REINSURANCE OF ASSET INTENSIVE PRODUCTS

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Outline

- Types of products - Risks
- Reinsurance of Fixed annuity products
  - Dynamics of ceding companies and reinsurers
  - Types of Annuity Reinsurance structures
  - Challenges and considerations with reinsurance
- FIA and VA Reinsurance
  - Key differences

REINSURANCE OF RISKS

What do we mean “Asset Intensive”?

- When we talk about Asset Intensive products, we mean those products which, from a risk profile to the insurance company, are affected by a set of “assets” or investments on the company’s balance sheet.
- Annuity reinsurance is really the ultimate form of “Asset Intensive” reinsurance, i.e. reinsurance of liabilities that are heavily weighted on asset/interest rate risk.
- Forms of reinsurance can be developed on the Asset Only component of these types of liabilities;

  - ISWL
  - Universal Life
  - Payout Annuities
  - Indexed Annuities
  - Structured Settlements
  - Disabled Life Reserves
  - Whole Life
  - Long Term Care

Types of Risks – Individual Insurance

- Mortality / Morbidity
- Longevity
- Interest Rates
- Policyholder Behavior (lapse, withdrawals, etc)
- Equity Markets

Various Risks considered in Reinsurance of individual products

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	Product	Description	Sub-products	GAAP standard	Risks: Interest rate	Risks: Equity	Risks: Mortality/ Longevity	Risks: Lapse / Other
Individual annuities	**Immediate / Payout Annuities**	• Earn a fixed rate for the life of the contracts	• Single-premium immediate annuity • Structured settlement	FAS 60	✓✓		✓✓	
	Fixed Deferred Annuities	• Earn a fixed rate for a period followed by a floating rate set by the insurer	• Fixed annuities • Fixed indexed annuities	FAS 97	✓✓✓	✓		✓✓
	Variable Annuities	• Premiums are invested in separate account funds earning a floating rate	• Living benefit VA • Death benefit VA	FAS 133/ SOP 03-1	✓✓	✓✓✓	✓	✓
Individual life	**Term Life**	• Provide a death benefit over a specified benefit period with no cash value		FAS 60	✓		✓✓✓	✓✓
	Traditional Whole Life	• Provide life insurance with cash value	• Whole life • 20 Pay Life • Final Expense	FAS 60	✓✓		✓✓	✓
	Universal Life	• Flexiible premiums, accumulated account value, life insurance protection	• NLG-UL (term alternative) • Accumulation • Indexed UL	FAS 97	✓✓	✓	✓✓	✓✓
Individual Health	**Long-term Care (LTC)**	• Provide benefits based on need for long-term care		FAS 60	✓✓		✓✓	✓✓

✓✓✓ *Significant risk exposure* ✓✓ *Moderate risk exposure* ✓ *Some risk exposure*

FIXED ANNUITY PRODUCTS

MARKET DRIVERS OF AND RATIONALE FOR ANNUITY REINSURANCE

Market drivers of fixed annuity reinsurance

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- Despite higher sales, low interest rate environment continues to pressure fixed annuity writers
  - Spread compression on general account assets
  - Pressure on credited interest rates and profit margins
  - Reluctance of companies to invest capital (Surplus Strain)
- Results – demand for fixed annuity reinsurance is strong

Reasons for reinsuring annuities

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Reasons	Description	Downstream Impact(s)
De-risk balance sheet	No appetite for on-going management of non-core business	Focus on growing core business
Capital base	Release of EV within closed blocks	More readily support and grow new business
Diversification	High concentration of risks	Diversify risks to protect balance sheet, in particular during adverse environments
Investment experience	Annuity reinsurers consider investment management one of core strengths	Share in expertise

Risks transferred in Annuity Reinsurance

Risks transferred	Mitigation strategies by reinsurers
Disintermediation	Managed through rate negotiation
Lapse	Managed through rate negotiation
Credit Quality	Reinsurer typically manages investments
Reinvestment	Reinsurer typically manages investments
Mortality & Morbidity	Generally secondary risks and of less concern

In other words, 100% risk transfer is typical of these arrangements.

DYNAMICS OF CEDING COMPANIES AND REINSURERS

Characteristics of reinsurers

- Established, highly rated, well capitalized
  - Generally, most have pulled back from capital driven reinsurance, and though this is starting to come back a bit
- Newer, annuity focused reinsurance entities
  - Growing
  - Bring Investment expertise
- Off-shore vs. On-shore
- Unauthorized vs. Authorized
- Various stages of capital raising efforts

Reinsurance market segments to consider

- AM Best rated NAIC Reinsurers: US Statutory accounting and US tax/less flexible investment strategy
- AM Best rated non-NAIC Reinsurers: GAAP accounting, non-NAIC regulations, non-US tax, collateral structure / moderately flexible investment strategy
- Unrated Reinsurers: GAAP accounting, non-NAIC regulations, non-US tax, collateral structure / flexible investment strategy

Ceding company considerations when choosing a Reinsurer

- Credit Rating of reinsurer
- Experience in market
- Investment expertise
- Pricing / Competitiveness
- Regulatory concerns
- Rating agency reactions
- Reinsurance structure proposed
- Partnership Approach

Considerations – choosing a reinsurance partner

1. Pricing assumptions

- Annual full surrender (“lapse”) rate assumptions (assuming current low interest environment remains during projection period):
  - Review of experience of company
  - Benchmark to competitor rates
  - High lapse at end of SC period
- Investment yield (per investment guidelines)
- Expenses (for administration – typically paid to ceding company)
  - Commissions are an expense on new sales - shared
- Taxes, cost of capital, etc. – all different by reinsurer

Considerations – choosing a reinsurance partner (cont'd)

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2. Viewing all of the economic factors in a block transaction:

- Ceding allowance is only one consideration
  - Reinsurers have been offering "negative" ceding allowances on blocks of fixed annuities with relatively high minimum interest rate guarantees
- Liquidation of assets to provide a cash transfer to the reinsurer often results in releasing unrealized gains that can be used to off-set the negative allowance
- Liquidating assets to fund a 100% coinsurance transaction may also release a portion of the Interest Maintenance Reserves

TYPES OF ANNUITY REINSURANCE STRUCTURES

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Forms of Annuity Reinsurance

- Coinsurance
  - Reinsurer assumes risk for portion of asset performance, disintermediation, expense and persistency
  - In force vs. new business
    - Ceded premium is either defined as a quota share of the annuity deposits (new business) or a quote share of the reserves (inforce)
  - Does not require a separate investment management agreement
    - Acceptable investment guidelines are defined in treaty.

Forms of Annuity Reinsurance

- ModCo and Coins – funds withheld
  - Assets remain on ceding company's balance sheet, liabilities will depend on structure
  - Usually put into a trust or separate account, to the benefit of the reinsurer
  - Maintains more control over assets – still "on balance sheet"
  - Viewed as less risky
  - Requires separate investment management agreement between two parties
  - Assets are maintained at Book Value

Unauthorized Reinsurer – Trust requirement

- Reserve Credit Trust
  - To obtain reserve credit, a market value trust is established
  - Assets held in trust are marked to market at all times
  - Fluctuations in market conditions that impact asset value are responsibility of reinsurer
  - Investment guidelines are agreed to for trust assets

CHALLENGES AND CONSIDERATIONS WITH REINSURANCE OF ANNUITIES

Other issues in negotiations

- Quota share – how do you manage different profit objectives and investment approaches?
  - Example 60/40, with reinsurer assuming 5% yield and cedant assuming 3.5%.
  - If both have same profit objective, will need to discuss an on-going allowance from reinsurer to cedant to off-set the lower return target.
- Investment Guidelines –
- Credit quality of Reinsurer
  - Over collateralized structures, with assets/LOC equal to x% of reserves pledged as security.

Treaty issues

- Ongoing management
  - Reinsurer does NOT have authority to determine non-guaranteed interest rates; must work in cooperation with the reinsurer.
  - “seek consent, not to be unreasonably withheld”
  - Agreement will specify process to be followed.
    - Should ideally address cure and compromise approach.

REINSURANCE OF OTHER ANNUITY PRODUCTS

- INDEXED ANNUITIES
- VARIABLE ANNUITIES

VA and FIA reinsurance are in demand due to risk mitigation in place across material risks

Willis Re MANAGING EXTREMES

	Risks	VA reinsurance risks	FIA reinsurance risks	Description	Commentary
1	General account	✓	✓	• Supporting fixed accounts in VAs and minimum crediting rates / option budgets in FIAs are not large considerations for reinsurers	• Reinsurers typically earn higher spreads on assets compared to cedants
2	Equity risk	✓✓	✓	• Equity risk has been mitigated by volatility managed funds • FIA account value never decreases but equity movements determine crediting rate	• Reinsurers either use dynamic hedging programs or exotic options to hedge equity risk in VA products
3	Interest rate	✓✓	✓✓	• Persistently low interest rate hurts VA profitability • Reinsurer option budget typically set to cover movements in equity levels	• Newer VA products are more "interest rate friendly" but buying interest rate options/swaps in low interest rate environment is expensive
4	Surrender risk	✓	✓	• Risk of contract lapsing earlier than expected, reducing overall margins on business and increasing risk on not recovering acquisition expenses (e.g., commissions)	• Primary risk is that actual deaths exceed expected deaths
5	Death risk	✓	✓	• Benefit to be paid over and above cash surrender value and reserve for early death	• Mis-matching of hedges to liability (VA) and indexing (FIA)
6	Policyholder behavior risk	✓✓✓	✓	• Systematic withdrawals occur in different pattern than expected, creating statutory and GAAP volatility	• GLWB riders are being added to FIA base product, however GLWB riders in FIA contracts are not as risky as VA GLWB riders • Companies have developed more sophisticated policyholder behavior frameworks for VAs

Is VA or FIA Reinsurance different than Fixed Annuities?

- Differences:
  - Investment Risk
  - Guaranteed Benefits
- Similarities:
  - Reinsurance challenges
    - Full risk transfer
    - Counterparty concerns
    - Reserve and capital credit
    - Reinsurance structures – not straight forward

Indexed Annuity Reinsurance

- Key issues / challenges
  - Still need to manage the fixed interest rate aspects, very similar to fixed annuity reinsurance.
  - IN ADDITION – need to have hedging capabilities or appetite for the indexing strategy
- New developments
  - GLWB riders more popular
  - Not every reinsure is open to this, but most are, and will work with cedants
    - Viewed as a less risky rider than VA GLWB

Indexed Annuity Reinsurance

- Counterparties/reinsures
  - Similar to the Fixed Annuity players, with just a few differences.

Indexed Annuity Reinsurance – Product Development

- Changing market
  - Indexed annuities are growing in 2015
  - Many companies are considering alternatives for their distribution, but they either don't
    1. Have the expertise for indexed products, or
    2. Don't want any kind of derivative on their balance sheet
- Possible solutions?
  - Partner with an Annuity Reinsurer to co-develop a product

VA Reinsurance

- Key issues / challenges
  - Very different – no investment risk transferred, per se
    - Separate account assets must be maintained by ceding company
  - Living Benefits – are they reinsurable??
    - And at what cost
  - Big question – can full risk transfer be achieved
    - And can it be done at a cost similar to the rider fee???

Segments of the VA reinsurance market are no longer dormant (1/2)

Historical supply of VA reinsurance market[1]

	Time range	Supply	Description	Major products	Complexity of reinsurance
1	1990s		• GMDB reinsurance was commonplace (CIGNA was one of original GMDB reinsurers)	GMDB	
2	2000-2002		• VA reinsurance dried up with “dot com” recession, as reinsurance premiums increased drastically	GMDB, GMIB	
3	2006-2007		• Reinsurers entered market as equity markets were rising and interest rates remained at relatively high levels	GMIB, GLWB	
4	2008 - 2009		• Reinsurance market creased to exist during global financial crisis	GMIB, GLWB	
5	2009 - 2014		• Reinsurance market growing slowly post financial crisis • More companies considering VA reinsurance	GMDB, GMIB, GLWB	
6	Present		• Banks and newer reinsurers have expressed interest in both capital market risks and actuarial risks in VAs • Living benefit rider reinsurance has increased the complexity of transactions	GMDB, GMIB, GLWB	

1. Fitch

VA GLWB Reinsurers – who are they??

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- Investment banks feel this is a risk they know well
  - Must be very comfortable managing the market risk associated with the living benefit
  - Generally are open to “some” aspect of P/H behavior risk and/or longevity risk
    - But this risk appetite varies considerably
  - Separate reinsurance entity ?? Some yes, some no

- Traditional Reinsurers
  - Generally more comfortable with “Actuarial” risks
  - Starting to consider options in this market

Principles of VA reinsurance

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	Principles	Description
1	Appetite for VA reinsurance is not homogeneous across markets	• Appetite for reinsurance of new business / in-force products varies across markets • Appetite for VA products (GMDB, GMIB, GLWB, hybrid products) varies across markets • Markets display heterogeneous appetite for reinsuring certain risks (e.g., actuarial, lapse, longevity, market, credit, etc.)
2	Segments of the VA reinsurance market are no longer dormant	• Cedents have recently been trying to reinsure the living benefit rider of new business, making VA portfolios closer to an asset management business, via collection of revenue sharing fees • In-force / block reinsurance is still an active market, driven by new market entrants and increasing equity levels
3	Rationale for reinsurance	• Mitigate balance sheet fluctuations as asset values change by transferring underlying risks of policies (not policies themselves) from ceding company's balance sheet to reinsurer's balance sheet
4	Presence of base contract makes reinsuring VA policy more palatable	• The base contract is the most profitable part of the VA contract, leading most reinsurers to demand the base contract M&E fees as part of reinsurance transaction
5	Separate account reserve and asset treatment	• Non-NAIC regulated entities require reinsurer to post statutory reserves on funds withheld or coinsurance basis with high quality assets held in a trust • Separate accounts reserves are reinsured on modified coinsurance basis (policies retained on cedent balance sheet but statutory requirements transferred to reinsurer) • Separate account assets are never reinsured
6	Cost of reinsurance varies considerably	• Pricing of reinsurance varies across reinsurers (e.g., reinsurance transactions can be structured with one-time ceding commission or periodic reinsurance premiums) • Whether tail protection is provided • Richness of product, product vintage and net amount at risk are primary drivers of reinsurance premiums

REINSURANCE OF
OTHER ASSET INTENSIVE PRODUCTS

- INDIVIDUAL LIFE
- LONG TERM CARE

Various Risks considered in Reinsurance of individual products

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QUESTIONS????

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