Presentation Introduction Speech Script

Slide 1 (Cover Slide) – Introduction

Good morning.
We initiated the economic capital project three years ago in order to enhance our group-wide platform for business management. The project was a significant undertaking as it imposed the strict discipline of a single-yardstick to assess and quantify all of the risks, and associated capital requirements, across the Group.
We have also put in a place a regular reporting process across all of our operations. The economic capital position across the group is a regular agenda item at the Group's Asset-Liability Committee.
In this presentation I will first describe the high-level objectives behind this initiative
Second, I will explain some of the key principles underlying the approach that we have adopted.
Third, I will share with you some of the results of the model, and discuss some of the key applications of this important work, in particular around how we manage and allocate capital across the Group.

Slide 2 - (Three Key objectives)

We had three principal objectives for undertaking this project.
First, to enhance value creation.
We seek to create value for our shareholders by allocating our capital where returns – on a risk-adjusted basis – are most attractive.
Risk-adjusting those returns is no trivial task.
We operate under a variety of local reserving and capital regimes that do not always provide a consistent view of capital at risk. Our economic capital framework allows us to correct for those inconsistencies and provides us with a more rational, and often differentiated view, of the prospective attractiveness of the markets that we operate in.
And of course, we intend that this feeds into the performance management process.

Second, to enhance our risk management capabilities.
At Prudential, we deliberately operate as a decentralised group - we firmly believe that business decisions should be taken by our local people in their local markets. Nevertheless, it is important that we continue to monitor the risk profile of the Group as a whole and have a line of sight into our businesses.
This ensures that as we grow and expand, across markets and products, we continue to operate according to a single standard for managing and assessing risk.

Finally, we wanted to be able to demonstrate the financial strength of the Group on an economic basis.
Existing regulatory views do not always fully capture the risk profile and capital adequacy of a global and diversified business like ours. The regulators clearly recognise this and are seeking to use internal models as a component of the Solvency 2 proposals.
We have engaged with the FSA throughout the development of this framework. We have had a very useful two-way dialogue, which has informed our thinking on the whole issue of diversification. We also recognise that our ability to realise diversification benefits is limited by constraints on capital mobility around the Group.
Our dialogue with the FSA is continuing, and we intend to provide them with the detailed internal models as part of our Group Capital Assessment in due course.
We will thus only cover the in-force book throughout this presentation.
In addition all the major rating agencies are showing a lot of interest in the use of internal models as a supplement to their current processes and we have already had some useful discussions with them.

Slide 3 - (Key Principles)

In devising our framework, the principles that we adopted were guided by two things:
The need to ensure a sound theoretical framework, as well as the imperative to have a practical approach that can support real business decisions.
We set out three key principles at the start of the project:
The key driver of our approach was that we wanted to capture diversification benefits within each business and across the Group.

The issue of diversification is an absolutely fundamental requirement, as this is core to our strategy as a geographically and product-diverse Group.
Second, we use a multi-period approach in which we model cashflows over the run off of the books of business.
Our primary motivation for adopting this approach is that it suitably captures the nature of the risks that we are exposed to and how we manage them. For example, our exposure to asset-liability risk evolves over time - we manage that through dynamic asset allocation and flexible bonus and crediting strategies.

Finally, the risk coverage has to be comprehensive covering all of our risks, financial and operational, with a clear focus on the major exposures.
… Next, I will walk you through in a bit more detail the implications of each of these three principles.

Slide 4 - (Principle 1)

Turning to diversification and capital mobility…
Perhaps the most distinctive feature of our approach is that it allows Prudential to assess the economic solvency of the Group on an integrated basis.

At the core of the model is an integrated scenario generator that we maintain centrally. We call it GeneSiS: Generator of Stochastic Investment Scenarios. This model produces a set of investment scenarios that capture all the major financial risk drivers across the Group. In other words, correlated scenarios for interest rates, equity returns etc.
The scenarios are produced taking into account the probability of each outcome occurring and the way the risk drivers interact with each other.
For example, while global equity markets are highly correlated at times of distress, the same is not necessarily true for interest rates, inflation or credit defaults.
Our model captures how our business benefits from the diversity of exposure to various risk factors that do not always move in synch with each other.

These scenarios are then fed into detailed asset-liability models of the businesses. The detailed modelling produces projections of cash flows and balance sheets for each business. Note also, that these business unit models produce stand-alone economic capital analyses that are used for business unit applications. Our economic capital work is all about business application at both group and individual business unit.
(more next page)
For each scenario, we can capture whether a certain business generates excess capital that can be up-streamed to the group, or conversely whether the business requires a capital injection from the Group.

We bring together the cashflows from each of the individual businesses into the Group Solvency Model. Also, cashflows from other group activities such as expenses and interest on hybrid debt.
The financial strength of the Group is then assessed through observing the frequency of Group insolvency across all the range of the random scenarios generated. In this context you can think of Economic Capital as the amount of “buffer” capital that the Group needs to remain solvent in all but very extreme “tail” scenarios.
What is an extreme tail scenario? Given the mix of business we hold, the scenarios that tend to drive our capital requirement are those that have strong falls in one of our main markets – UK, US and Taiwan – and moderate falls in the remaining two. Extreme behaviour resulting in increased capital requirements in all three markets simultaneously tends to be rare. So by way of example, capital might be driven by a combination of sharp interest rate rises in the

US, bond losses in Taiwan, and below average investment returns in the UK which reduce the transfers coming out of the 90:10 fund.

At the moment, the Group Solvency Model covers 80% of our business. The economic capital for the remaining business is calculated in individual stand-alone models. This is then added to obtain the Group Capital Requirement using a correlation matrix approach. This is a standard aggregation approach used by banks and some other insurers.
Over time of course, we will look to migrate more individual stand-alone country models into the Group Solvency Model. However, at the same time we will ensure that our developmental efforts are targeted at areas that will best enhance our understanding of the business.

Slide 5

As I mentioned earlier, our model is designed to reflect the mobility of capital around the Group. Given that "tail events" DO NOT occur across all of our businesses at the same time, we can transfer capital out of a strong business into a weak business where necessary. However, our ability to make such transfers is constrained by the local regulatory requirements of the businesses. It is these constraints that limit the capital mobility across the Group.
If you think of the Group capital as the central capital pot…

… the model captures the business unit cashflows into the centre…

…. with the cashflows to and from the Group limited by the regulatory constraints shown in the grey boxes.

Our economic capital framework is, after all, a business management tool. We assess the economic position through looking at what happens to the business over many different possible economic scenarios while reflecting the reality of the environment we operate in. For example, focusing on the top grey box, we do not take any initial credit for the estate in the PAC with-profits fund. However, we do allow the 90:10 shareholder transfers to flow through each year to the Group Capital Balance. This happens as claims are paid and bonuses declared, depending on the economic environment determined by the scenario.

And of course, there are extreme scenarios where the PAC fund requires an injection. However, some of these will not be extreme scenarios for the group, as at that point, cash would have also been generated from another Business Unit.

The Group Solvency Model also captures the effects of non-discretionary cashflows that occur at the Group level.

The main cash outflows are expenses and the cost of servicing subordinated debt, and we also capture investment returns on capital held at Group level.
As this is an in-force solvency model, we have not put in the impact of future dividends and new business here.

Slide 6 - (Principle 2)

Next, the multi-year approach…
We assess our capital requirement on a multi-year basis using a 25-year projection. By multi-year, we mean that we examine the solvency position at the end of each projection year, and track the total number of times that the Group Capital Balance falls below zero.

The best way to think about this is as a three step-iterative process.

First, we start with an estimate of the required level of capital from our total available capital base. Here, we start with zero.

Second, we run our random investment scenario generator, feed the scenarios through the Business Unit ALM models and feed the results through to the Group Solvency Model.

Then, we look at the frequency of Group default over 25 years across all the scenarios.
On the vertical axis we have the random scenarios, say 1 to 1000. As an illustration, here we show 100 on the slide. On the horizontal axis we have the time horizon, i.e. 25 years.
The red dots you see here signify a Group default occurring in that time period. It is cumulative, in that once you default, all future years are also red – i.e. you don't recover. The green dots signify that the group is solvent in the time period.
Just looking at the number of red dots here, this initial starting level of capital of zero is clearly insufficient.

So, we iterate through the process, add more capital and re-run the model until the observed frequency of Group default is within our Group standard for financial strength.

We then rank the scenarios from worst to best, then we check that this meets our target calibration…

Slide 7 - (Calibration of standards)

Setting a common group target for default frequency is critical as it allows us to assess all risks and businesses using a consistent yard-stick. There are a number of approaches to setting the actual targets. For our purposes, we have adopted the calibration that is represented by the line here

The line represents the target probability of default over 25 years. In other words, we target a level of capital that ensures that our probability of default is always above the line as you can see from the red area on the chart.
The Group target is 4.4% over 25 years. By way of comparison, this is equivalent to the cumulative probability of default of a AA bond. This means the Group is capitalised such that we act as a very highly rated counter-party to our policyholders.
Note that our chosen level of calibration is well in excess of the minimum set by regulators, which is generally a BBB consistent basis. Here we have also shown the historic cumulative probability of default on BBB bonds.

To protect and grow our business franchise, we choose to hold to operate at a higher standard than the minimum “investment grade” standards that regulators require.

Slide 8

Finally, risk coverage…
As a Group, we are exposed to a wide variety of risks across our businesses. This table shows which risks are captured and where.
The Group solvency model captures the largest components of these risks across our major business models as shown here
ALM risk covers the effects of interest rates and investment assets such as equities, property and bonds. You will see later that credit risk is an important risk exposure for us, and we spent quite a bit of time getting a robust and detailed credit risk model that allows for spread volatility, credit migration and default incorporated into the broader framework.

Operational risk is captured in aggregate and quantifies the capital required to withstand tail operational losses. Specifically, losses that are high severity and low frequency in nature. This was modelled by first fitting frequency and severity distributions to risk parameters. The parameters were obtained through extensive risk workshops across the group, and sense-checked through an analysis of an external loss database. Capital requirements were then obtained from simulating over a large number of stochastic iterations.

For the remainder of our businesses, we use standalone economic capital models to cover the other large operations in Asia as well as Annuity business within the life fund.

For now, we continue to use regulatory capital requirements to cover M&G, Egg and other operations.

Slide 9 - (Group Available Capital)

Up till now, we have focused on how we calculate required economic capital. This is how we determine available capital…
We have defined available capital to be broadly consistent with the FSA's definition for the Integrated Prudential Sourcebook, in that equity and subordinated debt counts as capital, but goodwill doesn't. There are also valuation differences due to the conservatism in the FSA's valuation of assets and liabilities.
We start off with our UK GAAP shareholders equity.

We then take off the £1.4bn goodwill, add in the £1.4bn subordinated debt

Make £0.9bn of further adjustments, to arrive at our available capital figure of £3.4bn.

The £0.9bn valuation adjustment is driven by a combination of

- adjustments to shareholders' equity to bring the available capital onto a basis consistent with our calculation of required capital, and

- marking to market senior debt, which is then removed from the available capital all together.

The former requires a £250m adjustment for Asia and £500m for JNL, and the latter is around £100m.

This is similar to the adjustments made for IGD, but consistent with the way we approach required Economic Capital rather than required IGD reserves.

Slide 10 - (Group Capital Position)

Now let's look at the results of all this:
Just to remind you, we are looking at how much capital we have available in the group for the in-force book, compared to the capital we require to meet the group's target probability of default. The more capital, the fewer defaults.
At the end of 2004 we had a surplus of £1.6bn at our target calibration, which you will remember is equivalent to the historic probability of default of an AA rated bond over 25 years.

As I mentioned at the start, one of the principal uses of the model is as a risk management tool. The following two slides show the economic capital consumption at the group target level, by business unit and by risk type, on a diversified basis.

Slide 11 - (Capital Position by BU)

The pie chart provides a snapshot of the risk profile as at end-2004.
JNL is the largest shareholder operation at Prudential and naturally requires the most economic capital.
The PAC long-term fund has a nil requirement. Modelling demonstrates that it does not require any capital from shareholders due to the large size of the estate.
Over time, we would expect this to evolve in line with our business mix. For example, our current focus on growth in UK and Asia will drive a greater proportion of the risk towards those businesses.
Going forward, as JNL shifts its product mix towards Variable Annuities, we expect that the economic capital requirements for JNL will reduce.

Slide 12 - (Capital Position by risk)

By risk type, the greatest shareholder exposure is to credit risk, which is not surprising given the relative size of the direct exposure to JNL, the UK annuity corporate bond portfolios as well as Egg.
In contrast, underwriting risk is only 10% of the total, mostly reflecting the longevity risk in the UK annuity portfolios. This is due to the fact that at the group level longevity risk is fairly independent of other market type risks and therefore rapidly diversifies away. In fact, on a marginal basis, for each additional £1 of standalone longevity risk we take on, approximately 80p to 90p of it diversifies away. Given our current risk profile, appropriately priced longevity exposure provides very attractive returns on an economic capital basis.
Clearly, this risk profile is not static over time and we do monitor and adjust our exposure both at the Group and business units levels. In fact, the framework allows us to regularly monitor our risk-taking and adjust our profile depending on the attractiveness of how risk is priced in the market and our own risk appetite.

Slide 13

The economic capital framework is a long term project to create a major piece of infrastructure for the Group. The framework will be used to address the three objectives that we laid out at the outset.

Our businesses are beginning to use Economic Capital in product design, asset-liability management and hedging strategies. Let me give you a few concrete examples of what this means in practice.

From an Asset-Liability management perspective, we actively use Economic Capital to inform bonus declaration decisions. This provides an approach that can enable us to manage our crediting policies more carefully.

From a product management perspective, we need to continue to use the regulatory view of capital requirements, but are also introducing economic capital requirements in our assessment of new products. An assessment that is based on economic capital can be very different from the pure regulatory views adopted by local peers. This will allow us to use a different, and more economic, lens for identifying attractive opportunities in our various markets.

From a Group perspective, we can actively manage and use the framework to inform capital allocation decisions. In particular, we will drive towards deploying capital on an economic basis while centrally managing the differences between economic and regulatory capital needs.

From a risk management standpoint, we use economic capital as a group tool to understand the risk profile within our businesses as well as our overall capital adequacy position. Over time, we expect this measure to become increasingly prominent in our regulatory and rating agency dialogues.

Slide 14 - (Capital Management Slide)

To summarise, we view the economic capital framework as an important enabler for improving our capital allocation decisions. In fact, our de-centralised management philosophy goes hand-in-hand with an active capital management approach as to how we run our business.

While the presentation this morning covered all three objectives - I would like to focus your attention again to our first objective here …

… namely enhanced value creation for our shareholders.

Our ability to assess the attractiveness of opportunities in the global market place and to deploy capital against those opportunities will be a key success factor for the Group. Economic capital will allow us to assess opportunities on a like for like basis. We intend fully to embed the economic capital framework structures for the Group.

We believe that this provides us with an enhanced approach for capital allocation that ultimately leads to superior value creation for our shareholders

Thank you for your attention.