

A MILLIMAN GLOBAL FIRM



Milliman USA
Consultants and Actuaries

International Accounting Standards

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Agenda

- Current status of IASB insurance project
- DSOP & market value margins
- IAS 32,39 & embedded options
- FASB

IASB Insurance Project Current Status

- Project split into 2 phases
- Phase 1
 - Presentation and disclosure
 - Application of IAS 39
 - Reinsurance reporting
 - Elimination of catastrophe reserves
- Phase 2 - full insurance standard

Entity Specific Value

Best-estimate liability

plus

Provision for risk
(Market Value Margin)

Market Value Margins

- What are they?
- How might they be reflected?
- How might they be derived?
- Example
- Implications

MVMs - What are they?

- Insurance liabilities should reflect risk and uncertainty by the inclusion of a market value margin
 - price for bearing the uncertainty with amount and timing of cash flows

MVMs-What are They?

- Provision for insurance risk, not financial risk
- Calibrated to the “market”
- Double-sided distribution (not just adverse deviation)

Insurance Risk

- Depends on degree of performance linking
 - Guaranteed contracts
 - Participating & variable (unit-linked) contracts

Insurance Risks

- Model risk
- Parameter risk
- Process risk?

Diversifiable Risk

DSOP says:

- Process risk = diversifiable risk
- Full diversification not practical
 - Inefficient markets
 - Costs of obtaining information

Diversifiable Risk

DSOP says:

- Market prices reflect diversifiable risk

therefore

- MVM should reflect diversifiable risk

Diversifiable Risk

- Unit of account matters
- Unit of account may be different for MVM and best estimates
- Presentation issues

Reflecting MVMs

- Adjust discount rate
- Adjust cash flows
- Adjust combination of cash flows and discount rate

MVM in Discount Rate

- Common method used today
- Easier to estimate from observable data
- Consistent with cost of capital approach

MVM in Cash Flows

- Preferred method per DSOP
- More explicit
- Release mirrors actual release from risk

Derivation of MVMs

- CAPM approach
- Cost of capital approach
- Deflator approach
- Prescribed ranges

Calibration of MVMs

- Market prices
- Reinsurance prices
- Replicating portfolio

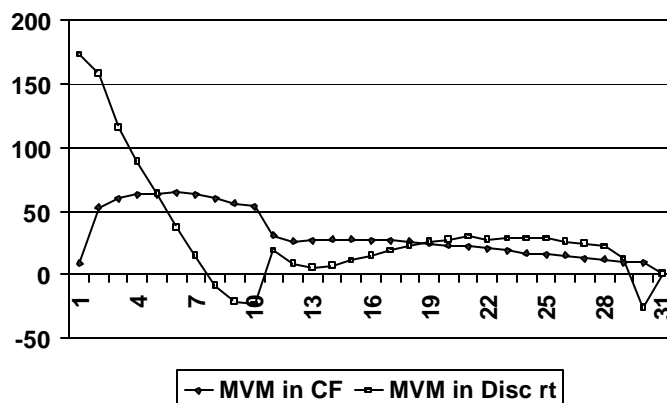
Term Insurance Example

- 10-yr level term, annually renewable thereafter
- Level interest rate scenario
- Cash flow invested pro-rata in 1-5yr corporate bonds
- Assets valued at amortized cost

MVM calibrated to “entry” price

- Determine best-estimate liability
- Solve for MVM such that no gain/loss at issue
 - Increasing benefit cash flows
 - Decreasing discount rate

Emergence of Income Term Insurance



Implications

- Move to explicit risk provisions
- “Market” calibration is necessary
- Actuarial standards will be important
- How MVM is reflected will affect emergence of income

FASB

- Fair value project
- Objective
 - financial instruments
 - at fair value
 - in financial statements

FASB Fair Value Project

- SFAS 107, Disclosures About Fair Value of Financial Instruments
- SFAS 115, Accounting for Certain Investments in Debt and Equity Securities
- SFAS 133, Accounting for Derivative Instruments and Hedging Activities

FASB Fair Value Project

- Hierarchy of determining FV
- Own credit risk should be reflected

FASB & IASB

- Working in parallel
- Joint meetings
- Heading towards Fair Value

IAS 32/39

- Insurance contracts excluded
- Applies to contracts transferring primarily financial risk
- Applies to derivatives embedded in insurance contracts

IAS 32/39

- Insurance Contract
- exposes insurer to identified risks of loss from events or circumstances occurring or discovered within a specified period

IAS 32/39

- Non-insurance contracts
 - Initial valuation
 - Subsequent valuation

IAS 32/39

- Embedded derivative

Separated from the host contract if economic characteristics and risks not closely related to host contract

AAA

- White paper in 2002
- Comments on DSOP to IASB

International Actuarial Associaton

- Actuarial Standards
- Discussion forums
- www.actuary.org