S&P Global Ratings

When Rates Rise: Risks To Global Banks Could Emerge From The Shadows

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This report does not constitute a rating action



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Key Takeaways

- After several years of substantial growth, tighter funding conditions and weaker macroeconomic conditions will likely slow down global shadow banking activity.
- Shadow banks operating with high leverage, running structural liquidity mismatches, or taking significant asset-quality risk could face financial pressure, particularly if their economies enter recessions.
- Traditional banks' direct exposure to shadow banks appears limited, at less than 3% of total bank assets.
- That said, indirect contagion risks--for example, from the failure or rapid deleveraging
 of one or more large shadow banks--could spell trouble for the broader financial sector
 and ultimately affect traditional banks.

Tighter funding conditions and weaker macroeconomic conditions will likely undermine shadow banks' competitive advantages over traditional banks in 2023, ending several years of robust growth. Many shadow banks operate time-tested or low-risk business models, such as money market funds, and therefore should be able to weather the downturn. Others will face a harder test, especially those operating with high or hidden leverage, those that have grown rapidly by acquiring riskier assets, or those running structural liquidity mismatches. Despite the noticeable progress resulting from regulatory initiatives since the global financial crisis of 2008-2009, some shadow banks continue to operate with limited transparency and oversight compared to traditional banks. This often means less prudent risk-management practices and large losses at times of heightened market volatility.

For traditional banks, shadow banks can be either competitors, or partners or clients whose difficulties will weigh on revenue growth and increase credit costs. Traditional banks also have direct balance-sheet exposure to shadow banks, but this appears limited in most jurisdictions, and is often well underwritten and collateralized. More relevant, in our view, are the indirect risks that a large shadow bank's failure or a broad deleveraging of the sector pose, given shadow banks' prominent role as receivers of customer funds and lenders to the real economy in some countries.

Unlike traditional banks, shadow banks cannot access emergency central bank funding in times of stress and we don't expect governments to use taxpayers' funds to recapitalize a failed shadow bank. This means that public authorities have limited tools to mitigate contagion risks, should they arise. Although the state of the shadow banking sector is not a source of rating pressure for global traditional banks right now, it will be an area of attention for 2023.

The nonbank financial (NBFI) sector, of which shadow banks are part, encompasses various players involved in financial intermediation. These include pension funds, insurance corporations, investment funds, finance companies (fincos), broker-dealers, and structured finance vehicles such as collateralized loan obligations. NBFIs have expanded, as has their systemic relevance in recent years, reaching almost half of total financial system assets at end-2021, and one-third of all credit assets, according to the Financial Stability Board (FSB).

The subset of institutions that we term shadow banks in this article are involved in credit intermediation in a similar way to banks and may pose bank-like risks to financial stability. Using the FSB's classification, shadow banks held about \$68 trillion in financial assets at end-2021, 14% of global financial assets. Shadow banks have grown rapidly since the global financial crisis,

largely led by investment funds including money market funds, fixed-income funds, credit hedge funds, and other mixed funds—holding both debt and equity. This growth has expanded private credit sources available to borrowers.

NBFIs Have Grown In Systemic Importance And Diversity

NBFIs' total assets increased to \$239 trillion at end-2021 from about \$100 trillion at the time of the global financial crisis. This represents approximately 49% of the total financial assets in countries reporting to the FSB and accounting for about 80% of global GDP (see chart 1). The growth of the NBFI sector largely resulted from global lower-for-longer interest rates, which encouraged savers and investors to search for yield. At the same time, global banks experienced a period of deleveraging after the global financial crisis, and faced with increased regulation, were reluctant to take on certain risks and reduced their lending to smaller or riskier borrowers. Therefore, in many ways NBFIs have played a positive role over the past decade to provide alternative financing sources to the real economy. For instance, NBFI financing has allowed:

- Creditworthy borrowers (like investment-grade corporates and governments) to borrow at
 fixed rates over long terms. This is debt that most banks do not want to hold, but that
 insurance companies, credit funds, and others with the right liability structures are able to
 hold.
- Higher-risk borrowers (consumers and commercial customers) to obtain funding in ways that
 may support economic activity. Indeed, many of these higher-risk borrowers turned to NBFIs
 that offered direct lending rather than traditional bank lines, boosting the private credit
 market's growth. Although this can create risks for the financial system and economy if such
 borrowing is too large and unchecked, it also brings benefits.
- Banks to originate and distribute exposures that they don't want on their balance sheet to shadow investors that can manage the credit and liquidity risk and earn fees in the process. The securitization market is the prime example of this.

Chart 1

The NBFI Sector Has Grown In Size And Systemic Importance In The Past Decade Size of the NBFI sector



Covers entities operating in 29 countries reporting to the Financial Stability Board (FSB), which together represent about 80% of world GDP. Source: FSB, S&P Global Ratings.

NBFIs have provided the real economy with a source of alternative financing over the past decade

NBFIs' total assets

NBFIs' total assets as a percentage of total global financial assets (right scale)

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The NBFI sector includes various subsectors that differ greatly by size, business profiles, and growth (see chart 2). Pension funds and insurance corporations are the two largest subsectors, each representing 15%-20% of all NBFI assets. These tend to hold securities much more than loans, typically those that match the liabilities' maturities, and therefore often do not compete directly with banks. Fincos and captive finance companies closely resemble traditional banks, providing credit to customers. The main difference is that they don't fund themselves with customer deposits and are less leveraged. Since these firms are likely to have a higher cost of funding than banks, they tend to hold higher yielding and therefore riskier assets. Fincos play a significant role in credit intermediation in certain emerging markets, and to a lesser extent, in the U.S.

Between these two categories lie several types of investment funds with varying investment and funding strategies. Some focus on specific underlying assets, such as real estate investment trusts. Others seek to generate alpha returns, such as hedge funds. A third category seeks to offer relatively safe investment alternatives to savers, such as money market funds--for example, 76% (or U.S.\$ 3.9 trillion) of all U.S. money market fund assets are invested in U.S. government securities. Collectively, investment funds represent the largest share of the NBFI sector--about 36% at end-2021. Investment funds were also the fastest-growing NBFI subsector up until 2021, although this growth has likely slowed with rising interest rates and the negative repricing of previously underwritten financial assets in 2022.

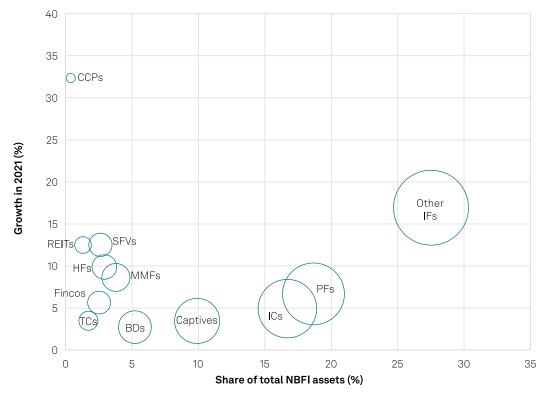
Several NBFIs play a specific role in connecting the shadow and traditional banking sectors, namely:

- Broker-dealers, which provide liquidity in key financial markets and compete with traditional banks' market-making divisions;
- Structured finance vehicles, which hold loans originated either by banks or nonbanks and distribute the risks to a broad investor base; and
- Central counterparties, which pool and net risks from the cash market and derivatives trades.

Chart 2

The NBFI Sector Includes A Wide Variety Of Subsectors

Relative size and growth rates in 2021 of NBFI subsectors



Bubble size represents the size of the entity relative to the total NBFI sector. Covers entities operating in 29 countries reporting to the FSB, which together represent about 80% of world GDP. BD--Broker-dealer. CCP--Central clearing counterparty. HF--Hedge fund. IC--Insurance corporation. MMF--Money market fund. Other IF--Other investment fund. PF--Pension fund. REIT--Real estate investment trust. SFV--Structured finance vehicle. TC--Trust company. Source: FSB, S&P Global Ratings.

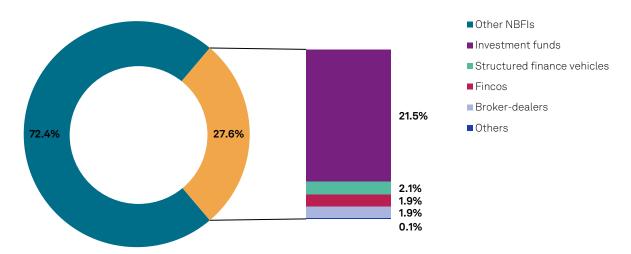
Until Recently Shadow Banks Were An Expanding NBFI Segment

Using the FSB's classification, we estimate that shadow banks held a total of \$68 trillion of assets at end-2021, accounting for 28% of all NBFI assets (see chart 3) and 14% of total global financial assets. Investment funds are the largest type of shadow bank by far, with \$52 trillion of assets at end-2021, followed by structured finance vehicles, broker-dealers, and fincos, with approximately \$5 trillion of assets each.

Chart 3

Shadow Banks Are A Subset Of NBFIs Performing Credit Intermediation Activities

Split of NBFI assets by type



Covers entities operating in 29 countries reporting to the FSB, which together represent about 80% of world GDP. Source: FSB, S&P Global Ratings.

Shadow banks have grown rapidly in recent years, with assets climbing to \$68 trillion from about \$30 trillion in the financial crisis aftermath. Since 2015, shadow banks' assets have risen by an average of 7.3% every year, varying across countries (see chart 4). The U.S. continues to represent the largest shadow banking sector, with 30% of all shadow banks' assets, followed by the euro area (23%), and China (17%). Relative to the domestic financial sector, shadow banks play a particularly significant role in the Cayman Islands (57% of all financial assets), Ireland (49%), and Luxembourg (27%). In major world economies, shadow banks account for 10%-20% of all financial assets.

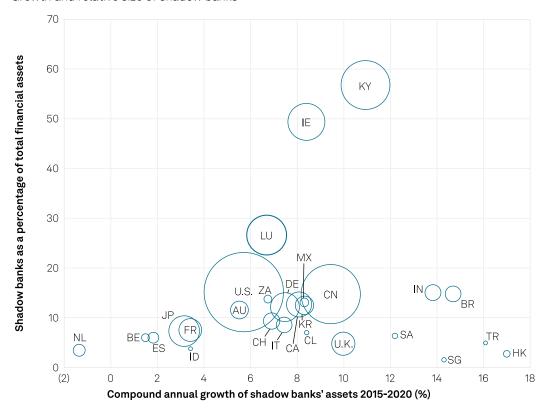
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Chart 4

Shadow Banks Have Grown Rapidly Across Geographies

Growth and relative size of shadow banks



Bubble size represents the absolute size of shadow banks' financial assets in each jurisdiction. Chart omits Argentina (compound annual growth 48.9%; shadow banks as a percentage of total financial assets 10.7%). AU--Australia. BE--Belgium. BR--Brazil. CA--Canada. CH--Switzerland. CL--Chile. CN--China. DE--Germany. ES--Spain. FR--France. HK--Hong Kong. ID--Indonesia. IE--Ireland. IN--India. IT--Italy. JP--Japan. KR--Korea. KY--Cayman Islands. LU--Luxembourg. MX--Mexico. NL--Netherlands. SA--Saudi Arabia. SG--Singapore. TR--Turkiye. ZA--South Africa. Source: FSB, S&P Global Ratings.

Investment funds were the fastest-growing subsector among shadow banks in the past decade, increasing to almost 80% of all shadow banks' assets from about 30% after the global financial crisis (see chart 5). Investment funds dominate the shadow banking sector in most advanced economies, especially in the euro area. In the U.S. and the U.K., the situation is slightly more balanced, with fincos, broker-dealers, and structured finance vehicles representing a more meaningful share of shadow banks' assets. In certain emerging markets, the picture is mixed, especially as fincos generally play an important part in financing the economy, for example, in India, Indonesia, and Mexico. In China's bank-dominated financial system, the rise in shadow banking before 2017 mainly resulted from banks' efforts to circumvent policy restrictions and shift loans to alternative accounting categories. In a report in 2020, the China Banking and Insurance Regulatory Commission (CBIRC) indicated that shadow banking assets peaked at Chinese renminbi (RMB) 100 trillion in 2017, mainly comprising wealth management products (WMPs), trust loans by fincos, private investment funds, and peer-to-peer lending. In the past five years, however, shadow banking assets have declined due to a regulatory crackdown on the sector, shrinking by RMB29 trillion from the peak by June 2022, according to the CBIRC. For instance, the authorities required a transition from expected value to net asset value, making banks' WMPs more transparent to investors. They have also increased scrutiny on trust loans directed to the property sector.

Chart 5
Investment Funds Tend To Dominate Shadow Banks, Especially In Advanced Economies

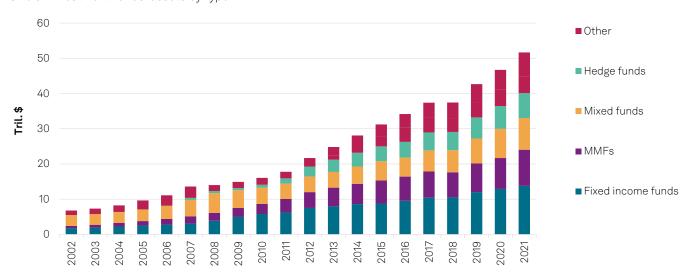


Source: FSB, S&P Global Ratings.

Chart 6

Within investment funds classified as shadow banks, fixed-income and money market funds account for about half of all assets and have increased significantly in the past decade (see chart 6). Hedge funds, in which we only include credit hedge funds, and mixed funds, holding both debt and equity securities, have also grown rapidly. These trends are particularly meaningful in advanced economies such as the U.S. and the euro area, where investment funds account for most shadow banking assets.

Fixed Income And Money Market Funds Represent Around Half Of All Investment Funds
Size of investment funds' assets by type



Covers entities operating in 29 countries reporting to the FSB, which together represent about 80% of world GDP. Source: FSB, S&P Global Ratings.

Economic Weakness And Tighter Funding Conditions Will Challenge Shadow Banks' Growth

Weakening economic conditions will likely increase credit losses globally. While this should be manageable for traditional banks (see "Global Banks: Our Credit Loss Forecasts: Manageable Rise In Credit Losses As Our Base Case," published Dec. 13, 2022), rising credit costs could impinge on shadow banks. We see shadow banks as exposed to three main types of financial risk, albeit to varying degrees (see chart 7). As the credit cycle turns, these three risks are likely to become more prominent and could turn into losses.

Credit risk

All shadow banks take part in some form of credit intermediation, but the credit assets' relative importance varies, with fincos and structured finance vehicles most exposed to credit risk. On the other hand, broker-dealers and mixed funds are relatively less exposed to credit risk as they typically hold noncredit (i.e., equities) assets as well.

Maturity/liquidity risk

This relates to the funding structure of shadow banks, as well as the potential mismatch between their assets and liabilities. Broker-dealers and credit hedge funds appear most exposed to this risk, largely due to their involvement in the derivatives markets, where they could face large liquidity or margin calls. Some investment funds also run structural liquidity mismatches due to their open-ended nature, meaning that they offer daily redemptions to clients while holding assets that may be less liquid. Among investment funds, money market funds, especially those holding short-term high credit quality investments, tend to be less exposed to maturity risk than general fixed-income funds. For instance, the weighted-average maturity of U.S. prime and government money market funds was 16 days as at end January 2023. What the FSB defines as fincos typically rely on short-term market funding but tend to hold relative similar amounts of liquid or short-dated assets, limiting overall asset-liability mismatches.

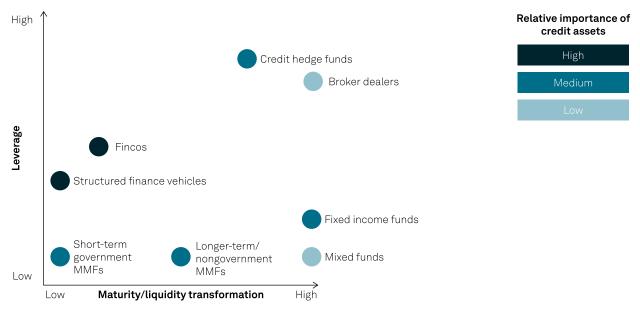
Leverage risk

This relates to shadow banks' use of various debt types to enhance capital returns, which can amplify shocks in a credit downturn. Leverage can take many forms, some of it visible, or on the balance sheet, some much less visible, or synthetic, such as embedded leverage in derivative transactions. Of the three types of risk, leverage is the hardest to measure objectively and consistently. Credit hedge funds and broker-dealers are typically among the most leveraged shadow banks, which tend to make the greatest use of synthetic leverage. Like traditional retail banks, fincos also take on leverage—this is of the most visible form, but still subject to vulnerable market sentiment. Securitization vehicles and investment funds typically operate with lower leverage. That said, some investment funds use derivatives, either to hedge against certain risks, such as interest rate swaps, or to boost returns. However, the use of embedded leverage is less a structural feature of their business model than for credit hedge funds, for instance.

Shadow banks can also be interconnected, meaning that losses in one part of the shadow banking sector could be transmitted to another part. For instance, investment funds, which represent the bulk of shadow banks' assets, might invest in securitized assets, and use prime brokerage services from broker-dealers. Similarly, fincos can rely on securitization vehicles to fund part of their activities. Although shadow banks do not form a closely interconnected sector like the traditional banking sector, they have direct financial interlinkages that could propagate risks and accelerate losses in a downturn.

Chart 7

Shadow Banks Have Diverse Exposures To Credit, Liquidity, And Leverage Risks



Source: S&P Global Ratings.

As economic conditions weaken and funding tightens, the abovementioned risks could materialize. We also reflect this in our ratings on banks and insurance companies, which are typically more homogenous and higher than those on NBFIs (see chart 8).

Chart 8

Bank And Insurance Credit Profiles Are More Homogenous And Stronger Compared With Other Nonbank Sectors

Rating distribution of selected financial sectors in the U.S. and Western Europe



^{*}Excluding insurance brokers. Source: S&P Global Ratings.

First, shadow banks have expanded rapidly over the years, which typically correlates with weakening credit underwriting standards. This is compounded by the fact that some shadow banks operate with less regulatory oversight, as well as less market transparency and therefore

discipline. For instance, fincos and securitization vehicles, the most credit-heavy shadow bank types, generally focus on specific areas, such as auto finance companies, or certain borrower segments, such as micro, small, and medium enterprises (MSMEs) and low-income population sectors. These groups usually have weaker credentials than traditional banks typically accept. Such credit concentration commonly leads to higher credit losses in a downturn. Not only do these losses pressure earnings, but they can also trigger funding pressures as excess spread (or net interest income less charge-offs) is typically tied to securitization transaction covenants.

Second, tighter funding conditions will test shadow banks running structural maturity or liquidity mismatches. Scarcer market liquidity and higher yields will heighten refinancing risk for fincos and securitization transactions. So far, this risk has remained broadly muted, as most shadow banks, like many other corporate issuers, took the opportunity to refinance their debt and lengthen their maturity profile when liquidity was abundant and interest rates low. As time passes, however, scarcer, and higher-cost funding will become more of a challenge for these entities. Tighter financing conditions and rising interest rates also led to net outflows and a lower value of managed assets for investment funds in 2022. So far, this decline has not significantly constrained liquidity, but the decline in market liquidity due to normalizing monetary policy still has some way to go.

Third, normalizing monetary policy is likely to result in heightened financial markets volatility, as central banks react to new inflation and growth data. Market price volatility can seriously affect derivative prices, triggering massive margin calls for counterparties. Although we believe that the authorities have addressed the most egregious market risk sources since the global financial crisis, higher margin requirements can transform counterparty credit risk into liquidity risk in periods of market stress, potentially putting significant pressure on shadow banks with weaker liquidity and risk-management practices.

This kind of situation occurred at the end of September 2022, when U.K. pension funds faced a crisis triggered by their liability-driven investments. The sharp fall in the value of U.K. government bonds created a sudden liquidity squeeze for these pension funds. Although rising long-term yields are positive for their funded status, U.K. pension funds had entered interest rate derivative transactions to hedge against declining interest rates. Rising yields plunged the value of these derivatives, triggering margin calls. Some pension funds were forced to sell U.K. government bonds to meet these calls, which exacerbated the rise in long-term yields. The Bank of England halted this negative spiral by announcing measures to backstop the market by temporarily acting as a buyer of last resort for the U.K. bond market. This allowed U.K. pension funds to reduce their leverage and rebuild their liquidity buffers.

The financial difficulties that Mexican nonbank lenders have faced in the past two years, including some large players' defaults or debt restructurings, illustrate how the risks of higher inflation and rates and lower growth could materialize for shadow banks elsewhere (see box).

Mexican Nonbank Lenders Face A Weakening Economy Amid Restricted Funding Access

NBFIs represent a relatively small part of the Mexican financial sector. We estimate that the sector's total assets--including securitizations of finance companies and two government-related entities--represent about 8% of GDP, which is much smaller than commercial banks' assets, at 43%. Among the main risks that nonbank lenders face relative to traditional banks are a lack of access to central bank funding, lower regulatory oversight, and higher competitive risk due to banks' lower cost of financing. In addition, independent NBFIs do not benefit from a parent's reputation, name, or brand, or from a high level of risk management or governance standards.

The pandemic shock severely affected highly indebted independent NBFIs, reflecting their credit exposure to MSMEs and low-income borrowers, which were hit hardest by the economic fallout. Another factor was the deteriorating global economy, which resulted in tightening financing conditions and market volatility. Moreover, the defaults of two large domestic players--(Alpha Holding S.A. de C.V. (not rated) in 2021 (evidencing accounting errors and governance deficiencies) and Credito Real S.A.B. de C.V. (not rated) in early 2022 (reflecting heightened risk appetite)--significantly eroded international investors' confidence in the sector and undermined other NBFIs' refinancing ability.

NBFIs then attempted to refinance their debt in the domestic funding market. However, in August 2022, the largest independent NBFI, Unifin Financiera S.A.B. de C.V. (not rated), announced that it was seeking a debt-restructuring agreement with all its creditors due to unsustainable funding prospects. With that, the sector struggled to access funding in the domestic funding market as well, and financing conditions became even tighter. At that time, we considered that government-owned development bank funding to the NBFI sector would be insufficient to offset upcoming financing strains. Such funding in the form of guarantees and liquidity in times of market stress previously supported the sector, which we considered to be a stable funding source.

Unlike traditional Mexican banks, which finance their operations mostly through diversified and low-cost deposits, independent NBFIs mainly funded their recent lending activity through global debt issuances (representing up to 50% of the funding base), followed by credit facilities from domestic commercial and development banks (about 30%), with the remainder comprising domestic debt issuances and securitizations. Historically, these NBFIs struggled to widen their range of financing options while extending funding terms and lowering costs. Since 2010, they started issuing senior unsecured debt in the international debt markets, accessing larger amounts of long-term financing at attractive interest rates, given the then-prevailing accommodative financing conditions. However, this resulted in significant financing sources concentration.

January 2023 saw the latest default in the sector, by Mexarrend S.A.P.I. de C.V. ('D'). The outlooks on the other Mexican NBFIs that we still rate--Engencap Holding, S. de R.L. de C.V. ('B+') and Operadora de Servicios Mega S.A. de C.V. SOFOM E.R. ('B')-remain negative, reflecting our view of challenging economic conditions, liquidity pressures amid limited refinancing alternatives, and profitability constraints due to weakening asset quality and rising funding costs for the next 12 months.

In our opinion, shrinking access to the international and domestic debt markets, coupled with a deteriorating global macroeconomic outlook, is increasing Mexican NBFIs' financing risks. Although the range of funding alternatives is narrowing, we believe that secured credit facilities and securitizations could provide relief. In our view, independent NBFIs will now be looking to tap domestic funding to preserve their liquidity positions. Nevertheless, we expect their financial flexibility to be tested amid higher funding costs and lower growth opportunities for the next 12 months. This would weaken their creditworthiness, making them more vulnerable to deteriorating economic and financing conditions.

Reduced Shadow Banking Activity Would Hurt Banks' Profits, But Balance Sheet Exposures To Shadow Banks Are Limited

Traditional banks' business relationships with shadow banks are varied and complex, and we consider that a slowdown in shadow banking activity would have a negative effect on banks' profits, and on their capacity to source funding from shadow banking clients and counterparties.

First, traditional banks may compete with shadow banks for certain lending segments (fincos), certain market-making activities (broker-dealers), or customer savings (investment funds). Tougher liquidity and funding conditions for shadow banks relative to traditional banks may give the latter a competitive advantage. As funding becomes scarcer and more expensive, traditional banks' capacity to collect stable deposits at a low cost will be a credit and business advantage. However, we would expect traditional banks to remain cautious in opening their books to the most risky customers traditionally dealing with shadow banks, especially given the volatile economic and market conditions.

Second, traditional banks partner with several shadow banks to offload risks that they originate but are unable or unwilling to carry and/or to manage their liquidity needs. As such, a reduced funding provided by structured finance vehicles or investment funds will exacerbate already tightening funding conditions for traditional banks. It will also lead to lower fee income, as some traditional banks derive lucrative revenues from shadow banks, for instance from arranging securitization transactions.

Third, traditional banks provide key services and market-making solutions to several investment funds, for example, prime brokerage services to hedge funds or securities firms. These activities result in both fee generation and balance-sheet exposures. While they can be a lucrative profit source, they require prudent management of counterparty credit risks (as illustrated by the collapse of Archegos).

That said, traditional banks' overall balance-sheet exposure to shadow banks is broadly limited, representing 2.6% of total bank assets at end-2021. The funding that shadow banks provide to traditional banks, on the other hand, represents a mere 2.2% of their total assets.

Chart 9

Global Banks' Balance Sheet Linkages With Shadow Banks Appear Limited

Global banks' asset and funding exposures to shadow banks, relative to total banking assets



Covers entities operating in 29 countries reporting to the FSB, which together represent about 80% of world GDP. Source: FSB, S&P Global Ratings.

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■ Asset exposure

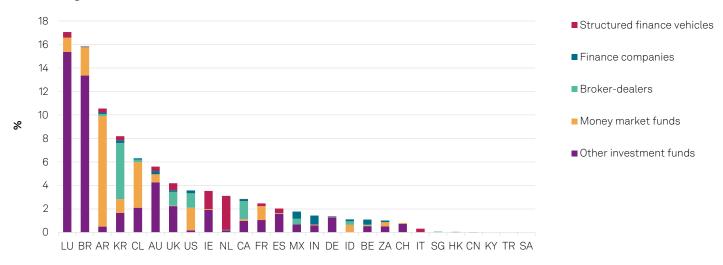
Funding exposure

Traditional banks' reliance on shadow bank funding is particularly prevalent in a handful of countries (see chart 10). In Luxembourg, this reliance is mainly due to the large number of investment funds operating in the country and depositing some of the cash with various custodian banks legally based in Luxembourg. As such, these funds are not a meaningful source of funding for local banks and the real economy.

Chart 10

Shadow Banks Are A Meaningful Source Of Funding Only In A Handful Of Countries

Bank funding from shadow banks relative to total assets, at end 2021



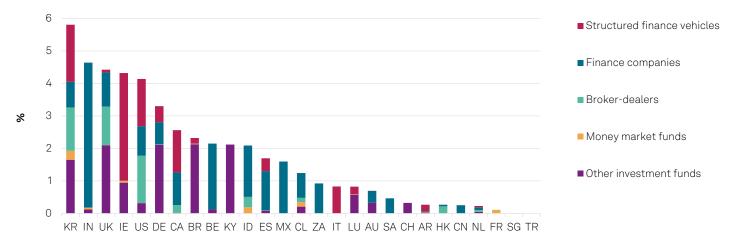
Source: FSB, S&P Global Ratings.

Traditional banks' exposures to shadow banks are more meaningful in countries where shadow banks play a prominent role in financing the real economy (see chart 11).

Chart 11

Banks' Direct Exposures To Shadow Banks Appear Manageable

Bank exposures to shadow banks relative to total assets, at end 2021



Source: FSB, S&P Global Ratings.

Contagion Risk For Traditional Banks Is Manageable

Traditional banks' limited on-balance sheet exposure to shadow banks fails to fully account for certain shadow banks' relevance in the financial system and economy. For instance, brokerdealers play a central role as market intermediaries in several countries, while investment funds manage a large proportion of household savings and hold a large share of government and corporate debt in several advanced economies. Beyond direct exposure via the balance sheet, we see three main indirect contagion channels through which a large shadow bank's failure or a broad deleveraging of the shadow banking sector could affect traditional banks.

Contagion via shared exposures to end clients

Shadow banks intermediate credit, meaning that, on both sides of their balance sheets, they deal with clients who are also depositors and borrowers at traditional banks. Hence, a large shadow bank's failure could lead to banks' clients suffering severe financial losses or losing access to funding. Traditional banks could appear to be relative safe havens in such a scenario, but the damage to their clients and the economy--and the costs that they would incur as a result--would likely outweigh any benefit.

Contagion via financial market losses

Many shadow banks play a pivotal role in financial markets, either via their market-making activities or their large holdings of fixed-income assets, for example, government bonds for money market funds. Hence, a shadow bank's failure or a broad deleveraging of the sector could severely disrupt the financial markets, for instance due to fire sales leading to further asset value declines. Since traditional banks hold similar financial assets, these fair-value losses would also hurt their profits and equity positions.

Contagion via perceived interconnectedness and reputational risk

More broadly, traditional banks remain highly confidence-sensitive, especially those with significant market-making activities or a reliance on market funding. If a country's shadow banking sector experiences acute financial stress, it is likely that traditional banks would, at least temporarily, suffer from perceived interconnectedness. This form of contagion risk--via perceived proximity or reputational risk--should not be underestimated, as previous financial crises have shown.

Recognizing these contagion risks has triggered a series of global regulatory initiatives since the global financial crisis (see box). For example, money market funds domiciled in the EU and U.S. have regulatory frameworks that provide asset managers guidelines on eligible investments, maturity profiles, daily and weekly liquid asset levels, and pricing of instruments amongst other elements to ensure consistency. Although these initiatives have improved transparency and mitigated shadow banking risks for traditional banks, we consider them a work in progress, with some areas less covered and/or the implementation of key standards still lacking in certain jurisdictions. Overall, many shadow banks still have less sophisticated risk-management practices than traditional banks. For instance, most are not subject to regular stress tests. Furthermore, the reduced transparency makes certain players more vulnerable to a potential loss of market confidence, which can have serious consequences for those relying on short-term funding.

Stronger Regulation Enhances Shadow Banks' Transparency And Mitigates Risk

The shadow banking sector's rapid growth and contagion risk in the broader financial system is mainly behind several global regulatory initiatives that aim to:

Enhance the shadow banking sector's transparency

The FSB plays a key role in this through the issuance of regular reports. In addition, the International Organization of Securities Commissions (IOSCO) has issued several policy recommendations relating to securitization transactions' transparency and standardization.

Reduce shadow banks' risk exposure

Since the global financial crisis, the FSB has played a central role, often in conjunction with the IOSCO, in issuing multiple policy recommendations to address shadow banks' vulnerabilities resulting from their leverage or liquidity profiles. A major focus of this policy work was on enhancing money market and open-ended funds' resilience, mainly to reduce their susceptibility to liquidity runs.

Mitigate risks in banks' interactions with shadow banks

The Basel Committee on Banking Supervision (BCBS) is taking a leading role. For instance, the Basel Committee has set higher capital requirements for banks' equity investments in funds, which are now implemented in most jurisdictions except the U.S., China, and Mexico. Furthermore, the BCBS has issued standards for measuring and controlling large exposures, including to shadow banks.

Unlike banks, shadow banks cannot access emergency central bank funding in a stress scenario, and we don't expect governments to use taxpayers' funds to recapitalize a failed shadow bank. Should contagion occur, the authorities could still intervene in the financial markets, for instance to avoid fire sales and negative feedback loops, as the Bank of England did in 2022 at the height of the liability-driven investment crisis. But we expect the bar for such intervention to be very high, meaning that contagion risks to banking systems would need to be imminent and severe. We do not see the failure of most shadow banks, or a broad deleveraging of the shadow banking sector, as likely to meet that bar. This means that traditional banks need to manage the risks emanating from their business with shadow banks, in keeping with supervisory authorities' insistence on the need for banks to manage their counterparty credit risks carefully.

Although we are mindful of the contagion risks that shadow banks pose to traditional banks, we don't currently see them as a major negative rating driver for traditional banks. We believe traditional banks are now more aware of and able to manage counterparty credit risk, having learnt lessons from previous crises. Traditional banks are also more resilient, with higher capital and liquidity ratios, and therefore are generally better prepared to resist financial shocks, including those potentially stemming from shadow banks.

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