NBFI RISKS

FRANCESCO MAZZAFERRO

Director General of Secretariat - European Systemic Risk Board (ESRB)

Tackling risks and vulnerabilities in Non-bank Financial Institutions and beyond

The need to address risks and vulnerabilities in Non-bank Financial Institutions (NBFIs) has moved up the international policy agenda in recent years.

There are several reasons for this: First, NBFIs have increased in size. For example, using a measure that comprises investment funds, insurance companies, pension funds and other financial intermediaries, the Financial Stability Board (FSB) estimates that the financial assets of NBFIs accounted for a little over 47% of the global financial system in 2022, compared to 42% in 2008. Second, several events in recent years, such as the collapse of the US family office Archegos in 2021 and the fire-sale of UK gilts by investment funds using liability-driven investment (LDI) strategies in September 2022, have put certain NBFIs into the spotlight.

Despite the prominence of NBFIs in the policy debate, I sometimes encounter several misperceptions when discussing the topic. I want to touch on three of these misconceptions in this article.

First, there sometimes seems to be misconception that the focus on NBFIs is new. Far from it. The 2009 Leader's Statement of the Pittsburgh Summit in the wake of the global financial crisis referred to the need: "To make sure our regulatory system for banks and other financial firms reins in the excesses that led to the crisis". And the European Systemic Risk Board (ESRB) has been in the vanguard when it comes to looking beyond the banking sector. For example, one of the first ESRB recommendations focussed in 2013 on the need to make money market funds more resilient. In 2016 this was followed by a paper on "Macroprudential policy beyond banking" that set out a policy strategy to address risks to financial stability wherever they arise in the financial systems.

In the same year, the ESRB published the first edition of what has become an annual monitoring report of certain NBFIs. With respect to specific types of NBFIs, the ESRB published report on "Macroprudential provisions, measures and instruments for insurance" in 2018 – a time when few were talking about 'insurance' and 'systemic risk' in the same sentence.

Second, there sometimes seems to be a misconception that authorities – especially those with a financial stability mandate like the FSB or the ESRB – do not appreciate the positive contribution NBFIs make to the economy. To the contrary: one lesson of the global financial crisis was that a more diversified set of funding sources for the economy is important when the banking system becomes impaired. This narrative of a 'spare tire' still holds true. This is also reflected in the continued efforts by the European Commission to promote a Capital Markets Union. But NBFI can also pose risk to financial stability as they can be a source of shocks or transmit shocks to the financial system. By searching for vulnerabilities and trying to address them, authorities want to ensure that NBFIs and the broader financial system is resilient and can make a sustainable contribution to the economy.

Third, there sometimes seems to be a misconception that authorities are not mindful of the great diversity across NBFIs and the differences with banks. This is not true. Authorities understand that the financial system is a complex ecosystem of entities with different business models and balance sheets that pursue a diverse set of activities. For example, the ESRB has a broad membership of around 80 institutions to reflect this diversity. In addition to central banks and banking supervisors, its membership comprises national insurance and market supervisors as well as the European Securities and Markets Authority (ESMA) and the European Insurance and Occupational Pensions Authority (EIOPA). But it is true that terminology such as 'the NBFI sector' can give a wrong impression.

A financial system that serves citizens requires that risks and vulnerabilities are addressed.

The variety of entities that fall under the term NBFIs is sometimes compared to the diverse types of animals one finds in a zoo. We do not visit zoos and talk about seeing the 'elephants' and the 'non-elephants'. But the diverse set of financial entities beyond the banking sector, are being defined as 'non-banks'. Moreover, the terms NBFIs and market-based finance are also sometimes conflated, even though banks play an important role in financial markets.

A financial system that serves citizens requires that risks and vulnerabilities are addressed. This is true regardless of whether these risks and vulnerabilities relate to banks, NBFIs, or the markets where they interact. Removing misconceptions and arriving at a shared understanding between authorities and market participants can lead to better policies to address such risks and vulnerabilities. This is why the dialogue between market participants and authorities in fora such as the meetings of Eurofi is important.

GERRY CROSS

Director Financial Regulation, Policy and Risk - Central Bank of Ireland

A macroprudential approach to investment funds

Since the Global Financial Crisis, we have seen the global Non-Bank Financial Intermediation (NBFI) sector grow from EUR 72 trillion in 2008 to approximately EUR 200 trillion in 2022[1]. Despite a decline in total assets between 2021 and 2022, it still represents just under half of all global financial assets and is largely driven by investment funds.

The funds sector is playing an increasingly important and complex role in the global financial system particularly in financial intermediation with strong linkages to other parts of the financial sector and the real economy.

This brings many benefits, and as set out in the objectives of the EU's Capital Markets Union, enhancing our capital markets broadens financing channels, reduces reliance on traditional banks to fund businesses, creates jobs and enables investors to access financial products that meet their savings and investment needs while also diversifying their portfolios.

At the same time, as the sector grows in size and engages in an increasingly diverse range of activities, so does its systemic importance. Like all forms of financial intermediation, investment funds can give rise to risks that in certain conditions can become systemically relevant. There is the potential for cohorts of investment funds to spread or amplify shocks to other parts of the financial system or the real economy, particularly at times of market stress.

We have seen this in relatively recent market events such as the 'dash for cash' at the beginning of the COVID pandemic and the disruption in the gilt market in September 2022 that highlighted the risks associated with high leverage in GBP Liability Drive Investment Funds.

International bodies such as the Financial Stability Board (FSB), the International Organisation of Securities Commissions (IOSCO), the European Systemic Risk Board (ESRB) and the European Securities and Markets Authority (ESMA) have all progressed work in recent years covering the role of investment funds and their relevance from a systemic risk perspective. National policy makers will need to consider how to implement their recommendations and the topics of liquidity and leverage will remain key areas of focus.

Ireland is a leading global funds jurisdiction and the Central Bank has played an important role in these discussions. We published Discussion Paper 11 – 'An approach to macroprudential policy for investment funds' last year setting out the rationale for and the importance of an internationally coordinated approach to macroprudential policy for investment funds.

The paper sets out a number of key considerations when assessing the potential systemic risk posed by investment funds including:

- Economic frictions arising from financial intermediation, such as incentive misalignments, asymmetric information, other externalities and coordination problems. These factors can mean that individually rational decisions by fund managers can lead to excessive risk-taking at an aggregate level across the financial system;

- Concentrated and over-lapping market positions can lead to spill over effects to other parts of the financial system and real economy. However, there have also been instances where a single entity has caused a systemic event.

- The materialisation of systemic risk from the investment funds sector typically follows a shock or trigger event and the interplay between two factors:

- Vulnerabilities at the fund cohort level including leverage and liquidity mismatch. Growth in open-ended funds has changed the dynamics of liquidity demand and supply in certain market segments and increasing the likelihood of systemic liquidity stresses. Combined with the use of leverage and the overall size of the sector, such shocks can lead to rapid deleveraging and asset sales with corresponding market impacts; and,

- Interconnectedness within the system that can transmit or amplify such shocks to other cohorts and the real economy, which can happen directly through counterparty channels or indirectly through asset valuations and collateral pledges.

A key challenge is in the area of data. High-quality and timely data is a key enabler for an effective macroprudential framework and supports the identification of potential risks including interconnectedness and forms the basis for developing policy interventions. Ideally, this would be based on internationally consistent definitions to facilitate comparable risk assessments and data sharing and lower administration costs to industry.

The funds sector is playing an increasingly important role in the global financial system.

This is the core purpose of the Central Bank's paper, to establish a foundation and set of key principles on which we can now move forward to develop an international approach to this important topic.

This will ensure that the funds sector is more resilient to stresses and less likely to amplify adverse shocks and is positioned to serve as a resilient source of financing that supports broader economic activity, innovation and growth.

ULF LEWRICK

Principal Economist - Bank for International Settlements (BIS)

Building Resilient NBFIs and mitigating systemic risk

The expansion of non-bank financial intermediation (NBFI) has marked recent decades, fuelled in particular by the dynamic growth of asset management. While discussions often centre on the United States, it is crucial to acknowledge its significant surge in the euro area and emerging markets. According to the latest Financial Stability Board (FSB) monitoring data, the share of non-bank financial intermediaries (NBFIs) in total financial assets has ascended from 20% in 2002 to 49% in 2022 in the euro area and from 16% to 27% in emerging markets. This growth not only diversifies funding sources but also serves as a vital complement to the services provided by traditional banks.

However, this upward trajectory of NBFI is not without its challenges. The term "NBFI" encapsulates diverse business models, subjecting market participants to varied risks. We observe a notable shift from relationship-based funding, typical of banks, towards transaction-based funding, altering investor response functions and enabling them to unwind positions in response to adverse market developments.

At the same time, we note a rise in liquidity demand from the asset management sector, driven by pro-cyclical factors such as the risk of large investor withdrawals, margin calls and deleveraging pressure. This trend occurs against the backdrop of a structural decline in liquidity supply in key asset markets, as traditional market-makers seek less balance sheet-intensive ways to provide liquidity.

These market developments highlight the trade-off associated with the growing NBFI footprint. While NBFI can act as a "spare tire" to cushion shocks, particularly those originating from the banking sector, it introduces greater pro-cyclicality in the supply of funding. Promoting stable market-based funding throughout the financial cycle based on a consistent policy framework is of the essence. In the end, "a flat spare tire is no spare tire."

Research at the Bank for International Settlements, among many others, underscores the challenges NBFIs face in liquidity risk management and the need to account for negative externalities. An example of systemic risk in NBFI is evident in open-ended bond funds, where on-demand convertibility of illiquid investments into cash creates a liquidity mismatch. Large investor redemptions can force rapid asset sales, triggering adverse feedback loops and systemic risks. Liquidity risk management tools, though individually rational, may not align with broader financial stability goals. Tools, such as swing pricing, may require more stringent calibration to improve their effectiveness during episodes of market stress. Implicit reliance on central banks to provide a liquidity backstop, may underpin overly optimistic assumptions about portfolio liquidity under stress scenarios.

NBFI policy aims to build resilience in good times to curb collective retrenchment in crises.

Risks created by NBFIs and its implications for financial stability are clearly at the forefront of the policy discussion. Adopting a systemic approach to mitigate risks from NBFIs is crucial for more effectively addressing their structural vulnerabilities, such as liquidity mismatches and hidden leverage, while establishing sufficient shock-absorbing capacity. Systemic risk assessment requires examining channels of contagion and spillovers, emphasising the fallacy of composition, where individually rational actions may collectively lead to a destabilising market response.

NBFI policy aims to build resilience in good times to curb collective retrenchment in crises. This requires a comprehensive and balanced approach to avoid migrating risks into opaque pockets of the financial system.

At the international level, the FSB and the International Organisation of Securities Commissions (IOSCO), supported by other international standard setting bodies, are actively addressing priority areas for NBFI such as enhancing the resilience of money market funds, improving market participants' preparedness for spikes in liquidity demand, and promoting the resilience of core funding markets.

In addition, recent revisions to the 2017 FSB Recommendations that address open-ended funds focus on providing clarity on redemption terms, promoting anti-dilution liquidity management tools, and encouraging their consistent use. The revised recommendations have been complemented by IOSCO's guidance on liquidity management tools to support effective implementation.

As work progresses at both national and international levels, the overarching goal is to strengthen the stability of market-based funding, acknowledging the intricate interplay of risk and policy guidance in the dynamic landscape of NBFI.

Disclaimer: The views in this article are those of the author and do not necessarily reflect the views of the Bank for International Settlements.

ROMAIN PASEROT

Deputy Secretary General - International Association of Insurance Supervisors (IAIS)

Insurance sector risks in a changing world

The IAIS' Global Monitoring Exercise (GME) provides a robust empirical basis to analyse insurance sector trends and risks, the highlights of which are published in our Global Insurance Market Report. By gathering data from nearly 60 global insurers and market-wide data from 45 supervisors, we build a detailed picture of insurance sector risks.

GME data shows:

- Capital adequacy remains sound but slightly declined at end-2022 (-3.1%), primarily due to financial market developments such as lower asset valuations and rising interest rates. Most supervisors expect a stable or slightly negative outlook for insurers' solvency positions.

- A decrease in the insurance liquidity ratio compared to year-end 2021 (-29.1%), while remaining well above 100%. On aggregate, insurers hold large amounts of highly liquid assets to be prepared for potential liquidity needs including in adverse circumstances.

One potential source of liquidity stress is increased or mass lapses of life insurance contracts, particularly in a context of rapidly rising interest rates. GME data shows that total surrender values add up to 30% of assets, excluding separate accounts. Half of these surrender values relate to contracts without any economic penalty, and are contractually redeemable within one week. There may however also be additional disincentives for policyholders to surrender, such as regulatory and tax implications. Additionally, the type of distribution channel and shareholder disengagement are believed to impact surrenders.

Credit risk is another area of attention. Data shows that the vast majority of participating insurers' fixed income investments are of high credit quality. Unrated assets and assets below investment grade increased at year-end 2022 compared with year-end 2021. At year-end 2022, 12.8% of total investments were unrated investments, while 3% were below investment grade. One area of increased attention going forward is real estate exposures – notably for commercial real estate. On aggregate insurers' exposures to real estate and securitisations are not material, however a real estate downturn may have a noticeable financial impact for those insurers with significant relative exposures.

The GME also dived considered a growing trend towards alternative investments and increased use of asset-intensive reinsurance which will mean a change to the liquidity profile of insurer balance sheets.

The GME provides a robust empirical basis to annually analyse insurance sector trends.

Firstly, the shift to alternative investments is material for some life insurers. This trend emerged in the low yield environment, particularly for long-term life insurance business, to capture additional yield against reduced liquidity. Although difficult to quantify with GME data, there is a slight upward trend in the allocation of capital to alternative assets in the dataset as proxied by level 3 assets[1]. Alternative investments, such as private placements and structured products, are associated with higher liquidity risk and complexity in terms of risk assessment and valuation compared to traditional investments. These assets may thus diminish insurers' ability to meet unexpected cash demands and may also exhibit an enhanced sensitivity to downturns in the credit cycle. The long-term nature of certain alternative assets however offers a good duration match for insurers with long-term liabilities, such as annuity liability portfolios. IAIS members have stressed the need to ensure investment portfolio characteristics are sensitive to the liquidity profile of insurer liabilities. This places a focus on effective valuation techniques, rigorous credit analysis and robust liquidity management.

We have also observed a growing use of cross-border asset-intensive reinsurance, in which material investment risks, notably for long-tailed life insurance liabilities, are transferred to reinsurers. Asset-intensive reinsurance is utilised as a risk and capital management tool in the life sector, with varying degrees of adoption across different jurisdictions. The motivation for cross-border asset-intensive reinsurance transactions ranges from risk management (eg risk-sharing and consolidating blocks of business) and financial management (eg raising capital) to potentially leveraging regulatory differences across jurisdictions (eg valuation, reserving and capital requirements). Consequently, each transaction must be assessed on its individual merits. Supervisors are focused on ensuring a clear understanding of who retains the asset ownership (cedant or reinsurer), who manages the assets and which jurisdiction has supervisory authority over these assets, to allow efficient supervisory cooperation.

The global insurance sector has demonstrated its resilience across a series of major shocks, from the pandemic to the rapid change in the macro-economic environment. Perspectives however are still challenging, hence supervisory coordination through the IAIS work is all the more important to contribute to global financial stability.

1. *Illiquid, difficult-to-value assets held at fair value.*

LÁSZLÓ VASTAG

Executive Director Prudential and Consumer Protection Supervision of Money Market Institutions - The Central Bank of Hungary

Increasing supervisory vigilance and cooperation is needed

The phenomena of Non-Bank Financial Intermediation (NBFI) have been always a challenge for supervisory authorities. The current macroeconomic context of high interest rates and relatively weak growth has added further risks to financial stability through the activity of NBFI's. In Hungary – and most probably in other countries as well –, there are basically two types of connected risks which can be mentioned in this regard. Banks finance the lending and leasing transactions of their own subsidiaries, but also of other financial institutions, therefore due to their potential poor risk management, repayment of refinancing loans may become questionable.

Furthermore, various investment funds can siphon liquidity away from banks with promises of high returns, and later with possible problems they can shake confidence in the financial intermediary system. Although banks themselves may invest in such funds, which investments may become unprofitable at later stage, nevertheless, in the current macroeconomic situation, where liquidity is abundant, it probably does not appear much as an actual risk. Apart from these, other risks can also be mentioned, for instance the interconnectedness and the risk of contagion across sectors and within the non-bank financial sector, including domestic and cross-border linkages, from that point of view strong cooperation between supervisory authorities is much needed.

Risks to the stability of the NBFIs further increased due to rising geopolitical risks, elevated inflation and consequently the tightening of financial conditions. A broad-based economic slowdown and tightening financial conditions could increase credit risk. Some non-banks remain heavily exposed to interest rate-sensitive sectors, such as highly indebted corporates and real estate.

Market liquidity risk could put further pressure on NBFIs engaged in liquidity transformation, as it has been observed earlier in the deterioration of liquidity conditions in EU bond markets. Excessive use of leverage could amplify liquidity and market risks, as well as lead to contagion and magnify shocks to financial stability. Countries that more heavily rely on bank-based finance, such as Hungary, exhibit much lower systemic risk related to non-banks. A systemic feature of the Hungarian financial sector is the predominance of banking intermediation and the moderate interconnectedness between the banking and non-banking financial sub-sectors.

We shall ensure that banks' concentration risk stemming from shadow banking exposures is kept at bay.

NBFI's activity is even riskier if it connects to shadow banking, which can actually threaten the stability of the financial sector as a whole. Based on a relevant European Banking Authority Guideline (EBA/GL/2015/20), CBH also implemented its Guideline (2016/11) which concerns the shadow banking exposures, with regard the limitation of exposures to organizations that carry out shadow banking activities and conduct their banking activities outside the regulated framework. One of the key purposes of the CBH is to establish the methods that institutions required to use as part of their internal processes and regulations when examining and managing concentration risk arising from exposures to shadow banking institutions. The recommendation also defines the aspects that apply to the determination of aggregate limits for exposures to institutions engaged in shadow banking activities, as well as individual limits to such institutions.

In addition, the EBA was tasked with developing a Regulatory Technical Standard that defines the conditions for classification in the shadow banking category, which was an important step regarding the CRR (Capital Requirements Regulation) requirement for credit institutions to provide information on their exposure to the 10 largest shadow banking organizations.

The NBFI category also includes non-bank financial enterprises (NBFEs). Most of these financial enterprises are licensed to lend in Hungary, but they operate outside the banking system. Given that NBFEs are not allowed to engage in deposit collection activities, the key risk from a financial stability perspective is the possibility of non-repayment of funds by credit institutions, though the volume of loans managed by them is quite small compared to banks. This is managed by CBH on two levels: through its mandate for constant supervision of their business operations; and as part of the supervision of domestic credit institutions, CBH also monitors financial enterprises as customers.

NBFEs operate with relatively high leverage, since the external fundings are mostly coming from credit institutions (both domestic and foreign), and the share of external financing from owners and related companies is also increasing. In the current macroeconomic environment, external funding can only be obtained at high interest rates, this may lead to a reduction of available resources which is considered to be a long-term operational risk for them.

ANA ARSOV
Global Co-Head of Financial Institutions and Global Head of Private Credit - Moody's Investors Service

Private credit will benefit from greater transparency amid rapid growth

The private credit market, estimated at $1.7 trillion, is part of the non-bank financial intermediation (NBFI) market and has evolved significantly since the global financial crisis – driven by rapid growth among the largest alternative asset managers. These asset managers are building out new business platforms through acquisitions and through strategic partnerships with traditional financial market players, most notably life insurance companies.

This trend is supporting growth in direct corporate lending and new investments in asset-backed finance. By investing in insurance companies, alternative asset managers can increase their investable capital and gain stable, recurring fees generated from access to a sizable pool of perpetual assets under management.

For their part, insurers gain incremental returns by moving into higher-yielding private investments that, while largely structured as investment grade assets, include more speculative investments. However, the increased yield also brings higher credit and liquidity risk for insurers – as well as greater regulatory and political scrutiny.

Public markets vs private credit for larger deals

Private credit lenders, including large and rapidly growing business development companies (BDCs) – which make up about 20% of private credit assets under management – are increasingly vying to lend for larger leveraged buyouts (LBOs), in addition to their traditional clientele of middle-market companies.

As LBO activity revives following the recent sharp contraction, competition will accelerate between these direct lenders and the broadly syndicated leveraged loan (BSL) structures. Public and private lenders will compete to offer more favorable pricing and terms, eroding credit quality and attractive returns. We forecast that the US speculative grade default rate will be around 4.1% a year from now – below the long-term average, but still elevated relative to past cycles – as markets continue to manage leveraged capital structures in an elevated rate environment. In an uncertain credit environment, smaller and more highly leveraged companies, especially those with credit ratings at B3 and below, face new and formidable challenges.

This segment makes up a growing share of the private credit universe, and more broadly the US economy. And unlike BSL lenders, private credit functions outside the purview of prudential regulators.

Fewer protections amid increased defaults

Direct lenders are encountering an escalating array of risks as they navigate a challenging financial landscape with worsening credit metrics because of elevated interest rates, higher inflation, slower economic growth and lower valuation multiples. These factors are combining to undermine the credit metrics of borrowers within credit portfolios.

While BDCs and direct lending portfolios appear to be weathering tighter financial conditions for now, increasing levels of stress are starting to show in certain lending segments. This could potentially lead to markdowns on the carrying value of portfolios.

Amid more defaults, credit investors may face fewer protections than before – at least for the largest deals. Private credit has long offered lenders superior covenants but key protections such as term loan maintenance covenants have been falling away from bigger private credit deals. While this is a new phenomenon for private credit, it's consistent with long-established trends in the syndicated loans market.

Potential systemic implications

The rapid growth of private equity has pushed more economic activity into the hands of fast growing asset managers, with strategies that increase leverage for mostly middle market businesses. As asset managers continue to grow their private credit portfolios, their investment, risk management and funding decisions could reverberate more strongly throughout the financial system and the broader economy.

However, asset managers typically are subject to lighter prudential regulatory oversight than the banking sector, and there is a lack of transparency about the growing importance of the financing they provide to the real economy. As a result, it may be difficult to see where bubbles of risk are forming.

Higher yields heighten credit and liquidity risks for insurers, prompting more regulatory scrutiny.

Although liquidity risks are modest, considering the absence of overnight liquidity demands for these funds relative to the liquidity difficulties of risky structures formed in previous cycles, banks are still the largest lenders to private credit funds, and therefore the linkage with the banking system should not be ignored.

JOHN GOLDEN

Executive Vice President, Global Head of Insurance Regulation - Athene

Liquidity risk in an evolving financial system

The financial sector has been in a period of transition following the Global Financial Crisis ("GFC") and corresponding broad policy responses. Adjustments have been underway across banking, insurance, asset management and other sub-sectors. At the same time, the global economy is faced with unprecedented challenges, technological change and climate risk, to name but a few. The need for financing to address such transformative trends is obvious. It is the financial sector's task and opportunity to satisfy this demand – through banks and equally insurers, asset managers and others. It is this diversity of financial players which contributes to a powerful and resilient financial sector, along with prudent risk-management and regulation tailored to the challenge.

In the context of these transitions, liquidity risk remains a key focus - every part of the financial sector has to consider liquidity in some fashion. Policymakers and supervisors have the difficult job of determining how to measure and oversee liquidity risks across many sub-sectors undergoing significant change, while markets are often observing reduced liquidity. Thus, policy dialogue regarding liquidity should begin with careful consideration of the structural characteristics of the diverse products and investments in the sector with a view toward effective and tailored policy recommendations.

Case studies in structural mismatches

Three recent situations across sectors illustrate the difficulties of mitigating structural liquidity risk:

1. Silicon Valley Bank (SVB). Much has been written about the significant rate rise, technological change and other factors that contributed to the failure of SVB; while all of those had their part, the core problem was the age old difficulty associated with paring long duration assets with liquid liabilities.

2. Eurovita. Eurovita represents a similar example within insurance. Eurovita's failure raised concerns that other customers surrender, creating potential for a "mass lapse" (insurance words for a bank-like 'run'). In response, and rightfully so, supervisors were prompted to review prudential measures for certain liability types and other risk indicators for future sectoral stress.

3. LDI and U.K. Pensions. In late 2022, several UK pension funds deploying "liability-driven investments", designed to address funding gaps, were subject to substantial collateral calls after a GILT spike and devaluation. The Bank of England intervened to support GILTs to avoid a deeper crisis.

Other significant structural risk exists in open-end funds - another well-known focus. Funds have $10s, sometimes $100s, of billions in longer duration assets associated with investor daily liquidity. Even the best risk overlays may be outmatched when faced with a structural liquidity mismatch such as this. Policymakers are understandably reviewing regulatory measures, including enhancements to risk management, swing pricing and fund reporting.

Addressing structural liquidity risk

Customer liquidity features are the leading indicator to any understanding of liquidity risk. When features are constructed with asset liquidity in mind, outside of demand deposits, run risk should be very low. Insurance is a good example. It is generally accepted that insurers present a structurally appropriate model to undertake longer duration credit risk, provided asset and liability liquidity features are closely matched. At Athene, products are tailored to target assets to the extent possible. For example, roughly 84% of liabilities have current surrender protections, with assets and liabilities each having a roughly 8-year average duration. Cash flow requirements, ALM and stress frameworks are included on top of basic product design, with stress testing assumptions providing that illiquid assets are unavailable for short term liquidity needs.

This concept of tailoring assets and liabilities, with effective risk overlays, is not new and is available to many financial businesses, although some have more freedom to achieve it than others. Firms must consider that the greater the structural gap between assets and liabilities, the greater the measures that may be required from risk managers and supervisors.

Nearly all financial products have some liquidity element that needs to be designed and governed. However, product design and ALM are not the end of the story. The "currency" (investments) for funding liquidity demands is also subject to a range of factors impacting liquidity risk. Certain asset types may no longer be as liquid (reliable) for stress situations as they once were. As seen in the U.K. LDI situation, market illiquidity does not need to be triggered by "alternatives assets", but can occur with assets that are considered the safest and most liquid. Another example exists in the U.S. where primary dealer inventory of corporate bonds has plummeted to a small fraction compared to pre-GFC levels, resulting in greater illiquidity during times of stress, even as the corporate bond market has seen steady expansion.

So what does it all mean? It simply means that assessing liquidity will remain a key focus across the sector. Policymakers and risk-managers are well founded to monitor evolving liquidity risks when assessing product design and risk mitigation, and should recognize liquidity dynamics agnostic to their location within the system. Over time, this will allow any policy measures to be appropriately and narrowly tailored, supporting a resilient and diverse financial system in the face of evolving market liquidity.