
The Actuarial Profession
making financial sense of the future
2012 Life Conference and Exhibition, Brussels
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The Other Side of the Fence
…is the grass greener?
November 2012
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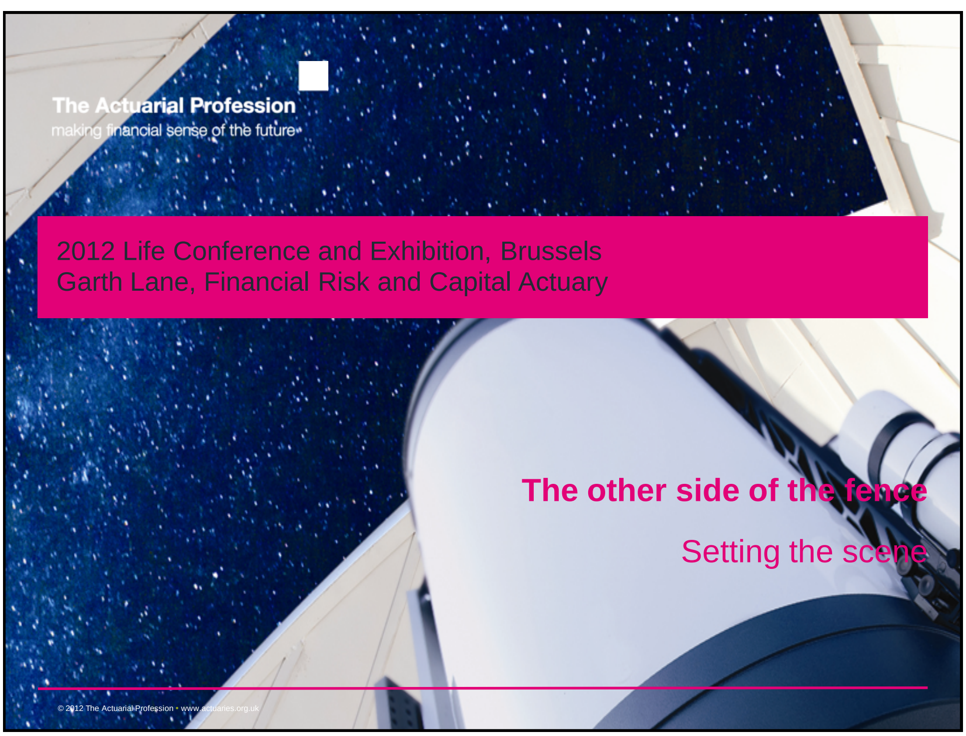
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2012 Life Conference and Exhibition, Brussels
Garth Lane, Financial Risk and Capital Actuary
The other side of the fence
Setting the scene
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Agenda

- Solvency II – the colour of the grass
- 3rd Country Equivalence
- The ideal Regulatory Environment
- Perspective I – South Africa
- Perspective II – Canada and the USA

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Is the Grass Greener on the Other Side?

SII – The Colour of the Grass

Catch-22 (Joseph Heller 1999)

'Can you ground him?'

'I sure can. But first he has to ask me to. That's part of the rule.'

…

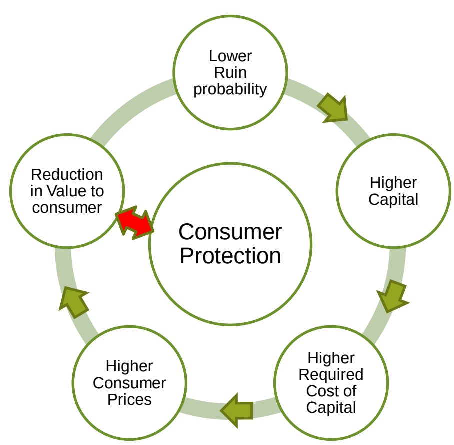
'And then you can ground him?' Yossarian asked.

'No. Then I can't ground him.'

'You mean there's a catch?'

'Sure there's a catch,' Doc Daneeka replied. 'Catch-22. Anyone who wants to get out of combat duty isn't really crazy.'

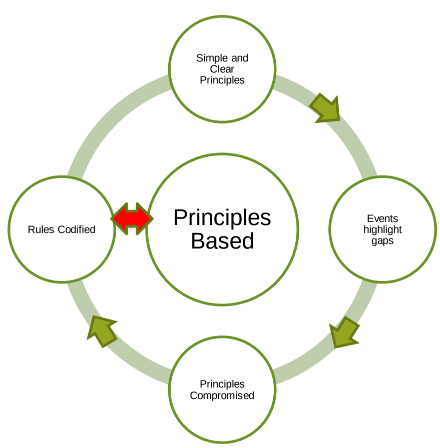
Catch-22: Consumer Protection



Catch-22: Possible Consequences

- Too high capital leads to higher premiums
- Avoidance of long term guarantees
- Cost of implementation reducing own funds
- Unintended shift in asset durations
- Avoidance of riskier assets impacts returns
- Model Complexity obscures *raison d'etre*

Catch-22 : Principles Based Regulation



Matching Adjustment/Liquidity Premium

Horse designed by Committee?

Catch-22 Possible Consequences

- Initial compromise of risk neutral principle
- Purists vs Pragmatists
- Conservatives vs Liberals
- Vested Interest vs Genuine Need
- Politicisation of the debate
- Compromise solutions

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Is the Grass Greener on the Other Side?

3rd Country Equivalence

3rd Country Equivalence

3rd Country Equivalence

- Equivalence acts as a shield
- Equivalence protects against extra cost
- Groups and solo subsidiaries
- Reinsurance to a 3rd country rated entity
- Unrated entities
  - Collateral
  - Additional risk mitigation technique

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Is the Grass Greener on the Other Side?

The Ideal Regulatory Environment

The ideal regulatory environment

- Free from regulatory capture
- Internally Consistent
- Balanced capital requirement
- Low to moderate compliance burden
- Flexible
- Pragmatic
- Efficient
- Effective

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Lindsay Wanliss, Old Mutual

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A South African Perspective on Solvency Developments

South African Financial Soundness Valuation

Liabilities	Capital
Mostly discounted cashflow	Simplified risk-based model
Best estimate + Margins	Roughly 95% percentile over 5 years
(compulsory + discretionary)	
Allows negative reserves	Top-up to surrender value

The case for Solvency II in South Africa

Why Solvency II?		
Addresses weaknesses of Solvency I		
• Capital imposed not commensurate with risk profile	√	X
• Undefined level of prudence in technical provisions	√	?
• Benefits of pooling and diversifying	√	X
• Assets are not adequately recognized in required capital	√	X
• Interaction of technical provisions and the solvency margin can create irrational effects	√	X
• Risk mitigation tools (matching, hedging) - proper asset/liability management is not adequately rewarded.	√	X
• Risk mitigation tools (matching, hedging) - Profit sharing systems to absorb risk	√	X

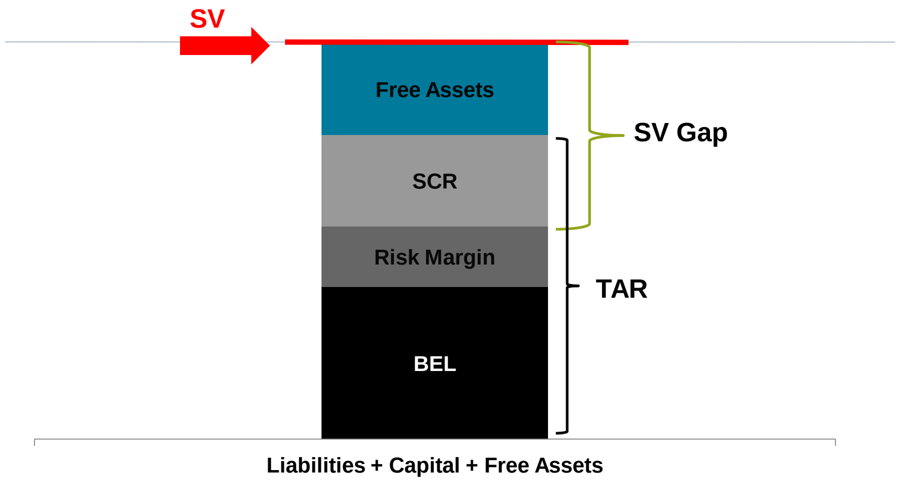
The case for Solvency II in South Africa

Why Solvency II?		
Set solvency standards to match risk and encourage proper risk control	√	?
Harmonise standards across the EU to avoid need for Member States to set higher standards	√	X
Strengthening policyholder protection through capital requirements which can provide early warning of deterioration in solvency levels and therefore timely intervention by the supervisor	√	?
Encouraging improvements in the quality of risk management.	√	√
Aligning economic and regulatory capital, including appropriate recognition of diversification benefits within firms and between groups' subsidiaries; and	√	√
Bring assets and liabilities onto a "fair value" basis.	√	?

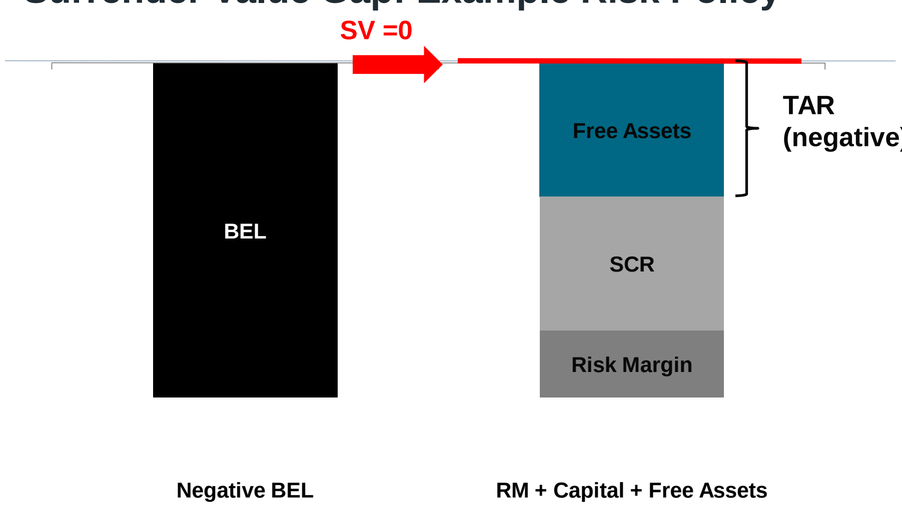
Surrender Value Gap: Concept

- Present value of future profits (PVFP) is offset against PV future (benefits – premiums) to arrive at economic value of a contract.
- This gives rise to a phenomenon called the "Surrender Value Gap": **SV Gap = SV – (BEL + RM)**
- It is very likely that the SCR, as currently envisaged by Solvency II, is not sufficient to bridge the Surrender Value Gap.
- Total Asset Requirement: **TAR = BEL + RM + SCR < SV**

Surrender Value Gap: Example Savings Policy



Surrender Value Gap: Example Risk Policy



Surrender Value Gap: Philosophy

Can companies pay dividends from future profits?

- The possibility of surrender means that profits may not be earned.
- But dividends paid in real assets.
- Who supplies those assets?

South Africa needs to have this debate

SAM Timetable

- **Aiming for 1 Jan 2015 implementation**
- QIS1 during 2011 and QIS2 in progress
- Quantified SV Gap in QIS2
- Can learn lessons from Europe

3rd country equivalence in 3rd world

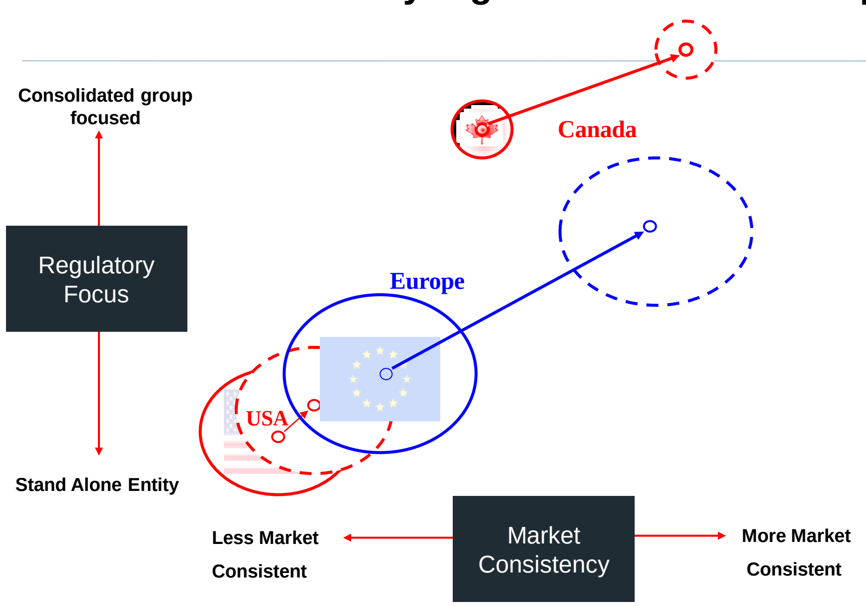
- **3rd World has few deep and liquid markets**
- No yield curves?
- Illiquid equity markets?
- **If best estimates are hard, what then 99.5% percentile?**
- Solvency II places huge reliance on models to find the 1/200 level of risk to give policyholders protection
- Can small countries afford Solvency II?
- **So is 3rd country equivalence possible for the 3rd world?**
- Pragmatism required – and hence conservatism

Key message

The grass is not greener in Canada

- **Volatile** – assets and liabilities are largely marked to market and aligned with IFRS
- **Procyclical** – required capital expands as interest rates decline
- **Challenged by dual constraints** – from both consolidated group requirements and local requirements.

International solvency regimes relative to Europe



In the current economic environment, the grass is greener south of the border

Canada	United States
IFRS accounting, required capital is risk-based	Statutory accounting, required capital is rules-based
Asset-based discount rates	Prescribed discount rates
Volatile: more beneficial in good times but more punitive in adverse times	Stable: the US regime has been more stable through the economic cycles
No benefit from diversification	Some benefit from diversification
Consolidated capital ratios, group-wide basis	RBC ratios include US business only, group oversight more qualitative
No benefits from affiliate reinsurance, multiple constraints	Balance sheet relief through affiliate reinsurance

How effective has the Canadian framework been?

From regulators perspective:

- Performed well in face of global economic crisis
- System protects policyholders and creditors
- Four insolvencies since 1990. More than 96% of policyholders fully protected

From the insurance industry's perspective:

- Excessively pro-cyclical and too rigidly linked to IFRS
  - Declining interest rates produce increasing and excessive capital requirements and at a time earnings are under pressure
  - For example, since 2005, the required capital for lapse risk has tripled, while mortality capital has remained relatively level

Future changes to Canadian framework will make it more market consistent, and more volatile

- Increased balance sheet volatility under IFRS 4 Phase 2
- Corporate A based discount rates could introduce non-economic volatility to the total asset requirement
- Leading to understatement and overstatement of capital ratios

Current

Factors determine required capital directly

Required Capital

IFRS Liabilities

Total Asset Requirement (TAR)

2014 Vision

Discounted stressed cashflows determine the TAR. Subtracting IFRS GAAP liabilities defines required capital indirectly.

Proposed changes to solvency regimes are taking a bad idea and making it worse

Market Consistency

- Based on economic principles
- Stemming from financial economic theory
- Tries to emulate how assets are priced, but is just a theory trying to explain reality

Extended to insurance industry

- Long term business, going concern basis
- Significant disincentives for policyholders to redeem early
- Results in undue volatility

Then applied to solvency framework

- Primary focus is to protect policyholders in event of wind up (gone concern)
- Short term market consistent model fundamentally disconnected from life insurance business model

Unintended consequences of inappropriate volatility in capital ratios

Earnings volatility can be managed but capital volatility has a far greater impact

- Drives life insurers to short term products that can be matched
  - Public policy implications
- Increases cost of capital
- Impedes access to capital markets
- Create false positives and negatives

Summary

- Challenging regime in Canada with volatility, pro-cyclicality and an onerous consolidated group approach.
- USA is much steadier through the economic cycle. Oversight of US subsidiaries and holding companies is more qualitatively based.
- Both regimes are evolving in response to the financial crisis, and to align with international developments from the IASB and IAIS.

Questions or comments?

Expressions of individual views by members of The Actuarial Profession and its staff are encouraged.

The views expressed in this presentation are those of the presenter.