

AVIVA

Payout Annuities

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04/04

What is a Structured Settlement?

- Used to settle Personal Physical Injury or Workers' Comp Claims
- Immediate Annuity exempt from 72(t) limitations
 - Payments do not have to be substantially level, start within 13 months, start after age 59.5
 - They can be anything, and frequently are
- Payments must be "fixed and determinable" at issue
- Payments are tax-free, not tax-deferred
- Almost all cases are fixed annuities, not variable

Benefits of a Structured Settlement

“Win, Win, Win”

Benefits to the Annuitant

- ✓ Prevents Dissipation of funds
- ✓ Can guarantee an income for life
- ✓ Can be contoured to needs of the annuitant
- ✓ Provides tax-free income

Benefits to the Defendant

- Can save settlement money
- If case is assigned, can write-off the liability
- Does not have to administer periodic payments

Benefits to the Life Company

- Long-term known liabilities
- No Disintermediation
- Liabilities offset risk of deferred annuities
 - deferred annuities gain value when interest rates drop
 - immediate annuities gain value when interest rates rise
 - having strong books of both types of annuities helps significantly in scenario testing
- Life Insurance block may help offset unanticipated mortality improvement

Structures Market

- Many companies writing in house (from their own P&C sister company)
- About 12 companies writing outside in significant volume
- 14 companies accounted for over 80% of market over last 4 years
- Approximately 600 producers nationwide, most of which write with all of the 12 major players
- About \$6B in premium/yr

Structures Market Issues

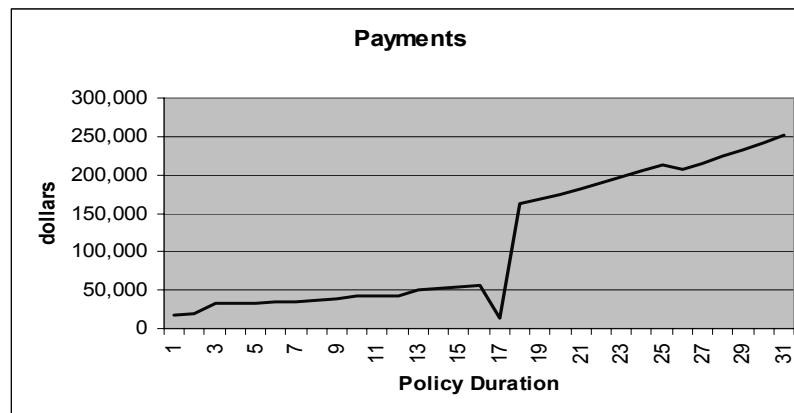
- Virtually all cases are spread sheeted among eligible life markets
- Broker perception of service is a key factor
- Name recognition helps, decision maker often not in a position to research companies
- Commissions not a driving force
- Ratings, Ratings, Ratings

Structures

High Entry Barriers

- Sophisticated Admin System required
 - ⇒ More complex than SPIA's
- Underwriting Knowledge
 - ⇒ Industry wide, approximately 25% of assets are supporting substandard cases
- Legal support needed
- Assignment company needed
 - ⇒ IRC 130(c) allows defendant to assign liability. Life companies set up assignment companies to take it
- Many defendants (e.g., P&C companies) have approved lists, which vary in requirements from fairly simple to next to impossible

An Actual Policy



Complexities

- Rated age
- Annuitant was under 10 years old at issue. Payments could be made for 100 years
- 77 different payout streams

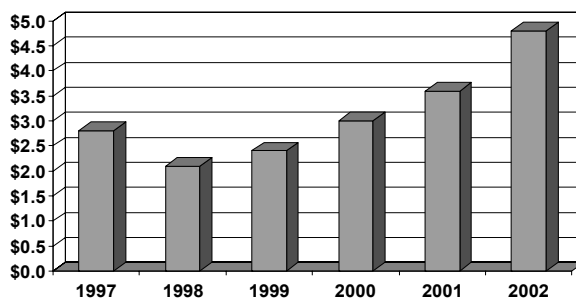
Structures High Exit Barriers

- Have to administer cases for possibly another 100 years
 - Only alternative is to sell block

SPIA Market

Size of fixed immediate annuity market is smaller than structures, but many annuity companies sell SPIA's

Sales in Billions



Source: LIMRA International 2003

SPIA Market Issues

- ↗ Sales opened to all licensed life agents
- ↗ As Baby Boomers mature, market is growing
- ↗ VA possibility for the more risk tolerant

SPIA's Low Entry Barriers

- Most companies already have an admin system that can handle periodic payments for their annuitizations
- Underwriting possible, but not required

SPIA's Medium to High Exit Barriers

- Have to administer cases for possibly another 100 years, although most cases sold to annuitants > 65
 - Only alternative is to sell block

Actuarial Guidelines that Specifically Affect Payout Annuity Reserves

- Guidelines IX-A and IX-C
 - Relates to reserving substandard structures and other immediate annuities
- Guideline IX-B
 - Relates to reserving non-level payouts

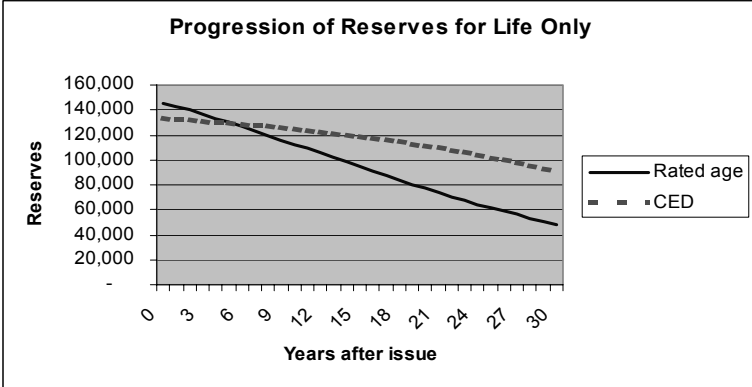
Guideline IX-A

- Effective starting 1990
- Covers settlements from tort settlements, workers' comp, and LTD claims where rated age is used
 - ⇒ These were the only immediate annuity cases that were allowed to have reserves calculated on a substandard basis until IX-C was adopted
- Reserves must be calculated using Constant Extra Death method
 - ⇒ K is calculated such that e_x (calculated using q_x 's with K added to each q) = e_{x+r} (calculated using standard q 's)
 - ⇒ Result is that reserves grade to standard by the end of the mortality table

Guideline IX-A Effect on Pricing

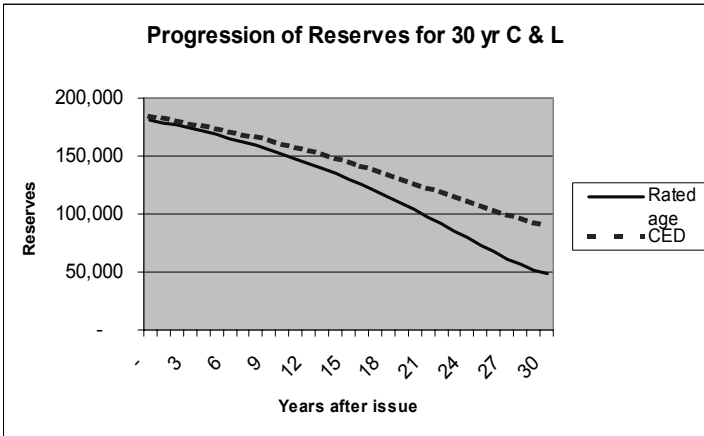
- In most cases, initial reserves are higher under IX-A
- In all cases, statutory profits emerge more slowly
- ROI is reduced
- PV Profit as % of PV of Premium is reduced

Guideline IX-A



Assumptions: Male issue age 40 rated to 60
 Payments = \$1000/mo annuity-immediate
 Interest rate = 5.5%
 Mortality table = 83 IAM

Guideline IX-A



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Guideline IX-C

- Effective 2003
- Expands rules of IX-A to other Immediate Annuities, although some differences
 - The reserves cannot be less than would have been calculated using the rated age as the actual age with no rate up
 - The mortality impairment must be at least a 25% reduction in e_x
 - Under 2000 IAM, translates to a 9 year rate up at age 55 and 5 years at age 80

Guideline IX-B

Requires that certain Immediate Annuity cash flows be reserved more conservatively

1. Policies that do not satisfy definition of an annuity are “carved out” (annuity = payments at least annually for at least 5 years in a row)
2. Cash Flows that do not satisfy either the 110% or 115 % test (company choice) are “carved out”

Guideline IX-B

- 115% test: Seriatim
 - Each year's annual cash flow is examined and any portion of the policy's cash flow that is greater than 110% of the prior years' is carved out
- 110% test: Aggregate for all policies issued in a calendar year
 - Each year's annual cash flow is examined and any portion of the cash flow that is greater than 110% of the prior years' is carved out
- Company's choice to test with or without mortality

Guideline IX-B

- Cash flows that are not carved out are reserved using the interest rate corresponding to the length of deferral between issue and time of first payment
- Cash flows that are carved out are reserved at the interest rate corresponding to the length of deferral between issue and time of payment

Alternative Method Within IX-B

- Calculate aggregate reserves for an issue year without IX-B
- Recalculate aggregate reserves discounting all liabilities more than 20 years out at the Plan Type A rate for policies deferred more than 20 years
- Solve for $x\%$ such that discounting all payments in the first 20 years at x results in the same starting reserve
- Keep x constant through life of block
- Results in lower reserves at first, but they soon surpass results from 115% or 110% test

Life Annuity Purchased to Pay Life Policy Premium

- Often marketed as creating money for policy holder by taking loan to buy SPIA
- If both sold by same company, little risk to Insurer. Policyholder tax implications? Is there a life policy?
- Mortality assumptions underlying two products are different. One is wrong
- Mortality risk magnified if preferred mortality used for life policy and standard mortality used for annuity
 - Possible arbitrage for policy holder