

Systemic Risk

# Global Nonbank Financial Institutions Press Ahead

Feb. 18, 2025



# Table of Contents

This report leverages Financial Stability Board (FSB) data (for the year ended Dec. 31, 2023, covering 29 jurisdictions that account for 88% of global GDP) as part of its monitoring of the nonbank financial intermediation (NBFIs) sector. We focus on the subset of NBFIs that are involved in a form of credit intermediation, corresponding to the FSB's defined "narrow measure."

Key Takeaways	3
Market Growth	4
NBFIs	8
Private Credit Growth	11
Bank-Like Risks	13
Mexican Nonbanks	16
Interconnectedness	17
Financial Stability Risks	21
Regulatory Response	23
Related Research	25
Analytical Contacts	26

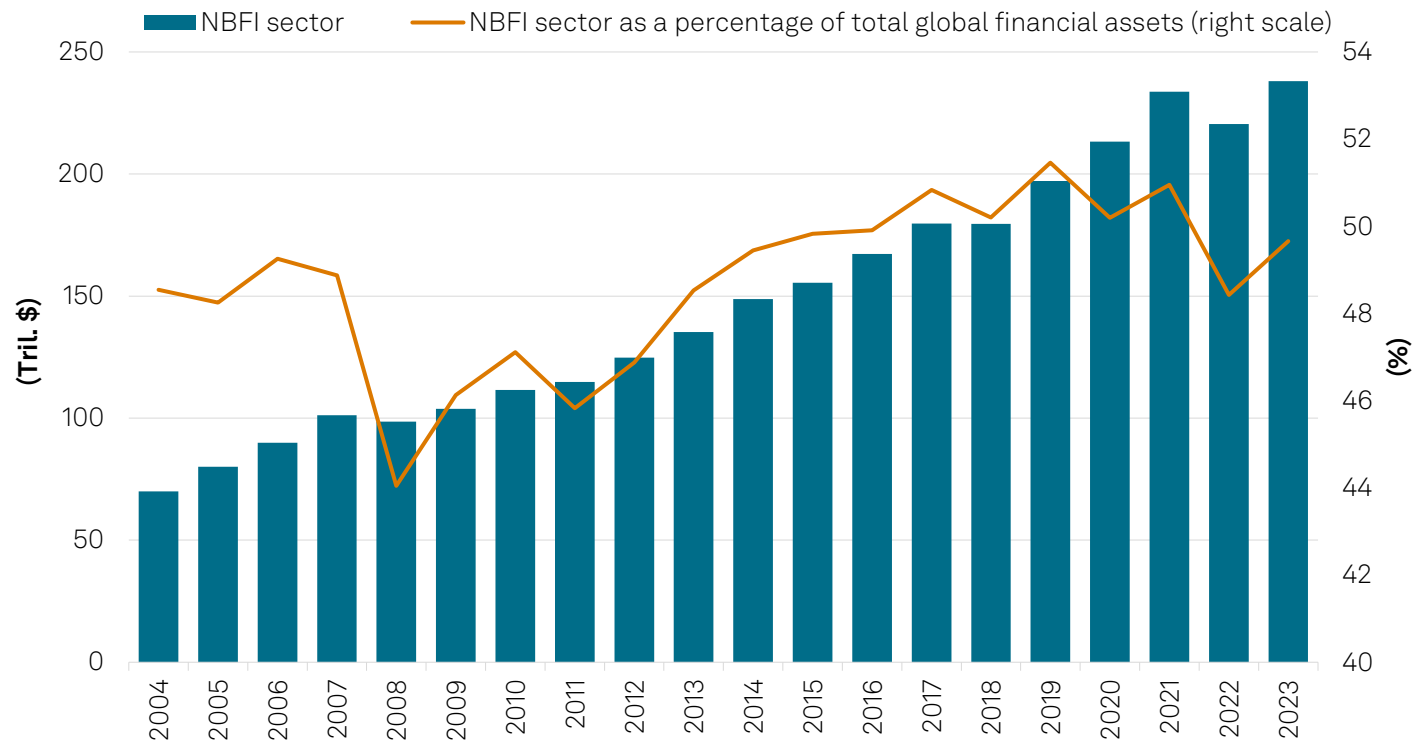
# Key Takeaways

- As the global financial system continues rebalancing, nonbank actors are expanding faster than banks in almost all jurisdictions. More financial diversification can be positive for savers and borrowers, but this can also increase risks to financial stability and create challenges for regulatory authorities.
- NBFIs' resilience will be tested as downside risks to global macro-financial conditions rise. While nonbank credit providers' overall leverage is not high, those with higher leverage alongside asset and liability or maturity mismatches pose higher risks as a source of contagion and direct exposure.
- Direct and indirect linkages between banks and nonbanks are a key concern for financial stability. Although banks' direct NBFIs exposures may appear low, the risk of contagion persists. We expect regulatory scrutiny to increase, while bank supervisors will continue to push for enhancements to banks' counterparty credit risk frameworks.
- NBFIs typically do not have access to central banks' lending facilities. Even though central banks could still intervene to address any market fallout from a potential nonbank failure, it is unlikely that they would directly provide liquidity to the affected nonbank credit provider.

# The Market Share Of NBFIs Increased Again In 2023

The amount of global financial assets held outside the banking system has increased markedly in the past decade

## NBFIs have grown rapidly in the past decade

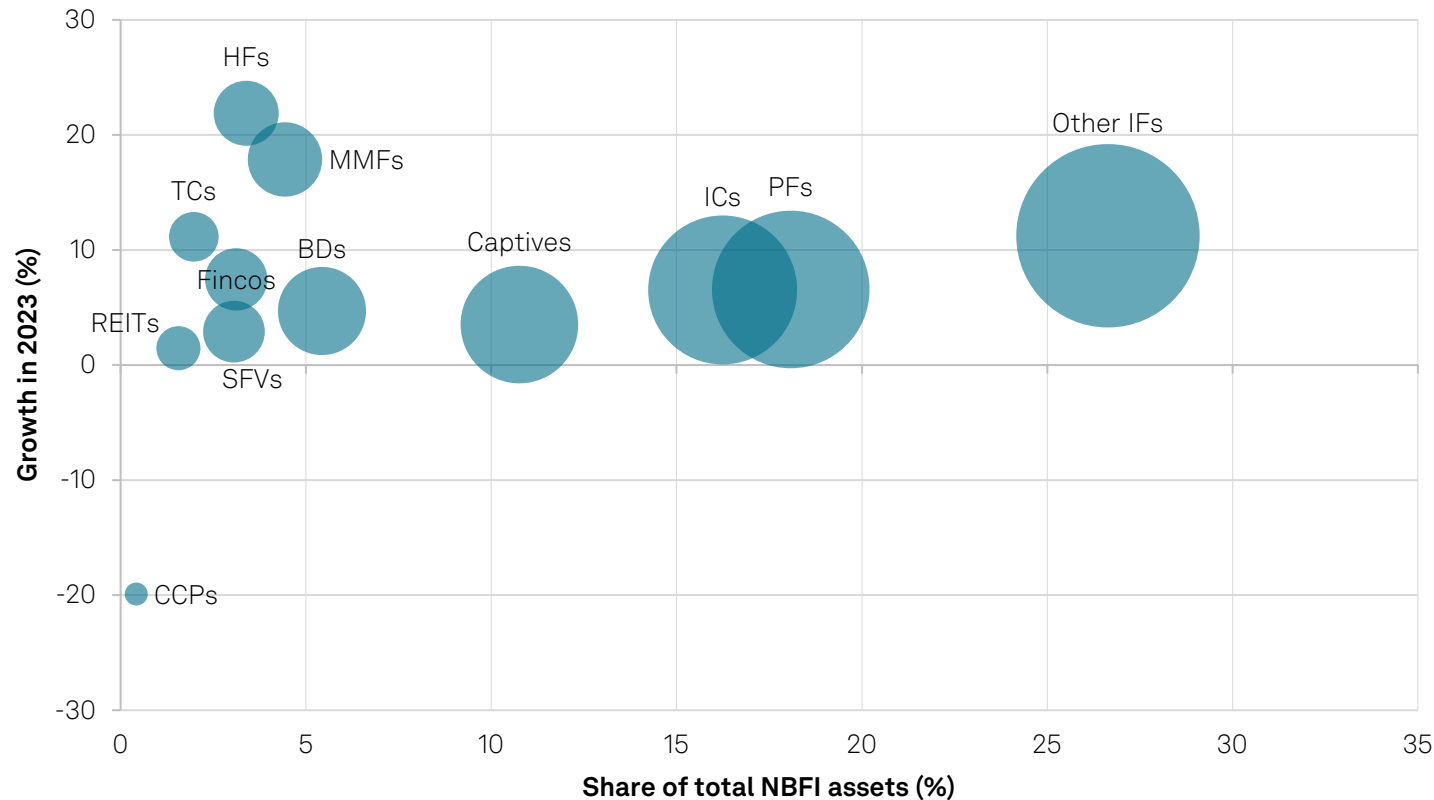


Sources: FSB, S&P Global Ratings.

- The size of the NBFIs sector increased by 8.5% in 2023, after a decrease by 5.5% in 2022. According to the FSB, NBFIs accounted for 49.1% of total global financial assets in major economies. These economies represent about 80% of global GDP in aggregate.
- The increase in 2023 mainly resulted from a rebound in equity and debt securities prices after the decline in 2022, as well as investor inflows.
- Lower market valuation impaired the size of NBFIs assets in 2022. NBFIs tend to account for such equity and debt securities at fair value, whereas banks' assets mainly comprise loans held at amortized cost.
- For 2024, we estimate NBFIs have likely benefited from the rebound in market values and their increasingly important role in the global financial system.

# The NBFBI Sector Includes Several Subsectors

Relative size and growth rates of NBFBI subsectors in 2023



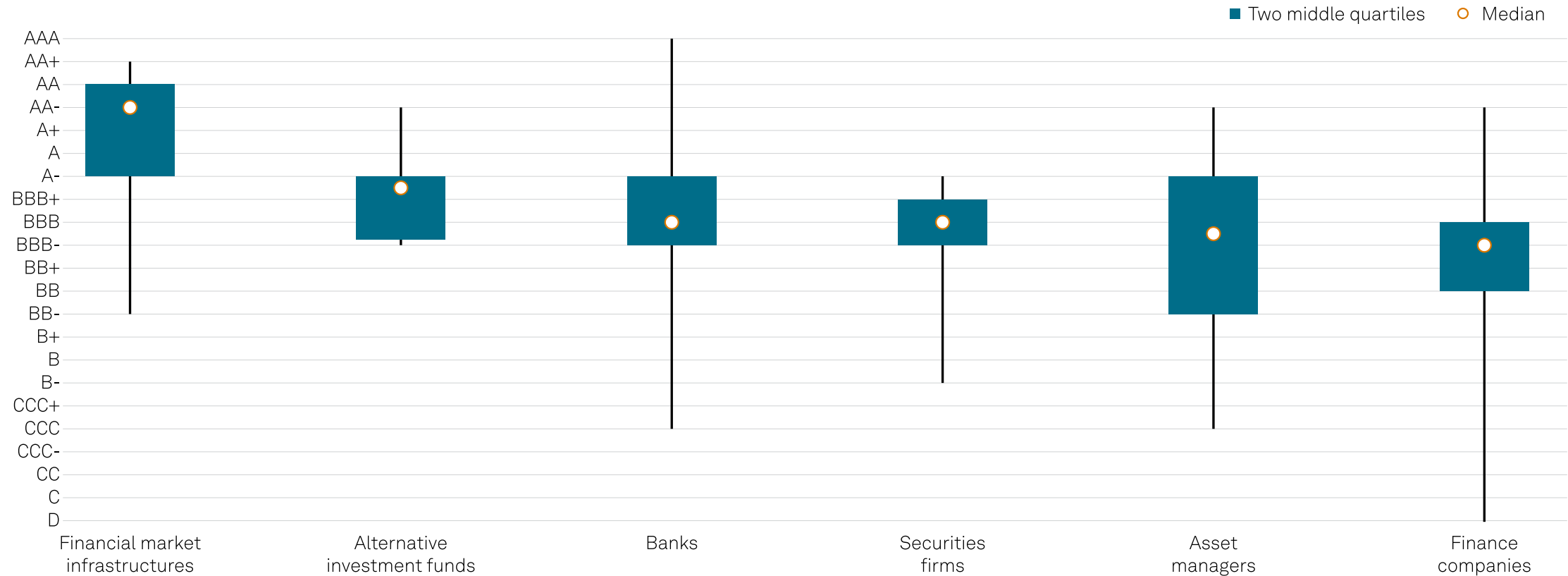
Bubble size represents the size of the entity relative to the total NBFBI sector. BD--Broker-dealer. CCP--Central clearing counterparty. HF--Hedge fund. IC--Insurance corporation. MMF--Money market fund. Other IF--Other investment fund (funds excluding MMFs, REITs, and hedge funds). PF-- Pension fund. REIT--Real estate investment trust. SFV--Structured finance vehicle. TC--Trust company. Sources: FSB, S&P Global Ratings.

- All NBFBI subsectors expanded in 2023 and the composition of the NBFBI sector remained stable overall.
- Despite higher rates, NBFIs--including finance companies, broker-dealers, and money market funds (MMFs)--recorded higher lending growth than banks in 2023.
- MMF assets mainly increased due to higher inflows, which resulted from higher yields, relative to bank deposits, particularly in the U.S.
- Broker-dealers benefited from increasing intermediation activity among higher rates.

# Ratings On NBFIs Vary

Banks' credit profiles are usually more homogenous and stronger than those of NBFIs

## Ratings distribution of the selected financial sectors



Source: S&P Global Ratings.

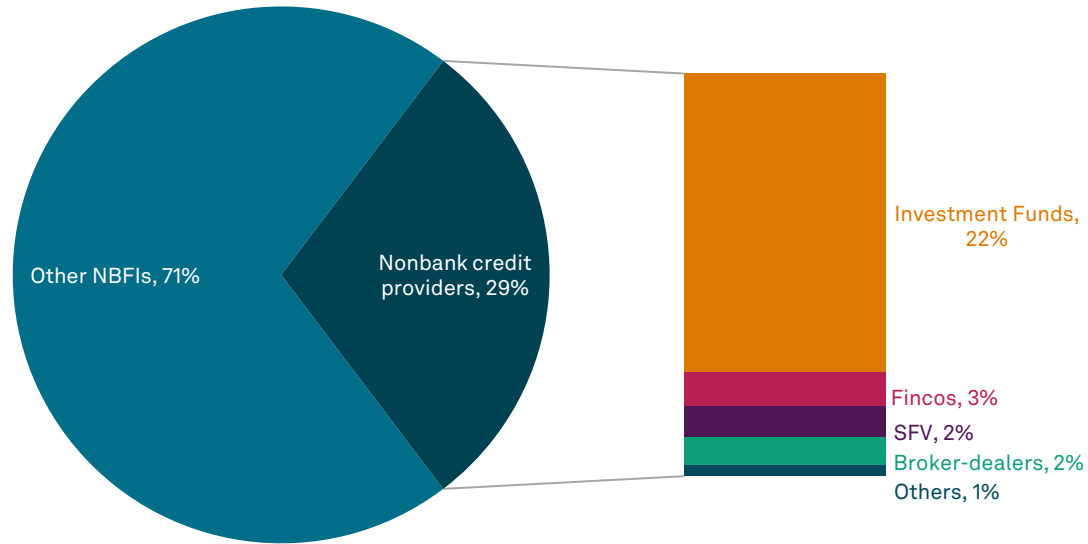
# Outlooks For NBFI Subsectors In 2025

- **Securities firms:** Favorable market and interest rate conditions supported underwriting activity, trade volumes, retail investor participation, growth in asset-based fee revenues, and, thus, profitability for most rated firms. While we see support for these continued tailwinds, we also note that political, economic, and geopolitical uncertainty could increase market volatility, lead to a correction, or otherwise cause headwinds for the sector in 2025. Even so, we expect ratings will remain largely stable due to most firms' solid capital and liquidity.
- **Alternative investment funds:** Slow exits for private equity funds will continue to increase debt across the fund structure this year. In 2025, we expect general partners will ramp up their debt issuance to support continuation funds; enable the establishment of fresh vintages; and support portfolio companies. Geopolitical uncertainty could affect the private credit market as stubbornly high international interest rates put pressure on marginal borrowers in 2025. Deteriorating asset quality will test private credit funds' asset valuations and liquidity as borrowers seek relief from their interest burdens or broader restructurings of their capital structures.
- **Asset managers:** The outlook for traditional asset managers has improved as market appreciation over 2023-2024 boosted assets under management (AUM) and provided some protection against credit metric downsides. Alternative asset managers are best positioned to weather potential headwinds due to locked-up AUM and growing demand. Yet risks remain as complexity increases.
- **Financial companies (fincos):** Among the key concerns for the sector are higher U.S. tariffs, which could reignite inflation and slow--or reverse--the descent in policy interest rates. These could impair NBFIs' business models and credit growth expectations, increase their operating expenses, and add pressure to the sector over the next 12 months. We expect pressures on asset quality will remain manageable for fincos, unless they focus on commercial real estate (CRE) and small and midsize enterprise (SME) loans.

# Nonbank Credit Providers Are A Critical Subset of NBFIs

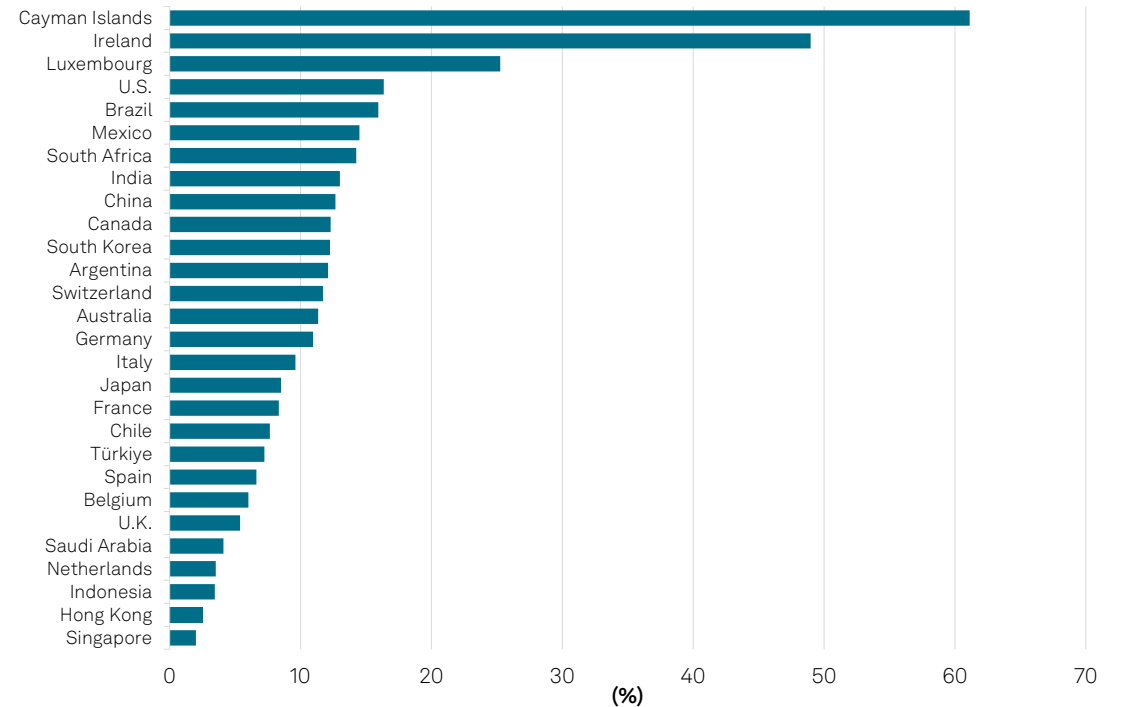
With \$70.2 trillion in assets globally, nonbank credit providers are a meaningful alternative funding source in several jurisdictions

Nonbank credit providers represent about 29% of total NBFIs assets, mainly in the form of fixed-income investment funds



Investment funds include money market funds, fixed income funds, mixed funds, credit hedge funds, and real estate funds. Fincos include finance companies, leasing/factoring companies, and consumer credit companies. SFV--Structured finance vehicles. Sources: FSB, S&P Global Ratings.

Nonbank credit providers account for about 10% of total financial assets, with significant differences across geographies



Sources: FSB, S&P Global Ratings.

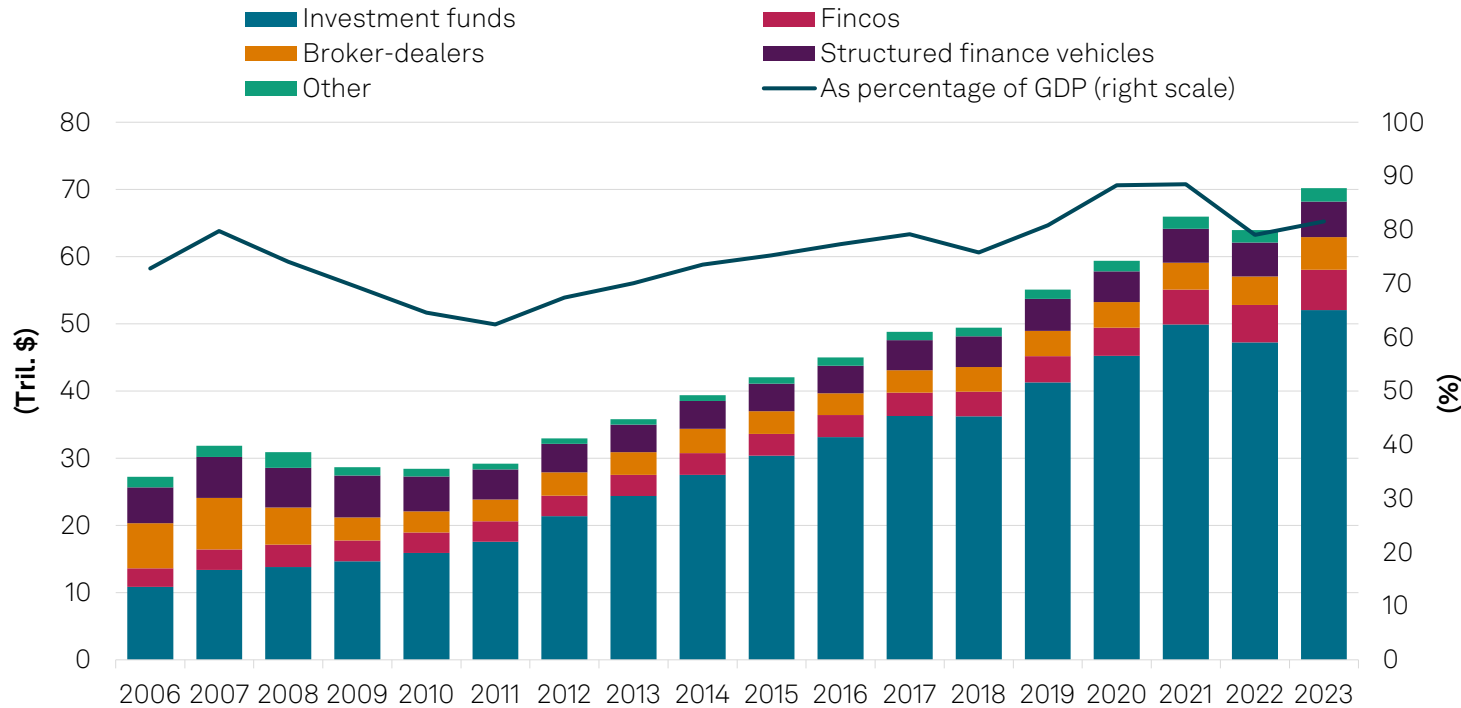


# Nonbank Credit Providers Are Rebounding After A Slight Decline In 2022

Collective investment funds and broker-dealers are largely driving the growth, fueled by improved market valuations and net inflows

## Investment funds represent the bulk of nonbank credit providers' assets

Size of assets by type

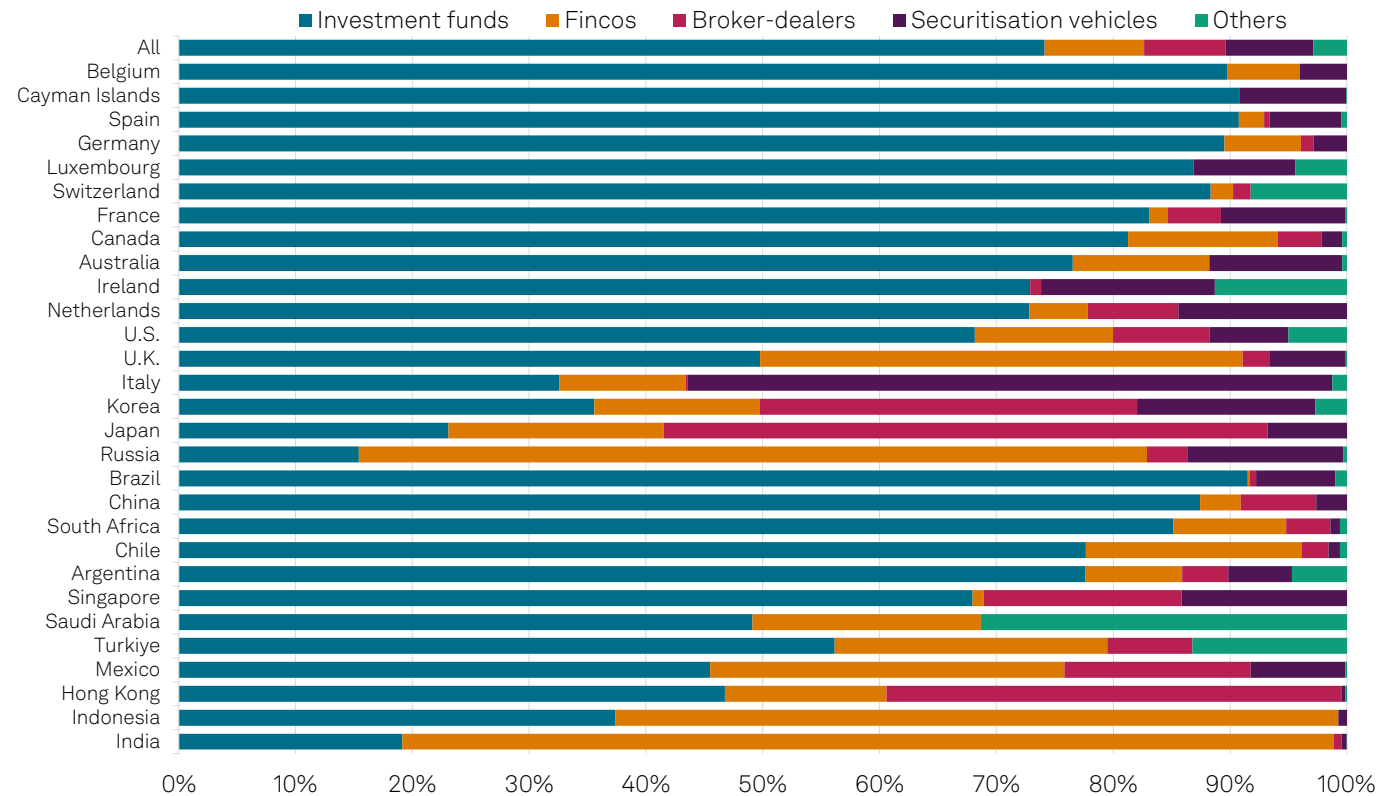


Sources: FSB, S&P Global Ratings.

- Nonbank credit providers' assets increased by 9.8% in 2023.
- Collective investment funds represented 74.1% of these assets in 2023, compared with 74.3% in 2022. Collective investment funds' assets increased by 10.1% in 2023, mainly from inflows to MMFs in the U.S.
- Broker-dealers represented 7.0% of NBFI assets in 2023. Growth in 2023 was largely driven by broker-dealers in Japan, who account for most nonbank credit intermediation activities in the country.

# Nonbank Credit Providers' Relative Importance And Composition Differ Across Jurisdictions

Investment funds tend to dominate nonbank credit providers, especially in advanced economies



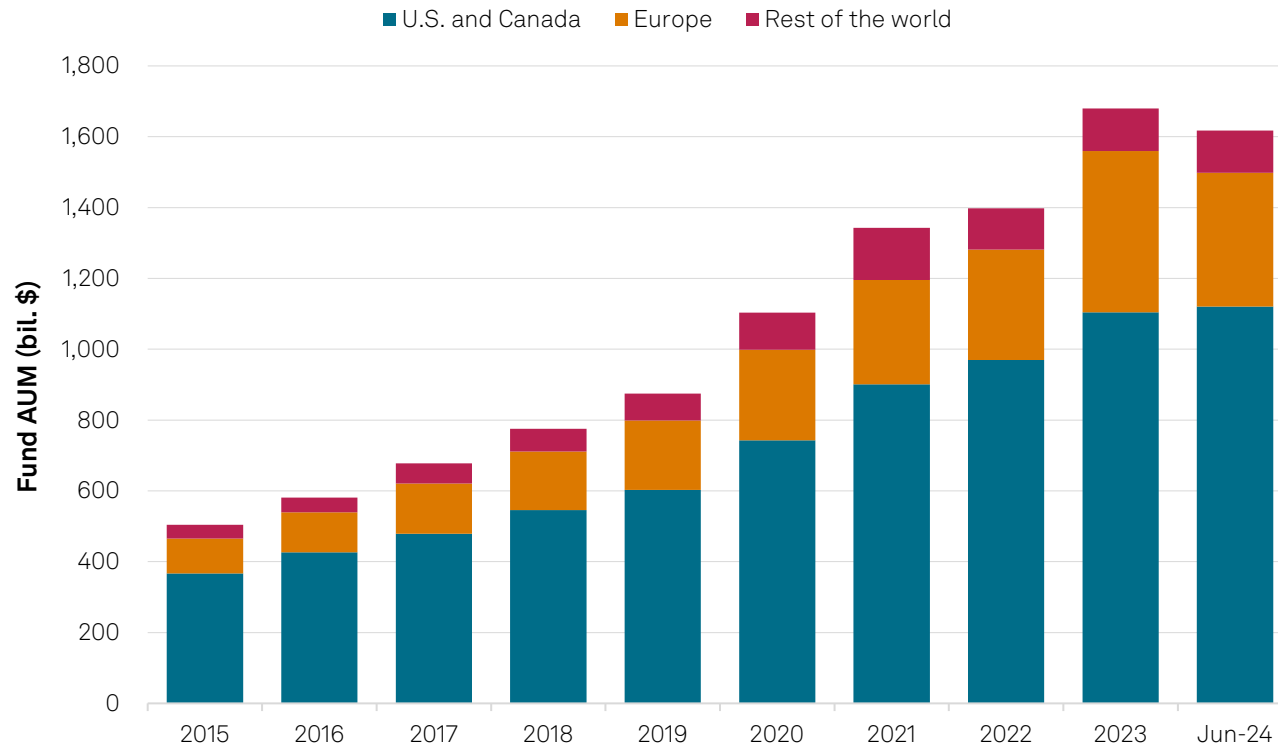
Sources: FSB, S&P Global Ratings.

- NBFIs account for a significant share of financial assets in some relatively small open economies, such as the Cayman Islands, Luxembourg, and Ireland.
- Most of these NBFIs have investment funds in these countries because of tax and other regulatory reasons.
- In Asia-Pacific and Latin America, we see a more mixed picture. Nonbanks are relatively important funding sources in Brazil, Mexico, China, India, and South Korea.
- In these countries, investment funds are less prevalent, while fincos or broker-dealers play a more significant role.

# Private Credit Growth

Fast growth increases funding diversification but also regulatory scrutiny

## Private credit growth remains concentrated in the U.S.



AUM includes dry powder and unrealized value. Region based on the domicile of the fund.  
Rest of the world: Middle East, Africa, Asia Pacific, and Latin America. Sources: Preqin, S&P Global Market Intelligence.

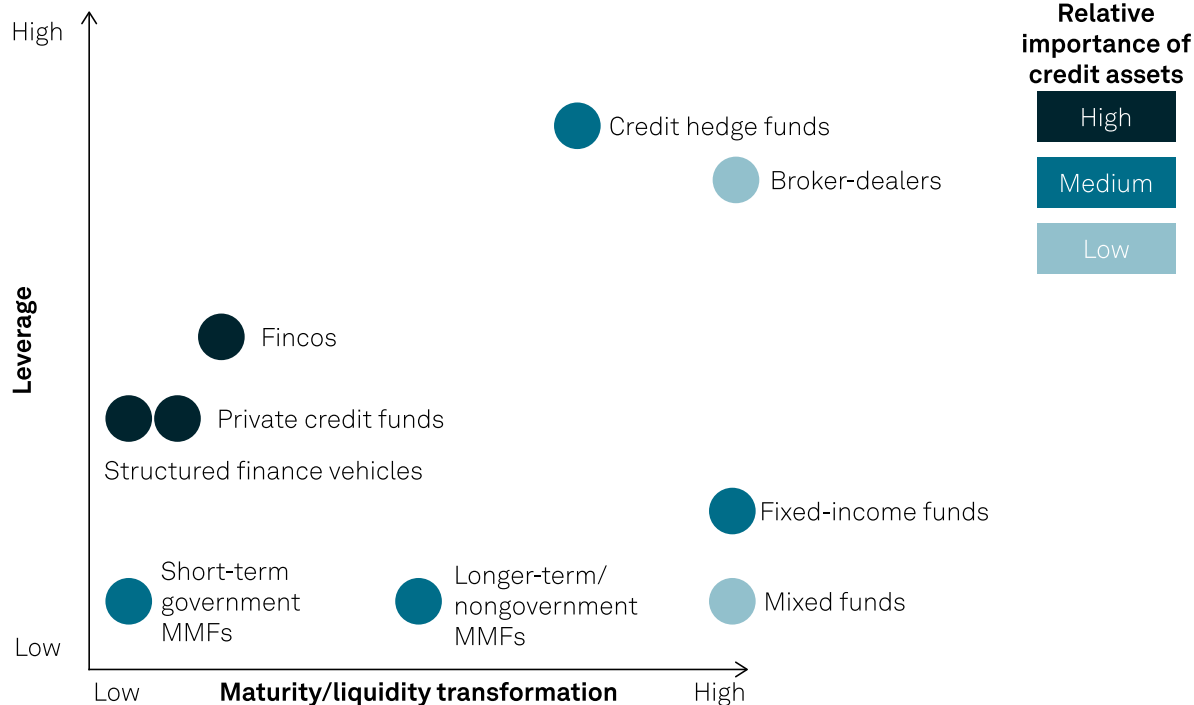
- Alternative asset managers have become serious competitors for banks in recent years.
- In the U.S., these institutions have increasingly positioned themselves as alternatives to other funding sources. Facing limited prudential regulation, they compete on terms, structure, and execution and can offer one-stop solutions to many borrowers.
- In Europe, the fast growth in private credit represents a new wave of financial disintermediation. European private credit funds are gradually expanding their lending activities from mid-market entities to more credit classes and strengthening their relationships with banks.
- A core lesson from the global financial crisis is that fast growth and financial innovation can create systemic risks. As such, financial regulators require more transparency on banks' exposure to private credit funds.

# Key Risks

# Bank-Like Risks | NBFIs Provide Credit And Maturity Transformation

Credit risk, leverage, and maturity/liquidity transformation are the main bank-like risks to which NBFIs are exposed

## Nonbank credit providers have diverse risk profiles



MMFs--Money market funds. Source: S&P Global Ratings.

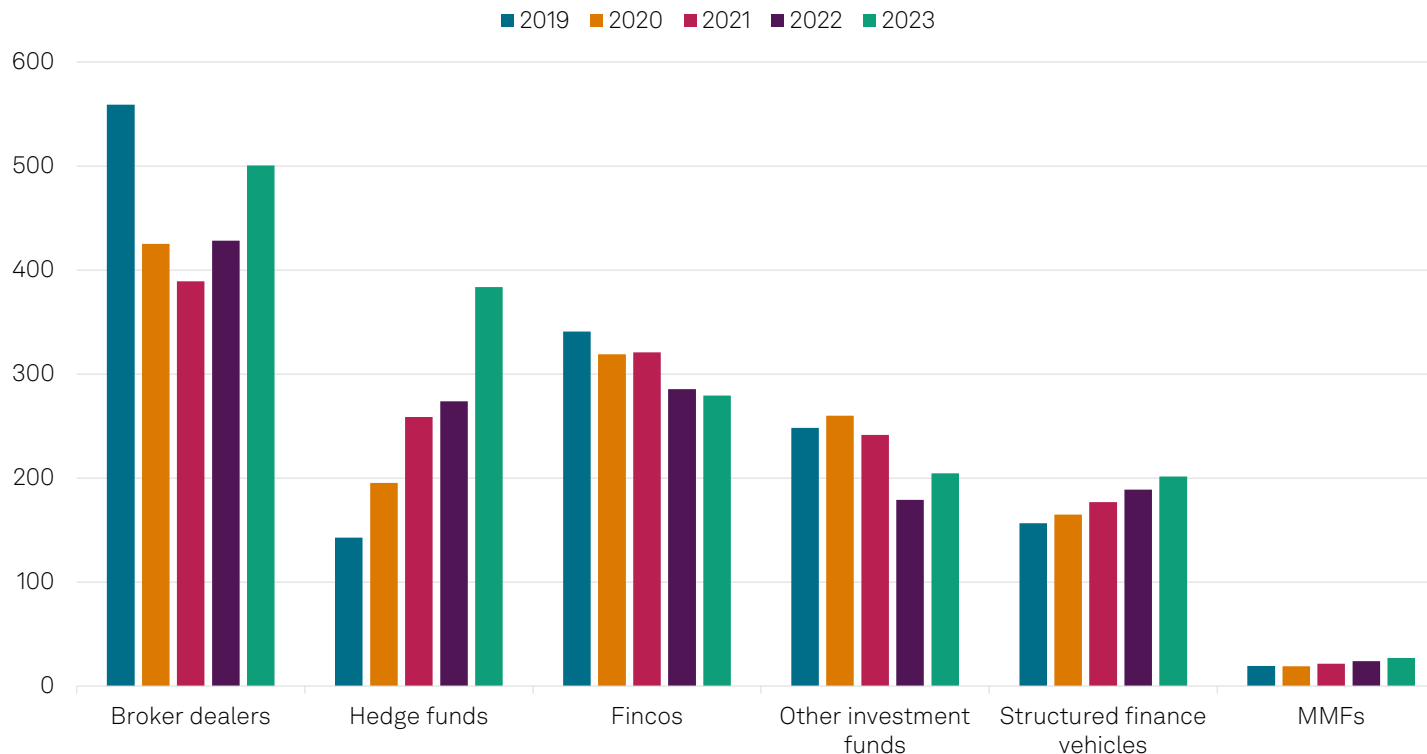
- **MMFs** typically have limited liquidity and leverage risks, while their exposure to credit risk varies, depending on their asset allocation between government and non-government bonds.
- At the other extreme, **credit hedge funds** typically operate with high leverage (mostly in synthetic form) and face elevated liquidity risks from their derivative positions via margin risk.
- Between these two extremes, **fincos** tend to be exposed to credit and refinancing risks from their financial leverage.
- **Investment funds** face liquidity risks when they operate with a structural mismatch between their assets and liabilities, for instance open-ended funds.
- **Private credit funds** and **structured finance vehicles**, on the other hand, are mainly exposed to credit risk while their funding risks are typically lower, given that their end-investors tend to be locked in for the life of the fund.

# Bank-Like Risks | Reliance On Short-Term Funding Increases Refinancing Risks

Hedge funds' ramp-up in short-term funding is the most noticeable trend

## Refinancing risks are higher for broker-dealers and hedge funds

Short-term wholesale funding against deposits held (%)



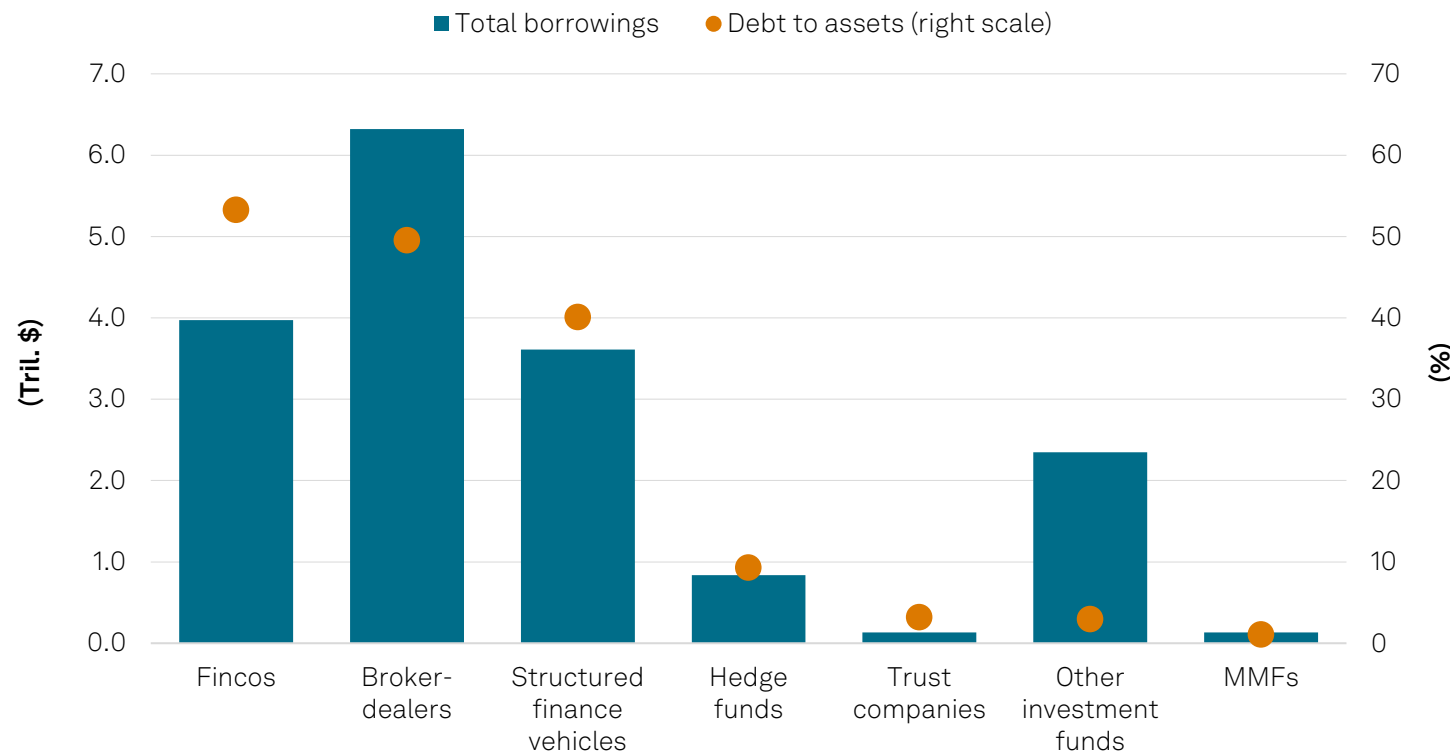
This ratio is calculated by dividing short-term wholesale funding by deposits held by nonbank credit providers. Wholesale funding includes all non-deposit on- and off-balance sheet funding sources, particularly market funding, but excluding equity. Sources: FSB, S&P Global Ratings.

- Nonbank credit providers make significant use of market funding, thus facilitating maturity/liquidity transformation outside of the banking system. Wholesale funding represented about 20% of total nonbanks' assets in 2023.
- Short-term funding, including repurchase agreements (repos), can be compared to deposits held by nonbanks to measure refinancing risk.
- This refinancing risk is highest for broker-dealers and hedge funds, with a sharp increase in refinancing risks for the latter, in the past few years.

# Bank-Like Risks | Financial Leverage Can Amplify Shocks

Leverage can also be synthetic via derivatives, which is more difficult to measure

## NBFI indebtedness



- Less stringent regulations allow nonbanks to boost returns through financial leverage, defined as on-balance-sheet borrowings, such as loans, bonds, or repos.
- Despite higher rates, NBFIs' indebtedness increased faster than that of banks in 2023 (4.1% versus 3.4%).
- Broker-dealers and fincos are the main users of financial leverage.
- Even if some nonbank credit providers, (such as hedge funds) do not carry significant financial leverage, they may be significantly levered via their derivatives position. This form of synthetic leverage can lead to significant stress in case of market shocks due to margin calls.

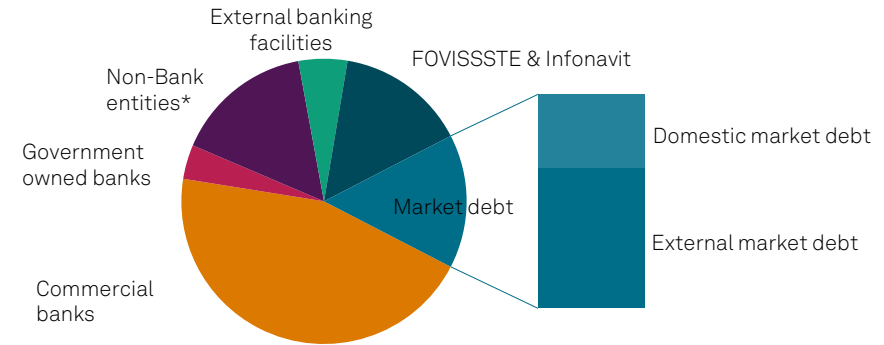
MMF--Money market fund. Sources: FSB, S&P Global Ratings.

# Mexican Nonbanks

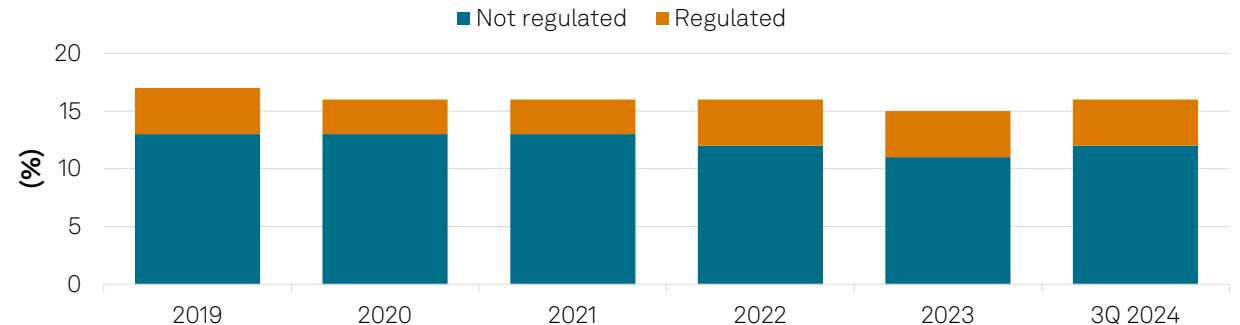
Declining rates are easing pressure, but economic uncertainty is rising

- Mexican non-regulated NBFIs, which primarily serve SMEs and low-income individuals, face challenges in accessing competitive financing due to limited central bank access and competition from banks.
- For 2025, we anticipate a gradual recovery in credit from non-regulated NBFIs, projected to account for approximately 12% of total credit in Mexico, supported by declining interest rates.
- For years, the sector has struggled to improve funding diversification while lowering costs. A successful joint securitization issuance in 2024 has sparked optimism, while the new securities market law could professionalize the SME sector and improve governance. This could enhance investor appeal for SMEs, ultimately supporting NBFIs over the medium term.
- In our view, NBFIs can capitalize on government support for SMEs and nearshoring opportunities, leveraging their regional focus and experience to meet emerging financing needs as the sector evolves.
- We believe that the banking sector's overall exposure to vulnerable NBFIs is marginal, indicating a low level of systemic risk for the sector.

## Mexican credit provider landscape



## Evolution of the share of NBFIs within total credit in Mexico



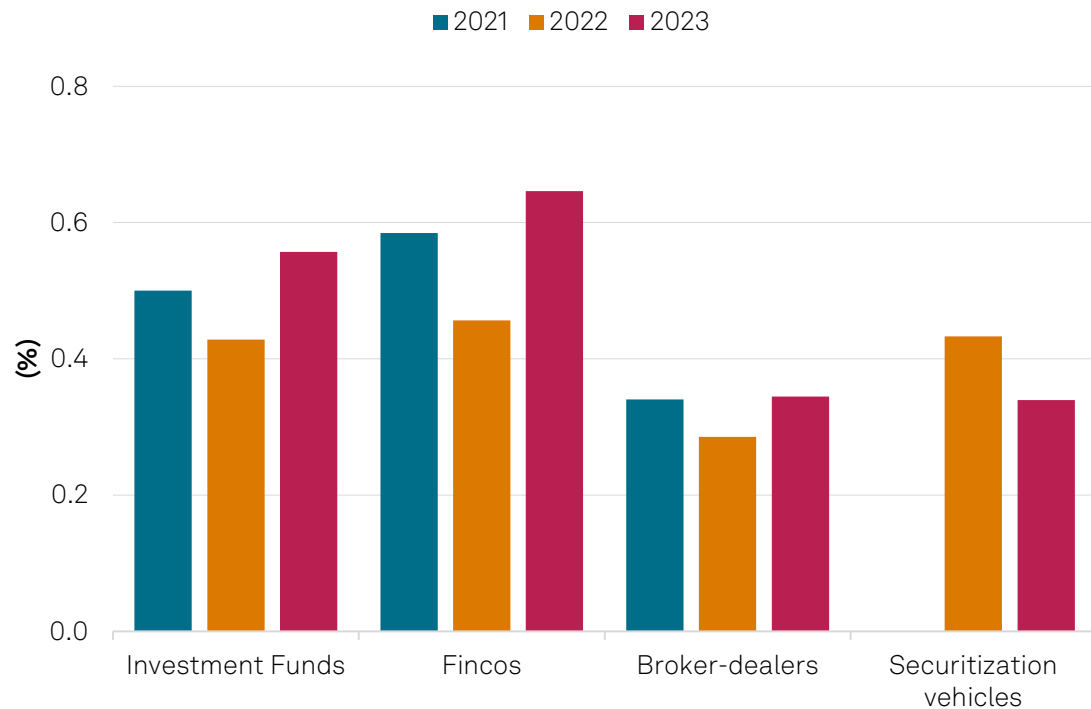
Data as of September 2024. \*Includes non-bank financial institutions (NBFIs), retailers' financial arms, automobile captive financial arms, etc. Source: Banco de México - Financial Stability Report June 2024.



# Interconnectedness | Linkages Appear Deceptively Low

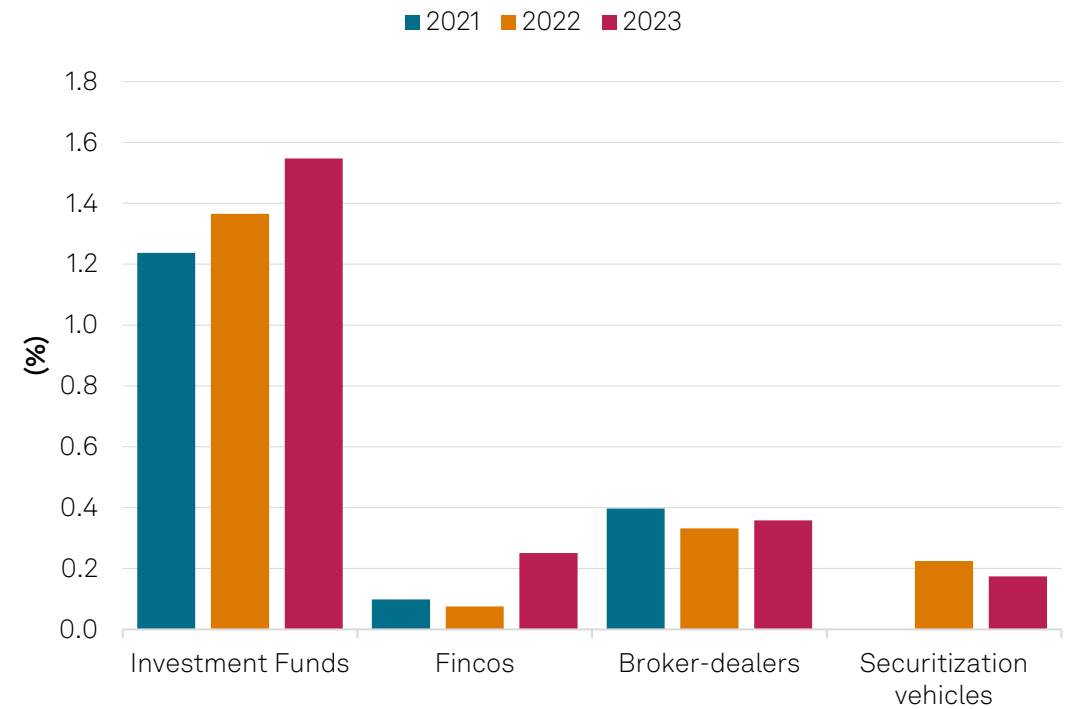
Even though transparency on banks' exposures to nonbanks is limited, traditional lenders mainly seem to be net recipients of funding from nonbank credit providers

Global banks' asset exposure, relative to total banking assets



Sources: Financial Stability Board, S&P Global Ratings.

Global banks' funding exposure, relative to total banking assets

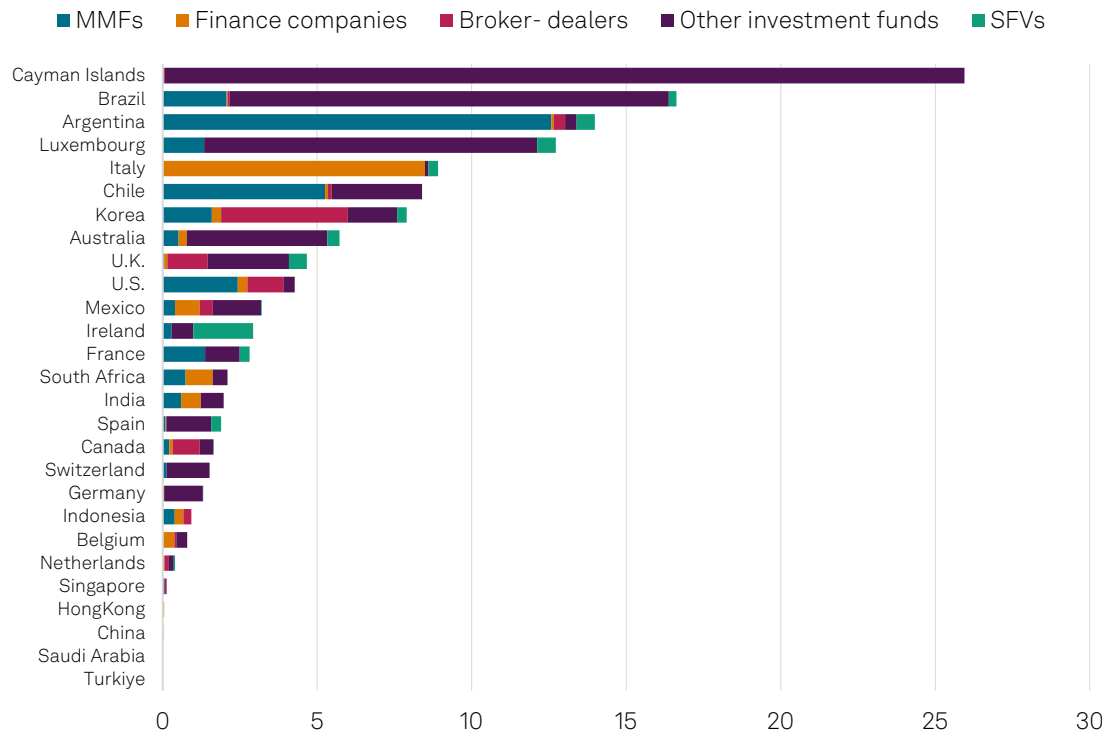


Sources: Financial Stability Board, S&P Global Ratings.

# Interconnectedness | Meaningful Cross-Exposures Only In Selected Countries

## Funding from nonbank credit providers is meaningful in the Cayman Islands, Brazil, Argentina, and Luxembourg

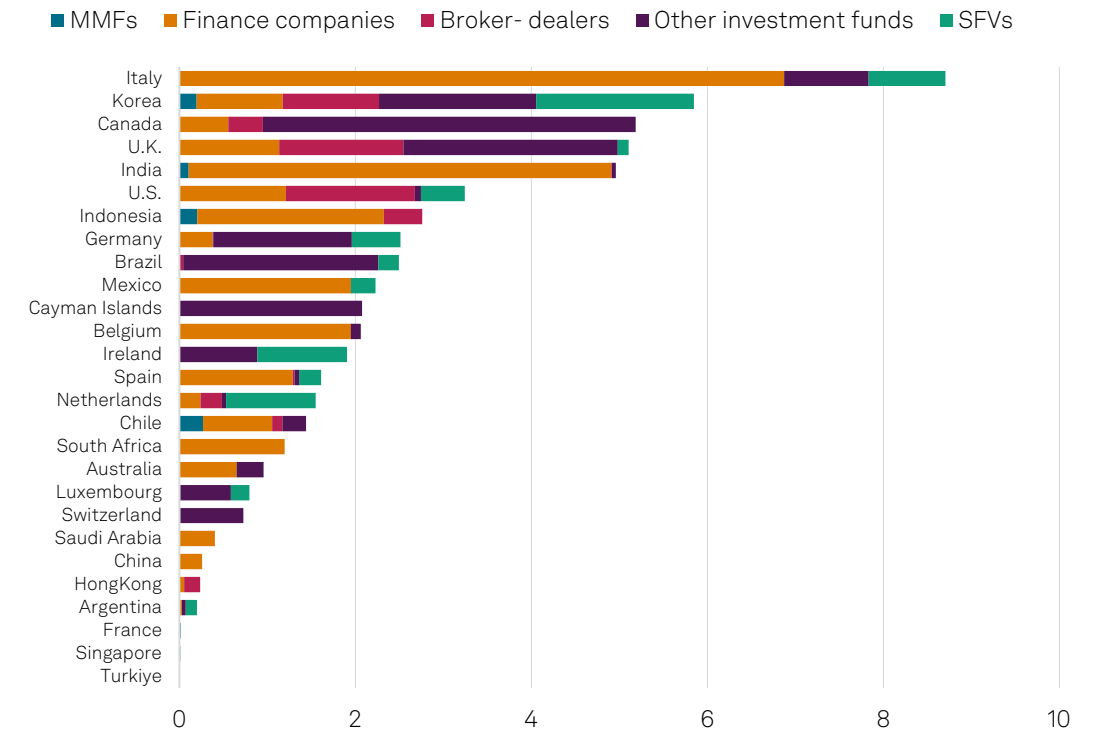
Bank funding from nonbanks relative to total assets at end-2023



MMF--Money market fund. SFV--Structured finance vehicle. Sources: FSB, S&P Global Ratings.

## Exposures to nonbank credit providers are typically smaller or concentrated on less risky fincos

Bank exposures to nonbanks relative to total assets at end-2023



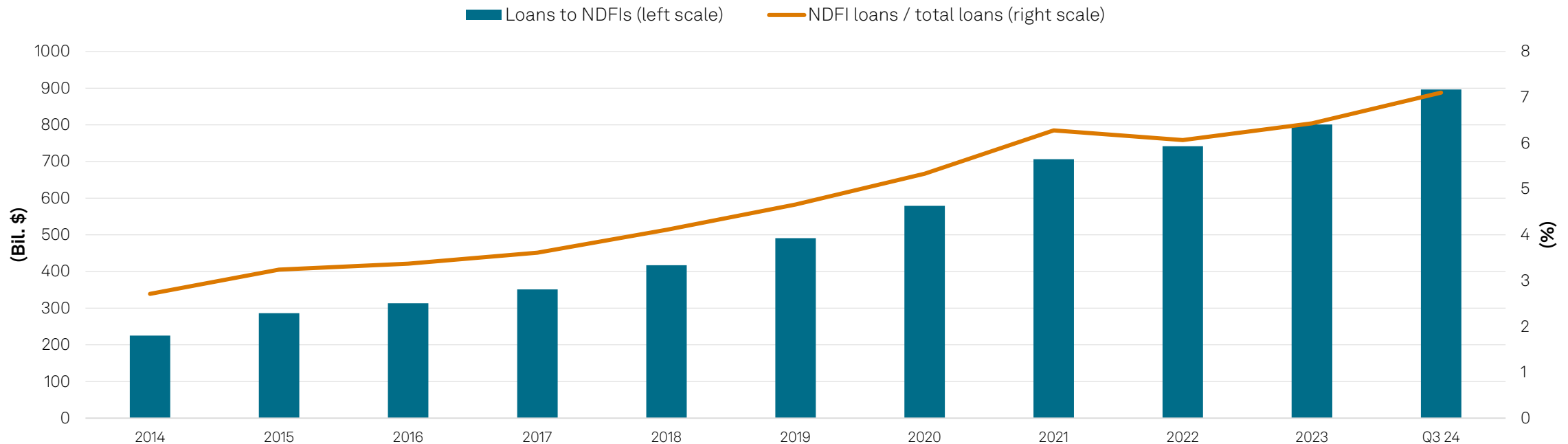
MMF--Money market fund. SFV--Structured finance vehicle. Sources: FSB, S&P Global Ratings.

# Interconnectedness | U.S. Banks' Exposure To Nonbanks Increases Quickly

We believe, however, that collateral and good diversification by borrower type have helped mitigate risks for banks

**U.S. banks' loans to nonbanks, which account for 7% of total loans, have increased by more than 50% since 2020**

U.S. banks' loans to non-depository financial institutions (NDFIs)



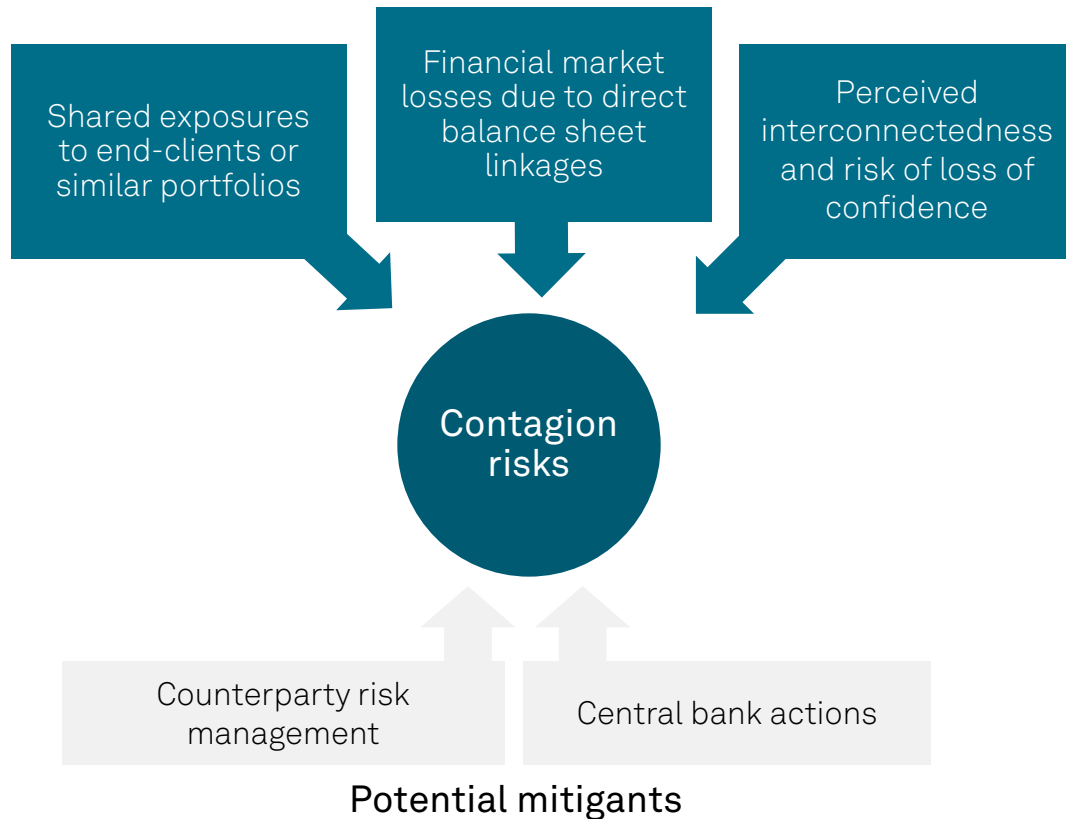
Note: All FDIC-insured banks. Source: S&P Global Ratings.

All banks are insured by the Federal Deposit Insurance Corporation. Source: S&P Global Ratings.

# Interconnectedness | Contagion Risks Remain Prominent

Interconnectedness among NBFIs and between these nonbanks and banks can enable risk-sharing, but also lead to risk propagation in case of market shocks

## Contagion risks could materialize in multiple ways



The recognition of these contagion risks for the broader financial system has triggered a series of regulatory initiatives in the past decade.

### Our key expectations:

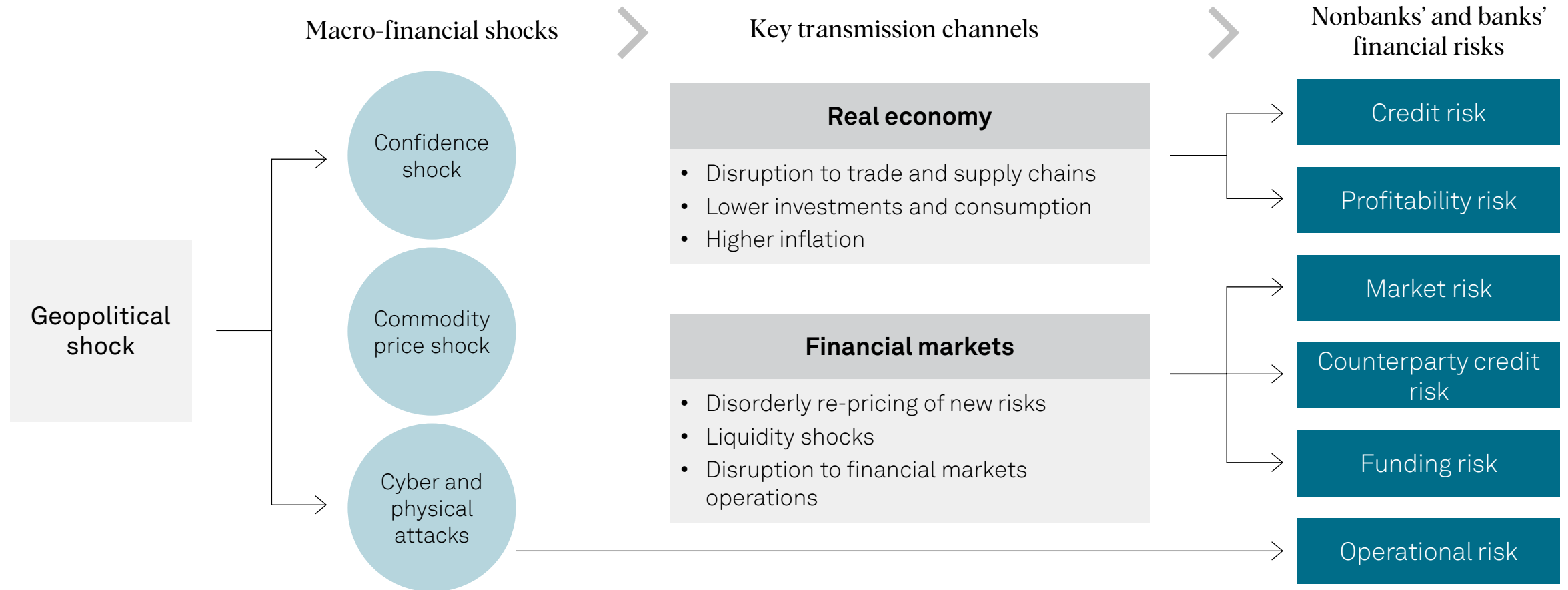
- Banks will continue to improve their counterparty credit risk management, partly on stricter regulatory probing. This risk is most prominent for a handful of global investment banks with prime brokerage activities, which are particularly in the focus of supervisors.
- Nonbank credit providers do not typically have access to central bank funding and will not receive taxpayer funds in case of failure.
- That said, authorities could intervene in the financial markets if a large nonbank were to fail--in order to avoid contagion to key funding markets. Yet the bar to be met for such an intervention to occur is very high.

### Downside risks:

- Further geopolitical shocks and market fragilities could trigger market shocks and test the resilience of banks and nonbanks.

# Financial Stability Risks | Geopolitical Shocks Are Potential Triggers

Geopolitical shocks can impair NBFIs, banks, and broader financial stability—with financial markets and the real economy as the main transmission channels



# Financial Stability Risks | Market Fragilities Could Trigger Instability

Shocks could stem from political or policy interventions, and be amplified by structural market changes

	Cause	Possible mitigants	Potential consequences
<b>Known vulnerabilities in the financial system create potential for disorderly asset repricing</b>	<ul style="list-style-type: none"> <li>Decreased liquidity in some key markets, amplified by banks' reduced market intermediation capacity.</li> <li>Margining requirements that transform counterparty credit risk into potential liquidity risk.</li> <li>Fast markets, fragile confidence.</li> <li>Potential "herd" (dis)investment patterns.</li> </ul>	<ul style="list-style-type: none"> <li>Central bank intervention to avoid disorderly markets.</li> <li>Central banks cooperation globally (foreign exchange swap lines).</li> <li>Anti-procyclicality reduces volatility in CCP margins.</li> <li>Switch to T+1 cash equity clearing cuts required margin.</li> </ul>	<ul style="list-style-type: none"> <li>Drawdown of liquidity by bank clients and to meet own obligations.</li> <li>Materialization of market tail risks.</li> <li>Possible counterparty default events among troubled clearing clients and trading counterparts (incl. some nonbanks).</li> </ul>
<b>What to look out for in 2025</b>	<ul style="list-style-type: none"> <li>Ongoing QT in large developed economies removes large buyers from bond markets and cuts bank reserves.</li> <li>Policy rate changes could be unpredictable and unaligned.</li> <li>Geopolitical risks are high.</li> <li>Some deregulatory political agenda could facilitate more risk-taking.</li> <li>Market concentration and pyramid of investment in new technologies could deepen, or investment thesis break.</li> </ul>	<ul style="list-style-type: none"> <li>Reform of U.S. treasury market to expand central clearing.</li> <li>Expansion of central bank repo access to some nonbanks.</li> <li>Regulatory monitoring of NBFIs risks via banks could evolve into direct oversight.</li> <li>Collateral mobilization/reuse capacity will continue to rise.</li> </ul>	<ul style="list-style-type: none"> <li>Margin spikes increase banks' liquidity consumption.</li> <li>Sustained bank provision of liquidity/credit to core clients versus reduced lines to marginal clients.</li> <li>Some nonbanks could be among these marginal clients and face refinancing risks.</li> </ul>

# Regulatory Response | Scrutiny On NBFIs Set To Increase

Recent stress resulted in new regulatory proposals on nonbank finance globally, but their implementation could take time and lead to significant divergences

Topic	Main policy proposals from the FSB	Status
<b>Resilience of MMFs</b>	<ul style="list-style-type: none"> <li>Imposing cost of redemption on investors redeeming MMF shares via anti-dilution liquidity management tools (LMTs) such as swing pricing.</li> <li>Reducing liquidity transformation by MMF.</li> <li>Improving the MMF's ability to absorb losses.</li> </ul>	<ul style="list-style-type: none"> <li>Policy recommendation in 2021. Progress report in 2024.</li> <li>Uneven progress across jurisdictions with some introducing new policy tools (e.g., China, India, Japan, U.S.) while others are still in process (EU, U.K.).</li> <li>Main progress is on redemption risk, with anti-dilution LMTs reported in many jurisdictions.</li> <li>Next step: Assessment of policy effectiveness by 2026.</li> </ul>
<b>Liquidity risks in open-ended funds (OEFs)</b>	<ul style="list-style-type: none"> <li>OEF design: Mapping the liquidity of OEFs' holdings to the redemption terms offered to investors, via a categorization approach.</li> <li>Reducing investors' redemption incentives (via LMTs).</li> </ul>	<ul style="list-style-type: none"> <li>Proposals published in 2023.</li> <li>Next step: Progress report expected in 2026.</li> </ul>
<b>Margining practices on cleared and non-cleared derivatives</b>	<ul style="list-style-type: none"> <li>Increasing transparency on margin requirements in centrally cleared markets.</li> <li>Reinforcement of anti-procyclicality requirements for CCP margin models.</li> <li>Enhancing the liquidity preparedness of market participants (stress testing, liquidity risk management, and governance).</li> </ul>	<ul style="list-style-type: none"> <li>Consultation reports in 2024 on liquidity preparedness of market participants, and on the functioning of initial margining models in both cleared and non-cleared markets.</li> </ul>
<b>Non-bank leverage</b>	<ul style="list-style-type: none"> <li>Improving data and transparency on leverage.</li> <li>Activity-based measures: broader margining requirements, central clearing mandate.</li> <li>Entity-based measures: limit on leverage, counterparty risk governance.</li> </ul>	<ul style="list-style-type: none"> <li>Consultation report in 2024 following the findings report in 2023.</li> <li>Next step: Policy recommendations should follow in 2025 and a progress report at a later stage.</li> </ul>

# Regulatory Response | Banks Need To Manage Counterparty Credit Risk Better

Supervisors aim to address the deficiencies in some banks' management of counterparty credit risk revealed by the Archegos failure, which caused over \$10 billion of losses across numerous banks

- Counterparty credit risk (CCR) is not a novel risk. The failure of LTCM in 1998 launched a first wave of regulatory initiatives to avoid stress stemming from highly-leveraged nonbanks (for example, hedge funds) to propagate losses through the banking system. Recent episodes, such as the Archegos failure, have intensified bank supervisors' efforts globally.
- In 2024, the Basel Committee for Banking Supervision (BCBS) issued new guidelines, emphasizing the need for banks to improve due diligence and the monitoring of their counterparties. Banks must use risk mitigation tools, including a margining framework, and quantify their CCR exposure daily by using multiple metrics, including the potential future exposures.
- The European Central Bank also published guidelines on CCR management in 2023, following a targeted review that revealed some shortcomings. Recommendations were broadly similar to those of the BCBS and require banks to have adequate CCR stress testing frameworks that take into account wrong-way risk (WWR). WWR is the risk that the size of a bank's exposure to a counterparty could increase mechanically as the credit quality of this counterparty deteriorates.
- CCR is a meaningful risk for the largest investment banks, which tend to be exposed to financial counterparties with the highest leverage (that is, hedge funds) through prime brokerage activities.



# Related Research

## NBFI sector research

- [U.S. Securities Firms Outlook 2025: Uncertainty Could Cloud Otherwise Favorable Conditions](#), Jan. 31, 2025
- [Sector Review: China Brief: Securities Firms Await Revival In Market Sentiment](#), Jan. 27, 2025
- [Financial Market Infrastructure Sector View 2025: Rocky Geopolitics, Solid Fundamentals](#), Jan. 27, 2025
- [U.S. Finance Companies Are Poised To Weather An Uncertain Economy And Interest Rate Environment In 2025](#), Jan. 22, 2025
- [Asset Management Sector View 2025: Assets Under Management Are Growing--And So Is Complexity](#), Jan. 21, 2025
- [Regulators Eye Private Debt Boom In Europe](#), Dec. 5, 2024
- [Private Markets: How Will Private Credit Respond To Declining Yields?](#), Dec. 4, 2024
- [Private Markets Monthly, April 2024: Private Credit Is A Growing Segment Of Nonbank Finance](#), April 24, 2024

## Macro research

- [Global Credit Outlook 2025: Promise And Peril](#), Dec. 4, 2024
- [Global Economic Outlook Q1 2025: Buckle Up](#), Nov. 27, 2024

## 2025 banking system outlooks

- [Japan Banking Outlook 2025: Tailwinds And Tests Of Resilience](#), Jan. 30, 2025
- [The Top Trends Shaping European Banks In 2025: Solid Positions, Growing Ambitions](#), Jan. 27, 2025
- [U.S. Bank Outlook 2025: Entering A New Phase Under A New Administration](#), Jan. 14, 2025
- [Global Banks Outlook 2025: Cautiously Confident](#), Nov. 14, 2024

**[spglobal.com/ratings/PrivateMarkets](https://spglobal.com/ratings/PrivateMarkets)**

# Analytical Contacts



Nicolas Charnay

Paris

[nicolas.charnay@spglobal.com](mailto:nicolas.charnay@spglobal.com)



Brendan Browne

New York

[brendan.browne@spglobal.com](mailto:brendan.browne@spglobal.com)



Alfredo Calvo

Mexico City

[alfredo.calvo@spglobal.com](mailto:alfredo.calvo@spglobal.com)



Giles Edwards

London

[giles.edwards@spglobal.com](mailto:giles.edwards@spglobal.com)



Mehdi El Mrabet

Paris

[mehdi.el-mrabet@spglobal.com](mailto:mehdi.el-mrabet@spglobal.com)

Copyright © 2025 by Standard & Poor's Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED, OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses, and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Rating-related publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw, or suspend such acknowledgement at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal, or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, [www.spglobal.com/ratings](http://www.spglobal.com/ratings) (free of charge) and [www.ratingsdirect.com](http://www.ratingsdirect.com) (subscription) and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at [www.spglobal.com/ratings/usratingsfees](http://www.spglobal.com/ratings/usratingsfees).

Australia: S&P Global Ratings Australia Pty Ltd holds Australian financial services license number 337565 under the Corporations Act 2001. S&P Global Ratings' credit ratings and related research are not intended for and must not be distributed to any person in Australia other than a wholesale client (as defined in Chapter 7 of the Corporations Act).

STANDARD & POOR'S, S&P and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.

## **spglobal.com/ratings**

---

**S&P Global**  
Ratings