ALIRT INSURANCE RESEARCH

Independent Analysis of Insurance Company Risk Trends

200 Day Hill Road, Suite 220, Windsor, CT 06095, Phone: (860) 683-2070

Liquidity and Risks for Life Insurers *(March 14, 2023)*

There has been considerable client interest in the liquidity of life insurance and annuity companies in the wake of bank regulatory actions against Silicon Valley Bank (SVB) and Signature Bank of New York (SBNY) over the last several days. The concerns are understandable given a number of similarities between banks and life insurance companies, including the following:

- Both are major investors in bonds,
- Both face interest rate risk in terms of the market value of their bond portfolio,
- Both are confidence-sensitive businesses.

However, there are several substantial differences between banks and life insurance companies that result in materially lower liquidity risks for life insurers. We detail these below.

1. Surrenders/Withdrawals

The most critical difference between banks and insurance companies is the nature of their liabilities. Banks can face the need to meet surrenders/withdrawals on an immediate basis, as most bank deposits do not have any surrender or withdrawal penalties. This can result in a classic "run on the bank," which caused the demise of Bear Stearns, Lehman Brothers, and Washington Mutual (among others) in 2008 and appears to have prompted the recent regulatory takeovers of SVB and likely SBNY.

This contrasts greatly with life insurance companies, as most policies and contracts are not demand deposits and policyholders either do not have the legal or contractual ability to demand any cash from the insurer, or they can demand some of their cash from the insurer but face a surrender charge, market value adjustment, the cancellation of an embedded guarantee within an annuity or life insurance contract, and/or the loss of a product with life or health insurance benefits. The latter serve as strong deterrents to policy surrenders.

In addition, insurers establish and maintain policy reserves (in addition to their capital positions) to support their contractual liabilities, which contrasts significantly with banks that do not generally hold reserves to cover their deposits (as banks assume not all depositors will request their funds at the same time).

That does not mean that liquidity events are impossible for insurers. They can and have happened in the past, driven largely by institutional group annuities where the decision making of a small number of corporate policyholders led to large and unexpected surrenders, resulting in a rush by other policyholders to cash out. However, the mix of liquid group annuities has declined dramatically across the life insurance industry over the last 30 years and is now a small component of total industry liabilities. The liquid group annuities that remain reside mostly in diversified, large, financially strong companies (i.e. New York Life, Metropolitan Life, etc.) and possess certain withdrawal restrictions which did not exist in the past.

Other than institutional group annuities, individual fixed annuities are the product most likely to produce higher than expected surrenders. First, sales of the product are heavily driven by crediting rated and given the rise in rates in 2022 (sustained for the most part thus far in 2023) a new fixed annuity contract may have a higher crediting rate than existing contracts. Secondly, fixed annuities out of surrender charge most closely resemble bank demand deposits as there may be no penalty for surrender.

Mitigating these risks somewhat are the large number of individual annuity holders with relatively small policy amounts, combined with the lack of publicity surrounding surrenders (as opposed to what happened at SVB with a number of very large deposit holders trying to get their money out at once under a fierce media spotlight).

Despite the rise in interest rates in 2022, total annuity and surrender benefits for the ALIRT Life Composite were actually 3% **lower** than in 2021. This could be the result of annuity contractholders opting to continue their contracts (at likely higher rates), and/or the effects of distributor compliance and legal protocols surrounding policy (i.e. 1035) exchanges that may limit early surrender. Whether this will remain the case in 2023 remains to be seen, but at least for 2022 it was not evident that annuity surrender levels responded to the higher crediting rates for new annuities.

2. Accounting "Mark to Market" Differences

A second important difference between publicly-traded banks and U.S. insurers can be the composition of their bond holdings.

Financial Statements for Publicly Traded Organizations: Financial statements filed with the Securities and Exchange Commission (SEC) are based on Generally Accepted Accounting Principles (GAAP). Under GAAP accounting, fixed income securities are separated into three classifications:

- Securities Held to Maturity: Bonds are valued at their Amortized Cost or Book Value
- Securities Available for Sale: Bonds are valued at their "Fair" or "Market" Values
- Trading Securities: Bonds are valued at their "Fair" or "Market" Values

For bonds carried at their "Fair" or "Market" values, higher interest rates depress their reported value, which produces unrealized capital losses. The unrealized capital losses reduce "Accumulated Other Comprehensive Income", which in turn reduces GAAP shareholders' equity.

Those bonds classified as held to maturity do not experience reported changes in their value as interest rates fluctuate. However, if such bonds are sold in a higher interest rate environment, a realized capital loss is incurred which could reduce shareholders' equity (see the following page).

Fixed Income Securities by GAAP Accounting Classification

	As a % of Total Fixed Income Securities at 12/31/2022			
Institution/Group	Available for Sale	Trading Securities	Held to Maturity	"Other" Securities
Signature Bank NY (SBNY)	68.9%	0.2%	28.8%	2.1%
Silicon Valley Bank (SVB)	21.6%	0.1%	75.5%	2.8%
Composite of 16 Publicly traded Life Insurer Organizations	97.1%	1.9%	0.1%	0.8%

ALIRT reviewed the year end 2022 "10-K" reports filed by 16 publicly traded companies[1] that have sizable life insurance and annuity businesses. For these companies, virtually all (98%) their fixed income securities are classified as "Available for Sale", with most of the remainder classified as "Trading Securities". Only

[1] These 16 companies were comprised of American Equity Investment Life Corp., Ameriprise Financial Inc., Brighthouse Financial Inc., Corebridge Financial Inc., Equitable Holdings Inc., Fidelity National Financial Inc., Genworth Financial Inc., Globe Life Inc., Jackson Financial Inc., Lincoln National Corporation, MetLife Inc., National Western Life Group Inc., Principal Financial Group Inc., Prudential Financial Inc., UNUM Group, and Voya Financial Inc.

Prudential Financial (PFI) among the sixteen groups had any securities classified as "Held to Maturity" at year end 2022, and these comprised only 0.4% ($1.3 billion) of PFI's $325 billion of total bonds.

As a result, virtually all the reduction in bond market values from the higher interest rates in 2022 was already reflected in these insurance group's GAAP financial statements and shareholders' equity. As shown below, the classification of bonds for these insurers stand in dramatic contrast to that for Silicon Valley Bank (SVB) and Signature Bank New York (SBNY), the two banks taken over by regulators in recent days.

SVB had over 75% of its bonds in the "Held to Maturity" classification at year end 2022. As the company faced the need to sell assets to meet increasing depositor withdrawals, it incurred large capital losses which reduced its shareholders' equity. In addition to the reduction in the value of its bonds due to interest rates, it is also possible that SVB received lower bids for its investments, given the motivation of the company to sell assets quickly.

While SBNY had a substantially lower mix of "Held to Maturity" securities in its bond portfolio than did SVB, the concentration was still dramatically higher than for the U.S. life insurance industry.

3. <u>Regulatory Financial Statements Filed by Insurers: No Mark to Market</u>

Individual U.S. insurers must file financial statements every quarter with the regulators in every state in which they are licensed to conduct business. These financial statements (which form the backbone of the ALIRT score and analytical model) are based upon statutory accounting principles which differ from GAAP accounting standards in several important ways. ***One of the chief differences is that under statutory accounting virtually all bonds are recorded at book value or amortized cost and not at market values, under the tacit assumption that most of these securities will be held to maturity.***

Thus, while insurers' existing bond holdings experience unrealized capital gains or losses when interest rates decline/rise, these gains or losses are not reported through their income statements and therefore do not impact insurer capitalization or the carrier's risk-based capital positions. In short, the perceived interest rate risk to insurers' asset values and capitalization is not "on display" in each quarterly reporting period.

That said, the regulatory financial statements do include on an annual basis an exhibit in which insurers report both the book value and estimated market value for their bond portfolios. In the table below, we highlight the changes in the book and market values of bonds for the ALIRT Life Insurance Industry Composite[2] that over the last six years, as well as the total unrealized capital gain (loss) position.

Bond Market Value Analysis:
ALIRT Life Industry Composite

Year	$ Billions			Total Unrealized Gain/(Loss) As a % of	
	Book Value	Market Value	Total Unrealized Gain/(Loss)	Total Bonds	Total Surplus
2017	2,556	2,724	168	6.6%	39.6%
2018	2,541	2,565	24	1.0%	5.8%
2019	2,635	2,853	217	8.3%	47.5%
2020	2,824	3,190	366	13.0%	74.2%
2021	2,963	3,209	246	8.3%	44.1%
2022	3,027	2,694	(332)	-11.0%	-62.9%

[2] The ALIRT Life Composite consists of 100 of the largest U.S. Life insurers (=88% of 2021 industry general account invested assets).

As this table shows, the market value of insurer bond portfolios (and bonds in general) can exhibit dramatic swings over short periods of time. This was the case in 2019 and 2020 when interest rates declined, and in 2018 and 2021 when interest rates rose modestly. However, by far the biggest change occurred in 2022, as the 10 Year U.S. Treasury Bond yield rose 237 basis points from 1.51% at year end 2021 to 3.88% at year end 2022, and the ALIRT Life Industry Composite's bond portfolio swung from a large unrealized capital gain position of $246 billion to an unrealized capital loss position of $332 billion.

The reduced market value of bonds was driven largely by higher interest rates, as the risk premium for investing did not change substantially in aggregate for the year. This could change with a shift in investor sentiment toward credit risk, driven by weaker economic conditions, lower and/or turbulent equity and financial markets, a reduction in investor demand for fixed income investments, or other factors.

The important point, however, is that even with these swings in bond values there was no policyholder anxiety over the solvency position of life insurers and hence no attempted "run" on the liabilities.

Insurer Specific Risks and Risk Management Efforts

Insurers could certainly face challenges if their current unrealized capital losses related to changes in interest rates become realized capital losses. This could result from either higher than anticipated policyholder lapses or surrenders, and/or insurers that have taken some undue risk as relates to asset/liability management. Both circumstances could increase the likelihood that insurers must sell assets before their maturities, which could lead to the realized capital losses mentioned above.

Asset/liability management is a critical part of insurer risk mitigation efforts, especially for fixed annuities (individual annuities and perhaps especially group contracts). Effective asset/liability management encompasses the close matching of investment purchases and maturities with expected contractual maturities, as well as cash flow testing and forecasting. An example would be an insurer that writes five-year fixed annuities to purchase investments with an expected duration of approximately five years.

Though it is not possible to perfectly match asset and liability durations, most insurers attempt to keep these durations fairly close, so that there is a pool of investments that will mature and provide the necessary cash flows to fund contractual maturities. This can mitigate, perhaps greatly, any potential for substantial sales of investments before their maturities, and by extension limit capital losses. However, if an insurer does not manage asset and liability durations appropriately, it may need to sell a large volume of investments quickly, and if this occurs when interest rates are higher, the company could incur realized capital losses which could in turn reduce capitalization.

Also, asset/liability management efforts and cash flow testing incorporate estimates and assumptions of policyholder behavior. These assumptions could prove inaccurate, and the insurer could experience higher levels of policyholder surrenders and lapses. Assumptions that differ from the ultimate reality is a normal part of the insurance and annuity business, and this has happened for many different products, due to elevated mortality, higher than expected policyholder persistency, higher health insurance claim costs, and perhaps especially the much lower than anticipated investment yields over the last three decades.

Fixed annuities also experienced assumptions about policyholder behavior that proved inaccurate. Given the long duration decline in interest rates and investment returns, the persistency of fixed annuities was much higher than expected, as the relatively high (compared to new contract rates) guaranteed minimum crediting rates were (correctly) perceived as attractive and many clients kept their contracts in force.

Given the sharp rise in interest rates in 2022, the incentives have reversed as new fixed annuities may have higher crediting rate than in force annuities. This could lead to a period of higher lapses and surrenders, and if this occurs either before surrender change periods end and/or for insurers that did not closely match their investment durations with policyholder maturities, realized capital losses could result which could in turn reduce capitalization.

In addition, over the last several years insurance companies and especially issuers of fixed and fixed indexed annuities have increased their investment holdings of more complex securities, structured securities, privately placed bonds, and alternative investments. This was driven by a desire to bolster investment returns in the ongoing low interest rate environment, to offer products with competitive crediting rates and other policy terms and conditions, and to offset reduced opportunities to purchase corporate bonds and mortgage-backed securities given strong demand for fixed income securities.

These investments performed very well over the last several years, a period characterized by low borrowing costs, strong financial markets, loose credit markets, and generally benign economic conditions. However, if macro-economic and/or credit market fundamentals change, these assets may become less liquid.

To gird against the risk of elevated surrenders, lapses, and/or claims, as well as to offset a reduction (on the margin) in the liquidity of their investment portfolios, insurers can pursue several different strategies, which can include but are not necessarily limited to:

- Diversified Business Mix, perhaps especially including products with renewal premiums
- Sizable holdings of cash and/or short duration investments, which reduces the likelihood and possible need for an insurer to sell other investments
- Maintain strong Capital/Surplus Positions
- Execute Hedges for Material Changes in Interest Rates

Conclusion

We do not mean to say that the decline in bond values poses no risk to insurers, and – as discussed above - certainly problems can arise if the unrealized capital losses become realized capital losses.

This risk, as pointed out above, is higher for fixed annuities (both institutional and individual), given the sensitivity of the product to current crediting rates, their relatively short duration, the lack of significant life insurance or health insurance coverage inherent in most fixed annuities, and product distribution for individual annuities concentrated in third party firms not affiliated with the insurer. This liquidity risk is enhanced when interest rates rise, as new contracts can have higher crediting rates than in-force business.

Life insurers can also face liquidity needs in the event claims for life insurance and/or health insurance contracts are elevated, such as was the case with life insurance given the higher mortality in 2020-2022.

With that said, the life insurance and annuity industry's liquidity risk is not comparable to the risk faced by banks. Most of the insurance industry's liabilities do not resemble the demand deposits that underpin banks, and many distributors (especially those regulated by FINRA) have protocols in place from a compliance and legal standpoint that serve to prevent or at least slow down any policyholder surrenders or lapses.

All of these factors lead to a much lower, though not zero, liquidity risk for life insurers. Other methods insurers use to mitigate their liquidity risks include maintaining strong capital positions, executing asset/liability management and cash flow testing efforts on an ongoing basis, purchasing financial instruments to hedge against interest rate changes, holding a portion of their investments in cash and liquid short-term investments, and pursuing diversity in their business mix.

ALIRT Insurance Research (860) 683-2070 Email: info@alirtresearch.com Website: www.alirtresearch.com