

Contingent Deferred Annuities

Solvency & Risk Management Issues

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Summary Points

- The Contingent Deferred Annuity (CDA) design establishes a lifetime income floor for purchasers at or near retirement while still allowing them to take advantage of potential market returns. A CDA is essentially a stand-alone *guaranteed living withdrawal benefit*, thus providing many of the same benefits and sharing many of the same risks associated with the guaranteed living benefits issued as part of *variable annuity* (VA) contracts with living benefits.
- The issuance of CDAs necessitates strong, comprehensive risk management practices for insurers, with complementary regulatory oversight.
- The regulatory framework for GLWBs already in place is appropriate for CDAs:
 - The NAIC model laws for reserves and risk-based capital, Actuarial Guideline 43 (AG 43) & C3-Phase II (C3P2), explicitly cover GLWBs and CDAs. We believe that AG 43 and C3P2 provide appropriate methodologies for establishing CDA reserve and risk-based capital requirements.
 - Regulatory review of a company's risk management programs is important; we believe regulators are able to review insurers' risk management programs at time of policy form approval.
- To assist regulators in identifying CDA filings, all significant characteristics of CDAs should be highlighted in product filings and discussions with regulators.
- We encourage regulators to continue their work to increase their overall knowledge and comfort level with CDAs, and to resolve their regulatory concerns.



Product Design & Consumer Need

- CDA Basic Product Design
 - A stand-alone GLWB design
 - Covered Assets held outside the life insurance company
- Our review of nonforfeiture regulations supports the conclusion that paid-up nonforfeiture benefits are not required for CDAs. The premiums do not accumulate to determine a payout, but are in the nature of risk charges for a longevity contingency risk.
- CDAs, GLWBs and longevity annuities (deferred income annuities) all provide consumers with alternatives to secure a guaranteed lifetime income.



CDA Product Structure and Costs

- Like other annuities, CDAs can operate through various contractual structures:
 - Group fixed annuities issued to asset management firms or retirement plans
 - Individual customers / plan participants receive group participant certificates
 - Asset options, allocation requirements, and other terms are set forth in group annuity contract and certificates
 - Individual fixed annuities issued directly to customers
 - Separate contractual agreement would define the roles and responsibilities of the asset management firm
 - CDAs require insurers to manage the risks of funds not directly within their control. Regulators have experience regulating products with funds held outside the insurance company with synthetic GICs.
- To assist in identifying CDA products, all significant characteristics of CDAs should be highlighted in product filings and discussions with regulators.



CDA Product Structure and Costs

- A traditional Variable Annuity with a GLWB (VA/GLWB) has a more elaborate fee structure than a CDA:
 - Base annuity
 - M&E and administrative charges, which cover expenses associated with selling and administering the contract and contribution to reserve, capital and profit/risk margin.
 - Charges for specific VA contract benefits, such as guaranteed death benefit.
 - Rider
 - Fee covers cost of the guarantee (including cost of hedging and additional contributions to reserve, capital and profit/risk margins).
 - Fees, profit and revenue from the base annuity are available to cover the costs of the rider.



CDA Product Structure and Costs

- CDA design is a standalone GLWB-type benefit. CDA pricing considers the standalone nature of the benefit to determine an appropriate fee which covers:
 - Cost of guarantee
 - Cost of hedging
 - Expenses associated with selling and administering the contract
 - Contribution to reserve, capital and profit/risk margin
- Fees collected from the covered assets or from the relationship with the financial advisor are not available to cover the costs of the CDA.
- The CDA fee(s) cover the same relevant costs and margins as the aggregate VA/GLWB fee structure.



Risk Management for Insurers

- The risks to insurers issuing CDAs include:
 - Longevity Risk
 - Policyholder Behavior Risk
 - Market Risk
 - Operational Risk
- An insurer's exposure to these risks is similar for CDAs and GLWBs.
- With the exception of operational risk, insurers will generally follow similar risk management techniques for CDAs and GLWBs.



Risk Management – Longevity

- **Definition** - The risk that policyholders will live longer than expected.
- **How Managed by the Insurer** – Generally retained by the insurer and managed by product design, risk pooling and diversification. Monitored with economic capital, sensitivity and what-if survivorship analysis.
- **How Currently Regulated** – By reserve and risk-based capital requirements, which are responsive to changing mortality. Statutory reserves for CDAs are part of the company-wide actuarial opinion and supporting asset adequacy analysis.



Risk Management – Policyholder Behavior

- **Definition** – The risk that policyholders will behave differently than expected. Types of behavior include:
 - Lapse
 - Withdrawal amount & benefit utilization timing
 - Asset Allocation selection
- **How Managed by the Insurer** – Generally retained by insurer and managed by product design, risk pooling and diversification. Monitored with economic capital, sensitivity and what-if policyholder behavior analysis.
- **How Currently Regulated** – By reserve and risk-based capital requirements, which are responsive to changing behavior. Statutory reserves for CDAs are part of the company-wide actuarial opinion and supporting asset adequacy analysis.



Risk Management – Market Risk

- Benefits and reserves for CDAs are directly affected by the fund performance of the underlying investments, creating market risk exposure for the insurer.
- Market volatility creates two types of risk exposure:
 - Benefit Payment Risk
 - Hedge Effectiveness Risk (for companies hedging CDAs)



Risk Management – Benefit Payment Risk

- **Definition** –Benefit Payment risk is the risk that the value of the guarantee fluctuates as the market goes up and down.
- **How Managed by the Insurer** – Benefit payment risk is primarily managed with a capital markets hedging program. Hedging involves the purchase of different derivative contracts and involves entering into offsetting risk positions whose value is expected to offset the changes in the liability being hedged. Specific hedging strategies are influenced by the insurer's choice of the hedging objective, e.g., GAAP earnings, statutory capital, economic capital, or some other objective. This risk is also managed through product design, the fund choices offered to consumers, and distribution or other limits established through the company's ERM program.
- **How Currently Regulated** – By reserve and risk-based capital requirements, which includes a credit for hedging strategy, the level of credit depending on regulatory definitions.



Risk Management – Hedge Effectiveness

- **Definition:** Hedge effectiveness risk is the risk that the hedging strategy will not perform as expected. Types of risk include basis risk (mismatch between the underlying funds and the hedge index), correlation risk (risk of loss arising from a change in the historical relationships, or correlations, between assets), and counterparty risk (default risk).
- **How Managed by the Insurer:** An insurer will monitor hedge effectiveness through frequent hedge attribution analysis and will modify hedging practices, as needed. Other risks from hedging execution will be managed through trading controls, counterparty arrangements, and other audit and risk governance practices.
- **How currently regulated:** Some states review hedging operations in the examination process. A “Clearly Defined Hedging Strategy” (per AG 43 and C3P2) must be in place for an insurer to take credit for hedging in reserve and risk-based capital calculations, and the reserve and risk-based capital guidance places limits on the assumptions that an insurer can make for hedge assets and hedge effectiveness.



Risk Management – Operational

- Operational risk is the risk that company operations that relate to CDAs will not be executed as expected.
- Operational risk for CDAs can be split into two major categories:
 - Management of third party issues
 - Other operational risks (e.g., expense, distribution) that apply to all annuity products would be managed in a similar fashion for CDAs.



Risk Management – Third Party Issues

- **How Managed by the Insurer** – Third-party issues are managed through a complete description of the rights and roles of the parties involved in order to ensure the necessary activities are carried out by the third party.
- **How Currently Regulated** – States may inquire into third-party requirements before product filings are approved (similar to requirements for Synthetic GICs)
- **Comparison to GLWBs** – Some risks may appear different due to the use of third party assets, but these risks can be managed effectively with the proper third-party agreements and careful ongoing management.



Risk Management – Third Party Issues

- Insurance company contractual requirements associated with third party ownership of assets include:
 - Requiring data needed to value liabilities and execute hedging programs
 - Requiring that the risk/return profile of covered assets remains within insurer tolerance (e.g., volatility and allocation characteristics of covered assets are similar to those of GLWBs)
- Insurance companies will typically monitor compliance of the third party asset manager relationships by conducting periodic audits; insurer will establish escalation procedures and will terminate the contract with the third party provider if necessary.



How do Insurers Handle the Risk of a Large Number of CDA Benefits being Triggered at One Time?

- The concern is that poor market performance could result in a significant amount of claims for the insurer, raising solvency concerns.
- With an annuity product, the amount of claims will be paid out periodically, rather than as a lump sum payment as would be the case with death benefits.
- The risk is managed by holding reserves and risk-based capital, along with a properly executed hedging strategy where the hedge contracts will pay off, offsetting the claim payments.
- Even with sub-optimal hedge effectiveness, the impact of a market downturn on an insurer's solvency is difficult to predict. The triggering of a large amount of CDA benefits is dependent upon a series of events all being aligned: (1) A concentration of policyholders of similar issue age and similar covered funds; (2) policyholders who have survived and are in the withdrawal stage; and (3) all covered funds are exhausted (due to withdrawals and/or by continued poor market performance).



Reserves and Risk-Based Capital

- **Reserves** - Statutory reserve requirements for CDAs are covered in AG 43, as is the case for GLWBs
- **Risk-Based Capital** – Statutory risk-based capital requirements for CDAs are covered in C3P2, as is the case for GLWBs



Can AG 43 and C3P2 be used to Determine Reserves and RBC for CDAs?

- AG 43 and C3P2 are principle-based approaches (PBAs), rather than rules-based, prescriptive approaches, designed to accommodate general product types.
- AG 43/C3P2 do not require new standards for a new product, but rather allow the existing methodology to be applied to the new product.
- The regulatory framework for reserve and risk-based capital requirements for CDAs exists with AG43 and C3P2.



Reserves/Risk-Based Capital Under AG 43/C3P2

- Under AG43 the insurer is required to set reserves based on the greater of:
 - Projected future cash flows, including utilization of benefit options, across a wide range of scenarios at each valuation date, which take into account the assets (i.e., hedges) backing the guaranteed benefits
 - Projected cash flows under a “standard scenario” of prescribed conservative assumptions to ensure that a minimum level of reserves are held to support the liability.
- Minimum risk-based capital requirements under C3P2 is developed using a similar methodology
- AG43/C3P2 calculation is based on an aggregate revenue and benefit stream, meaning that the cash flows for VA/GLWBs will reflect the characteristics of both the base VA contract and the GLWB rider. CDA reserves may be different from GLWB reserves due to GLWB reserves giving recognition to revenues and benefits from the underlying VA, while these revenues and benefits do not exist with a CDA.



Can AG 43 and C3P2 be used to Determine Reserves and RBC for CDAs?

- We believe that AG 43 and C3P2 provide appropriate methodologies for establishing CDA reserve and risk-based capital requirements.
- As with any product, it is important to continue to monitor the experience of this product.



Concluding Observations

- A CDA is essentially a stand-alone *guaranteed living withdrawal benefit*, thus providing many of the same benefits and sharing many of the same risks associated with the guaranteed living benefits issued as part of *variable annuity* (VA) contracts with living benefits.
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Concluding Observations

- CDAs provide an alternative for consumers to secure a guaranteed lifetime income. We encourage regulators to continue their work to increase their overall knowledge and comfort level with CDAs, and to resolve their regulatory concerns.
- Both insurers and regulators need resources, knowledge, and training in risk management practices in order to manage and regulate CDAs and GLWBs.
- The CAWG is willing to work with the NAIC to further these goals.



For More Information

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