



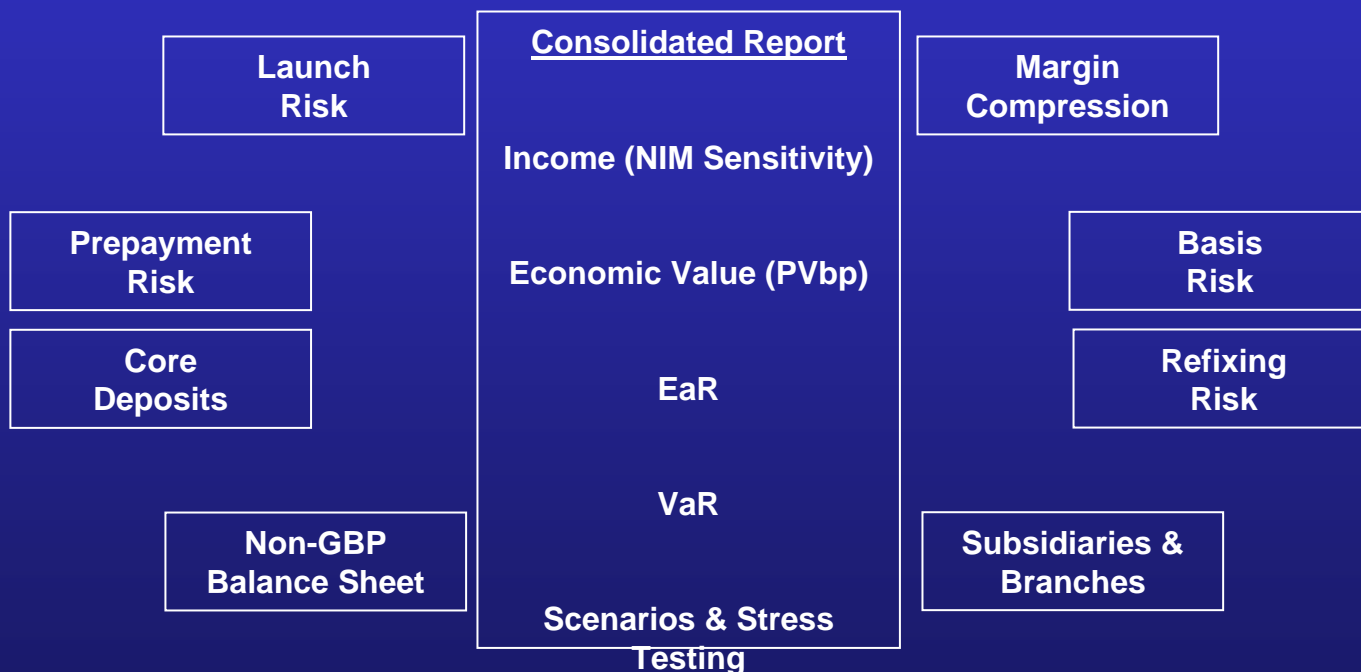
ALM – New Developments and Challenges

January 2007

IRRBB – Where have we come from and where are we going

ALM systems in banks have been used to Model, Report and Manage a wide variety of risks that arise on the Banking Balance Sheet.

For Barclays, Basle II IRRBB has created a requirement to consolidate each of these elements of risk into a Group-wide view.



IRRBB – Benefits & Challenges

The implementation of a Group-wide model to satisfy the requirements of Basle II IRRBB has provided the bank with a number of opportunities. In addition it presents us with a number of challenges.

- Data Feeds
- ‘Slice & Dice’
- Distribution of information to business ALCO’s etc
- Group MTP challenge
- Economic Capital (top down vs. bottom up)

- Resource Issues – IT & personnel
- Location & Governance
- Behavioural Modelling & Assumptions (consistency)
- Backtesting
- Dynamic vs. static view
- Reporting Frequency

Pensions – Understanding the Deficit (Surplus)

The process for tracking the DB pensions deficit is well established and can be readily performed on different bases (e.g. IAS19, Funding / Actuarial, Insolvency / Buyout).

Historically this analysis has been outsourced to scheme actuaries.

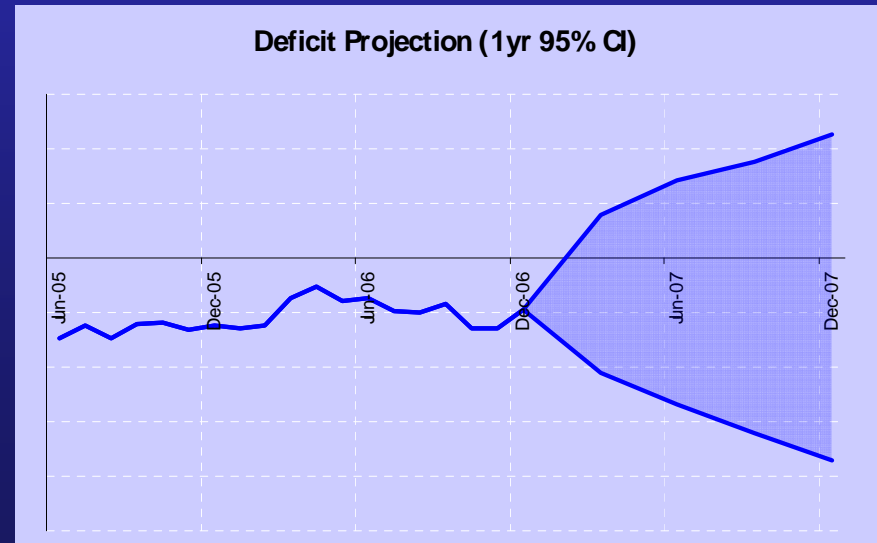
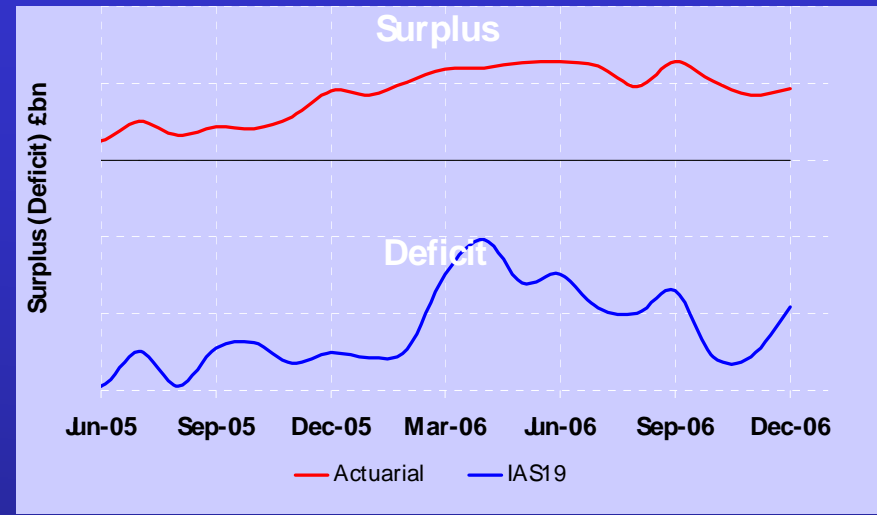
Institutions must be able to model the risks inherent in the scheme themselves to understand the potential impact on the bank's Capital.

ALM modelling techniques can be used to provide insight into the nature of the Risk.

A VaR-type metric can quantify the Market Risk over an appropriate time-horizon.

A sound grasp of the volatility of the deficit and the key drivers can inform subsequent discussions with the Scheme Trustees.

Modelling methodology & assumptions must be robust.



Pensions – Drivers of Deficit Risk

Simulation techniques allow us to model the interaction between risk drivers and the impact of diversification on the portfolio.

Incorporation of performance measures provides insight into the risk-budget debate.

In-house modelling not only permits quantification of the Economic Capital requirement, but also allows us to understand the impact of changes in scheme design, asset allocations or the effect of various hedging approaches.

Further Issues

Which metric?

Governance – Trustee relationship

Scheme-specific funding & scheme design

Hedging Issues – what to hedge (e.g. nominal rates, real rates, mortality)
what products

Regulatory Capital – Pillar II requirement

