lobal financial conditions have tightened notably and downside risks to the economic outlook have increased as a result of the war in Ukraine (Figure 1). The tightening has been particularly pronounced in eastern Europe and Middle East countries with close ties to Russia, reflecting lower equity valuations and higher funding costs. This has occurred just as most of the world was slowly bringing the pandemic under control and the global economy was recovering from COVID-19.

Financial stability risks have risen on several fronts, even though so far, no global systemic event affecting financial institutions or markets has materialized. A sudden repricing of risk resulting from an intensification of the war and associated escalation of sanctions may expose, and interact with, some of the vulnerabilities built up during the pandemic, leading to a sharp decline in asset prices.

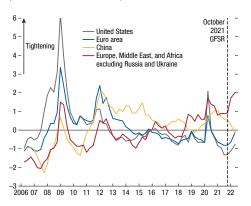
With the sharp rise in commodity prices anticipated to add to preexisting inflation pressure, central banks are faced with a challenging trade-off between fighting record-high inflation and safeguarding the post-pandemic recovery at a time of heightened uncertainty about prospects for the global economy (Figure 2). Bringing inflation back down to target and preventing an unmooring of inflation expectations require a delicate act in removing accommodation while preventing a disorderly tightening of financial conditions that could interact with financial vulnerabilities and weigh on growth. Incoming inflation data suggest that more decisive tightening of monetary policy is necessary in many countries

After rising early in the year on concerns about the inflation outlook, advanced economy nominal bond yields have increased further since the invasion, amid heightened volatility of rates (Figure 3). Inflation break-evens (a market-implied proxy for future inflation) have risen significantly on the back of sharply higher commodity prices.

Repercussions of the Russian invasion of Ukraine and ensuing sanctions continue to reverberate globally and will test the resilience of the financial system through various potential amplification channels, including direct and indirect exposures of banks and nonbanks; market disruptions in commodity markets and increased counterparty risk; poor market liquidity and funding strains; acceleration of cryptoization in emerging markets; and possible cyber-related events.

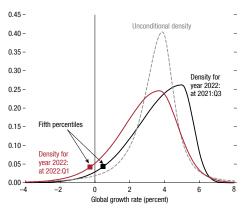
The war has already had an impact on financial intermediaries, nonfinancial firms, and markets directly or indirectly exposed to Russia and Ukraine. Europe bears a higher risk than other regions due to its proximity, reliance on Russia for energy

Figure 1. Financial Conditions in Selected Regions (Standard deviations from the mean)



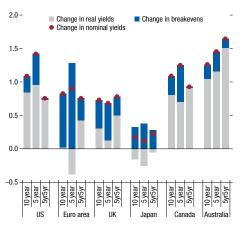
Source: IMF staff calculations. Note: GFSR = Global Financial Stability Report

Figure 2. Near-Term Growth Forecast Densities (Probability density)



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

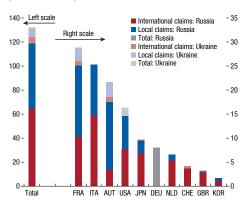
Figure 3. Year-to-Date Change in Yields (Percentage points)



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

Note: 5yr5yr (5-year, 5-year forward) corresponds to a five-year period that begins five years from the current date.

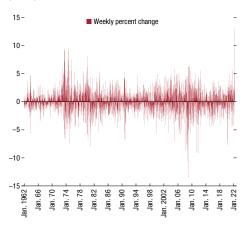
Figure 4. Foreign Banks' Gross Claims on Russia and Ukraine (Billions of US dollars)



Sources: Bank for International Settlements Consolidated Banking Statistics; and IMF staff calculations.

Note: Data labels use International Organization for Standardization (ISO) country codes.

Figure 5. Commodity Price Changes, 1962–2022 (Percent)



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

Figure 6. Emerging Market Hard Currency Yields (Percent)



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

Note: EM = emerging market; HY = high-yield. Yields based on JPMorgan Emerging Market Bond Index.

needs, and the non-negligible exposure of some banks and other financial institutions to Russian financial assets and markets.

Banks' direct exposures to Russia are relatively small except for some non-systemic European banks (Figure 4). Banks' indirect exposures are more difficult to identify and assess because they are less well known (especially the extent of interconnectedness) as it is difficult to quantify them in the absence of detailed and consistent disclosures by country or by specific activity types. The risk is that indirect exposures could be meaningful and surprise investors once revealed, leading to a sharp rise in counterparty risk and risk premia. Foreign nonbank financial intermediaries (NBFIs) have sizable investments in Russian assets, with US and European investment funds accounting for most of the exposures. As a share of total assets, however, their exposure to Russia is small.

Dedicated emerging market funds have maintained a cautious stance on their exposures to Russian debt since the Crimea occupation in 2014, reducing their share of Russian debt from more than 10 percent before 2014 to just over 4 percent in 2022. Funds benchmarked to global indices have had a much smaller exposure to Russia, with an average 0.2 percent of their assets invested in Russian debt in 2022.

Severe disruptions in commodity markets and supply chains across the globe have caused extreme volatility in commodity prices, amplified by pressures in commodity trade finance and derivatives markets (Figure 5). Dealer banks play a crucial role and have significant exposures in these markets, including by providing liquidity and credit to a small group of large energy trading firms that operate globally, are largely unregulated, and are mostly privately owned. Pressures in commodity markets, often magnified by poor liquidity, have led to lower risk appetite and rising counterparty risk concerns, with implications for funding conditions.

Emerging and frontier markets are facing tighter financial conditions and higher risks of capital outflows. Since the war in Ukraine began, emerging market (EM) hard currency yields have increased at a rapid pace, akin to earlier episodes of emerging market stress, before retracing some in mid-March (Figure 6). The number of issuers trading at distressed levels has surged to nearly 25 percent of issuers (Figure 7), surpassing pandemic-peak levels. The deterioration in spreads, combined with the increase in US yields, has pushed financing costs well above their pre-pandemic levels for many borrowers. Markets remain open for issuance at those higher levels of funding costs. Flows in local currency bonds and equities have come under pressure, experiencing the largest weekly redemptions since March 2020. Tighter external financial conditions on the back of US monetary policy normalization and heightened geopolitical uncertainty are likely to increase the downside risks for portfolio flows (Figure 8).

In China, the recent equity sell-off, particularly in the tech sector, and the increase in COVID-19 cases have raised concerns about a growth slowdown, with possible spillovers to emerging markets. Ongoing stress in the battered real estate sector has increased financial stability risks and added to growth pressures. Extraordinary financial support measures may be necessary to ease pandemic-driven balance sheet pressures but would add further to medium-term debt vulnerabilities.

The interlinkages between emerging market sovereigns and domestic banks have intensified over the past two years as additional government financing needs to cushion the impact of the pandemic have been mostly met by banks (see Chapter 2). As a result, bank holdings of domestic sovereign debt surged to historic highs in 2021 (Figure 9). Distress in emerging markets could trigger an adverse feedback loop between sovereigns and banks through multiple channels—the so-called sovereign-bank nexus—potentially reducing bank soundness and lending to the economy.

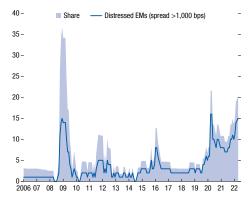
The war in Ukraine has brought to the fore a number of medium-term structural issues policymakers will need to confront in coming years, including the possibility that the geopolitics of energy security may put climate transition at risk; the risk of fragmentation of capital markets and possible implications for the role of the US dollar; the risk of fragmentation in payment systems and the creation of blocs of central bank digital currencies; more widespread use of crypto assets in emerging markets; and more complex and bespoke asset allocations in an effort to preempt the possible imposition of sanctions.

The war has made evident the urgency to cut dependency on carbon-intensive energy and to accelerate the transition to renewables. However, in the face of growing concerns about energy security and access to energy sources (Figure 10), the energy transition strategy may face setbacks for some time. The current energy crisis may alter the speed of phasing out fossil fuel subsidies in emerging market and developing economies, while rising inflation pressure may also lead authorities to resort to subsidies or other forms of fiscal support to households or firms.

Crypto asset trading volumes against some emerging market currencies have spiked following the introduction of sanctions against Russia and the use of capital restrictions in Russia and Ukraine. This is occurring against a longer-term increase in such cross-border transactions, bringing to the fore the challenges of applying capital flow measures and sanctions.

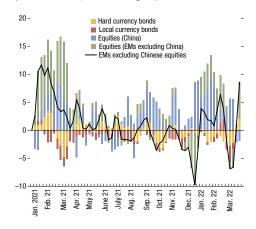
While technological innovation in financial activities (fintech) can support inclusive growth by strengthening competition, financial development, and inclusion (Chapter 3), the rapid growth of risky business segments can be a cause of concern for financial stability when fintech firms (fintechs) are subject to less stringent regulation (Figure 11).

Figure 7. Distressed Sovereign Hard Currency Issuers (Number of sovereigns with spreads above 1,000 basis points; share of total)



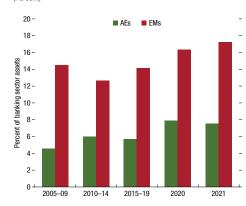
Sources: JPMorgan Chase & Co.; and IMF staff calculations Note: bps = basis points: EMs = emerging markets.

Figure 8. Fund Flows to Emerging Markets (Billions of US dollars, two-week moving sum)



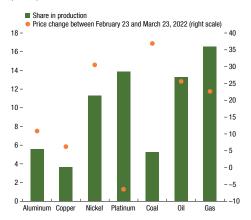
Sources: EPFR; and IMF staff calculations. Note: EMs = emerging markets.

Figure 9. Bank-Sovereign Debt Exposure, 2005–21 (Percent)



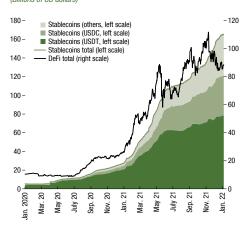
Sources: IMF, Monetary and Financial Statistics; and IMF staff calculations. Note: See Figure 2.1, panel 2 of Chapter 2 for more information. AEs = advanced economies; EMs = emerging markets.

Figure 10. Russia's Share in Global Production (Percent)



Sources: US Geological Survey, National Minerals Information Center; and IMF

Figure 11. Value of DeFi Assets and Stablecoins (Billions of US dollars)



Sources: CoinGecko; DeFi Pulse; and IMF staff calculations.

Note: DeFi = decentralized finance: USDC = USD Coin: USDT = USD Tether

Policy Recommendations

Central banks should act decisively to prevent inflation pressure from becoming entrenched and avoid an unmooring of inflation expectations. To avoid unnecessary volatility in financial markets, it is crucial that central banks in advanced economies provide clear guidance about the normalization process while remaining data dependent.

Emerging markets remain vulnerable to a disorderly tightening of global financial conditions. Many central banks have already significantly tightened policy. Further rate increases, or policy normalization with respect to other measures taken during the pandemic (such as asset purchases), should continue as warranted according to the country-specific inflation and economic outlook to anchor inflation expectations and preserve policy credibility.

Policymakers should tighten selected macroprudential tools to tackle pockets of elevated vulnerabilities while avoiding a disorderly tightening of financial conditions. Striking a balance between containing the buildup of vulnerabilities and avoiding procyclicality appears important given uncertainties about the economic outlook, the ongoing monetary policy normalization process, and limits on fiscal space in the aftermath of the pandemic.

While taking steps to address energy security concerns, policymakers should intensify their efforts to implement the 2021 United Nations Climate Change Conference (COP26) road map to achieve net-zero targets. They should take measures to increase the availability and lower the cost of fossil fuel alternatives and renewables while improving energy efficiency; scale up private finance in the transition to a greener economy; and continue to strengthen the climate finance information architecture.

Policymakers should develop comprehensive global standards for crypto assets along the activity and risk spectrum. A more robust oversight of fintech firms and decentralized finance (DeFi) platforms is needed to take advantage of their benefits while mitigating their risks. To preserve the effectiveness of capital flow management measures in an environment of growing usage of crypto assets, policymakers need to pursue a multifaceted policy strategy. Recent measures taken in markets and exchanges in response to elevated volatility in commodity prices highlight the need for regulators to examine the broader implications, including exchange governance mechanisms, resiliency of trading systems, concentration of risk, margin setting, and trading transparency in exchange and over-the-counter markets.