

BENEATH THE RESILIENCE: RISING RISKS, UNRESOLVED VULNERABILITIES

Introduction

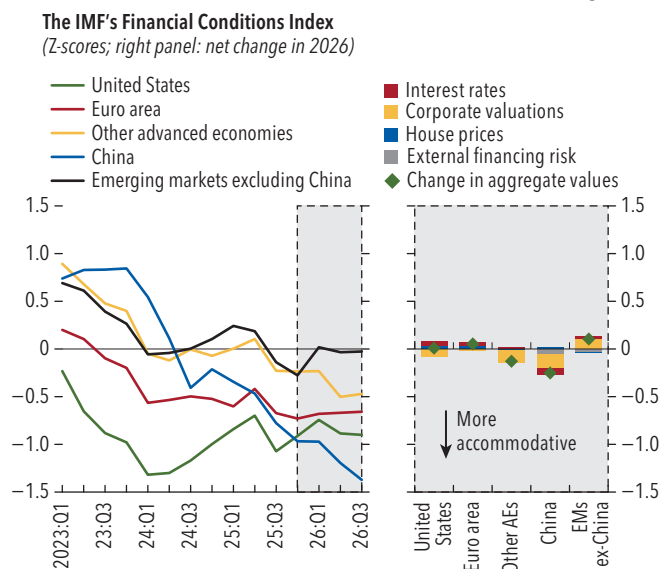
Financial markets have remained resilient since the April 2026 *Global Financial Stability Report*. Economic growth has held up and corporate earnings have been strong, particularly among firms related to artificial intelligence (AI). Likely responding to higher inflationary pressures stemming from the energy shock from the war in the Middle East, 14 of 33 major central banks have hiked policy rates since the second quarter of 2026, up from just 2 in the first quarter.¹ However, inflation has been more contained than initially feared, leading to only a modest rise in policy rates. Financial conditions tightened somewhat in the first quarter, but the subsequent tailwind from corporate valuations more than offset the tightening from higher interest rates, leaving overall financial conditions accommodative on net (Figure 1.1). Non-China emerging market economies are a notable exception, with financial conditions tightening this year to date, mostly in the first quarter.

The chapter identifies three salient risks ahead: an AI-driven market correction, a sharp rise in sovereign bond yields, and cyber threats. These risks are plausible near-term catalysts for a sharp tightening of financial conditions and market turmoil, selected based on the likelihood of their triggering shocks and the severity of their potential market impact. Weaker or less durable investment and profitability in AI would not only undermine a key engine of growth that has helped offset the economic drag from the war in the Middle East and heightened policy uncertainty, but also lead to a correction in AI-linked equities and credit, which now account for a large share of both markets. Inflationary

¹These 33 central banks are the *Reserve Bank of Australia*, *Banco Central do Brasil*, *Bank of Canada*, *Banco Central de Chile*, *Banco de la República*, *Hrvatska narodna banka*, *Czech National Bank*, *Central Bank of Egypt*, *European Central Bank*, *Bank of Ghana*, *Magyar Nemzeti Bank*, *Reserve Bank of India*, *Bank Indonesia*, *Bank of Japan*, *Bank of Korea*, *Bank Negara Malaysia*, *Banco de México*, *Reserve Bank of New Zealand*, *Norges Bank*, *State Bank of Pakistan*, *Banco Central de Reserva del Perú*, *Bangko Sentral ng Pilipinas*, *Narodowy Bank Polski*, *Banca Națională a României*, *Central Bank of the Russian Federation*, *South African Reserve Bank*, *Sveriges Riksbank*, *Swiss National Bank*, *Bank of Thailand*, *Central Bank of the Republic of Türkiye*, *National Bank of Ukraine*, *Bank of England*, and the *US Federal Reserve*. Some central banks that hiked rates in the second or third quarter of 2026 did so more than once. Italicized central bank names have tightened policy rates since the start of the second quarter of 2026.

Figure 1.1. Global Financial Conditions across Regions

Financial conditions have remained accommodative, on net, across regions.



Sources: Bloomberg Finance L.P.; Dealogic; EUROPACE AG/Haver Analytics; national data sources; and IMF staff calculations.

Note: The Financial Conditions Index incorporates various pricing indicators. For calculation details, see Online Annex 1.1 in the October 2018 *Global Financial Stability Report*. Indices could differ from other FCIs, depending on the variables included and aggregation methodologies. Changes are calculated at the component level and aggregate values could differ marginally from headline FCI. AE = advanced economies; EMs = emerging markets; FCI = Financial Conditions Index.

pressures from a prolonged war in the Middle East and persistent fiscal concerns can further drive up yields in a fragile bond market, repricing assets broadly through higher discount rates. Severe cyber incidents could undermine market confidence and disrupt critical financial market infrastructure and operations.

These risks by themselves do not necessarily threaten financial stability but could become systemic—impairments to financial intermediation and credit provision, with serious negative economic effects—if they are amplified by underlying vulnerabilities. This chapter provides assessments on such key vulnerabilities. Global stress tests suggest that the banking system would remain adequately capitalized in a bond yield spike and AI-led correction scenario, although a significant share of vulnerable institutions would emerge, and some banks' growing interconnectedness with nonbank financial intermediaries (NBFIs) could prove a source of fragility. Emerging market vulnerabilities stem from eroding external buffers in some economies

Table 1.1. Summary of Financial Stability Risks and Vulnerabilities

	Trend	Summary Assessment	Policy Recommendations
Salient Risks That Could Sharply Tighten Financial Conditions and Catalyze Market Turmoil			
Artificial Intelligence (AI)-driven market correction	About the same	<i>Triggering shocks: weaker or less durable AI investments and profitability</i> Impact could be significant given the growing size of AI-related assets. While the profitability of core AI firms has been strong and valuation pressure has eased, leverage is rising in the AI ecosystem.	Contain leverage used by investors to gain exposures to AI where excessive, including limits on derivatives, exchange-traded products, and margin loans. Strengthen system resilience using tools such as sector capital requirements, concentration limits, and capital buffers, as needed.
Sharp rise in sovereign bond yields	Worse	<i>Triggering shocks: resurgent inflation, term premium rises due to fiscal shocks</i> Impact could be severe given the foundational importance of sovereign bond markets. High debt and rollover risks remain unresolved, making the bond market susceptible to more frequent fiscal and inflation shocks. On the other hand, market functioning has been orderly.	Put public debt on a sustainable path and improve bond market structure, like central clearing.
Cyber threats	Worse	<i>Triggering shocks: successful cyberattacks on critical financial institutions or market infrastructure</i> Impact could be severe as rapid digitization has increased the attack surface. Frontier AI models could be used in both attacks and defense.	Build specialized cyber capacity and enhance incident reporting, third-party risk oversight, and operational resilience.
Structural Vulnerabilities That Could Amplify the Risks			
Weak banks in a stress scenario	About the same	The global banking system remains resilient in an adverse scenario, but vulnerable institutions remain and linkages of some banks to NBFIs have deepened.	Ensure prudent provisioning and robust buffers, monitor interconnections with NBFIs, and implement international standards.
Emerging market buffer erosion and alternative financing	Worse	Foreign exchange reserve buffers of weaker emerging markets have eroded, and frontier economies are increasingly using less transparent and alternative forms of financing.	Rebuild buffers, ensure policy mix is consistent with the IMF Integrated Policy Framework, and ensure robust disclosure of alternative borrowing sources.
Liquidity mismatches of institutional investors	Worse	Insurer and pension fund holdings of illiquid assets have increased and have become more concentrated, with liquidity mismatches rising.	Monitor and stress test liquidity gaps, align fund liquidity with underlying asset liquidity.
Leverage and liquidity risks in private credit	About the same	Default rates have fallen, but liquidity pressure is elevated and borrowers are more leveraged.	Strengthen surveillance of interconnected risks and address excessive exposures of regulated entities to private credit.
Household debt burden	Better	Debt burden has eased and households have sizable assets, but tighter financial conditions could erode wealth.	Use macroprudential tools to ensure ongoing household resilience.

Source: IMF staff assessment based on the findings in this chapter.

Note: IMF staff's assessment of trends refers either to the period since the April 2026 *Global Financial Stability Report* or when the risk or vulnerability was last analyzed by the report. Risks and vulnerabilities are not always distinct; for example, bond market fragilities could reflect underlying vulnerabilities like the use of leverage in cash-futures basis trades by NBFIs. See Box 1.1 for details on the risks and vulnerabilities framework. AI = artificial intelligence; NBFIs = nonbank financial intermediaries.

and growing reliance on alternative, often opaque, financing among frontier economies. Vulnerabilities also persist among institutional investors through rising liquidity mismatches and concentrated investments, particularly in private credit direct lending through higher leverage and liquidity mismatches, which could emerge alongside banking sector stress and interact in nonlinear ways, magnifying systemwide strains. On the positive side, household debt remains relatively low in aggregate. Box 1.1 documents the definitions of risks, vulnerabilities, and systemic risk, as well as the selection process and the assessment approach.

Against this backdrop, the chapter argues that financial stability risks remain elevated. Resilient markets face rising risks and unresolved vulnerabilities ahead. Fiscal and monetary policy space to mitigate the economic consequences of financial instability is more limited today than it was during much of the past two decades, given high debt levels and inflation that remains above central bank targets in many jurisdictions. Therefore, policies that prevent the crystallization of risks and the buildup of vulnerabilities should be pursued proactively. Table 1.1 presents the risks and vulnerabilities the chapter analyzes and IMF staff's

assessment of their trends. The last section of the chapter discusses specific policy recommendations.

Three Salient Risks to Financial Markets

Artificial Intelligence-Driven Market Correction

AI has become an important source of support for the global economy and financial markets. Spending on data centers, semiconductors, and related infrastructure has supported broader economic activity and has helped offset possible negative effects from the war in the Middle East and overall policy uncertainty (see the October 2026 *World Economic Outlook*). Firms at the center of the AI value chain have experienced strong equity price appreciation as they have delivered exceptional earnings growth. As a result, valuation pressure measures such as forward price-to-earnings ratios have eased in several equity markets (see Background Analysis 1.1, “Rising Leverage in the AI Ecosystem”).

Weaker or less durable AI investments and profitability could be a shock that triggers a market correction. Growing evidence suggests that AI capabilities can be delivered at lower investment levels (Nicol-Schwarz and Vania 2026) or that potential economic gains may not be as large as expected. The *World Economic Outlook* considers a scenario whereby an unwinding of AI investment reduces global GDP, investment, and consumption (through wealth effects) by as much as 0.4, 1.3, and 0.6 percent, respectively, by 2028. Market participant surveys increasingly identify the associated market correction as a major risk to financial markets.²

Leverage could exacerbate this shock. AI-related firms and their investors use three growing sources of leverage. First, since 2024, hyperscalers’ share of global investment-grade bond issuance has increased to 10 percent from less than 1 percent.³ Hyperscalers have strong earnings from their core businesses. Yet, free cash flows are rapidly declining as hyperscalers try to sustain large AI investment needs, leaving debt financing increasingly necessary (Figure 1.2, panel 1; see also Background Analysis 1.1, “Rising Leverage in the AI Ecosystem”). Other types of AI firms, like

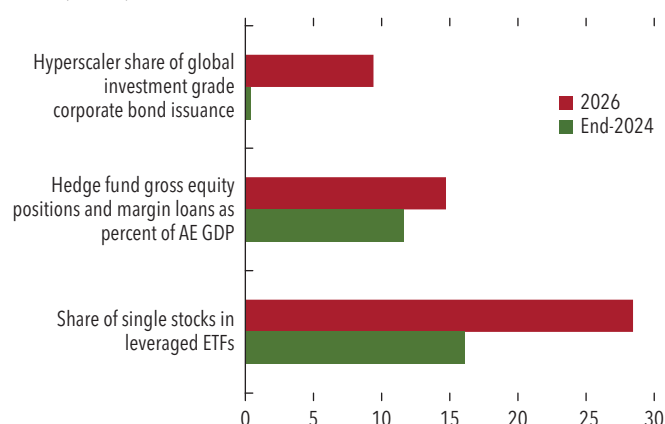
²See the Bank of America’s Global Fund Manager Survey conducted in August 2026 (Bank of America 2026). Respondents identified the “AI boom” as the most important risk.

³Investment-grade bond issuance accounted for 40 percent of total bond issuance—including sovereign bonds—in the euro area, the United Kingdom, and the United States on a duration-weighted basis in the first quarter of 2026. Large AI-related investment-grade bond issuance could therefore compete with sovereign bond issuance. Overall, quarter-on-quarter credit growth in the private nonfinancial sector has turned positive in the first quarter of 2026 for the first time since 2023, based on data from the Bank for International Settlements.

Figure 1.2. Leverage and Debt Used in Artificial Intelligence

Leverage throughout the AI ecosystem has increased.

1. Equity Leverage and Debt related to Artificial Intelligence (Percent)



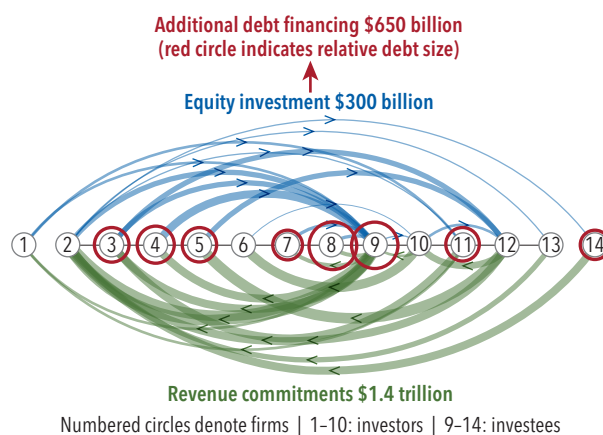
Sources: Bank for International Settlements; Bloomberg Finance L.P.; Dealogic; Federal Reserve Bank of New York; Financial Industry Regulatory Authority; Japan Exchange Group; Korea Financial Investment Association; Office of Financial Research; Shanghai and Shenzhen Stock Exchange; and IMF staff calculations.

Note: “Hyperscalers” is based on Bloomberg’s definition (massive cloud computing and data center operators). Margin loans data cover China, Japan, Korea, and the United States. Hedge fund gross equity positions are notional exposures. The 2026 data are as of July for leveraged ETFs and hyperscaler shares and June for hedge fund statistics. AE = advanced economies; AI = artificial intelligence; ETFs = exchange-traded funds.

AI circular financing: Equity and debt financing in exchange for future revenue commitments.

2. Equity Investment, Debt, and Revenue

(Size of lines and bubbles indicate dollar amount)



Sources: Bloomberg Finance L.P.; Chen, Gautam, and Wu 2026; and IMF staff calculations.

Note: Each number is a firm engaged in AI circular financing. Firms 1 to 10 are investors, firms 9 to 14 are investees, with some overlap. Blue and green lines indicate the size of equity investments and future revenue commitments, respectively. Red circles indicate debt issued as part of the circular deals. About \$320 billion of the \$650 billion debt is taken on by investees in circular financing deals, including debt backed by investor guarantees, contingent financing, and other off-balance-sheet debt. AI = artificial intelligence.

neocloud operators, have higher debt burdens and lower profitability, raising the possibility of weak links in the ecosystem.⁴ Second, also since 2024, hedge funds' gross equity positions plus equity margin loans have grown from 10 percent to about 15 percent of advanced economy GDP, reflecting an increase in levered positions in AI-related equities. Third, over the same period, the share of single stocks in leveraged exchange-traded funds has increased to 28 percent from 16 percent, as retail investors have used these funds to gain levered exposures to AI stocks. These growing sources of leverage heighten the potential for forced selling and surges in equity volatility and credit spreads in the event of lackluster and less durable AI investment and profitability.

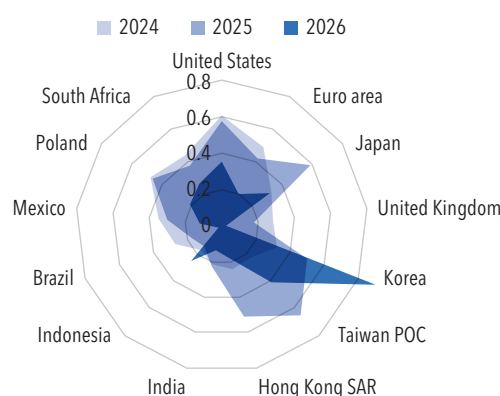
Circular financing further reinforces leverage-driven interdependencies among AI firms. Fourteen publicly disclosed transactions since 2023 account for approximately \$300 billion of aggregate equity investments led by hyperscalers in financially weaker AI firms, supplemented by \$650 billion in debt, in exchange for \$1.4 trillion in future revenue commitments through services or chip orders (Figure 1.2, panel 2), with a significant concentration of financing and revenue promises in a handful of investees. While investors (firms 1 to 10) are generally financially sound, distress at key investee firms could present significant “wrong-way risk” to the AI ecosystem: Equity and debt investments in the firms depreciate in value precisely when future revenue streams tied to them are impaired.

The consequences of an AI correction could be global, with some jurisdictions more sensitive than others. A sharp slowdown in AI investment could weaken earnings, expose the accumulated leverage by making repayments more difficult for firms or equity investors, and weigh on equity prices. Advanced Asian equity markets that exhibit high betas to a proxy of global AI equity returns will likely suffer the most (Figure 1.3, panel 1). In comparison, the euro area and the United Kingdom appear to have low betas, as do most emerging markets. Most of these markets' betas to AI have moderated this year. But even for jurisdictions with low equity market beta to AI, stress in AI could be transmitted through the sharp increase in holdings of US equities from 2022 to 2026, much

Figure 1.3. Equity Market Exposures to Artificial Intelligence

Equity market sensitivity to AI varies across jurisdictions ...

1. Equity Return Beta to the Global AI Index



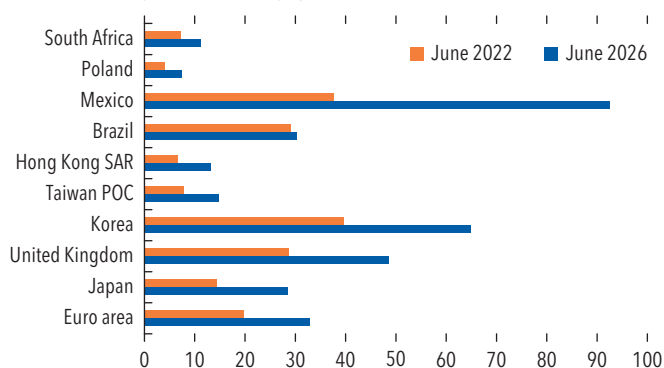
Sources: Bloomberg Finance L.P.; and IMF staff calculations.

Note: “Global AI Equity Returns” is proxied by Indxx Artificial Intelligence and Big Data Index (IAIQ). Jurisdictions' stock indices are the S&P 500 (United States), Stoxx 50 (euro area), TOPIX (Japan), FTSE (United Kingdom), KOSPI (Korea), TAIEX (Taiwan Province of China), Hang Seng (Hong Kong SAR), NIFTY 50 (India), JSX Composite (Indonesia), Ibovespa (Brazil), S&P/BMV (Mexico), WIG20 (Poland), and FTSE/JSE (South Africa). Betas are regression coefficients from weekly regression of jurisdictional index returns on IAIQ returns by year.

... but many have increased their exposures to US equities, a sign of AI chasing.

2. US Equity Holdings across Jurisdictions

(Percent of jurisdictions' foreign portfolio investment assets)



Sources: Coordinated Portfolio Investment Survey; Treasury International Capital System (TIC); and IMF staff calculations.

Note: Holdings of US equities are from TIC's SLT table. Portfolio investment assets by residents are from International Investment Positions data. The two data sources may not capture the same sources, as TIC data are based on US securities custodian reporting. AI = artificial intelligence.

of which reflect greater allocations to hyperscalers and other AI-related firms (Figure 1.3, panel 2).

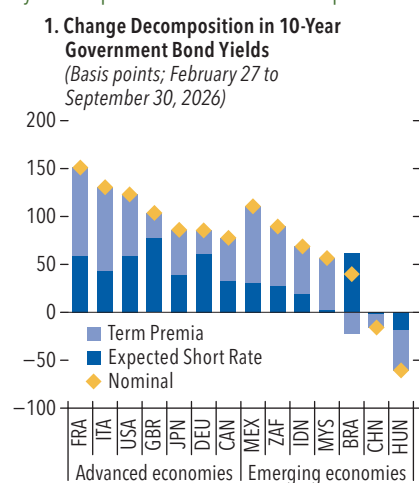
A Sharp Rise in Sovereign Bond Yields

Global sovereign bond yields have risen, driven by higher energy prices and increases in term premiums. Since the beginning of the war in the Middle East,

⁴Chen, Gautam, and Wu (2026) conduct an analysis on the financial health of 74 firms in the AI ecosystem and find that many firms upstream and downstream from the hyperscalers have weaker balance sheets. See also Figure 1.17 of Chapter 1 of the April 2026 *Global Financial Stability Report*.

Figure 1.4. Sovereign Bond Market Fragilities

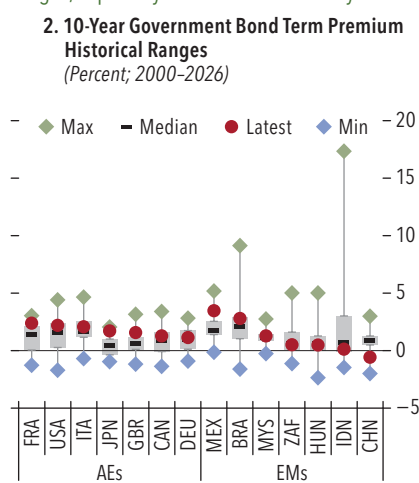
Increase in longer-term yields has been driven by both expected short rate and term premium.



Sources: Bank of England; Bloomberg Finance L.P.; US Federal Reserve; and IMF staff calculations.

Note: Regression-based term premium model used. The exact model (i.e., data window and other specifications) used for a given country is selected based on minimizing yield curve pricing errors. Uncertainty bands around estimates may vary substantially across time, depending on market liquidity and other conditions. Data labels in the figure use International Organization for Standardization (ISO) country codes.

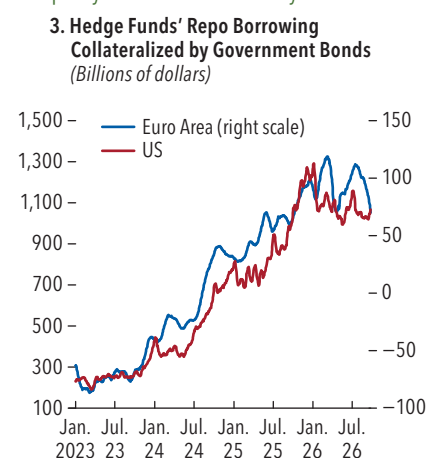
Term premiums are at the upper end of historical ranges, especially for advanced economy bonds.



Sources: Bank of England; Bloomberg Finance L.P.; US Federal Reserve; and IMF staff calculations.

Note: Ranges of estimates are based on daily data since the start of 2000 or the start of data series. Data availability for Brazil starts in March 2007, Mexico August 2003, Indonesia May 2003, Hungary March 2001, Malaysia September 2001, and China April 2004. Shaded regions show the interquartile range. Data labels in the figure use International Organization for Standardization (ISO) country codes. AEs = advanced economies. EMs = emerging markets.

Cash-futures basis trade in government bonds has partly unwound in an orderly manner.



Sources: Banque de France (2026); Office of Financial Research (OFR); and IMF staff calculations.

Note: "US" refers to aggregate daily repo volumes transacted via the Fixed Income Clearing Corporation's sponsored repo platform, in 10-day moving averages. "Euro Area" refers to euro area's net repo positions collateralized by European Government bonds, based on securities financing reporting. Repo = repurchase agreement.

increases in 10-year bond yields have been driven by both higher-than-expected short-term rates—reflecting expectations for higher inflation and a tighter monetary policy stance—and higher term premiums demanded by investors (Figure 1.4, panel 1). Higher expected short-term rates have driven yields in most advanced economies, while term premiums have played a larger role elsewhere, including in emerging markets. Across economies, the rise in term premiums reflects compensation for several risks, most notably renewed concerns about persistent fiscal deficits and high government debt levels (see April 2026 *Fiscal Monitor*), and the associated forthcoming increase in bond supply. For emerging market economies, higher term premiums may have resulted from spillovers from higher yields in advanced economies. More recently, surging AI-related debt issuances that may compete with sovereign bonds for investor demand has also been cited as an additional source of pressure on bond markets.⁵ Current term premiums are at the upper end

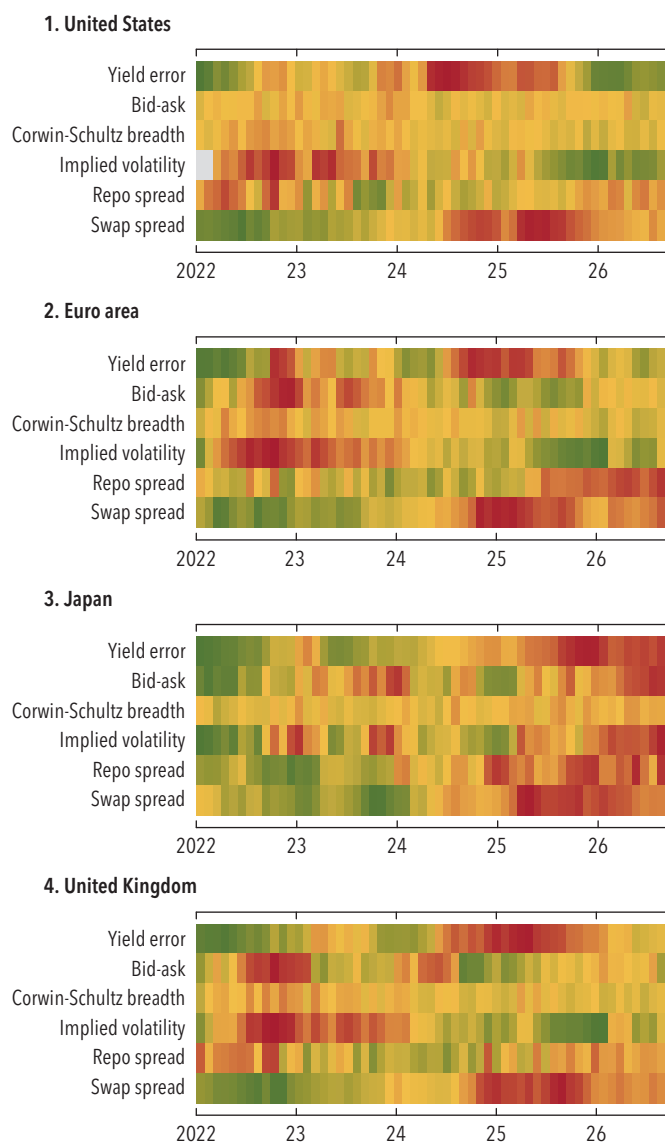
of historical ranges, especially for advanced economy bonds (Figure 1.4, panel 2).

Bond markets are susceptible to further rises in energy prices reigniting inflation and forcing the tightening of monetary policy. This downside scenario could propagate through several channels, beyond the need for higher monetary policy rates to rein in inflation. First, at higher inflation and policy rates, rollover risks would increase for governments that have recently shortened the maturities of their debt, potentially raising debt burdens and term premiums. Second, the growing presence of price-sensitive investors, including foreign investors, investment funds, and households and other funds, may amplify upward pressure on term premiums by selling longer-term bonds as energy prices and inflation rise. These two channels have been documented in the April 2026 *Global Financial Stability Report*. Third, market liquidity may also deteriorate when volatility rises, as the bond market still depends on dealers for intermediation and constraints on their balance sheets could scale back activities. All three channels could abruptly raise bond yields through term premium shocks; the *World Economic Outlook* analyzes

⁵See, for example, "Are Big Tech Bonds Crowding Out the US Treasury?" Financial Times, September 27, 2026, and PIMCO Perspectives (Seidner and Dhawan 2026).

Figure 1.5. Bond Market Liquidity Metrics
(Percentile rank heatmap, history = 2022–26)

Liquidity metrics have been stable in the euro area, United Kingdom and United States.



Sources: Bloomberg Finance L.P.; Haver Analytics; LSEG; and IMF staff calculations.

Note: Green = favorable liquidity (0th percentile of 2022-to-date own-history range); red = unfavorable (100th percentile); direction pre-adjusted per metric (Swap spread inverted) so red always means worse. Grey = no data that month. Monthly mean of the market-cap tenor-weighted daily aggregate (2y/5y/7y/10y/30y); Repo Spread is a simple mean of three repo-curve legs. Cell values are intentionally not displayed on the swatches—see ChartData for the numbers—so the sheet reads as close as possible to the plotted chart. See ReadMe for full scope and vintage.

macroeconomic outcomes under a scenario featuring such a shock.

That said, some fragilities in bond markets have improved. Repurchase agreement (repo) borrowing by hedge funds collateralized by sovereign bonds in the euro area and the United States—a proxy for the size of cash-futures basis trades—has partly unwound without notable pressure in repo markets (Figure 1.4, panel 3); nevertheless, the substantial leverage still deployed in these trades continues to leave the bond market susceptible to a disorderly unwind. Market liquidity metrics have improved for the euro area and the United Kingdom, especially yield curve fitting errors and market breadth metrics (Figure 1.5). Market liquidity metrics have continued to deteriorate in the Japanese government bond market, driven by yield volatility that has risen since the end of yield curve control and amid ongoing monetary policy normalization, and wider bid-ask spreads, especially for long-term bonds.⁶ In the US Treasury market, yield curve fitting errors, implied volatility, and bid-ask spreads point to favorable liquidity conditions in recent months. Finally, fiscal initiatives have reduced sovereign funding spreads in some economies (see Box 1.2 for a case study on such a program in the euro area).

Other fragilities may have worsened. Rollover risk remains high and could be exacerbated by debt management strategies that replace long-term debt with short-term debt or available cash if done on a large scale. Furthermore, historically high government debt levels—the root cause of a more fragile bond market—remain unresolved, and persistently high fiscal deficits in major economies continue to add pressure. On balance, these developments suggest that bond market risks have worsened since the April 2026 *Global Financial Stability Report*.

A crystallization of these fragilities could lead to market turmoil. Given government bonds' foundational importance to financial markets, a sharp rise in bond yields would depreciate asset valuations through higher discount rates—including on AI-related assets—and erode the value of government bonds used as collateral in derivatives and other financial transactions.

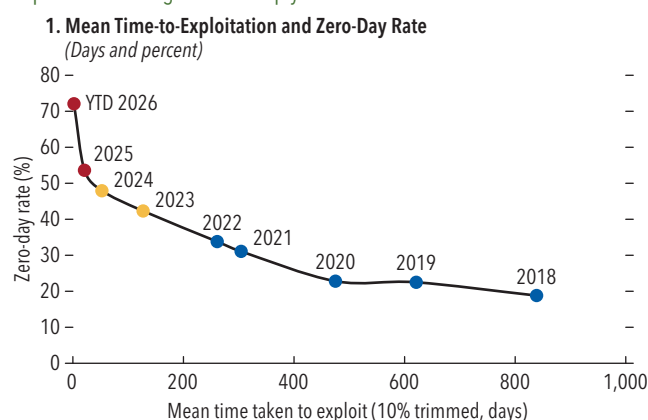
Cyber Threats

As finance becomes more digital and interconnected, cyber disruptions have emerged as a growing source

⁶Meanwhile, the Bank of Japan's bond market survey in August 2026 shows that the difference between the shares of respondents' viewing bond market functioning as "high" and "low" stood at minus 12 percentage points, the highest level since 2016.

Figure 1.6. Cyber Defense Is Getting More Difficult

The time between the publication of vulnerabilities and their confirmed exploitation has tightened sharply.



Source: zerodayclock.com.

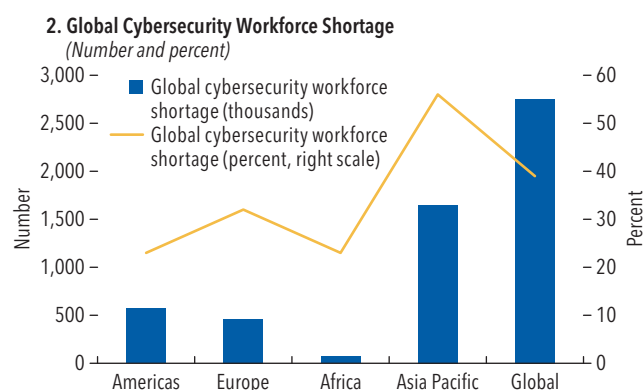
Note: "Time to exploit" measures the gap between common vulnerabilities and the public disclosure and first confirmed exploitation of exposures. The zero-day rate is the percentage of exploited common vulnerabilities and exposures where exploitation occurred before or on the day of disclosure.

of systemic risk. A major attack affecting payments, trading, or access to deposits could cause immediate losses and undermine confidence. If an operational disruption strikes a critical node, such as a major bank or financial market utility, cloud provider, or software vendor, it could quickly evolve into a broader confidence shock or impairment of the provision of credit and financial services, transmitting stress through both operational and financial linkages.

Three trends are driving these risks. First, rapid digitalization has expanded the attack surface. Financial institutions depend increasingly on interconnected technologies, cloud services, third-party providers, and real-time payment and settlement systems. Second, growing reliance on a small number of critical technology providers, together with increasingly complex and often opaque third-party dependency chains, has increased concentration risk and created potential common points of failure across financial institutions. Third, cyber threats are becoming more sophisticated. State-sponsored actors, ransomware groups, and insiders now have access to increasingly powerful tools, including frontier AI models that have demonstrated strong capabilities in network-attack simulations (Adrian and others 2026).

These developments are making cyber defense more challenging. The number of reported vulnerabilities has risen sharply as the time between the disclosure and exploitation of vulnerabilities has compressed

Cybersecurity progress is constrained by a persistent shortage of talent.



Source: Global Cybersecurity Forum.

Note: The shortage is measured as a share of the current workforce. The study covers 48 countries and estimates workforce demand and supply using five archetypes based on cyber maturity and macroeconomic indicators, adjusted for industry and firm size. See the Global Cybersecurity Forum (2024).

significantly. In more than 70 percent of cases thus far in 2026, software providers have had almost no time to patch vulnerabilities before exploitation began, a jump of 20 percentage points from just a year ago (Figure 1.6, panel 1). At the same time, regions such as Asia face significant shortages of cybersecurity talent (Figure 1.6, panel 2). AI can help address shortages of cyber expertise through stronger monitoring, threat detection, and automated response. But AI also increases the urgency of strengthening foundational cyber resilience, including cyber hygiene, incident reporting, crisis preparedness, and oversight of critical third-party providers, particularly in emerging markets where capacity constraints remain significant.⁷

Vulnerabilities and Trends That Could Amplify Risks

Global Banks Remain Resilient, but a Significant Share of Weak Institutions Remain

Global banking stress tests demonstrate that most banks remain resilient. The IMF's 2026 Global Bank Stress Test evaluates banks' ability to withstand an adverse scenario that combines weaker-than-expected

⁷Emerging markets face similar exposures to cyber threats, but often with fewer defensive resources, more limited supervisory capacity, and less access to frontier tools. See Adrian and others (2026) and Kopp, Kaffenberger, and Wilson (2017).

productivity gains from AI with higher interest rates amid bond market fragilities and energy supply disruptions, in line with two of the key risks analyzed in this chapter. It assumes that a reassessment of the productivity gains expected from AI triggers a sharp correction in technology valuations, generating broad spillovers across global financial markets. Together with disruptions in repo and bond markets—short- and long-term bond yields rise by 150 and 300 basis points, respectively—this sharply tightens financial conditions, raising borrowing costs across sectors and economies. As a result, global real GDP growth falls about 3 percentage points below baseline in the first two years of the scenario and only partly recovers thereafter. Global unemployment rises 3.5 percentage points, while inflation increases by over 4 percentage points by 2027 (see Background Analysis 1.2, “2026 IMF Global Banking Stress Test”). Under this scenario, the global banking system’s aggregate Common Equity Tier 1 (CET1) ratio declines by about 150 basis points to approximately 11.5 percent. This remains well above regulatory minimums, with the decline driven primarily by credit impairments partly offset by stronger net interest income.

However, aggregate resilience masks pockets of weakness. Banks representing 22 percent of global banking assets are classified as weak—weak banks being those with post-stress CET1 ratios falling below 7 percent. Moreover, this share has increased since the 2025 stress test, which found that weak banks accounted for 18 percent of global banking assets. While banks’ starting capital positions were broadly unchanged, the more severe energy supply shock and sharper rise in long-term government bond yields in the 2026 scenario generate substantially larger losses in some jurisdictions, leading to greater capital depletion (Figure 1.7, panel 1).

Stress test outcomes vary considerably across regions. In North America, the increase in the share of weak banks is driven by market risk, as a sharp increase in long-term government bond yields triggers asset valuation losses, particularly in a small number of large banks. In Asia, the share of weak institutions reflects significant capital depletions in oil- and gas-importing economies.⁸ By contrast, banks in most other regions,

⁸Banks in oil- and gas-importing economies are projected to face higher short-term interest rates, reflecting a de-anchoring of inflation expectations amid elevated oil and gas prices. Higher short-term rates, combined with contracting real GDP and sharply rising unemployment, have amplified the credit-risk-induced and loan-loss-induced capital shortfalls in these economies.

particularly emerging markets, experience more limited capital depletion, supported by stronger net interest and fee income generation (see Background Analysis 1.2, “2026 IMF Global Banking Stress Test”).

Banks’ NBFIs exposures appear manageable but are growing. In the United States, loans to NBFIs increased by 18 percent in 2026, while exposures to private equity and private credit firms rose by 30 percent. Although these exposures do not appear to pose systemic risks on their own, they could become a meaningful source of losses under severe stress. In a scenario whereby bank losses equal 20 percent of their exposures to private assets, aggregate CET1 capital would decline by about 2 percentage points, and banks representing less than 1.6 percent of assets in the sample would see their Tier 1 capital ratios fall below 7 percent (Figure 1.7, panel 2). In the European Union and the United Kingdom, under the same shock, losses represent 1 percentage point of CET1 capital and no banks fall below the 7 percent Tier 1 threshold. Although banks appear well positioned to absorb losses from stand-alone NBFIs and private asset stress events, vulnerabilities could be amplified if such losses were to coincide with a severe economic downturn, as many banks with large NBFIs exposures are also among those experiencing the largest capital declines under the adverse global stress test scenario.

Eroding Buffers in Some Emerging Markets

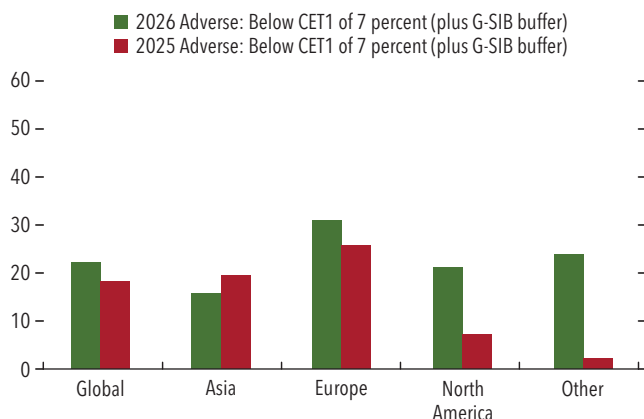
Emerging market and frontier economies have proved relatively resilient during recent shocks as they deployed policy measures, with risk premiums retracing to levels last seen before the war in the Middle East. The widening of emerging market risk premiums at the outbreak of the war was concentrated mainly in currencies, local rates, and equities but premiums have now retraced to historically compressed levels (Figure 1.8, panel 1). Emerging market authorities have deployed a broad range of measures to cushion the energy shock. Targeted fiscal support has helped contain the pass-through of energy prices to inflation and eased pressure for additional monetary tightening, and monetary policy action alongside targeted currency interventions and capital flow measures have limited near-term financial stress.

Partly because of these measures, policy buffers have weakened in some cases. Measures to cushion the energy shock have weighed on fiscal space and reserve buffers, leaving less room to maneuver if energy price pressures intensify or global finan-

Figure 1.7. The Global Share of Weak Banks Is Significant

A resilient global banking sector in aggregate masks pockets of vulnerabilities.

1. Share of Total Assets in Weak Banks
(Percent of bank assets)

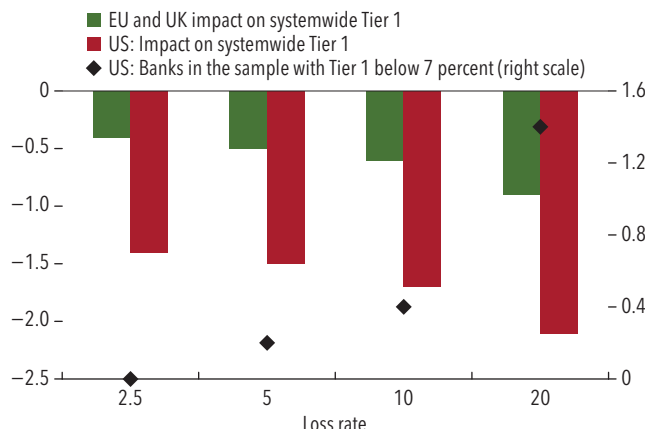


Sources: Fitch Connect; Fitch Solutions; and IMF staff calculations.

Note: The analysis includes 665 banks excluding foreign subsidiaries across 29 countries. The "adverse" scenario using the 2026 stress test features stagflation, an energy supply disruption, higher interest rates, and weaker-than-expected artificial intelligence gains. CET1 = Common Equity Tier 1 ratio; G-SIB = global systemically important bank.

Banks appear well positioned to withstand losses from stand-alone private assets stress events.

2. Sensitivity Analysis of Banks' Private Assets Exposures
(Percentage points, percent of total assets)



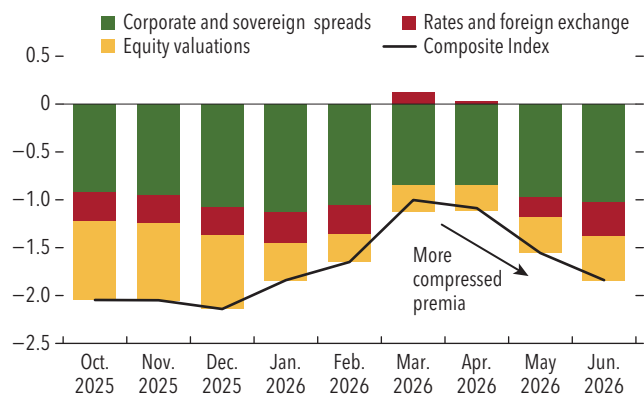
Sources: Consolidated Reports of Condition and Income; S&P Capital IQ Pro; and IMF staff calculations.

Note: The chart is based on 2026 first quarter data for 131 banks in the United States and considers exposures to private equity and business credit intermediaries. For the European Union and the United Kingdom, the chart is based on 13 major banks and considers exposures to private equity and private credit as reported by them.

Figure 1.8. Emerging Market Risk Premiums and Foreign Exchange Reserves

Emerging market risk premiums are back to compressed levels across asset classes.

1. Emerging Market Composite Risk Index
(Z-scores since 2015)

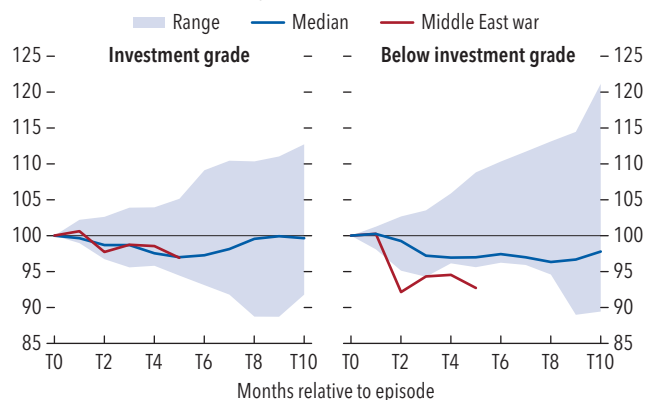


Sources: Bloomberg Finance L.P.; and IMF staff calculations.

Note: The Composite Index is based on aggregating 15 measures of premiums across a sample of 14 countries. See Figure 1.6 of the April 2026 *Global Financial Stability Report* for the methodology.

Below-investment-grade emerging markets experienced sharper official reserve drawdowns from weaker starting positions.

2. Cumulative Changes in Official Reserves
(Index, month before the episode = 100)

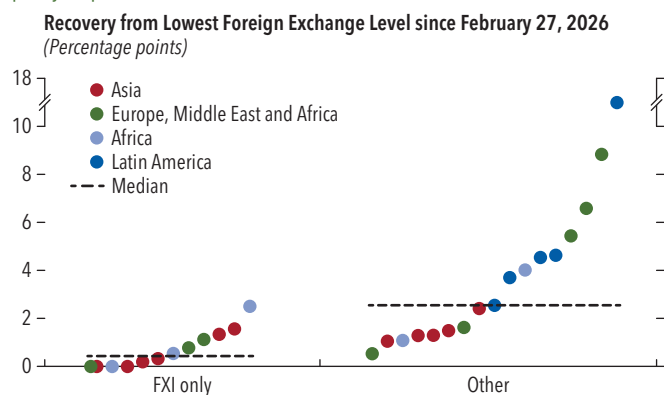


Sources: Bloomberg Finance L.P.; IMF, International Reserve and Foreign Currency Liquidity dataset; and IMF staff calculations.

Note: Historical episodes include the April 2025 US tariff announcement, February 2022 Russia-Ukraine war, February 2020 COVID-19 outbreak, February 2018 "Volmageddon," August 2015 renminbi devaluation, and May 2013 "taper tantrum." The sample includes 13 investment-grade and 21 below-investment-grade countries and is based on monthly data. The median reserve adequacy ratio as of June 2026 for the two groups is 135 and 117 percent, respectively.

Figure 1.9. Emerging Market Exchange Rates and Policy Responses

Exchange rate recovery has varied along with monetary and exchange rate policy responses.



Sources: IMF, Global Policy Tracker; Bloomberg Finance L.P.; and IMF staff calculations.

Note: Foreign exchange intervention is defined more broadly than in the Global Policy Tracker and includes foreign exchange sales/purchases, swap lines, verbal intervention, and intervention in the noncash markets such as nondeliverable forwards. "FXI only" category includes countries that conducted FXI without changing monetary policy. "Other" category includes countries that changed monetary policy with or without FXI, and those that did neither; FXI = foreign exchange intervention.

cial conditions tighten. The drawdowns in official reserves have been highly uneven, with greater erosion among below-investment-grade sovereigns. While investment-grade economies have drawn down reserves broadly in line with past stress episodes, below-investment-grade sovereigns have depleted their reserves far more sharply, starting from already weaker adequacy levels (Figure 1.8, panel 2). Lower gold prices have compounded the decline where gold had a larger share in official reserves. Although reserve adequacy remains comfortable in aggregate, supported by reserve rebuilding through stronger trade balances, renewed capital inflows, or bilateral financing arrangements, reserve adequacy across most emerging markets remains below pre-war levels. Furthermore, for weaker emerging markets that are both below-investment-grade and had a reserve adequacy ratio below 100 percent, the median ratio has fallen from 72 percent in the first quarter of 2026 to 63 percent in the second quarter.

The composition and timing of the policy response has varied across regions, with Asia experiencing the greatest pressure on foreign exchange interventions. Foreign exchange interventions were concentrated in Europe and the Middle East in March 2026, rotating toward Asia and Africa in the second and

third quarters. Several Asian economies have faced larger capital flow swings given their dependency on imported energy, prompting the use of foreign exchange interventions and in some cases targeted capital flow management measures to ease strains in currency and offshore funding markets. These measures helped contain excessive volatility and near-term funding pressures, although their effectiveness rested on adequate reserves and credible macroeconomic policies. Economies that relied solely on foreign exchange interventions, including many in Asia and Africa, saw little meaningful recovery in exchange rates from their weakest level since end February (Figure 1.9). By contrast, the few economies that complemented intervention with monetary tightening generally experienced stronger exchange rate recoveries. Outcomes were more mixed among economies that relied on other policy tools. Overall, the cross-country experience underscores that foreign exchange intervention outcomes depend importantly on underlying vulnerabilities, including energy dependence, and the broader policy response.

Increased Use of Alternative Financing by Frontier Economies

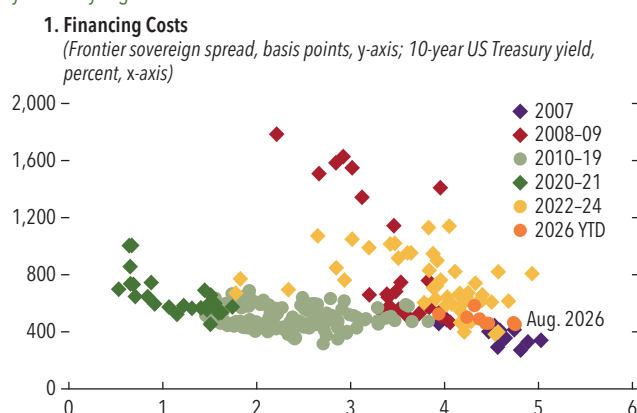
Financing conditions in frontier economies have improved.⁹ Frontier spreads widened by roughly 60 basis points at the onset of the war in the Middle East in late February 2026 but have more than retraced since, with spreads narrowing toward levels last seen in late 2024. Rising US Treasury yields have left all-in hard-currency funding costs little changed since February, but these costs are still down by roughly 200 basis points since early 2024. Market access has also broadened since February, with frontier sovereign issuers accounting for close to one-fifth of the emerging market sovereign supply in the first half of 2026, including several first-time borrowers that have lower sovereign credit ratings.

However, unusually tight spreads mask repricing risks. The current backdrop of historically compressed sovereign credit spreads alongside a 10-year US Treasury yield above 4.5 percent is historically unusual and was last observed in 2007 (Figure 1.10, panel 1). Typically, spreads were wider when yields were above 3 percent, suggesting that current credit spread

⁹Frontier economies are defined as sovereigns in the J.P. Morgan Next Generation Markets index, together with low-income sovereigns that have issued or have announced plans to issue international bonds but are not index constituents.

Figure 1.10. Financing Costs and External Debt Accumulation of Frontier Economies

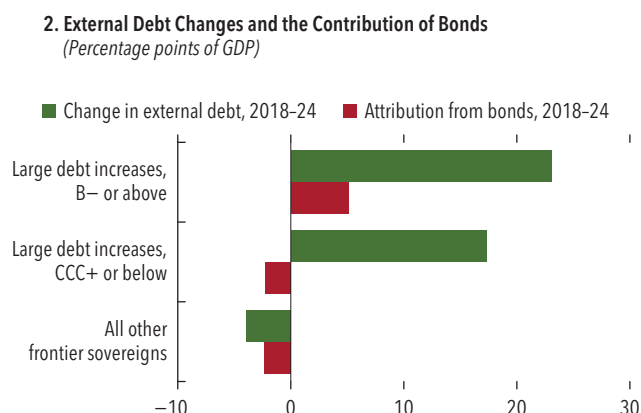
Funding costs remain elevated despite compressed spreads, as US Treasury yields stay high.



Sources: Bloomberg Finance L.P.; and IMF staff calculations.

Note: Uses monthly observations of the J.P. Morgan Next Generation Markets sovereign index. The US Treasury yield is derived from the all-in yield.

Bonds helped finance the external debt buildup of stronger frontier economies but not the weakest ones.



Sources: World Bank, International Debt Statistics; IMF, April 2026 *World Economic Outlook*; and IMF staff calculations.

Note: Group aggregates are in percent of group GDP. External public debt is publicly guaranteed external debt, including IMF credit, and ends in 2024. Large debt increases are increases above 5 percentage points of GDP during 2018–24. Rating groups use a composite of three agencies' 2024 ratings.

compression enjoys support from favorable global financial conditions and strong investor risk appetite. With Treasury yields likely to remain elevated, the vulnerability of frontier economies is a reversion to higher sovereign credit spreads, as during 2022–25, which could pass through fully into all-in borrowing costs.

Financing of the largest external debt buildups among frontier economies has been outside bond markets, particularly for lower-rated sovereigns. Among the frontier economies with the largest external debt increases, bond markets funded about one-fifth of the debt increase between 2018 and 2024 for those rated B– or higher. For sovereigns rated CCC+ or below with large debt increases, bond exposure declined even as external debt increased (Figure 1.10, panel 2). Instead, these sovereigns relied mainly on official financing.

Some sovereigns have also begun to raise funding using newer structured financing instruments such as sovereign total return swaps. Under these transactions, a sovereign can raise cash by pledging assets—often its own bonds—and transferring the return on those assets to a counterparty. This can create vulnerabilities when borrowing costs rise, as the value of the collateral may fall while the swap position deteriorates at the same time, triggering margin calls or demands for additional collateral precisely when market conditions are stressed and liquidity is scarce. Standard debt

statistics usually fail to fully capture these instruments, weakening transparency and investor confidence, as sovereign total return swaps are publicly reported in only a limited number of economies. Continued buildup of these and other opaque transactions could increase the vulnerability of frontier economies to global shocks and hinder future market access. Transparent reporting of these transactions is critical to mitigate vulnerabilities and underpin investor confidence (see Background Analysis 1.4, “Frontier External Debt: Beyond Bond Markets”).

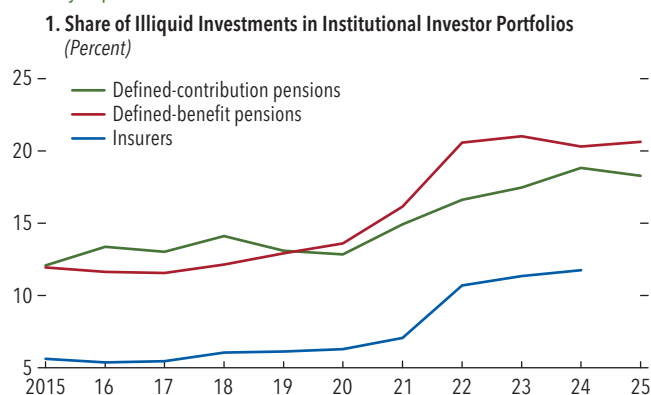
Rising Liquidity Mismatches and Concentrated Investments among Institutional Investors

Institutional investors have steadily expanded their holdings of illiquid assets over the past decade. Pension funds and insurers have nearly doubled their share of illiquid investments (Figure 1.11, panel 1). While their long-term liabilities allow them to invest over longer horizons, growing exposure to illiquid assets can create liquidity risks if it is not managed appropriately. During periods of stress, urgent cash needs may force pension funds and insurers to rely on the sale of their most liquid assets.¹⁰ The implications could be

¹⁰One of the main drivers of the growth in illiquid investments is the increasing allocation to private credit. The investment-grade status of many of these exposures supports favorable capital treatment.

Figure 1.11. Increasingly Illiquid and Concentrated Exposures of Pension Funds and Insurers

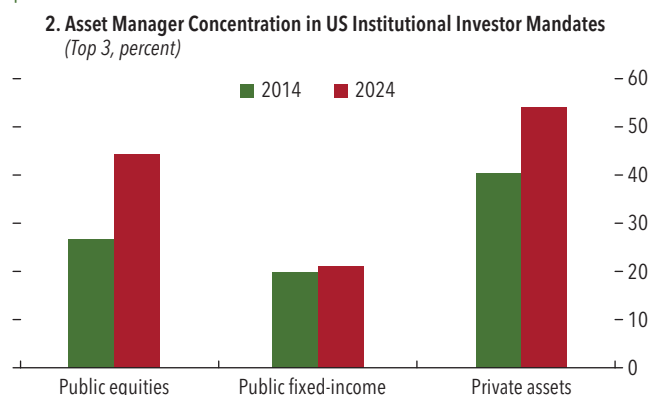
The share of illiquid investments in institutional investor portfolios has steadily expanded ...



Sources: *Pensions & Investments*; Standard & Poor; and IMF staff calculations.

Note: The calculations for pension funds estimate the asset-weighted share of alternative investments as a proxy for illiquid investments (subtracting the more liquid hedge fund exposures) for a sample of large defined-benefit plans in the United States and Europe and defined-contribution plans in the United States. The calculations for insurers use the Level 3 exposures of a sample including 50 of the largest insurers globally. Level 3 assets are the most illiquid, often priced with unobservable inputs, including proprietary models.

... as has the concentration of managers selected to run institutional portfolios.



Sources: *Pensions & Investments*; and IMF staff calculations.

Note: The calculations are based on a sample of US institutional investment mandates from *Pensions & Investments*. Pension funds are the main client in institutional investment mandates, accounting for over half of the advisory assets of investment consultants, followed by sovereign wealth funds, insurers, endowments, and nonprofit organizations.

significant, as pension funds and insurers are among the largest investors in financial markets, holding more than one-quarter of publicly traded corporate bonds in the United States and the euro area. Large-scale sales of liquid assets could therefore exacerbate market stress and transmit shocks well beyond the institutions affected directly.

A potential weak link is the increasing use of derivatives and holdings of private assets. Their use by large pension funds has increased markedly over the past decade, resulting in higher embedded leverage. The “dash for cash” financial turmoil in March 2020, when pension funds and insurers faced large liquidity demands from margin calls on derivative positions, provides a reminder of such risks. Other liquidity shocks may also emerge. For example, growing investments in private assets often come with contingent funding commitments that can require cash on short notice.¹¹ In addition, insurers may face policy surrenders, whereas defined-contribution pension plans may experience hardship withdrawals or abrupt portfolio

reallocations during downturns or when financial conditions tighten.

These vulnerabilities are compounded by growing concentration across the investment chain. A small group of investment consultants plays an increasingly influential role in advising pension funds on asset allocation and manager selection. Further down the chain, fewer asset managers are selected to run institutional portfolios, particularly in private markets (Figure 1.11, panel 2). The three largest managers could now account for more than half of institutional investments in private equity and private credit. Common and concentrated asset management exposures could increase the likelihood that institutions respond to liquidity pressures by adjusting their portfolios in similar ways, amplifying market stress.

Higher Leverage and Contingent Liquidity Risks in Private Credit Direct Lending

Direct lending is becoming increasingly relevant for financial stability. Having outgrown its origins as a niche financing channel, direct lending now accounts for nearly \$2 trillion globally in loans.¹² Its extensive cross-border interconnections between

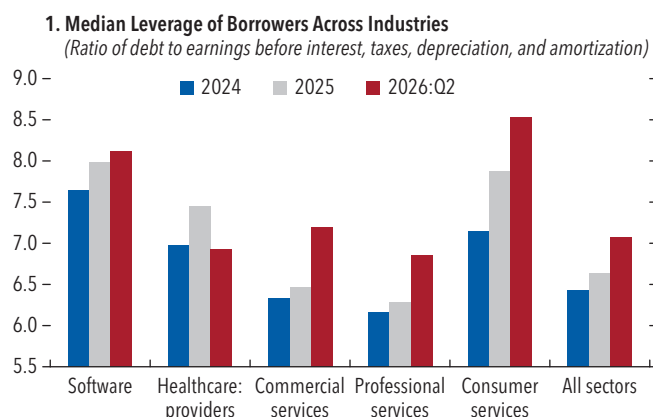
However, a deterioration in credit quality could trigger forced sales, amplifying losses and market stress.

¹¹During the global financial crisis, for example, private fund capital calls created severe liquidity strains for some large private university endowments. See Humphreys (2010).

¹²The deployed loans estimate excludes uninvested dry powder and incorporates leverage at the direct lending vehicle level.

Figure 1.12. Higher Leverage and Liquidity Risks in Private Credit Direct Lending

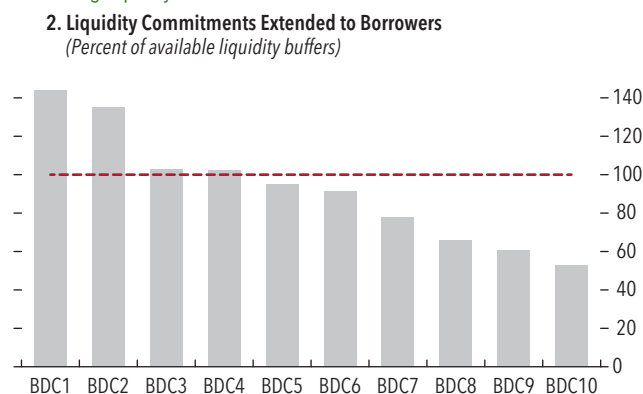
Leverage among direct lending borrowers has increased across most sectors.



Sources: S&P Global Ratings; and IMF staff calculations.

Note: The panel shows the median leverage in the S&P Global Ratings' set of reviewed US direct lending borrowers and S&P's definition of adjusted earnings before interest, taxes, depreciation, and amortization.

The commitments of some direct lending funds and business development companies to borrowers exceed their available cash and borrowing capacity.



Sources: Company disclosures; and IMF staff calculations.

Note: Firms were selected based on their size (largest BDCs) and availability of information. Available liquidity buffers are calculated as cash balances and available undrawn secured facilities minus short-term unsecured debt. BDC = business development company.

banks and nonbanks, combined with growing reliance on contingent funding arrangements and borrowers' leverage, are creating risk transmission channels that have yet to be tested in a sharp tightening of financial conditions.

Recent trends suggest that vulnerabilities are building in some areas, even as some data providers report declining trailing default rates among direct lending borrowers. This is in part because funds have provided flexibility to some borrowers by, for example, amending and extending loans (see the April 2026 *Global Financial Stability Report*). However, borrowers—often medium-sized companies—have taken on additional debt, which is partly used for dividend recapitalizations given pressure on private equity sponsors to return capital to investors. Although these transactions generate liquidity for investors, they leave borrowers more leveraged and less resilient. As a result, the ratio of the median borrower's debt-to-EBITDA (earnings before interest, taxes, depreciation, and amortization) has risen from 2024 through 2026, especially in the software and services industries (Figure 1.12, panel 1). Elevated leverage helps explain the persistently large share of borrowers unable to generate sufficient cash flow to meet debt-servicing obligations, leaving many reliant on sponsor support, lender forbearance, or continued access to external financing to remain viable. Should financial conditions tighten sharply, including

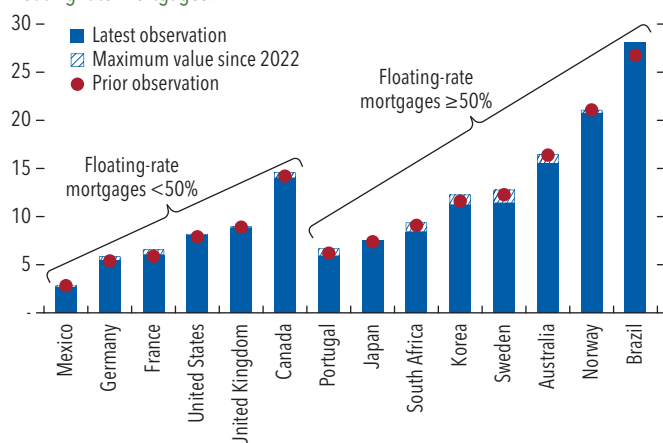
through the materialization of the three risks highlighted earlier in this chapter, higher leverage could exacerbate defaults and amplify stress in the sector (see Background Analysis 1.3, "Private Credit Leverage and Contingent Liquidity in Direct Lending").

Contingent liquidity risks are also becoming more pronounced. Until recently, concerns about liquidity in direct lending had focused largely on elevated redemptions from semiliquid vehicles. The broader significance of these capital flows is underscored by the growing contribution of semiliquid vehicles to capital formation in direct lending, accounting for more than 50 percent of new fundraising in the US in 2025 prior to the recent redemption wave. Although most of these funds appear to be able to manage investor redemptions,¹³ other sources of liquidity demand could add pressure. Direct lending funds—across retail- and institutional-focused vehicles—increasingly provide borrowers with substantial contingent liquidity commitments. For example, among 10 BDCs with \$300 billion in total assets, 4—representing about \$90 billion in assets—have commitments exceeding their available liquidity buffers (Figure 1.12, panel 2).

¹³Business development companies generally have no regulatory obligation to redeem shares and may suspend or modify repurchase programs, whereas interval funds are generally required to conduct periodic repurchase offers (typically for 5 percent to 25 percent of outstanding shares).

Figure 1.13. Household Debt: Debt Service Ratios (Percent)

Household debt servicing burden has improved in jurisdictions with less floating rate mortgages.



Sources: Bank for International Settlements; Organisation for Economic Co-operation and Development; national authorities; and IMF staff calculations.

Note: The debt service ratio is defined as required debt payments (interest plus principal) divided by disposable income. Calculations are made by the Bank for International Settlements for countries aside from Brazil, Mexico, and South Africa. Debt service ratios for Mexico are computed using household income and debt data from the national authority and the Organisation for Economic Co-operation and Development; interest rates are derived from policy rates and may not reflect true interest burdens faced by households. The debt service ratios for Brazil and South Africa are based on data from the Central Bank of Brazil and the South African Reserve Bank, respectively. For BIS-derived or Brazil and South Africa numbers, "latest observation" is the fourth quarter of 2025, and "prior observation" is fourth quarter of 2024. For Mexico, the "latest observation" is for the fourth quarter of 2024 and the "prior observation" is for the fourth quarter of 2023. The share of fixed-rate mortgages is based on the definition of De Stefani and Mano (2025).

In a stress scenario, borrowers could draw heavily on these facilities just as funds' own liquidity resources are eroded by lower collateral values. Such dynamics could transform liquidity pressures into a broader contraction in credit supply, amplifying procyclicality and reinforcing stress across the direct lending ecosystem.

Household Finances Have Improved Somewhat, though Lower-Income Households Could Be Disproportionately Affected by Higher Interest Rates

Household debt burden has stayed moderate even though global interest rates have risen. On the liability side, household debt-service ratios have broadly improved in recent quarters across countries and remain appreciably lower than the peak levels reached after central banks across the world began to hike interest rates in 2022 (Figure 1.13). Countries with more floating-rate mortgages tend to have higher debt-service ratios and are more sensitive to interest

rate resets. Meanwhile, household assets have been boosted by a strong equity market and elevated house prices. Globally, households' equity and real estate holdings account for roughly 20 and 40 percent of their assets, respectively, or 1.2 and 2.5 times global GDP.¹⁴

With a moderate debt burden and high overall asset holdings, households are unlikely to be a source of systemic concern. That said, a correction in housing or asset prices could erode household wealth and curb consumption, with potentially meaningful macro-economic effects. Lower-income households could be disproportionately affected given their limited liquidity buffers; for example, delinquency rates on consumer debt tied to households, like credit card debt in the United States, have risen.¹⁵ Looking ahead, persistent inflation leading to higher interest rates and weaker real income growth could further raise debt-servicing burdens for low-income households,¹⁶ while their exposure to global equities—though much more modest than that for high-income households—could be vulnerable to a market correction.¹⁷

What Should Policymakers Do?

Financial markets have demonstrated resilience since the last *Global Financial Stability Report*, but risks and vulnerabilities abound. This section outlines policy recommendations to help mitigate the risks and vulnerabilities analyzed in this chapter and summarized in Table 1.1.

Containing the leverage used to finance the AI ecosystem, where excessive, is a priority. Growing leverage in AI equity positions and high levels of AI-related debt could exacerbate the impact of weaker

¹⁴Global households also hold 15 percent of assets in pension plans and currencies and deposits each. See McKinsey Global Institute (2025).

¹⁵Delinquency rates can be found in the Federal Reserve Bank of New York's Consumer Credit Panel. Separately, Mori and Sanchez (2025) divide US zip codes into deciles based on 2019 per capita aggregate gross income and show that the share of credit card debt that is 30 days delinquent is higher in the lowest-income deciles than in the aggregate.

¹⁶Chapter 1 of the April 2025 *Global Financial Stability Report* contains a sensitivity analysis of global household debt to interest rates and income changes.

¹⁷In the United States, the euro area, and Japan, the latest available data from the Federal Reserve's Flow of Funds, the European Central Bank's Household Finance and Consumption Survey, and Japan's Family Income and Expenditure Survey, respectively, indicate that investment exposure, including equities, has risen by 1 to 3 percentage points for the bottom 20 percent of households over the past five years.

or less durable investment and profitability. To mitigate the risks of forced deleveraging and volatility amplification when AI equity prices decline, policymakers should increase oversight of the means to obtain leverage—including by retail investors—such as placing restrictions on equity margin financing, limiting the proliferation of leveraged exchange-traded funds, and containing the use of short-term options (see the April 2026 *Global Financial Stability Report*). Furthermore, financial sector supervisors and macroprudential authorities should assess the potential for systemwide losses arising from AI-related exposures, including the risk that highly interconnected and circular financing arrangements amplify distress. Where vulnerabilities could be material, authorities should deploy appropriate tools, including sectoral capital requirements; concentration limits, including in prime brokerage relationships; and capital buffers, to contain the buildup of systemic risk and strengthen financial resilience.

Mitigation of bond market fragilities begins by placing public debt on a sustainable path, but it also requires resilience in market structures, including funding markets. Credible fiscal consolidation is the first line of defense against bond market fragilities, particularly as higher term premiums and growing refinancing needs leave little room for fiscal slippage (see the April 2026 *Fiscal Monitor*). In addition, managers of public debt should reduce rollover risks by establishing a more durable maturity profile for sovereign debt outstanding. Market structure should also be strengthened to prevent a seizing of market liquidity during stress episodes by greater central clearing of both bonds and funding instruments, namely repos. Central bank liquidity facilities should be operationally ready to stem market dysfunction.

Central banks can help mitigate the risk of a sharp rise in sovereign bond yields by delivering on their mandates, preserving their independence, and communicating monetary policy decisions clearly. Communications should focus on explaining the policy reaction function, how incoming data are likely to inform decisions, and the risks surrounding the outlook. Such communication could help anchor medium- and long-term inflation expectations, reduce excessive market sensitivity to individual data releases, and mitigate a source of uncertainty for bond and funding markets. Central bank independence also remains critical to maintaining policy credibility and anchoring inflation expectations.

Addressing cybersecurity risks requires a systemwide operational resilience framework focused on the continuity of critical services. AI adds urgency by accelerating vulnerability discovery, exploitation, and attack, compressing the attack–defense cycle to machine speed. Policy priorities should be tailored to the levels of cyber maturity of the different economies. Advanced economies should strengthen operational resilience, third-party risk oversight, and resilience testing. This includes identifying critical business services, setting impact tolerances for disruptions, mapping operational dependencies, and conducting regular resilience testing. Emerging markets and developing economies may need to prioritize foundational cyber hygiene, incident reporting, crisis coordination, and supervisory capacity before adopting more advanced AI-related oversight frameworks. Low-income countries should focus scarce resources on essential controls and critical infrastructure protection. Across all jurisdictions, supervisors should build specialized cyber expertise, adopt risk-based and proportionate approaches, and ensure robust governance, operational resilience, and human oversight of AI systems.

Although banks remain resilient, an increase in the share of banks that appear weak under a scenario featuring lower growth, higher inflation and interest rates, energy shocks, and weaker AI monetization highlights the need to reinforce safeguards. In jurisdictions where banks' loan books and assets are highly sensitive to energy prices, supervisors should ensure timely and accurate asset classification and adequate provisioning to cover expected credit losses. Not doing so raises overall debt levels in the economy by sustaining firms that struggle to service their debt and may also jeopardize the future earnings and balance sheet health of banks (see Box 1.3 for an illustration of this issue in Asian emerging markets). More broadly, preserving financial stability in an environment of elevated uncertainty requires completing implementation of Basel III and other internationally agreed-upon standards to ensure that banks maintain adequate capital and liquidity buffers. Although a review of regulations to reduce unnecessary complexity may improve efficiency, reforms should not weaken resilience, create opportunities for regulatory arbitrage, or undermine international consistency. Given the growing interconnectedness between banks and NBFIs, supervisors should intensify the monitoring of banks' exposures to NBFIs and assess how stress at lightly regulated institutions could affect bank solvency and liquidity under adverse scenarios.

The growing size, concentration, and illiquidity of institutional investor portfolios calls for a broader approach to risk monitoring. Authorities should focus on identifying common exposures, leverage, and liquidity mismatches across pension funds and insurers, as well as their links to banks and financial markets, to detect vulnerabilities that could amplify market stress. Increasing the use of solvency and liquidity stress tests for these types of institutions could support this effort. Closing data gaps and strengthening information sharing, both domestically and across borders, would support earlier intervention and more effective prudential policies. Authorities should also ensure that the liquidity of investment products remains aligned with that of the underlying assets, including through appropriate redemption terms and notice periods.

As private credit becomes more interconnected with the broader financial system, authorities should strengthen systemwide monitoring of risks across the entire financing chain, from portfolio companies (borrowers) and special-purpose vehicles to funds and investors. Closing data gaps on leverage, contingent liquidity commitments, and cross-sectoral and cross-border exposures is critical. Enhanced disclosures would support the development of stress testing and surveillance tools to assess how shocks propagate across institutions and markets, helping authorities identify emerging vulnerabilities, better understand risk transmission channels, and mitigate systemic risks before they materialize.

In emerging markets, authorities should rebuild policy buffers, ensuring an overall policy mix consistent with the IMF's Integrated Policy Framework, while strengthening disclosure of alternative financing sources. Rebuilding external buffers where they have eroded is the first line of defense against likely external headwinds; doing so will preserve market access and the capacity to respond to shifts in global risk sentiment. Authorities should calibrate monetary, exchange rate, macroprudential, and capital flow measures to country-specific circumstances and deploy interventions only to address frictions or disorderly market conditions. Medium-term fiscal and debt management frameworks should safeguard debt sustainability and limit refinancing risks. Spending aimed at protecting vulnerable groups from inflation or an energy shock should be temporary and targeted. Given increased recourse to alternative borrowing sources, robust disclosure and comprehensive debt transparency are essential in accurately assessing sovereign balance sheets and ensuring continued investor confidence.

The debt-servicing capabilities and net worth of households have improved in recent years, but a resurgence of inflation and higher interest rates could test that resilience. Authorities should closely monitor household balance sheets and debt-servicing burdens, particularly in jurisdictions where mortgage payments are sensitive to interest rate fluctuations. Appropriate macroprudential measures, such as limits on loan-to-value or debt-service-to-income ratios, can help prevent the buildup of excessive household leverage and strengthen resilience against future shocks.

Box 1.1. Risks and Vulnerabilities Framework in the *Global Financial Stability Report*

This chapter distinguishes between risks and vulnerabilities, following Adrian and others (2019). Their selection draws on IMF staff’s daily monitoring of financial markets and institutions, while assessment of their trends is informed by analytical work, including analyses of new data sources.

Risks refer to scenarios that are plausible near-term catalysts for market turmoil and a sharp tightening of financial conditions. Rather than focusing solely on adverse shocks, which are inherently difficult to predict, risks combine both the likelihood of triggering shocks and the potential severity of impact on markets. For example, bond market risks could worsen if inflationary energy shocks become more likely. Given the foundational importance of sovereign bonds, the resulting tightening of financial conditions could lead to market turmoil.

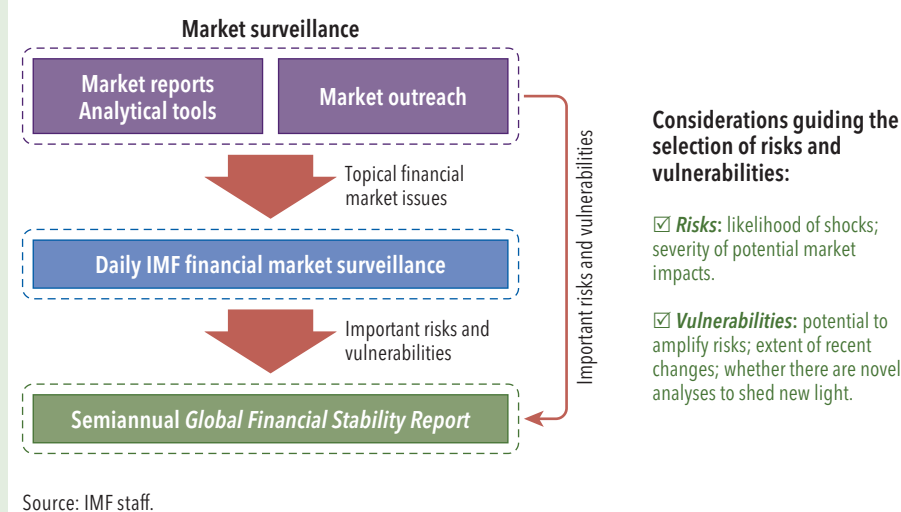
Risks by themselves may lead to market turmoil but may not threaten financial stability. Financial instability or systemic risk arises when risks are amplified by financial vulnerabilities to impair the functioning of key financial institutions and markets, disrupting the provision of credit or financial services and causing serious negative effects to the real economy, often necessitating extraordinary policy responses.¹

Vulnerabilities are structural imbalances in the financial system. They include elevated leverage, liquidity mismatches, concentrated exposures, interconnectedness, and weak external or fiscal positions.

They could amplify risks through mechanisms including forced deleveraging, fire sales, funding stress, and contagion. Vulnerabilities determine the extent to which shocks or risks propagate through the financial system and affect the real economy.

The selection of such risks and vulnerabilities is guided by IMF staff’s surveillance of financial markets and institutions (Figure 1.1.1), drawing on market reports, analytical tools, and outreach. Candidate risks and vulnerabilities are selected for deeper analysis based on the following considerations: for risks, the likelihood of triggering shocks and severity of potential market impacts; for vulnerabilities, their potential to amplify risks, the extent of recent changes and whether there are novel IMF staff analyses that can shed new light. Once selected, staff assess whether trends in risks and vulnerabilities are “better,” “about the same,” or “worse,” based on the balance of evidence from empirical indicators, balance sheet data, stress tests, and other analytical tools, recognizing that risks and vulnerabilities are inherently forward-looking and their trends cannot be classified purely through mechanical rules. Overall financial stability risks (for example, “elevated” vs. “moderate”) are then assessed based on the combined trajectory of risks and vulnerabilities. Where appropriate, this assessment may be benchmarked against growth-at-risk estimates (Adrian and others 2019).

Figure 1.1.1. Selection and Assessment of Risks and Vulnerabilities



¹This definition is similar to that of “systemic risk” in the IMF’s 2021 policy paper on comprehensive surveillance.

Box 1.2. European Union Common Borrowing Has Mitigated Sovereign Bond Market Fragilities

In euro area sovereign bond markets, yield differentials between core and southern member states (Greece, Italy, Portugal, and Spain) have narrowed markedly in recent years (Figure 1.2.1, panel 1). This convergence reflects several factors, including stronger fiscal positions in the southern states and European Central Bank measures in response to the macroeconomic shocks that hit Europe (for example, the Pandemic Emergency Purchase Programme and, later, the introduction of the Transmission Protection Instrument; see the April 2026 *Regional Economic Outlook* for Europe). Notably, yield convergence continued even after the European Central Bank began reducing its balance sheet in late 2022. Evidence suggests that European Union funding programs played an important role in this process.¹

Since the launch of the Next Generation EU, the European Commission has become a relatively large, regular borrower across maturities. By introducing common borrowing and transfers to member states, these programs have strengthened perceptions of fiscal risk sharing and helped reduce concerns about debt

sustainability and redenomination risk (Cioffi and others 2019; Blanchard and Ubide 2025; Lane 2026).

Empirically, these initiatives appear to have dampened the effect of systemic shocks on sovereign bond markets. The association of sovereign bond asset-swap spreads to systemic stress—gauged by the European Central Bank’s Composite Indicator of Systemic Stress—has become less negative since the introduction of the Next Generation EU (Figure 1.2.1, panel 2).² The effect was particularly pronounced in some southern European economies, where joint funding programs also contributed to the compression of sovereign spreads as compensation for contagion and redenomination risks (Pancotto, Gwilym, and Molyneux 2023; Bańkowski and others 2024; Darvas, Welsalu, and Zettelmeyer 2025; Busse, Caselli, and Fotiou 2026). Another set of results (not shown) suggests that shocks that previously triggered a flight into German bunds no longer generate significant selling pressure on southern European sovereign bonds. This evidence suggests that risk-sharing programs, where applicable in currency unions, can supplement fiscal consolidation in mitigating bond market fragilities.

This box was prepared by Francesco de Rossi.

¹The analysis covers the period from January 2016 until the end of July 2026.

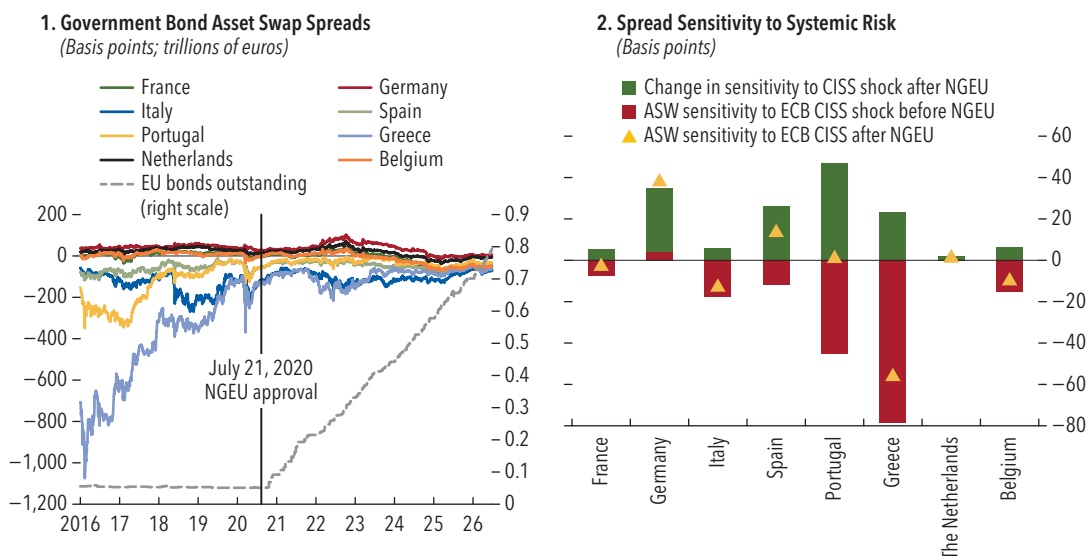
²Asset-swap spreads are computed as the difference between the swap rate and bond yields. A negative value reflects a premium demanded by investors to bear sovereign credit risk (including rating migration) associated with sovereign bonds, as well as their liquidity and funding risks.

Box 1.2 (continued)

Figure 1.2.1. Common Borrowing and Bond Market Fragilities

Government bond spreads in the euro area have narrowed in recent years.

Government bond spreads' sensitivity to stress has declined significantly since the launch of the NGEU.



Box 1.3. Corporate Zombies Are Thwarting Debt Deleveraging

Private sector debt has remained elevated. While Asia has seen some moderation in credit to nonfinancial corporations, its debt ratio has remained high compared with others. At the end of 2025, credit in Asia averaged 107 percent of GDP, compared with an average of 99 percent for emerging market economies and 93 percent globally,¹ up from 81 percent in 2007 (Figure 1.3.1, panel 1).

This rising share of corporate debt is increasingly concentrated in firms that cannot service it. For example, across 10 Asian economies, zombie firms—those for which earnings have not covered interest expenses for at least three consecutive years²—now account for 21.4 percent of corporate debt outstanding in the region, having increased from under 10 percent in 2008. The share of zombie firms is relatively small elsewhere. In Latin America, Europe, and Africa, on average, about one in eight firms were zombies in 2024, and were concentrated in a handful of large borrowers.

Corporate zombies are typically sustained through bank forbearance. Because recognizing losses on

distressed borrowers consumes capital, whereas rolling over loans defers losses and preserves reported capital ratios, undercapitalized banks tend to extend their bad loan exposure (Caballero, Hoshi, and Kashyap 2008; Acharya and others 2024; Faria-e-Castro, Paul, and Sánchez 2024). For example, in the Asian economies, banks with Tier 1 capital below the median of their country counterparts have 16 percent of their loans with zombie firms, compared with 12 percent for better capitalized banks.³ Bank forbearance therefore locks in both weak borrowers and weak banks.

Delaying loss recognition and loan extensions also add to overall debt levels. To quantitatively illustrate this, if the stock of zombie debt in the 10 Asian economies had been subjected to hazard and recovery rates typical of firms with sustained distress (Figure 1.3.1, panel 2), almost 23 percent of their debt would have been written off or restructured as of 2025. This amounts to more than 5 percent of total corporate debt and is likely a source of future earnings and balance sheet weakness for the banks involved.

This box was prepared by Sally Chen and Amanda Liu.

¹The samples for emerging markets, the global aggregate, and Asia are based on data from the Bank for International Settlements. Estimates of corporate zombies in Asia include China, Hong Kong SAR, India, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan Province of China, and Thailand.

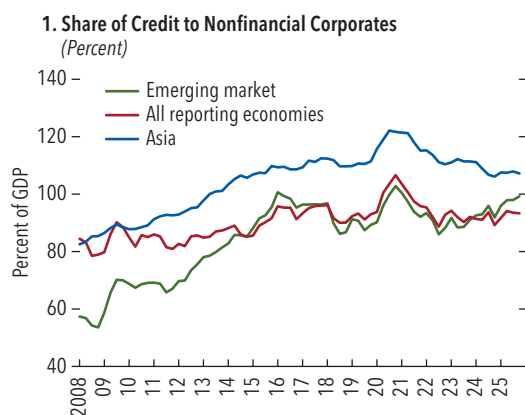
²Data from Orbis. Firms exit from zombie status after they cover their interest expenses for three consecutive years.

³Based on a bank-year panel regression of the share of bank loans extended to zombie firms on lagged Tier 1 capital ratios, controlling for lagged dependent variable, bank characteristics, and bank and year fixed effects.

Box 1.3 (continued)

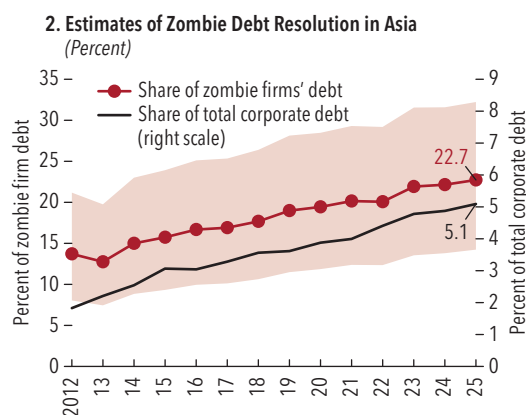
Figure 1.3.1. Corporate Debt, Shares Held by Zombie Firms, and Evergreening

Private sector debt remains elevated.



Sources: BIS, Moody's Analytics; Orbis; and IMF staff calculations.

Absent evergreening, a quarter of zombie debt would have been resolved.



Sources: BIS, Moody's Analytics; Orbis; and IMF staff calculations.

Note: Estimation of zombie debt that should be written off or restructured assumes an annual default hazard of 9 percent—the exit rate of comparably distressed firms absent evergreening, calibrated by Faria-e-Castro, Paul, and Sánchez (2024)—with creditor recovery of 35 percent upon default based on Kermani and Ma (2023). For a zombie firm in its d^{th} year, the counterfactual of debt resolution is $[1 - (1 - 0.09)d] \times (1 - 0.35)$. The shaded band in panel 2 indicates the range of estimates based on alternative default hazards of 5 to 15 percent.

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