



**Actuaries
Institute**

Role of Actuaries in Banking

Discussion around the evolving role of the Actuary in the world of banking and financial risk modelling

Issues affecting the banking sector

Regulatory change

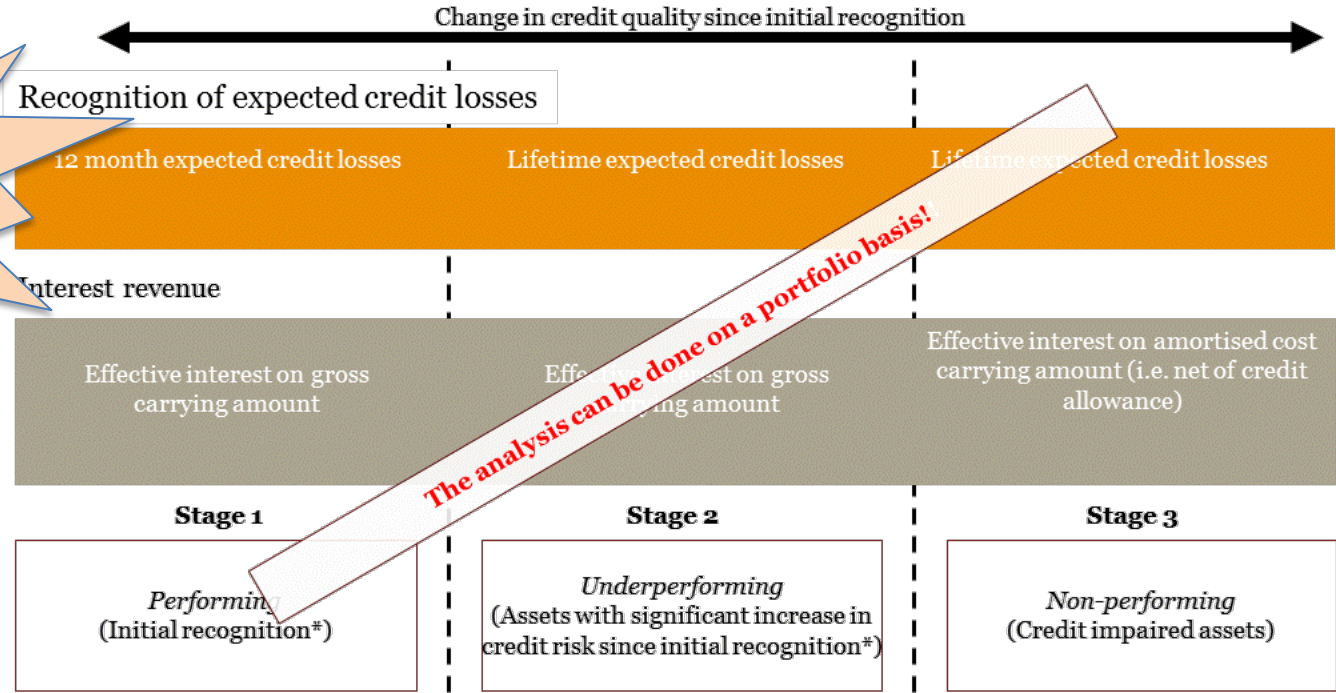
- Transitioning to a regulatory and financial reporting environment which requires more robust and forward looking assessment of risk.
- New regulatory capital rules and new accounting rules.
- Regulators looking for increased comfort around the risks in the financial system and the ability of the financial system to respond stress events.

Desire for ever more sophisticated risk modelling

- Access to capital and more efficient use of capital driving a push for better risk models.
- Better customer decisions and strategy setting requiring risk forecasting capabilities at a customer and portfolio level.
- Changes to approaches for credit risk, market risk, liquidity risk and interest rate risk modelling.
- Enhanced use of data analytics and modelling in areas including behavioural economics.

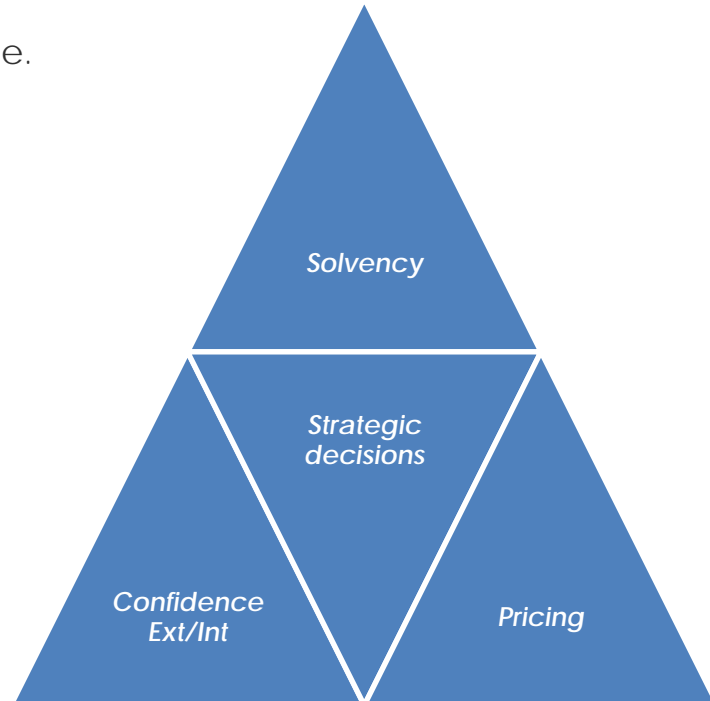
Example – the changing world of financial reporting and calculation of provisions

How the actuarial skill-set will be key in financial reporting



Example – the world of stress-testing

- Required by financial regulators and good practice.
- Stress testing scenarios may include:
 - Macroeconomic factors; and
 - Enterprise-specific factors.
- Stress testing can be performed
 - at enterprise/portfolio level; or
 - for particular segments.
- Range of models and formulae are used in bank stress testing depending on the portfolio:
 - Logistic Regression Model
 - Vasicek Model (Merton DD)
 - Roll-Rate model
- Outputs include both financial and non-financial metrics



The role of the Actuary in banking

The skills and capabilities of an actuary are in increasing demand

- Analytical capability to manage/manipulate data;
- Modelling capability to determine statistical relationships;
- Ability to identify risks/unusual patterns and determine the impacts;
- Ability to communicate technical concepts and relationships in simple terms;
- Ability to extrapolate and forecast scenarios;
- Provide comfort and assurance based on analysis and risk insights; and,
- Provide advice on compliance with regulation.

Actuaries Institute

2015 – 2017 Strategic Plan

- The Actuaries Institute is managed to a strategic plan, which sets out the key objectives and priorities over a three year period.
- The Strategic Plan for 2015-17 has focused the Institute's activity on five key goals centred around:
 - providing services to Members (in Australia and overseas) and opportunities for professional growth;
 - continuing to advance the profession into new practice areas as well as increasing awareness of the profession; and
 - ensuring that the Institute continues to be in a strong position to respond to the changing needs of Members and the profession.



Donald MacDonald, Director, PwC ASEANZ (Australia, South East Asia and New Zealand)

- Donald Macdonald is a Director in PwC's Actuarial Risk Consulting practice where he supports Financial Services clients with a range of Financial Risk Modelling assignments.
- Prior to moving to Australia he spent 6 years in PwC Japan and PwC Middle East supporting some of the largest FS Groups and regulators in measurement and management of financial risk.
- Before joining PwC Donald was with the Royal Bank of Scotland Group, where he led the development of the retail regulatory capital rating systems for credit risk for the retail portfolios.
- He was first employed as an Actuarial Manager for Scottish Widows, one of the leading UK life, pensions and protection providers. At Scottish Widows Donald was in the Actuarial Financial Reporting team.

