Multiple Insurer Approach to Retirement Income Guarantees

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Milliman

Milliman – Background

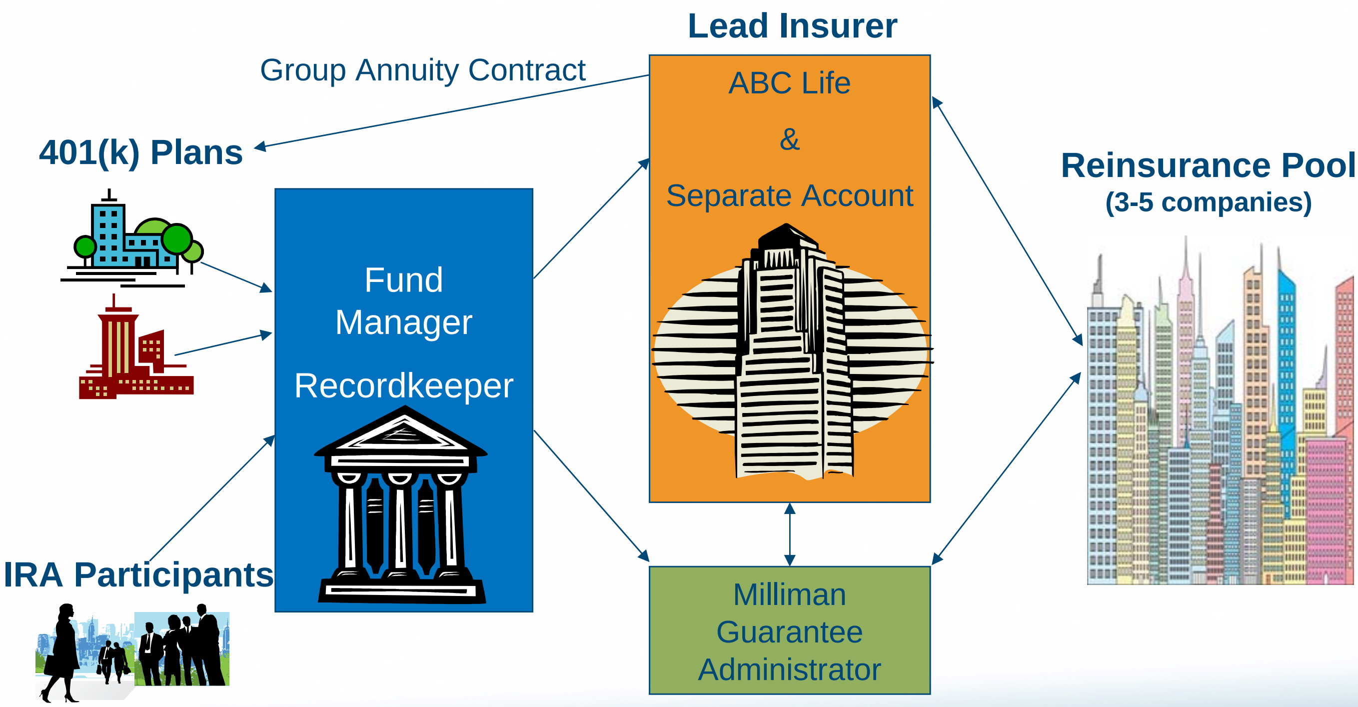
- Global independent actuarial consulting firm
  - 2,100 employees; 49 offices worldwide
- Financial Risk Management (FRM) Practice
  - Founded in 1998
  - Industry leader in risk management for retirement savings guarantees
  - 75 consultants with backgrounds in: Capital Markets, Technology, Quantitative Development, Actuarial
- Providing hedging services for over 35 major insurers
- Leading provider of risk management services to the life insurance industry
- Retirement Guarantee Network
  - Integrated technology, administration & investment advisory services to support guarantees in the 401(k), IRA, and retail markets

Reinforcing the Guarantee

RGN™ addresses the counterparty & financial risk management requirements of the large-plan market

1. Guarantees are backed by multiple insurers
2. Collateralization of guarantee fair value
3. Market risk is neutralized through industry-standard hedging techniques

Guarantee Program Structure



Guarantee Program Structure

- Fund Manager / Recordkeeper retains client-facing role
- Lead Insurer (ABC Life)
  - Writes the guarantee
  - Reinsures 50% of the risk to the Pool of reinsurers
  - Enters into a Group Annuity Contract with each Plan Sponsor
    - Plan participants with a guarantee have a certificate to the contract
  - Establishes a Separate Account
    - Collects premiums
    - Pays claims
    - Holds the hedges which support the guarantees
- Pool of 3 to 5 insurers / reinsurers assumes 50% of the risk from ABC Life via reinsurance treaties
- Assets covered by the guarantee stay in the 401(k) plans

Guarantee Program Structure – Cont'd

Collateralized Separate Account

- On a monthly basis:
  - Milliman calculates the fair value of the liability
  - Each insurer / reinsurer is responsible for funding its proportionate share of the Separate Account
- The Separate Account retains a portion of past profits to mitigate risk in the event of default of a participating insurer / reinsurer
- If an insurer becomes insolvent, they are removed from the Program and their share is assumed by the remaining insurers / reinsurers
  - Since the Separate Account is fully funded, they are not stepping into a loss situation

Guarantee Program Structure – Cont’d

- Milliman is the Guarantee Administrator
  - Execute the hedge transactions needed to support the guarantees
  - Determine mark-to-market & separate account funding requirements
  - Calculate premium & claim cash flows
  - Calculate the collateralized payments required from insurers / reinsurers
  - Calculate FAS133 & other reporting requirements for insurers / reinsurers
  - Conduct monthly meetings with ABC Life and the reinsurers to review financial performance, identify trends, etc.

Examples

Assumptions

- $1B in underlying guaranteed funds as of 1/1/2010
- Participant annual guarantee premium: 1%
- ABC Life (Lead Insurer) has 50% of risk
- Pool of 4 reinsurers has 50% of risk (12.5% each)

Example 1

- 1st qtr 2010: Market declines 5%

– Guarantee premiums	$ 2.5M
– Hedge gains	19.0M
– Assets in Separate Acct	$ 21.5M
– Fair value of guarantee	$ 20.0M
– Assets in Separate Acct	21.5M
– Profits to be released	$ 1.5M

- Profits released

– ABC Life: (50%)	$750,000
– Reinsurer A: (12.5%)	187,500
– Reinsurer B:	187,500
– Reinsurer C:	187,500
– Reinsurer D:	187,500
Total	$1.5 M

Example 2

- 1st qtr 2010: Market declines 20%

– Guarantee premiums	$ 2.5M
– Hedge gains	120.5M
– Assets in Separate Acct	$123.0M
– Fair value of guarantee	$ 125.0M
– Assets in Separate Acct	123.0M
– Required capital injection	$ 2.0M

- Required capital injection

– ABC Life (50%):	$ 1,000,000
– Reinsurer A (12.5%):	250,000
– Reinsurer B:	250,000
– Reinsurer C:	250,000
– Reinsurer D:	250,000
Total	$ 2.0 M

Summary

The approach relies on three basic techniques:

1. Guarantees are backed by multiple insurers
2. Collateralization of guarantee fair value
3. Market risk is neutralized through industry-standard hedging techniques

Feedback from large plan sponsors has been very favorable.

Questions

