Introduction

- Summary
- CDA Product Overview
- CDA Product Life Cycle
- Consumer Protection
- Solvency
Contingent Deferred Annuities (CDAs) offer protection similar to that provided by Guaranteed Lifetime Withdrawal Benefits (GLWBs) and Guaranteed Minimum Income Benefits (GMIBs)

The insurance industry has demonstrated the ability to manage the risks associated with CDAs:

- Financial / Actuarial Risks of CDAs are similar to those managed for GLWBs/GMIBs
- Operational Risk of CDAs is similar to that managed for Synthetic Guaranteed Investment Contracts (GICs)

Today’s three pronged regulatory oversight and requirements of State Insurance Regulators, SEC, and FINRA provide adequate consumer safeguards for CDAs

U.S Insurance Financial Solvency Regulatory Framework & Enterprise Risk Management are appropriate and sufficient for CDAs
CDA Product Overview
Most commonly a living benefit added to mutual funds or Separately Managed Accounts (SMAs)

Protection is similar to that provided by GLWBs and GMIBs

Individual begins taking annual income amount – a percentage of the highest locked-in daily/anniversary value of the account

If Covered Asset Account value reaches zero, insurer assumes obligation to continue annual income amount payments for life or joint lives

Primary distinction between a CDA and a Variable Annuity with a GLWB / GMIB is that the protected assets are held external to the issuing life insurer
Contingent Deferred Annuities

How it works

Provides a guaranteed basis for lifetime income based on the value of the covered assets administered at partner’s platform

Covered Asset Account Value

Basis for Lifetime Income
# Products Features and Benefits

<table>
<thead>
<tr>
<th></th>
<th>VA GLWB / GMIB</th>
<th>CDA</th>
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<tbody>
<tr>
<td><strong>Primary consumer need addressed:</strong></td>
<td>▪ Longevity risk protection</td>
<td>▪ Longevity risk protection</td>
</tr>
<tr>
<td><strong>Guarantees:</strong></td>
<td>▪ Lifetime income benefit</td>
<td>▪ Lifetime income benefit</td>
</tr>
<tr>
<td></td>
<td>▪ Death benefit</td>
<td>▪ No death benefit (but protected assets remain in owner’s estate)</td>
</tr>
<tr>
<td><strong>Fee structure</strong>*:</td>
<td>▪ Base annuity M&amp;E&amp;A fee</td>
<td>▪ CDA product fee</td>
</tr>
<tr>
<td></td>
<td>▪ Annual administrative fee</td>
<td>▪ Cancellation fee may apply</td>
</tr>
<tr>
<td></td>
<td>▪ Contingent Deferred Sales Charge</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ GLWB rider fee</td>
<td></td>
</tr>
<tr>
<td><strong>Underlying assets:</strong></td>
<td>▪ Client selects among funds and asset allocation models made available by insurance company</td>
<td>▪ Client selects among funds and asset allocation models which meet insurance company guidelines for permitted asset classes and investment types</td>
</tr>
<tr>
<td></td>
<td>▪ Held on insurance company Separate Account platform</td>
<td>▪ Held on asset manager platform</td>
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</tbody>
</table>

*Fee structure of insurance product only. Other fees may apply for investment management and/or advisory services, for both VA and CDA products.*
CDA Product Life Cycle

- Consumer Protections
- Solvency
# Life Cycle: Consumer Protections

<table>
<thead>
<tr>
<th>Pre-sale / Point of sale</th>
<th>Post-sale</th>
<th>Post-sale</th>
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<tbody>
<tr>
<td></td>
<td><strong>Accumulation and withdrawal phases</strong></td>
<td><strong>Annuity payments phase</strong></td>
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<tr>
<td></td>
<td>UPDATED</td>
<td></td>
</tr>
<tr>
<td>Product is state approved/ SEC registered (if applicable)</td>
<td>Updated prospectus delivery</td>
<td>Client assets are exhausted and investment product ceases</td>
</tr>
<tr>
<td>Agent is authorized to sell (insurance licensing &amp; FINRA registration, if applicable)</td>
<td>Quarterly / Annual Statement delivery</td>
<td>Annuity certificate continues and payments from insurance company General Account continue the income stream for life</td>
</tr>
<tr>
<td>Agent training requirements</td>
<td>Consumer begins taking annual income amount from covered asset account</td>
<td>Updated prospectus delivery</td>
</tr>
<tr>
<td>Product marketing material authorized under insurance law and FINRA guidelines</td>
<td></td>
<td></td>
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<tr>
<td>State Insurance and FINRA suitability review</td>
<td></td>
<td></td>
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<tr>
<td>Prospectus / State Disclosure</td>
<td></td>
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<tr>
<td>Annuity Buyer’s Guide, if applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery of contract / certificate</td>
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**Prior to annuity payments phase, consumer protections associated with the covered asset account continue to apply.**
**Consumer Protections**

*Existing protections related to covered assets – Separately Managed Account example*

- **Investment Advisor**
  - Duty of Investment Advisor:
    - Suitability Determination, Profile, Recommend, Fulfill, Monitor
  - Specific asset management programs with specific rules:
    - Form ADV
    - Investment policy statements for each portfolio/money manager

- **Partner Broker-Dealer Firm**
  - Protections afforded to all brokerage clients
    - SEC Rule 15(c)3.3 (Customer Protection/Segregation)
    - FINRA Oversight
  - Securities Investor Protection Corporation (SIPC) coverage

- **Routine Regulatory Exams of the broker-dealer and insurer by State Insurance Departments, SEC, and FINRA.**
Life Cycle: Solvency

Pre-sale / Point of sale
- Insurance company establishes investment guidelines and restrictions on the assets to which protection is applied pre-sale
- Product design and pricing considers risks and costs associated with the product, and limits exposure to certain risks (longevity, behavioral, and capital markets) pre-sale
- Insurance company assumes management of financial and operational risks at point of sale

Post-sale Accumulation and withdrawal phases
- Statutory reserve and capital requirements for inforce contracts
- Management of financial risks through various activities, including hedging programs
- Management of operational risk through various activities, including monitoring and enforcing adherence to investment guidelines and restrictions

Post-sale Annuity payments phase
- Hedge activities cease and hedge assets are released
- Statutory AG 43 reserve is released and a fixed immediate annuity reserve is put up
- Remaining risk in annuity payments phase is primarily longevity risk
- Capital markets risk associated with interest earned on General Account reserve assets remains

Enterprise Risk Management
Solvency

- **U.S. Regulatory Solvency Framework**
  - Seven principles of regulatory solvency framework
  - Statutory Reserve and Capital Guidance

- **CDA Risks and Risk Management**
  - Financial Risk Profile
  - Protecting Outside Assets

- **Enterprise Risk Management**
  - Risk Capacity
  - Own Risk & Solvency Assessment (ORSA)
Regulatory oversight of insurer solvency occurs within a comprehensive framework

Seven principles of regulatory solvency framework for insurance:

- Regulatory Reporting, Disclosure, and Transparency
- Off-site Monitoring and Analysis
- On-site Risk-focused Examinations
- Reserves, Capital Adequacy, and Solvency
- Regulatory Control of Significant, Broad-based Risk-related Transactions/Activities
- Preventive and Corrective Measures, Including Enforcement
- Exiting the Market and Receivership
Statutory reserve and capital guidance is a key principle within the overall regulatory solvency framework for insurance.

For CDAs, statutory reserve and capital guidance is provided by Actuarial Guideline 43 and Risk Based Capital C-3 Phase II.

- Scope includes “guarantees similar in nature to GMDBs or VAGLBs, even if the insurer does not offer the mutual funds or variable funds to which these guarantees relate.”
- Developed through thoughtful and extensive collaborative input from the American Academy of Actuaries, industry groups, and regulators.
- Considers the nature of the risks covered in a comprehensive, consistent, and actuarially sound way.
- Incorporates detailed guidance for companies in performing the calculations and communicating the results (further detail in following slide).
- RBC C-3 Phase II effective 12/31/2005; AG43 effective 12/31/2009.
Calculations based on Conditional Tail Expectation (CTE)

- CTE is a statistical measure which provides information about the tail of a distribution. $CTE(x)$ is equal to the average of the worst $(100-x)\%$ of results
  - AG 43: Reserve based on CTE 70, the average of worst 30% of scenario results
  - C-3 Phase II: Risk-based capital based on CTE 90, the average of worst 10% of scenario results

Stochastic scenarios calibrated to NAIC RBC C-3 Phase II criteria

- A minimum reserve & capital requirement based on the Standard Scenario, which includes prescribed assumptions for mortality, policyholder behavior, investment returns

- Hedging can be reflected only if a Clearly Defined Hedging Strategy, certified by a financial officer of the company, is in place; the assumed Effectiveness Factor can be no more than 70%

- Appointed Actuary opines annually on reserve adequacy and compliance with Actuarial Standards of Practice
CDA Risks and Risk Management Strategy

Financial / Actuarial Risk
- Longevity
- Behavioral
- Capital Markets

- Nature of risk – similar to VA GLWBs / GMIBs
- Risk management activities – similar to VA GLWBs / GMIBs

Operational Risk
- Outside assets

- Nature of risk – similar to Synthetic GICs
- Risk management activities – similar to Synthetic GICs
CDAs have similar sensitivity to Longevity Risk due to similarities in the pools of people insured and similar age requirements under the product.

In both GLWB/GMIBs and CDAs, Longevity Risk is managed through:

- Product design (richness of income guarantee, death benefit)
- Age requirements for both product issuance and income commencement
- Risk pooling (law of large numbers)
- Potential offsetting longevity and mortality risk across product lines

The financial risk profile of a CDA is similar to a GLWB/GMIB
The financial risk profile of a CDA is similar to a GLWB/GMIB

CDAs have similar sensitivity to Behavioral Risk due to similarities in the lifetime income guarantee structure and similarities in expected use of the product.

In both GLWBs/GMIBs and CDAs, Behavioral Risk is managed through:

- Product design (features which increase predictability of behavior)
- Contract provisions which protect against institutional assignments
- Risk pooling (individual behavior will be driven by personal circumstances and decisions)
- Significant experience monitoring for setting/refining behavioral assumptions used in pricing, reserving, and hedging
CDAs have similar sensitivity to Market Risk due to similarities in the character of the underlying assets, similar control over assets (but executed through slightly different processes), and similar hedge assets and governance.

In both GLWBs/GMIBs and CDAs, Market Risk is managed through:

- Asset allocation restrictions
- Investment type restrictions
- Product / fund embedded risk management features
- Capital markets hedging programs

The financial risk profile of a CDA is similar to a GLWB/GMIB
CDA Risks and Risk Management: Management of Outside Assets

<table>
<thead>
<tr>
<th></th>
<th>VA with GLWB/GMIB</th>
<th>Synthetic GIC</th>
<th>CDA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Location of Asset</strong></td>
<td>▪ Insurance company Separate Account platform</td>
<td>▪ Externally-held assets (typically held in trust of a group retirement plan)</td>
<td>▪ Externally-held assets (typically held in mutual funds, managed accounts, or group retirement plans)</td>
</tr>
<tr>
<td><strong>Character of Asset</strong></td>
<td>▪ Broadly Diversified and “Hedgeable”</td>
<td>▪ Specific asset type and quality</td>
<td>▪ Broadly Diversified and “Hedgeable”</td>
</tr>
<tr>
<td></td>
<td>▪ Established by Insurer</td>
<td>▪ Established by Insurer</td>
<td>▪ Established by Insurer</td>
</tr>
<tr>
<td><strong>Operational Support</strong></td>
<td>▪ Fully integrated into technology</td>
<td>▪ Fully integrated into technology</td>
<td>▪ Fully integrated into technology</td>
</tr>
<tr>
<td><strong>Oversight</strong></td>
<td>▪ Comprehensive business systems</td>
<td>▪ Comprehensive business systems</td>
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</tr>
</tbody>
</table>

- The insurance industry has demonstrated its ability to control the character of the assets to which it applies protection, through administrative platforms that are owned by the insurer as well as those owned by a third party:
  - VA Separate Account investment options include both proprietary funds and externally-managed subaccounts
  - Synthetic GICs provide guarantees on assets not owned or managed by the issuing insurer
- The business system, technology, and oversight are effective in managing the risks associated with outside assets
- Every capability that exists in the annuity business to manage that risk exists in the CDA business model
Enterprise Risk Management

- Enterprise Risk Management
  - Risk Capacity
  - Own Risk & Solvency Assessment (ORSA)
Enterprise Risk Management: 
ERM & Risk Capacity

- ERM is a framework for strategic decision making, risk management activities and governance
  - Insurers have ERM practices in place to identify, measure, and manage risk exposures across all of their activities

- The American Academy of Actuaries recommends that insurers issuing CDAs have robust ERM practices in place

- Risk Capacity
  - A key consideration within an insurer’s ERM framework is risk diversification and risk capacity
  - Diversity in business mix provides for offsetting risk exposures
  - “Monoline” enterprises take on significant risk concentration – regulators would have the ability to disallow filings by monoline CDA issuers
Enterprise Risk Management: Own Risk & Solvency Assessment (ORSA)

- ORSA is one element of a broader ERM framework
- ORSA Summary Report will be supported by internal risk management materials and more detailed underlying documentation

At a minimum ORSA Summary Report should cover:
- Description of risk management framework
- Assessment of risk exposures
- Group risk capital assessment
- Prospective solvency assessment

Goals:
- Foster an effective level of ERM at all insurers
- Provide a group-level perspective on risk and capital

Source: Invotex Group “ORSA – Parsing the Guidance for Regulators and Insurers” May 2012
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Closing Points

- Individuals face growing uncertainty and challenges impacting their future income and expenses in retirement
- Traditional sources of guaranteed retirement income (e.g., Social Security and defined benefit) are continuing to decline
- A growing burden rests on individuals to save for retirement and manage the spend down phase
- CDAs can expand the opportunity for more individuals to overcome these retirement income challenges
- Industry remains committed to assisting regulators on evaluating the adequacy of existing laws and regulations applicable to the solvency and consumer protections for CDAs