

## Capital management

**Prudential is subject to the capital adequacy requirements of the European Union (EU) Insurance Groups Directive (IGD) as implemented by the Financial Services Authority (FSA) in the UK. The IGD capital adequacy requirements involves aggregating surplus capital held in our 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.**

Our capital position has been further strengthened during 2009, driven by our prudent but proactive risk management. Our IGD capital surplus is estimated at £2.5 billion at 30 June 2009 (before any allowance for the 2009 interim dividend) giving an estimated solvency ratio of 237 per cent. After allowing for the July hybrid debt issuance, the Group IGD capital surplus is estimated to be £3.0 billion leading to an estimated solvency ratio of 262 per cent. This compares to a position (before allowing for a dividend) at the end of 2008 and at the end of the first quarter 2009 of £1.5 billion and £1.6 billion respectively. The movement from £1.5 billion at 31 December 2008 to the estimated £2.5 billion comprises:

- Internal capital generation of £0.3 billion;
- The impact of the sale of our agency distribution business in Taiwan of £0.8 billion;
- Additional hybrid debt, issued in May 2009, of £0.4 billion; and
- Additional recognition of a £0.4 billion part of the shareholders' interest in the future transfers from the PAC with-profit fund by FSA (up from £0.3 billion recognised in February 2009).

Offset by:

- Final 2008 dividends, net of scrip, of £0.2 billion;
- Credit related impairments and default losses in the US of £0.3 billion;
- Other market related impacts of £0.2 billion; and
- Foreign exchange movements of £0.2 billion.

We have strengthened our IGD capital position in challenging markets. We continue to have further options available to us to manage available and required capital. These could take the form of either increasing available capital (for example, through financial reinsurance or debt issuance) or reducing required capital (for example, through the level and the mix of new business, notably by maintaining pricing discipline and through the use of other risk mitigation strategies such as hedging and reinsurance).

In addition to this strong capital position, the total credit reserve for the UK shareholder annuity funds, which protects our capital position in excess of the IGD surplus, has been maintained at £1.4 billion. This reserve is equivalent to 85 bps per annum over the lifetime of the assets and would allow us to withstand a repeat of the average default experience during the Great Depression occurring every year throughout the life of the portfolio.

As already mentioned, during the extreme equity market conditions experienced in the first quarter of 2009, with equity volatilities at historically high levels, the Group entered into additional one-off hedging contracts to protect the Group's IGD capital position against a tail-event of an instantaneous

40 per cent drop in equity market level with no recovery. The vast majority of the costs related to that hedge have been incurred in the first half and the hedge will not be renewed as the Group's capital surplus has been significantly enhanced since then and market concern about such extreme events has receded.

As at 30 June 2009, the impact of a more realistic instantaneous 20 per cent fall in equity market levels would not be significant. A 20 per cent one day fall with no recovery is equivalent to the worst historic daily fall in the S&P. Were equity markets to fall by more than 20 per cent, we consider that this would not be an instantaneous fall but rather this would be expected to occur over a period of time during which we would be able to put into place mitigating management actions including the rebalancing of our hedging position. For example, we have estimated that the impact (net of mitigating management actions) of an additional 20 per cent fall in equity markets over a four week period following an instantaneous 20 per cent fall would be an estimated reduction in the IGD surplus of a further £200 million.

These equity sensitivities are assumed to be in addition to the 28 per cent fall the equity markets had already experienced in the twelve months prior to 30 June 2009.

In summary, the findings of our stress testing and sensitivity analysis, which are part of the continual process of assessing the resilience of the Group's IGD capital position to withstand significant further deterioration in market conditions include:

- An instantaneous further 20 per cent fall in equity markets from 30 June 2009 levels would not have a significant impact on IGD surplus;
- 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 £200 million;
- A 150bps reduction (subject to a floor of zero) in interest rates from 30 June 2009 would reduce the IGD surplus by £300 million; and
- Credit defaults of ten times the expected level would have an impact of £650 million in excess of the annual reserve release.

The results of these stress tests, together with our Group's strong underlying earnings capacity, our established hedging programmes and our additional areas of financial flexibility, demonstrate that we are in a position to withstand possible significant further deterioration in market conditions.

We also use an economic capital assessment to monitor our capital requirements across the Group, allowing for realistic diversification benefits and continue to maintain a strong position. This assessment provides valuable insights into our risk profile and is used for both risk measurement and capital management.

The EU is developing a new solvency framework for insurance companies, referred to as 'Solvency II' which will be very important for the insurance industry. There will be continued uncertainty until the rules are finalised and Prudential is actively participating in shaping the outcome through our involvement in industry bodies, including in the Chief Risk Officer and Chief Financial Officer Forums, and progressing with our implementation plans.

## Risk management

**As a provider of financial services, we recognise that the managed acceptance of risk lies at the heart of our business. As a result, effective risk management capabilities represent a key source of competitive advantage for our Group. To maximise this advantage, we have embedded a risk and capital management framework and culture that drives our rigorous risk and capital management and the optimisation of risk adjusted returns across the Group.**

The Group's risk appetite framework sets out our tolerance to risk exposures as well as our approach to risk management and return optimisation. Under this approach, we monitor our risk profile continuously against agreed limits. Our core strategies for managing and mitigating risk include asset liability management, the use of financial instruments to hedge relevant market risks, and implementing reinsurance and corporate insurance programmes.

Our risk exposure and approach to risk management were described in detail in our 2008 year end report and remain valid.

### Equity risk

We have an exposure to equity risk that varies between each of our main operations. Most of the equity exposure in our UK business arises from the with-profits fund which includes a large inherited estate, estimated at £5.0 billion at 30 June 2009, which can absorb the impact of 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 the first half of 2009 we have reduced the fund's exposure to UK equities whilst increasing the proportion of bonds and cash.

In Asia, a high proportion of our in-force book is made up of unit-linked products with limited shareholder exposure to equities. We have minimal direct shareholder exposure to Asian equity markets outside our unit-linked holdings and this has been further reduced during the first half of the year.

In the US, where we are a leading provider of variable annuities, there are well-understood risks associated with the guarantees embedded in our products. To protect the shareholder against the volatility induced by these embedded options, we use both a comprehensive hedging programme and reinsurance.

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. We seek to sell at a price where we can hedge or reinsure our risks, for example

in 2009 we discontinued the GMIB guarantee and repriced certain GMWB guarantees.

We take a macro approach to hedging that covers market risk in the US business, including all exposure to GMDB and GMWB guarantees. Within this macro approach we make use of the natural offsets that exist between the variable annuity guarantees and the fixed-indexed annuity book, and then use a combination of over the counter options and futures to hedge the residual risk, allowing for significant market shocks and minimising the amount of capital we are putting at risk. The hedging programme covers both the in-force book and new business for the 'greeks' – i.e. changes in equity market levels, the rate of change in market levels and equity market volatility, as well as interest rate movements. We also hedge the fees on variable annuity guarantees.

### Interest rate risk

Interest rate risk arises primarily from Prudential's investments in long-term debt and fixed income securities. Interest rate risk 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.

Interest rates primarily impact our Asia, US and UK with-profits businesses. However, the sale of the agency-based business in Taiwan has significantly reduced our exposure to interest rate risk in Asia. The remaining risk relates mostly to guarantees on traditional shareholder-backed life products and asset-liability mismatches, primarily in Japan and Korea. This exposure is within our risk appetite, and we monitor and manage it carefully on an ongoing basis. We have a range of risk mitigation options available to us should we wish to reduce this exposure further.

In the US there is interest rate risk across the portfolio. We manage fixed annuity interest rate exposure through a combination of interest rate swaps and interest rate options, to protect capital against rates rising quickly, and through the contractual ability to reset crediting rates annually. On variable annuities business interest rate risk has natural offsets within Jackson's other liabilities, particularly fixed annuities and guaranteed investment contracts. The net position is then hedged externally in order to achieve the desired risk profile.

In the UK the investment policy for the shareholder-backed annuity business is to match the cash flow from investments with the annuity payments. As a result, assets and liabilities are closely matched by duration. The impact of any residual cash flow mismatching can be adversely affected by changes in interest rates, but the impact is expected to be small.

## Foreign exchange risk

Prudential operates in 13 countries in Asia, in the US, in the UK, and in Continental Europe. The geographical diversity of our businesses means that we are inevitably subject to the risk of exchange rate fluctuations. Prudential's international operations in the US and Asia, which represent a significant proportion of our 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 our consolidated financial statements when results are expressed in pounds sterling.

We do not generally seek to hedge foreign currency revenues, as these are substantially retained locally to support the growth of the Group's business and meet local regulatory and market requirements. However, in cases where a foreign surplus is deemed to be supporting Group capital or shareholders' interest, this exposure is hedged if we deem it economically optimal to do so. Currency borrowings, swaps and other derivatives are used to manage exposures.

## Credit risk

### Debt portfolio

Our debt portfolio on an IFRS basis was estimated at £89.4 billion at 30 June 2009. £40.9 billion of these assets backed shareholder business, of which 93 per cent were investment grade, compared to 96 per cent at 31 December 2008. This change was a result of downgrades, largely occurring in March and April, with the pace of downgrade significantly slowing subsequently.

### Asia

Asia's debt portfolio totalled £8.3 billion at 30 June 2009. Of this, approximately 76 per cent was invested in unit-linked and with-profits funds with minimal shareholder risk. The remaining 24 per cent is shareholder exposure and is invested predominantly (70 per cent) in investment grade bonds. For Asia, the portfolio has performed very well, with no default losses in the first half of 2009.

### UK

The total debt portfolio for UK insurance operations was £59.2 billion, including £37.4 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 which absorbs market fluctuations. Outside the with-profits fund, £4.8 billion was held in unit-linked funds where the shareholder risk is limited, and the remaining £17.0 billion (of which 78 per cent is rated AAA to A, 18 per cent BBB and four per cent non-investment grade) was backing the shareholder annuity business and other non-linked business. Despite downgrades of £3.4 billion mostly in the first quarter of 2009, (85 per cent of these being in Financial Institutions) the quality of the portfolio remains high with 96 per cent of the portfolio rated investment grade, compared to 99 per cent at 31 December 2008.

On a statutory basis we have maintained the credit reserve within the UK shareholder annuity funds of £1.4 billion to allow for future defaults. This reserve can withstand the equivalent of the average default experience during the Great Depression occurring every year over the life of the portfolio. In the first half of 2009, we have experienced credit defaults for UK operations of £11 million that relate to shareholder funds (0.1 per cent of the portfolio).

### US

The most significant area of exposure to credit risk for the shareholder is Jackson in the US. At 30 June 2009 Jackson's fixed income portfolio was £20.9 billion, comprising £14.9 billion of Corporate Debt, £1.7 billion of Commercial Mortgage Backed Securities (CMBS), £3.4 billion of Residential Mortgage Backed Securities (RMBS) and £0.9 billion of other instruments. We entered the present credit cycle in a defensive position and continue to manage the portfolio rigorously.

The US Corporate Debt portfolio of £14.9 billion is 91 per cent investment grade, compared to 92 per cent at 31 December 2008. Concentration risk is low, with the top ten holdings accounting for only 5 per cent of the portfolio. The high-yield portfolio is also well diversified with an average holding of £9 million. Our largest sector exposures, in the investment grade portfolio are Utilities and Energy both at 15 per cent. We actively manage the portfolio and will sell exposure as required.

Within the RMBS portfolio of £3.4 billion, the agency guaranteed portion is 64 per cent. Another 19 per cent of the portfolio relates to investments with pre-2006/2007 vintages, where experience has generally been more positive than later vintages. Our exposure to the 2006/2007 vintages totals £406 million of which £304 million is invested in the senior part of the capital structure, thereby significantly reducing the risk of defaults and the magnitude of loss if a shortfall were to occur. In a typical RMBS structure the non-AAA tranches are relatively thin, so as collateral losses increase, non-AAA tranches can be hit very hard. The senior/AAA tranche, on the other hand, is very wide, and thus, the actual economic loss is much more contained and much lower than the current price declines driving reported accounting values. The actual exposure to non-senior 2006/2007 Prime and Alt-A RMBS is only £102 million. This portfolio has an average fair value price of 76 cents in the dollar.

The CMBS £1.7 billion portfolio is performing well, with 89 per cent of the portfolio being AAA and none below investment grade. We materially reduced our non-AAA purchases after 2004 in response to the significant deterioration in underwriting standards observed in the market and in line with rating agencies' guidelines. The entire portfolio has an average credit enhancement level of 30 per cent. This provides significant protection, since it means the bond has to incur a 30 per cent loss, net of recoveries, before we are at risk.

## Risk management

### continued

Jackson experienced less than £1 million of bond default losses during the first half of 2009. As part of our active management of the book we incurred net losses of £42 million on the sale of impaired bonds. IFRS write-downs excluding defaults for the half-year were £324 million.

The impairment process reflects a rigorous review of every single bond and security in our portfolio. We believe that the accounting rules for impairments are necessarily conservative and not always consistent with economic losses. So, while the accounting requires us to book them as losses through our income statement, we would expect only a proportion of these impairments eventually to turn into defaults, and some of the impaired securities to recover in price over time.

In considering potential future losses for Jackson, it is essential to examine the key components of the debt portfolio. As at 30 June 2009, 92 per cent of Jackson's total debt portfolio of £20.9 billion consisted of investment grade securities and 8 per cent were high yield. To put potential future losses in context, the highest global annual default rates over the past 50 years were 0.5 per cent for investment grade and 10 per cent for high yield, and the highest global annual default rates during a recession have been 1.6 per cent for investment grade and 15.4 per cent for high yield, although not necessarily in the same year (Source: Moody's Investors Service – February 2009).

Applying peak annual default rates and making conservative assumptions for recoveries to our US debt portfolio would generate losses of approximately £330 million for one year that could be absorbed by our current IGD surplus as estimated at 30 June 2009.

#### Asset management

The debt portfolio of the Group's asset management operations of £978 million principally comprises £966 million related to Prudential Capital operations. Of this amount, debt securities of £923 million were rated AAA to A- by S&P or Aaa by Moody's.

#### Loans

Of the total Group loans of £8.6 billion at 30 June 2009, £6.8 billion are held by shareholder-backed operations comprising of £4.4 billion commercial mortgage loans and £2.4 billion of other loans.

Of this total held by shareholder-backed operations, the Asian insurance operations held £0.3 billion of other loans; the majority of which are commercial loans held by the Malaysian operation that are investment graded by two local rating agencies. The US insurance operations held £4.3 billion of loans, comprising £3.8 billion of commercial mortgage loans, all of which are collateralised by properties, and £0.5 billion of policy loans. 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. The UK insurance operations held £0.6 billion, the majority of which are mortgage loans also collateralised by properties.

The balance of the total loans amounts to £1.6 billion and relates to bridging loan finance managed by Prudential Capital. The bridging loan assets generally have no external credit ratings available, with internal ratings prepared by the Group's asset management operations as part of the risk management process, with the majority being rated BBB+ to BBB-.

#### Unrealised credit losses in the US

Jackson's gross unrealised losses reduced from £3.2 billion at 31 December 2008 to £2.2 billion at 30 June 2009. This change reflects the benefits of some normalisation of the credit markets. The entire market for fixed income securities has been re-priced downwards from historically tight spreads of approximately 100 bps experienced during the first half of 2007, with average spreads on investment grade paper in excess of 331 bps at 30 June 2009. Wider credit and liquidity spreads are causing the average investment grade security to trade around the mid to high 90s as a per cent of book value. Unrealised losses on securities priced at less than 80 per cent of face value were £1.5 billion at 30 June 2009. It is our intention to hold these fixed income securities to maturity – an approach which in economic terms limits the impact of the current market dislocation.

With the return of liquidity in most segments, of structured securities, virtually all the non-agency RMBS, ABS and certain CMBS that, at 31 December 2008, were valued using internal valuation models due to the dislocated market conditions in 2008, have now been valued using external prices.

We believe that the accounting impact of these unrealised losses significantly overstates the risk of economic losses on our portfolio at current price levels.

### **Insurance risk**

The processes of determining the price of our products and reporting the results of our long-term business operations require us to make a number of assumptions. In common with other industry players, the profitability of our businesses depends on a mix of factors including mortality and morbidity trends, persistency, investment performance, unit cost of administration and new business acquisition expenses. We continue to conduct rigorous research into longevity risk using data from our substantial annuitant portfolio. Prudential's persistency assumptions reflect recent experience for each relevant line of business, and any expectations of future persistency. 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.

### **Liquidity risk**

Our liquidity position remains very strong, both at holding and subsidiary company level. The holding company has significant internal sources of liquidity which are sufficient to meet all of our 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, of which, in February 2009, we renewed £1.4 billion of the undrawn syndicated committed banking facility for a further three years. We also have two £100 million undrawn bilateral committed banking facilities expiring in 2011 and 2012, with the balance being an annually renewable £500 million committed securities lending facility. In addition the Group has access to liquidity via the debt capital markets, which was demonstrated most recently through the two hybrid instruments, £400 million of Lower Tier 2 debt issued in May and US dollar \$750 million (approximately £455 million) of Innovative Tier 1 debt issued in July.

### **Non-financial risk**

Prudential is exposed to operational, business environment and strategic risk in the course of running its businesses. We process a large number of complex transactions across numerous and diverse products, and are subject to a number of different legal and regulatory regimes. We also have a significant number of third-party relationships that are important to the distribution and processing of our products, both as market counterparties and as business partners.

We use quantitative analysis of operational risk exposures material to the Group to inform our decisions on the overall amount of capital held and the adequacy of our corporate insurance programme.

### **Risk factors and contingencies**

The Group published details of its risk factors and contingencies in its 2008 Annual Report. There have been no changes in the nature of the risk factors during the period. Note R of the IFRS basis condensed consolidated financial statements gives an update on the position for contingencies.