Life Settlements

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Agenda

- Introduction to the secondary market
- Valuing policies
- Impact on the life insurance industry

Introduction to the Secondary Market

Life Settlement

- Sale of an existing life insurance policy to a third party, typically an institutional investor, for an amount greater than the underlying cash value of the policy
- Traits of a typical candidate
  - Impaired (but not terminal)
  - Age 65 or older
  - Life expectancy of 6 to 11 years
  - Large face amount ($1 million+)

Premium Financing

- Sometimes referred to as “Investor Owned Life Insurance (IOLI)” or “Stranger Owned Life Insurance (STOLI)”
- Inherent concept is similar to that of a life settlement, with the following general distinctions:
  - Investor, via a broker or other third party, may initiate the application of a life insurance policy through a prospective insured
  - A loan is made to cover at least the first two-five years of premium
  - After the loan period, the insured is given several options:
    - — Retain the policy, after paying back the initial loan plus interest and fees
    - — Default on the loan, possibly sharing in any gain derived from selling the policy into the secondary market

Life Insurance/Life Annuity Contract ("LILAC")

- A life insurance contract and lifetime payout annuity are taken out on the same life
- Owner is typically a charity and recipient of a portion of the death benefit
- A loan is established to pay annuity premium, with annuity payments set to cover loan interest plus the life premium
- Unlike life settlement or premium financing, typically involves unimpaired lives
- Effectively life/annuity arbitrage, taking advantage of underlying mortality assumption discrepancy between the life and annuity contract
- No longer common

Drivers of the market

Life Settlements

- Insureds with reduced life expectancies may have a higher economic value than the policy's underlying cash value
- Individuals in the U.S. are living longer, thus potentially outliving the usefulness of their life insurance policies
  - The target market for settlements (i.e., individuals above age 65) is expected to grow by 90% over the next 25 years
- Decline in interest rates has led to lower cash values than originally illustrated
- Broker commissions

Premium Financing

- Free or low-cost insurance to insureds
- Lack of asset collateralization
- Broker commissions

Products with appeal in the secondary market

- Universal life (80-90% of policies transacted)
  - Single life or joint
  - With or without extended no-lapse guarantees
- Convertible term
- ROP term
- Whole life

Market participants

Core participants

- Funding source
- Settlement provider
- Medical underwriter
- Attorney
- Servicer & tracking agent
- Broker
- Policyholder

Secondary participants

- Reinsurer
- Rating agency
- Monoline

Valuing Policies

The key driver of policy value is the life expectancy estimate ("LE")

- The LE is typically based on a mortality rating applied to a standard mortality basis
- The mortality rating is derived by the underwriter using life insurance underwriting processes
  - Typically derived using a system of debits and credits
  - Generally expressed as a percentage of standard where standard is 100%
- The table used for the standard mortality basis varies across underwriters
  - Until recently, most underwriters used a table based on the 2001 Valuation Basic Table ("2001 VBT")
  - Many underwriters have moved to, or are planning to move to, 2008 VBT
  - Select/ultimate vs. ultimate - differing opinions exist as to the appropriate duration to move to ultimate mortality
  - Some underwriters include a provision for future mortality improvement and/or selection factors in the early durations

Life expectancies (months): 2008 VBT vs. 2001 VBT, male non-smoker rated 100%

	Issue Ages				
	65	70	75	80	85
2001 VBT	239.5	199.5	165.7	127.7	91.9
2008 VBT	262.8	216.1	172.7	132.1	91.4
% change	9.7%	8.3%	4.2%	3.4%	(0.5)%

The same mortality rating applied to 2008 VBT will generally create longer LEs

Generally, LE estimates continue to increase

- A portfolio of approximately 100 lives originally underwritten in 2005 were re-rated (i.e., no new medical information was obtained) by the same underwriter in 2007 and resulting LEs were approximately 8 months longer than equivalent LEs rolled forward from the original estimate
- One major underwriter indicated that its mortality ratings were 20% to 30% lower than what they estimated five years ago; one reason given was a lack of experience underwriting impaired lives at that time
- Another major underwriter recently acknowledged prior LEs were inaccurate, and has recently changed its methodologies, resulting in LEs that are approximately 25% higher
- The evaluation criteria used by underwriters are proprietary, constantly evolving, and exposed to little formal industry scrutiny
  - However, the underwriters are continually being evaluated by investor groups

Mortality variance can come from two general sources

Sources of Mortality Variance

Mortality Volatility Risk	Mis-estimation Risk

▪ Standard random fluctuation in mortality
  ▪ Given the limited number of lives in a portfolio, this fluctuation may be material
▪ Fluctuation in population mortality due to various environmental factors
▪ Fluctuation due to catastrophic events
  ▪ A cure for cancer would be a catastrophic mortality event for life settlements
	▪ Mis-estimation of mortality rating
	▪ Mis-estimation of standard mortality basis
	  ▪ Both initial level and mortality slope

There are two common approaches investors use to value policies

A. Apply a fixed mortality rating received from an underwriter to an independent mortality curve
   - The LE will vary based upon the chosen curve
   - Assumes mortality rating and table are independent

B. An alternative, but more common industry approach is to rely on the LE estimate provided from the underwriter, as opposed to the mortality rating
   - The LE is then calibrated to a chosen mortality curve
   - This approach results in a much tighter range of expected profit results across various curves, since only the timing of deaths is impacted

Premium finance can be thought of as a zero sum game

- Leverage generally emerges from 3 sources of carrier pricing:
  - Mortality
  - Persistency
  - Premium pattern
- Relative weight of each source will vary by carrier and product; however, some component of mortality leverage is generally necessary in order for the secondary market investment to meet investors' IRR requirements

Impact on the Life Insurance Industry

The secondary market has impacted life insurance carriers in a variety of ways

- Increased sales at older ages
- Experience may differ from assumptions used in pricing
  - Better persistency
  - Mortality antiselection
  - Reduced overfunding of UL policies
  - Higher number of term conversions
- Potential for fraud

Capital market influence

- In recent years the capital markets have been paying increased attention to the life insurance industry
  - XXX/AXXX securitizations
  - Life settlements
    - — Investors are always seeking a new asset class … especially one with a lack of correlation with existing investments
- Upside:
  - Additional sources of capital (e.g., life insurance securitizations)
    - — Less of an upside in current, post-credit crunch market
  - Longevity indices allow investors to ‘bet’ on mortality or potentially use as a hedging tool
    - — Significant basis risk exists
- Downside: arbitrage opportunities in pricing can be exploited

The insurance industry is now well aware of the secondary market and many have taken action

- Increased focus on pricing at older ages
  - Mortality
    - — Increased focus on mortality at older issues ages
  - Lapse
    - — Lower levels of assumed lapses used in pricing
  - Funding levels
    - — Increased focus on minimum funding scenarios
- Adoption of stronger underwriting procedures for insureds over age 70
- Many have attempted to identify and deter investor-owned life insurance cases
  - Closer monitoring of producers
    - — Include supplement with application asking both applicant and producer to sign confirmation that applied-for policy is not being purchased with intent to re-sell
  - Restrict change of ownership
- Some direct carriers have recently taken an active role in the secondary market

Anecdotal evidence shows that many carriers are still open to accepting premium financed cases, under certain conditions