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Calculating insurance liabilities in an IFRS Phase II / Solvency II world

Workshop C08

Paul Collins, Aviva and Hans Wagner, AXA
(IAA Risk Margins Working Party)

1

Agenda

- The present – how are liabilities calculated?
- Key players – who are they?
- The future – IAA views
- The future – other views
- Next steps – how can you get involved?
- Q&A / Discussion

Slide 2

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- **The present – how are liabilities calculated?**
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Slide 3

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The Present – why calculate liabilities?

Insurance liabilities are calculated for three main purposes:

- Accounting (UK GAAP / IFRS 4)
- Regulatory capital (Solvency I / ICAS)
- Shareholder value (embedded value)

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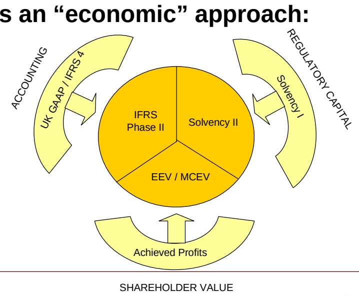
The Present – current developments

Developments are moving liability measurement towards an “economic” approach:



Slide 5

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Slide 6

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Key players

Standard Setters
IASB
EU / CEIOPS

Regulators
IAIS
FSA

Industry Bodies
CEA
CFO Forum
CRO Forum

Actuarial Profession
IAA
Groupe Consultatif
Faculty / Institute

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Key players – IAA working party

IAA formed a Working Party to assist the IAIS develop its proposed approach to liability measurement

- WP requested to provide "recommended objectives, principles, considerations and methodologies for considering"
  - Unbiased central estimates of insurance liabilities
  - Prudential margins for the calculation of prudential liabilities
  - Risk margins for general purpose accounting
  - Total regulatory capital requirements (not covered here)

Slide 8

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Slide 9

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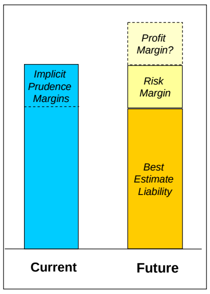
Key liability measurement issues
- overall measurement framework

- Based on "fair value" – entry or exit value?
- Proposed approach depends on whether each underlying risk is "observable" in the market

	Financial	Non-Financial
Hedgeable	**Observe value in market**	Observe value in market (if deep and liquid)
Non-Hedgeable	Extrapolate from market value	**"Mark to model" approach**

Key liability measurement issues
- overall measurement framework

- Approach typically produces the following components:
  - "best estimate liability" including full allowance for financial risks and expected values for non financial risks
  - additional "risk margin" for residual non financial risks
  - further margin to restrict profit recognition at issue?



Key liability measurement issues
- treatment of inflows and outflows

- Should contract inflows (e.g. premiums) be considered separately from outflows (e.g. claims)? Can they be recognised as an asset?
  - Insurance contracts typically contain a complex mixture of rights and obligations
  - Where these elements cannot easily be separated, they should be valued together
  - Uncertainty about receipt of premiums should be reflected using probability weighted cash flows

Key liability measurement issues
- best estimate liabilities

- Best estimate = probability weighted mean
- Measurement is generally more difficult for general insurance liabilities
- IAA RMWP is developing a draft paper on current estimates

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Key liability measurement issues
- risk margins

- Selection of underlying model
  - Margins in assumptions
  - Quantile approach
  - Cost of capital approach
- Calibration of the preferred model
- “Additivity” of liabilities and comparability between companies
- Allowance for pooling / diversification – within the liability or total capital resources?

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Key liability measurement issues
- risk margins

- What level of diversification benefit should be allowed?

Level of diversification	**Advantages**	**Disadvantages** (“own company”)	**Disadvantages** (“average company”)
1 – within risk types (own/average company)	Focuses on risks at portfolio (“unit of account”) level	Produces relatively high risk margins	Diversification of different pool sizes ignored (e.g. 1m vs. 10m policies)
2 – across risk types (own/average company)	Allows for entity level diversification	Same liability would be valued differently in different companies (for a portfolio within a given risk type)	“Ave company” definition? Small companies gain undue benefit?
3 – across entities in same territory (own/average company)	Some diversification between entities, while allowing single regulator to retain oversight	Group liabilities <> sum of entity level liabilities Same liability would be valued differently in different companies	“Ave company” definition? Small companies gain undue benefit?
4 – across territories (own/average company)	Recognises pan-Group diversification benefits (subject to appropriate controls being in place)	Risk margins too low? Group liabilities <> sum of entity level liabilities Same liability would be valued differently in different companies	“Ave company” definition? Small companies gain undue benefit?

Slide 15

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Key liability measurement issues - participating contracts

- Expected bonuses / dividends should be included in addition to guaranteed amounts
- Projection assumptions should be consistent with other (non par) products
- Ultimate solution must reflect the wide range of different participating contracts across the world

Other liability measurement issues

- Based on settlement or transfer of the liability?
- Application of surrender value floors?
- Treatment of acquisition costs?
- Valuation of options and guarantees?
- Allowance for own credit standing?
- Consistency with IAS39 for investment contracts?

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Areas identified for further work

- Discount rates
- Treatment of reinsurance ceded
- Issues specific to certain lines of business
- Disclosure of information
- Etc!

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The future – Other views

The other key players have been active:

- IASB – tentative decisions, discussion paper 2007Q1
- EU/CEIOPS – Consultative papers, QIS1, QIS2
- CFO Forum, GNAIE / Japanese – Phase II Principles
- CRO Forum – various papers, including framework for risk and liability assessment

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IASB- key tentative decisions (1/2)

- One model for all insurance contracts
- Measurement is “current exit value”
  - Recognition and measurement based on bundled cash flows, although presentation of revenues has no tentative decision
  - Includes credit characteristics of the liability
  - Margins might be calibrated at issue, or at least with initial premium as a ‘sense check’
- Portfolio basis of measurement
  - Expected cash flows assumed to be additive from seriatim view
  - Risk margins developed by portfolio, but ignoring potential interaction with other portfolios

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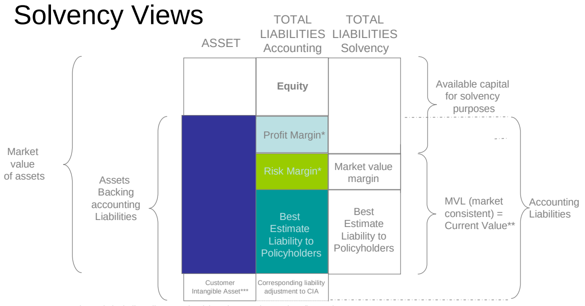
IASB- key tentative decisions (2/2)

- Future policy premiums included in cash flows if
  - Insurer has an obligation to accept premiums even if PV premiums is less than PV benefits arising, or
  - Insurer can enforce premium payment, or
  - Policyholder must pay premiums to retain guaranteed insurability
- Participating policyholder liability only reflects unconditional obligations
  - Participating insurance and investment have same treatment
  - Possibly split equity and profit/loss between shareholders & policyholders

CFO Forum Accounting & CRO Forum Solvency Views



* CFO Forum Total margin including allowance for risk and uncertainty and profit margin

** CRO Forum Market consistent value of liabilities includes, for non-hedgeable risks, the best estimate liability plus the market value margin (with a cost of capital as a proxy)

*** CFO Forum CIA = Customer Intangible asset (for accounting purposes, shown as an asset together with gross liabilities)

Comparing IASB to CFO/CRO Forums

- Lots of common ground
- But significant differences:
  - Profit recognition in accounting framework
  - Participating contracts: legal vs economic obligation
  - Liability credit characteristics
  - P&L impact of unlocking non-financial assumptions
- And many potential trouble-spots not yet decided
  - Deposit floor
  - Elimination of accounting arbitrage between insurance and investment contracts
  - IAS 39 modifications to allow alignment of asset and liability measurement
- And some issues not yet on the radar screen?
  - Expense allocation

Comparing CFO Forum to GNAIE/Japanese Big 4 Life Insurers

- Lots of common ground
- But some differences in GNAIE/Japanese
  - Different model for non-life than life insurance
  - Discount rates based on expected asset returns
  - Assumption unlocking might be handled differently
  - “US GAAP-type” view of DAC amount

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How can you get involved?

- Participate in the Profession’s Financial Reporting Group
- Join the IAA’s “interested observer” lists
- Get involved with industry lobbying groups
- Make your views known within your company!

For more information, the following websites may help:

www.actuaries.org
www.iasb.org
www.cea.assur.org
www.cfoforum.nl
www.gcactuaries.org
www.ceiops.org
www.iaisweb.org

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Q&A / Discussion

?

Slide 28

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