of PIIGS, Prudential held £260 million at 31 December 2012 (31 December 2011: £328 million). This comprised £130 million of covered bonds, £93 million senior debt, £3 million Tier 1 debt and £34 million Tier 2 debt. There was no direct exposure to Greek banks.

The Group held the following direct exposures to banks' debt securities of shareholder-backed business at 31 December 2012.

Bank debt securities – shareholder-backed business £m	Senior debt			Subordinated debt				
	Covered	Senior	Total senior debt	Tier 2	Tier 1	Total subordinated debt	31 Dec 2012 Total	31 Dec 2011 Total
Portugal	–	37	37	–	–	–	37	24
Ireland	–	16	16	–	–	–	16	13
Italy	–	29	29	10	–	10	39	81
Greece	–	–	–	–	–	–	–	–
Spain	130	11	141	24	3	27	168	210
	130	93	223	34	3	37	260	328
Austria	–	–	–	11	–	11	11	9
France	18	62	80	72	43	115	195	149
Germany	–	33	33	18	–	18	51	29
Luxembourg	–	–	–	–	–	–	–	–
Netherlands	–	16	16	86	80	166	182	152
United Kingdom	486	181	667	700	99	799	1,466	1,083
Total Europe	634	385	1,019	921	225	1,146	2,165	1,750
United States	–	1,770	1,770	467	6	473	2,243	1,716
Other, predominantly Asia	30	334	364	352	220	572	936	841
Total	664	2,489	3,153	1,740	451	2,191	5,344	4,307

In addition to the exposures held by the shareholder-backed business, the Group held the following banks' securities at 31 December 2012 within its with-profits funds.

Bank debt securities – participating funds £m	Senior debt			Subordinated debt				
	Covered	Senior	Total senior debt	Tier 2	Tier 1	Total subordinated debt	31 Dec 2012 Total	31 Dec 2011 Total
Portugal	–	6	6	–	–	–	6	7
Ireland	6	–	6	–	–	–	6	–
Italy	–	71	71	4	–	4	75	96
Greece	–	–	–	–	–	–	–	5
Spain	173	12	185	–	1	1	186	138
	179	89	268	4	1	5	273	246
Austria	–	–	–	–	–	–	–	–
France	16	78	94	56	7	63	157	144
Germany	–	–	–	–	–	–	–	7
Luxembourg	–	–	–	–	–	–	–	7
Netherlands	–	136	136	2	–	2	138	122
United Kingdom	725	423	1,148	749	7	756	1,904	1,550
Total Europe	920	726	1,646	811	15	826	2,472	2,076
United States	–	1,837	1,837	240	6	246	2,083	2,052
Other, predominantly Asia	48	340	388	206	61	267	655	746
Total	968	2,903	3,871	1,257	82	1,339	5,210	4,874

Risk and capital management continued

iv Other possible impacts of a Eurozone crisis
(Audited)
Other knock on impacts of a Eurozone crisis may represent some risk to the Group, both in terms of financial market impact and potential operational issues. These third order exposures are intrinsically more difficult to quantify. However, as well as the monitoring routines noted above, Prudential has also developed tools to identify the Group's exposure to counterparties at risk (including contingent credit exposures), and has in place Group-wide processes to facilitate the management of such risks should they materialise.

In respect of operational risks, we believe we have strong investment operations, counterparty risk and change management capabilities that enable us to manage the transition to a new Eurozone regime if events require it to do so.

v Loans
(Audited)
Of the total Group loans of £11.8 billion at 31 December 2012, the following are held by shareholder-backed operations.

	2012 £bn			2011 £bn		
	Mortgage loans	Other loans	Total	Mortgage loans	Other loans	Total
Asia insurance operations note (i)	–	0.4	0.4	–	0.4	0.4
US insurance operations note (ii)	3.5	2.7	6.2	3.6	0.6	4.2
UK insurance operations note (iii)	1.3	–	1.3	1.1	–	1.1
Asset management operations note (iv)	–	1.2	1.2	–	1.3	1.3
Total loans held by shareholder-backed operations	4.8	4.3	9.1	4.7	2.3	7.0

Notes
(i) The majority of Asia insurance operations loans are commercial loans held by the Malaysian operation that are rated investment grade by two local rating agencies.
(ii) The US insurance operations held £6.2 billion of loans, comprising £3.5 billion of commercial mortgage loans and £2.7 billion of policy loans. Approximately £1.8 billion of the policy loans are held as collateral related to the three reinsurance treaties with Swiss Re, which are offset by a funds withheld liability. These loans are carried at fair value. All other loans are accounted for at amortised cost, less any impairment. All commercial mortgage loans held by US insurance operations are collateralised by properties. The US commercial mortgage loan portfolio does not include any single-family residential mortgage loans and therefore is not exposed to the risk of defaults associated with residential sub-prime mortgage loans. Jackson incurred write downs of £5 million on its commercial mortgage book (2011: write-downs of £28 million).
(iii) The majority of mortgage loans held by UK insurance operations are mortgage loans collateralised by properties.
(iv) Relates to bridging loan finance managed by Prudential Capital.

vi Counterparty credit risk
(Audited)
The Group enters into a variety of exchange traded and over-the-counter derivative financial instruments, including futures, options, forward currency contracts and swaps such as interest rate swaps, cross-currency swaps, swaptions and credit default swaps.

All over-the-counter derivative transactions, with the exception of some Asian transactions, are conducted under standardised ISDA (International Swaps and Derivatives Association Inc) master agreements and the Group has collateral agreements between the individual Group entities and relevant counterparties in place under each of these market master agreements.

The Group's exposure to derivative counterparty and reinsurance counterparty credit risk is subject to the same framework of Group-wide operational limits and monitoring as its invested credit risk. Where appropriate, Prudential will reduce its exposure, purchase credit protection or make use of additional collateral arrangements to control its levels of counterparty credit risk.

c Insurance risk
(Audited)
The processes of determining the price of Prudential's products and reporting the results of its long-term business operations require Prudential to make a number of assumptions. In common with other industry players, the profitability of Prudential's businesses depends on a mix of factors including mortality and morbidity levels and trends, persistency, investment performance, unit cost of administration and new business acquisition expenses.

Prudential continues to conduct research into longevity risk using data from its substantial annuity portfolio. The assumptions that Prudential makes about future expected levels of mortality are particularly relevant in its UK annuity business. The attractiveness of transferring longevity risk (via reinsurance and other external solutions) is regularly evaluated. These are used as risk management tools where it is appropriate and attractive to do so.

Prudential's morbidity risk is mitigated by appropriate underwriting and use of reinsurance and the morbidity assumptions reflect recent experience and expectation of future trends for each relevant line of business.

Prudential's persistency assumptions reflect recent experience for each relevant line of business, and any expectations of future persistency. Persistency risk is mitigated by appropriate training and sales processes and managed proactively post sale. Where appropriate, allowance is also made for the relationship – either assumed or historically observed – between persistency and investment returns, and for the resulting additional risk.

d Liquidity risk

(Audited)

The parent company has significant internal sources of liquidity which are sufficient to meet all of its expected requirements for the foreseeable future without having to make use of external funding. In aggregate the Group has £2.1 billion of undrawn committed facilities, expiring between 2013 and 2017. In addition, the Group has access to liquidity via the debt capital markets. Prudential also has in place an unlimited commercial paper programme and has maintained a consistent presence as an issuer in this market for the last decade. Liquidity uses and sources have been assessed at the Group and at a business unit level under base case and stressed assumptions. The liquidity resources available and the subsequent Liquidity Coverage Ratio are regularly monitored and have been assessed to be sufficient under both sets of assumptions.

B.2 Non-financial risk

(Unaudited)

Prudential is exposed to operational, business environment and strategic risk in the course of running its businesses.

Prudential is exposed to operational risk through the course of running its business. It is dependent on the successful processing of a large and complex number of transactions, utilising various IT applications and platforms, across numerous and diverse products. It also operates under the ever evolving requirements set out by different regulatory and legal regimes (including tax), as well as utilising a significant number of third parties to distribute products and to support business operations.

Prudential's systems and processes incorporate controls that are designed to manage and mitigate the operational risks associated with its activities. The Prudential Group Governance Manual was developed to make a key contribution to the sound system of internal control that the Group is expected to maintain under the UK Corporate Governance Code and the Hong Kong Code on Corporate Governance Practices. Group Head Office and business units confirm that they have implemented the necessary controls to evidence compliance with the Manual.

Prudential has an operational risk management framework in place that facilitates both the qualitative and quantitative analysis of operational risk exposures. The output of this framework, in particular management information on key operational risk and control assessments, scenario analysis, internal incidents and external incidents, is reported by the business units and presented to the Group Operational Risk Committee. This information also supports business decision-making and lessons-learned activities; the ongoing improvement of the control environment; and determination of the adequacy of Prudential's corporate insurance programme.

With regard to business environment risk, including the impacts of regulatory developments, the Group has a wide-ranging programme of active and constructive engagement with governments, policymakers and regulators in its key markets and with relevant international institutions. Such engagement is undertaken both directly and indirectly via trade associations. The Group has procedures in place to monitor and track political and regulatory developments and assess their potential impact on the Group. Where appropriate, the Group provides submissions and technical input to officials and others, either via submissions to formal consultations or through interactions with officials.

With regard to strategic risk, both business units and the Group Head Office are required to adopt a forward-looking approach to risk management by performing risk assessments as part of the annual strategic planning process. This supports the identification of potential threats and the initiatives needed to address them, as well as competitive opportunities. The impact on the underlying businesses and/or Group-wide risk profile is also considered to ensure that strategic initiatives are within risk appetite.

Solvency II represents a regulatory risk due to the uncertainty of what the rules will be when finalised, their potential impacts, and the timing of their introduction. The risks are that the Group may not be able to respond sufficiently quickly to the strategic implication of the change given levels of uncertainty around the content and timing; operational risk in terms of the scale and complexity of the delivery and uncertainty over timelines; and the additional capital that the Group may be required to hold. Solvency II is covered in more detail in the Capital Management section below.

B.3 Risk factors

Our disclosures covering risk factors can be found at the end of this document.

C. Capital management

C.1 Regulatory capital (IGD)

(Audited)

Prudential is subject to the capital adequacy requirements of the European Union Insurance Groups Directive (IGD) as implemented by the Financial Services Authority (FSA) in the UK. The IGD capital adequacy requirements involve aggregating surplus capital calculated on a FSA consistent basis for regulated subsidiaries, from which Group borrowings, except those subordinated debt issues that qualify as capital, are deducted. No credit for the benefit of diversification is permitted under this approach.

Prudential's capital position remains strong. Prudential has continued to place emphasis on maintaining the Group's financial strength through optimising the balance between writing profitable new business, conserving capital and generating cash. Prudential estimates that its IGD capital surplus is £5.1 billion at 31 December 2012 (before taking into account the 2012 final dividend), with available capital covering its capital requirements 3.0 times. This compares to a capital surplus of £4.0 billion at the end of 2011 (before taking into account the 2011 final dividend).

Risk and capital management continued

The movements in 2012 mainly comprise:

- Net capital generation mainly through operating earnings (in-force releases less investment in new business, net of tax) of £2.5 billion.

Offset by:

- Negative impact arising from market movements estimated at £0.2 billion;
- Final 2011 dividend of £0.5 billion and interim 2012 dividend of £0.2 billion;
- External financing costs and other central costs, net of tax, of £0.4 billion; and
- Negative impact arising from foreign exchange movements of £0.1 billion.

IGD surplus represents the accumulation of surpluses across all of our operations based on local regulatory minimum capital requirements with some adjustments, pursuant to the requirements of Solvency I. The calculation does not fully adjust capital requirements for risk nor does it capture the true economic value of assets. Global regulatory developments, such as Solvency II and ComFrame, aim to ensure that the calculation of regulatory surplus continues to evolve over time into a more meaningful economic measure.

There is broad agreement that ultimately it would be beneficial to replace the IGD regime with a regime that would be more risk based. Solvency II was supposed to provide such a framework but we now know that it will not be implemented before 31 December 2015. The structure of the Group and the approach we have taken to managing our risks, with a sizeable credit reserve in the UK annuity book, a strong inherited estate in UK with profits and the relatively low risk nature of our asset management and Asian operations, together with a high level of IGD surplus, means we have positioned ourselves well for future regulatory developments and stresses to our business.

(Unaudited)
In March 2013, we have agreed with the FSA to amend the calculation of the contribution Jackson makes to the Group's IGD surplus. Until now, the contribution of Jackson to the reported IGD was based on an intervention level set at 75 per cent of US Risk-Based Capital Company Action Level (CAL). Going forward, the contribution of Jackson to IGD surplus will equal the surplus in excess of 250 per cent of CAL. This is more in line with the level at which we currently report free surplus, which we have set at 235 per cent of CAL. In the absence of an agreed Solvency II approach, we believe that this change makes the IGD surplus a more meaningful measure and one that is more closely aligned with economic reality. The revised IGD surplus calculation has no impact on the way that the US business is managed or regulated locally.

(Unaudited)
On this revised basis, the IGD surplus at 28 February 2013 is estimated at £4.4 billion[1] (equivalent to a capital cover of 2.5 times) which includes the £0.4 billion of subordinated debt raised in January 2013 and is after deducting £1.3 billion in respect of the Jackson change from 75 per cent to 250 per cent of CAL.

Prudential continues to have further options available to manage available and required capital. These could take the form of increasing available capital (for example, through financial reinsurance) or reducing required capital (for example, through the mix and level of new business) and the use of other risk mitigation measures such as hedging and reinsurance. A number of such options were utilised through the last financial crisis in 2008 and 2009 to enhance the Group's IGD surplus. One such arrangement allowed the Group to recognise a proportion of the shareholder's interest in future transfers from the UK's with-profits business and this remained in place, contributing £0.36 billion to the IGD at 31 December 2012. We will phase this out in two equal steps, reducing the credit taken to £0.18 billion from January 2013 and we expect to take zero credit from January 2014.

In addition to its strong capital position, on a statutory (Pillar 1) basis, the total credit reserve for the UK shareholder annuity funds also protects its capital position in excess of the IGD surplus. This credit reserve as at 31 December 2012 was £2.1 billion. This credit risk allowance represents 40 per cent of the bond portfolio spread over swap rates, compared to 33 per cent as at 31 December 2011.

Stress testing
(Unaudited)
As at 31 December 2012, stress testing of our IGD capital position to various events has the following results:

- An instantaneous 20 per cent fall in equity markets from 31 December 2012 levels would reduce the IGD surplus by £450 million;
- A 40 per cent fall in equity markets (comprising an instantaneous 20 per cent fall followed by a further 20 per cent fall over a four-week period) would reduce the IGD surplus by £950 million;
- A 100 basis points reduction (subject to a floor of zero) in interest rates would reduce the IGD surplus by £850 million*; and
- Credit defaults of ten times the expected level would reduce IGD surplus by £700 million.

Note
1 The estimated position at 28 February 2013 allows for economic conditions and surplus generation since 31 December 2012 and is stated before the final dividend and the effect of the Thanachart acquisition and after allowing for a reduction in Jackson's contribution to IGD surplus of £1.3 billion.

* The impact of the 100 basis points reduction in interest rates is exacerbated by the current regulatory permitted practice used by Jackson, which values all interest rate swaps at book value rather than fair value for regulatory purposes. At 31 December 2012, removing the permitted practice would have increased reported IGD surplus by £0.3 billion. As at 31 December 2012, it is estimated that a 100 basis point reduction in interest rates (subject to a floor of zero) would have resulted in an IGD surplus of £4.9 billion, excluding the permitted practice. The effect of the revised calculation of Jackson's contribution to IGD surplus as at 31 December 2012 would have been to increase the sensitivity to equity market falls by approximately £50 million.

Prudential believes that the results of these stress tests, together with the Group's strong underlying earnings capacity, its established hedging programmes and its additional areas of financial flexibility, demonstrate that it is in a position to withstand significant deterioration in market conditions.

Prudential also uses an economic capital assessment to monitor its capital requirements across the Group, allowing for realistic diversification benefits and continues to maintain a strong position. This assessment provides valuable insights into its risk profile.

C.2 Solvency II and other global regulatory developments

(Unaudited)

The European Union (EU) is developing a new solvency framework for insurance companies, referred to as 'Solvency II'. The Solvency II Directive, which sets out the new framework, was formally approved by the Economic and Financial Affairs Council in November 2009. The new approach is based on the concept of three pillars – minimum capital requirements, supervisory review of firms' assessments of risk, and enhanced disclosure requirements.

Specifically, Pillar 1 covers the quantitative requirements around own funds, valuation rules for assets and liabilities and capital requirements. Pillar 2 provides the qualitative requirements for risk management, governance and controls, including the requirement for insurers to submit an Own Risk and Solvency Assessment which will be used by the regulator as part of the supervisory review process. Pillar 3 deals with the enhanced requirements for supervisory reporting and public disclosure.

A key aspect of Solvency II is that the assessment of risks and capital requirements are intended to be aligned more closely with economic capital methodologies and may allow Prudential to make use of internal economic capital models if approved by the relevant supervisory authority.

Representatives from the European Parliament, the European Commission and the Council of the European Union are currently discussing the Omnibus II Directive which, once approved, will amend certain aspects of the original Solvency II Directive. In addition the European Commission is continuing to develop, in consultation with stakeholders including industry, the detailed rules that will complement the high-level principles of the Directive, referred to as 'implementing measures'. The Omnibus II Directive is not currently scheduled to be finalised until late 2013, while the implementing measures cannot be finalised until after Omnibus II.

There is a significant uncertainty regarding the final outcome from this process. In particular, the Solvency II rules relating to the determination of the liability discount rate and to the treatment of US business remain unclear and Prudential's capital position is sensitive to these outcomes. With reference to the liability discount rate, solutions to remove artificial volatility from the balance sheet have been suggested by policymakers as the regulations continue to evolve. These solutions, along with transitional arrangements for the treatment of the US business, are continuing to be considered by policymakers as part of the process to reach agreement on the Omnibus II Directive. There is a risk that the effect of the measures finally adopted could be adverse for Prudential, including potentially that a significant increase in capital may be required to support its business and that Prudential may be placed at a competitive disadvantage to other European and non-European financial services groups. Prudential is actively participating in shaping the outcome through our involvement in industry bodies and trade associations, including the Chief Risk Officer and Chief Financial Officer Forums, together with the Association of British Insurers and Insurance Europe (formerly known as the Comité Européen des Assurances).

The delays in finalising the Omnibus II Directive and implementing measures are expected to result in a deferral of the Solvency II implementation date for firms beyond the previously anticipated date of 1 January 2014. At this stage, it remains unclear exactly when Solvency II will come into force, although a deferral until 1 January 2016 or beyond appears likely.

Having assessed the requirements of Solvency II, an implementation programme was initiated with dedicated teams to manage the required work across the Group. The activity of the local Solvency II teams is being coordinated centrally to achieve consistency in the understanding and application of the requirements. Prudential is continuing its preparations to adopt the regime when it eventually comes into force and is undertaking in parallel an evaluation of the possible actions to mitigate its effects. Prudential regularly reviews its range of options to maximise the strategic flexibility of the Group. This includes consideration of optimising the Group's domicile as a possible response to an adverse outcome on Solvency II.

Over the coming months Prudential will remain in regular contact with the FSA as it continues to engage in the 'pre-application' stage of the approval process for the internal model. In addition, Prudential also expects to engage in the initial stage of the FSA's proposed 'Individual Capital Adequacy Standards Plus (ICAS+)' regime, which will ultimately enable its UK insurance entities to leverage the developments made in relation to the Solvency II internal model for the purpose of meeting existing ICAS regime.

Currently there are also a number of other prospective global regulatory developments which could impact the way in which Prudential is supervised in its many jurisdictions. These include the Dodd-Frank Act in the US, the work of the Financial Stability Board (FSB) on Globally Systemically Important Financial Institutions (G-SIFIs) and the Common Framework for the Supervision of Internationally Active Insurance Groups (ComFrame) being developed by the International Association of Insurance Supervisors (IAIS).

The Dodd-Frank Act represents a comprehensive overhaul of the financial services industry within the United States that, among other reforms to financial services entities, products and markets, may subject financial institutions designated as systemically important to heightened prudential and other requirements intended to prevent or mitigate the impact of future disruptions in the US financial system. The full impact of the Dodd-Frank Act on Prudential's businesses is not currently clear, however, as many of its provisions have a delayed effectiveness and/or require rulemaking or other actions by various US regulators over the coming years.

Risk and capital management continued

As part of a global initiative to identify G-SIFIs, in May 2012, the IAIS published proposed assessment methodology for designating Globally Systemically Important Insurers (G-SIIs). For those groups that are designated by the FSB as G-SII then additional policy measures including enhanced supervision, introduction of recovery and resolution plans and higher loss absorbency requirements could be proposed. Further detail of the proposals is expected during 2013 and implementation is likely to be over a period of years. Furthermore, the FSA is considering the designation of Domestically Systemically Important Insurer (DSII) for those UK insurers that are significant in UK terms. It is not yet clear what the impact of this designation may be.

ComFrame is also being developed by the IAIS to provide common global requirements for supervision of insurance groups. The framework is designed to develop common principles for supervision and so may increase the focus of regulators in some jurisdictions. It is also possible that some prescriptive requirements, including group capital, could be proposed. Further clarity on ComFrame is expected during the second half of 2013.

C.3 Capital allocation

(Unaudited)

Prudential's approach to capital allocation is to attain a balance between risk and return, investing in those businesses that create shareholder value. In order to efficiently allocate capital, Prudential measures the use of, and the return on, capital.

Prudential uses a variety of metrics for measuring capital performance and profitability, including traditional accounting metrics and economic returns. Capital allocation decisions are supported by this quantitative analysis, as well as strategic considerations.

The economic framework measures risk adjusted returns on economic capital, a methodology that ensures meaningful comparison across the Group. Capital utilisation, return on capital and new business value creation are measured at the product level as part of the business planning process.

C.4 Risk mitigation and hedging

(Unaudited)

Prudential manages its actual risk profile against its tolerance of risk. To do this, Prudential maintains risk registers that include details of the risks Prudential has identified and of the controls and mitigating actions it employs in managing them. Any mitigation strategies involving large transactions such as a material derivative transaction involving shareholder business are subject to review at Group level before implementation.

Prudential uses a range of risk management and mitigation strategies. The most important of these include: adjusting asset portfolios to reduce investment risks (such as duration mismatches or overweight counterparty exposures); using derivatives to hedge market risks; implementing reinsurance programmes to manage insurance risk; implementing corporate insurance programmes to limit the impact of operational risks; and revising business plans where appropriate.