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**International Financial Reporting for Insurers: IFRS
and U.S. GAAP
September 2009**

**Session 17: SOA Study – IFRS vs. US GAAP
Comparison by Product**

[Thomas Hergett](#)

SOA 2008 Study

on “Preliminary Views”
Accounting Standards for Insurance Contracts

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September, 2009



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Outline

- 1) Insurance IFRS 1990–2008
- 2) *Preliminary Views* and Exit Value basics
- 3) Numerical Examples
- 4) Responses to IASB



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1. Insurance IFRS 1990–2008



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IASB

- International Accounting Standards Board
 - London-based, 14 members from 9 countries
 - Staff
 - Insurance Working Group (IWG)
 - Now a joint project with FASB (U.S. Financial Accounting Standards Board)
 - Publishes
 - ◆ IAS (International Accounting Standards)
 - ◆ IFRS (International Financial Reporting Standards)
 - These are identical – IAS was published before IFRS



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IASB Insurance Project

- Those providing significant input:
 - ◆ CFO Forum (European insurers)
 - ◆ GNAIE (North America plus 4 companies from Japan)
 - ◆ IAA (International Actuarial Association)
 - ◆ IAIS (International Association of Insurance Supervisors)
- Others with influence:
 - ◆ IOSCO (International Securities Commissioners)
 - ◆ Banks (they sell annuities)
 - ◆ EU (European governments)
 - ◆ SEC (Security & Exchange Commission)



IFRS Insurance Project Objectives

- Reduce diversity of accounting practices that currently exist for insurance contracts
- Align insurance accounting with other business sectors, where possible
- Increase users' understanding of insurance financial statements
- Help investors make decisions



IFRS Insurance Project – Phase I

- Phase I started in 1997
- 2001 Draft Statement of Principles
- Phase I ended with IFRS4 in March 2004
 - Defined insurance
 - Revised IAS 39, guidance for investment products
 - Existing local GAAP with additional disclosure and loss recognition was permitted
 - Still allowed diverse practices
- Applies to insurance *contracts*, not insurance *companies*



IFRS Insurance Project – Phase II Recent Timeline

- Phase II started mid-2004
 - IASB, IASB staff and IWG worked on a discussion paper called “Preliminary Views”, released in May 2007
 - Main text – 150 pages
 - Appendices – 80 pages
 - 150 comment letters submitted November, 2007
 - Board and staff evaluated all submissions
 - Using feedback to craft Exposure Draft



2. Preliminary Views and Exit Value Basics



Identify the Measurement Attribute

- Search for fundamental principles underlying the accounting basis
- Paragraph 93 “Exit Value”:
 - The amount the insurer would expect to pay to transfer its remaining contractual rights and obligations to another carrier.
 - Similar to Fair Value



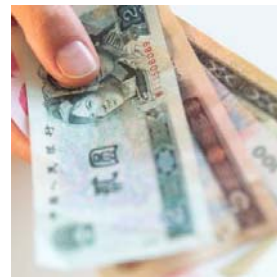
What is Exit Value?

- Measure insurance liabilities using three building blocks:
 1. Cash flows
 2. Time value of money
 3. Risk margins



Cash Flows (Paragraph 34)

- (a) are explicit
- (b) are as consistent as possible with observable market prices



Cash Flows (Paragraph 34)

- (c) incorporate, in an unbiased way, all available information about the amount, timing and uncertainty of all cash flows arising from the contractual obligations
- (d) are current, in other words they correspond to conditions at the end of the reporting period... use all available information



Cash Flows (Paragraph 34)

- (e) exclude entity-specific cash flows. Cash flows are entity-specific if they would not arise for other entities holding an identical obligation
- (f) are “probability-weighted” (par. IN18)



Time Value of Money (Paragraph 63)

- Use “current market discount rates that adjust the estimated future cash flows for the time value of money.”
- Don’t use existing portfolio of assets



Time Value of Money

- Paragraph 69: “the discount rate should be consistent with observable current market prices for cash flows where characteristics match those of the insurance liability, in terms of timing, currency and liquidity.”
- Readers believe this to be a risk-free rate



Risk Margins (Paragraph 71)

“an explicit and unbiased estimate of the margin that market participants require for bearing risk (a risk margin) and for providing other services, if any (a service margin).”

- Explicit
- Unbiased



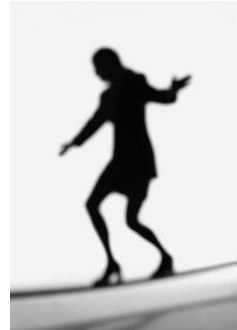
Risk Margins Purpose

- Risk margins provide for:
 - “An explicit and unbiased measurement of the compensation that entities demand for bearing risk.”
- Not for conservatism



Risk Margins

- Must be estimated, since, typically they cannot be observed
- Assess how market participants would measure



Risk Margins

- Suggests Suitable Methods (Appendix F):
 - Confidence levels
 - Conditional Tail Expectation (CTE)
 - Explicit margin within a specified range
 - Cost of capital
 - and others



Risk Margins

- Estimate Risk Margins using appropriate combination of:
 - Observed market prices for similar contracts
 - Pricing models
 - Other inputs if available:
 - ◆ Prices for similar new contracts
 - ◆ Reinsurance prices
 - ◆ Prices for insurance – linked securities
 - ◆ Prices for business combinations or portfolio transfers



Risk Margins

- Approach to estimate risk margins
 - Should be explicit, not implicit
 - Should reflect all risks associated with the liability
 - Should not reflect risks that do not arise from the liability, such as investment risk
 - Should be as consistent as possible with observable market price



Risk Margins

- Cost of capital approach
 - Determine the amount of capital backing the liabilities; could use
 - ◆ Regulatory capital, or
 - ◆ Economic capital
 - Determine the cost of holding that capital
 - ◆ Cost of capital as required by the market
 - ◆ Cost of capital = % CoC × capital required
 - Margins = PV of Cost of capital



Risk Margins – Implementations B and A

- Implementation B – exit value
 - But please comment on
- Implementation A – entry value
 - Risk margins are recalibrated so there is no gain at issue



Service Margins

- Per IASB staff, “service margins” would normally be included in cash flows and risk margins
- It was given its own paragraphs to ensure it wasn’t overlooked



Non-guaranteed Elements

- Participating policies
- Universal life and deferred annuities
- What is legally required?



Obligation

- A duty or responsibility to act or perform in a certain way as a consequence of a binding contract or statutory requirement...



Constructive Obligation

- A present obligation that arises from an entity's past actions when:
 - (a) By an established pattern of past practice, published policies or a sufficiently specific current statement, the entity has indicated to other parties that it will accept particular responsibilities; and
 - (b) As a result, the entity has created a valid expectation in those parties that they can reasonably rely on it to discharge those responsibilities.



Policyholder Participation

- Paragraph 254: "...the cash flows used in measuring a participating insurance liability should incorporate for each scenario an unbiased estimate of the policyholder dividends payable in that scenario to satisfy a legal or constructive obligation that exists at the reporting date."



Universal Life

- Paragraph 267: "...estimates of crediting rates in each scenario should reflect the estimated rate payable in that scenario to satisfy a legal or constructive obligation that exists at the reporting date."



Conclusion and Concerns

- These non-guaranteed elements should be a part of cash flows
- The Board was very split on whether or not these items should be considered a liability
- These non-guaranteed elements are not liabilities according to other IASB standards



Universal Life

- Paragraph 154: "...future premiums should be included...if and only if...
(a) the policyholder must pay the premiums to retain guaranteed insurability."
- Conflicts with concept of exit value, what an acquirer would pay



3. Numerical Examples



SOA Numerical Examples

- Society of Actuaries Study
 - Completed February, 2008
 - Commissioned by American Academy of Actuaries for their response to IASB
 - 15 U.S. companies
 - 20 Submissions
 - 80 pages
 - Available on SoA website
 - ◆ www.soa.org/research/research-life.aspx



Products Covered

- Traditional life (Term)
- Universal life (UL)
- Variable universal life (VUL)
- Single premium fixed deferred annuity (SPDA)
- Variable deferred annuity
- Single Premium Immediate Annuity (SPIA)
- Long-term care
- Supplemental health (medical)



Process

- Project Manager – PwC
- Education Sessions
- Templates
- Cash Flow and GAAP Reserves
- Risk Margins
- Vetting



Deliverables

- Existing business and new business
- US GAAP – balance sheet and income statement
- IFRS – balance sheet and income statement
- Alternative scenarios
- Observations



Take a Look

- Let's look at six products
 - New business income statements
 - IFRS basis is "Implementation B," Exit Value
 - Liability basis is sum of
 - ◆ PV of cash flows and
 - ◆ PV of margins,
 - ◆ Both discounted at risk-free rate
 - Margins use Cost of Capital method



Risk Margins – Liability

- The liability for risk margins
= Present Value of Cost of Capital rate
x capital in year t

where

Present Value uses discount rate from the scenario,
Cost of Capital rate is 12%, and
Capital in year t comes from capital factors
on next slide



Risk Margins – Capital Factors

| Sample Capital Factors | AV/Claim | Face | Premium |
|------------------------|----------|------|---------|
| Fixed Annuity | 1.15% | | 3.08% |
| Immediate Annuity | 1.15% | | 3.08% |
| Participating WL | 1.15% | 0.9% | 3.08% |
| Supplemental Health | 5.00% | | 4.27% |
| Term Life | | 0.9% | 3.08% |

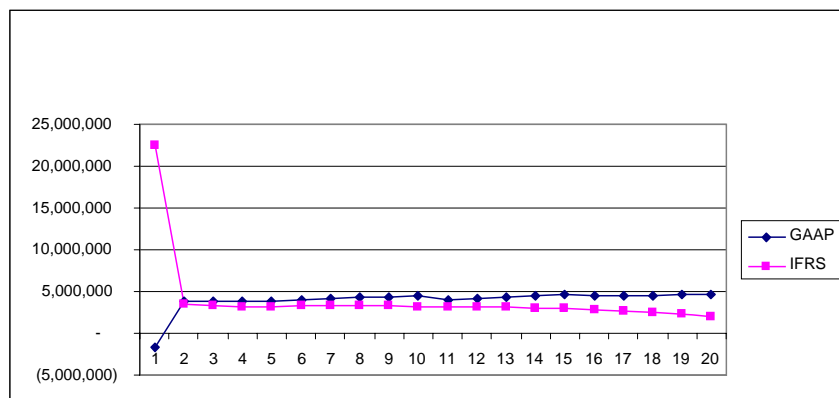


Risk Margins – Calibration

- Base line – used 100% United States Risk Based Capital (RBC), an estimate of economic capital
- For perspective:
 - 300–750% – most companies
 - 300% – an A company
 - 100% – company action



Term – GAAP and IFRS – Income



First year premium = \$28,000,000

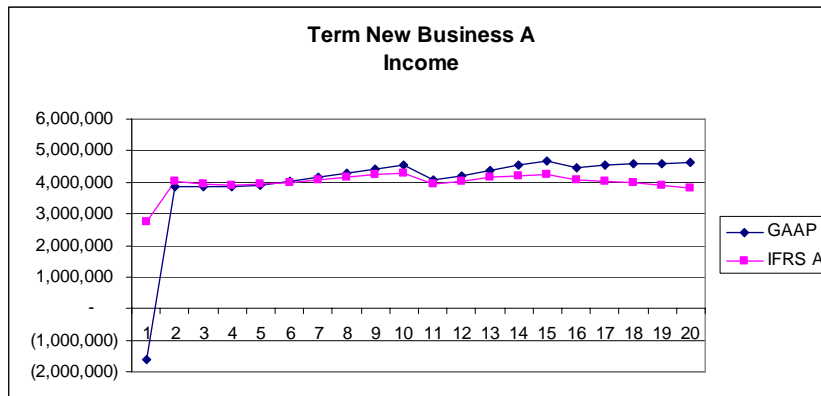


Term – Comment on First Year Earnings

- GAAP – first year non-deferrable costs of \$5.5 million cause a loss
- IFRS – day one gains are \$21 million; days 2–365 gains are \$2 million



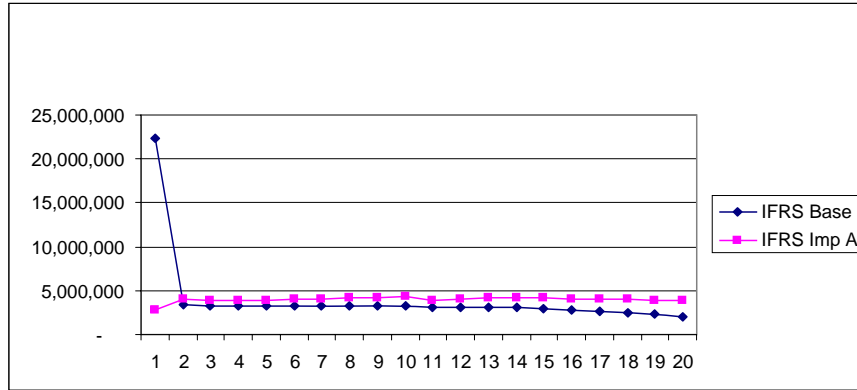
Term - GAAP and IFRS "A" Income



first year premium of \$28 million

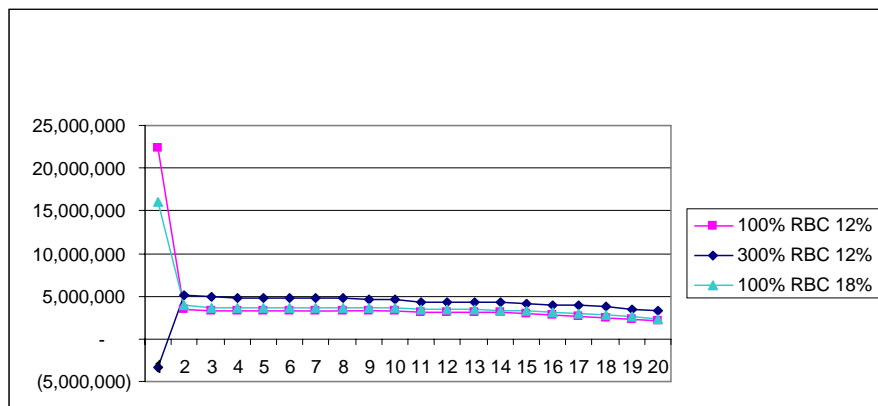


Term – IFRS “B” and “A” – Income



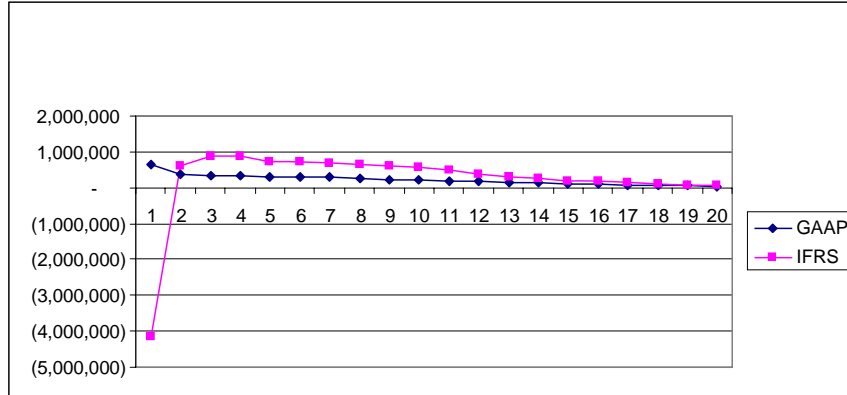
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Term – Risk Margin Sensitivity – Income



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SPIA – GAAP and IFRS – Income

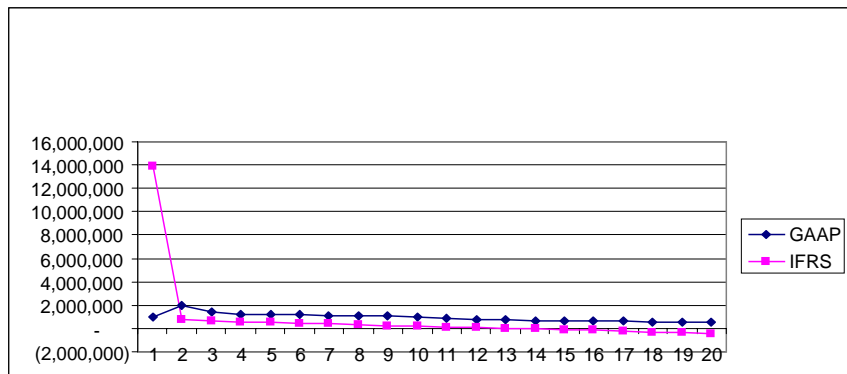


Premium = \$117 million



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Health GAAP and IFRS – Income

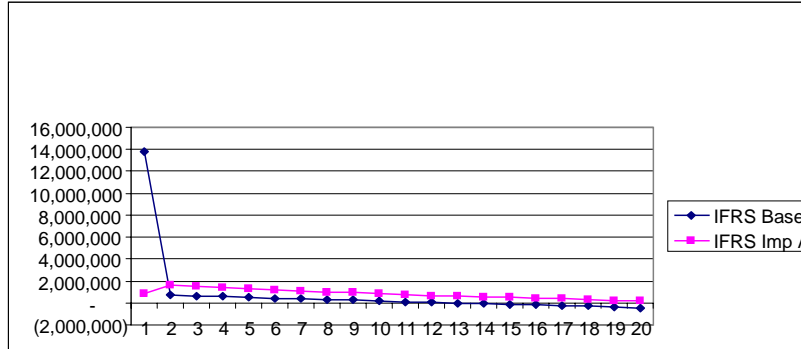


First year premium = \$3.2 million



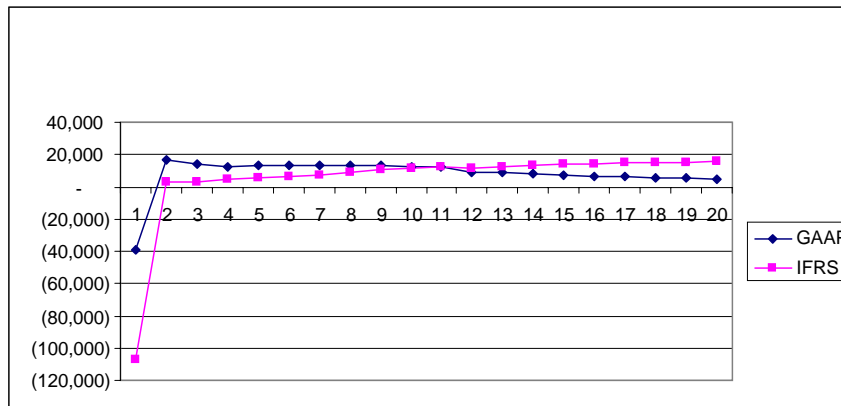
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Health IFRS “B” and “A” – Income



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Par Whole Life GAAP & IFRS – Income

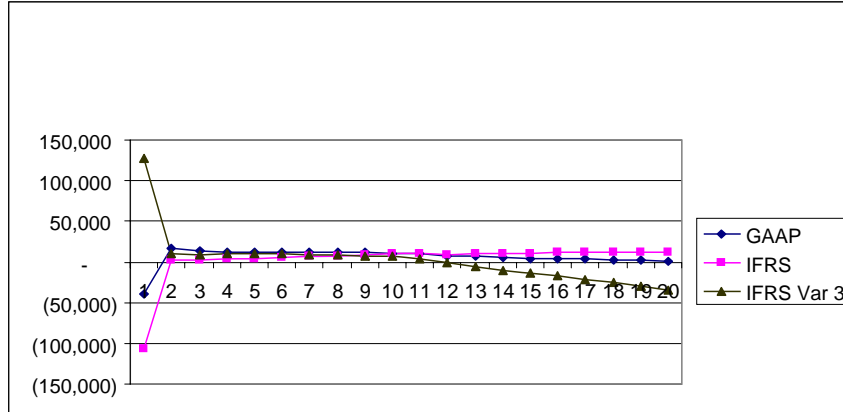


First year premium = \$133,000



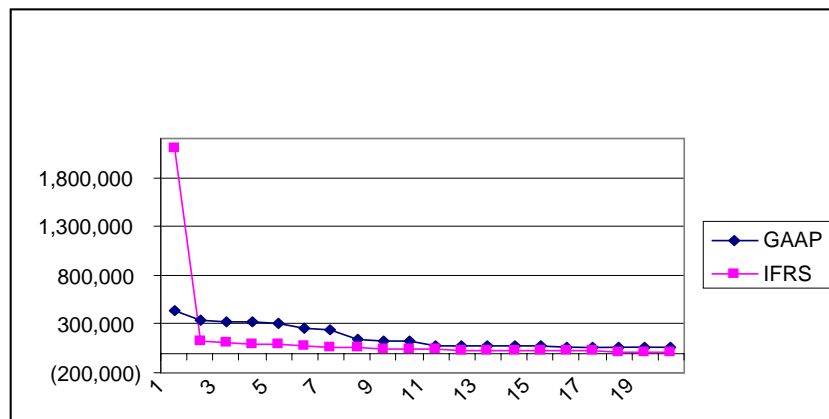
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Par Whole Life – Exclude Dividend – Income



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Variable UL GAAP and IFRS – Income

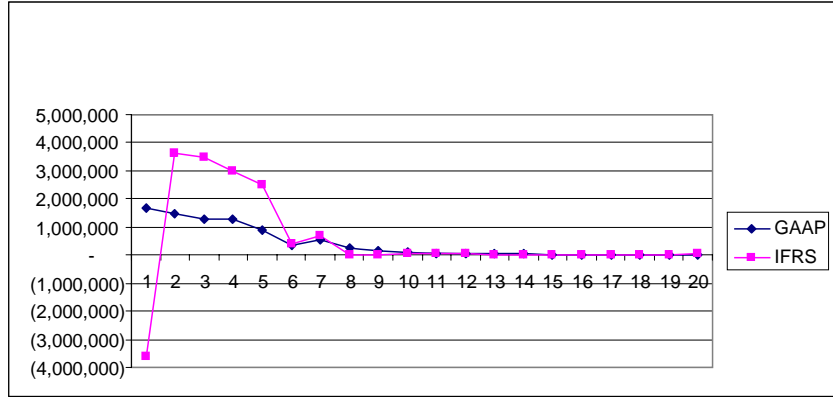


First year premium = \$3.2 million



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SPDA GAAP and IFRS – Income

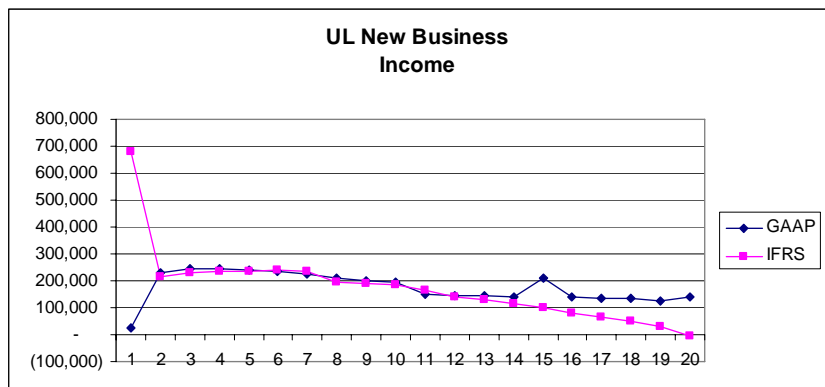


Premium = \$3.2 million



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UL GAAP and IFRS – Income

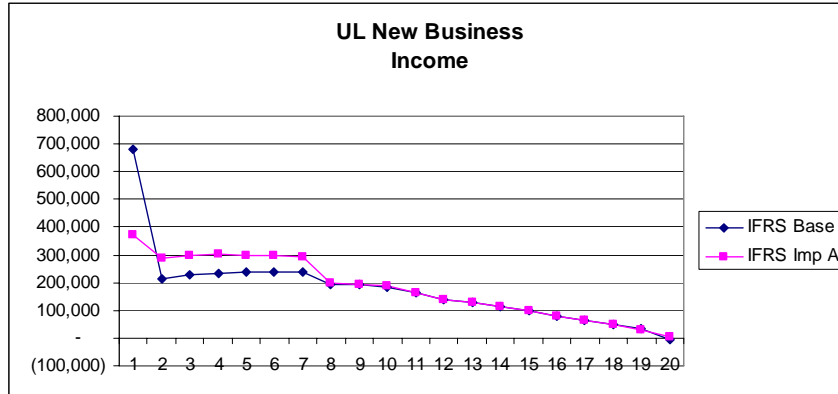


first year premium of \$5.8 million



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UL Exit and Entry Income



first year premium of \$5.8 million



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Baseline IFRS Income in the First Contract Year (\$000)

| Product | Income | | | First Year Premium |
|------------------------|----------|------------|---------------------------|--------------------|
| | Day 1 | Days 2-365 | Total First Year Contract | |
| Universal Life | \$546 | \$131 | \$678 | \$5,800 |
| Term Life | 20,575 | 1,797 | 22,373 | 28,000 |
| Immediate Annuity | (7,417) | 3,286 | (4,131) | 117,000 |
| Long Term Care | (29,267) | 316 | (28,951) | 27,000 |
| Supplemental Health | 13,480 | 379 | 13,859 | 3,200 |
| Fixed Deferred Annuity | (12,030) | 8,418 | (3,612) | 200,000 |
| Par Whole Life | (102) | (4) | (107) | 133 |



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Relative Size (1 of 2) of Cash Flows and Risk Margins (\$000)

| | | Year 1 | Year 5 |
|---------------|---------------|-----------------------|---------------------|
| PAR WL | PV Cash Flows | (\$497) | \$2,916 |
| | PV Margins | <u>232</u> (262) | <u>215</u> 3,131 |
| UL | PV Cash Flows | 68 | 1,326 |
| | PV Margins | <u>53</u> 121 | <u>42</u> 1,369 |
| SPIA | PV Cash Flows | 919 | 722 |
| | PV Margins | <u>9</u> 928 | <u>6</u> 727 |
| TERM | PV Cash Flows | (1,766) | (875) |
| | PV Margins | <u>461</u> (1,305) | <u>344</u> (531) |

PV = Present Value



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Relative Size (2 of 2) of Cash Flows and Risk Margins (\$000)

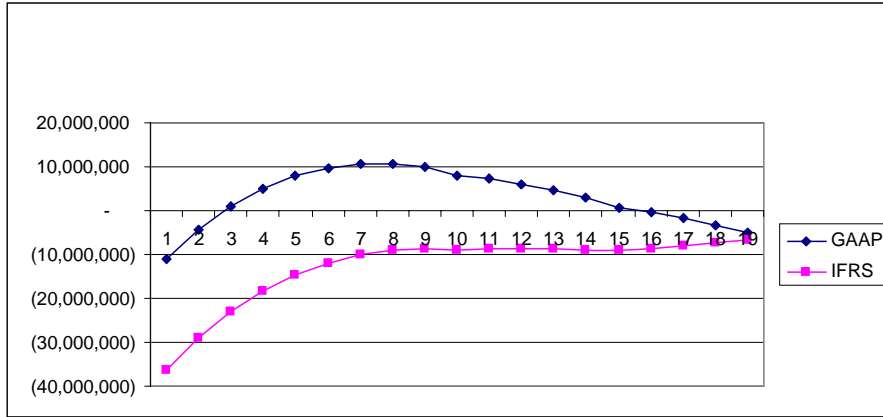
| | | Year 1 | Year 5 |
|---------------|---------------|-----------------------|-----------------------|
| VUL | PV Cash Flows | (\$2,330) | (\$1,573) |
| | PV Margins | <u>142</u> (2,187) | <u>129</u> (1,444) |
| SPDA | PV Cash Flows | 940 | 892 |
| | PV Margins | <u>2</u> 942 | <u>1</u> 893 |
| HEALTH | PV Cash Flows | (4,526) | (1,507) |
| | PV Margins | <u>87</u> (4,439) | <u>65</u> (1,442) |
| LTC | PV Cash Flows | (21) | 3,137 |
| | PV Margins | <u>366</u> 346 | <u>270</u> 3,407 |

PV = Present Value



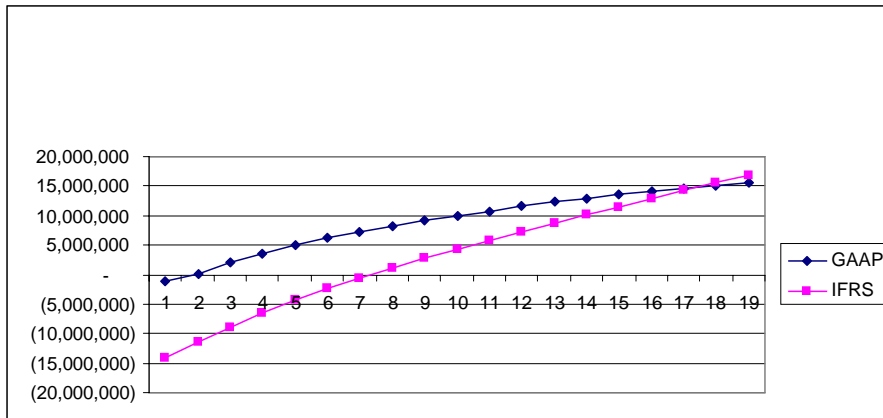
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Balance Sheet, Term



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Balance Sheet, Health



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Summary 1 of 2

- Income varies dramatically by product
- Products that derive a significant portion of their profits from investment income will show lower profits, or losses, in year one.

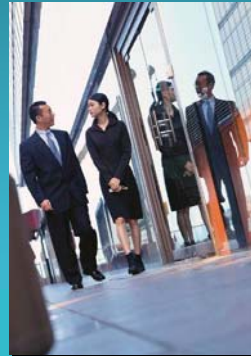


Summary 2 of 2

- Products with significant sources of profits other than investment income portray a larger year one income
- Initial and subsequent profitability is extremely impacted by choice of methods and assumptions to determine risk margins



4. Responses to the IASB



Responses to IASB (as of January 2008)

- Go to www.IASB.org
 - Click on (left-hand column):
 - ◆ IASB projects and work plan, then
 - ◆ Insurance contracts, then
 - ◆ Discussion paper, then
 - ◆ Comment letters
 - 151 responses, 2,000 pages



Profiles of Responders

- 47 insurers (2)
- 28 professional societies (4)
- 23 regulators (2)
- 6 auditors (4)
- 32 industry associations (3)
- 15 others (2)



AIG – U.S.-based; in 130 countries

- Generally supportive
- Leave general (property & casualty) insurance alone; have 2 models
- Questions relevance of exit value
 - Hypothetical
 - Not observable
 - Pricing details unavailable
 - No profit charge
 - Market data inferior to entity-specific
- Unwarranted profit at inception



ManuLife – Canadian-based; in 19 Countries

- Very supportive; is similar to Canadian GAAP
- Some refining is needed:
 - Cash flows – stochastic not needed for all products
 - use discount rates an insurer would expect to earn
 - Needs more specific guidance, especially in margins



International Actuarial Association (IAA) – 57 Members; 95% of Actuaries

- Constraints on cash flows should be removed
- Use own (not market) servicing costs and expenses
- Eliminate service margins
- Reflect diversification effects in margins
- Don't overlook the income statement



United Kingdom Actuarial Profession (Institute, Faculty, 17,000 Members)

- Comments only where they differ from IAA
- Some views too complex and demanding for all preparers
- Measurement – value should reflect own costs to settle, not to transfer to a buyer
- Cash flow assumptions – should be from the viewpoint of the insurer, not the market
- Risk margins – should be based on insurer's cost for risk where there is no market



American Academy of Actuaries (AAA) (USA – 15,000 Members)

- Has concerns
 - Gains at issue
 - Too much actuarial guidance (should do by nation)
 - Impractical issues (each possible scenario)
 - Limitations on cash flows



Institute of Actuaries of Japan (3,500 Members)

- Should reflect policyholder dividends in the liabilities
- Discount rate – need rates for very long term
- Difficult to calibrate insurance products to market
- Expenses – use entity-specific
- Need consistent measurement and reporting of changes in assets and liabilities



Institute of Actuaries of Korea (800 Members)

- Agrees with using a transfer to another party as the source for calibration
- Should define Fair Value first
- Should provide some practical examples



International Association of Insurance Supervisors (IAIS) [1 of 2]

- Its members supervise 140 countries, 97% of world's insurance
- Would like to use IFRS accounting for solvency (statutory) purposes



International Association of Insurance Supervisors (IAIS) [2 of 2]

- Endorses principles-based
- Supports some form of exit value
- Suggests a “reference entity” (large, efficient, well-diversified) with equal or higher rating
- Reflect all expected cash flows



International Organization of Securities Commissioners (IOSCO)

- Its member organizations regulate 90% of the world's securities markets
- Generally supportive, but
 - Difficult to determine market participant assumptions
 - Solvency – increasing a discount rate (own credit standing) lowers a liability
 - Include all cash flows relevant to the contract



Ernst & Young (Worldwide Audit Firm)

- Why not these principles for *all* industries?
- Not supportive of Exit Value
 - Hypothetical
 - Doesn't reflect actual cash flows
- Can't assess quality of earnings
 - Source of earnings
 - Identify impacts of judgment
- Focus on entity's own value and entity's principal market – the customer



PricewaterhouseCoopers 1 of 2 (Worldwide Audit Firm)

- Affirm consistency with other IASB initiatives
- Consult more widely with affected parties and field test
- Reliability of data is dependent on an assessment of a transaction in a hypothetical market
- Hypothetical basis – does not meet the needs of users for transparency
- Is exit value relevant?



PricewaterhouseCoopers 2 of 2 (Worldwide Audit Firm)

- Changes to building blocks
 - Cash flows
 - ◆ Include all cash flows
 - ◆ Consider market value only when directly observable
 - Discount rates – drop liquidity adjustment
 - Margins – needs more work
 - ◆ How to select? Not observable
 - ◆ Portfolio vs. entity
 - ◆ Why service margin?



KPMG (Worldwide Audit Firm)

- Generally supportive
- Less emphasis on market participants' views and more on internal information
- Risk margins – little or no consensus, so use entity-specific
- “Exit Value” as defined wouldn't produce a transaction price – so don't call it exit value



Deloitte (Worldwide Audit Firm)

- Market data must be available and relevant; use entity-specific
- Margins need further elaboration and should address explicit profits
- Use all relevant cash flows
- Gains/losses at issue is acceptable



Merrill Lynch (Buys/Sells Securities)

- Too theoretical
- *Reduces* comparability within the industry
- All you need to do is align liability discounting with rates used for assets to help identify asset/liability mismatch



Standard & Poor's (Rating Agency)

- Wants more disclosures
- Use all cash flows
- Gains at issue are acceptable



GNAIE – 16 gigantic Life and P&C Insurers Group of North American Insurance Enterprises

- Doesn't support Exit Value
- "Market consistent" is a problem because there are no regularly observable transfer markets
- Wants extensive field testing
- Recognize profit over coverage period
- Develop separate models for life and P&C
- No restrictions on building block cash flows
- Discount rate – reflect actual return



CFO Forum (1 of 2)

- Represents Europe's 20 largest insurers, 94% of the market
- Discussion Paper is good starting point
- As is, it is not relevant to users, preparers or regulators
- Keep working; maintain dialogue and due process
- Field test before a final exposure draft is issued
- Tie in with regulatory developments, such as solvency II



CFO Forum (2 of 2)

- Issues with three building blocks
 - Level of day one profit
 - Use discretionary benefit payments
 - Consider all expected cash flows
 - Use run-off, not transfer or exit values
 - Hold back initial profits at issue and recognize in line with release from risk over the lifetime of the contract



Umbrella – CFO Forum, GNAIE and Four Large Japanese Insurers

- Areas of consensus:
 - Recognize all future premium
 - Recognize all future expected payments to par-policy holders
 - Don't use market assumptions for expenses
 - Unit of account – redefine portfolio solely on the “managed together” criteria
 - Do not unbundle
 - Do not reflect “own credit standing” in valuing liabilities
 - Going forward, engage in robust and transparent process for engaging with preparers and users prior to issue of both the exposure draft and final standard



Questions & Answers

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