

Coinsurance – The Other Reinsurance

Presentation to the Actuarial Institute of the Republic of China

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April 26, 2013

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Agenda

- Forms of Reinsurance Beyond Risk-Premium Reinsurance
- Why Coinsurance?
- Considerations when Using Coinsurance
- Uses of Coinsurance Case Studies

Forms of Reinsurance

Beyond Risk-Premium Reinsurance

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Forms of Reinsurance

Summary and Nicknames

- Yearly Renewable Term ("YRT"):
 - Premium paid in return for mortality or morbidity coverage only
 - Often referred to as "risk-premium reinsurance"
- Coinsurance ("Co"):
 - Share of gross premium in return for coverage of all benefits
 - Sometimes referred to as "original terms reinsurance"
- Coinsurance with Funds Withheld ("Co FW"):
 - Coinsurance but ceding company keeps assets
 - Also referred to as "coinsurance with deposit back"
- Modified Coinsurance ("Modco"):
 - Coinsurance but ceding company keeps assets and reserves

Forms of Reinsurance

YRT Reinsurance

- Ceding company pays reinsurer a premium, less any allowances, to cover reinsured mortality (or morbidity) claims
- Reinsurer pays only mortality (or morbidity) claims, and does not pay other benefits such as surrender benefits
- Allowances and/or profit sharing may be paid to ceding company

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Forms of Reinsurance

Coinsurance

- Ceding company pays reinsurer (quota share of) <u>all</u> policyholder premiums or considerations
- Reinsurer pays ceding company (quota share of) <u>all</u> benefits paid to policyholders
 - Not just mortality or morbidity claims
 - Also includes surrender benefits, interest credited (implicitly), etc.
- Reinsurer pays an allowance / ceding commission designed to cover ceding company's expenses + profit share; however:
 - Upfront / first-year ceding commission can be positive or negative
 - Upfront / first-year ceding commission can be greater than, less than, or equal to ceding company's acquisition costs
- Assets and reserves are transferred to the reinsurer
- Reinsurer holds reserves for its share of the business

Forms of Reinsurance

Coinsurance Cash Flows

- Ceding Company pays Reinsurer (quota share of):
 - Policyholder Premiums
 - Initial Consideration (if an in-force block transaction)
- Reinsurer pays Ceding Company (quota share of):
 - Mortality / morbidity benefits
 - Surrender benefits
 - Other benefits
 - Expense Allowances:
 - First-year ceding commission
 - Can be less than, equal to, or greater than ceding company's actual acquisition costs
 - Can be positive or negative
 - Initial ceding commission (if an in-force block transaction)
 - Can be less than, equal to, or greater than ceding company's unamortized acquisition costs
 - Can be positive or negative
 - Renewal-year expense allowances
 - Designed to cover fully allocated renewal-year expenses + commissions
 - Trail commission (maybe)

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Forms of Reinsurance

Coinsurance Cash Flows





Forms of Reinsurance

Coinsurance Cash Flows – New Business Transaction

	Initial	1	2	3
CEDING COMPANY PAYS:				
Initial Consideration				
Policyholder Premiums		100	95	90
TOTAL PAYMENTS FROM CEDING COMPANY	-	100	95	90
REINSURER PAYS:				
Mortality Benefits		1	2	3
Morbidity Benefits				
Surrender Benefits		5	5	5
Other Benefits				
SUBTOTAL - BENEFITS	-	6	7	8
Initial Ceding Commission				
First-Year Ceding Commission		125		
Renewal-Year Expense Allowances			2	2
Trail Commission				
SUBTOTAL - COMMISSION AND EXPENSE ALLOWANCES	-	125	2	2
TOTAL PAYMENTS FROM REINSURER	-	131	9	10
NET PAYMENT FROM CEDING COMPANY TO REINSURER	-	(31)	86	80
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Forms of Reinsurance

Coinsurance Cash Flows – In-Force Block Transaction

	Initial	1	2	3
CEDING COMPANY PAYS:				
Initial Consideration	1,000			
Policyholder Premiums		15	10	5
TOTAL PAYMENTS FROM CEDING COMPANY	1,000	15	10	5
REINSURER PAYS:				
Mortality Benefits		10	12	15
Morbidity Benefits				
Surrender Benefits		5	5	5
Other Benefits				
SUBTOTAL - BENEFITS	-	15	17	20
Initial Ceding Commission				
First-Year Ceding Commission	200			
Renewal-Year Expense Allowances		20	20	20
Trail Commission				
SUBTOTAL - COMMISSION AND EXPENSE ALLOWANCES	200	20	20	20
TOTAL PAYMENTS FROM REINSURER	200	35	37	40
NET PAYMENT FROM CEDING COMPANY TO REINSURER	800	(20)	(27)	(35)



Forms of Reinsurance

Coinsurance versus YRT / Risk-Premium Reinsurance

Risk-Premium Reinsurance

- Covers mortality or morbidity benefits only
- Reinsurance premiums are independent of policyholder premiums
- Ceded reserve = unearned (reinsurance) premium reserve
- Solvency margin relief for mortality / morbidity risk only

Coinsurance

- Covers all benefits, including surrender benefits
- Reinsurance premiums are defined to be equal to policyholder premiums
- Ceded reserve = underlying policy reserve
- Solvency margin relief for most risks
 - May not include business risk, and there may be an offset for reinsurer counterparty risk

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Forms of Reinsurance

Variants of Coinsurance

- Key differences from pure coinsurance are whether the ceding company keeps the assets and/or reserves
- All three are economically equivalent
 - Assuming the same interest rate on reserves / funds-withheld balance / modco reserve

Why Coinsurance?

Going Beyond Risk-Premium Reinsurance

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Why Coinsurance?

Reasons to Consider Coinsurance vs. YRT

- Reserve and/or Capital Relief
 - For some products especially accumulation products the portion of the reserve and/or capital corresponding to mortality or morbidity risks can be a fraction of the total reserve and/or capital
- Risk Transfer
 - Some risks that the ceding company may not be comfortable with investment risk, surrender / lapse risk, etc. – cannot easily be transferred via YRT reinsurance
- Ceding Commission
 - To the extent a ceding company seeks a sizeable ceding commission or override, there may be a lot more profits available under a coinsurance structure, which, in turn, leads to a higher potential ceding commission

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Why Coinsurance?

Reasons to Consider Coinsurance

- Capacity for asset-intensive (e.g., savings) products
 - Companies don't want to write too much of this business for capital / rating agency / other reasons, but have to keep their distributors happy
 - Reinsurance can act as a "capacity valve" to allow a company to tailor their level of production to a desired level
- Capital relief
 - For products that are capital-intensive, coinsurance can help alleviate that strain without having to limit sales
 - Reinsurer may have a different view of capital intensity due to different accounting or solvency margin constraints
- Signaling effect
 - A coinsurance treaty tells management, Board of Directors, regulators, rating agencies, etc. that a third party stands behind your pricing and is willing to put their own capital behind that belief
 - This is because the reinsurer is economically in the same position as the ceding company
 - This works especially well when the reinsurer has helped to develop the product
 - Rather than taking consulting fees, the reinsurer is betting on the success of the product right alongside the ceding company

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Why Coinsurance?

Reasons to Consider Coinsurance (continued)

- Investments expertise / ability or willingness to take risk
 - Reinsurer may have different constraints on investment risk
 - Willingness or ability to invest in different currencies
 - Access to various asset classes
 - Willingness to invest in alternative asset classes
 - Access to various hedging or derivative strategies
 - Different capital constraints
 - Ceding company may be limited by availability of various asset classes, regulatory restrictions, management or Board preferences, rating-agency constraints, etc.

Considerations when Using Coinsurance

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Considerations when Using Coinsurance

Investments

- Investment guidelines and agreed-upon investment strategy:
 - Ceding company will want the reinsurer to agree to investment guidelines if the assets are placed in trust

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- Reinsurer may want the ceding company to agree to investment guidelines for its retained quota share to the extent that credited rates or other non-guaranteed elements are set off of that investment portfolio
- Key elements may include:
 - Issuer and sector limits
 - Need to consider what happens when portfolio gets "small"
 - Duration / key-rate duration / convexity limits
 - Cure process / timing

Considerations when Using Coinsurance

Investments (continued)

- Regular communication between ceding company's and reinsurer's investments professionals
- Depending on nature of the reinsurance treaty, may need a separate / segregated asset portfolio
- Reinsurer can consider designating the ceding company (or an asset-management affiliate of the ceding company) as the investment manager for the coinsured asset portfolio
- Reinsurer can receive the initial consideration in the form of:
 - Cash
 - Actual assets transferred (at market value need to consider accounting impacts if the assets are not currently held at market value by the ceding company)

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Any combination thereof

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Considerations when Using Coinsurance

Non-Guaranteed Elements

- Includes interest credited (including indexed interest), fund choices and fees, cost-of-insurance charges, etc.
- Need to agree upon a common framework for managing guaranteed elements
- Balance between treating reinsurer as a partner in the block of business versus being able to manage block on a day-to-day basis
- Methodology that has worked well for RGA:
 - Ceding company can manage as they see fit as long as pricing spreads (defined and measured in treaty) are being achieved
 - Only if pricing spreads are not being achieved does the reinsurer get involved in setting non-guaranteed elements
- May consider dynamically adjusting ceding commissions to react automatically to changes in new business

Considerations when Using Coinsurance

Managing Counterparty Risk

- Without further steps, coinsurance creates a large counterparty exposure for the ceding company facing the reinsurer
- There are a number of different ways to handle this risk:
 - Assets in trust
 - Other collateral such as letters of credit
 - Use of special-purpose reinsurance vehicle (SPRV)

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Considerations when Using Coinsurance

Managing Counterparty Risk – Assets in Trust

- If liabilities are implicitly or explicitly measured at book value (or some other system that doesn't react like market value), then we don't want a requirement to hold a certain market value of assets against that liability metric
 - Can consider a book-value of assets trust requirement that turns into a marketvalue trust requirement if the market-to-book asset ratio falls below some predefined level, say, 80%
- Reporting:
 - CUSIP-by-CUSIP positions, trading activity, performance attribution, and compliance with agreed-upon investment guidelines
 - Generally, quarterly frequency is sufficient

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Considerations when Using Coinsurance

Managing Counterparty Risk – Use of Special-Purpose Reinsurance Vehicle

- SPRV is a standalone legal entity (or a "protected cell" of an insurance company) designed to assume a single block of business from a single counterparty
- It essentially "walls off" the block of business, similar to the function of an insurance company separate account
- Rather than placing assets in trust, the ceding company's counterparty protection can be that they take over the voting shares of the SPRV under certain pre-specified conditions
- By not placing encumbrances on the assets, the reinsurer will have more flexibility that it can build into the reinsurance transaction and thus should be able to offer a more competitive price
- This structure also provides more visibility and transparency to the ceding company in terms of how the reinsurer is managing the block of business

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Considerations when Using Coinsurance

Reporting and Administration

- Need to ensure that ceding company's reinsurance administration system can handle coinsurance and associated accounting / ledger entries
- Reinsurer may require seriatim data including detailed account-value roll-forward; necessary for:
 - Risk management
 - Valuation (especially if reinsurer operates under a different accounting standard)
 - Check on bulk reporting
- May need to pay reinsurance premiums more frequently (monthly, weekly, or even daily) than claims or other benefits
 - Reinsurer needs to invest the proceeds in a timely manner to achieve the same economics as the ceding company
- Build in flexibility for future changes to reinsurance terms (on new business), e.g., changes in quota share or product terms

Considerations when Using Coinsurance

Finance, Valuation, and Solvency

- A lot more entries in the accounting ledgers
- Consider tax implications carefully
- Need to make sure that valuation software can handle the reinsurance appropriately
 - May need some modifications
- Consider solvency margin impacts carefully
 - Both local solvency margin, rating agency capital, etc.

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Considerations when Using Coinsurance

Taiwan Regulations

In March 2011, Insurance Bureau introduced regulations to allow reserve credit

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- Reserve credit requires IB approval
- Reinsurance must transfer all the insurance risks
- Must be reinsured to approved reinsurer
 - Reinsurance to locally registered reinsurer:
 - Full credit and no collateral requirement
 - Reinsurance to offshore reinsurer:
 - Must be rated at least S&P A (or equivalent)
 - Collateral via cash, CDs, or government bonds placed in trust with, or an LOC issued by a locally registered qualified financial institution
 - Rating must be at least that of reinsurer
 - Reserve credit is limited to the amount of collateral provided
 - Reduction in reserve credit recognized 10% or 25% depending on rating
 - Can use the rating of the qualified financial institution if it is higher
- Reserve credit is recognized via adding a reinsurance asset to the balance sheet

Uses of Coinsurance

Case Studies

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Uses of Coinsurance – Case Studies

	nnuity In-Force Block (United States)
Overview of Reinsuran	ice Structure
Client Objective:	Exit an underperforming and capital-intensive product line
Rationale:	 Parent-company accounting and solvency margin formula leads to volatility in results, low returns RGA, able to factor in some level of credit spreads above risk-free rates, can better match the underlying economics of this business
Transaction Structure:	 90% quota share on a full-risk coinsurance basis RGA receives an initial consideration, in the form of cash plus assets, equal to the sum of: Local statutory reserves Adjustment for past changes in interest rates (extra consideration) Pricing adjustment covering changes in available yields from quoting date to closing date RGA pays: All benefit payments Reimbursement of maintenance expenses Assets placed in trust for benefit of ceding company
Risk Transfer:	 Full risk transfer to RGA Risks transferred: mortality, lapse / surrender / withdrawal, investment (interest rates, credit spreads)
Capital Impact:	Client releases capital backing the reinsured quota share
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Uses of Coinsurance – Case Studies

Fixed Deferred Annuity In-Force Block (United States) – Considerations

- Initial consideration mostly in the form of assets
 - Includes "participation agreements" on some illiquid asset classes, such as commercial-mortgage whole loans and private-placement securities
 - Due diligence on asset valuations
 - Be careful of "dirty" vs. "clean" prices (i.e., inclusion of accrued interest)
- Assets in trust
 - Book value of assets compared to US statutory liabilities (a book-value type of metric)
 - Required top-up if market-to-book ratio falls below a certain level
 - Duration limits not symmetric around liability duration to allow for short investment strategy
 - Regular reporting and communications
- Pricing adjustment formula:
 - RGA needed to reposition a significant portion of the portfolio to get to our desired asset strategy and ALM profile
 - Ceding company was in a better position to hedge the risk of changes in the difference in yields between the portion to be sold and the target reinvestment portfolio
 - Pricing adjustment formula uses public, liquid indices and passes this risk back to the ceding company, who then hedged it by purchasing exchange-traded funds

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Uses of Coinsurance – Case Studies

Seasoned Disabled Life Reserves In-Force Block (Australia)

Overview of Reinsurance Structure		
Client Objective:	Freeing up capital to improve return on equity	
Rationale:	 Statutory capital requirement for long term disabled life reserves is very high 	
Transaction Structure:	 Full-risk coinsurance 95% quota share on in-force block of disabled lives Assets and reserves transferred to RGA representing the current reserves for paying the future claims of the disabled lives RGA responsible for all future claim payments on reinsured block Experience Refund = X% x (Expected Claims – Actual Claims) Recapture not allowed except in very limited circumstances, such as insolvency 	
Risk Transfer:	 Full risk transfer to RGA Risks transferred: morbidity, mortality, inflation, investment (interest rates, credit spreads) 	
Capital Impact:	 No impact on P&L as reserves transferred to RGA were equal to the statutory reserves Client able to free up regulatory capital (around 40% of reserves) 	



Uses of Coinsurance – Case Studies

Seasoned Disabled Life Reserves In-Force Block (Australia) – Considerations

- Hedging inflation risk embedded in underlying liabilities:
 - Combination of:
 - Use of inflation-indexed AUD municipal bonds
 - Inflation swaps
 - US GAAP accounting volatility on inflation swaps
- Investment strategy:
 - Inflation-linked AUD municipal bonds
 - Other AUD securities
 - Some USD investments, hedged back to AUD with cross-currency swaps
- Assets in trust:
 - Market-value of assets must be ≥ Australian best-estimate liability, which is a market-value type of metric

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Uses of Coinsurance – Case Studies

Savings / Long-Term Care Product Development (Japan)

Overview of Reinsurance Structure		
Client Objective:	Sell an innovative and unique product to be used in conservation efforts	
Rationale:	 Ceding company wants a partner willing to be more aggressive in the investment strategy and who is comfortable with the morbidity and mortality risks in this product 	
Transaction Structure:	 75% quota share on a full-risk coinsurance basis RGA pays: First-year ceding commission (% of premium) All benefit payments Reimbursement of maintenance expenses Trail commission (x basis points on sum assured) Changes formulaically for each cohort of new business based on changes in government bond yields 	
Risk Transfer:	 Full risk transfer to RGA Risks transferred: mortality, longevity, morbidity, lapse / surrender, investment (interest rates, credit spreads) 	
Capital Impact:	 Client sets up minimal capital for the reinsured quota share Client receives trail commissions for life of product on reinsured portion 	



Uses of Coinsurance – Case Studies

Savings / Long-Term Care Product Development (Japan) – Considerations

- Product development
 - RGA conducted several "Voice of the Channel" exercises to determine product ideas that agents were interested in
 - RGA provided the majority of the material the client needed to file the product with the regulator
 - Concept developed was to not credit any interest (i.e., return of premium after 10 years) to avoid competing with aggressive Japanese domestics
 - Instead, a sizeable lump sum LTC benefit is provided
- Investment strategy
 - Purchase of duration matched JGBs combined with the sale of credit default swaps to increase the yield
 - Very difficult to earn a spread over JGBs with other strategies
- No collateral requirements:
 - Reinsurer is large, "onshore" rated entity
 - Not huge premium amounts to start with → little counterparty risk
 - Allows for modest uplift in pricing → higher ceding commission

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Conclusion

Coinsurance – The Other Reinsurance

Conclusion

- It's important to consider coinsurance in addition to YRT or riskpremium reinsurance, as coinsurance gives the possibility of
 - Higher ceding commissions;
 - More risks transferred to the reinsurer; and
 - More reserve and/or capital relief
- There are a number of additional items for a ceding company to consider with a coinsurance treaty, including:
 - Investments
 - Treatment of non-guaranteed elements
 - Managing counterparty risk
 - Reporting, administration, finance, valuation, and solvency
- Coinsurance is an extremely powerful tool that can help solve some of today's most pressing problems for life insurance companies

The ComFrame Initiative From the International Association of Insurance Supervisors

Presented by Tom Herget, FSA, MAAA, CERA

Actuarial Institute of Chinese Taipei

April 26, 2013

ComFrame



ComFrame Common Framework for the Supervision of Internationally Active Insurance Groups



But first, a word on its sponsor, the IAIS



to what extent should the two be aligned/coherent? P.20







IAIS Roles and activities

Develop principles, standards, guidance	Encourage implementation of principles and standards	Develop assessment methodologies
Encourage co- operation amongst insurance supervisors	Identify potential risks that may affect insurance supervision Cooperate with other international organisations	Represent field of insurance supervision





IAIS Organisation

Staff

Staff of 25, all in Basel

Revenues (\$000)



from Members:135 pay around \$25; 13 pay \$70; One pays \$300 (Total \$ 3,600) from Observers: about 160 pay \$15 (Total \$2,200)

US input

- Members: 58 states, Federal, NAIC
- Observers: about 40
- AAA: through IAA



ComFrame

ComFrame aims to

- Develop methods of operating group-wide supervision of Internationally Active Insurance Groups (IAIGs) in order to make group-wide supervision more effective and more reflective of actual business practices
- Establish a comprehensive framework for supervisors to address group-wide activities and risks and also set grounds for better supervisory cooperation in order to allow for a more integrated and international approach
- Foster global convergence of regulatory and supervisory measures and approaches



ComFrame

ComFrame should

- be specific, but not rules-based
- be ever-evolving (and further look into case experiences)
- be developed in close collaboration with interested stakeholders
- lead to more consistency and better comparability and alignment regarding the supervision of internationally active insurance groups being undertaken by each jurisdiction

ComFrame

Timeline



- ComFrame is to be developed within 3 years ("Development Phase") starting July 1, 2010
- At the end of the first year from the starting date, a comprehensive and indepth Concept Paper is to be be available
- Immediately following the three-year Development Phase, impact assessments including those on calibrations (particularly for quantitative requirements) will be undertaken ("Field Testing Phase", formerly "Calibration Phase")

Module 1 Scope of ComFrame

Element 1 Identification of IAIGs Element 2 Process of identifying IAIGs Element 3 Scope of ComFrame supervision Element 4 Identification of the group-wide supervisor and involved supervisors

Module 2 The IAIG

Group Governance Element 1 Governance
Group ERM Element 2 Enterprise Risk Management
Group Structure and Strategy
Element 3 IAIG's legal and management structures from an ERM perspective
Element 4 IAIG's strategy from an ERM perspective
Element 5 Intra-group transactions and exposures from an ERM perspective
Group Financial Condition
Element 6 Liabilities/technical provisions and assets/investments
Element 7 Valuation
Element 8 Group Capital Adequacy Assessment

Group Reporting and Disclosure Element 9 Reporting and disclosure

ComFrame

Module 3 The Supervisors

Group-wide supervisory process

Element 1 Group-wide supervisory process

Supervisory Cooperation

Element 2 Cooperation and coordination including reliance and recognition Element 3 Roles of group-wide supervisor and involved supervisors Element 4 Use of Supervisory Colleges

Crisis Management and Resolution

Element 5 Crisis management among supervisors Element 6 IAIGs and resolution

Module 4 Implementation of ComFrame

Element 1 Applicability of ComFrame to all IAIS jurisdictions

ComFrame Working Draft dated July 2, 2012

- 179 pages
- Comment period July 1 through August 31
- Comments from AAA, CIA, IAA, NAIC, ACLI, GNAIE and many others
- Over a thousand comments (358 pages) on the original 180 page document

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Highlights of Comments (1 of 6) Member overarching themes (expressed often but not necessarily by a majority)

- 🚽 1 Don't use CF to expand ICPs
- 2 Don't repeat/duplicate ICPs
- 💡 3 Simplify
- 4 Ambiguous terminology
- 5 Power and authority issues

6 Lake of clarity about where CF requirements are meant to apply (lead supervisor, all supervisors, the iaig, the subsidiaries)

7 Field testing will be important

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Highlights of Comments (2 of 6) Member comments at opposite ends of spectrum

- 1 Converge CF rules vs. use regulations of home country
- **2** Flexibility vs. consistency
- 3 Level playing field between iaig's and non-iaig's
- 7 4 Role of group supervisor specified or negotiated
- 5 Reporting requirements too detailed; detail needed for commonality
- 6 Criteria too prescriptive; others comfortable
- 7 Lack of progress on capital adequacy element; others comfortable

8 CF should foster mutual understanding of different capital requirements but others say capital requirements should be consistent across iaig's

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Highlights of Comments (3 of 6) Observer overarching themes

1 Many observer comments stem from differences in opinion on purpose of CF

2 CF focus: focus on module 3 (supervisory cooperation); module 2 too prescriptive

- **3** Field testing / impact assessment should begin asap; do pilot
- 4 Need clearer CF goals articulation
- 7 5 IAIG criteria: firm up determination; net too big
- 6 Supervisory resources do they currently have the resources to implement
- 7 Confidentiality
- 8 No blurring lines between gsii and iaig

Highlights of Comments (4 of 6) Observer comments at opposite ends of the spectrum

- **P**
- 1 Level playing field vs. flexibility
 - 2 Highly prescribed requirements on supervisors vs. flexibility

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Highlights of Comments (5 of 6) Valuation (module 7)

- 1 Sole use of IFRS is now in question
- - 2
- 2 Mention no accounting standard
 - 3 Various options for an accounting basis

4 Keep IFRS - G20 advanced use of 1 set of global accounting standards as they measure of post-crisis reforms

5 Don't need prudential filters; others say we do so supervisors don't do their own thing

6 Where to place filters – to the accounting basis or to the resulting capital resources

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Timeline from here on out (1 of 2)

• April - Further refinements of the drafts will be discussed in April working party meetings

• May - There is a key TC meeting in May to discuss outstanding issues. Working parties will be meeting too. A full draft made available to Observers

• June - The TC meeting in May will hopefully approve a 2013 Draft ComFrame for consultation from July to the end of August 2013 (final consultation in the Development Phase)

Timeline from here on out (2 of 2)

- Summer Preparation of a comprehensive report on comments for the General Meeting in 2013
- December Sign off by Executive Committee on the comprehensive report on the end of the Development phase
- 2014 field testing phase starts details being discussed internally

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Way forward with Stress / Scenario Testing

- Scenarios are projections of financial outcomes for the group/entity
- Focus on extreme negative scenarios, which are stressed to examine close to the full range of extreme possibilities
- The company should survive 99.5% of the possibilities
- The NAIC would like to remove the one in two hundred reference with something like "events that occur only rarely, such as once in every 200 years." The reliability in the tail is not as good as we think.
- Supervisors would dictate three types of scenarios:
 - Global (e.g. financial, pandemic, man-made catastrophe or natural catastrophe),
 - Jurisdictional, and
 - Group-specific

Need a common valuation basis

• Originally was going to utilize the accounting for the IASB's insurance accounting project

- World-wide adoption of a single standard is now in doubt
- Currently in contemplation is a ComFrame Adjusted Balance Sheet (CABS)





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Overarching Issues

- We seem to be developing a minimum capital
- Evaluate at just the holding company level or at each subsidiary?
- How to handle non-insurance companies that could impact the insurance companies
- What is the accounting basis for this since IFRS no longer a viable option (TH suggestion: just do assets and cash)
- Members think that field testing will shed much light

Four Key Issues

- Where, in the organization structure, to define the insurance holding company? At the lowest level holding company that owns all the insurers in the group. Naturally, you would have to watch for impacts from other affiliates
- Financial Assets. Fair Value vs. Amortized Costs (can be appropriate for long term business)
- Technical Provisions (reserves) (liabilities). Discounting for property & casualty reserves? Discount rate for long-term life liabilities?
- Deferred Tax Assets. Most would disallow, but might be more significant if P&C reserve discounting introduced

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Field Testing - Objectives

• Objective - To perform impact studies of all elements* of the draft ComFrame resulting from the Development Phase, to test if they

lead to effective group-wide supervision of IAIGs,

are practical, and

do not lead to excessive costs to IAIGs and their supervisory colleges

• Objective - To assess the results of such field testing so that the IAIS can determine any evidence-based changes that are necessary to the draft ComFrame in view of a target date of adoption at the 2018 General Meeting

• Field Testing Task Force chair and vice chair appointed; committee being populated

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Field Testing - Timeline

- Spring, summer 2013 how to do it
- Summer, fall 2013 selection of volunteer iaig's
- 2014 perform the field testing

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Field Testing – how the IAA may assist

- We have "seat at the table" on the SSC perhaps get on the FTTF
- Develop prototype understanding of deliverables

• Develop case studies to simulate situations CF could address without waiting for year-long FT turnaround

Progress on Insurance Contracts Accounting IFRS and FASB

April 26, 2013 Presented to

Actuarial Institute of Chinese Taipei

by Tom Herget, FSA, MAAA, CERA

IASB

- Formed April 1, 2001, assuming standards setting from IASC. Governments dictate requirements. IFRS is used in Europe because EU requires it.
- 16 international members limited insurance company experience
- Actions taken at monthly meetings
- Staff in London; most meetings in London
- www.IFRS.org

FASB

- Formed 1973; 7 members
- Actions taken at weekly meetings
- Staff in Connecticut; most meetings in Connecticut (or in London if joint with IASB)
- SEC delegates standard setting to FASB; FAS is used in the US because SEC requires it.
- SEC accepts IFRS from foreign registrants and is considering accepting IFRS for US registrants
- www.FASB.org

Timeline

- IASB
 - Spring 2007: Phase II Discussion Paper
 - July 2010: Insurance Standard Exposure Draft
 - June 2013: Re-exposure
 - 2014: IASB Insurance Contract Standard
 - 2018?: Insurance Standard Effective
- FASB
 - September 2010: Insurance Discussion Paper
 - July 2013: FASB Exposure Draft
 - 2014: FASB Insurance Standard
 - 2018?: Insurance Standard Effective
IFRS Insurance Project Objectives

- Reduce diversity of accounting practices for insurance contracts, particularly in Europe
- Increase users' understanding of insurers' financial statements
- Help investors make decisions
- Align insurance accounting with other business sectors, where possible

Overview of IASB Exposure Draft

- Principles-based approach with additional guidance
- Reflects the economics of insurance contracts
- Based on insurance contracts, not insurance companies
- So this affects banks and others issuing insurance contracts

Goals of IASB Exposure Draft

- A measurement model that focuses on the drivers of profitability and uses current estimates of cash flows
- Presentation of information about insurance contracts that reflects the changes in those drivers
- A coherent framework for dealing with complex and future insurance contracts
- IASB wants insurance accounting to be as consistent as possible with accounting principles for other financial institutions (banks)

Premium Allocation Approach

- Keep P&C pre-claims accounting similar to current (US GAAP) P&C accounting
- Gross Unearned Premium for short-term (one year) contracts

Building Block Approach (BBA)

- IASB has four building blocks:
 - Current estimate of future cash flows
 - Time value of money
 - Risk Adjustment (RA)
 - Residual Margin (RM)
- FASB has no RA and merely a single Margin which is amortized

Current Estimate of Future Cash Flows

- Current; use all relevant information
- Contract boundaries for some group-like contracts whose renewal provisions aren't guaranteed, those periods cannot be considered
- Unbiased
- Explicit
- Probability weighted
 - Expected value (mean), not "best estimate"
 - Number of scenarios depend on product
 - Stochastic not always required
- Exclude non-performance risk for insurer but include nonperformance risk for ceded reinsurance

Acquisition Costs

- Acquisition costs are included within the liability cash flows; no separate asset for DAC
- The IASB includes unsuccessful as well as successful sales expenses
- The IASB includes only incremental acquisitions costs
- The FASB ED limits acquisition costs to incremental at a policy level and only for successful sales
- This is more restrictive than other cash flows which are to be based on a portfolio of similar contracts

Time Value of Money

- Consistent with current observable market prices
- Exclude factors not present in the insurance liability
 - Independent of assets held unless obligation is a direct function of a set of assets (e.g. unit linked or variable)
 - Do not consider non-performance risk of insurer
- Guidance in first ED was risk free plus adjustment for illiquidity (bottom up)
- IASB and FASB will now allow top-down (earned rate less provision for default, expenses and uncertainty)
- Any discounting claim reserves will be a change for P&C in the US

Time Value of Money – Interest Rate Rubik's Cube

- Always use a current rate at any valuation date
- Do another set of discounting with a locked in rate (at issue)
 This is used for distinguishing P/L and OCI
- Use one set of interest rates where cash flows are dependent on investment performance and a different set of interest rates where they are not (this is within the same contract) (IASB only)
- But possibly more
 - Mirroring where liability crediting rates are a legal function of the underlying asset performance
 - You may have to unlock the locked-in rate
- And these will be yield curves, not yield rates
- Need to see next Exposure Draft for clarity

IASB - Risk Adjustment

- Objective of Risk Adjustment (RA) is the 'compensation the insurer requires for bearing the uncertainty inherent in the cash flows that arise as the insurer fulfills the insurance contract'
- Not what you'd sell it for; not what someone else would pay
- More like it is what you would buy it for given all the information you already know about it
- The RA quantifies the difference between the certain and the uncertain liability
- Re-measured at each period
- It is not a PAD (Provision for Adverse Deviation) but it is like a PAD

IASB - Residual Margin

- Residual Margin is the plug so that there is no profit at issue
- Residual Margin is re-measured for changes in future assumptions.
- Current year experience flows through income statement
- Margin is amortized into earnings based on how insurance and other services are provided (similar to revenue recognition)

FASB – Single Margin

- Similar to IASB Residual Margin it is the plug so that there is no profit at issue.
- Not remeasured; not unlocked
- Amortized by release from risk (which has not really been defined yet)
- The FASB is not in favor of running estimates of future experience changes through the margin.
- Amortized into earnings similarly to IASB's residual margin

Key FASB-IASB Differences

- One margin vs. a Risk Adjustment and a Residual Margin
- Residual Margin unlocks, single margin doesn't unlock
- IASB considers successful and unsuccessful expenses, FASB only successful

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Presentation

Investments

- Instructions come from IFRS 9, which replaces IAS 37 no later than 2015
- IFRS 9 is entitled Financial Instruments
 - Includes assets and liabilities
 - Being done in three phases
 - 1 Recognition and Measurement
 - 2 Impairments
 - 3 Hedge accounting

Investments - Measurement

- Debt instruments (bonds, mortgages) are on Amortized Cost (AC)
 - An option you can use Fair Value (FV) if you can demonstrate that this avoids an accounting mismatch (they support insurance liabilities that move with FV). All income goes through profit / loss
 - Another option report FV, but also calculate AC.
 AC is used for profit/loss, but mark to market and report that difference in OCI
- Equities and derivatives at FV (and all impact goes through profit loss

Balance sheet	20XX
Assets Reinsurance assets Other assets	XX XX
Total assets	XXX
Liabilities Insurance contract liabilities	XX
Other liabilities Total liabilities	XX XX
Equity Total equity and liabilities	XX XXX

IFRS Presentation Income Statement

- Insurers required to present earned premiums, margin released, change in Risk Adjustment, claims, benefits and the gross underwriting margin in income statement
- Definition of premium is different from definitions commonly used today – IFRS definition is the portion of premium allocated to the value of coverage and the expected non-claims fulfillment costs – equivalent to expected claims and expected expenses
- "Disaggregate" exclude the deposit component
- Other comprehensive income (OCI)
 - Changes in liability due to changes in discount rate will be reflected in OCI

IFRS Presentation Income Statement - OCI

- Pause just what is OCI?
- CI = PL plus OCI
- Comprehensive Income, Profit Loss
- Again, just what is OCI?
- In the major accounting bases, there is no articulation of philosophy in ascribing elements to OCI
- Investors tend to look at PL as gauge of performance
- How to assign? Blanket or principles?
- Possible principles
 - Warranted vs. unwarranted volatility
 - Actions within vs. outside of management control
 - · Ordinary (usual) vs. extraordinary (unusual) events
 - Regular results vs. those induced by changes in methodologies or assumptions
 - · Current year results vs. prior period adjustment

Statement of Comprehensive Income	20XX
Insurance contracts revenue Incurred claims and expenses Underwriting result	X (X) X
Investment income Interest on insurance liability Net interest and investment	X (X) X
Profit or loss	X
Effect of discount rate changes on insurance liability Total comprehensive income	(X) XX

Presentation - Revenue

- Premium element of revenue stream will look like YRT premiums
 - Do not include portion of premium that is deposit-like (e.g. account values for UL policies) ("dis-aggregate")
- Cannot be derived from collected and doesn't affect bottom line
- Most items in income statement will come from actuaries

Presentation - FAS60

- Premium 100
- Investment income 10
 - Revenue 110
- Death claims 15
- Expenses 20
- Cash value paid 5
- Increase in Reserves 55
 - Expense 95
- Profit

Presentation - FAS97

- COI charge 25 Expense load charge 10 • Investment income 10 • Revenue 45 Death claims (NAR) 5 • Expenses 20 • Interest on fund 5 • • Expense 30
- Profit

Presentation - IFRS

•	Residual Margin released	4		
•	Change in Risk Adjustment	6		
•	Expected claims	5		
•	Expected expenses	20		
	• Revenue		35	
•	Claims	5		
•	Expenses	20		
	 Claims and expenses 		25	
•	Underwriting profit			10
•	dsf			
•	Investment Income		10	
•	Interest credited to liabilities		5	
•	Investment profit			5
•	Total profit			

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Disclosures

- Premiums, claims
- Expected PV of future payments and receipts
- Changes in the amount of risk
- Effects of new contracts written
- Processes for estimating inputs and methods used
- Effect of changes in methods and inputs used
- Explanation of reasons for change & identification of contracts affected
- Nature and extent of risks
- Extent of mitigation of risks (reinsurance, participation)
- Quantitative information about exposure to credit, market and liquidity risk

Transition

Transition

- Measure the present value of fulfillment cash flows using current estimates
- Derecognize current DAC balances
- Determine the single or residual margin:
 - Through retrospective application of new principles to all prior periods where it is practical to do so
 - For earlier periods where the retrospective application is not practical, estimate the margin
- Determine the discount rate for a minimum of 3 years
 - Use difference from a reference rate for prior periods if necessary

Recap - Timeline

- New IFRS ED for Insurance Contracts May or June 2013
 - This will be an Exposure Draft but they are only asking for comments on five areas:
 - Presentation of premium
 - Unlocking residual margin
 - · Changes in discount rate go through OCI
 - Transition requirements
 - Participating contract mirroring
 - Will read all comments received
 - 120 day exposure period
- FASB Exposure Draft for Insurance Contracts expected July 2013
 - Asking for comments on entire ED
- Final standards adopted in 2014; effective in 2018?

Steps to get ready

- Work on your cash flow models
 - Where are deterministic models sufficient?
 - Where do you need to measure embedded guarantees stochastically?
- Comment on what you like and what you don't like
 - American Academy of Actuaries will focus on
 - Accounting Mismatch (spurious volatility)
 - Complexity/Expense/Usefulness
 - Guidance too much, too little
 - Society of Actuaries will focus on
 - Study on earnings impact (US GAAP vs. IFRS) for 15 products
 - Will present to you here later this year
- Reconcile your cash flow models from one period to the next
- Stay current with approaches to calculating risk margin
- Consider how you will determine discount rates (i.e. top down or bottom up)

Questions & Maybe Answers