2006 Financial Services Forum

Expanding Our Horizons

International Trends in Regulatory Capital & Target Surplus

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Agenda

- Review of Capital Framework
- International Trends in Regulatory Capital
- Target Surplus
- Discussion

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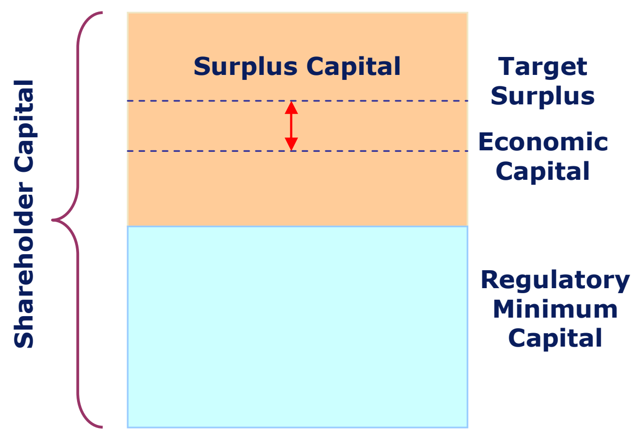
Review of Capital Framework

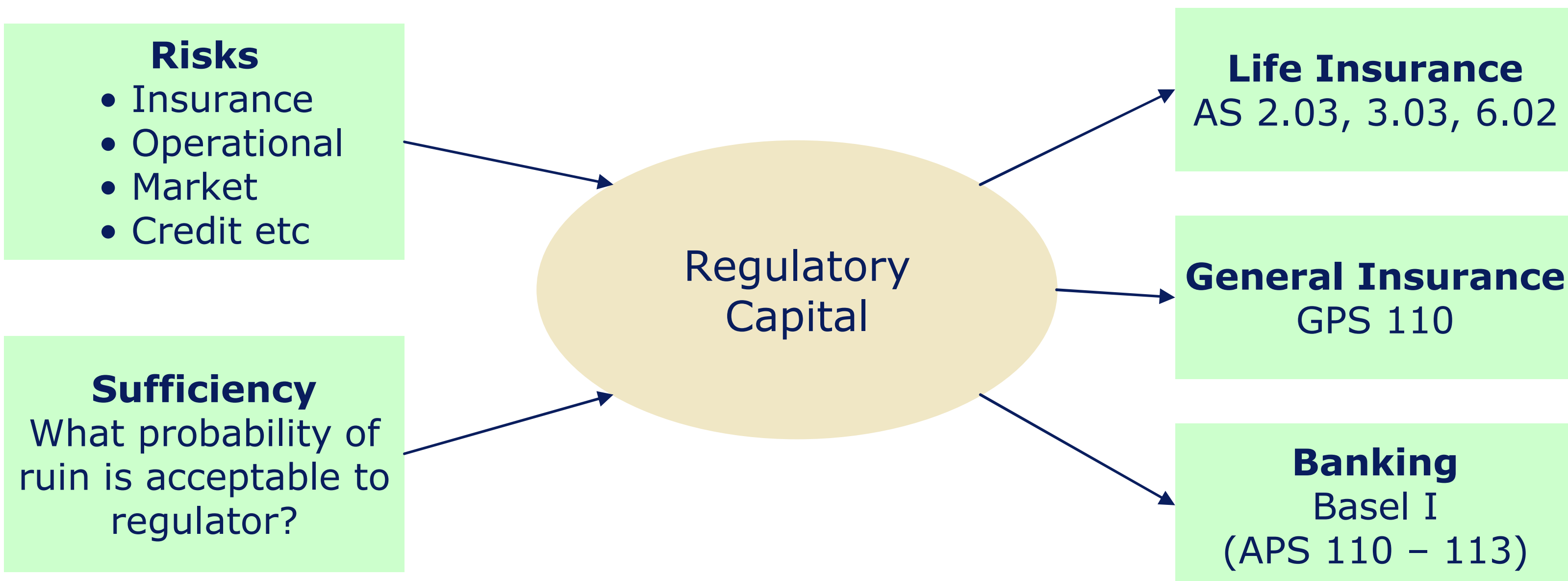


Regulatory capital	Economic capital	Target Surplus
Defined by regulators	Anything that can absorb economic losses	Designed to provide a buffer to regulatory capital
Uses (mainly) accounting definitions of capital	Could include intangibles, hidden reserves, pricing changes, etc	Uses same definitions of capital as regulatory
Trade-off for regulators between simplicity and detailed matching with the business	Intended to support the underlying risks of the business	Can be similar to economic capital (depending on risk definitions)

Today will focus on Regulatory Capital and Target Surplus

Regulatory Capital

- Aims to ensure the safety and security of the financial services sector and individual companies within it
- Requires companies to hold capital in excess of their obligations to customers
- Known variously as Solvency or Capital Adequacy
- Tends to be “rules-based” in Australia, not “principles-based”



Target Surplus

- The amount (or distribution) of excess capital required over regulatory capital requirement, to ensure the regulatory requirement is met in the future
  - Selected high likelihood (e.g. 95%)
  - Over specified time horizon (e.g. 1 year)
- Internal measure
  - Complexity ranges from 'rules of thumb' to complex stochastic models
- Focus is on the surplus, so must consider
  - future regulatory capital requirements and
  - assets backing those requirements, including dividend policies and access to additional capital

Economic capital is the capital sufficient to protect against a specified major risk (e.g. insolvency).

Target Surplus may be considered a specific variant of economic capital, the capital sufficient to protect against a shortfall in regulatory capital

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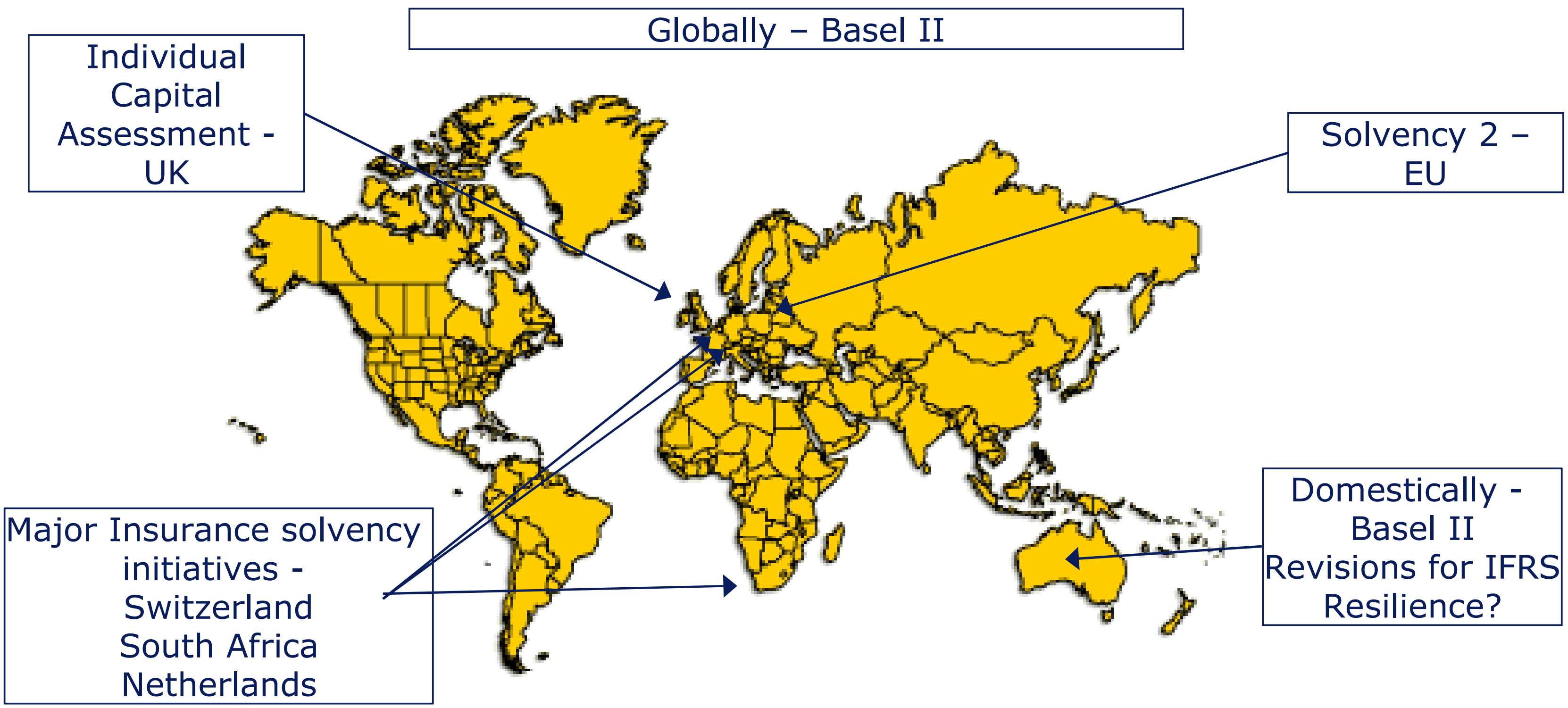
International Trends in Regulatory Capital

- A trend from rules-based to principle-based approaches allows greater:
  - use of internal models
  - alignment with an Enterprise Risk Management framework
  - recognition of risk mitigation, sharing and avoidance strategies



Basel II - Overview

Scope	Banks in most developed economies
Impetus	Bank for International Settlements, as adopted by national regulators
Objective	Sound and stable banking system
Components	1. Minimum capital requirements 2. Supervisory review process 3. Market discipline
Risks addressed	Credit, operational and trading book (including market) Other risks considered in Pillar 2
Protection Against	A shortfall of capital against credit, operational or trading book losses individually Over 1 year time horizon To 99.9% confidence
Implementation Timeframe	In effect from 1 January 2008 Interim deadlines to prove preparedness for advanced approaches to APRA in Q3 2005

Basel II – 3 Sizes Fit All

Sound and Stable Banking System

Allows 3 approaches depending on size and complexity of business

Standardised/Basic Indicator	Foundation/ Standardised	Advanced (IRB & AMA)
APRA expects Smaller and Regional Australian banks to use these approaches Mostly rules-based	Some allowance for internal credit-rating models of the probability of default	Big 4 required, others optional Mixture of rules-based and principles-based Internal estimates of credit & operational risk Linked to bank's ERM

Basel II is deliberately more principles-based to:

- **Encourage banks to view regulatory capital as part of a holistic Risk Management Framework, which they can influence and**
- **Encourage further development of risk management strategies and modelling techniques**

Solvency 2 - Overview

Scope	Insurance companies in the European Union, for now
Impetus	European Union review of Insurance Solvency Regime, International Association of Insurance Supervisors (IAIS), Solvency Subcommittee International Association of Actuaries (IAA), Insurer Solvency Assessment Working Party
Objective	Protection of policyholders against bankruptcy
Components	1. Solvency Capital Requirement. Internal or standardised models. Must be met at all times. 2. Minimum Capital Requirement. Standardised formula. Regulatory intervention if breached. 3. Supervisory Review Process
Risks addressed	Insurance, Liquidity (ALM), Credit, operational and market, considered in combination Other risks considered in Pillar 2
Protection Against	Inability to meet policyholder obligations Over 1 year time horizon To 99.5% confidence
Implementation Timeframe	Current estimate around 2010

Solvency 2 # Basel II

Measure	Solvency 2	Basel II
Objective	Protection of policyholders against bankruptcy	Sound and stable banking system
Components	1. Solvency Capital 2. Minimum Capital 3. Supervisory Review	1. Minimum capital 2. Supervisory review 3. Market discipline
Methods	Mostly principles-based	Mixture of principles-based and rules-based
Risks addressed	Insurance, Liquidity (ALM), Credit, operational and market, considered in combination	Credit, operational and trading book (including market) In isolation
Protection Against	Inability to meet policyholder obligations Over 1 year time horizon To 99.5% confidence And future policy liabilities with 75% confidence	A shortfall of capital against credit, operational or trading book losses individually Over 1 year time horizon To 99.9% confidence
Implementation Timeframe	Current estimate around 2010	1 January 2008

Individual Capital Assessment (UK)

- Similar to the Solvency Capital Requirement under Solvency 2. Key differences:
  - Life insurance only
  - It's already happened. In place, from 1 January 2005
  - Not part of a broader framework
    - No public disclosure and only periodic review or submission to regulator
  - Strongly principle-based. Emphasis on the Individual in ICA
    - Based purely on individual assessment of risk and individual modelling of the potential adverse outcomes of those risks
  - Envisages a variety of complex and simple, but never standardised, approaches from:
    - Stochastic modelling of risk distributions and interactions, to
    - Deterministic extreme scenarios (or stress tests)
    - Curiously these scenarios are required to be deeper and more robust if the starting capital position is weaker
  - Emphasis on justification of assessment, any techniques used and assumptions or judgments made
  - 99.5% confidence over 1 year *"or, if appropriate to the firm's business, an equivalent lower confidence level over a longer timeframe*" and policy liabilities after 1 year

Domestically

- Major banks spending tens of millions on Basel II projects.

FINANCIAL REVIEW

  – "… [IT] projects required by new accounting standards and the Basel 2 capital accord that will cost the [National] bank $123 million in the 2004 financial year"

- APRA intends to implement Solvency 2 along IAIS/EU timelines
  – International harmonisation
  – Cross-sector harmonisation (life, general and possibly health)

- In the meantime Life Insurance Standards revised for IFRS
  – Strengthened principles-based approach to Solvency and Capital Adequacy
    - Solvency must allow for all combinations of risks, including those not specifically addressed, with a probability of sufficiency greater than 99.5%, over 1 year horizon, allowing for plausible mitigation strategies
  – Risk-free discount rates
  – Minor (interim) changes to resilience reserves (e.g. credit shocks)

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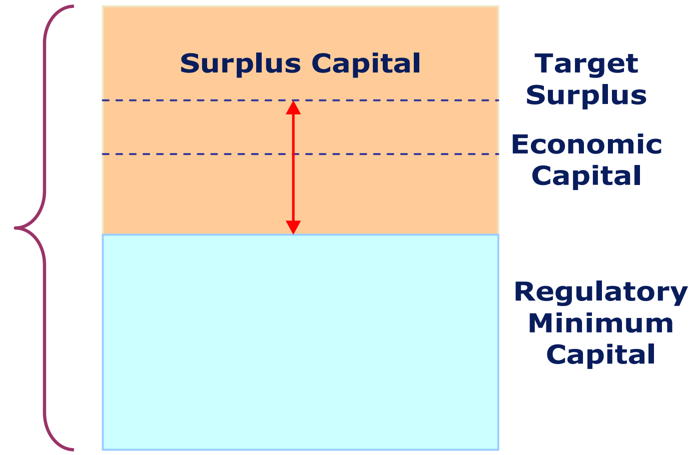
Why Measure Target Surplus?

The amount of excess capital required over regulatory capital requirement, to ensure the regulatory requirement is met in the future



- Target surplus can provide the link between risk appetite and regulatory capital
- APRA has recently expressed interest in target surplus in life insurance
  - APRA focus not in amount of target surplus, however
  - The way an insurer manages and develops target surplus influences APRA's assessment of the regulatory oversight required for that insurer
- Two key questions emerge
  - What is the insurer's risk appetite regarding regulatory capital breaches and how should influence target surplus?
  - How can target surplus management be integrated with other capital management issues?

Target Surplus

- As target surplus is an internal measure a wide variety of approaches may be appropriate. E.g.
  - Could modify an economic capital model adding an estimate of regulatory capital requirements
  - Alternatively, scenario testing on the capital requirements and assets backing the requirements could be used
- Either stochastic or scenario approaches may be used
- Likelihood of breach and time horizon should be relevant to the risk appetite
- Need to consider assets backing regulatory capital requirements, including dividend policies and access to additional capital
- Both process and parameter risks should be evaluated
  - Process risks – experience variations
  - Parameter risks – impact of assumption changes arising from experience variations on regulatory capital requirements

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