Executive Summary

Financial market stability under multiple trials

Global financial conditions over the past few years have oscillated between tightening and easing, underpinned by central banks shifting their monetary policy stances in response to the COVID-19 pandemic, higher inflation, and geopolitical tensions. Easy financial conditions in major markets started to gradually reverse in late 2021 amid the rise in global inflation (Figure E.1). Global central banks responded with forceful monetary tightening in 2022 leading to an aggressive tightening of financial conditions. Market perceptions that the Federal Reserve (Fed) would reduce its pace of monetary tightening saw conditions ease somewhat after November 2022.

By 2023, market focus had shifted from the pace and extent of monetary tightening to the spillover effects on financial stability. This shift was underscored by liquidity stresses that hit United States (US) regional banks in March 2023. Market concerns intensified with a run on a major global systemically important bank (G-SIB), Credit Suisse. Swift action by regulators in the US and Switzerland helped keep the broader financial system free of contagion, which enabled global markets to return to easier financial conditions.

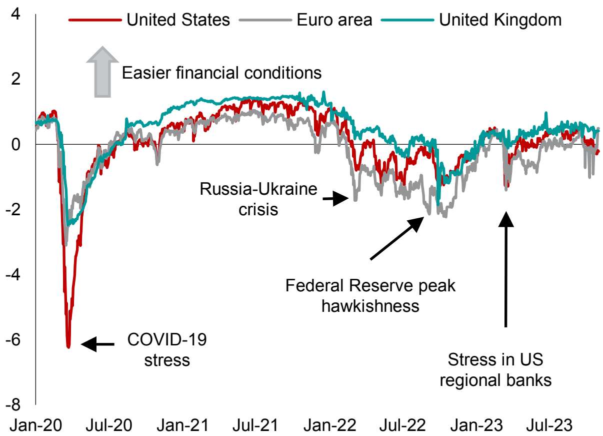
Despite this easing, potential disruption continues in the regime shift from a "near-zero interest rate with ample liquidity" to one where rates are "higher-for-longer with receding liquidity". This regime can be disruptive as it could expose hidden and/or less-visible financial vulnerabilities, manifested in elevated bond market volatility and underperformance in banking stocks that have yet to recover from the sharp falls in March (Figures E.2 and E.3). Meanwhile, global central banks have started again to reduce their balance sheets after expanding them during the pandemic (Figure E.4).

ASEAN+3 financial markets have weathered this global storm reasonably well. The effects of global monetary tightening and elevated market volatility on regional assets were notable but varied in scale and timing. Relative to US markets, most regional equity and bond markets experienced milder fluctuations in 2022 and 2023, partly because monetary policy tightening in the region was not as aggressive as in the US. Most regional currencies weakened against the US dollar, largely driven by a change in interest rate differentials as US policy rates rose at a faster pace (Figure E.5).

In light of milder inflationary pressures, improved external buffers, and the use of price subsidies and other non-monetary measures to contain inflation, monetary tightening was less aggressive overall in the ASEAN+3 region than in the US (Figure E.6). The pace of policy tightening has generally eased in the region in 2023 compared with 2022, reflecting a deceleration in inflation led by the decline in global fuel and food prices. Market pricing implies that the monetary policy tightening cycle is approaching its end in the US and in most economies in the region.

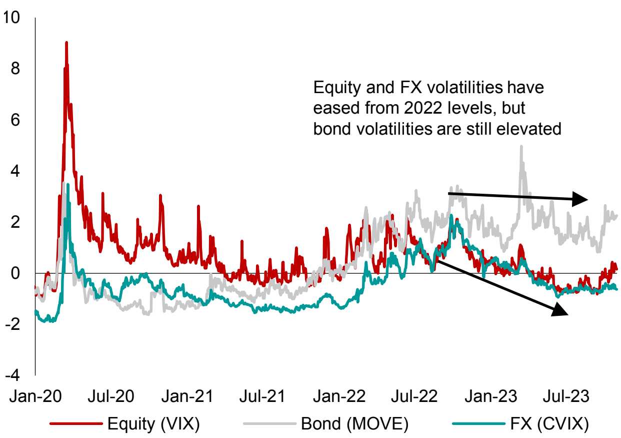
Emerging markets in the region have seen nonresident portfolio flows gradually recover, though there are some exceptions. Chinese debt markets saw a shift to large outflows in 2022, which have continued in 2023 despite the easing global financial conditions. Flows into Chinese equities have remained volatile. Asian emerging markets excluding China saw a strong recovery in debt flows but flows in equity markets moderated. The significant heterogeneity in flows across regional markets reflected differing monetary policy stances and other idiosyncratic factors.

Figure E.1. Selected Advanced Economies: Financial Conditions Index (FCI)
(Index)



Source: Bloomberg Finance L.P.; AMRO staff calculations.

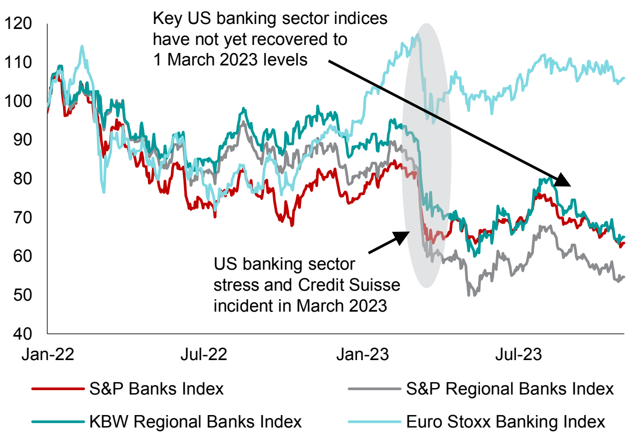
Figure E.2. US: Volatility in Key Assets and Corresponding Long-Term Averages
(Z-score based on data since 1 January 2010)



Source: Bloomberg Finance L.P.; AMRO staff calculations.
Note: VIX refers to Chicago Board Options Exchange's Volatility Index. MOVE refers to Merrill Lynch Option Volatility Estimate Index. CVIX refers to Deutsche Bank Currency Volatility Index.

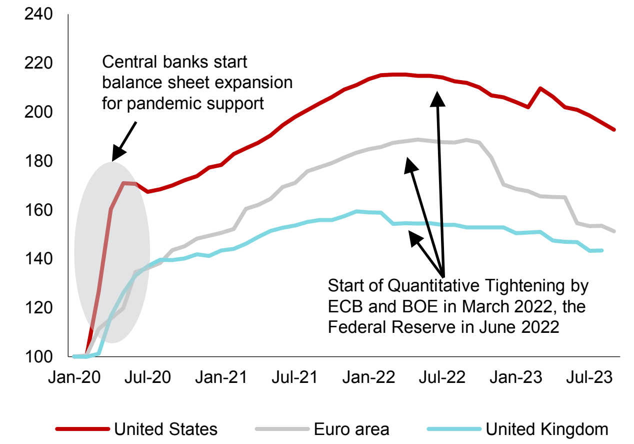
This summary was prepared by Kevin C. Cheng, Kimi Xu Jiang, and Eunmi Park, with input from Prashant Pande, Siang Leng Wong, Richard Sean Craig, Chiang Yong (Edmond) Choo, and Huisheng Wang.

Figure E.3. US and Euro Area: Banking Sector Stock Indices
(Index, 1 January 2022 = 100)



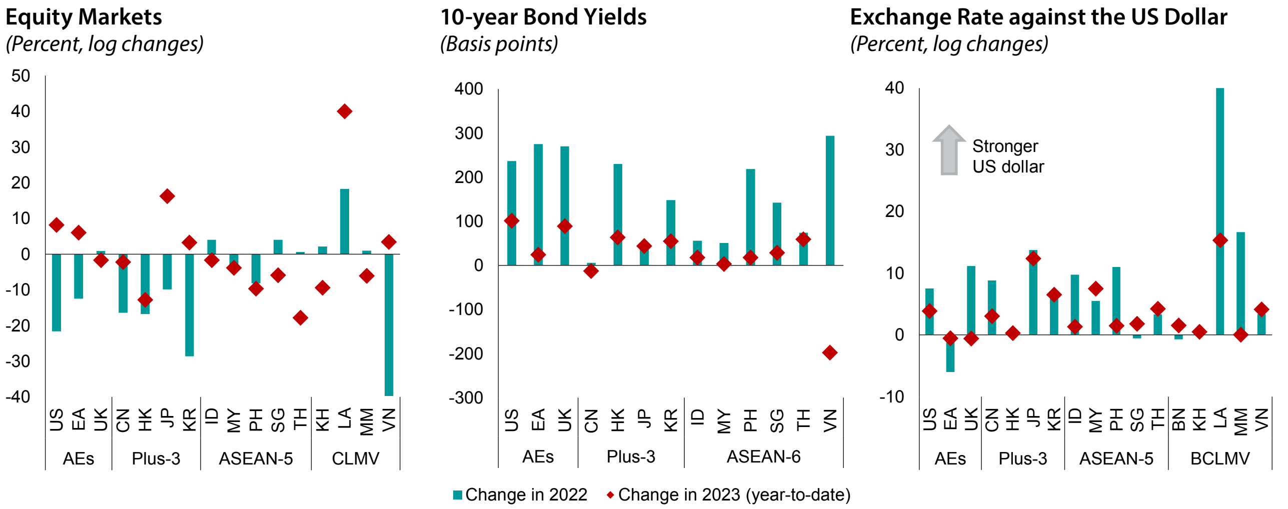
Source: Bloomberg Finance L.P.; AMRO staff calculations.
Note: KBW = Keefe, Bruyette, and Woods; S&P = Standard & Poor's.

Figure E.4. Selected Advanced Economies: Balance Sheets of Major Central Banks
(Index, 31 January 2020 = 100)



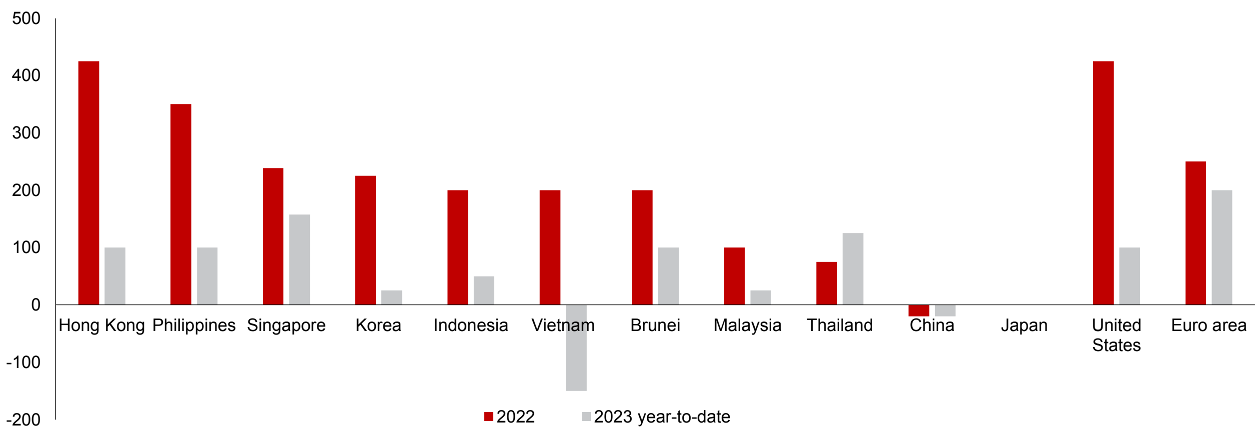
Source: Haver Analytics; AMRO staff calculations.
Note: BOE = Bank of England; ECB = European Central Bank.

Figure E.5. Selected ASEAN+3: Changes in Financial Markets, 2022 and 2023



Source: National authorities via Bloomberg Finance L.P.; Bank for International Settlements; Haver Analytics; AMRO staff calculations.
Note: The DXY Index is used to determine the change in the US dollar. AEs = advanced economies; BN = Brunei; CN = China; EA = euro area; HK = Hong Kong; ID = Indonesia; JP = Japan; KH = Cambodia; KR = Korea; LA = Lao PDR; MM = Myanmar; MY = Malaysia; PH = the Philippines; SG = Singapore; TH = Thailand; UK = United Kingdom; US = United States. VN = Vietnam. Data for 2023 (year-to-date) as of 31 October 2023.

Figure E.6. Selected ASEAN+3: Policy Rate Changes, 2022 and 2023
(Basis points)



Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: For Vietnam, we use the main refinancing rate. For Brunei, we use the standing facility lending rate. For Singapore, we use the overnight rate average. For China, we use the People's Bank of China (PBC) 7-day Reverse Repurchase yield. For Hong Kong, we use the Base Rate. Data for 2023 as of 31 October.

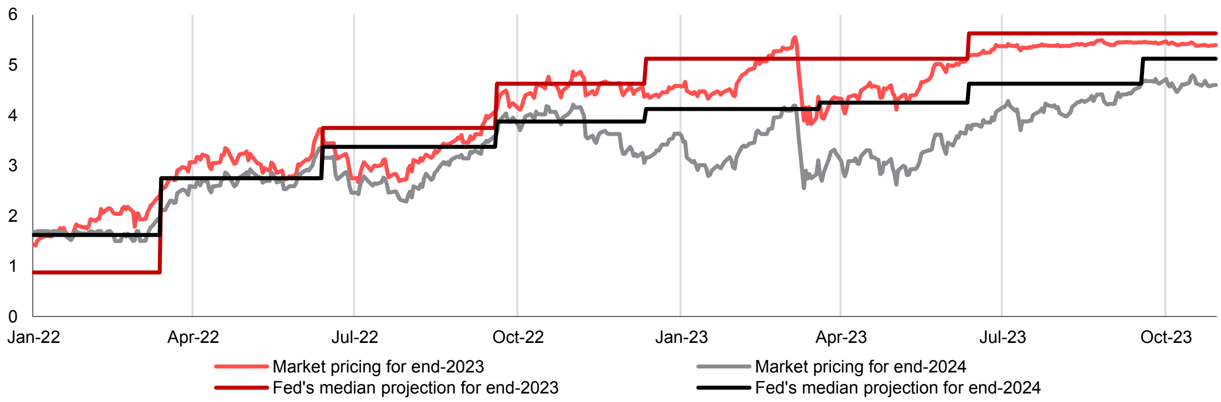
Low visibility of challenges to financial stability

Inflation provides a challenging backdrop for ASEAN+3 authorities in safeguarding financial stability, as it is for monetary authorities in many major economies outside the region. Headline inflation has receded after its rapid rise in 2022. However, the pace of disinflation has varied across economies, with above-target inflation persisting in several. A tight labor market and lagged effects of high inflation could push up wages and, together with a potential commodity price surge and geopolitical tensions, could fuel inflation. In an adverse scenario, a resurgence in inflation could put regional central banks in a challenging situation as they try to balance multiple objectives of managing inflation, promoting economic growth, and ensuring financial stability.

Financial markets consider the Fed to be close to the end of its tightening cycle, but the risk of further tightening cannot be dismissed amid uncertainty over how long inflation will remain elevated. Further upward revision in projections cannot be ruled out given the strength of the US economy, its robust labor market, and the risk of a resurgence of inflation. Market evaluation of the Fed's reaction function has changed over the years (Figure E.7), with a dovish bias of market expectation re-emerging in the latest hiking cycle. The realignment of market expectations to the "higher-for-longer" scenario can lead to increased volatility in the markets.

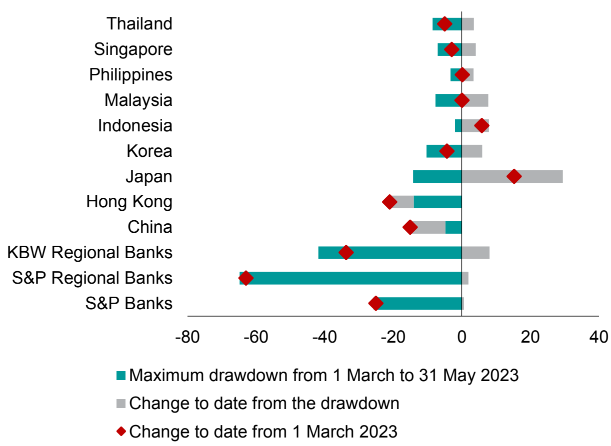
Banking stress in the US and Europe has had limited spillovers to ASEAN+3 markets, but risks remain. The March bank run raised significant concerns about the health of the banking system across the world. Although ASEAN+3 banks appear more resilient to the factors that cause US regional banks to fail, financial stocks still fell with the increase in investors' risk aversion (Figure E.8). The lack of recovery in US banking stocks highlights lingering investor concerns about the financial sector, as shown by elevated market betas (Figure E.9). As such, the risk of contagion from further stress in US banking sector to ASEAN+3 markets remains.

Figure E.7. Market and Fed's Projected Policy Rates Since the Start of the US Hiking Cycle
(Percent)



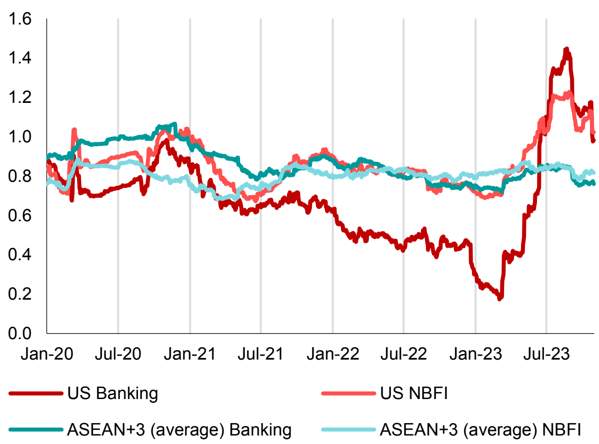
Source: Bloomberg Finance L.P.; Haver Analytics; AMRO staff calculations.
Note: The projected (at the start of the year) market pricing and median dots on 1 January for end-year policy rates are the latest available. The intra-meeting change in market projections shows the average and median change in the market projections for the policy rates of each meeting during the year from the day after the previous meeting. Data for 2023 is as of 31 October 2023.

Figure E.8. US and Selected ASEAN+3: Drawdown and Recovery in Banking and Financial Index after the Banking Turmoil
(Percent, log returns)



Source: Bloomberg Finance L.P; AMRO staff calculations.
Note: MSCI Financial Indices have been used for ASEAN+3 economies. KBW = Keefe, Bruyette, and Woods; S&P = Standard & Poor's. Drawdown refers to index changes from 1 March 2023 to the trough before 31 May 2023. The change to date is from the lowest level seen between 1 March 2023 and 31 May 2023 to the latest level (as of 31 October 2023).

Figure E.9. US and ASEAN+3: Market Betas for Banking and NBFI Sectors
(Index)



Source: Bloomberg Finance L.P; AMRO staff calculations.
Note: ASEAN+3 (average) is the simple average of the market betas for China, Hong Kong, Japan, Indonesia, Korea, Malaysia, Philippines, Singapore, and Thailand. NBFI = nonbank financial institution; US = United States. Latest level as of 30 October 2023.

Financial system risks and vulnerabilities could be amplified by increasingly interconnected and complex financial systems, and a high degree of dollar dependence in the region, where dollar finance increasingly is channeled through nonbank financial intermediaries (NBFIs). Faster cross-border capital movement boosted by more integrated financial markets and digitalization could propagate shocks much faster than before. Banks and NBFIs could face increasing risks of digital runs facilitated by social media and digital payments, with potential for a rapid deposit outflow. US dollar funding stress may re-emerge as monetary tightening and balance sheet rundowns in the US could combine with a sudden shift in risk sentiment to create a shortage of dollar supply. Lower rated financial institutions are more vulnerable to the "sudden stop" in access to dollar liquidity that can happen amid concerns over counterparty risks.

Higher debt spurred by ample liquidity and pandemic measures

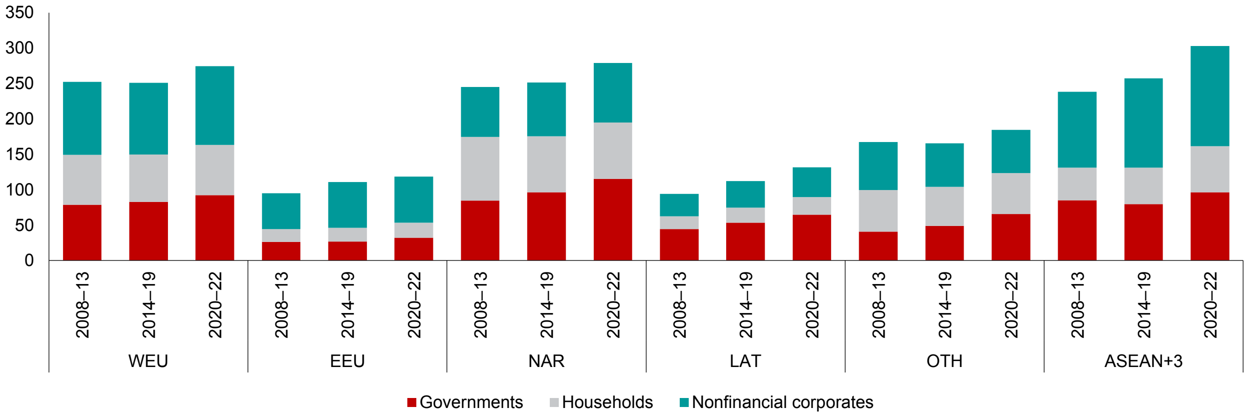
Ample and low-cost liquidity provided by global central banks in the aftermath of the global financial crisis had fueled a rise in ASEAN+3 debt. In these low-for-long interest rate conditions, many corporates, households, and governments in the region took on new debt to finance consumption and investments. During the pandemic, monetary and fiscal stimulus measures further increased debt-to-GDP ratios. Central banks in the region helped stabilize the economy and financial system by expanding their balance sheets and lowering policy rates. Governments issued more debt to finance pandemic relief measures. And the nonfinancial private sector increased its borrowing, taking advantage of cheap funding costs.

Against this background, the thematic chapters of this inaugural ASEAN+3 Financial Stability Report (AFSR) 2023 assess the financial stability implications of elevated private and public nonfinancial debt. Chapters 2 and 3 show how the region's total debt-to-GDP ratio—including corporate, household, and public debt—has steadily increased, peaking at 325 percent of the region's GDP during the pandemic before declining to 299 percent of GDP at the end of 2022.

The corporate debt-to-GDP ratio is notably higher in ASEAN+3 than in other regions, while the ratios for household and government debt are relatively moderate (Figure E.10). The corporate debt-to-GDP ratio reached about 140 percent while for households the ratio was 63 percent in 2022, an increase of 40 and 18 percentage points respectively from 2008. The rapid expansion of private sector debt has driven the increase in overall debt in Plus-3 economies and in the international financial hubs of Hong Kong and Singapore.

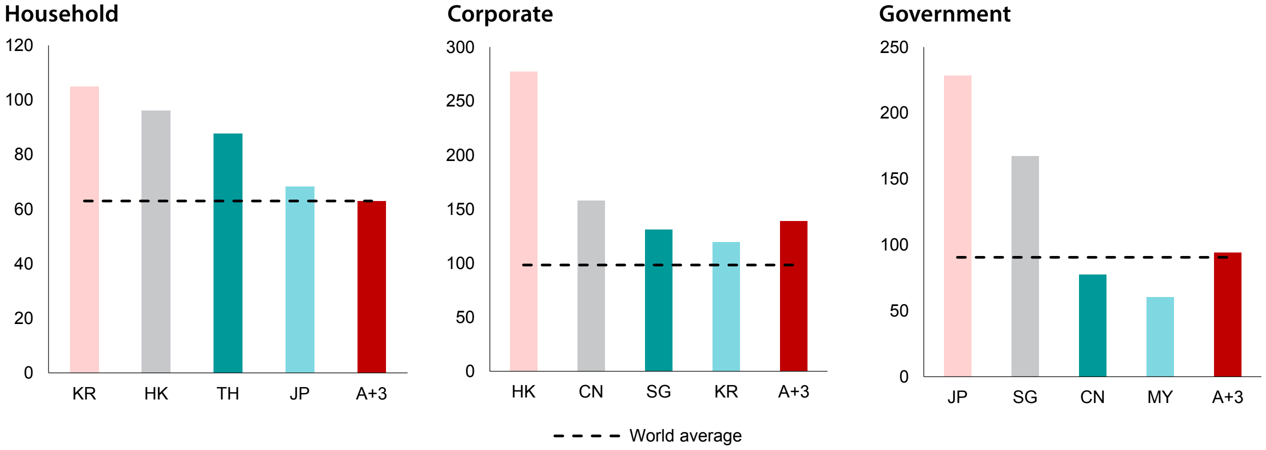
The composition of debt and associated risks vary greatly across ASEAN+3 economies (Figure E.11). Relative to world averages, Hong Kong, Japan, Korea and Thailand have higher household debt, while China, Hong Kong, Korea and Singapore have higher corporate debt. Japan maintains an exceptionally high public debt.

Figure E.10. World: Nonfinancial Sector Debt-to-GDP by Region
(Percent of GDP)



Source: BIS; IMF; AMRO staff calculations
Note: WEU = Western Europe; EEU = Eastern Europe; NAR = North America; LAT = Latin America; OTH = Others. ASEAN+3 includes China, Hong Kong, Indonesia, Japan, Korea, Malaysia, Singapore and Thailand.

Figure E.11. Selected ASEAN+3: Nonfinancial Sector Debt-to-GDP Ratios, 2022
(Percent of GDP)



Source: BIS; IMF; AMRO staff calculations
Note: For household and corporate debt-to-GDP ratios, Hong Kong, Indonesia, Japan, Korea, Malaysia, Singapore and Thailand are included in ASEAN+3. For public debt ratios, all ASEAN+3 economies are included. A+3 = ASEAN+3; CN = China; HK = Hong Kong; JP = Japan; KR = Korea; MY = Malaysia; SG = Singapore; TH=Thailand.

Financial stability risks and vulnerabilities from higher debt

Rapid debt accumulation by private or public sectors makes financial systems more vulnerable to sudden shocks. Long periods of credit expansion and risk-taking could lead to financial instability that could eventually result in panic and crisis. The recent collapse of some US regional banks and the liquidity stress that hit Credit Suisse in Europe are reminders of the need for vigilance.

Chapters 2 and 3 warn that increased debt stocks and rising debt service in a high interest rate environment could threaten financial stability, especially when pandemic support measures for households and firms have been, or in some cases are still being, phased out.

- For households, corrections in housing prices and rising mortgage interest payments are major pressure points. Housing prices have fallen since the pandemic but may remain above levels consistent with macroeconomic fundamentals in some economies, which continue to face the risk of further price corrections. Interest rate increases raise the cost of servicing debt, with a faster transmission in economies with a high proportion of floating mortgage loans. In a recession, defaults could rise significantly among households with reduced incomes or high leverage.

- Corporates with relatively weak balance sheets owing to low profitability and cash buffers, or/and high leverage, could find it more difficult to refinance and pay interest expenses. These risks are more evident in the property and construction sectors, especially in economies where the housing market is in a downturn, and for unlisted micro, small and medium-sized enterprises.

- Governments with elevated debt-to-GDP ratios may face increased refinancing costs and rollover risk on maturing debt. The risk that an ASEAN+3 economy could have refinancing problems depends on factors such as the maturity and currency structure of its debt, investor composition, and market liquidity. Excessive debt levels raise concerns about debt sustainability and increase the likelihood of a fiscal crisis, which would erode investor confidence and impede credit availability.

Chapter 4 finds that while bank-based financing still dominates in ASEAN+3, the role of NBFIs has expanded. NBFIs have emerged as significant providers of foreign currency liquidity, particularly through the region's international financial centers, which represent an important channel in the propagation of financial shocks within ASEAN+3.

The resilience of some ASEAN+3 banks could be tested in a high interest rate environment despite building up capital buffers in the decades since the Asian Financial Crisis. Tighter financial conditions, combined with the exit from pandemic relief measures, could weaken banks' loan quality and increase nonperforming loans. Moreover, competitive pressures make the passthrough from high interest rates to net interest margins uncertain. Besides this, rising funding costs could exacerbate liquidity risks for banks from increased reliance on market and cross-border financing.

Risks to financial stability also arise from NBFI activities that involve substantial maturity and currency transformation. These can materialize, for example, with declines in NBFI asset values that lead investors to withdraw funds, or where declining assets values reduce access to market funding, which can force NBFIs to quickly deleverage. An associated fire sale of NBFI assets could trigger a broader fall in asset prices, further worsening liquidity and funding difficulties and impacting the broader economy.

Policy recommendations

The combination of high debt and rising interest rates means authorities need to strengthen defenses against financial stability risks. The policy mix requires a careful balancing of monetary, fiscal, and macroprudential policies, as well as good cooperation among authorities.

Chapter 1 recommends that ASEAN+3 central banks should prioritize price stability while preserving financial stability and supporting growth. Upside risks to the outlook for prices remain, where a resurgence in inflation could lead to higher for longer interest rates. When conflicts arise between inflation and financial stability objectives, a coordinated approach involving monetary, fiscal, and macroprudential measures is warranted to achieve the right balance.

To insulate the financial system from liquidity stress amid monetary tightening, central banks should make sure that regular liquidity facilities are available for banks. In economies where NBFIs are systemically important, authorities may need to strengthen regulatory, supervisory, and risk management measures. In a potentially systemic crisis situation, where these measures could prove insufficient, authorities should be prepared to provide temporary liquidity support for the orderly functioning of core financial markets and to limit contagion to the banking system or the broader economy. Such a liquidity backstop for NBFIs should be carefully designed with clear communication to avoid lending to insolvent institutions and to strike a delicate balance between crisis prevention and moral hazard concerns. Regional authorities should cooperate to ensure continued availability of US dollar liquidity in times of stress given that the dollar remains the dominant currency in trading and investment in the region. Reducing dependence on the US dollar can contribute to regional financial stability, although this will be a multiyear initiative requiring close cooperation among ASEAN+3 authorities.

Chapter 2 recommends that policymakers deploy a wide range of macroprudential tools to mitigate systemic risks to the financial system from higher nonfinancial private debt. These can target different sources of risk arising from high household and corporate debt, and help curb excessive leverage by property developers. Promoting responsible corporate borrowing and embarking on new initiatives such as digitalization to reduce costs and enterprise collaboration efforts to promote corporate competitiveness are important steps. Moreover, given that small and medium-sized enterprises are particularly vulnerable, credit guarantee schemes can directly promote their access to financing, which could facilitate the rollover of debts.

To rein in financial stability risks from higher public debt (Chapter 3), a medium-term fiscal consolidation plan may be warranted. In some cases, a fiscal rule can also be considered. In addition, public debt management should aim to establish a debt structure with a maturity profile and currency distribution that mitigates liquidity and currency risks. It should also develop a diversified investor base to reduce government reliance on a narrow group of investors—and so increase resilience against shocks. Lastly, efforts to promote a deep and liquid bond market should continue.

Safeguarding the soundness of financial intermediaries is paramount to ensure that credit intermediation is both stable and smooth (Chapter 4). For banks, keeping leverage in check, including through the continual use and refinement of macroprudential policies, is important to reduce vulnerabilities. Weaker banks are advised to either increase provisioning or improve their capital reserves. Learning from the experiences of US bank failures, the scope of the deposit insurance coverage could be widened to ensure depositor confidence in times of stress. NBFIs' growing systemic importance makes strengthening their supervisory and regulatory framework a priority. Their central role in the functioning of financial markets in the region, especially in dollar funding and hedging markets, requires close cooperation among regulatory and macroprudential authorities and central banks in ASEAN+3. Steps to close the major gaps in data on NBFIs can facilitate this cooperation.