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# How Insurance Investors Can Adapt to a Low-Liquidity World

Lower bond-market liquidity and insurance investors' unique needs raise the stakes for liquidity management in what's likely to be a volatile environment. The responses should be multifaceted: reviewing liquidity profiles and private-market allocations, tapping supplemental liquidity sources, and ensuring that investment capabilities can find liquidity at the ground level in public markets.

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## Introduction

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Evidence of lower market liquidity isn't hard to find, and the UK liability-driven investing "crisis" is a recent example of the potential pitfalls when liquidity becomes thinner. Insurance investors' unique needs, sizable public bond exposure and growing private allocations raise the stakes for liquidity management, given the recent dramatic shifts in the market landscape.

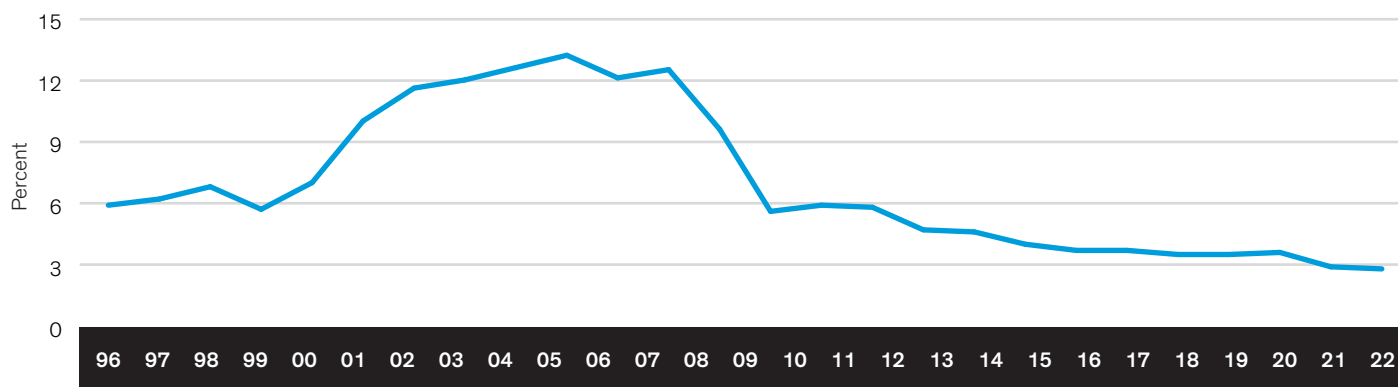
It seems sensible to expect an extended period of bigger news-driven market moves and higher volatility as trend-driven pre-pandemic markets recede further in the rearview mirror. The risks from less predictable liquidity have drawn attention from regulators, which have urged insurers to reassess liquidity needs and approaches, among other measures.

In our view, insurers' responses should be multifaceted. They should include reviewing liquidity profiles and private-market allocations, tapping supplemental liquidity sources, and ensuring that investment capabilities are well versed in finding liquidity at the ground level in public markets, security by security. We'll examine these topics in more detail, but let's start by revisiting how we got here.



## DISPLAY 1: US TREASURY LIQUIDITY HAS FALLEN OFF

US Treasury Securities' Trading Volume as Percent of Total Outstanding



Historical analysis and current forecasts do not guarantee future results.

As of June 6, 2023 | Source: Securities Industry and Financial Markets Association (SIFMA) and AB

### Declining Liquidity Poses a Major Challenge

Concern about market liquidity will likely occupy the minds of CIOs and other investors for some time, with the evidence of reduced liquidity easy to find.

Central banks have sharply tightened monetary policy, and allocations to illiquid assets have generally risen across the investment community. The outstanding amount of developed-market public equities is shrinking, particularly in the US, with issuance down and buybacks up over the past decade. As a result, the balance of portfolios has shifted from public-market exposure toward private-market.

Microstructural issues in the equity market are reducing liquidity, too, with the rise of high-frequency traders and changes in trading behavior: volume in closing auctions has grown from 3% to 10% over the past decade, narrowing the window for effective price discovery. The UK's Financial Policy Committee identified the "fragility of market liquidity" as a key risk, noting that high-frequency traders occupy a "sweet spot" of liquid mega-cap stocks and don't trade in more volatile regimes or highly news-driven markets. This causes market liquidity to evaporate when it's needed most.

Liquidity is lower in public bond markets, too, with trading volume in Treasuries down from about 13% around the time of the global financial crisis (GFC) to around 2% at the end of 2022 (*Display 1*).

Passive investing, which now accounts for over 40% of assets under management (AUM), is also hurting liquidity. Passive investors tend to trade at a low percentage of the volume around index rebalancing

dates, using less aggressive algorithms than active investors. The AUM of active value investors has notably declined, too, leaving a much smaller share of investors able to buy oversold assets.

### The LDI Crisis: A Canary in the Coal Mine

The UK liability-driven investing (LDI) "crisis" is a recent example of complications from shakier market liquidity.

Defined benefit pension schemes had adopted LDI overlays to better match their liabilities, leaving them in a vulnerable position. When the UK announced a "mini" budget on September 23, 2022, the 30-year gilt yield surged from 3.7% to 5.1% at its peak. This triggered margin calls on LDI instruments, forcing pension plans to rapidly sell liquid assets—including gilts. As upward pressure on yields continued, the Bank of England had to postpone the start of its quantitative tightening program and resume buying long-term gilts.

Some of these issues were UK-specific, but we see this episode as a warning of the need for liquidity when regimes change. In this case, the interest-rate cycle has clearly turned, inflation volatility is expected to rise and the business cycle is back. It's a dramatic contrast with the longest period of economic expansion ever seen in the years leading up to the COVID-19 pandemic.

A more delicate liquidity situation alone isn't reason to be bearish; markets could remain orderly. But we think ignoring the potential complication would be a mistake. And because the forces at work are slow-moving trends of policy, market structure and the illiquid tilt of many strategic asset-allocation approaches, the liquidity issue isn't likely to pass quickly.

Investors should get ready for an extended period of bigger news-driven market moves, distinct from expecting higher volatility as we move further away from trend-driven pre-pandemic markets. Allocations will be affected, too: all else equal, more focus on liquidity implies a need for more public-market exposure than would otherwise be the case. Investors should also give greater consideration to cash flow–driven approaches rather than focusing on liability-driven views.

### **A Challenge (Intensified) for Insurance Investors**

Liabilities—and their corresponding assets—are a much more prominent consideration in the world of insurers. Liabilities drive unique liquidity needs that make adapting to a lower-liquidity world a particular challenge, on top of firm-specific liquidity drivers.

Regulators are pushing insurers to review liquidity risk appetites; define limits, governance and areas of responsibility; and consider short- and longer-term liquidity risks and requirements. The US National Association of Insurance Commissioners has adopted a Liquidity Stress Test Framework to quantify the impacts of large life insurers' asset sales on financial markets in scenarios when liquidity is under stress. The framework complements existing tools and processes for assessing liquidity risks.

The European Insurance and Occupational Pensions Authority (EIOPA), meanwhile, has attempted to enhance a common approach to assessing liquidity risk in recent years through its publications focused on [methodological approaches](#).<sup>1</sup> Solvency II has no explicit capital charge for liquidity risk; if it did, approaches across the industry might be more standardized. Standardization wouldn't necessarily be a positive, though; it could lead to tunnel vision and a narrower focus.

Insurers' sizable public bond-market exposure and consistent inroads into private markets make their liquidity approach even more important. US insurers own between 30% and 40% of the US public bond market; in Europe, the share is around 30%.<sup>2</sup> Over the past decade or so, insurers have shifted heavily into private debt seeking yield and diversification. The favorable liquidity profiles of their liabilities have facilitated this move. If you can accommodate illiquidity and receive a premium, why wouldn't you?

### **Not All Insurance Liability and Liquidity Profiles Are the Same**

Of course, asset liquidity has declined in a fairly benign environment that—until now—has posed few challenges to meeting liability requirements. The dramatic shift in previous years is raising the stakes for insurers that hold sizable illiquid allocations.

The health of an insurer's liquidity position can be thought of as two sides of an equation. On one side are liquidity needs—in both normal environments and times of stress. On the other side is the amount of liquidity available to meet those needs.

There's a relationship between the two sides. When a dislocation like the COVID-19 pandemic hits, liquidity needs can rise at the same time that the value of investment portfolios is tumbling. Similarly, if rising rates cause policy lapses to increase, they'll also be depressing the value of fixed-income assets.

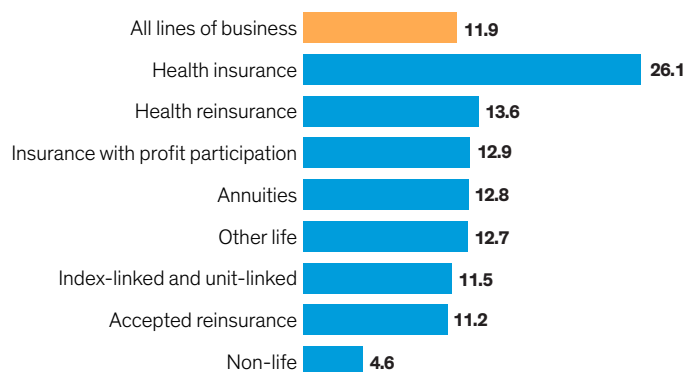
In some scenarios, asset classes that had previously been liquid can become illiquid—episodes that increase the need to source liquidity from remaining assets. Insurers may become forced sellers, compelled to sell off their most liquid assets—investments they may be eager to hang onto.

<sup>1</sup> "EIOPA publishes the second paper on the methodological principles of insurance stress testing with focus on liquidity," European Insurance and Occupational Pensions Authority, January 26, 2021, [https://www.eiopa.europa.eu/eiopa-publishes-second-paper-methodological-principles-insurance-stress-testing-focus-liquidity-2021-01-26\\_en](https://www.eiopa.europa.eu/eiopa-publishes-second-paper-methodological-principles-insurance-stress-testing-focus-liquidity-2021-01-26_en).

<sup>2</sup> Barclays, EIOPA and AB, as of 4Q:2022.

## DISPLAY 2: DURATION VARIES SIGNIFICANTLY ACROSS INSURER TYPES

Modified Duration by Insurance Line of Business (Years)



### Historical analysis does not guarantee future results.

As of December 31, 2019 | **Source:** *Insurers' asset and liability management in relation to the illiquidity of their liabilities*, European Insurance and Occupational Pensions Authority, December 20, 2019

Insurers' liability profiles can vary quite a bit. Life insurers' long-term liabilities, for example, have durations in the 12- to 13-year range (*Display 2*), often higher than underlying asset portfolios. Because longer-term illiquid liabilities can better accommodate illiquid assets, they've been a key enabler in life insurers ramping up private allocations.

While the private asset premium is attractive, there are other nuances to consider. These include the need to maintain diversification and adhere to regulatory capital requirements as well as to ensure the ability to source assets and satisfy operational requirements.

Property and casualty (P&C) insurers face a very different business model that requires much more liquidity. For example, their policies cover higher-frequency events through products such as car and home insurance as well as less predictable but potentially costly events such as natural disasters.

As a result, P&C liabilities have a much lower duration—averaging 4.6 years—that requires more liquidity access. Typically, P&C insurers

are also more exposed to inflation than their life counterparts: most policies cover restitution or repair rather than a pre-defined amount, making them subject to prevailing prices and adding a layer of uncertainty to future liquidity requirements.

Matching shorter liabilities requires shorter-duration, lower-yielding bond portfolios, so P&C risk-seeking and surplus assets tend to favor higher-returning investments such as equities. As a result, P&C private-market allocations are smaller than those of life insurers, though they've also risen over time.

### Dynamic Liquidity Needs Require a Dynamic Approach

It's impossible to eliminate risks from extreme-stress scenarios, but insurers *can* consider their potential impact as part of liquidity planning. They can also revisit their approach to sourcing liquidity when it's needed, including vetting asset managers' capabilities and processes to identify and access liquidity.

Each insurer also needs to account for business-specific liquidity risks. Reinsurance arrangements and choices on hedging business exposures or risks, for example, could alter a company's sensitivity to changing collateral requirements. Credit-rating downgrades could impose regulatory haircuts on assets used as collateral, requiring insurers to provide even more assets.

Changes in mortality and morbidity experiences can also boost liquidity requirements. "Best estimate liabilities" are just that—estimates based on actuarial assumptions. Experience often differs, driving unexpected liquidity needs. The COVID-19 pandemic is a notable—and recent—example, with higher death rates greatly increasing the number of claims.

Life insurers can diversify against such scenarios by taking on both longevity and mortality risks. For example, when higher mortality rates increase claim payouts, longevity businesses would see reduced annuity payouts, creating an inherent element of diversification. Monoline insurers, however, may have substantial exposure to unexpected liquidity demands.

Higher lapse rates from changes in the macro environment can create another gap between estimated and actual liquidity needs. For example, when interest rates rise sharply, policyholders may find more attractive deals elsewhere, leading them to surrender policies and head for greener pastures.

### Marginal Liquidity Needs Have Likely Increased

Insurers' higher private-market allocations now face an environment with a more intense liquidity need. Rising interest rates are likely to lead to rising policy lapses. A cost-of-living crisis in many regions of the world has made policies less affordable, eroding insurers' confidence in new premiums and available liquidity. With monetary policy pivoting quickly, policy errors can have unforeseen effects that change the liquidity landscape—with the UK LDI episode a case in point.

A less predictable liquidity environment calls for insurers to revisit asset liquidity profiles—and the ability to access that liquidity. Selling assets, whether preemptive or to satisfy cash outflows, should be a solution of last resort.

Fortunately, insurers are inherently less susceptible to liquidity crises than banks, and liquidity can be bolstered through sound asset-liability management (ALM) practices. Banks' business models rely on short-term borrowing through on-demand customer deposits accompanied by long-term lending. As the Silicon Valley Bank (SVB) and Signature Bank stories have made clear, this asset-liability mismatch can trigger devastating bank runs, leaving only two options: selling assets or raising more capital.

### FHLB System Tops the List of US Liquidity Resources

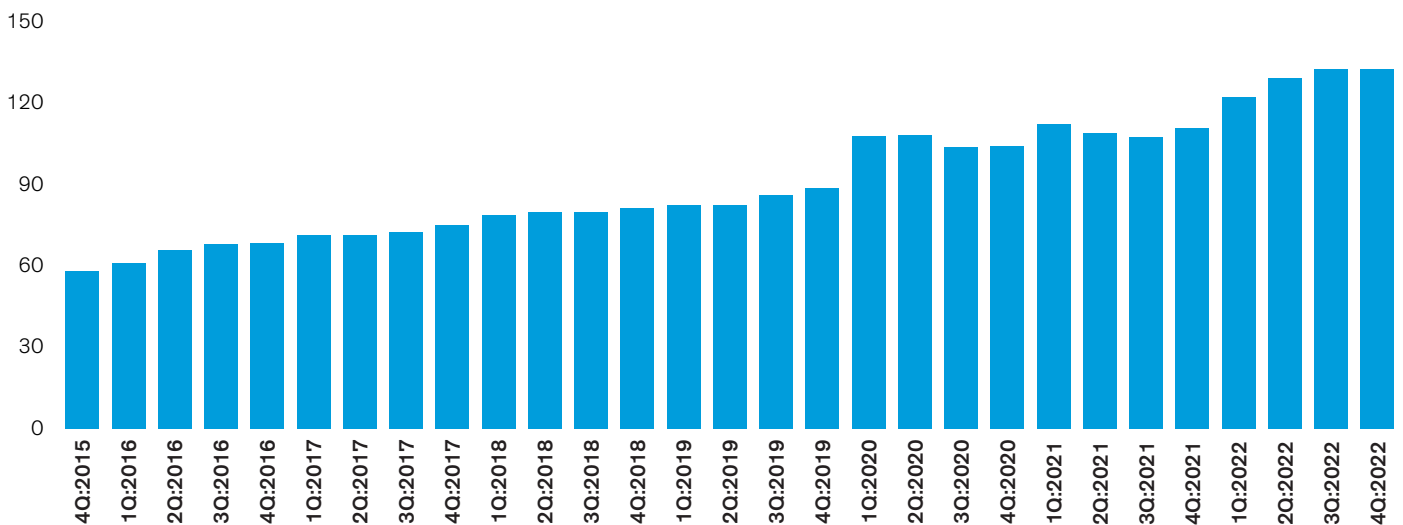
US insurers have other avenues for meeting liquidity needs. Federal Home Loan Bank (FHLB) borrowing, for example, is broadly available to financial companies. The FHLB system, a network of regional mortgage-lending cooperatives owned by member companies, was initially tapped at scale by insurers 15 years ago during the GFC.

US life insurers' FHLB advances, in the \$12–\$15 billion range before mid-2007, soared to a peak of \$55 billion in the fourth quarter of 2008 and stayed high even after the GFC. Advances reached new heights starting in late 2013, as life insurers found new uses: ALM and capital management, spread enhancement, M&A deals, and debt refinancing.

Borrowing has continued to grow (*Display 3*), including a 21% jump early in 2020 with the onset of the COVID-19 pandemic. Advances stayed at that level until 2022, when market dislocations prompted life insurers to tap this liquidity source once again. Between the fourth quarter of 2021 and fourth quarter of 2022, the outstanding balance grew by another \$21.6 billion, or 19.5%, topping \$132 billion.

### DISPLAY 3: FHLB BORROWING—A POPULAR LIQUIDITY SUPPLEMENT FOR LIFE INSURERS

Federal Home Loan Bank—Advances Outstanding (USD Billions)



Past performance does not guarantee future results.

Through December 31, 2022 | Source: *Financial Accounts of the United States*, Board of Governors of the Federal Reserve System, December 31, 2022

US P&C companies haven't relied as much on FHLB borrowing (*Display 4*), given the shorter, more liquid nature of their assets and liabilities—along with generally much larger surpluses. Still, borrowing managed to more than triple during the first three quarters of 2020—the height of the pandemic—from \$3.5 billion to \$11.2 billion, before starting to decline.

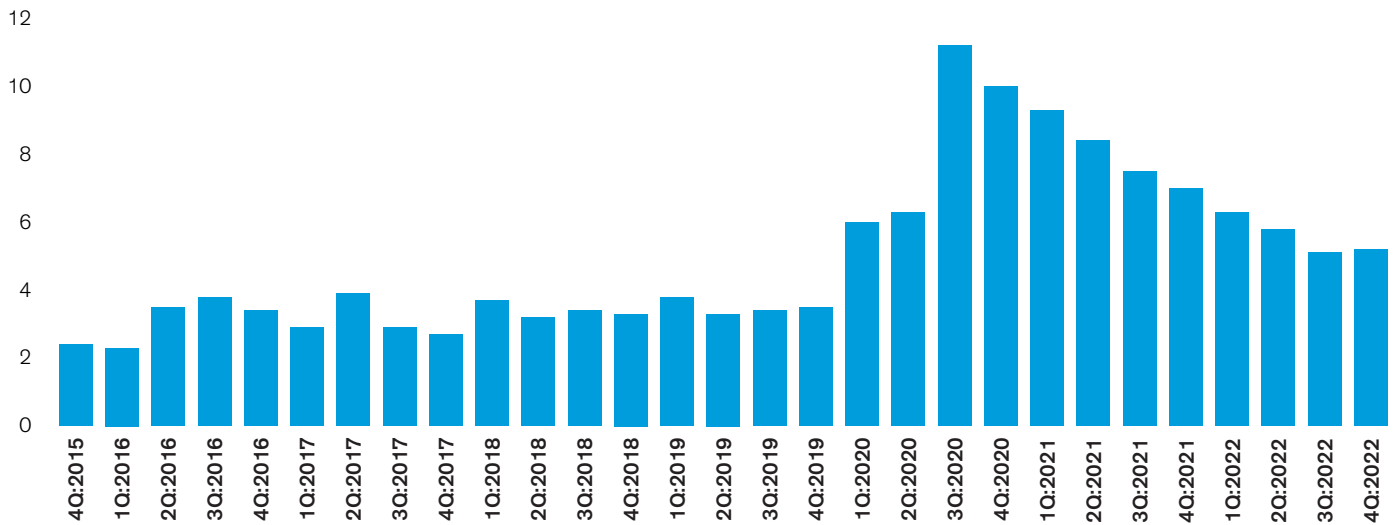
FHLB borrowing is clearly an important liquidity source for financial companies—including insurers. It serves as an emergency option—a lender of “next to last resort,” given its government support. FHLB borrowing is available in a variety of formats, including fixed- and floating-rate advances and a wide range of maturities.

However, only FHLB members can take advances, which must be 100% collateralized with housing-related assets—with regulatory haircuts applied to different collateral types. The FHLB also isn't a magic solution; SVB had access but collapsed anyway. Some voices already caution that financial firms rely too much on the FHLB as emergency funding, which could be amplifying systemic risk and threatening the stability of the US financial system.<sup>3</sup>

Surplus notes offer another path for US insurers to raise capital. They're typically issued by mutual insurance companies that are policyholder-owned, with no way to raise equity capital. These fixed-income securities are at the bottom of the capital structure, similar to equities' position in a public company's hierarchy. The name stems from their treatment as surplus under US statutory accounting.

### DISPLAY 4: P&C INSURERS MAKE LESS USE OF LIQUIDITY BACKSTOP

Federal Home Loan Bank—Advances Outstanding (USD Billions)



Past performance does not guarantee future results.

Through December 31, 2022 | Source: *Financial Accounts of the United States*, Board of Governors of the Federal Reserve System, December 31, 2022

<sup>3</sup> Stefan Gissler, Borghan Narajabad and Daniel K. Tarullo, “Federal Home Loan Banks and Financial Stability” (Harvard Public Law Working Paper No. 22-20, June 23, 2022), <https://ssrn.com/abstract=4135685>; Daniel K. Tarullo, “How to Limit the Risks to Financial Stability Posed by the Federal Home Loan Bank System,” Brookings, July 11, 2022, <https://www.brookings.edu/blog/up-front/2022/07/11/how-to-limit-the-risks-to-financial-stability-posed-by-the-federal-home-loan-bank-system/>.

Much like FHLB advances, surplus notes provide flexibility: they can be used to improve a capital position (they count toward total adjusted capital in the risk-based capital calculation), finance M&A activity, refinance existing surplus notes, or carry out general business activities. Like FHLB borrowing, surplus notes have been used more heavily in times of market stress—particularly by life insurers after the GFC (*Display 5*). Even higher rates in 2022 have so far failed to curb insurers' appetite for surplus notes.

### Revisiting Private-Market Allocations

The predictability of cash-flow needs in the stable landscape that prevailed for most of the past decade made insurance investors ready and able to provide liquidity. They collectively channeled a sizable amount of capital into private assets, given the attractive liquidity premiums over public equivalents.

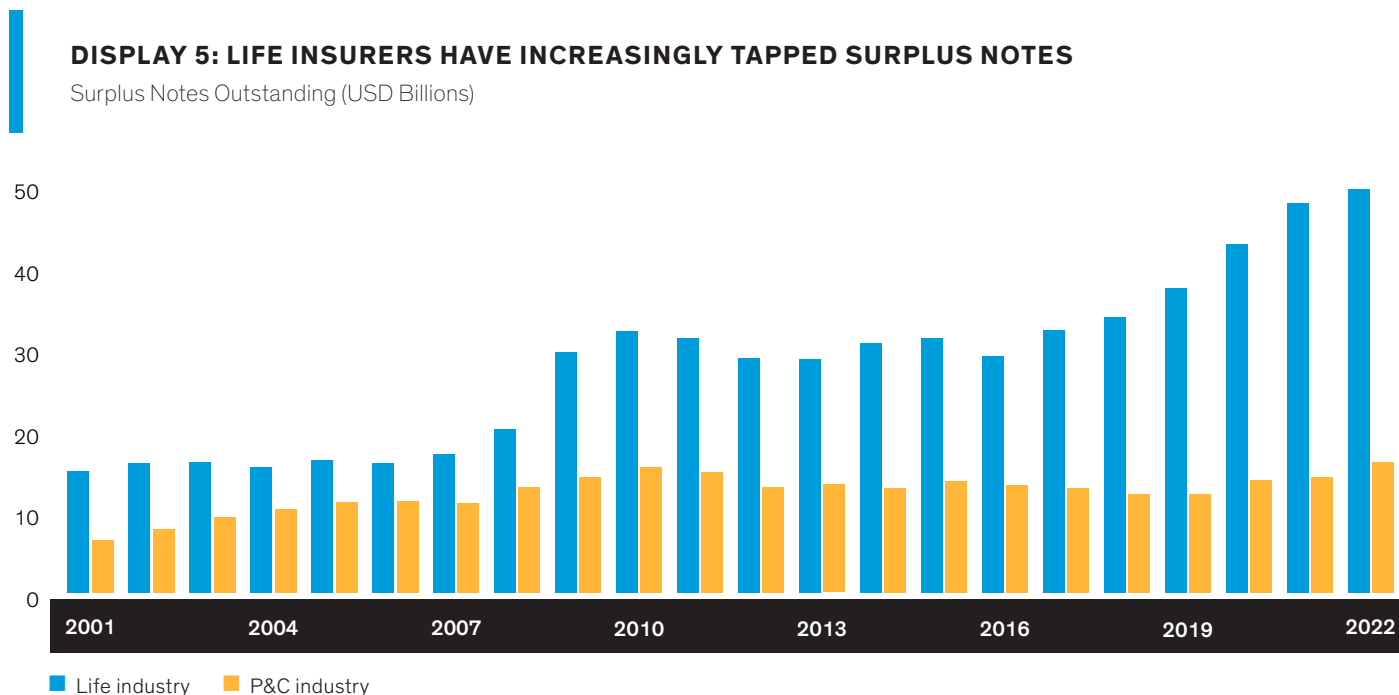
The surge in volatility and the correlation between sovereign bonds and stocks in 2022 left many life insurers needing more liquidity.

In addition to tapping supplementary resources, including those mentioned in the previous section, some insurers also reexamined the overall size of their private-market allocations, which had grown substantially over the years. We do think insurers' exposure to private markets will continue to grow over time, given their abilities to provide some insulation from the effect of inflation on returns, to diversify public-market exposures, to access the growing array of diversifying investments within private markets, and to channel capital into targeted opportunities that address environmental, social, and governance goals.

However, the starkly different market environment is likely to intensify the focus on private-market allocations to ensure that the return potential still fully compensates investors for the added risk. The specific private asset being assessed should also be scrutinized to ensure that it adequately diversifies risk and bolsters balance sheets. And each insurer should consider the impact of private exposures when stress-testing exposures to dimension potential liquidity needs.

## DISPLAY 5: LIFE INSURERS HAVE INCREASINGLY TAPPED SURPLUS NOTES

Surplus Notes Outstanding (USD Billions)



Past performance does not guarantee future results.

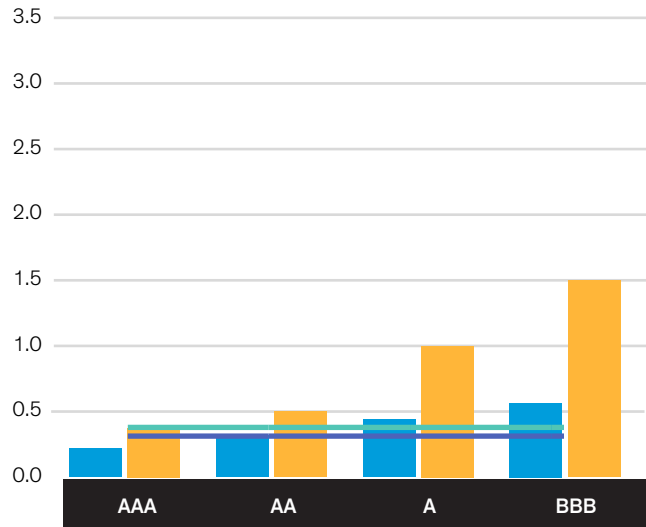
Through December 31, 2022 | Source: S&P Capital IQ



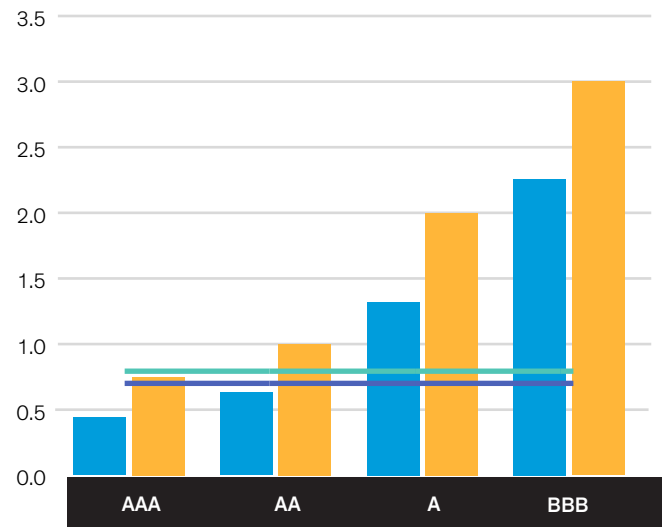
## DISPLAY 6: PUBLIC-MARKET LIQUIDITY ISN'T BINARY...AND CAN CHANGE

Bid-Ask Spread Comparison (in Dollar Price Points)

Before 2023 Banking-Sector Turmoil



After 2023 Banking-Sector Turmoil



■ CMBS ■ CLO ■ USD IG ■ EUR IG

Current estimates do not guarantee future results.

CMBS: commercial mortgage-backed securities; CLO: collateralized loan obligations; IG: investment grade

Left display as of February 28, 2023; right display as of March 30, 2023 | Source: AB

### Applying Multiple Lenses to Liquidity Evaluation Across Sectors

Liquidity also plays a key role in assessing opportunities across sectors. Liquidity isn't a binary condition with a bright line between public and private markets; it's a continuum. In public fixed-income markets, for example, liquidity profiles can vary across segments—and sometimes even within the same segment.

Insurers' growing allocations to private markets have likely been established over time, based on the principle that public markets can provide required liquidity. But because public-market liquidity profiles aren't uniform across assets, it's vital to carefully assess each individual investment, which we think is best accomplished by applying multiple lenses.

**The bid-ask spread lens:** Investors often assess liquidity through a point-in-time measure of the bid-ask spread: the cost an investor is willing to bear when buying and selling the same security simultaneously at a specific size. A tight bid-ask spread tends to indicate a security with more liquidity.

Bid-ask spreads can differ substantially by security type (*Display 6, left*). Treasuries and agency mortgage-backed securities tend to have the narrowest spreads—often measured in basis points or fractions of basis points. Lower-rated credit securities, such as high-yield bonds, tend to have wider bid-ask spreads, with dollar price points the typical measure. As the recent banking turmoil has illustrated, changing market environments can both alter and reduce liquidity profiles (*Display 6, right*).

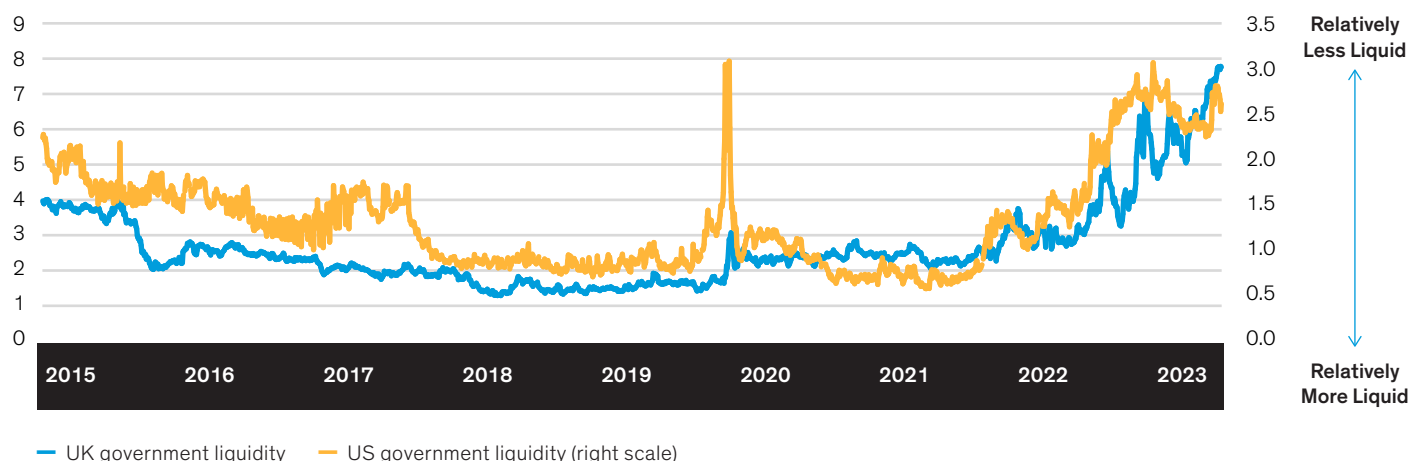
**The “moving target” lens:** US Treasury liquidity provides an informative—and notable—case study of the dynamic nature of liquidity profiles over time. Liquidity has improved since the end of 2022, but US Treasuries are still five times less liquid today than in 2017–2021, their most liquid period (*Display 7*).

**The trading volume lens:** Investors often point to secondary-market annual trading volumes as a liquidity indicator; expressing

that volume as a percentage of total market size enables straightforward comparisons of turnover rates across asset types. Based on this metric, high-yield bonds were the most liquid assets in 2022 (*Display 8*) with a turnover rate of 230%, followed by investment-grade corporates at 97% and leveraged loans at 45%. For most securitized assets, rates hover in the 20%–30% range.

## DISPLAY 7: GOVERNMENT BONDS ARE LESS LIQUID TODAY

US and UK Government Bond-Market Liquidity Condition Measures (Average Yield Error)



### Past performance does not guarantee future results.

The GVLQUSD and GVLQGBP indices are a measure of prevailing liquidity conditions in the US and UK government bond markets, respectively. These indices track the average yield error across the universes of US and UK government notes and bonds with remaining maturities of one year or greater, based off the intra-day Bloomberg relative-value curve fitter. When liquidity conditions are favorable, the average yield errors are small, as any dislocations from fair value are normalized within a short time frame. Under stressed liquidity conditions, dislocations from fair value implied by the curve fitter can remain persistent, resulting in large average yield errors. Composite Bloomberg Bond Trader is the pricing source for all notes and bonds used in these index calculations.

Through March 31, 2023 | **Source:** Bloomberg

## DISPLAY 8: FIXED-INCOME LIQUIDITY VARIES CONSIDERABLY ACROSS SEGMENTS

Security Type	Current Market Size (USD Bil.)	2022 Market Size Change	FY 2022 Trade Volume (USD Bil.)	2022 Turnover Rate	2021 Turnover Rate	2020 Turnover Rate	2019 Turnover Rate
US CLO debt	854	15%	181	21%	16%	27%	21%
Non-agency RMBS	392	-16%	92	23%	21%	36%	26%
ABS	708	0%	193	27%	29%	41%	34%
CMBS	600	-9%	140	23%	26%	36%	26%
Leveraged loans	1,421	6%	645	45%	58%	60%	63%
US investment-grade corporates	6,615	7%	6,398	97%	95%	99%	99%
US high yield	1,413	-10%	3,260	230%	216%	231%	278%

**Past performance does not guarantee future results.** | RMBS: residential mortgage-backed securities; ABS: asset-backed securities

As of December 31, 2022 | **Source:** Citi Research, SIFMA and AB

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Liquidity distinctions exist even within these segments (*Display 9*). In collateralized loan obligations (CLOs), for instance, subordinate issues such as BBB- (42% turnover rate) and BB-rated (55%) tend to trade more often than AAA-rated securities (17%). These bifurcations stem partly from different investor bases: insurers, banks and foreign financial institutions, which tend to be buy and hold, are large AAA buyers. BBB and BB securities, on the other hand, are typically held by money managers who trade more often.

## DISPLAY 9: LIQUIDITY VARIES WITHIN FIXED-INCOME SEGMENTS, TOO

US CLOs by Rating

Rating	Current Market Size (USD Bil.)	FY 2022 Trade Volume (USD Bil.)	2022 Turnover Rate
<b>US CLO Debt</b>	<b>854</b>	<b>181</b>	<b>21%</b>
US CLO AAA	583	100	17%
US CLO AA	114	23	20%
US CLO A	61	13	21%
US CLO BBB	56	23	42%
US CLO BB	40	22	55%

Past performance does not guarantee future results.

As of December 31, 2022 | Source: Citi Research, SIFMA and AB

### The Technology Dimension to Liquidity Management

For investors seeking to provide liquidity (by purchasing securities in a less liquid world) or source liquidity (identifying an asset to sell that will have the lowest impact on price), there's a technology dimension to tackling this challenge. As bond markets continue to evolve and become increasingly digital, operational efficiencies will become a key driver of alpha.

In the bond world, that translates into developing tools and technology to trade fixed-income securities more efficiently.

Liquidity pools, or markets that provide liquidity for credit-related fixed-income securities, have been highly fragmented across multiple market sources. Technology that rapidly presents a more complete market picture can quickly identify the best sources.

That was the objective behind AB's development of ALFA (Automated Liquidity and Filtering Analytics). ALFA is designed to consolidate data from many external sources, providing comprehensive bid, offer and trade data that enable traders to make better and more informed decisions on the price levels at which less liquid and illiquid securities should trade. The combination of advanced technology and a multi-sector approach, in our view, is critical in seeking the best liquidity today.

### Summary

The forces at work in reducing market liquidity move slowly, so the liquidity issue won't fade quickly. Insurers' unique liquidity needs can make adapting to this environment a particular challenge, one that regulators are keenly aware of.

Insurers have many avenues for tackling this challenge. It makes a lot of sense, for example, to consider the potential impact of extreme-stress scenarios in liquidity planning and to revisit approaches to sourcing liquidity at times when it's needed. Each insurer also needs to account for business-specific liquidity risks that can vary substantially.

Higher marginal liquidity needs and a less predictable liquidity environment call for insurance investors to revisit asset liquidity profiles—and the ability to access that liquidity. US insurers can also tap into supplemental liquidity sources such as FHLB borrowing and surplus notes, which have both been popular in recent years.

It's also prudent to revisit private-market allocations. We think these exposures will continue growing, but insurers should ask key questions about risk compensation, diversification, balance sheets and liquidity implications from stress testing. Assessing opportunities across sectors requires multiple lenses: bid-ask spread, moving target and trading volume. Technology can play a role, too, for asset managers equipped with the tools and systems to identify and access the best available liquidity.

With a thoughtful combination of these approaches, we think insurers will stand better equipped to navigate a liquidity-constrained environment that will likely be with us for a while.

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