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Insurance Research

Life Settlements

Continued Growth, Positive Outlook

2018

CONNING®

Life Settlements

Continued Growth, Positive Outlook

2018

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1. Introduction

The second consecutive year of growth in the amount of face value settled may indicate a renewed interest in life settlements by investors.

This interest reflects a combination of a prolonged low interest rate environment, continued investment allocations to non correlating alternative asset classes, and the stability of the life settlement landscape. The stability of the life settlement landscape reflects the investor awareness of the investment risks associated with the asset class, a more favorable tax environment, and demographics trends creating a growing supply of policies that could be settled.

The potential cloud on the horizon are COI (cost of insurance) increases on UL (universal life) policies. These increases could raise premiums for settled policies and eventually reduce investor returns. Some of those increases have been challenged in court. That said, insurers remain under some degree of pressure created by lower investment returns on their assets. As a result, this study continues its analysis of the issues driving COI increases. We also continue our analysis of the life insurance companies whose policies life settlement investors purchased. This analysis provides useful insight for investors on the financial performance of the companies that issued the policies in their portfolios and the possible impact life settlements may have on those companies.

This study reviews this diverse secondary market for insurance products.

- We review the current market and provide our forecast for 2018-2027.
- We analyze the performance of those insurers targeted by life settlement investors and compare them to the broader life industry.
- We analyze the drivers for recent COI increases.
- As always, for new investors curious about life settlements, we provide an introductory primer of how life settlements operate.

A History of Life Settlement Research

Conning has followed the development of the life settlement market since 1999. Our prior studies include:

1999	*Viatical Settlements—The Emerging Secondary Market for Life Insurance Policies*
2003	*Life Settlements—Additional Pressure on Life Profits*
2006	*Life Settlements—The Concept Catches On*
2007	*Life Settlement Market—Increasing Capital and Investor Demand*
2008	*Life Settlement Market—New Challenges to Growth*
2009	*Life Settlements—A Buyers' Market for Now*
2010	*Life Settlements—The Market Stabilizes as Insurer Impact Grows*
2011	*Life Settlements—An Asset Class Resets*
2012	*Life Settlements—Weak Investor Supply Despite Growing Consumer Demand*
2013	*Life Settlements—A New Opportunity in Smaller Policies*
2014	*Life Settlements—Growing Unmet Need, Increasing Opportunity*
2015	*Life Settlements and Secondary Market Annuities—Opportunities and Challenges*
2016	*Life Settlements, Secondary Annuities, and Structured Settlements—Rate Increases Squeeze Returns*
2017	*Life Settlements—Steady Growth, Growing Potential*

2. Executive Summary

Conning first reviewed the life settlement market in 1999. This is the 13th annual review and forecast of the life settlement market. This edition continues our review of those life insurers who have been targeted by life settlement investors. In addition, we also continue our analysis of the factors driving COI increases, a key issue of concern for many life settlement investors.

Life Settlement Market Review

Conning's life settlement market review shows the development of the life settlement market, in terms of annual volumes and in force settlements, from 2002 through 2017. Our market review also includes announcements involving key market participants, regulatory actions, or litigation in the second half of 2017 and the first half of 2018.

In 2017 and through the first half of 2018, the life settlement market has exhibited growing strength. The volume of new settlements continues to increase. The number of new life settlements is a positive factor for the number of in force life settlements.

Company announcements over the past year support the positive landscape for life settlements. The Tax Cuts and Jobs Creation Act (TCJA) was a positive development that should simplify the process for future life settlements. What is also noticeable, is the continued development of life settlement provider websites. Calculators provide individuals interested in settling their policies with a sense of what that policy could be worth. At the same time, those calculators generate leads for the providers to follow.

From July 2017 through June 2018, announcements by companies participating in the life settlements market broadly concerned issues of growth and expansion. Geographic expansion, capital raises, and the sales of policy portfolios were recurring themes.

Legal and regulatory actions continued from July 2017 through June 2018. The positive impact on life settlements from the TCJA was the significant regulatory action. Actions by the federal court for the Second Circuit dominated the legal arena.

With this edition, Conning begins a review and analysis of the online tools and presence of life settlement participants. Driving this analysis is the growing importance all businesses place on using the Internet and social media to attract and develop business. Our initial examination finds that the inclusion of life settlement calculators and educational and promotional videos is established.

Life Settlement Forecast Drivers

Looking beyond 2017, several key drivers are favorable for continued growth in the life settlement market.

The economic and capital drivers for life settlements are positive. Even as interest rates improve, they remain below historic levels. Asset managers and investors are likely to continue allocating capital to alternative assets. Life settlements should benefit from that allocation.

Consumer drivers favor the continued growth of life settlements. The number of potential customers will increase as more Baby Boomers enter their senior years. As that generation ages, concerns about how its members will fund LTC (long-term care) increase. Both drivers are positive in terms of increasing the number of policy owners who might want to settle their policy.

Industry drivers remain mostly favorable for the continued growth of life settlements. The broad regulatory landscape for life settlements has stabilized. While the passage of the TCJA is positive, the availability of credit for life settlement investors to finance premiums on existing portfolios appears to remain limited. Life expectancy revisions are now understood as an investment risk, rather than an unexpected surprise.

Two drivers are key to the development of the tertiary life settlement market (where investors resell secondary market policies or portfolios.) Policy evaluation costs for already settled policies are a factor in pricing portfolios. At the same time, the number of available policies in the tertiary market is driven by the amount of in force policies and the competition for those policies may increase policy costs. These drivers influence investor decisions whether to purchase a new policy, an already settled policy, or not purchase any type of policy. Looking ahead, these drivers are mixed and suggest that capital may concentrate on new life settlements.

Life Settlement Market Forecast

Given the favorable nature of the drivers of life settlement market growth, our analysis of the life settlement market is that:

- The average of our ten-year forecast of the annual gross market potential for life settlements is an increase from the prior forecast.
- The average of our ten-year forecast of the annual volume of new life settlements is also an increase from our 2016 forecast.

The amount of in force life settlements will decline as policies settled in the mid-2000s mature and claims are paid.

Life Settlement Insurer Performance

Over the course of the life settlement asset class's development, life settlement investors have purchased policies from a wide selection of companies. In 2017, 606 companies reported any amount of life insurance reserves. Our analysis of Form 10(k)s of life settlement companies found that the policies they owned were issued by 43 insurance companies. An insurance group is a holding company with one or more operating subsidiaries.

Before reinsurance, the life industry reported a total face value of $9.0 trillion of cash value life insurance in force at the end of 2017. The 43 insurers whose policies life settlement companies own represented 50%, or $4.5 trillion, of the cash value life insurance in force at year-end 2017. Cash value insurance, whole life, and universal life, is the product that life settlement investors favor.

Insurers targeted by life settlement investors have experienced worsening mortality performance over the period of 2013 through 2017. We examined surrenders as both a percentage of in force face value and in absolute dollar terms. Analyzing face value provides an indication of how much of an insurer's book of life business is being lost. The amount of surrender benefits, as a percentage of reserves, gives some insight to the economic impact of surrenders on an insurer.

One reason there may be an increase in death claims is that fewer policies are lapsed or surrendered. This impact on lapse and surrender rates provide some indication of potential future mortality experience. Insurers targeted by life settlement investors have lower lapse rates than the remaining industry, indicated by stronger growth of in force face value by the 43 insurers than by the remaining industry.

The use of reinsurance can reduce the financial impact from higher mortality rates on a primary insurer by transferring the cost of death claims to a reinsurer. As a result, companies with higher cession rates (the percentage of direct premiums ceded to a reinsurer) may have reported lower mortality benefit rates than companies that choose not to use reinsurance.

The performance of insurer General Account portfolios is crucial to profitability. For life settlement investors, an insurer's ability to generate strong investment returns can directly affect UL crediting rates. At the same time, overall profitability indicates an insurer's financial strength and its ability to meet future claims.

Cost of Insurance Increase

Life settlement investors have shown a strong preference for purchasing UL insurance. This preference is due to the product's structure, which enables investors to optimize their premiums. Simply put, premium optimization involves making the minimum premium payments necessary to keep the policy in force. Increases in COI charges can affect premium optimization.

The COI charge applied on a UL policy primarily covers insurer mortality experience. It also provides recovery for insurer expenses, profit, and interest spread (e.g., the pricing interest spread may be reduced by increasing COIs and vice versa).

Between 2015 and 2017, some insurers made the difficult decision to increase their COI rates. Through August 2018, John Hancock and Voya are examples of companies that increased COI rates. For life settlement investors, COI increases, in combination with lowering crediting rates, can significantly affect premium optimization and eventually overall investment returns.

Several lawsuits have been filed against insurers for the COI increases. These lawsuits continued to make their way through the legal system in 2018. COI increases attracted the attention of several state regulators as well as national consumer groups. Efforts began by some states to require greater disclosure about, and flexibility in, COI increases.

Based on insurer announcements, the major factors driving COI increases were higher than expected mortality, lower than expected investment returns on insurer portfolios, and lower than expected policy crediting rates. In most cases, the companies announcing COI increases did report lower performance than the remaining industry.

3. Life Settlement Market Review

A review of the life settlement market for 2017 and through the first half of 2018 shows an improving landscape. This chapter reviews the key financial results for the asset class, specifically the amount of new life settlements, death benefits paid, and the change in the amount of in force life settlements.

Beyond the financial results from new settlements and benefit payments, we continue our review of announcements from key players, as well as key legal and regulatory developments. With this edition, we include an overview and analysis of the online presence life settlement firms use.

Our review of the life settlement market for 2017 finds:

- The amount of new life settlements increased for the second consecutive year.
- The death benefits paid by insurers to three public life settlement investors increased in 2017 from 2016 levels.
- From July 2017 through June 2018, announcements by companies participating in the life settlements market broadly concerned issues of growth and expansion.
- The positive impact on life settlements from the TCJA was the significant regulatory action.

The following sections analyze the U.S. life settlement market and its potential growth over the coming decade.

Life Settlement Market Review

Conning's life settlement market review shows the development of the life settlement market, in terms of annual volumes and in force settlements, from 2002 through 2017. Our market review also includes announcements involving key market participants, regulatory actions, and litigation in the second half of 2017 and the first half of 2018.

Conning 2017 Market Volumes

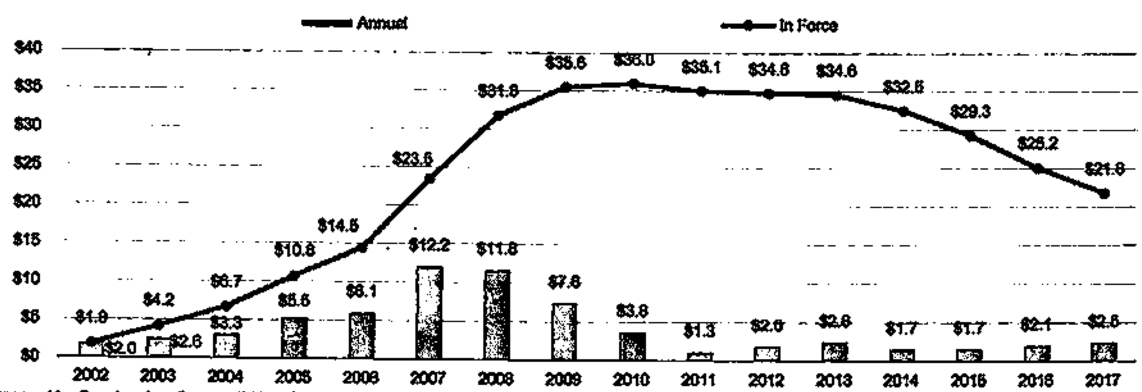
The annual amount of life settlements increased strongly in 2017 compared to the prior year. The amount of in force life settlements decreased. Our review of publicly available reports found that the amount of reported benefit payments made to publicly traded companies with life settlement portfolios decreased in 2017.

Annual Volumes Increase, In Force Amount Decreased in 2017

In 2017, based on the percentage increase in new life settlements reported by Conning's study, *Life Settlements—Steady Growth, Growing Potential*, Conning estimates investors purchased approximately $2.5 billion worth of U.S. life insurance face value.

In 2017, the annual volume of $2.5 billion in face value of life settlements was a strong increase from 2016 and the second highest amount since 2011. However, with policies maturing or lapsing, the amount of in force life settlements decreased from $25.2 billion in 2016 to $21.8 billion in 2017. The relatively strong decreases of in force amounts since 2013 reflect the maturation of the large face amounts sold between 2005 and 2009.

Conning Estimate of Annual and In Force U.S. Life Settlement Volume
$ in billions



Prepared by Conning, Inc. Source: ©2018 Conning, Inc.

- *Life Settlements—Steady Growth, Growing Potential* reported that 2017 annual volume based on available state filings increased 19%.

- Over the past five years, the annual volume of new life settlements has averaged $2.1 billion. Annual volumes ranged from $1.7 billion to $2.6 billion over this period, and 2017 represent the second consecutive year of growth. This may signal a renewed interest by capital providers in this asset class.

- The amount of face value for in force life settlements decreased to an estimated total of $22 billion in 2017. The decrease of in force face value reflects the combination of policies maturing and lapses outpacing new policy growth.

- A continued increase in the amount of new life settlements would slow the decrease in the amount of in force settlements and eventually begin to increase that amount. This bodes well for the future supply of policies available in the tertiary market.

Benefit Payments Increased in 2017

We reviewed the 10(k)s of three public companies with life settlement portfolios to understand the amount of revenue being generated from maturing policies. The amount of reported claims paid on already settled policies decreased approximately 26% in 2017, compared to 2016. The primary driver of this decrease was AIG, which disposed of its entire life settlement portfolio during 2017. This reduced the amount of revenue it reported for the year.

- AIG reported that it received $266 million in income in 2017, compared to $453 million in 2016.

- Emergent Capital, Inc. reported it received $67.2 million from maturing policies in 2017, compared to $37.5 million in 2016.

- GWG Holdings reported it received almost $64.7 million in death benefits from its life settlement portfolio during 2017, compared to $48.5 million in 2016.

2018 Key Participant Announcements

From July 2017 through June 2018, announcements by companies participating in the life settlements market showed broadly concerned issues of growth and expansion. Geographic expansion, capital raises, and the sales of policy portfolios were recurring themes.

2017H2-2018H2 Key Participant Announcements

Company	Announcements
Abacus	Expanded its business into West Virginia
ALIR	Obtains California license, launches platform
American International Group	Sold the remainder of its life settlement portfolio
AmTrust Financial Services	Sold most of its life settlement portfolio
Corry Capital Advisors	Raised more than $300 million for a new life settlement fund
EEA Life Settlement Fund	Redeemed approximately $15.1 million in shares
FidentiaX	Singapore-based startup creates blockchain platform
Life Settlement Institute	Opens membership to financial advisors
Life Settlements Asset PLC	Launched on London Stock Exchange
LfS Pipeline	Launches agency platform
LIST Settlements	Accepted into 2018 Tel Aviv Barclay's Accelerator Program
Mason Financial	Expanded number of states it is licensed to operate in
NorthStar Life Services	Acquired Torrey Pines Services
Perla Global Capital	Forms life settlement joint venture
Vida Capital	Closed second life settlement fund
Windsor Life	Introduced new life settlement calculator

Prepared by Conning, Inc. Source: Press releases.

Abacus Life Settlements Obtains West Virginia License

In May 2018, Abacus Life Settlements announced that it was granted a life settlement provider license by the West Virginia Offices of the Insurance Commissioner. This expanded the number of states where Abacus could conduct life settlements to 40. As the state with the third highest percentage of seniors, West Virginia's licensure process for viatical and life settlement providers is considered one of the most rigorous in the nation.

ALIR Acquires California Provider License, Introduces New Platform

ALIR, LLC, a leading life settlement provider, announced it has obtained a life settlement provider license from the state of California. The license will allow ALIR to provide life settlement services to California's 39 million residents. As a life settlement provider, ALIR is positioned as a leader in the industry. Its unique approach of direct origination, coupled with servicing individual policies of $50,000 and up, distinguishes ALIR from its competition.

ALIR has rolled out its online portal ABC (ALIR Broker Connect). The ABC platform provides a simple online tool for life settlement brokers to quickly share case files including life expectancy reports, illustrations, policy data, and medical records for pricing. This facilitates quicker turnaround and funding of life settlement cases and streamlined workflow for the life settlement broker community.

AIG Dispose of Remaining Policies in its Life Settlement Portfolio

AIG sold the remainder of its life settlements portfolio in 2017. In 2016, Blackstone Group was reported to be the successful bidder for the first block of AIG's life settlement portfolio. The winning bid was not known for the tranche containing $4.5 billion to $5 billion in face amount. The remaining block had a total face value of approximately $9.8 billion. AIG reported a loss on the sale of $139 million and total book value impairments on the policies of $360 million.

AmTrust Financial Disposes of Majority of its Life Settlement Portfolio

AmTrust Financial Services announced in its 2018 10(k) that it had sold most of its life settlement portfolio investments. The company had a 50% ownership interest in two entities formed for the purpose of acquiring life settlement contracts, with a subsidiary of NGHC (National General Holding Corporation) owning the remaining 50%. AmTrust's life settlement entities were Tiger Capital, LLC and AMT Capital Holdings. In August 2017, AmTrust sold 114 life settlement contracts from Tiger portfolio for $100.0 million. In December 2017, the two AmTrust entities contributed another 136 life settlement contracts to a limited partnership managed and operated by an unrelated third-party. AmTrust received $217.8 million of cash and the right to receive certain contingent earn-out payments. The two AmTrust entities have a 30% non-controlling equity interest in the limited partnership. Those two transactions divested AmTrust of all but six remaining life settlement policies with a year-end 2017 value of $20.8 million. AmTrust does not expect to be an active purchaser of life settlement policies going forward.

Corry Capital Raises More Than $300 million for a New Life Settlement Fund

In July 2018, CCA (Corry Capital Advisors) announced it had raised more than $300 million for a new fund. Information about the fund was not made publicly available.

EEA Life Settlement Fund Redeems Shares

The EEA Life Settlement Fund redeemed shares valued at approximately $15.1 million on February 12, 2018. The redemption equated to approximately 10.3% of the

January 31, 2018 net asset value of the EEA Life Settlement Fund Run-Off Cells. In February 2018, there were 115 active policies still in the fund with a net death benefit of $405 million.

Since the suspension, the fund has been returning money to trapped investors on announced redemption days. The February 2018 redemptions were made despite the fact that the benefits paid on some 2017Q3 policy claims were the subject of a lawsuit. Coventry Capital, filed a suit against EEA, alleging that the firm had thwarted its efforts to buy the portfolio of life settlements following a "pattern of fraudulent, bad faith conduct".

The fund initially suspended redemptions in 2011 following a wave of withdrawal requests after the FSA (Financial Services Authority) branded retail life settlement funds "toxic". When the EEA Life Settlements fund was suspended, it held policies valued at $955 million.

FidentiaX Creates Blockchain Life Settlement Platform

FidentiaX is a Singapore-based startup using a blockchain life settlement platform. It plans to focus on Asia, starting in Singapore, then moving to Malaysia and Hong Kong. The marketplace will be live by the end of 2018. In each jurisdiction, the policies will be held in a trust managed by a lawyer. Legally the policies will be owned by the trust.

FidentiaX's co-founder, Alvin Ang, explains that an investor could be in a different jurisdiction to the policyholder. The beneficial owner will be recorded on the blockchain. The lawyers will have a blockchain node and a separate database with full policy details. The two will be connected using an oracle, which is a way for a blockchain to communicate with off-chain data. This structure also ensures the privacy of the policyholder whose name will not be revealed to buyers. Typical information will include the policy, the insurer, the policy tenure, the policy surrender value, projected return, and some basic information about the life assured's age and gender. They do not plan to disclose health conditions.

FidentiaX is creating a model fund that involves buying some policies directly from the market. The idea is to tokenize the fund in the future, enabling fractional ownership of a policy. The longer-term plan will involve securitization. However, FidentiaX will need a larger capital structure and comply with complex regulations.

Life Settlement Institute Opens Membership for Financial Advisors

The Life Settlement Institute opened to financial advisors in September 2018. The Institute's goal is to educate and train financial advisors about life settlements. "Individual financial professionals are an underserved segment of the life settlement industry, and the Life Settlement Institute was founded to contribute to their success." Says Nels Griffin, a principal at the Life Settlement Institute. "We have rolled out our online presence at LifeSettlementInstitute.org, which provides a free membership driven platform to guide and educate individual professionals that want to contribute to the industry growth. We know this is the right time to make life settlements part of the broader financial dialogue and we have the right team to facilitate this transition."

Life Settlement Asset Fund Backed by Acheron Lists on London Stock Exchange

Life Settlement Assets PLC was listed on the London Stock Exchange's specialist fund segment in April 2018, as the manager of the strategy looks to gain access to a broader cross-section of investors through a listed closed-ended vehicle. Life Settlement Assets PLC is a newly formed closed-ended investment company, backed by London-based alternative investment manager Acheron Capital Limited, which has had dealings in ILS (Insurance Linked Securities) and insurance-linked strategies in the past.

Acheron used to manage its Natural Risk Fund, which invested in catastrophe bonds and reinsurance linked securities, but for this new launch its focus has switched back to life settlements, another area where the firm has a history. Life Settlement Assets PLC will target the management of portfolios of whole and partial interests in life settlement policies issued by life insurance companies, largely sourced from companies in the United States.

The fund was previously known as the Acheron Portfolio Corporation (Luxembourg) S.A., which was delisted in Luxembourg before its listing under the new company name in London. The firm's investment objective will be focused on generating long-term returns for its investors through allocations made to the life settlement market and after this listing it will acquire the portfolios of the previously named Acheron Portfolio Corporation.

LIS Pipeline Platform Introduced

LIS Pipeline, a start-up technology company out of Florida, has created an online life settlement submission platform for life insurance agents and financial professionals. The LIS Pipeline was created to become the tool financial professionals use to grow life settlement as an offering throughout their organizations.

The pipeline simplifies and digitizes the most time consuming aspects of life settlement transactions, LIS Pipeline provides the first ever fully electronic life settlement application backed by blockchain auditability. Once an application is submitted, users can easily track where the application is in process and provide additional documents and information as requested.

LiST Settlements Accepted into FinTech Accelerator

LiST Settlements, a life settlement blockchain technology company, was accepted by Barclays and Techstars into the 2018 Tel Aviv Barclays Accelerator program. The accelerator program will provide mentoring and networking help for 11 financial services technology firms this year. Program managers picked LiST and the other 2018 participants from a pool of about 200 applicants. The founders of LiST, Yaacov Goldenhersh, Izik Algarisi, and Yaakov Bergman, want to use blockchain technology to turn life insurance policies into easily tradeable assets.

Mason Finance Expands List of States

Mason Finance, a fintech life settlement start-up, announced in 2018 that it acquired life settlement licenses in California, Arizona, North Carolina, Tennessee, and Pennsylvania. These new states built on other licenses granted in 2017 for Washington D.C., Alabama, Michigan, Missouri, New Mexico, South Carolina, South Dakota, and Wyoming. Mason Finance is an online "reverse life insurance" provider that offers viatical settlements, life settlements, and Medicaid settlements.

NorthStar Life Services Acquires Torrey Pines Services

NorthStar Life Services, LLC, a full-service life settlement advisory firm that assists institutional and private investors with each stage of the life settlement investment cycle, announced that it has completed the purchase of the business and assets of Torrey Pines Services, LLC. Torrey Pines Services provides policy servicing, portfolio management, and optimization services to help owners of life insurance policies better manage their assets.

Perla Global Capital Advisors Announces Global Life Asset Management, LLC Joint Venture

In 2018, Perla Global Capital Advisors announced the formation of Global Life Asset Management, LLC. Global Life Asset Management is a joint venture formed between Perla

Global Capital Advisors and JSC Financial and Insurance Services. The new joint venture will acquire life settlements in collaboration with national brokers and providers.

The new company will review and purchase term life, whole life, and universal life insurance policies for acquisition with face value of $250,000 to $500,000 and up to $5.0 million for ages 65 years and older. The focus will be for those in their late 70's and early 80's. The company plans to leverage JSC Financial and Insurance Services business platform of over 250 agent affiliates.

Vida Capital Raises Capital for New Credit Fund

Vida Capital, an alternative asset manager with around $3.5 billion under management in various insurance-linked strategies, announced in 2018 that it had raised $886 million for a new closed-end life settlement fund. The company had been targeting a $750 million capital raise for its new Vida Insurance Credit Opportunity Fund II, but raised $886 million in capital commitments from institutional investors including U.S. and global public pension plans, insurance companies, foundations, family offices, as well as some high net worth individuals. Vida Capital is integrated with Magna Life Settlements, a licensed life settlement provider. As a result, the firm can source a proprietary deal flow of life settlement investment opportunities, giving it immediate access to origination. The new life settlements focused fund is the third capital raise for a closed-end fund that Vida Capital has completed since its inception in 2009.

Windsor Life Settlements Introduces New Life Settlement Calculator

Windsor Life Settlements, LLC unveiled their "Life Settlement Calculator" with the goal of helping all life insurance policyholders get an instant estimate of their policy's value on the secondary market. In addition to providing instant estimates for policyholders, Windsor has also produced educational resources like the "Ultimate Guide To Life Settlements" with a two-part goal. The first goal is to increase transparency about the life settlement process for the policyholders currently going through the process, by providing helpful information about topics like the new life settlement tax laws, which actually now benefit and even incentivize policyholders. The second goal is to increase consumer awareness and confidence of the life settlement option by producing trustworthy resources that help policyholders make the best decision possible, even if that option is not a life settlement.

Key Legal/Regulatory Action

Legal and regulatory actions continued from July 2017 through June 2018. The elimination of the requirement to remove COI from the cost basis of life settlements was a positive regulatory change created by TCJA. Actions by the federal court for the Second Circuit dominated the legal arena.

Key Legal/Regulatory Actions

Entity	Actions Taken from June 2017-June 2018
Congress	Passed the Tax Cuts and Jobs Act
SEC/Life Partner Holdings	Continued litigation over fines
U.S. Court of Appeals for the Second Circuit	Ruled on New York State jurisdictional dispute on life settlement case Ruled on STOLI victim case Ruled on viatical statute of limitation case
LifeTrade Fund/Wells Fargo and S&P	Investor lawsuit against Wells Fargo and S&P filed
Transamerica	COI lawsuit proceeding
AXA Equitable	COI lawsuit proceeding
NAIC	Identifies life settlements as funding option for LTC

Prepared by Conning, Inc. Source: Press releases.

TCJA Contains Favorable Impact of Life Settlements

In 2017, TCJA eliminated the requirement to remove COI from the cost basis of a life settlement. As a result, the cost basis treatment of a life settlement is the same as a policy surrender. In addition, the new tax law is retroactive for policy sales dating back to August 25, 2009.

IRS Revenue Ruling 2009-13, enacted in 2009, outlined the tax treatment for sale or surrender of a life insurance policy. The ruling stated that tax treatment for policy sale was different than the tax treatment for a policy surrender. The 2009-13 tax ruling imposed a formula on life settlements for calculating basis that required removing the COI from the policy tax basis. COI is a calculation, provided by the insurers, and was often extremely difficult for policy owners to get. COI did not have to be removed from the policy tax basis for policies that were surrendered back to the insurer. This hampered life settlements due to the increased difficulty in calculating taxes for life settlements. The restoration of the pre-ruling treatment is expected to increase life settlements.

Another aspect of the TCJA that could prove favorable for life settlements is the increase in the estate tax exemption to $11.2 million per individual and $22.4 million per married couple. Life insurance has been a key product for estate and tax planning. With the increase in tax exemption, high net worth individuals and their advisors may re-evaluate their need to keep the insurance for estate protection. For those individuals that decide not to keep their policies, life settlements may prove to be an attractive option.

SEC Supports Fines for Ex-Life Partners Holding CEO and Attorney

In September 2018, The U.S. SEC (Securities and Exchange Commission) argued in a Texas federal court that the court should adopt a recommendation to levy a combined $7 million in civil penalties against the attorney and former CEO of Life Partners Holdings, Inc. The CEO, Brian Pardo, and attorney, R. Scott Peden, had argued that the penalties were baseless.

The SEC won a $47 million judgment and Life Partners filed for bankruptcy in 2015. It exited bankruptcy in 2016 after agreeing to pay a $1 billion settlement to resolve class action litigation over the alleged fraud. The Fifth Circuit Court of Appeals, while largely siding with the SEC, ordered the lower court to recalculate the award in 2017.

Federal Curt Affirms Favorable Jurisdiction Conflict

In June 2018, the U.S. Court of Appeals for the Second Circuit affirmed a district court's conflict of laws ruling that New York law, rather than New Jersey law, applied to an insurable interest dispute between AEI Life, LLC and Lincoln Benefit Life Company. This decision was the culmination of an almost five-year legal battle and reinforced a number of legal rulings that are common in insurable interest lawsuits between life insurers and third-party investors. The ruling should benefit investors in pending and subsequent disputes.

AEI Life, LLC purchased a life insurance policy in 2011 from another investor in a secondary market transaction that had been issued by Lincoln Benefit in 2008. The policy insured the life of a resident of New York. Lincoln Benefit filed suit in New Jersey federal court in 2013, seeking a declaration that the policy was void ab initio because it was purchased as part of a STOLI (stranger originated life insurance) scheme and, therefore, lacked insurable interest. AEI promptly filed a lawsuit in federal court in New York, seeking a declaration that the policy was valid and enforceable because under New York's incontestability statute, Lincoln Benefit had failed to challenge the validity of the policy within two years. Though Lincoln Benefit filed the first lawsuit, the New York federal court decided that it had obtained jurisdiction over the parties first and proceeded with AEI's lawsuit.

The Second Circuit affirmation is beneficial for investors that own policies purchased in the secondary market. Life insurers often file suit in jurisdictions (such as New Jersey or Delaware) where courts have concluded that the state's incontestability statute does not apply to challenges for lack of insurable interest. There is often motion practice early in the lawsuit concerning which state's law should apply. Many such lawsuits involve policies where the policy's insured lives in New York, with New York trustees, and all negotiations with respect to the purchase of the policy occurred in New York.

Federal Appeals Court Affirms Restitution Order

A 2018 decision from the Second Circuit Court of Appeals affirmed an order of restitution in *U.S. v. Quatrella*, where the criminal defendant had pled guilty to insurance fraud. The federal appellate court said that the criminal defendant's friends had invested in the STOLI scheme without being knowing participants in the crime, and therefore the federal district court was correct in concluding that they were victims under the Mandatory Victims Restitution Act. The district court had ordered $1.9 million in restitution be paid to these victims, who had intervened.

Federal Court Dismisses Claims Against Viatical Provider

The federal court for the Southern District of New York dismissed claims against Legacy Capital Corporation in October 2017 over the sale of viatical investments. The reason for the dismissal was the expiration of the statute of limitation. In 2016, Christopher Amberger sued Legacy Capital Corporation and its agent, Mills, Potoczak & Company, alleging that the defendants made misrepresentations and false statements about the life expectancy of the viators, back-dated documents, and did not, as promised, track the whereabouts of the viators and took other actions contrary to the viatical investment contract.

While it is not clear exactly when the plaintiff had reason to suspect that some type of wrongdoing had injured him, the court said "it must have occurred at some point" over the period between 2001 and 2013. Based on the expiration of the statutes of limitations, the court dismissed the fraud-based and securities law claims against Legacy Capital, as well as the request for a declaratory judgment.

Life Settlements Calculators and Videos

With this edition, Conning begins a review and analysis of the online tools and presence of life settlement participants. Driving this analysis is the growing importance all businesses place on using the Internet and social media to attract and develop business. The following table provides an overview of the life settlement calculators offered by key life settlement firms (as of October 2018).

Life Settlement Calculator Profiles

Provider	Policy Information Requested	Quote Provided
Abacus Life Settlements	Name, age, gender, agent of policy owner, health, policy type, face amount, premium, outstanding loan amount, cash surrender value	Via email
ALIR Settlements	Name, phone #, email, DOB, sex, state, face amount, annual premium, cash surrender value, health status, current tobacco user Calculator also includes estimate of savings for original owner from no longer paying premium	Via agent
Braveport Settlements	Name, age, gender, tobacco user, health, policy type, face amount, premium	Via email
Coventry Direct	Name, age, gender, detailed health questionnaire, insurer, policy type, face amount, length of ownership	Via email
Harbor Life Settlements	Name, age, face amount, state	Via email
Life Settlement Advisors	Age, gender, health, type of policy, cash surrender value, outstanding loans, annual premium as a % of death benefit, death benefit	No, information is provided a preliminary score, based on score policy owner can begin application process.
Magna Life Settlements	Death benefit amount, age, health status	Yes
Mason Finance	Face value, age, general health, questions	Via email
Ovid	Age, payout, state, health status, phone, email	Via email
Settlement Benefits Association	Name, phone, email, face value, age, general health, questions	No. Give phone # to call after putting in information
Welcome Funds	3-step process	Via agent contact
Windsor Life Settlements	Name, email, phone, age, death benefit, health status, policy in effect more than 2 years	Via email

Prepared by Conning, Inc. Source: Press releases.

Broadly speaking, these calculators provide a potential seller with an idea of what they might receive as a settlement, and then provides ways for the potential seller to engage with the provider. The actual amount that would be offered to the original policy owner would depend on the results of underwriting the settlement.

Life settlement calculators stimulate interest within the policy owner by providing some approximate idea of the value of their policy. For life settlements, this is crucial because the original policy owner may have little idea of how much their policy is worth, above what is reported by the insurer in annual policy owner reports. The calculator also enables the policy owner to follow up with the provider to learn more and take the next steps in settling a policy.

Looking ahead, the inclusion of calculators may indicate that competition among providers for policies may be increasing. Providing basic information about the firm, what a life settlement is, and how the process works, may no longer be enough to attract potential clients. Similarly, providers are including videos on their websites to explains life settlement concepts.

Summary

Conning's life settlement market review shows the development of the life settlement market, in terms of annual volumes and in force settlements, from 2002 through 2017. Our market review also includes announcements involving key market participants, regulatory actions, and litigation in the second half of 2017 and the first half of 2018.

In 2017 and through the first half of 2018, the life settlement market has exhibited growing strength. The volume of new settlements continues to increase. Eventually, this growth will slow and steady the decrease of in force life settlements.

Company announcements over the past year support the positive landscape for life settlements. The TCJA was a positive development that should simplify the process for future life settlements. What is also noticeable, is the continued development of life settlement provider websites. Calculators provide individuals interested in settling their policies with a sense of what that policy could be worth. At the same time, those calculators generate leads for the providers to follow.

From July 2017 through June 2018, announcements by companies participating in the life settlements market broadly concerned issues of growth and expansion. Geographic expansion, capital raises, and the sales of policy portfolios were recurring themes.

Legal and regulatory actions continued from July 2017 through June 2018. The positive impact on life settlements from the Tax Cuts and Jobs Act was significant regulatory action. Actions by the federal court for the Second Circuit dominated the legal arena.

With this edition, Conning begins a review and analysis of the online tools and presence of life settlement participants. Driving this analysis is the growing importance all businesses place on using the Internet and social media to attract and develop business. Our initial examination finds that the inclusion of life settlement calculators and educational and promotional videos is established.

4. Life Settlement Forecast Drivers

Looking beyond 2017, several key drivers are favorable for continue growth in the life settlement market. Life settlements remain an appealing alternative asset class to investors seeking above average returns, relative to the current low interest rate environment. The increased supply of investors is met with the increasing number of retiring Baby Boomers seeking ways to increase their retirement income or pay for LTC.

Key Long-Term Drivers: Secondary Market

	Driver	Trend	Impact on Life Settlement
Economic and Capital Drivers	Interest Rates	Continued pressure on life insurer investment yields may lead to further UL (universal life) cost of insurance increases	Negative since higher UL premiums reduce investor returns and introduce uncertainty
	Capital Markets	Investors looking for yield turning to alternative asset classes. Capital markets becoming more comfortable with pension risk and other long-tail life insurance products	Positive as investors view life settlements as an established asset class
Consumer Drivers	Consumer Demand	Demographic-driven demand increasing as Baby Boomers age and costs of retirement increase	Positive impact on supply of policies entering market
	Long Term Care Funding	Individuals and states continue to find ways to cover the cost of LTC for an aging population	Positive impact on consumer awareness of life settlements
Industry Drivers	Regulatory Oversight	Comparatively stable as states implement model laws, focus continues to be on consumer and investor protection	Positive as investors view stable regulatory environment
	Credit availability for Premium financing	Banks remain reluctant to provide financing for life settlement portfolios.	Negative as investors retain more capital to pay premium rather than purchasing policies
	Life Expectancy Estimates	Continue to adjust as underwriter's data increases	Neutral since life expectancy risk is widely known and discussed

Prepared by Conning, Inc. Source: ©2018 Conning, Inc.

The following sections analyze the U.S. life settlement market and its potential growth over the coming decade.

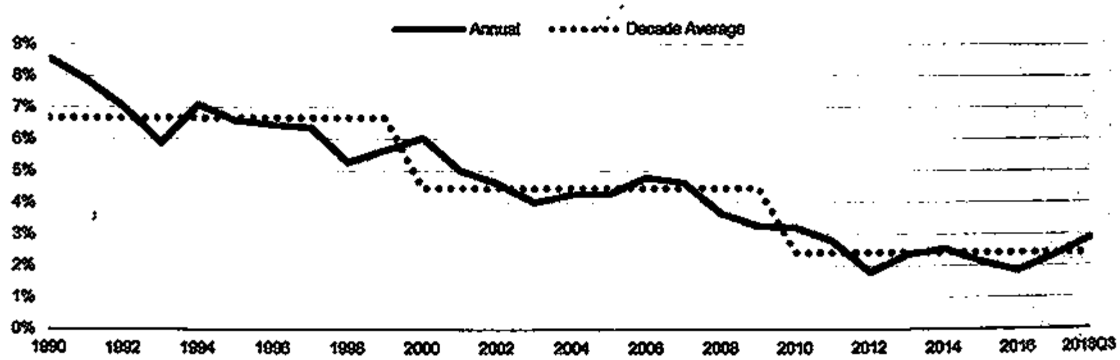
Economic and Capital Drivers

The economic and capital drivers for life settlements are positive. Even as interest rates improve, they remain below historic levels. Asset managers and investors are likely to continue allocating capital to alternative assets. Life settlements should benefit from that allocation.

Treasury Rates

The 10-year Treasury provides a useful benchmark for life settlements because the duration of a life settlement portfolio can average ten years. The yield on 10-year Treasuries began to increase in 2017. Forecasts from the Philadelphia Federal Reserve Survey of Professional Forecasters are for continued improvement in interest rates. While Treasury rates are improving, they remain relatively low compared to prior decades.

Average Annual 10-Year Treasury Rate



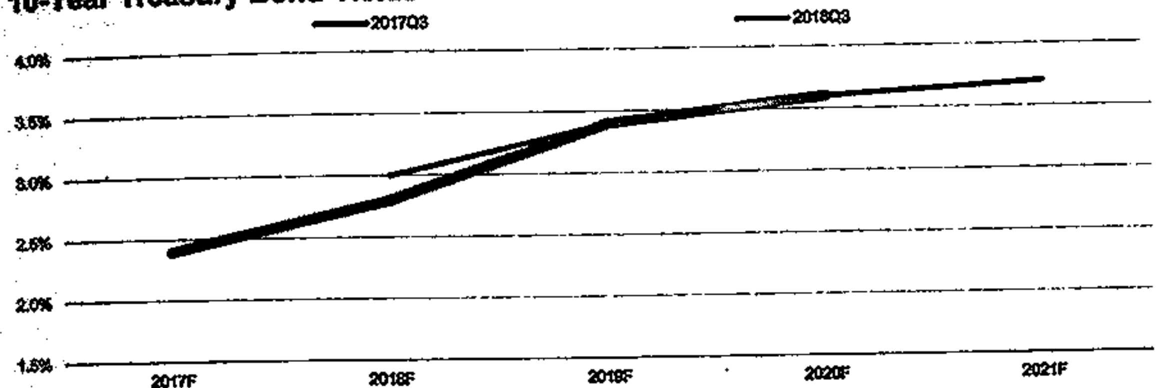
Prepared by Conning, Inc. Source: U.S. Department of the Treasury (2018).

- The average 10-year Treasury for the 1990s was 6.6%.
- The average 10-year Treasury for the 2000s was 4.5%
- Since 2010, the average 10-year Treasury has been 2.4%

The decrease in interest rates is a contributing factor to the allocation of capital towards alternative assets such as life settlements. Looking ahead, these rates are expected to improve, but remain below historic levels.

The third quarter 2018 consensus estimates of the Philadelphia Federal Reserve's *Survey of Professional Forecasters* adjusted their forecast for 10-year Treasury bonds from third quarter 2017.

10-Year Treasury Bond Yields



Prepared by Conning, Inc. Source: Philadelphia Federal Reserve *Survey of Professional Forecasters* 2018Q3.

- The *Survey of Professional Forecasters* estimates that 10-Year Treasury rates will increase between 2018 and 2021.
- Improving Treasury yields will benefit life insurer investment portfolios, reducing spread pressure on universal life crediting rates and the need for COI increases.
- This is a positive for life settlement investors who have seen COI increases potentially reduce the profitability of their portfolios.

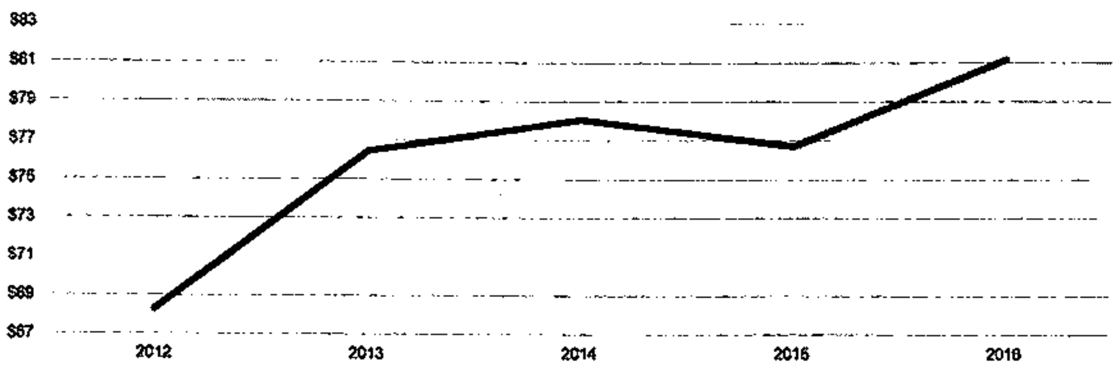
Capital Flows to Alternative Assets

The 2016 and 2017 growth in life settlements reflects the return of capital to this asset class. That return is driven in part by the continued flow of money to asset managers. Those inflows lead asset managers to find more ways to generate investment returns. Alternative assets, of which life settlements is a type, are one segment attracting attention to generate those returns. Looking ahead, these trends are likely to continue, supporting further growth for life settlements.

Inflows to Asset Managers Continue

Asset managers continue to experience growth in their assets under management. P&I/Willis Towers Watson, which reports on the 500 largest asset managers, found that assets increased from $68 trillion in 2012 to $81 trillion in 2016 (the latest year data is available).

Assets Under Management: 500 Largest Global Asset Managers
$ in trillions



Prepared by Conning, Inc. Source: P&I/Willis Towers Watson *The World's 500 Largest Asset Managers* (2016).

- Some of that growth reflects the appreciation of underlying assets.

- However, the consulting firm BCG reported in its report "*Global Asset Management 2018: The Digital Metamorphosis*," that asset manager inflows were 3.5% of AUM in 2017, compared to 1.5% for the years of 2012-2016.

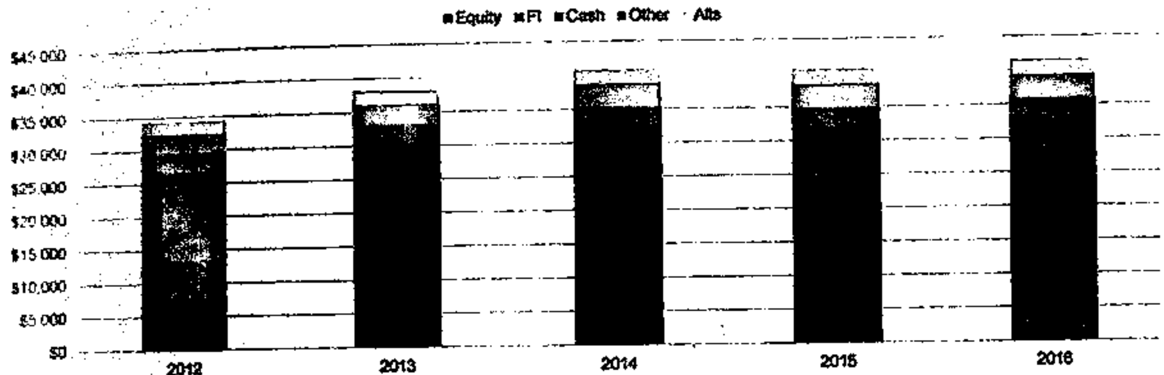
Several macro-level drivers favor the continued inflows of investor capital to asset managers and private equity firms. Demographics trends are driving individuals to save more for retirement in their pension plans. In the U.S., defined benefit pension plans continue to increase funding contributions to improve funding ratios.

The increase in personal wealth among the high net worth and ultra-high net worth population segment adds to the amount of capital seeking investment returns. For example, in 2012, CapGemini reported that the number of single-family offices in the U.S. was about 3,000, with assets under management between $1 trillion and $1.2 trillion. There were also about 150 multi-family offices, with assets under management between $400 billion to $450 billion. The growing number of high net worth individuals in the emerging markets of Asia and India creates a global flow of new capital for investment.

Alternative Assets Increase

The challenge for asset managers is generating risk-adjusted returns for the growing number of investors. Alternative assets, such as life settlements, have provided one solution. P&I/Willis Towers Watson has tracked the asset allocation of the 500 largest asset managers, which captures the growing interest in alternative assets. The following chart shows the change from 2012 to 2016 (the last year available).

AUM for the 500 Largest Asset Managers
Assets under management, $ in billions



Prepared by Conning, Inc. Source: P&I/Willis Towers Watson *The World's 500 Largest Asset Managers* (2016).

Over this period, Alternative Assets had the second highest CAGR (compound annual growth rate) among the asset classes tracked:

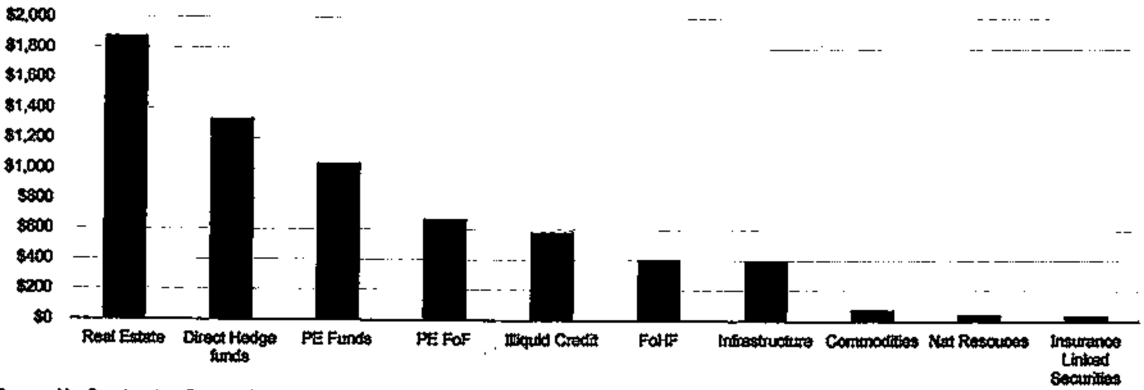
- Equity allocations had an 8.1% CAGR
- Alternative Assets had a 6.0% CAGR
- Other investments had a 4.5% CAGR
- Fixed Income had a 2.1% CAGR
- Cash had a 1.5% CAGR

Life Settlements as an Alternative Asset Class

Compared to other types of alternative asset, life settlements are a relatively small asset class. That said, life settlements have attracted more capital than other life insurance ILS.

Willis Towers Watson produces an annual survey of 562 global alternative asset managers. As seen in the accompanying chart, the types of assets invested in by those managers range from $1.9 trillion for real estate to $39 billion for insurance linked securities (which include life and non-life liabilities).

Alternative Assets under Management, 2016
$ in billions



Prepared by Conning, Inc. Source: Willis Towers Watson *Global Alternative Survey 2017*. © 2018 Willis Towers Watson. All Rights Reserved.

Life settlements, in 2016, had an estimated $25 billion of face value in force. What the Willis Towers Watson survey shows is that insurance-based assets, overall, are a small percentage of the alternative asset sector. That said, compared to other ILS, life settlement has attracted more capital from investors. How much capital has been committed to life settlements?

Over the period of 2002 through 2017, we estimate approximately $69 billion of new face value has been settled in the secondary life settlement market. Assuming investors paid, on average, 20% of that face amount in the secondary market, the total initial capital committed to life settlements would be approximately $14 billion. The $21 billion of life settlements in force at the end of 2017 represents approximately $4.2 billion of capital.

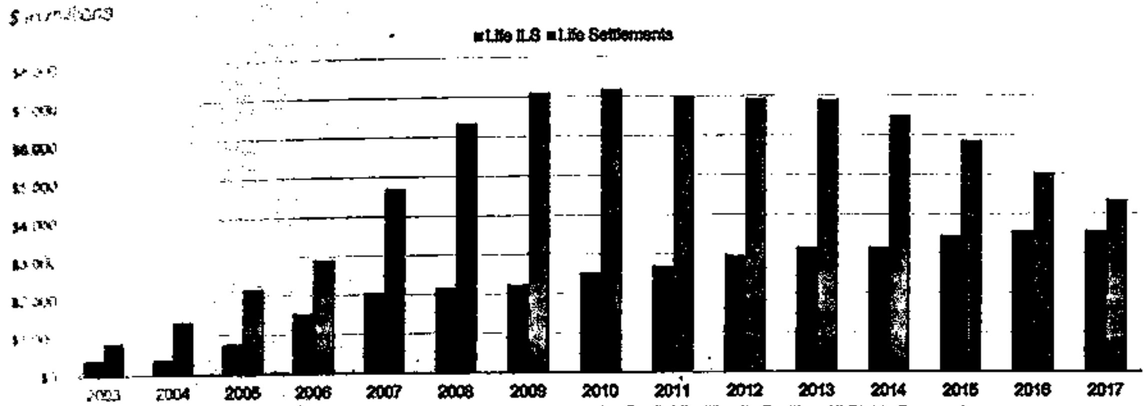
A portion of life settlement market is resold in the tertiary life settlement market. Those sales also consume investor capital and increase the total capital committed to life settlements. For example, the AIG portfolio represented approximately $15 billion of total face sold in two large blocks. If the same 20% rule of thumb was applied to that portfolio, that would represent an additional $3 billion in capital committed to life settlements.

It is likely that sales in the tertiary market occur at a lower percentage of face than in the secondary market. That lower percentage represents a combination of buyer concern about the initial underwriting and the seller's desire to dispose of the underperforming policy or portfolio. Because tertiary market sales are not readily available, the conservative approach to estimating the amount of capital committed to life settlements is to use the secondary market only.

We can compare the amount of capital committed to life settlements against the amount committed to life insurance-linked securities. When we do so, we find that life settlements have exceeded life ILS.

Cumulative Committed Capital

$ in millions



Prepared by Conning, Inc. Source: Aon-Benfield Insurance-Linked Securities: Alternative Capital Fortifies Its Position. All Rights Reserved.

Capital committed to life-ILS has primarily focused on securities issued to relieve the reserve strain caused by XXX and AXXX life reserves. The emergence of PBR (principle-based reserves) and regulatory change reduced the need for those types of life-ILS.

Understanding the size of the life settlement market, relative to other asset types, is important. As a small asset class, it does not take a large shift in capital movement to alter the market's dynamics from a buyers' market to a sellers' market. Clear evidence of this was 2008 and 2009 when capital retreated from life settlements. As capital returns, there is potential for the market to shift again towards the sellers' favor.

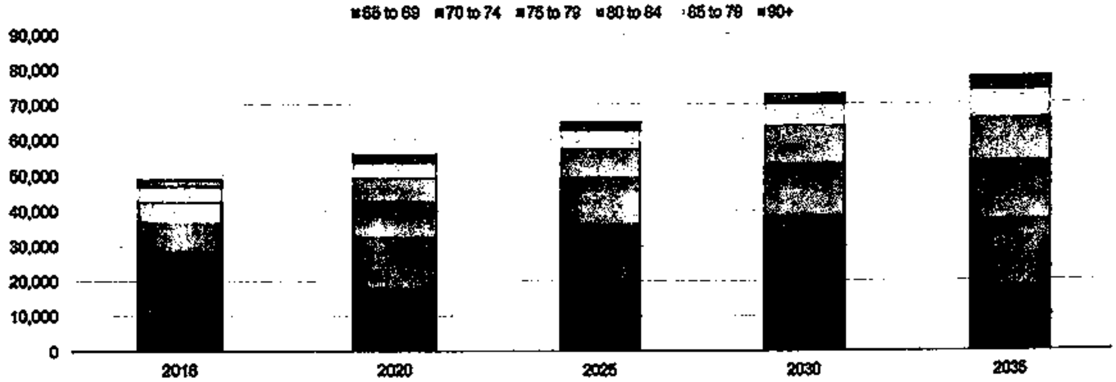
Consumer Drivers

Consumer drivers favor the continued growth of life settlements. The number of potential customers will increase as more Baby Boomers enter their senior years. As that generation ages, concerns about how its members will fund LTC increase. Both drivers are positive in terms of increasing the number of policy owners who might want to settle their policy.

Consumer Demand Likely to Increase

The number of retirees continues to increase. The U.S. Census Bureau projects a 38% increase in the number of people age 65 and older from 47.8 million in 2015 to 65.9 million in 2025. For those ages 65 to 85, there will be a projected 40% increase, from 41.5 million to 58.4 million. These demographic increases drive the potential growth of the life settlement market.

U.S. Population Projection for Selected Age Groups



Prepared by Conning, Inc. Source: U.S. Census Bureau, U.S. Department of Commerce (2018).

- There is double-digit compound annual growth for all age groups from age 70 and older.

- The 80 to 84 age group is projected to experience a 20% CAGR over this period

- The 75 to 79 age group is projected to experience a 19% CAGR over this period

By 2030, all Baby Boomers will be older than age 65. This will expand the size of the older population so that 1 in every 5 residents will be retirement age. In a 2018 press release announcing the publication of the Census' Bureau's population projection, Jonathan Vespa, a demographer with the U.S. Census Bureau was quoted as saying: "The aging of Baby Boomers means that within just a couple decades, older people are projected to outnumber children for the first time in U.S. history. By 2035, there will be 78.0 million people 65 years and older compared to 76.7 million (previously 76.4 million) under the age of 18."

The Census Bureau projects that the aging population will lead to an increase in the number of deaths. Between 2020 and 2050, the number of deaths is projected to rise substantially as the population ages and a significant share of the population, the Baby Boomers, age into older adulthood.

Growing Demand for Long-Term Care Funding Sources

Associated with the number of individuals entering the life settlement demographic range, the costs associated with aging continue to rise. Life settlements can provide an alternative source of funding for LTC. The combination of more elderly and rising LTC costs suggests a positive force for the demand among policy holders to settle their policies.

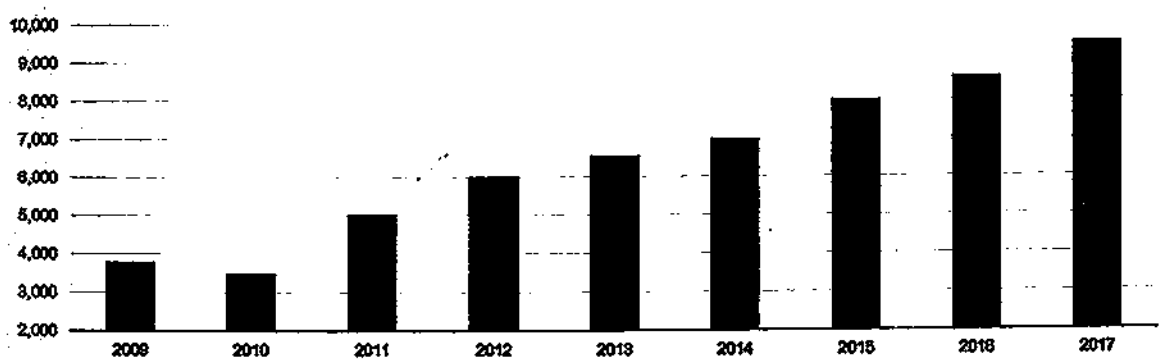
Growing Demand for Long-Term Care Funding Sources

The number of individuals filing long-term care insurance claims with insurers has increased over time.

As the number of claims increases, so too does the cost of LTC. Medicaid payments can be problematic in terms of qualification and a state's ability to pay. The need to pay for LTC creates an opportunity for life settlements. Investors can provide a source of LTC funding through the purchase of cash value policies.

Number of New Individual Long-Term Care Insurance Claims Incurred

 # in thousands



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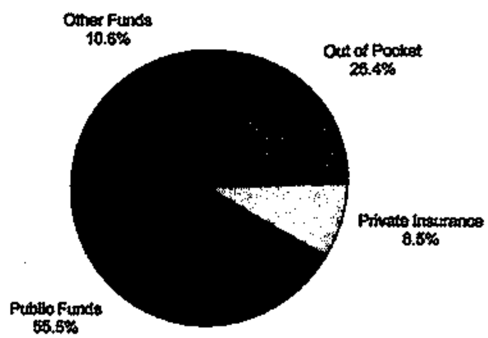
- In 2009, there were 3.8 million new LTCI claims filed with insurers.
- In 2017, there were 9.5 million new LTCI claims filed.
- These numbers only represent those claims covered by individual LTCI insurance plans.
- The number of Medicaid LTCI claims is not included, but increases the number of new long-term care patients

According to the Genworth *2017 Cost of Care Survey*, the annual median cost of long-term care services increased an average of 4.5% from 2016 to 2017, the second-highest year-over-year increase for nursing homes and home care since the study began in 2004 and nearly three times the 1.7% U.S. rate of inflation.

Many individuals needing LTC turn to public funds to cover their costs. As federal and state governments face ongoing fiscal constraints, the long-term care benefits that these government programs currently cover may be reduced. States, through Medicaid, are a primary funder of nursing home care.

Public funds (Medicare, Medicaid, and the Department of Veterans Affairs) were the major source of funds used to cover LTC costs. Collectively, public funds accounted for 56%, or $88 billion, of nursing home payments in 2015 (the latest data available from Centers for Medicare & Medicaid Services). As federal and state governments face ongoing fiscal constraints, the long-term care benefits that these government programs currently cover may be reduced.

Nursing Home and Retirement Care Expenses Paid by Source—2015



Prepared by Conning, Inc. Source: ©2018 Centers for Medicare & Medicaid Services.

Under Medicaid, if a cash value life insurance policy has more than a minimal amount of cash value (usually in the range of $2,000), the owner must liquidate it and apply any money received towards their LTC cost of care before qualifying for Medicaid.

In 2016, according to the *State Expenditure Reports* from the National Association of State Budget Officers, Medicaid accounted for 28% of the average state's budget. Among the individual states, the range ran from 11% for Wyoming to 38% for Ohio.

With Medicaid accounting for a significant portion of a state's budget, and likely to increase as an increasing number of aging Baby Boomers need LTC, states are exploring other LTC funding options. This has led some states to recommend life settlements as one option families and individuals could consider for LTCI funding.

Industry Drivers

Industry drivers remain mostly favorable for the continued growth of life settlements. The broad regulatory landscape for life settlements has stabilized. The availability of credit for life settlement investors to use to finance premiums on existing portfolio appears to remain limited. Life expectancy revisions are now understood as an investment risk, rather than an unexpected surprise.

Regulatory Oversight

The attempt by a Florida state legislator to limit or ban viatical settlements failed to leave committee. The NAIC has not introduced new life settlement model laws, and states continue to adopt regulations favorable to discussing life settlements with retirees considering lapsing or surrendering their policies. The TCJA simplified the process of gathering information to calculate the capital gains on a life settlement. This is a positive for future growth.

Credit Availability for Premium Financing

At its high point, banks were willing lenders to life settlement investors. The credit facilities enabled investors to finance the early years of a portfolio's premiums, enabling them to put more capital at work buying policies. The economic crisis of 2008 led banks to withdraw lending from life settlements, along with other sectors. While other sectors have seen a relaxation of credit, life settlements appear to have not yet benefited from an easing of credit.

Life Expectancy Estimate Revisions

None of the major medical underwriters announced significant changes to their life expectancies in late 2017 or the first half of 2018.

Tertiary Market Drivers

Two drivers are key to the development of the tertiary life settlement market. These drivers influence investor decisions whether to purchase a new policy, an already settled policy, or not purchase any type of policy. Looking ahead, these drivers are mixed and suggest that capital may concentrate on new life settlements.

Key Long-Term Drivers: Tertiary Market

Driver	Trend	Impact on Tertiary Market
Policy Evaluation Costs	Increasing percentage of in force settled policies are post-NAIC and NCOIL (National Conference of Insurance Legislators) model settlement laws	Positive as policies settled post-NAIC and NCOIL model laws may reduce legal costs
In Force Market Supply	Unless annual volumes increase, there will be a decreasing supply of in force policies	Negative as the in force supply decreases, producing increased competition for investors

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Policy Evaluation Costs

Policy evaluation costs influence the tertiary market. Higher costs reduce the tertiary market's appeal by lower rates of return. Conversely, lower evaluation costs improve returns and increase the tertiary market's appeal.

The costs in evaluating an already settled portfolio or policy are primarily focused on legal costs and underwriting costs. Legal costs are incurred because the laws governing the initial settlement may have changed. The legal review can identify any potential issues a new owner may have in collecting a death benefit. These costs vary in relation to the amount of paperwork concerning the original settlement that is available for review. As with an original settlement, an investor in the tertiary market will likely want to review the life expectancy report on the policies to understand their longevity risk exposure. As with the legal cost, the availability of medical and life expectancy records affects the amount of new underwriting costs.

In 2018 and beyond, we expect legal costs may be lower as policies settled after the implementation of NAIC (National Association of Insurance Commissioners) and NCOIL (National Conference of Insurance Legislators) model settlement laws become a larger percentage of existing portfolios. In a similar fashion, higher levels of medical underwriting documentation may lower some costs.

In Force Market Supply

The face value amount and number of policies held in force define the upper limit of the tertiary market. As with the secondary market, not all in force policies are available for sale in a given year.

Summary

Looking beyond 2017, several key drivers are favorable for continue growth in the life settlement market.

The economic and capital drivers for life settlements are positive. Even as interest rates improve, they remain below historic levels. Asset managers and investors are likely to continue allocating capital to alternative assets. Life settlements should benefit from that allocation.

Consumer drivers favor the continued growth of life settlements. The number of potential customers will increase as more Baby Boomers enter their senior years. As that generation ages, concerns about how its members will fund long-term care increase. Both drivers are positive in terms of increasing the number of policy owners who might want to settle their policy.

Industry drivers remain mostly favorable for the continued growth of life settlements. The broad regulatory landscape for life settlements has stabilized. While the passage of the TCJA is positive, the availability of credit for life settlement investors to use to finance premiums on existing portfolio appears to remain limited. Life expectancy revisions are now understood as an investment risk rather than an unexpected surprise.

Two drivers are key to the development of the tertiary life settlement market. Policy evaluation costs for already settled policies are a factor in pricing portfolios. At the same time, the number of available policies in the tertiary market is driven by the amount of in force policies and the competition for those policies may increase policy costs. These drivers influence investor decisions whether to purchase a new policy, an already settled policy, or not purchase any type of policy. Looking ahead, these drivers are mixed and suggest that capital may concentrate on new life settlements.

5. Life Settlement Market Forecast

Given the favorable nature of the drivers of life settlement market growth, our analysis of the life settlement market is that:

- The average of our ten-year forecast of the annual gross market potential for life settlements is approximately $194 billion, an increase from the prior forecast.
- The average of our ten-year forecast of the annual volume of new life settlements is approximately $2.7 billion, again an increase from the prior forecast.

The following sections analyze the potential growth of the U.S. life settlement market over the coming decade.

Conning's Life Settlement Market Forecast

The secondary market for life settlements is where the original policyholder sells their policy to an investor. Three components form the basis of our secondary market forecast. The first is the gross market potential. The second is the net market potential. The third is the annual volume settled. The forecasts for these three components reflect the impact of certain key long-term drivers.

Gross Market Potential Forecast

Conning refers to the total of in force life insurance face amounts that meet the criteria used by life settlement buyers and investors as the U.S. gross market potential. This represents the amount of policies that meet buyer and investor criteria, regardless of whether the policyholder has settled their policy, or has any interest in settling their policy.

Forecast Criteria

U.S. gross market potential is not static. Changes in buyer criteria can increase or decrease the number of policies and face amount that may be eligible for life settlements. In our 2007 strategic study, *Life Settlement Market—Increasing Capital and Investor Demand,* we identified the criteria commonly used by life settlement providers in selecting a policy.

Given the changes in the life settlement market since 2007, we re-evaluated the criteria life settlement providers use to select policies. These providers, and many others, continued to identify the same policy types as in our 2007 analysis. The following table shows the changes we made in our current forecast criteria because of our analysis.

Life Settlement U.S. Gross Market Potential Forecast Criteria

Criteria	2007 Criteria	2018 Criteria
Minimum Age of Insured	55 years old	60 years old
Policy Types	Whole Life, Universal Life, Convertible Term Life, Level-Premium Term Life	Whole Life, Universal Life, Convertible Term Life, Level-Premium Term Life
Minimum Face Amount	$50,000	$100,000

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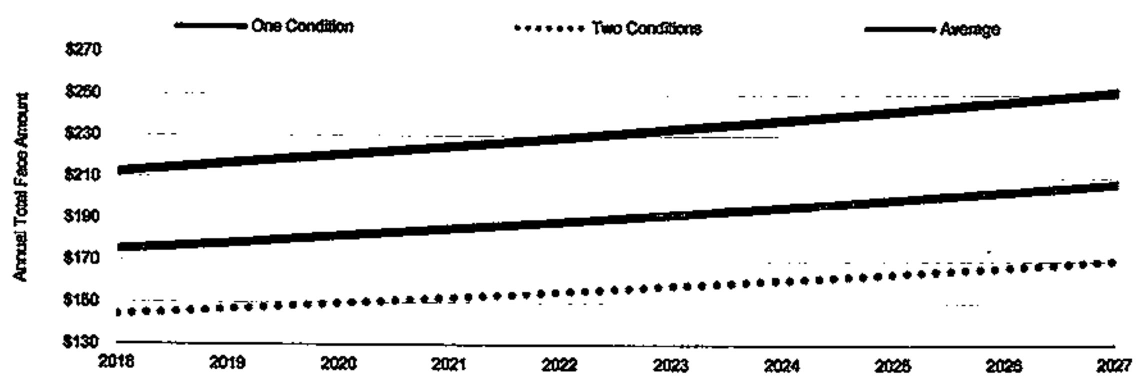
Looking ahead, the return of capital to this asset class is the key factor at play that could alter these criteria over the forecast period. If capital returns to the market, along with an appetite for purchasing new policies, competition might cause the age value and face value criteria to be lower.

The U.S. Gross Market Potential for 2018-2027

Based on a $100,000 minimum face value, Conning estimates the average U.S. gross market potential will range between $175 billion and $207 billion in face value for 2018 through 2027, for an average face value of $191 billion.

Conning Forecast of U.S. Life Settlement Gross Market Potential
$ in billions



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A key factor in determining the forecast is how selective prospective buyers are when it comes to health conditions. Assuming that investors are willing to accept policies where the insured has one serious medical condition, then the forecast U.S. gross market potential would range between $213 billion and $251 billion in face value for 2018 through 2027, with an average face value of $232 billion.

However, given lower capital levels flowing into this asset class, investors may be more selective in their policies. If investors selected policies where the insured has two serious medical conditions, then the U.S. gross market potential would range between $144 billion and $170 billion in face value for 2018 through 2027, with an average face value of $157 billion.

Net Market Potential Forecast

Not everyone who has a policy that meets investor criteria would be willing to settle that policy. We refer to the percentage of policy owners that meet investor criteria and who would consider settling their policies as the net market potential. Net market potential is important because it puts a ceiling on the face amount of policies that could be settled at any given point.

Estimating Net Market Potential 2018–2027

Conning estimates net market potential as falling within a lower and higher limit. We established these limits based on a 2010 survey by the Insurance Studies Institute of U.S. seniors.

In the Insurance Studies Institute survey, 40% of respondents had lapsed or surrendered their life insurance policies. Of those who had lapsed or surrendered, 61% stated they were not interested in a life settlement. We used this to establish a lower net market potential band of 40% (100% less the approximately 60% who expressed no interest in life settlements.) At the same time, 69% of respondents said they were not concerned about investors owning policies on their lives. We used that to establish 70% as the higher limit (100% less the approximately 30% who were concerned about investors owning their policies.)

Changes in Life Settlement Net Market Potential

Criteria	2018–2027
Consumer Awareness	Increasing as states encourage life settlements for long-term care Medicaid recipients
Consumer Demand Drivers	Increasing due to demand for retirement income and long-term care

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Over time, educational campaigns by the life settlement industry should increase awareness. At the same time, states have begun encouraging individuals to consider a life settlement if they are also planning to use Medicaid to fund long-term care.

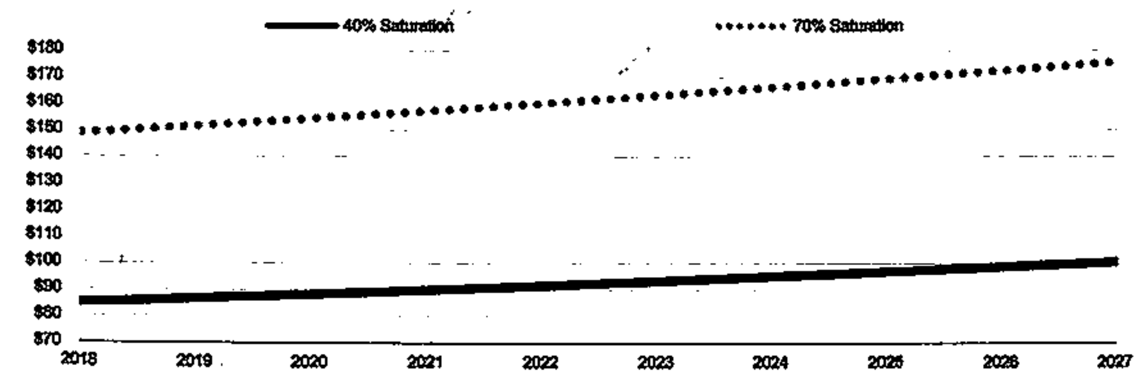
In addition, life settlements may be a source to fund retirement income as Baby Boomers begin retiring. Together, these indicate an increase in the percentage of individuals willing to consider settling their policies.

The Net Market Potential for 2018-2027

Conning estimates that the average annual net market potential will be $162 billion over the next ten-years, based on a 70% limit. We base this potential on policies with a minimum face value of $100,000 and with a policyholder who has a single health condition.

Conning Forecast of U.S. Life Settlement Net Market Potential

$ in billions, one health criterion



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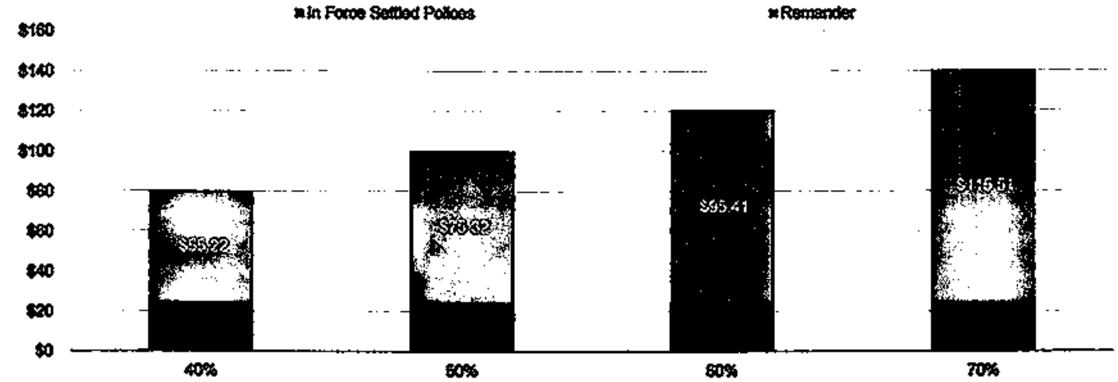
Net market potential increases over time, driven by demographic forces. This translates into more policies being available for surrender. Even if the percentage of individuals willing to surrender their policies remains unchanged, the net market potential's face amount would increase.

Our forecast indicates that the upper limit of net market potential will increase from $149 billion in 2018 to $176 billion in 2027. The lower limit will increase from $85 billion to $101 billion over the same period. The exact timing of when policyholder awareness reaches that limit, and the percentage that limit might be, is subject to judgment.

Conning Estimate of 2017 U.S. Policies Remaining for Life Settlement
$ in billions, one health criterion



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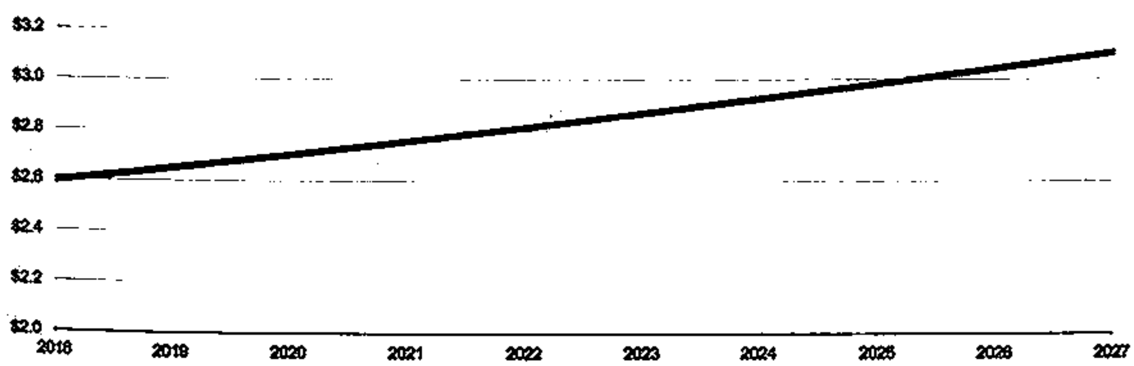
Net market potential establishes a ceiling on the growth of life settlements. The amount of in force life settlements acts as a floor. Any remaining growth can only reflect the "space" between the floor and ceiling.

If the ceiling remains static, in force growth will reduce the amount of available life settlements. Alternatively, if the amount of in force increases faster than the ceiling, the amount of available life settlements also becomes smaller.

Annual Volume Forecast

Only a small amount of the net market potential is settled in a given year. This reflects the combinations of the amount of policies brought to market and the amount of capital committed to purchasing those policies.

Conning Forecast of Annual U.S. Life Settlement Volume
$ in billions, one health criterion



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Over the ten-year period from 2018 through 2027, Conning estimates the average annual amount of new life settlements will be $2.7 billion.

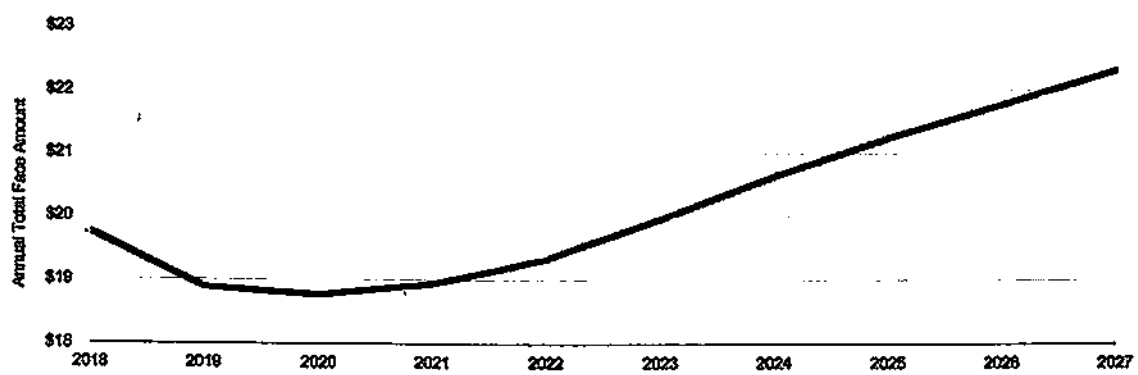
We estimate annual growth of 1% to 2% for face value over the medium-term and remainder of the forecast period. We base this on our analysis of broader investor concerns and continued uncertainties around this asset class.

Conning Tertiary Market Forecast

The tertiary market is where investors purchase already settled policies. At the end of 2017, we estimated the total face value of already settled policies that were still in force was slightly more than $21 billion.

The tertiary market's upper limit is the total amount of in force policies that are already settled.

Conning Tertiary Market Forecast of In Force U.S. Life Settlements
$ in billions, one health criterion



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Conning estimates the in force block of life settlements by projecting the maturation of each year's block of settled policies and including new policies added in that year (which in turn are aged over the forecast period.)

Over the forecast period of 2018 through 2027, Conning estimates the in force amount of life settlements will go through two phases. The first is a decline from approximately $20 billion to almost $19 billion, with the majority occurring within the next five years before leveling off. This decrease represents the maturation, or lapsation, of the policies sold during the high-point of the market. After that policy bulge passes, there is a slow increase of in force volumes as the growth of annual volumes exceeds the lower amount settled from 2011 through 2016.

Two key factors can change the amount of in force life settlements. The first is the amount of new life settlements purchased each year. The second is the life expectancies of those policies. Life expectancies for policies sold in 2015, for example, was 105 months according to the August 2015 *AAP Life Settlement Market Update*. Longer life expectancies mean that the policies remain in force for a longer period. This adds to the amount of in force policies.

The prolonged buyers' market will significantly reduce the amount of in force business over the 2018-2027 forecast period. Unless capital returns in significant amounts to this asset class over this period, the number of new policies settled each year will not offset those that either lapse or have death claims, resulting in a lower in force amount of life settlements.

Summary

Life settlements continued to attract investor interest as an alternative asset class in 2017 and into 2018. Looking ahead, investor interest is likely to translate into steady growth in new life settlements. That growth, while steady, is unlikely to reach pre-crisis peaks.

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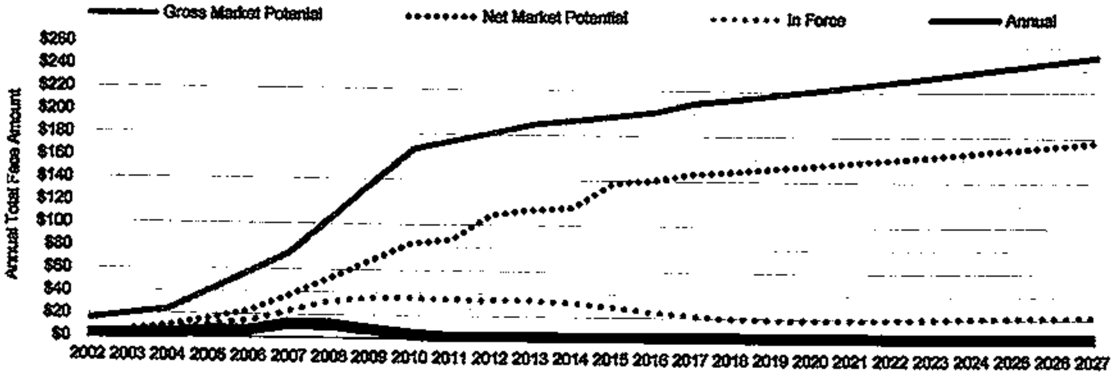
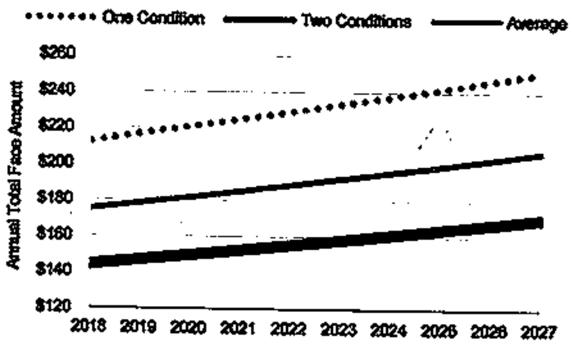
Face Value Projection Summary—Key Forecasts

$ in billions, one health criterion

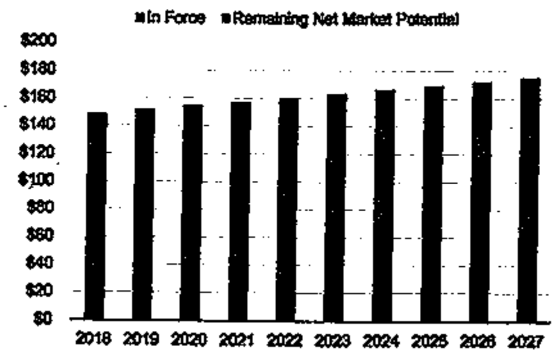
Conning U.S. Life Settlement Market Development and Forecast



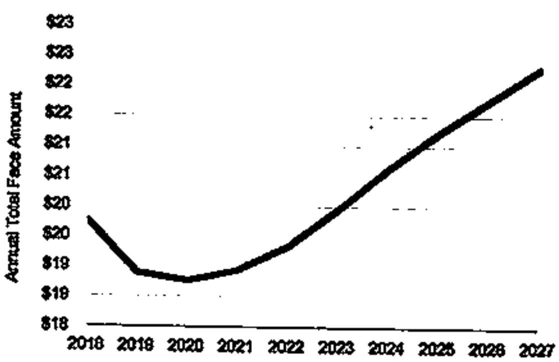
Conning Forecast of U.S. Life Settlement Gross Market Potential



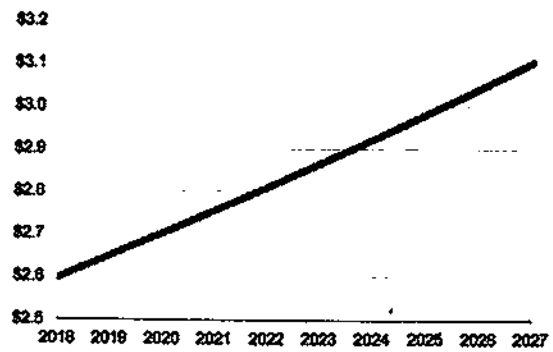
Conning Forecast of U.S. Life Settlement Net Market Potentials



Conning Forecast of In Force U.S. Life Settlements



Conning Forecast of Annual U.S. Life Settlement Volume



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Conning Estimated Face Value History and Projection

$ in billions

Year	Annual Volume	In Force	Net Market Potential	Gross Market Potential
2002	$2.0	$1.9	$3.2	$15.8
2003	2.6	4.2	6.0	20.0
2004	3.3	6.7	9.7	24.3
2005	5.5	10.8	16.5	41.2
2006	6.1	14.5	23.2	58.1
2007	12.2	23.5	37.5	75.0
2008	11.8	31.8	52.9	105.7
2009	7.6	35.6	68.2	136.4
2010	3.8	36.0	83.6	167.1
2011	1.3	35.1	87.3	174.6
2012	2.0	34.8	109.3	182.2
2013	2.6	34.6	113.8	189.7
2014	1.7	32.5	116.1	193.4
2015	1.7	29.3	138.0	197.2
2016	2.1	25.2	140.7	200.9
2017	2.5	21.8	146.6	209.3
2018	2.6	19.8	148.8	212.6
2019	2.6	18.9	151.8	216.9
2020	2.7	18.8	154.6	220.9
2021	2.8	18.9	157.5	225.0
2022	2.8	19.3	160.4	229.2
2023	2.9	20.0	163.4	233.4
2024	2.9	20.6	166.4	237.8
2025	3.0	21.2	169.5	242.2
2026	3.0	21.8	172.7	246.7
2027	3.1	22.3	175.9	251.3

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Conning Tertiary Market Forecast: 2018-2027

$ in billions

Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Beginning In Force	$19.8	$18.9	$18.8	$18.9	$19.3	$20.0	$20.6	$21.2	$21.8	$22.3
New Settlements	$5.5	$6.1	$12.2	$11.8	$7.6	$3.8	$1.3	$2.0	$2.6	$1.7
Claims	$6.4	$6.2	$12.0	$11.4	$6.9	$3.1	$0.7	$1.4	$1.8	$0.8
Ending In Force	$18.9	$18.8	$18.9	$19.3	$20.0	$20.6	$21.2	$21.9	$22.5	$23.2

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6. Life Settlement Insurer Performance

Over the course of the life settlement asset class's development, life settlement investors have purchased policies from a wide selection of companies. This chapter examines the financial performance and trends of those insurance companies. It compares the performance of those companies against the total life industry to identify any divergence from broader industry trends. Significant negative divergence may indicate future challenges for life settlement investors if any divergence leads to premium increases.

Insurers with Life Settled Policies

As the life settlement asset class has developed, investors have concentrated the purchase of policies among a relatively small number of insurance companies. That said, those companies represent a significant portion of the life industry and of cash value products.

Cash Value Life Insurance Analysis

In 2017, 606 companies reported any amount of life insurance reserves. Our analysis of the 2016 and 2017 SEC filed Form 10(k)s of life settlement companies that have disclosed the policies investors own found that there were 43 operating subsidiaries owned by 37 insurance groups in those portfolios. An insurance group is a holding company with one or more operating subsidiaries.

Before reinsurance, the life industry reported a total face value of $9.0 trillion of cash value life insurance in force at the end of 2017. The 43 insurers whose policies life settlement companies own represented 50%, or $4.5 trillion, of the cash value life insurance in force at year-end 2017. Cash value insurance, whole life and universal life, is the product that life settlement investors favor.

Cash Value Market Share

The accompanying table shows the total face value of cash value life insurance in force at the end of 2017 and market share of the total industry cash value life insurance face values for the 43 insurers.

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Insurers in Life Settlement Portfolios: 2017

$ in millions

Company	Insurance Group	Cash Value Life Insurance Face	Cash Value Life Market Share
Prudential Insurance Co of America	Prudential Financial Inc	$427,392	4.7%
New York Life Insurance Company	New York Life Insurance Company	334,757	3.7%
John Hancock Life Insurance Company USA	Manulife Financial Corporation	316,228	3.5%
Lincoln National Life Insurance Co	Lincoln National Corporation	318,107	3.5%
Protective Life Insurance Company	Dai-ichi Life Holdings, Inc.	289,756	3.2%
Massachusetts Mutual Life Insurance Co	Massachusetts Mutual Life Insurance Co	278,784	3.1%
Metropolitan Life Insurance Company	MetLife Inc	224,684	2.5%
State Farm Life Insurance Company	State Farm Mutual Automobile Ins Co	227,343	2.5%
Pruco Life Insurance Company	Prudential Financial Inc	210,400	2.3%
AXA Equitable Life Insurance Company	AXA S.A.	192,743	2.1%
Brighthouse Life Insurance Company	Brighthouse	151,665	1.7%
American General Life Insurance Company	American International Group, Inc.	142,269	1.6%
Pacific Life Insurance Company	Pacific Mutual Holding Company	145,283	1.6%
Transamerica Life Insurance Company	Aegon N.V.	135,876	1.5%
Hartford Life and Annuity Insurance Co	Hartford Financial Services Group Inc	100,906	1.1%
Lincoln Benefit Life Company	Resolution Life L.P.	96,922	1.1%
Principal Life Insurance Company	Principal Financial Group Inc	102,090	1.1%
RiverSource Life Insurance Company	Ameriprise Financial Inc	94,175	1.0%
Midland National Life Insurance Company	Sammons Enterprises, Inc.	74,835	0.8%
Penn Mutual Life Insurance Company	Penn Mutual Life Insurance Company	65,412	0.7%
Jackson National Life Insurance Company	Prudential plc	51,883	0.6%
United of Omaha Life Insurance Company	Mutual of Omaha Insurance Company	55,648	0.6%
Genworth Life Insurance Company	Genworth Financial, Inc.	46,854	0.5%
North American Company for L & H Ins	Sammons Enterprises, Inc.	40,989	0.5%
Sun Life Assurance Co of Canada USB	Sun Life Financial Inc	41,703	0.5%
American National Insurance Company	American National Insurance Company	34,959	0.4%
Ameritas Life Insurance Corp	Ameritas Mutual Holding Company	38,666	0.4%
Fidelity & Guaranty Life Insurance Co	HRG Group, Inc.	25,981	0.3%
National Life Insurance Company	NLV Financial Corporation	27,468	0.3%
New England Life Insurance Company	MetLife Inc.	23,064	0.3%
Ohio National Life Insurance Company	Ohio National Mutual Holdings Inc	23,667	0.3%
Phoenix Life Insurance Company	Nassau Reinsurance Group Holdings, L.P.	24,551	0.3%
Texas Life Insurance Company	Canada Pension Plan Investment Board	29,023	0.3%
National Western Life Insurance Company	National Western Life Group, Inc.	16,433	0.2%
Security Mutual Life Insurance Co of NY	Security Mutual Life Insurance Co of NY	20,037	0.2%
West Coast Life Insurance Company	Dai-Ichi Life Holdings, Inc.	22,277	0.2%
Banner Life Insurance Company	Legal & General Group Plc	4,721	0.1%
Columbus Life Insurance Company	Western & Southern Mutual Holding Co	11,707	0.1%
Kansas City Life Insurance Company	Kansas City Life Insurance Company	11,280	0.1%
Voya Retirement Insurance and Annuity Co	Voya Financial Inc.	9,204	0.1%
Great Southern Life Insurance Company	Financial Holding Corporation	4,159	0.0%
US Financial Life Insurance Company	AXA S.A.	2,083	0.0%
Total		**$4,495,975**	**49.7%**

Athene's life insurance has been reinsured.
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- The 43 insurers, known in this chapter as Life Settlement Targets, accounted for 50% of the total face value held by all insurers for cash value life insurance. This is before reinsurance.

- Cash value life insurance, which excludes term life insurance, accounted for only 33% of their total in force life insurance.

- Among these 43 insurers, cash value life insurance as a percentage of total life insurance ranged from 99% to 1%. Six companies had 75% or more of their total life insurance in cash value products, while seven insurers had 25% or less in cash value products.

Life Settlement Impact on In Force Face Values

- Conning estimates there were approximately $21 billion of life settlements in force at the end of 2017.

- Life settlements represented less than 1% of the face value of all cash value life insurance of these 43 insurers at the end of 2016.

- While a small percentage of total in force face value, eventual death claims could alter the mortality assumptions used in pricing UL policies.

Mortality Analysis

Insurers targeted by life settlement investors have experienced worsening mortality performance over the period of 2013 through 2017. We examined surrenders as both a percentage of in force face value and in absolute dollar terms.

Analyzing face value provides an indication of how much of an insurer's book of life business is being lost. The amount of surrender benefits, as a percentage of reserves, gives some insight to the economic impact of surrenders on an insurer.

Because statutory reporting does not separate term life death claims from cash value insurance death claims, our first two analyses use face amount and reserves for all individual life insurance products.

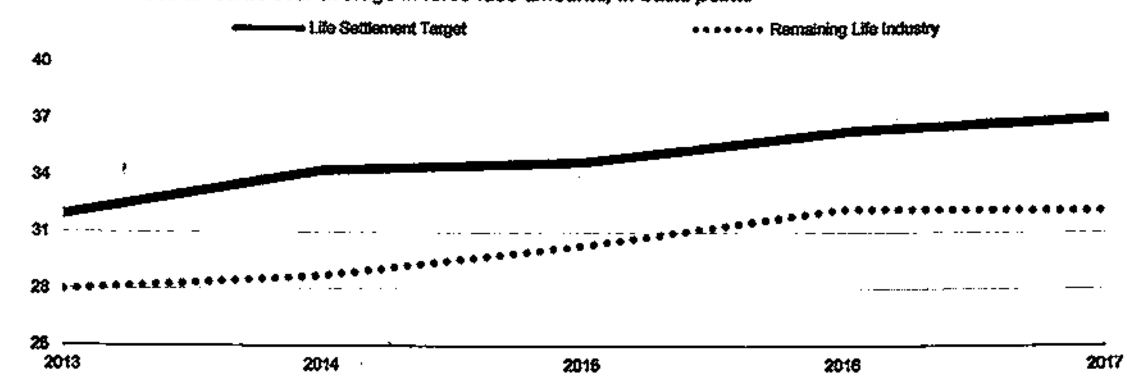
Our third analysis focuses on ISL (interest sensitive life) product, which includes UL. This product specific analysis uses ISL reserves because ISL face amount is not reported in statutory filings.

Our analysis found that:

- In terms of face amount, the 43 insurers whose policies are in life settlement portfolios have a higher mortality rate than the remaining industry.
- Surrenders as a percentage of individual life reserves are lower for the 43 insurers than for the remaining industry.
- ISL surrender benefits have been higher, as a percentage of ISL reserves, for the 43 insurers than for the remaining industry.

Mortality Rates: Face Amount

Death benefit face amounts over average in force face amounts, in basis points



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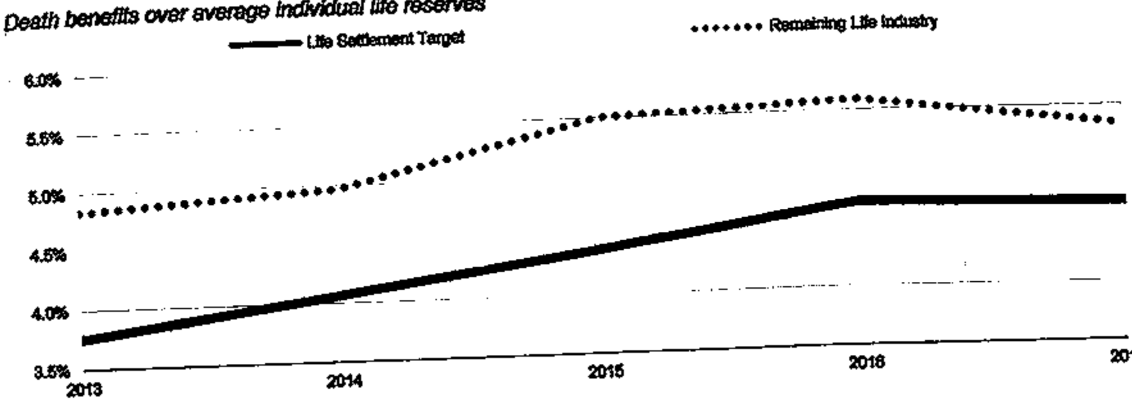
- In terms of mortality rates based on face amounts, in 2017 the 43 insurers saw less than 1 bp (basis point) increase over 2016 compared to a decrease of less than 1 bps for the remaining life industry.
- Over the period of 2013 through 2017, the 43 insurers have experienced a 7.1% CAGR in the face value lost through death. In 2013, the 43 insurers reported a $38 billion decrease in face amount due to death claims. In 2017, those companies reported a $50 billion decrease in face value due to death claims.

- The remaining life industry experienced a 6.6% increase in the face value lost through death. The remaining life industry reported a $48 billion decrease in face value from death claims in 2013, and $63 billion in 2017.

We also analyzed death claims as a percentage of individual life reserves. As with face amounts, the 43 companies have experienced a stronger increase in mortality experience than the remaining life industry. The spread between the two groups narrowed in 2017 as mortality benefit rates for the remaining life industry decreased more than the 43 companies.

Mortality Benefit Rates

Death benefits over average individual life reserves



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- Over the period of 2013 through 2017, the 43 insurers have seen a 93 bps increase in mortality experience as a percentage of average individual life insurance reserves.

- In comparison, the remaining life industry experienced a 51 bps increase in mortality expense.

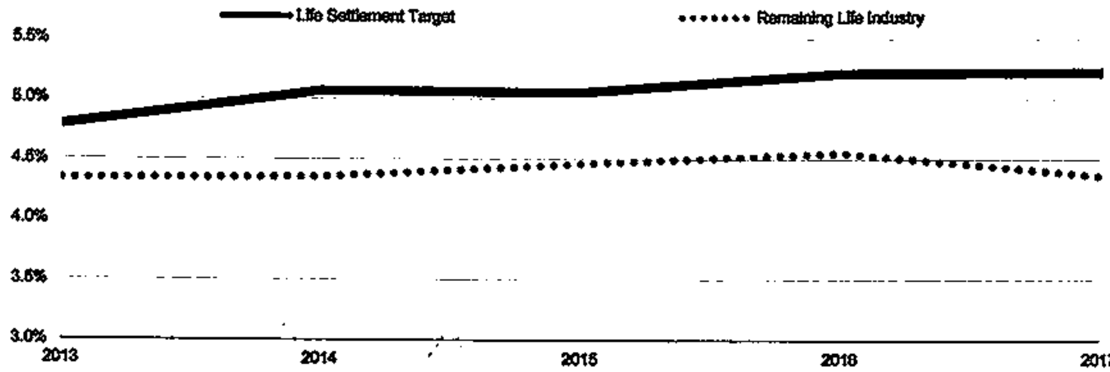
- Two key reasons for the higher mortality rates are that the 43 insurers have experienced lower reserve growth. The 43 insurers have experienced 4.1% compound annual growth in reserves, compared to 5.4% growth for the remaining life industry. Lower reserve growth would reduce the denominator, relative to the remaining life industry.

- In 2017, the 43 insurers experienced a mortality benefit rate decrease of 4 bps, compared to 24 bps for the remaining industry.

Because many life settlement investors have shown a preference for UL policies, in order to optimize their premiums and maximize their profits, we examined the ISL mortality experience of the 43 companies and the remaining life industry. The ISL line contains universal life. This analysis provides some insight on the mortality experience of the UL product.

ISL Mortality Benefit Rates

ISL death benefits over average ISL reserves



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- The 43 insurers whose policies are in life settlement portfolios have seen a 6.5% compound annual growth in ISL death benefits for the period of 2013 through 2017.
- In comparison, the remaining life industry experienced a 5.9% compound annual growth in ISL death benefits.
- At the same time, the 43 insurers experienced a 4.1% compound annual growth in ISL reserves, compared to 5.4% for the remaining life industry.
- The stronger growth in ISL death benefits for the 43 insurers meant that they experienced a 44 bps increase in ISL mortality expenses for 2013 through 2017 compared to 3 bps for the remaining industry.

Lapse and Surrender Analysis

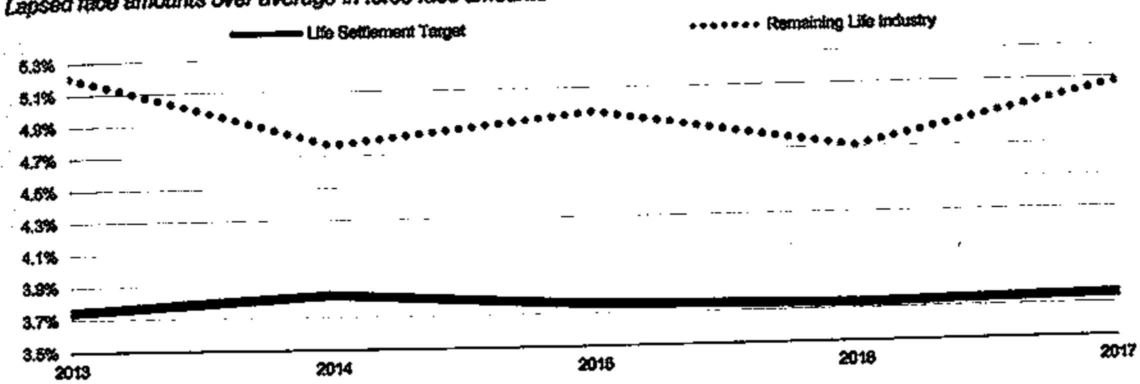
One reason there may be an increase in death claims is that fewer policies are lapsed or surrendered. This impact on lapse and surrender rates provide some indication of potential future mortality experience.

- Insurers targeted by life settlement investors have lower lapse rates than the remaining industry, driven by stronger growth of in force face value by the 43 insurers than by the remaining industry.

- Surrender rates for the 43 insurers were higher than the remaining industry, however, since 2015, the rates have been similar.

Lower lapse rates, measured by the amount of face value lapsed as a percentage of total in force face, can ultimately produce higher death benefits because more policies are in force.

Lapse Rate
Lapsed face amounts over average in force face amounts



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- For the period of 2013 through 2017, the 43 insurers have experienced a 2 bps increase in lapse experience compared to a decrease of 13 bps for the remaining life industry.

- On a compound annual growth basis, the 43 companies experienced a 1% increase in lapses compared to a 1% decrease in lapses for the remaining life industry.

- Stronger growth in face amount contributes to the difference in lapse experience. Over 2013 through 2017, the 43 companies saw 3.4% CAGR in the amount of in force face value, while the remaining life industry experienced a 1.8% increase.

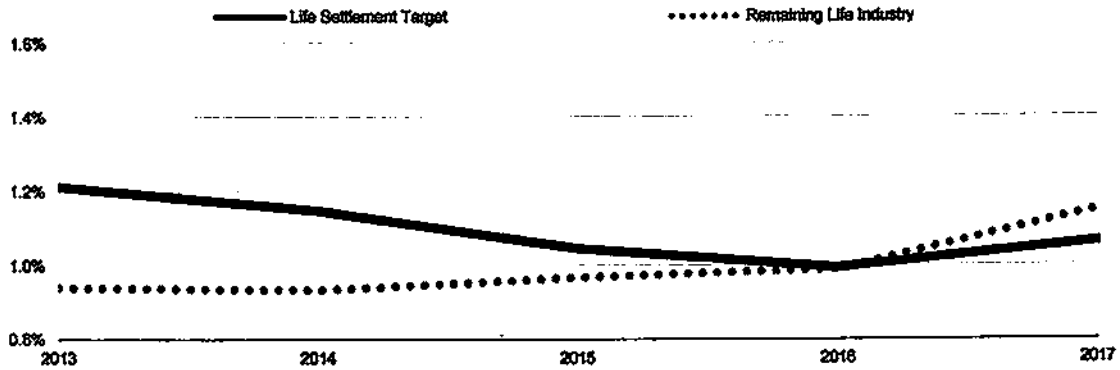
Surrender Analysis

A decrease in surrenders can also lead to higher mortality experience. As a result, we analyzed the surrender rates for the 43 insurers and remaining life industry.

As with mortality rates, we can view surrender rates in terms of face amounts and benefits paid. This enables the analysis to examine surrender rates at a product level.

Face Amount Surrender Rate

Face amount surrendered over average in force face amount



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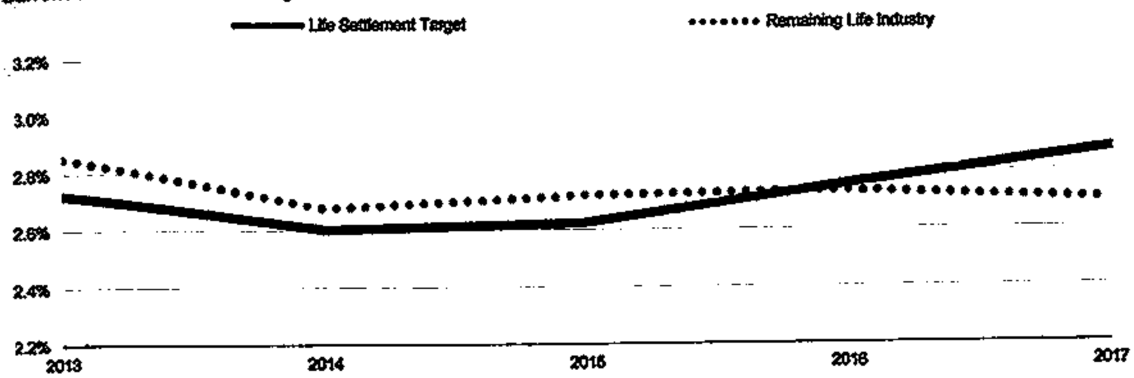
- For the period of 2013 through 2017, the 43 insurers experienced a 15 bps decrease in face amount surrender rates.
- In comparison, the remaining life industry saw a 21 bps decrease in face amount surrender rates.
- Over the observation period, the 43 companies experienced a CAGR of –3.3% in surrenders, compared to 5.2% for the remaining life industry.
- A larger decrease in surrender rates could indicate a life settlement impact given that policies owned by life settlement investors often have face values larger than $1 million.
- Large face policies that would otherwise have been surrendered might now be owned by life settlement investors.

When we analyzed surrender benefits as a percentage of average individual life reserves, those companies targeted by life settlements had a lower surrender benefit rate than the remaining life industry.

Surrender Benefit Rate

Surrender benefits over average individual life reserves



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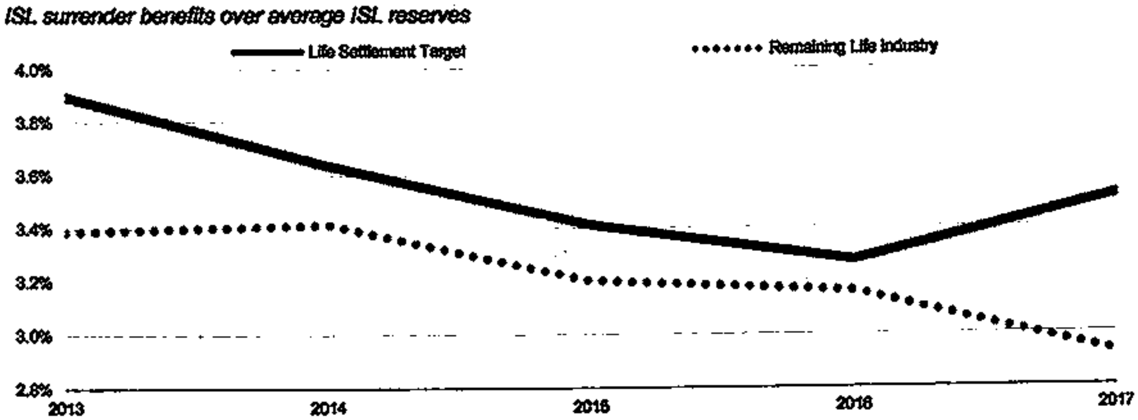
- The companies targeted by life settlement investors experienced a 15 bps increase in surrender rates.
- The remaining life industry saw a 15 bps decrease.
- The 43 companies experienced a 1.3% compound annual growth in surrender benefits paid, compared to –1.4% for the remaining life industry.

We can analyze surrender benefits at a product level by using ISL surrenders and reserves. Life settlement investors tend to favor UL policies, which are part of the ISL line.

ISL Surrender Benefit Rate

ISL surrender benefits over average ISL reserves



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- The 43 insurers experienced a 36 bps decrease in surrender rates for the period of 2013 through 2017.

- The remaining life industry experienced a 46 bps decrease.

- The 43 companies experienced a compound annual growth in ISL surrender benefits of –2.5%, compared to –3.6% for the remaining industry.

- Given that life settlement investors favor UL policies, the decrease in ISL surrender rates could indicate higher future death benefits being paid on UL policies sold by companies targeted by life settlement investors.

- Higher death benefits would, all else being equal, reduce UL operating profits. Lower operating profits could lead some insurers to increase COI charges to offset losses. For life settlement investors, higher COI charges could reduce the profitability on their portfolios.

Reinsurance Analysis

The use of reinsurance can reduce the financial impact from higher mortality rates on a primary insurer by transferring the cost of death claims to a reinsurer. As a result, companies with higher cession rates (the percentage of direct premiums ceded to a reinsurer) may have reported lower mortality benefit rates than companies that choose not to use reinsurance.

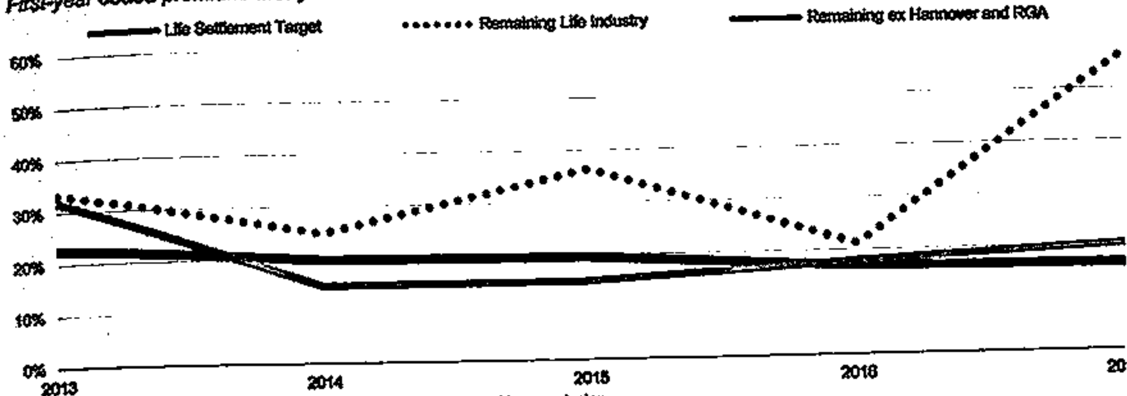
However, insurers also use reinsurance to relieve the strain on reserves as well as to buy or sell blocks of business. For this reason, analyzing overall reinsurance trends may be less informative than focusing on the use of reinsurance for first-year direct premiums and assumed premiums.

First-year direct premiums represent new life insurance sales. As such, they are more representative of a company's ongoing business than total premiums, which include renewals. Assumed premiums also represent the acquisition of business.

When we analyzed the cession rate (defined as first-year ceded premiums divided by combined first-year direct and assumed premiums), we find that the insurers targeted by life settlement investors had a lower rate than the remaining industry.

First-Year Reinsurance Cession Rate

First-year ceded premium/ first-year direct and assumed premium



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- The 43 insurers have had a lower reinsurance cession rate than the remaining industry; this will contribute, over time, to more death claims and possibly a higher mortality rate.
- Over the period of 2012 through 2016, the 43 companies saw a 6-percentage point decrease in their first-year cession rate.
- The remaining life industry experienced a 23-percentage point increase. The increase was driven by Hannover and RGA in 2017.
- Removing Hannover and RGA across the observation period found an 11-percentage point decrease in the first-year reinsurance cession rate for the remaining industry.
- To the extent that policies owned by life settlement investors are not reinsured, the eventual death claims filed could boost mortality death benefit rates.

Portfolio Performance and Net Operating Gain

The performance of insurer General Account portfolios is crucial to profitability. For life settlement investors, an insurer's ability to generate strong investment returns can directly affect UL crediting rates. At the same time, overall profitability indicates an insurer's financial strength and its ability to meet future claims.

We examine the portfolio performance and net operating gain of the 43 insurers and compare them to the remaining industry. This understanding may provide insight into potential future COI increases for these 43 insurers relative to the broader life industry.

Portfolio Rates

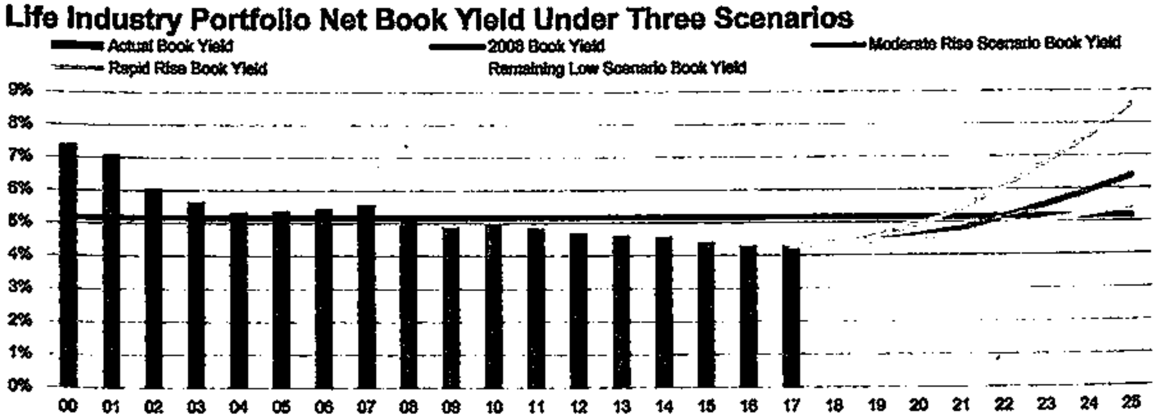
Operating in a prolonged low interest rate environment does not seem to have had a stronger effect on the portfolio returns of insurers targeted by life settlement investors, compared to the remaining industry.

Insurers Operating in a Lower Interest Rate Environment

While 10-Year Treasury yields are likely to increase, life insurer portfolio yields may remain under some pressure. This is the result of the purchase of new bonds that are relatively lower in yield than older bonds that mature. The following model illustrates this point.

The columns show the actual average book yield for the life and annuity industry, followed by three that present a range of possibilities. The straight line across the whole graph is the actual book yield for 2008; which is the middle of a relatively calm era after the decreases during the 2001/2002 recession.

Life Industry Portfolio Net Book Yield Under Three Scenarios



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- The lowest scenario has interest rates remaining roughly at current levels. Under that scenario, the industry's book yield does not climb back to its 2008 level until after 2025—another eight years.

- The middle line is a moderate rise scenario and under that scenario, the portfolio rate reaches the 2008 level in 2021, or another 4 years.

- Finally, the top line is a rapid rise scenario, and even with that fast growth, the portfolio rate does not recover to its 2008 level until 2020.

This continued pressure on portfolio yields could constrain the ability of insurers to grow business. More importantly, average portfolio yields are likely to decrease for the next few years, even as external rates increase.

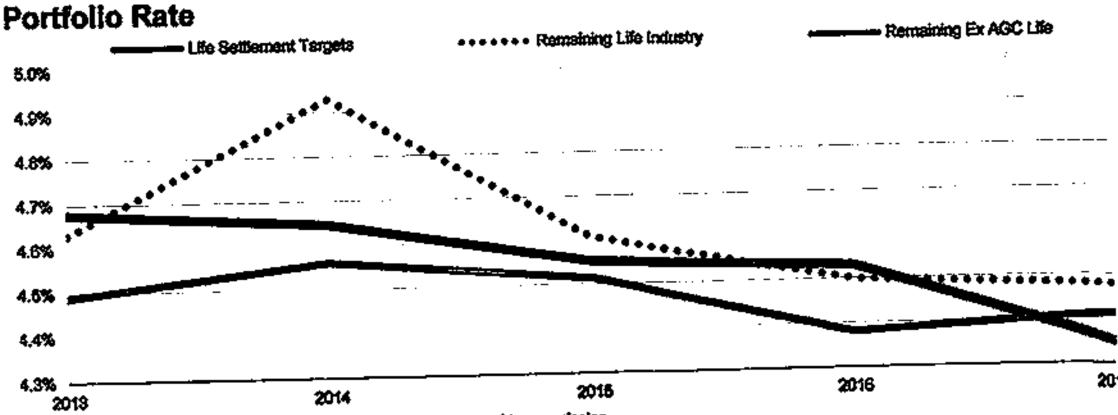
This continued downward pressure on portfolio yields will impact UL and annuity crediting rates, making it difficult to offer competitive rates compared to other investment products. This pressure will be explored in more detail later in this chapter.

It is important to note that some insurers may outperform this average as they attract large pension risk transfers and retirement income sales. Those types of business can require insurers to purchase assets as the market rises. Therefore, those competitors may see a quicker response in portfolio yields than pure life players.

Portfolio Rate Comparison

The effect of lower investment returns is evident in the change in portfolio rates among insurers. We define portfolio rate as net investment income divided by average General Account assets. We compared the change in portfolio rate for the period of 2013 through 2017 for the total life insurance industry and for those companies whose policies have been purchased by life settlement investors.

Portfolio Rate



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- Over the period 2013 through 2017, the 43 insurers have averaged a portfolio return of 4.55%. The remaining industry had an average portfolio rate of 4.63% over the same period.

- In terms of the absolute portfolio rate change for the period of 2012 through 2016, the 43 companies had a 9 bps decrease, while the remaining industry increased 32 bps.

- The 2014 increase in portfolio rate for the remaining industry was driven by AGC Life, which experienced increased dividends from its subsidiaries. Excluding that company would reduce the 2014 portfolio rate for the remaining companies to 4.56%.

The continued low interest rate environment results in spread compression for fixed income products such as UL insurance. If a company maintains higher crediting rates despite the low interest rate environment, then it will experience lower earnings. If a company responds to the low interest rate environment by lowering crediting rates, then its products will become less attractive to buyers.

Low interest rates also have a second-order effect of reducing surrenders. As companies lower crediting rates for new and existing policies and modify other pricing and benefit features, in reaction to the low interest rate environment, the customer's existing policy looks better by comparison.

To date, insurers have responded to the low interest rate environment by adjusting the quality and duration of the bond investments, interest rate hedging, and business repricing. The ability to make further adjustments may be restricted. However, the industry's ability to continue reducing crediting rates on in force business has become increasingly limited. Given the potential for a prolonged low interest rate environment, these effects may continue over the near term.

Profitability

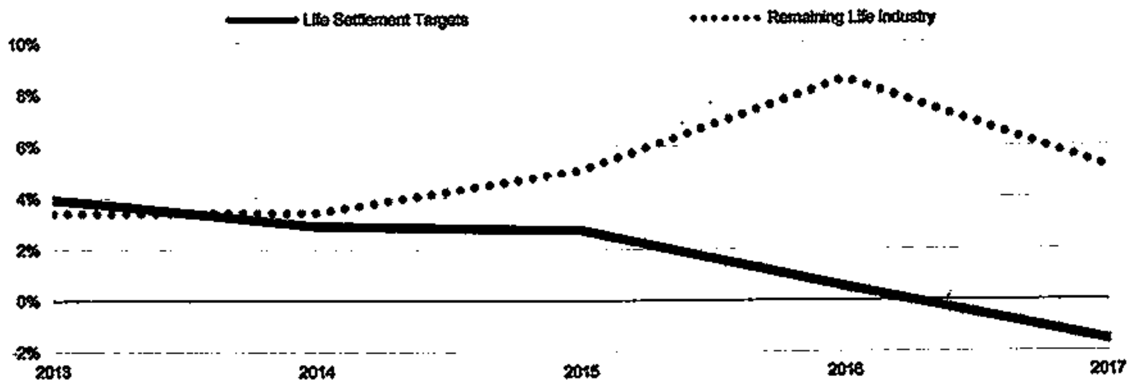
Mortality eventually affects profitability. We analyze profitability in terms of statutory net operating margins because not all companies file GAAP statements. The use of statutory data, therefore, provides a universal approach to measuring and understanding profitability.

Net Operating Margin

Net operating margins are a more useful comparison of profitability than the dollar amounts reported as net operating gain. Using net operating margins, we can compare the profitability of different size companies that generate different dollar amounts of net operating gain.

We calculate statutory net operating margin as the net operating gain for the individual life line of business or loss over the revenue for the individual life line.

Aggregate Operating Margin
Net operating gain/ revenue



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- The 43 insurers experienced an average operating margin of 1.7% for the period of 2013 through 2017.

- The remaining life industry generated an average operating margin of 5.2% for the same observation period.

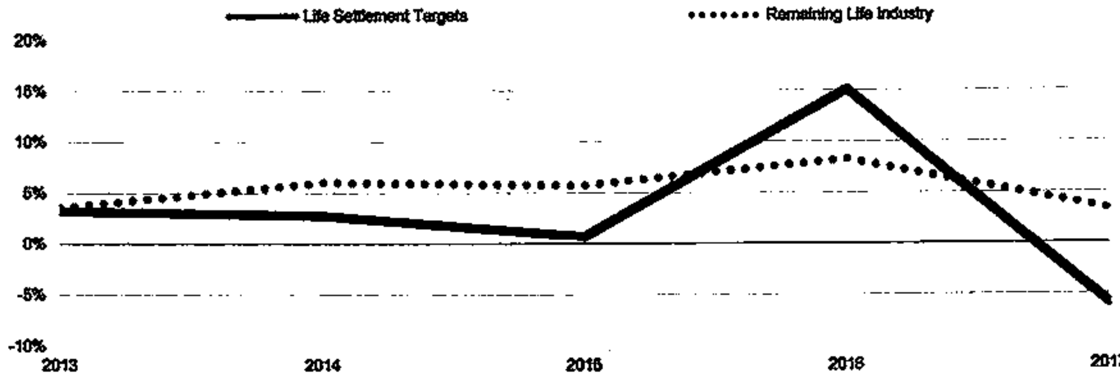
- The results for 2016 reflect reinsurance transactions by AIG and Prudential. Without those transactions, the operating margins for 2016 would have been 1.4% for the life settlement target and 3.5% for the remaining life industry.

- Comparing the two groups' profitability reveals that, on a collective basis, the life settlement targets have generally seen a weakening of operating margins. As shown earlier in this chapter, higher death benefit rates (death benefits as a percentage of reserves or face amounts) are growing for that group. However, the lower operating margin could also reflect the lower use of reinsurance.

Because life settlement investors primarily purchase UL products, we analyzed the operating margin generated on ISL business. This provides some insight on the profitability of that product line. If life settlements were having an impact, it would likely be felt on that product more so than the individual life line of business.

ISL Operating Margin

ISL net operating gain/ISL revenue



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- In 2017, those 43 insurers saw their operating margin decrease from 15.1% to –5.9%. This decrease was driven by Aegon, which restructured its Transamerica operation in 2017.
- Over the observation period, the ISL line generated a 2.6% average operating margin for companies targeted by life settlement investors.
- In comparison, the average operating margin for the remaining industry was 4.7%.
- Note, these results are just for the ISL line of business. Companies can, and do, use other products to offset losses. That said, the pressures on UL profitability were a reason companies increased COI charges.

Income Statement

We analyzed key financial and operational performance metrics for the 43 operating insurance companies that investors have targeted. We compared their performance in these areas against the remaining operating companies in the life industry. This comparison provides some context to understand the state of the insurers that represent the eventual payment to investors.

As part of our analysis, we examined the statutory income statements of the 43 insurers whose policies are in life settlement portfolios. The accompanying table contains the simplified results for the years 2015 through 2017.

Income Statement: Life Settlement Target Insurers

$ in millions

	2015	2016	2017
Premium	$3,084	$44,196	$41,196
Net Investment Income	29,825	29,587	30,115
Other Revenue	(913)	(1,099)	10,988
Total Revenue	**$31,997**	**$72,684**	**$82,289**
Death Benefits	21,962	23,173	23,650
Surrender Benefits	13,143	13,521	14,522
Change in Reserves	(29,349)	6,322	18,108
Other Benefits	1,111	1,203	1,087
Total Benefits	**$6,867**	**$44,219**	**$57,367**
Commission and Expenses	17,823	23,409	21,817
Net Operating Gain BFIT and Dividends	**$7,306**	**$5,056**	**$3,115**
Dividends and Taxes	6,427	4,670	4,396
Net Operating Gain	**$879**	**$385**	**($1,281)**
Operating Margin	*2.75%*	*0.53%*	*(1.56%)*

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- Over the period of 2015 through 2017, these 43 insurers have experienced a decrease in net operating margin, from 2.75% to –1.56%.

- The low net premium in 2015 was caused by Prudential's reorganization. As a result, Prudential reported a –$46 billion net premium for the year. While offset to some degree by the release of reserves, the ultimate affect was to reduce net operating gains.

- The decrease in other revenue, which includes Separate Account fees and reimbursements from reinsurance transactions, was the major driver of lower revenue.

- Death benefits were the strongest contributor to higher benefits over this period.

Summary

Over the course of the life settlement asset class's development, life settlement investors have purchased policies from a wide selection of companies. In 2017, 606 companies reported any amount of life insurance reserves. Our analysis of the 2016 and 2017 SEC filed Form 10(k)s of life settlement companies that have disclosed the policies investors own found that there were 43 operating subsidiaries owned by 37 insurance groups in those portfolios. An insurance group is a holding company with one or more operating subsidiaries.

Before reinsurance, the life industry reported a total face value of $9.0 trillion of cash value life insurance in force at the end of 2017. The 43 insurers whose policies life settlement companies own represented 50%, or $4.5 trillion, of the cash value life insurance in force at year-end 2017. Cash value insurance, whole life and universal life, is the product that life settlement investors favor.

Insurers targeted by life settlement investors have experienced worsening mortality performance over the period of 2013 through 2017. We examined surrenders as both a percentage of in force face value and in absolute dollar terms. Analyzing face value provides an indication of how much of an insurer's book of life business is being lost. The amount of surrender benefits, as a percentage of reserves, gives some insight to the economic impact of surrenders on an insurer.

One reason there may be an increase in death claims is that fewer policies are lapsed or surrendered. This impact on lapse and surrender rates provide some indication of potential future mortality experience. Insurers targeted by life settlement investors have lower lapse rates than the remaining industry, driven by stronger growth of in force face value by the 43 insurers than by the remaining industry.

The use of reinsurance can reduce the financial impact from higher mortality rates on a primary insurer by transferring the cost of death claims to a reinsurer. As a result, companies with higher cession rates (the percentage of direct premiums ceded to a reinsurer) may have reported lower mortality benefit rates than companies that choose not to use reinsurance.

The performance of insurer General Account portfolios is crucial to profitability. For life settlement investors, an insurer's ability to generate strong investment returns can directly affect UL crediting rates. At the same time, overall profitability indicates an insurer's financial strength and its ability to meet future claims.

7. Cost of Insurance Increase

Life settlement investors have shown a strong preference for purchasing UL insurance. This preference is due to the product's structure, which enables investors to optimize their premiums. Simply put, premium optimization involves making the minimum premium payments necessary to keep the policy in force.

Between 2015 to 2017, some insurers made the difficult decision to increase their COI rates. Through August 2018, John Hancock and Voya, are examples of companies that increased COI rates.

The COI charge, while primarily applied to cover insurer mortality experience, also provides recovery for insurer expenses, profit, and interest spread (e.g., the pricing interest spread may be reduced by increasing COIs and vice versa). For life settlement investors, these COI increases, in combination with lowering crediting rates, can significantly affect premium optimization and eventually overall investment returns.

This chapter looks at the reasons insurers have increased the COI charges. It compares those companies against the broader life industry and against "pure" universal life players. This comparison provides some context for those increases and may help life settlement investors better understand the forces affecting their assets.

COI Increases

In 2016 and 2017, six major insurers announced COI increases on their UL policies. Depending on the policy's issue date and the amount of the death benefit, those increases have been as high as 200%. Because of these increases, some policy owners have filed suit against these insurers.

Typically, unless mortality expectations of the company have become worse, universal life policies prohibit insurance companies from raising rates. Some administrative expenses can also be placed in the category of allowing premium rate increases. That policy seems to have changed due to the low interest rate environment. Because of this change from insurance companies, insurers believe large cost of insurance increases are unlawful and that has resulted in lawsuits. In some cases, life settlement companies have sued life insurers that issued polices and years later increased premiums. In 2017 there were noticeable fewer COI increases than in 2016.

Key Insurer COI Increases

Company	Reason(s)	COI Increase
2017 Announcements		
Phoenix	Mortality	Unknown
Lincoln National	Investment return and insurance companies not being allowed to pay out policies	Up to100%
Transamerica	Current expectations about future costs	38% to 47%
2016 Announcements		
AXA	Mortality	27% to 68% (depending on age)
Banner/William Penn	Investment returns, mortality, crediting rates	10% to 200%
Lincoln National	Investment return and reinsurance cost	14% to 52%
Transamerica	Current expectations about future costs	5% to 100%
VOYA	Reinsurance costs, investment returns	5% to 54%
Conseco	Investment earnings, morality, persistency, expenses	Unknown

Prepared by Conning, Inc. Sources: 2016 MLF Lexserv, LLC, press releases.

2017 COI Transactions

Phoenix issued 2017 COI increases on certain policies. These increases were scheduled to begin after November 2017, except for insureds older than 85 years old, who would receive this full increase immediately.

Some products will not feel the effect of the increase until after December 31, 2020. Those policies were part of the Phoenix lawsuit that was settled in 2015. In that case, Phoenix raised the cost of insurance on policies issued between 2004 and 2008, with face amounts of $1,000,000 or more, and issue ages equal to or above 65 or 68, depending on the policy. The plaintiffs alleged that the increase, which took place in 2010 and 2011, "did not apply uniformly to a class of insureds, discriminated unfairly between insureds of the same class, and were improperly designed to recoup past losses". While Phoenix denied the charges, they did agree to establish a settlement fund of up to $42,500,000 as compensation for the affected policyholders. In addition, the insurer agreed to "not impose any additional COI rate increases" on the affected policies, "through and including December 31, 2020".

Lincoln National issued its 2017 COI increases for UL policies that were initially issued by Jefferson Pilot Life from 1999 to 2007. It is believed this increase, as much as 100%, will impact as many as 25,000 customers.

In August 2017, Lincoln National increased COI for several of its products. The increases were made after Lincoln updated projections of their future costs for providing this coverage. The rates are based on future expectations of certain cost factors, including mortality, interest, expenses, and the period policies stay in force.

Transamerica issued a new COI increase on its Ultra 115 and TransSurvivorship products that were purchased in 1988-1989. According to sources, Transamerica is increasing rates based on "current expectations" about "future costs," and the "future costs of providing coverage are subject to change over time."

2016 COI Transactions

AXA increased COI rates for a block of 1,600 UL policies with particularly bad mortality experience. The company also chose those policies because their owners were only paying the COI rates. A class action lawsuit was filed against AXA in May 2016, alleging that AXA falsely stated the increase was permitted by the policy terms. That lawsuit was expanded in January 2017 to include another set of plaintiffs.

Banner Life/William Penn Insurance Companies increased COI charges on all of its universal life policies. The companies announced that a combination of factors severely eroded the profitability of this block of policies. Chief among these factors was that investment returns have been at all-time lows for an extended period. At the same time, average mortality on these blocks has been unfavorable, usually attributable to the conversion segments.

Lincoln National announced that it would begin increasing COI rates in 2016 for specific policies Lincoln acquired from Aetna Life Insurance and Annuity Company and Jefferson National. Material changes in future expectations of key cost factors associated with providing this coverage, including lower investment income and higher reinsurance costs, drove these increases.

Transamerica Life Insurance Company increased COI rates affecting about 26,000 policyholders on certain UL insurance products sold between 1987 and 1998. Transamerica said that the increases are necessary "to address the expectations as to the future costs of providing coverage. The percentage of the increase varies by policy, but Transamerica does expect some of the increases to be substantial." In November 2016, The U.S. District Court in California's Central District ruled that a class action lawsuit against Transamerica regarding the insurer's "breach of faith" for universal life policies COI could proceed.

VOYA increased COI on nine UL products sold in the late 1990s and early 2000s. The increase ranged from 9% to 42% depending on the product. VOYA announced the increase was due to a reinsurance rate hike and low crediting rates and deferred this increase to the customer.

Conseco sent a letter to some UL insurance policy owners in February 2016 explaining that there would be a cost of insurance increase. Reasons stated in the letter include investment earnings, mortality, persistency, and expenses.

COI Litigation

Several lawsuits have been filed against insurers for the COI increases. These lawsuits continued to make their way through the legal system in 2018.

Key Insurer COI Litigation

Company	Reason(s)
U.S. Financial Life Insurance	Increases did not match original policy
Lincoln National	Consolidated putative class action
Lincoln National	Individual investor-initiated suit
AXA Equitable Life	Putative class action suit
John Hancock	Settled COI litigation
Voya	COI increase
Phoenix Companies	COI increase

Prepared by Conning, Inc. Sources: 2018 MLF Lexserv, LLC, press releases.

U.S. Financial Life Insurance increased rates for policies purchased in 2001. According to court case, *Farris v. U.S. Financial Life Insurance Company*, U.S. Financial Life Insurance began increasing rates for polices due to anticipated future mortality experience being worse than anticipated. This suit was filed in 2017, and in 2018, part of the motion was granted saying that the remaining claims of conversion, breach of the covenant of good faith and fair dealing, and fraudulent misrepresentation may go forward.

Lincoln National had two suits against them regarding COI. The first was a consolidated putative class action and the second was an investor-initiated suit. The court dismissed the plaintiffs' claims on both actions due to duplicated breach of contract claims.

AXA Equitable Life was part of a putative class action suit, *Brach Family Foundation, Inc. v. AXA Equitable Life Insurance Company*, which involved CIO rate increases that had been pending since 2016. The Southern District of New York denied AXA's motion to dismiss the claim alleging misrepresentation as well and other rejections for dismissal. It was determined that because the plaintiff had not identified any specific illustration, annual statement, or interrogatory that was misleading, the case was dismissed. The plaintiff filed a second motion and AXA is moved to dismiss this complaint as well.

John Hancock settled a COI increase in July 2018 in the Southern District of New York by agreeing to pay just over $91 million. Unlike other suits to companies who are accused of using excessive COI increases, this suit alleged that John Hancock should have lowered rates in its policies because mortality rates "declined significantly over the past several decades" and future mortality expectations were "likewise substantially changed in its favor." According to court documents, John Hancock had stated in the past 15 years in regulatory filings mortality experience was improved. It was also stated that John Hancock would review COI rates at least once every 5 years.

Voya was sued in August 2018 in United States District Court—Southern District of New York for what is described as an illegal rate hike to certain UL policies. The policies in question were originally issued by Aetna Life Insurance Company, now Voya, and the administrative agent and reinsurer on the policies was Lincoln Financial Group. According to court documents, the increase was based on Lincoln's estimate of future premiums rather than Aetna's estimates of future costs as required by the policy contract.

Phoenix Companies are in the midst of two lawsuits in 2018. The first, filed in February 2018, is a class action lawsuit against the COI increases in their universal life policies and whole life policies. An additional class action lawsuit was filed by Advance Trust & Escrow Services in April 2018. Advance Trust in suing on behalf of Life Partners Position Holder Trust for COI increases. Both lawsuits are considered related and are being assigned the same district judge.

COI Regulation

COI increases attracted the attention of several state regulators as well as national consumer groups. Efforts began by some states to require greater disclosure about, and flexibility in, COI increases.

In an effort to regulate COI increases, the New York State Department of Financial Services enacted new regulation in 2017. The purpose of this regulation was to "govern life insurance company practices related to increases in the premiums." This new regulation required insurance companies that are raising rates on policies to give the department at least 120 days prior notice to that increase. Insurers are also required to give consumers at least 60 days prior notice.

In an effort to piggyback the New York law, California signed into law Assembly Bill 2634. The purpose of this Bill is to protect consumers from cost of insurance increases on life insurance policies. The bill is in effect for all policies after April 1, 2019 and will require insurers to give a summary notice of flexible premium policies 90 days prior to the increase to the policy owner. Among the changes to this new law is that there must be included an explanation that adverse change will be "based on expectations of the future cost of providing the benefits under the policy, and that the adverse change to the current scale of nonguaranteed elements will reduce the accumulation value and may increase the risk of policy lapse based on continued payment of current premiums."

The Consumer Federation of America also took notice of COI increases. Consumer Federation contacted all state insurance commissioners in 2017 and urged them to make sure that any UL insurance cost increases were done for legitimate reasons.

Reasons for COI Increases

Based on insurer announcements, the major factors driving COI increases were higher than expected mortality, lower than expected investment returns on insurer portfolios, and lower than expected policy crediting rates. What is noticeable is that most of these policies were issued in the 1990s. At that time, insurers operated in an environment where interest rates and crediting rates were higher than today. Since then, both rates have decreased.

Comparison Groups

Our analysis of COI drivers begins by categorizing the 606 insurers that reported any amount of individual life insurance reserves at the end of 2017. Statutory filings do not identify life insurance premiums and reserves by product (term life, universal life, variable life, or whole life). However, those filings do identify ISL and non-interest sensitive life premiums and reserves. Under statutory reporting, universal life is part of the ISL premium and reserves, however, it is not possible to separate UL premiums and reserves from other whole life products. In this study, and in other Conning reports, we use ISL premium and reserves to identify UL companies and activity.

At the end of 2017, 62 companies had 90% or more of their total individual life insurance reserves in ISL. We categorized those 62 companies as "ISL Focused" companies. The eight companies that announced COI increases formed the final comparison category. Of those eight companies, AXA, Banner, Jackson National, Lincoln National, Phoenix, Transamerica, and Voya are among the 43 insurers targeted by life settlement investors.

Insurer Categories

Category	Number of Companies
All Insurers with Individual Life Reserves	606
ISL Focused (90% or more of reserves in ISL)	62
COI Increase	8

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As part of our analysis, we examined the statutory income statements of the companies that increased their COI charges. The accompanying table contains the summary aggregated results for the years 2015 through 2017.

The reason for the operating loss for 2017 was because of Aegon's Transamerica reinsuring its closed block of BOLI (Bank-Owned Life Insurance)/COLI (Corporate Owned Life Insurance) business to Wilton Re. This was a one-time event. For that reason, we have excluded Aegon form these results. Once again, death benefits increased in 2017. Surrender benefits increased for 2017.

ISL Income Statement: Insurers that Raised COI

$ in millions, excluding Aegon

	2015	2016	2017
Premium	$6,452	$6,971	$7,673
Net Investment Income	3,881	4,100	4,556
Other Revenue	1,195	1,033	112
Total Revenue	$11,528	$12,104	$12,340
Death Benefits	3,753	4,060	4,552
Surrender Benefits	1,911	1,898	2,215
Change in Reserves	2,921	3,026	3,559
Other Benefits	128	124	127
Total Benefits	$8,713	$9,107	$10,453
Commission and Expenses	2,924	2,934	2,903
Net Operating Gain BFIT and Dividends	($109)	$63	($1,017)
Dividends and Taxes	(44)	(11)	(185)
Net Operating Gain	($66)	$74	($831)
Operating Margin	(0.6%)	0.6%	(6.7%)

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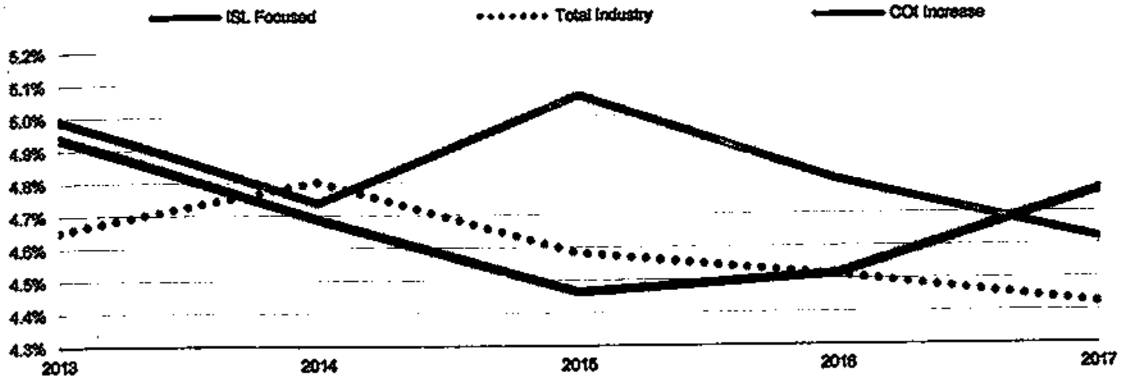
- In 2017, excluding Aegon's Transamerica, these insurers have experienced a decrease in net operating margin, from 0.6% to –6.7%.
- Revenues increased slightly in 2017, compared to 2016. The increase in revenue was offset by the increase in benefits.
- Net operating gains were negative for two of the three years for these companies.

Portfolio Rates

The prolonged low interest rate environment does not seem to have had a stronger effect on the portfolio returns of those insurers that increased their COI charges, compared to ISL focused insurers or the total industry.

We define portfolio rate as net investment income divided by average General Account assets. We compared the change in portfolio rate for the period of 2013 through 2017 for the total life insurance industry, those insurers who are pure ISL companies, and for those companies that have announced COI increases.

Insurer Portfolio Rate
Net investment income/General Account assets



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- While those companies that increased COI charges have experienced a decrease in investment returns, their decrease has been less than ISL focused insurers or the industry in aggregate.

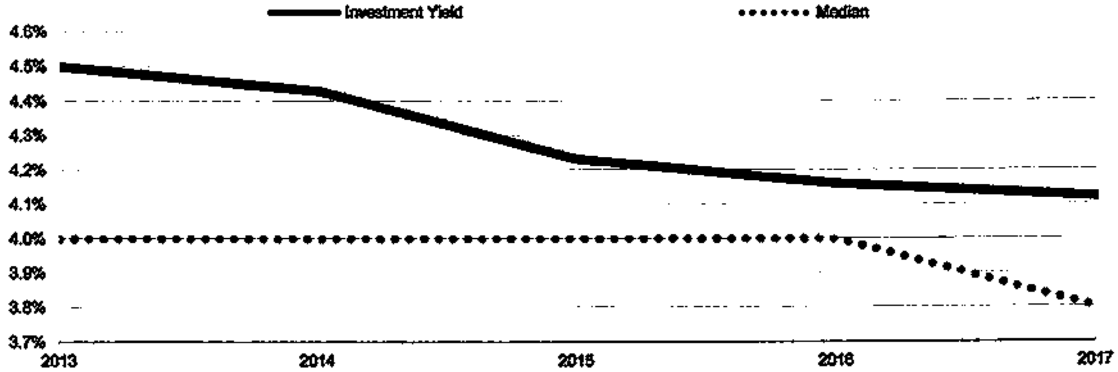
- On average, all three groups have approximately had the same average return of 4.7% for the period 2013 through 2017.

- In terms of the absolute portfolio rate change for 2013 through 2017, those companies that increased COI costs experienced a 37 bps decrease. However, the ISL focused and total industry groups experienced a 17 bps and 23 bps decrease, respectively.

Crediting Rates

As interest rates have fallen since the 1980s, minimum guarantees have also fallen. In the 1990s, guarantees of 3% were common. Indeed, minimum crediting rates on UL have been as low as 0% in some quarters in recent years, according to LIMRA surveys. As can be seen in the accompanying graph of median crediting rate for UL, the median rate has been at 4% from 2013 to 2016. That changed in 2017 when the median crediting rate decreased to 3.8%.

Median Universal Life Credited Rates vs. Individual Life Net Investment Yield



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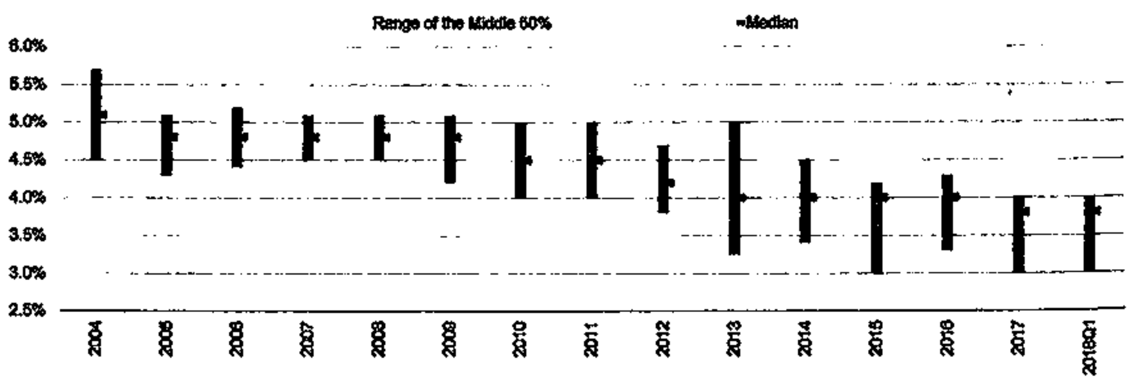
- Crediting rates have been decreasing for more than a decade, eroding the appeal of traditional UL products.
- Median UL crediting rates had the first decrease in five years, going from 4.0% in 2013-2016 to 3.8% in 2017.
- The spread between insurer net investment yields on individual life assets and UL crediting rates has decreased from 50 bps in 2013 to 33 bps at the end of 2017. This decrease adds pressure on insurer product pricing.

Median crediting rates decreased in 2017, to 3.8%, and held at that level in 2018Q1. Median crediting rates were at 4.0% from 2013 to 2016. While the median remained steady for years, the range has shifted. In 2017 and 2018Q1, 50% of crediting rates were between 3% and 4%. In 2016, the middle 50% of crediting rates were between 3.3% and 4.3%.

Universal Life Credited Rates



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Crediting rates have been decreasing for more than a decade, eroding the appeal of traditional UL products.

Mortality Rates

Four of the eight insurers that announced COI increases cited worsening mortality performance as a significant reason for their increases. Our analysis supports this.

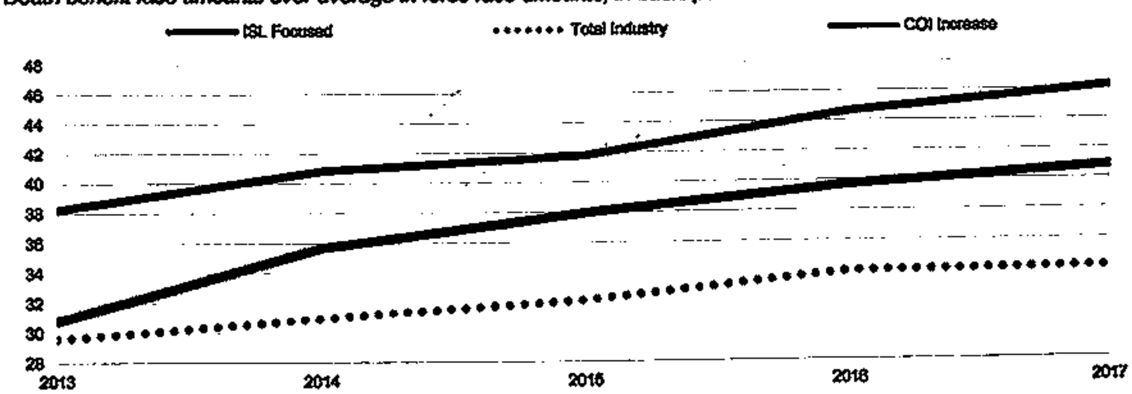
We analyzed the mortality experience of those insurers who increased COI, ISL focused insurers, and the total individual life industry to understand their experiential differences.

Our analysis examined mortality experience from two perspectives. First, we looked at mortality in terms of the face amount lost via death claims.

We then looked at mortality benefits paid as a percentage of reserves. This second analysis enabled us to take a deeper look and examine ISL death benefits paid as a percentage of ISL reserves.

Mortality Rates: Face Amount

Death benefit face amounts over average in force face amounts, in basis points



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- Those companies that announced COI increases have similar mortality experience to other ISL focused insurers. However, both groups had higher mortality experience than the total industry.

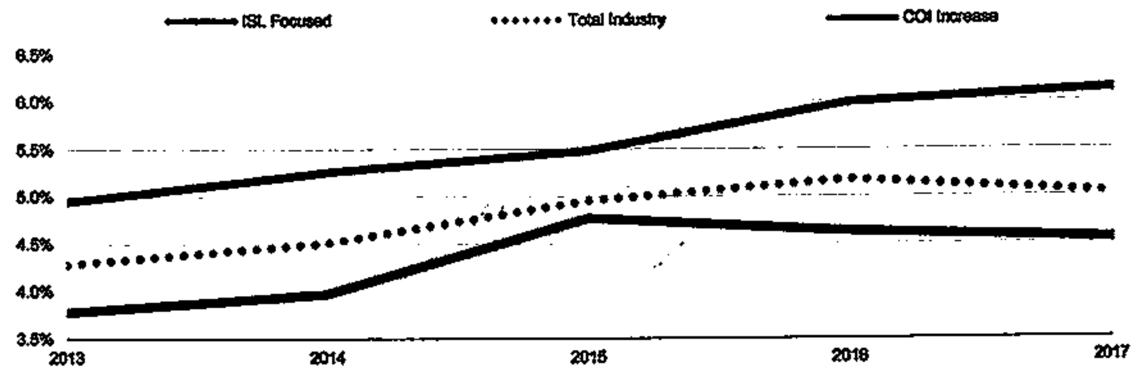
- Over the period of from 2013 to 2017, the COI insurers have experienced an almost 8 bps increase in the face amount mortality rate compared to a 10 bps for ISL focused insurers and almost 5 bps for the total industry.

- It is important to note that the amount of average in force face value lost, regardless of the insurer category, is relatively small. In 2017, for example, insurers in both the ISL focused category and the COI increase category lost approximately 41 bps of their average in force face through death.

Mortality has a more significant impact when viewed as a percentage of reserves. As with in force face amounts, those companies that announced COI increases have experienced a stronger increase in mortality experience.

Mortality Benefit Rates

Death benefits over average individual life reserves



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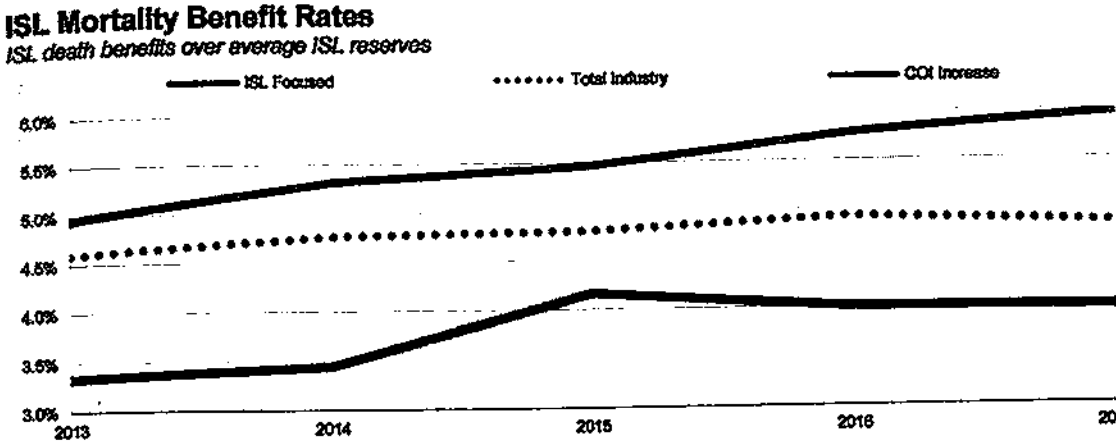
- Over the period of 2013 through 2017, those companies that announced COI increases have seen an almost 118 bps increase in mortality experience as a percentage of average individual life insurance reserves.

- In comparison, ISL focused companies and the total industry experienced a 77 bps and 75 bps increase, respectively.

The previous two charts viewed mortality experience across all products. In terms of UL, our analysis found that the companies announcing COI increases have had a significantly stronger increase in mortality rates than ISL companies or the total industry.



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- Companies that have announced COI increases have experienced a 101 bps ISL mortality rate increase over the period of 2013 through 2017.

- ISL focused companies experienced an almost 66 bps increase in ISL mortality, and the industry total experienced an almost 26 bps increase over the same period.

Lapse Rates

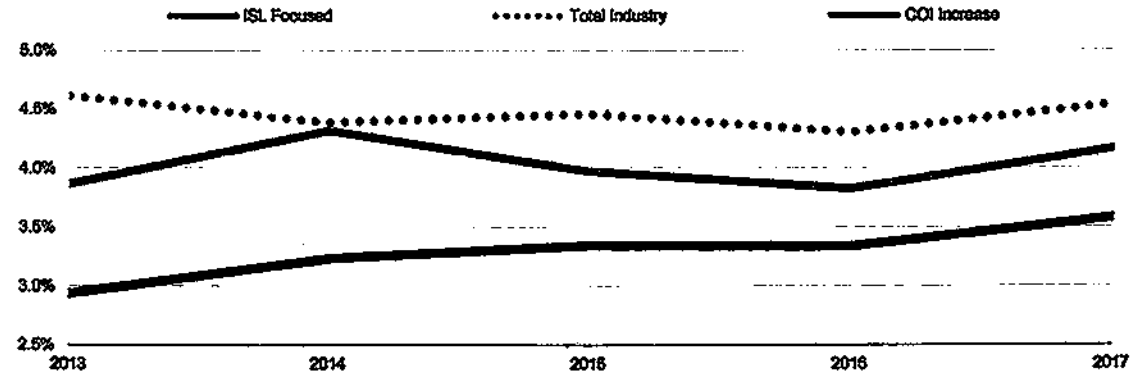
One reason morality experience might increase is that fewer policies are being lapsed or surrendered. This has been the concern of insurers about the effect life settlements would have on their books of business. As part of our analysis into the potential drivers of COI increases, we looked at both lapses and surrenders.

Lapses are not reported in terms of benefits paid, because there are none. However, the amount of face value lost through policy lapses is recorded, albeit for all products. As a result, we can only get an approximate sense of whether those companies announcing COI increases have experienced a significant change in their lapse experience relative to ISL focused insurers and the total industry.

Unlike mortality experience, lapse rates that decrease over time mean that fewer policies are lapsing. Ultimately, lower lapse rates translate into higher mortality experience. We analyzed the percentage of lapsed face amounts over average in force face amounts.

Face Amount Lapse Rate

Face amount lapsed over average in force face amount



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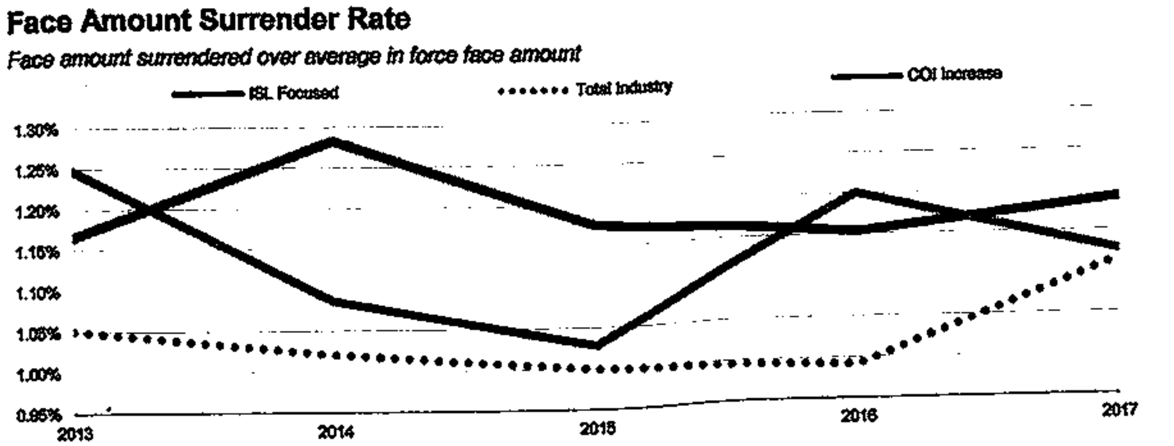
- Companies announcing a COI increase saw an almost 30 bps increase in lapse rates, compared to an almost 56 bps for ISL focused companies and the total industry.

- It is important to note that these lapse rates are across all products. That said, with lower lapse rates, those companies that announced COI increases may experience higher mortality in the future should those policies remain in force.

Surrender Rates

A decrease in surrenders can also lead to higher mortality experience. As a result, we analyzed the surrender rates for those companies that announced COI increases, those that focused on ISL, and the total industry.

As with mortality rates, we can view surrender rates in terms of face amounts and benefits paid. This enables the analysis to examine surrender rates at a product level.



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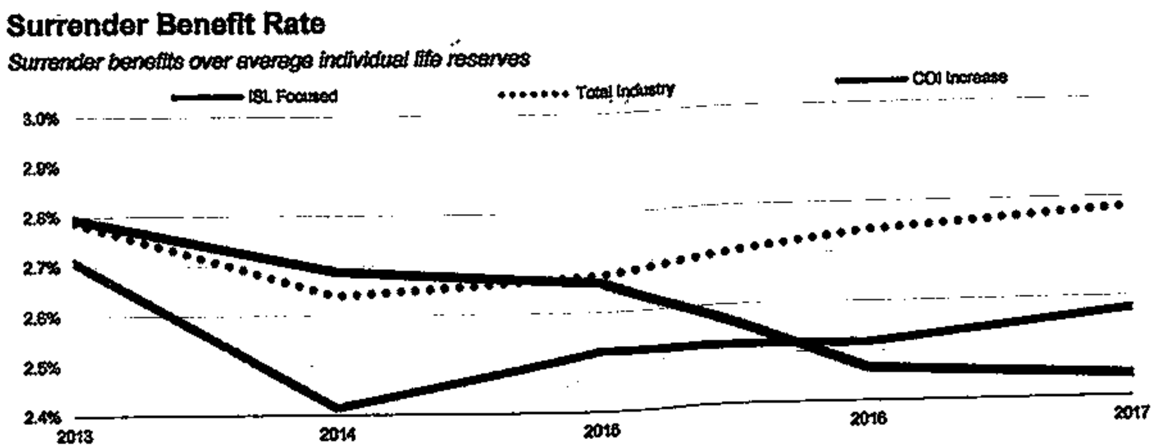
- For the period of 2013 through 2017, those companies that announced COI increases experienced a 12 bps decrease in face amount surrender rates.
- In comparison, ISL focused insurers saw an almost 3 bps increase and the total industry had just over a 6 bps increase in face amount surrender rates.

Companies that had COI increases, had the lowest average surrender benefit rate, based on reserves, for the 2013-2017 period.



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- The companies that announced COI increases experienced a 13 bps decrease in surrender rates.
- The ISL focused companies saw a 35 bps decrease and the total industry experienced an almost 1 bp decrease.

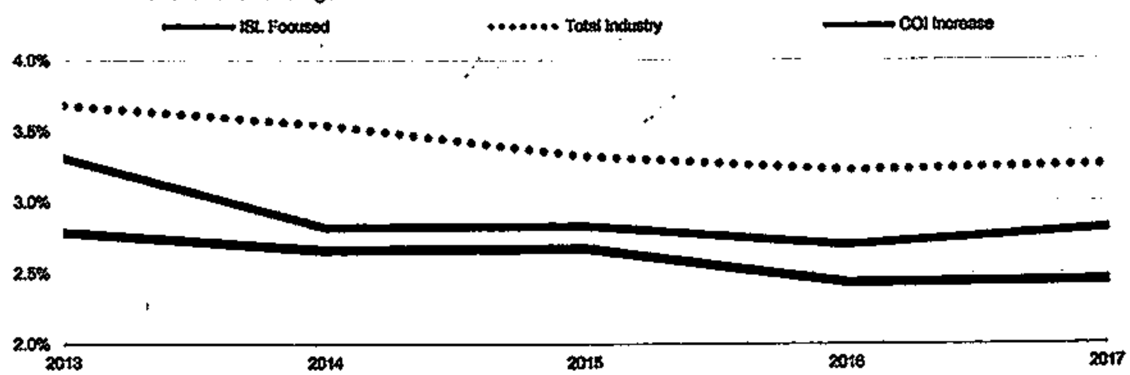
- Both the COI insurers and the Total industry have experienced an increase in surrender rates since 2014, though they remain below their 2013 level.

- Surrender benefits were 2.6%, 2.4%, and 2.8% of average individual life reserves for the companies that announced COI increases, ISL focused insurers, and the total industry, respectively.

We can analyze surrender benefits at a product level by using ISL surrenders and reserves. While those companies announcing COI increases have been in the middle in terms of face value and all product surrender decreases, a different picture emerges when viewed at the ISL level.

ISL Surrender Benefit Rate

ISL surrender benefits over average ISL reserves



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- Those companies that announced COI increases experienced a 50 bps decrease in surrender rates for the period of 2013 through 2017.

- ISL focused companies experienced a 34 bps decrease and the total industry experienced a 42 bps decrease.

- As with lapses, this ISL surrender benefit analysis suggests that, those companies that announced COI increases are experiencing stronger decreases in surrenders than other insurers.

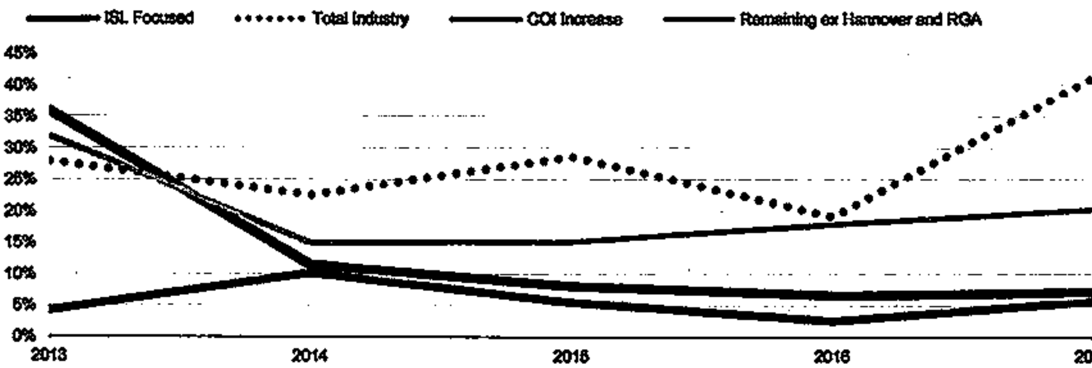
- Longer term, these trends suggest higher mortality experience for the companies announcing COI increases.

Reinsurance Cession Rates

When we analyzed the cession rate of the insurers who raised their COI rates, we find that those companies have a lower reinsurance cession rate than ISL focused insurers or the industry in total.

First-Year Reinsurance Cession Rate

First-year ceded premium/ first year direct and assumed premium



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- During the period of 2013 through 2017, companies announcing COI increases had an average cession rate of 5.7%.
- ISL focused companies experienced an average cession rate of almost 14% and total industry experienced an almost 28% average cession rate.
- Reinsurance use could decrease further with the coming of principles-based reserving, expected to go in effect in 2018.
- Lower use of reinsurance could lead to higher death benefits being paid, reducing profitability.

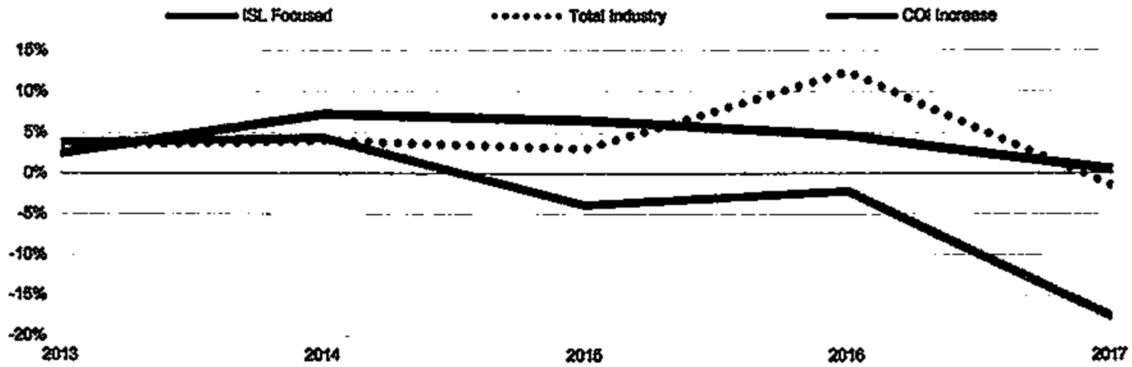
Profitability

Ultimately, profitability is why insurers increase COI charges. We analyze profitability in terms of statutory data because not all companies file GAAP statements. The use of statutory data, therefore, provides a universal approach to measuring and understanding profitability.

While net operating gains or losses are informative, a more useful measure of profitability is the operating margin generated on ISL business. Operating margin is the net operating gain or loss over the revenue generated by the line.

ISL Operating Margin

ISL net operating gain/ISL revenue



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- In 2017, those companies that announced COI increases saw their operating margin decrease from –2.2% in 2016 to –17.6% in 2017. The negative operating margin was driven by a Transamerica reinsurance transaction.

- In comparison, the average operating margin for the ISL focused companies was 0.5% and for the total industry it was –1.4% for 2017.

- More telling, in terms of why those companies may have announced COI increases, is that they have had negative operating margins since 2015.

- Pressures on UL profitability were identified as a reason companies increased COI charges. With average operating margins for the insurers that increased COI below the average for other ISL focused insurers and the remaining industry, there appeared to be a clear need to increase COI rates.

- The reasons given for COI increases matched our analysis, with little evidence that life settlements were the reason.

Summary

Life settlement investors have shown a strong preference for purchasing UL insurance. This preference is due to the product's structure, which enables investors to optimize their premiums. Simply put, premium optimization involves making the minimum premium payments necessary to keep the policy in force. Increases in COI charges can affect premium optimization.

The COI charge applied on a UL policy primarily covers insurer mortality experience. It also provides recovery for insurer expenses, profit, and interest spread (e.g., the pricing interest spread may be reduced by increasing COIs and vice versa).

Between 2015 to 2017, some insurers made the difficult decision to increase their COI rates. Through August 2018, John Hancock and Voya, are examples of companies that increased COI rates. For life settlement investors, a COI increases in combination with lowering crediting rates, can significantly affect premium optimization and eventually overall investment returns.

Several lawsuits have been filed against insurers for the COI increases. These lawsuits continued to make their way through the legal system in 2018. COI increases attracted the attention of several state regulators as well as national consumer groups. Efforts began by some states to require greater disclosure about, and flexibility in, COI increases.

Based on insurer announcements, the major factors driving COI increases were higher than expected mortality, lower than expected investment returns on insurer portfolios, and lower than expected policy crediting rates. As part of our ongoing review of the life settlement market, we analyzed the performance of those factors for the companies that announced COI increases. We compared their performance against the remaining industry. In most cases, the companies announcing COI increases did report lower performance than the remaining industry.

Appendix—Life Settlement Market Structure and Risks

Glossary

For the purposes of this study, Conning will use the following terminology:

Life Settlement Glossary

Term	Definition
Physical Life Policy	A life insurance policy that is underwritten and issued by an insurance company on the life of an insured.
Traditional Life Settlement	The purchase of a physical life policy by a buyer on an investor's behalf.
Extra-Contractual Loan	Loaning an individual an amount in excess of their physical life policy's cash surrender value, and using that policy's death benefit as collateral.
Synthetic Life Policy	A virtual policy created by investment firms based on data from a pool of lives.
Measuring Life	An individual whose demographic and health data are used to price a synthetic policy and whose death triggers the payment of a synthetic death benefit. This is similar to the insured in a physical life policy.
Synthetic Life Settlement	The purchase of a synthetic life policy by a buyer on an investor's behalf.
Gross Market Potential	The total face amount of all policies that meet life settlement buyer criteria, regardless of whether the policyholder wants to sell.
Net Market Potential	The percentage of all policies that meet life settlement buyer criteria where the policyholder is likely to consider selling.
In Force Amount	The cumulative face amount of all life settlements where the insured is still alive.
Annual Volume	The face amount of all life settlements transacted in a given year.
Provider	An institution that purchases policies on a fund manager or investor's behalf.
Fund Manager	An institution or individual that manages a portfolio of life policies on behalf of investors.
Investor	An institution or individual that supplies capital to purchase life settlements.
Secondary Market	A market where the original policyholder sells their policy to an investor.
Tertiary Market	A market where investors, or fund managers, resell secondary market individual policies or portfolios of policies.

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As with many investments, life settlements are a complex asset class. A basic understanding of how the market works is beneficial to investors considering allocating some of their capital to this asset class. What do new investors need to know about life settlements?

This annex provides a high-level overview of these areas and is not comprehensive in scope or depth. It examines the market's structure and key risks. These risks include:

- Life expectancy
- The importance of portfolio diversification
- Premium optimization and its challenges

Each investor needs to develop an understanding of those issues and areas most important to their specific needs.

The Life Settlement Market Structure

Investors entering the life settlement market should have some degree of awareness about market players, how a transaction works, the costs of participation, and the ways they can participate in it.

Market Players

Four key players are involved in the life settlement transaction.

- Individual policy owners own the policy. Some policy owners approach a life settlement provider directly and offer their policy for sale.
- Financial advisors to the policy owner often act as the intermediary between the policy owner and the provider.
- Life settlement providers serve as the point of contact between the life agents and life settlement brokers helping insureds to sell their policies and the investors that fund the settlement offers.
- Investors are individuals or institutions (such as hedge funds or mutual funds) that purchase the policy.

Over time, several types of services have formed to support and facilitate the buying and selling of life settlements. Among the key service providers are the following:

- Underwriting firms assist in pricing and risk selection. Some evaluate the current life expectancy of insureds whose policies are being considered for purchase and determine the quality of the initial policy underwriting.

- Trust companies provide escrow services at time of transfer and on an ongoing basis to ensure that purchase payments are disbursed after the policy transfer has been recorded, and that funds are available to make continuing premium payments.

- Administrative services companies can assist at several stages of a transaction, often tracking the continuing survival of insureds, making actual premium payments, and processing claims at the death of a covered insured.

- Attorneys provide some advice on current settlement laws. As investors have become more concerned with legal issues surrounding life settlements and the regulatory requirements in various states, legal services firms have stepped up to assist them.

- Actuaries assist underwriting companies in determining appropriate basic mortality patterns, and the effect that various impairments will have on life expectancy. They assist investors in calculating the appropriate offer to be made and the amount needed to be put in escrow to handle future premium payments. They assist administrative services providers in determining the optimum pattern of premium payment, and taking policy features and investment returns into consideration.

The Life Settlement Transaction

At a basic level, a life settlement transaction is straightforward. An individual, working with a financial advisor, approaches a life settlement provider and offers a policy for sale. The life settlement provider evaluates the policy to determine its market value.

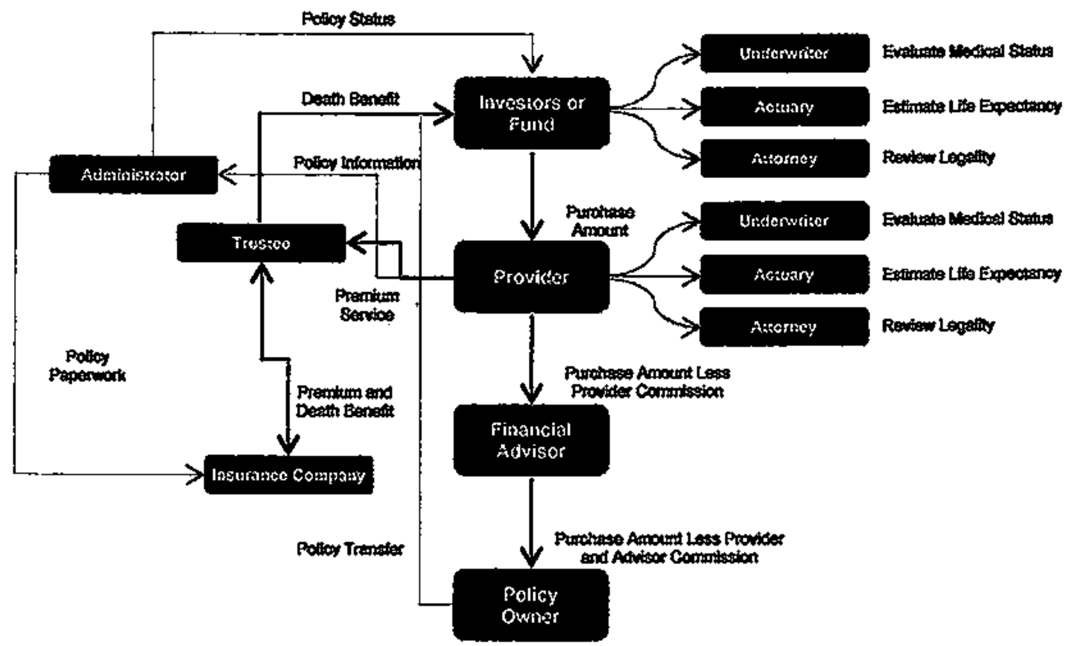
In some cases, the life settlement provider decides to purchase the policy for its account. If it does so, the provider makes an offer to the individual policy owner, who accepts or rejects it. If accepted, the policy is purchased by the investor and the original owner receives their net payment.

Investors approach life settlement providers seeking policies to buy. The provider offers the investor the policies it has available for sale either from its existing portfolio of policies (much as a car dealer sells autos from its inventory), or else agrees to find policies meeting the investors' criteria (similar to the way a real estate agent works with a home buyer to find a new home.)

The service providers described earlier support this straightforward transaction. As a result, capital and policy information flows can be complex.

In many cases, there is a planned duplication of effort. For example, some life settlement investors use two or more underwriters to develop a broader understanding of the insured's life expectancy and lessen the investor's risk. Meanwhile, providers also employ underwriters to provide their own internal estimate of the life policy's value and establish an offering price. The following graphic illustrates this complex process of working with a life settlement provider to acquire policies.

The Life Settlement Acquisition Process



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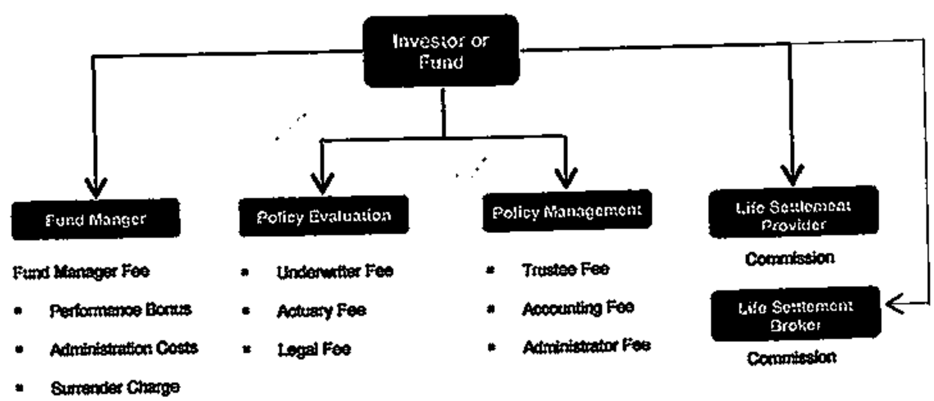
Life Settlement Participation Costs

This process involves the costs borne by the investor that reduce the ultimate amount paid to the individual policy owner. Broadly speaking, the investor's costs associated with life settlements fall into two categories: those paid to the fund manager and those paid to external parties, such as providers.

The fund charges fees for its investment management, in many cases including a performance bonus; administrative costs associated with operating the fund; and because the life settlement market is illiquid, many funds impose a surrender charge on investors who opt to withdraw within a given period after the initial investment.

Fees paid to external parties include commissions paid to life settlement providers and the policy owner's financial advisor as well as to underwriters and actuaries. The fund may directly pay these costs or pay them to the life settlement provider who settles the individual cost. The following graphic illustrates the types of fees or charges life settlement investors may incur.

Investor Costs



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Analyzing all of these costs is difficult. First, the costs vary because they are paid to different external providers. For example, a fund may buy policies from different providers, and the commissions it pays to one provider may differ from what is paid to another. Second, costs may be grouped together as general or as acquisition expenses, rather than split into their respective pieces.

Fund Manager Costs

Investors pay a wide variety of fees to the fund manager. These fees cover the costs of establishing and managing the portfolio, investment management, and, in some cases, the impact of withdrawal from the fund on its overall return.

Fund Manager Fee

The fund manager charges for managing the fund. This fee covers the manager's expenses for finding polices, evaluating the policy, assessing whether the return on investment meets the fund's criteria, arranging an independent medical evaluation of the insured, and arranging the purchase. Our analysis of fund offerings indicates fund manager fees range between 1% and 3% of assets under management, and are usually deducted from the fund's assets as part of the net asset value pricing. One life settlement fund, for example, charges 2% of the portfolio's value as its "Base Management Fee."

Performance Bonus

Some life settlement funds adopted the performance bonus often associated with hedge funds. Performance bonuses are designed to align the manager and investor's interests. These bonuses are paid to the portfolio manager after the investor has reached a "hurdle" rate of return on their investment. Above that hurdle, the portfolio manager shares a percentage of all further returns. This percentage is substantial, often in the range of 20% to 30%. For example, an Isle of Jersey based life settlement fund earns 20% of all profits once the investor realizes a 9% annual rate of return. The following table illustrates a hypothetical example.

Life Settlement Performance Bonus

Bonus Parameters	Amounts
Life settlement investment	$100,000
Performance bonus rate	20%
Performance bonus hurdle	10%
Actual return amount	$15,000
Performance hurdle amount (life settlement investment × hurdle rate)	$10,000
Performance bonus basis (actual return amount–performance hurdle amount)	$5,000
Performance bonus paid to fund manager (bonus basis × bonus rate)	$1,000

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Portfolio Administration Costs

Having built a portfolio of life settlement policies, the fund manager incurs costs in monitoring those policies on an on-going basis. This monitoring includes activities such as evaluating the portfolio's exposure to having too many policies issued from a single insurance company (which would increase the solvency risk investors face if the insurer were to become insolvent); maintaining any risk mitigation programs such as hedging or performance bonds; and tracking projected life expectancy against actual results. Investors may be charged portfolio administration costs as either a flat charge or a percentage of assets. These expenses will average approximately 1% of assets per year.

Surrender Charges

Many life settlement funds are illiquid, locking in investors until maturity. Others offer periodic opportunities to withdraw from the fund, albeit after paying a surrender charge; and some charge nothing, should investors choose to withdraw. The lack of a liquid market usually limits investors to set periods when they can withdraw from the fund, because net asset values are not calculated on a daily basis. Those surrender charges often decreases the longer the investor has been in the fund.

Policy Evaluation Costs

The purchase price of a life policy is based on its evaluation. In some cases, investors rely on life settlement providers to evaluate the policy. Others perform their own evaluation, even if a life settlement provider supplies an evaluation.

The investor directly bears the costs of this evaluation for underwriters, actuaries, and lawyers, if performed by the fund. The costs are indirectly borne if supplied by the provider inasmuch as the provider's costs increase its fees.

Policy Management Costs

Once policies are purchased, the fund is responsible for making sure premium payments are made on time and death benefit claims are processed efficiently. These services are most often outsourced because many fund managers see a risk control benefit for the investor. For example, if a third-party trust handles the premium reserve and the payment of the premiums, there is less likelihood that those reserves would be diverted to other uses.

Trustee Fees

Fees charged by trustees may be based on the number of transactions it processes for the fund during a period and are subject to preset minimum amounts. For example, one fund tells its investors that the fund is charged:

- Each time a policy is bought or sold

- Each time a policy matures

- A percentage of all fees levied during the month if the minimum fees do not reach a minimum level

- Any amount necessary to bring the minimum monthly payment to a target level for custodian and escrow services

- For each bank account opened

- For each premium payment made

- For each premium payment cancellation request

One aspect of this type of pricing is that, because it is transaction based rather than asset value based, the larger the individual returns on a policy, the lower these costs are on a percentage basis. This encourages the fund manager to select policies that produce a high return, and to avoid low face value policies where the same profit margins might be difficult to achieve.

Life Settlement Provider Costs

Life settlement providers, when acting as originators of life insurance policies for the life settlement investor, earn a fee for each policy purchased. This fee, often referred to as an origination fee, is usually stated as a percentage of the policy's death benefit. The amount and conditions applicable to the payment of the origination fee are typically a key element of the origination agreement or master purchase agreement. It is also common for the fees described in this agreement to include one or more incentive mechanisms. This motivates the life settlement provider to purchase policies for the investors at the best possible prices.

Life Settlement Broker Costs

Life settlement brokers represent a seller of policies in the market. They are typically paid a commission deducted from the total cash settlement amount offered by the life settlement provider for the policy. Brokers may adjust their fees with the individual policyholders whom they represent. In some instances, several brokers may compete for representation of the same seller, which will result in lower broker fees. Referral fees also vary depending on factors such as varying contractual obligations, market demand for a particular kind of policy or life expectancy category, and individual agreements between clients and their referring financial planners. Broker fees are usually not paid when a policy owner approaches the provider directly.

Our prior research suggested that a typical current standard would allocate to the financial advisor the lesser of 6% of the face amount of the policy or one-third of the increased value provided to the policy owner (increased value equals the excess of the settlement offer to the policyholder over the cash surrender value of the contract.) The following table is a hypothetical example of the compensation paid to the life settlement broker.

Life Settlement Broker Compensation Illustration

Compensation	Amount
Death Benefit	$1,500,000
Surrender Value	225,000
Settlement Payment to Policyholder	450,000
6% of Death Benefit (a)	90,000
33.3% of Excess of Settlement Payment over Surrender Value (b)	74,925
Financial Advisor Compensation (Minimum of (a) or (b))	74,925

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This compensation will usually be split between the life settlement broker and the life agent or financial advisor representing the insured, with the broker typically receiving one-third and two-thirds paid to the agent.

Life Expectancy Risk

Life settlement buyers rely on a small number of medical underwriters who provide life expectancies. In 2008, the majority of these underwriters revised their methodologies, resulting in an increase on new lives they were evaluating. They did not revisit prior cases. Fund managers, however, took the revision as a cue to adjust their portfolios, on the belief that the life expectancies they used were inaccurate. The changes, reported in the media, ranged between 4% and 25%.

Increased life expectancy estimates mean that newly acquired assets will produce lower returns, all else being equal, because of the higher cost-of-ownership. Ultimately, as newer assets replace maturing assets, the overall portfolio return decreases. This reduces the attractiveness of life settlements in comparison to other investment opportunities.

In addition, with two life expectancy increases within a short period, buyers and investors were uncertain that there would not be future increases. This reduced their confidence in the purchase prices and estimated returns they hope to earn.

Portfolio Diversification Risk

Life settlement portfolio managers, like other asset managers, develop an investment strategy aimed at building what they view as the ideal mix of policies. This mix of policies could vary by face amount and life expectancy. However, acquiring a portfolio that meets the investment strategy can take time. This creates two types of diversification risk. First, the policy may lack a sufficient number of policies to mitigate longevity risk. Second, the portfolio may be concentrated in terms of illness, exposing the investor to lower returns due to potential medical advances.

An investor's inability to acquire enough policies to fulfill the strategy creates portfolio lumpiness. As a result, the portfolio consists of a small number of large policies. This creates three risks.

Portfolio Diversity in Terms of Number of Policies

More policies in the portfolio reduce the impact of a single policy's inaccurate life expectancy on the overall portfolio return. For two portfolios with the same total face amount, the standard deviation for a pool with 500 lives will be one-tenth of the size of the standard deviation of a pool with five lives. The accompanying table illustrates this.

The Impact of Life Expectancy Variation Based on the Number of Lives

Assuming each life has the same face amount rather than pool of unequal policy sizes

Number of Lives	Mean	Standard Deviation
5	96 months	53 months
500	96 months	5.3 months

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A portfolio that is lumpy because it consists of a small number of policies is, in effect, putting its eggs in a single basket. This risk is compounded if the policies vary widely in their face amounts. For example, if the portfolio of lives shown above had the same face amount, then the impact on overall portfolio returns of any particular policy exceeding its life expectancy is equal. However, if the face amounts were unequal, then the policies with higher face amounts would have a larger impact on return, and those with smaller face amounts would have less of an impact.

Analysis conducted by A.M. Best as part of developing their ratings methodology for securitized life settlement portfolios found that the more lives in the portfolio, the narrower the standard deviation of the portfolio's economic value. As a result, A.M. Best recommended that the collateral pool of life settlement policies supporting a securitization should contain at least 300 lives.

Portfolio Diversity in Terms of Illness

Portfolio diversification involves more than just increasing the number of policies in the portfolio. Life settlements grew out of the viatical settlement market of the early and mid-1990s. That market, aimed primarily at HIV and AIDs patients, focused on insureds with life expectancies of less than 24 months. The development and widespread use of AZT, which significantly improved HIV life expectancy, effectively ended the viatical market.

The lesson taken from the viatical experiences was that a diversified portfolio of life settlements, in terms of the illness suffered, would provide some degree of risk reduction against the development of another "miracle cure." A.M. Best added illness diversification criteria to its analysis on how it might rate life settlement securitizations.

A.M. Best Disease Diversification Factors for Life Settlement Securitization Rating

Parameters	Maximum Limit as Percentage of Face Value
Cardiovascular	50%
Cerebrovascular	20%
Dementia	20%
Cancer	25%
Diabetes	10%
Respiratory diseases	20%
Neurological disorder	15%
Other	10%
No diseases	100%
Multiple disease	40%
HIV	0%

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In addition to the potential risk of a miracle cure for a single illness, is the potential that one medical development could affect multiple related disorders. For example, improvements in Type II diabetes treatment may improve cardiovascular health through reduction in the insured's weight.

Premium Optimization Risk

Premium optimization is the analysis of the credits and debits to a universal life insurance policy's account value, as well as any accumulated account value, to determine the minimum amount of additional premiums necessary to keep the policy in force. Understanding the emerging risks to premium optimization is crucial to investors seeking to increase returns and avoid unexpected losses.

There are three premiums normally associated with universal life insurance policies:

- The **minimum premium** is the premium that, if paid each year, would generally be just enough to keep the policy in force for one more year without the accumulation of any cash value.

- The **target premium** is generally the amount of premium that will keep the policy in force for the insured's lifetime. There is, however, no guarantee that the universal life insurance policy will remain in force for that period if only the target premium is paid.

- The **maximum premium** is the largest permitted premium that will enable the universal life insurance policy to maintain its character as life insurance. If additional premiums are paid, the policy will be considered a "Modified Endowment Contract" and lose much of the tax advantages of life insurance.

These three premiums allow investors to optimize their premium cash flows, potentially increasing their investment return.

The accuracy of the calculations used to optimize the premium flows is crucial to avoid overpayment or underpayment. Overpayment may reduce returns because the excess premium may not be recaptured when the death benefit is collected, while underpayment may result in the policy lapsing. Not surprisingly, some life settlement managers devote significant resources to the premium optimization process. These resources may be internal to the fund, or outsourced to service providers.

Ideally, premium optimization occurs in two places. First, it occurs as part of the policy valuation process during the initial calculation of an offering price for the policy. The optimized premium analysis provides the ongoing capital commitment the investor needs to make until the policy's death benefit is paid. As such, it becomes a key factor in determining the offering price made to the original policyholder.

For life settlement investors, the changing nature of UL's crediting and debiting factors is a double-edged sword. It allows them to deconstruct the policy's charges and more effectively optimize premiums (compared to whole life insurance or term life insurance). At the same time, it requires an ongoing commitment to monitor changes in each UL policy. Having purchased a policy, premium optimization continues to play a role. Premium optimization enables the investor to adjust premium payments as changes occur to credited interest rates and policy charges.

German Secondary Markets for Insurance Products

The primary life settlement market outside the U.S. is Germany. Because capital availability is crucial to the development of the U.S. life settlement market, it is important to understand these markets and their appeal to investors. The most important difference to an investor between the U.S. and German markets is that investors are purchasing endowments and not life insurance policies.

An endowment policy is a life insurance contract designed to pay a lump sum after a specific term (on its "maturity") or on death. Typical maturities are 10-years, 15-years, or 20-years up to a certain age limit. Some policies also pay out in the case of critical illness. Policies are typically traditional with-profits or unit-linked (including those with unitized with-profits funds). The primary distinction between the two types of endowments is the underlying investments. Unit-linked endowments are similar to variable annuities in that the owner can select the endowment's sub-accounts. Insurers manage the investments of traditional with-profits endowments.

The owner of an endowment can surrender their policy for an amount determined by the insurance company based on how long the policy has been in force and the amount paid into it.

Endowment policies are usually much smaller in value than U.S. life insurance policies. As a result, investors need to be very efficient in managing the costs of acquisition of German endowments. Offsetting the lower face, to some extent, is that the endowment has a known maturity date. As a result, the investor does not face any longevity risk. However, they do need to continue making premium payments until the maturity date.

Endowment and Life Insurance Policy Comparison

Feature	Endowment	Life Insurance (cash value)
Death Benefit	Cash value plus bonus	Face value larger than cash value
Maturity date	Set at time of purchase (typically 10-years to 30-years from purchase)	Set to age or death
Purpose	Savings	Protection against untimely death, savings
Medically underwritten	No	Yes
Amounts	Typically under $100,000	Often well over $100,000
Benefit	Lump sum payment at end of period	Lump sum payment upon death
Investment type	Unit-Linked or Insurer General Account	Unit-Linked or Insurer General Account

Prepared by Conning, Inc. Sources: BVZL (2017), press releases.

For third-party investors in endowment policies, it is important to understand that the amounts of an endowment are relatively small, compared to U.S. life settlements. The German life settlement association, BVZL (Bundesverband Vermögensanlagen im Zweitmarkt Lebensversicherungen) reports that the average policy size of a German traded endowment policy was €50,000.

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