

Life settlement

Yesterday, Today and Tomorrow

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Introduction to life Settlements: a Market Primer

What will you do with an unwanted and/or unaffordable life insurance policy?

Life settlement: a brief history

- ▶ 1911: Grigsby v. Russell, 1st legal case involv. life settlement
 - ▶ decision: life policy granted characteristics of private property
- ▶ 1980s: outbreak of AIDS, patients sold policies for quick bucks
 - ▶ supply: beneficiaries (usually their parents) not in need of money, funds to pay end of life expenses desired – policies not worth keeping
 - ▶ demand: short life expectancy – investment of high value
 - ▶ trading policies from the terminally ill: viatical settlement
- ▶ 1999: Coventry First LLC carried out 1st non-viatical settlement

The mechanics of life settlements

The life insurance markets

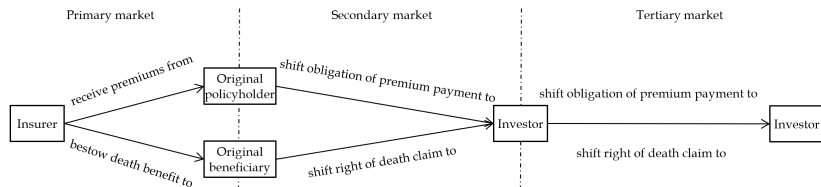


Figure 1: Dynamics of life insurance submarkets

1. Primary: **Insurers** issue policies on **insureds** to **policyholders**
2. Secondary: **Policyholders** sell policies to **investors**
3. Tertiary: **Investors** trade policies between each other

Life settlement parties

Sell side

- ▶ **Policyholders** own the policies and pay premiums to keep their policies in force.
 - ▶ can be individual, trust, or corporation.
- ▶ **Life insurance agents** advise policyholders on their choice of policy and in some cases facilitate the settlement process.
- ▶ **Life settlements brokers** find the best bid for policyholders by soliciting competing offers from as many as buyers as possible.

Buy side

- ▶ **Investors** are policy buyers.
 - ▶ can be a natural person or, more commonly, a bank or a fund who may be fronted by a special purpose vehicle.
- ▶ **Life settlements providers** negotiate the price of a policy on behalf of the investor.

Third-party service providers

- ▶ **Medical underwriters** evaluate insureds' health conditions and forecast their life expectancies.
- ▶ **Servicers** manage premium payments and process death claims.
- ▶ **Trustees** safeguard policy-related documents and sometimes act as the legal owner of policies while investors are the legal beneficiary.
- ▶ **Tracking agents** monitor changes in insureds' health status, track deaths and obtain death certificates so death claims may be collected.

Note: roles can merge.

Other stakeholders

- ▶ **Insureds'** lives are referenced by the policies.
- ▶ **Carriers**, or insurers, are insurance companies that issue the policies.

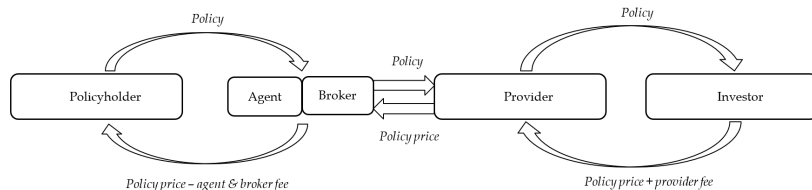


Figure 2: Life settlement deal flow

Life settlement valuation

An actuarial model

$$P = -C - \pi_0 + \sum_{i=1}^{\infty} \frac{({}_{i-1}p_x - {}_ip_x) \cdot DB - {}_ip_x \cdot \pi_i}{(1 + IRR)^i}$$

P : purchase price.

C : total transaction cost including fees paid to intermediaries.

DB : death benefit.

${}_ip_x$: the probability that the x -year-old insured will live i periods.

π_i : premium to be paid at time i .

IRR : internal rate of return (discount rate).

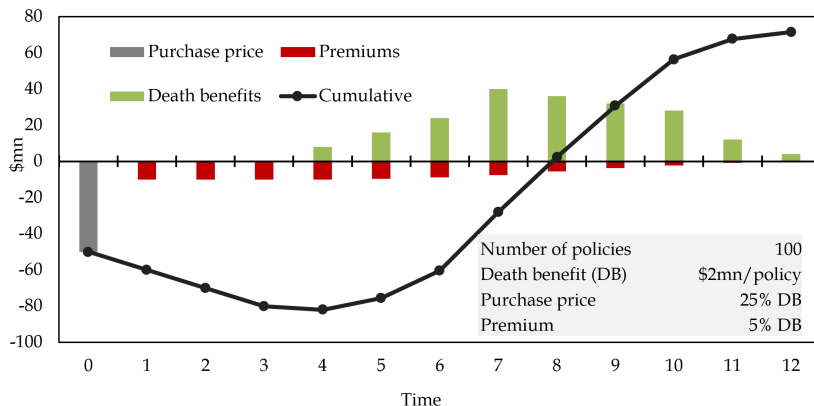


Figure 3: Exemplified life settlement cash flow¹

Shorter life expectancy → higher return

¹Source: Braun (2017). Securitization of Life Settlements: Challenges and Opportunities.

Problematics and controversies

Legal issues

- ▶ Validity of settlement $\xrightarrow{\text{necessitate}}$ validity of policy
 - ▶ honesty at policy application
 - ▶ Stephen Keller (Kelco Inc) allegedly encouraged HIV patients to lie
 - ▶ insurable interest
 - ▶ stranger-originated life insurance policies ("STOLIs")

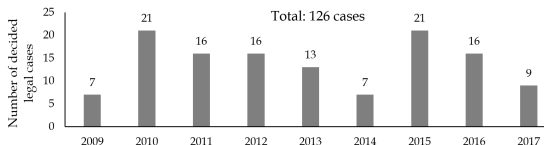


Figure 4: STOLI legal cases decided

- ▶ Manipulation of life expectancy (LE)
 - ▶ Wide variance in life expectancies
 - ▶ Midwest Medical Review issued unreasonably short LEs
- ▶ Other regulatory issues
 - ▶ security regulation
 - ▶ fractional interests in life settlement policies
 - ▶ variable universal life
 - ▶ tax law
 - ▶ privacy law

Moral and societal disputes

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- ▶ Negative image: “Wagering on death”
- ▶ premium increase $\leftarrow$ lapse rate decrease

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- ▶ liquidity $\rightarrow$ demand
- ▶ scrutiny of longevity risk

Life settlement as a financial tool

From the perspective of policyholders

Usage

- ▶ economically a more Pareto-efficient option than lapsing
- ▶ removes the policy from the taxable estate

Considerations

- ▶ selling vs. keeping
- ▶ if selling, through broker, or “consumer-direct”

From the perspective of investors

Usage

- ▶ low correlation with other assets → portfolio diversification
- ▶ **theoretically** decent returns

Considerations

- ▶ open-end vs. close-end
- ▶ risks
 - ▶ longevity risk
 - ▶ premium risk
 - ▶ default risk
 - ▶ rescission risk
 - ▶ liquidity risk
 - ▶ exchange risk
 - ▶ legal and political risk

Life Settlement Outlook

Data

Life settlement market data

1. AA-Partners life settlement transaction data
2. LISA conference proceedings

Life insurance data

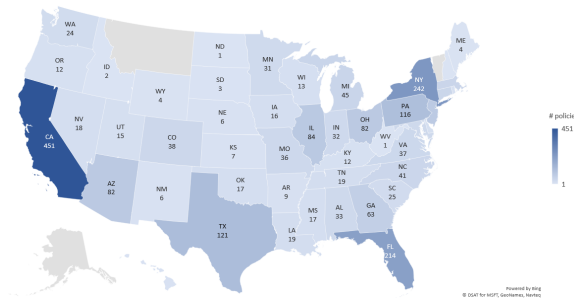
Main data

1. SNL Financial - U.S. Life Industry Briefing Book (from NAIC)
 - ▶ pro: representative (complete sample); up-to-date
 - ▶ con: crude
2. SOA & LIMRA - U.S. Individual Life Insurance Persistency
 - ▶ pro: relatively granular
 - ▶ con: unrepresentative (incomplete sample); obsolete

Supporting data

1. ACLI - Life Insurers Fact Book (from NAIC)
2. SOA - 2009-2013 Individual Life Insurance Mortality Experience Report

Life settlement landscape I



Life settlement landscape II

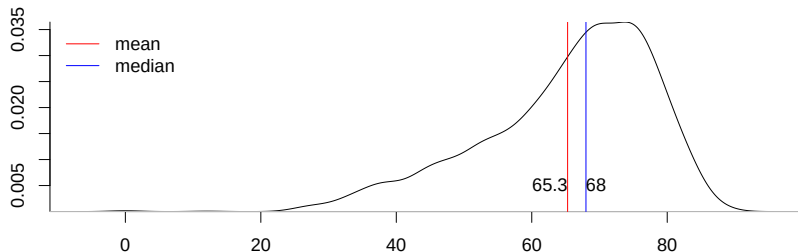


Figure 6: Life settlement age distribution

Senior lives preferred

Life settlement landscape III

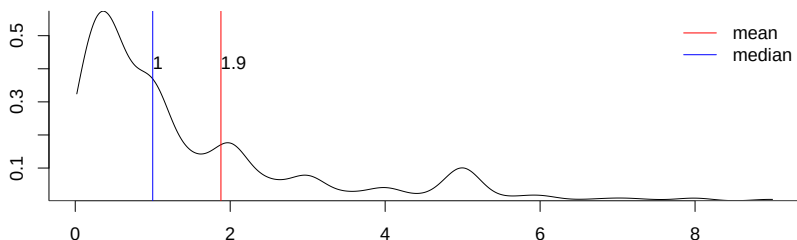


Figure 7: Life settlement face amount distribution

Total life settlement face in force: \$100bn

Life insurance termination

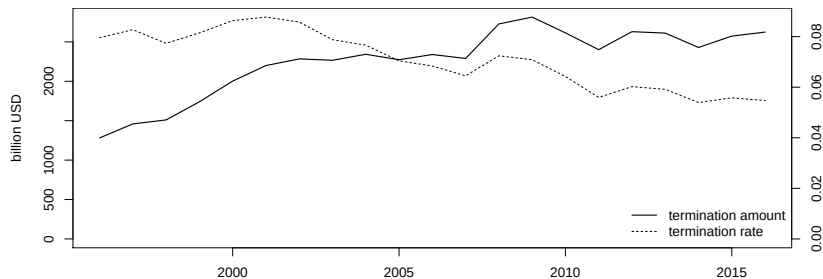


Figure 8: Annual face amount terminated 2006-2016

- ▶ Total face value terminated in 2016: \$2,624bn
- ▶ Real estate market value loss each year 2007-2009: \$2,325bn

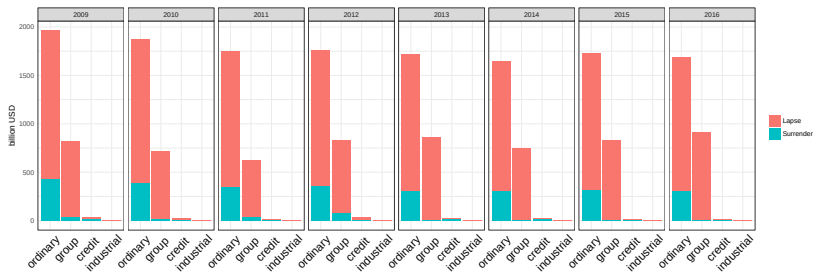


Figure 9: Annual face amount terminated 2009-2016

1. ordinary: individual life insurance
2. group: often offered through the workplace
3. credit: primarily offered by lending companies
4. industrial: burial insurance

Total face value terminated: 1,691 billion USD

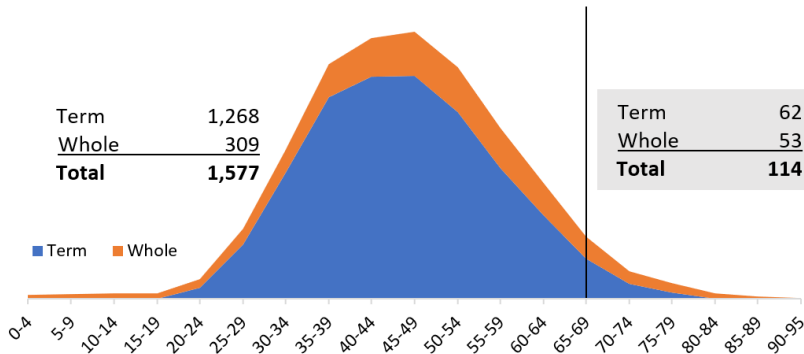


Figure 10: Face amount of ordinary life policies terminated in 2016

Estimator of untapped life settlement market size

Total face amount of ordinary life insurance terminated by seniors above 65: \$114bn

- ▶ Not all the terminated policies within the scope worth settling (overestimation)
- ▶ Some terminated policies beyond this scope worth settling (underestimation)

Estimator of untapped life settlement value

$$114 \times 18\% = \$21\text{bn}$$

medicine invoice spending for long-term care²: \$16.7bn

²Source: QuintilesIMS Institute (2017) Medicines Use and Spending in the U.S.

Proposal

How to capture the lost value?

Proposal: mandated secondary sale

- ▶ Sounder legal ground: not forbidding → regulating / allowing
→ encouraging / enforcing
- ▶ Higher efficiency: disintermediation
- ▶ Fairness: value loss through termination would otherwise be used to cover death benefits for others
 - ▶ analogous to airline overbooking

Impact on the primary life insurance industry?

Lapse-supported pricing

30-year term profit present value

	5%	8%	11%
Net Revenue			
Pricing Lapse	912	872	12
0% Lapse	2,244	1,947	1,521
Net Benefits			
Pricing Lapse	(1,036)	(769)	(574)
0% Lapse	(4,026)	(2,889)	(2,040)
Net Income			
Pricing Lapse	(125)	103	107
0% Lapse	(1,782)	(942)	(520)

Assumed rates in pricing: 12-15% in the first year, grading down to 5-8% over time. Source: SOA (1998) Current Issues in Product Pricing.

With all its potential realized, life settlement would be detrimental to the primary life insurance industry, ...

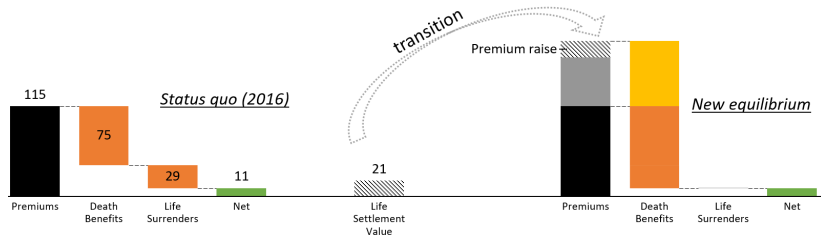


Figure 11: Life insurance industry transition

... but not if insurers act accordingly (and they will).