



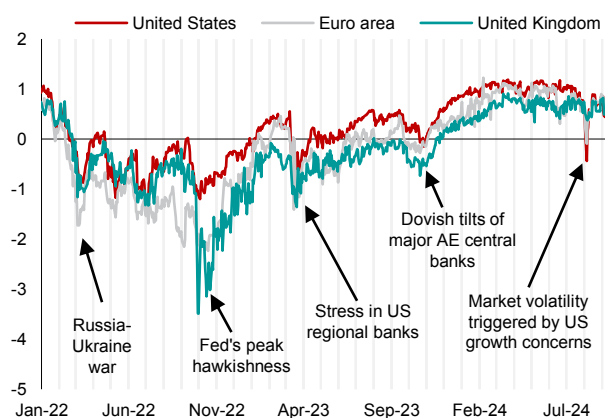
Executive
Summary

Strengthening resilience to challenges ahead

Relative to the situation during the launch of the inaugural *ASEAN+3 Financial Stability Report (AFSR) 2023*, global financial conditions initially eased as the end of the central banks' tightening cycle appeared in sight (Figure E.1). However, conditions tightened again as risks surrounding the United States (US) growth outlook emerged, with market participants navigating the bifurcated risks of US growth and inflation. Initially, the primary concern was persistently high inflation—or, in an extreme scenario, a resurgence—which could have delayed US monetary easing. By August, however, the focus had shifted to the

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

Financial conditions remained generally easy during H1 2024 in major economies, but volatilities increased since August.



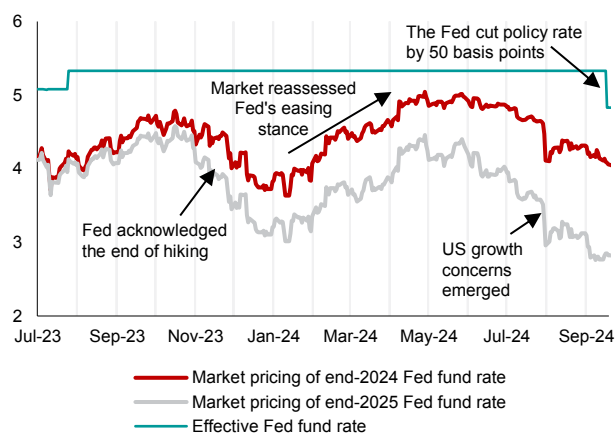
Source: Bloomberg Finance L.P.; AMRO staff calculations.
Note: Higher values of the index indicate easier financial conditions. AE = advanced economies.
Data as of 20 September 2024.

ASEAN+3 markets generally followed global trends but were also sensitive to domestic factors. In the first half of 2024, spillovers from strong US equity markets to regional equities were limited to a few sectors while the rise in US Treasury yields led to wider interest rate differentials and weaker ASEAN+3 currencies. However, as the Fed's monetary easing loomed and eventually commenced, yields eased and led to a weaker US dollar during the third quarter of 2024. Portfolio flows in the region were relatively muted in early 2024, as ASEAN+3 asset valuations were less attractive than elsewhere, but picked up recently as US Treasury yields eased. Due to easing inflationary pressures and robust growth, many ASEAN+3 central banks may maintain their current monetary stance for some time, but idiosyncratic factors may cause some divergence in the timing and pace of rate cuts. Moreover, concerned about the exchange rate weakness, several ASEAN+3 authorities have intervened in the forex market or raised interest rates to support their currencies. Some authorities have implemented measures to

risks of an economic hard landing and the Fed's response to such a scenario. These concerns were exacerbated by growing apprehension over the potential overvaluation of the "Magnificent Seven" tech stocks, which had fuelled much of the equity market gains earlier in the year. This uncertainty culminated in an equity sell-off and volatility spikes, further aggravated by the unwinding of yen carry trades. On 18 September, 2024, the Federal Reserve (Fed) reduced interest rates by 50 basis points (Figure E.2), responding to declining inflationary risks and growing concerns about labor market weakness.¹

Figure E.2. US: Fed Rate Expectations for End-2024 and End-2025
(Percent)

The market expects the Fed to ease monetary policy by around 100 basis points in 2024.



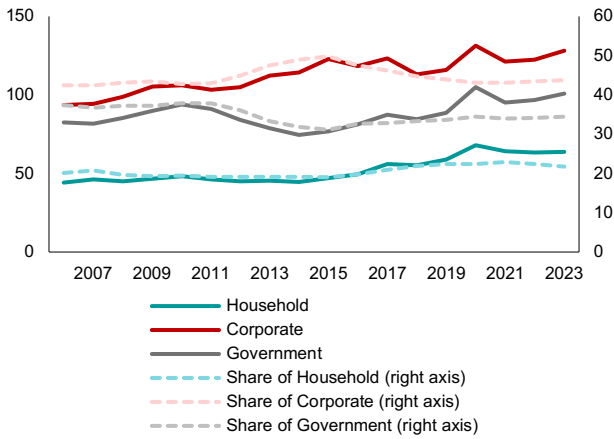
Source: Bloomberg Finance L.P.
Note: Data as of 20 September 2024.

encourage repatriation, and portfolio inflows, and to manage demand for US dollars in domestic markets to mitigate pressures on exchange rates.

The total debt-to-GDP ratio—encompassing corporate, household, and government debt—increased by 10 percentage points to 290 percent in 2023 (Figure E.3). This rise was mainly driven by corporate and government debt, with household debt increasing only modestly. Corporate debt vulnerability is high among micro, small, and medium sized enterprises, especially in property and construction, manufacturing, and raw materials sectors. The interest payment-to-GDP ratio for government debt rose significantly in 2023 for most ASEAN+3 economies due to higher debt levels and elevated interest rates (Figure E.4). Although interest rates in some economies have started to decline, the overall debt burden would likely remain high due to increased debt levels and the slow pace of interest rate reductions.

Figure E.3. Selected ASEAN+3: Corporate, Government and Household Debt
(Percent of GDP; percent)

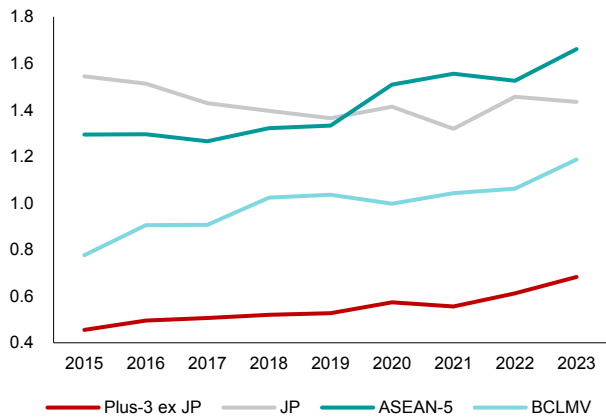
ASEAN+3’s total debt-to-GDP ratio rose by 10 percentage points from 2022, driven by corporate and government debt.



Source: Bank for International Settlements (BIS); AMRO staff calculations.
Note: Data covers all economies reporting nonfinancial debt data to the BIS. Selected ASEAN+3 includes China, Hong Kong, Indonesia, Japan, Korea, Malaysia, Singapore, and Thailand. Government debt data for these economies in nominal value, except for Korea, which reports market value.

Figure E.4. Selected ASEAN+3: Government Interest Payments
(Percent of GDP)

Elevated debt levels and rising interest rates have driven up government interest payments.



Source: National authorities via CEIC and Haver Analytics; AMRO (2024b); AMRO staff calculations.
Note: The interest payments are based on fiscal years and are computed using simple averages amongst economies in the specific group. Plus-3 ex Japan = China, Hong Kong, and Korea; JP = Japan; ASEAN-5 = Indonesia, Malaysia, Philippines, Singapore, and Thailand; BCLMV = Brunei, Cambodia, Lao PDR, Myanmar, and Vietnam.

Shifting near-term risks: some fade, some intensify

Although the Fed has commenced monetary easing, the timing and magnitude of further rate cuts will depend on developments on inflation and employment. Markets have adapted to the likelihood of sustained higher interest rates, but concerns over growth and employment have surfaced. Given that the pace of disinflation has been slower than expected (Figure E.5), a resurgence in inflation remains a potential threat, which could lead to renewed rate hikes. The worst-case scenario is stagflation, where high inflation constrains the Fed’s ability to address an economic slowdown.

Geopolitical uncertainties have intensified. Tensions in the Middle East have disrupted global supply chains, increasing commodity prices and shipping costs, which could derail the disinflationary process. The outcome of the US presidential election will significantly influence US trade, monetary, and fiscal policies, affecting global and ASEAN+3 economies and markets. Moreover, rising geopolitical fragmentation and potential conflict escalations could lead to increased risk aversion and capital outflows from regional markets.

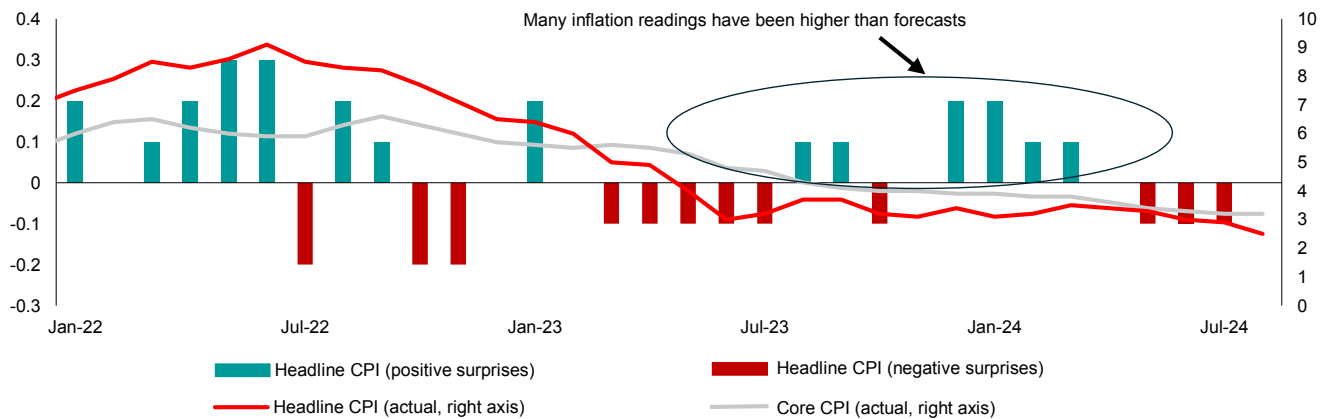
That said, some risks have receded over the past three quarters. The concerns surrounding the US regional banking system have diminished compared with the first half of 2023. Although stress in corporate real estate (CRE) has intensified in the US and other major developed

markets, spillovers to the financial sector have been limited, with only a few banks reporting losses on their CRE exposures. Nonetheless, CRE weakness remains a risk to financial stability. Meanwhile, US dollar funding conditions have remained stable, and with the Fed easing its monetary policy, the risks of funding stress have lessened.

The risks discussed may materialize amid increased interconnectedness among ASEAN+3 financial institutions, markets, and economies, heightening the potential for financial contagion. The Feature Analysis in Chapter 1 quantifies this vulnerability, showing that ASEAN+3 financial markets remain susceptible to shocks from global factors and developed economies, particularly North America, the United Kingdom, and Europe. ASEAN+3 markets are linked to developed financial markets, with equity returns in Japan, the Philippines, Singapore, Korea, Malaysia, and Hong Kong relatively sensitive to these shocks (Figure E.6). The effect from developed markets on ASEAN+3 is bigger than from emerging markets outside the region. The Plus-3 economies (China, Japan, and Korea) and the regional financial centers (Hong Kong and Singapore) are most exposed to global factors. Hong Kong and Singapore’s extensive external connections and cross-border spillovers make them potential channels of contagion for the region (Figure E.7).

Figure E.5. US: Inflation and Inflation Data Surprises
(Percentage points; percent)

The disinflation has been slower than expected.

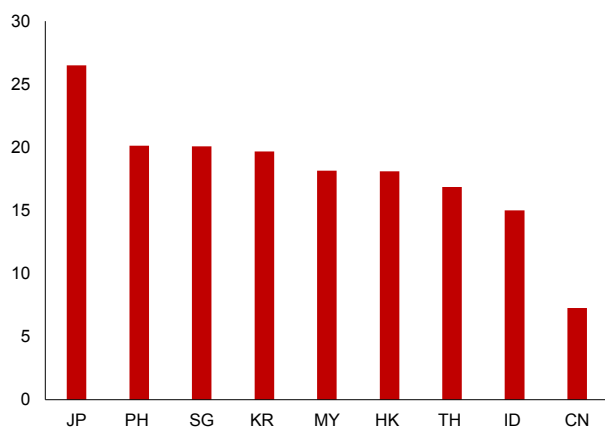


Source: Bloomberg Finance L.P.; AMRO staff calculations.

Note: Headline CPI surprise is calculated as the difference between actual and forecast median of Bloomberg economist survey. CPI = consumer price index. Data as of August 2024.

Figure E.6. Selected ASEAN+3: Top Spillovers from Non-ASEAN+3 Advanced Economies
(Percent)

Advanced economies have significantly strong contagion effects on ASEAN+3.

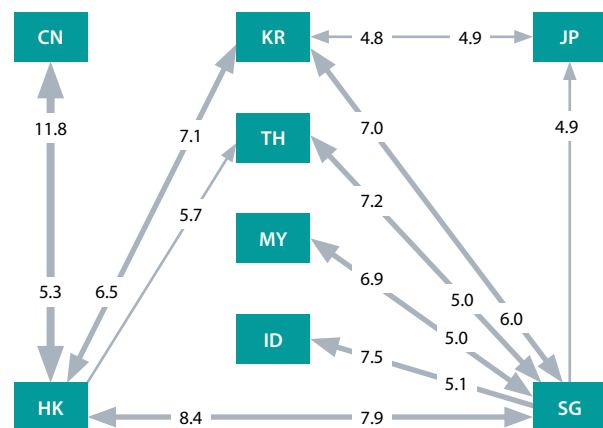


Source: AMRO staff calculations.

Note: The height of the bars reflects the size of the importance of spillover transmission channel, as calculated using the approach of Diebold and Yilmaz (2012, 2014). The figures represent the percentage of total equity return variability of each ASEAN+3 economy that is explained by a shock from advanced economies outside the ASEAN+3 region. See Annex 1.2 (Feature Analysis in Chapter 1) for technical details. CN = China; HK = Hong Kong; ID = Indonesia; JP = Japan; KR = Korea; MY = Malaysia; PH = Philippines; SG = Singapore; TH = Thailand.

Figure E.7. Selected ASEAN+3: Intraregional Spillovers
(Percent)

Spillovers involving the regional financial centers are central to regional dynamics.



Source: AMRO staff calculations.

Note: The size of the directed arrows reflects the size of the importance of spillover transmission channel, as calculated using the approach of Diebold and Yilmaz (2012, 2014). The numbers displayed in the directed arrows represent the percentage of total equity return variability of each ASEAN+3 economy that is explained by a shock from another ASEAN+3 economy. See Annex 1.2 (Feature Analysis in Chapter 1) for technical details. CN = China; HK = Hong Kong; JP = Japan; KR = Korea; MY = Malaysia; SG = Singapore; TH = Thailand.

Medium-term risks loom

Property sector

Chapter 2 analyses the real estate market downturn and the risks from property developer financing in ASEAN+3. High interest rates post-pandemic have worsened developers' financial conditions, leading many, including major companies, to default or face severe liquidity constraints and rising financing costs. Eroded buyer confidence has dampened demand. From 2021 to 2023, property companies in the ASEAN+3 region exhibited significant vulnerabilities, with declining profitability, liquidity, and debt servicing

capacity compared to pre-pandemic levels. Some Plus-3 economies showed more pronounced weaknesses (Figure E.8).

Currently, risks from property developers have not escalated into systemic threats, and potential spillover risks from the property sector to banks in ASEAN+3 remain limited, given the robust capital buffers of banks. However, pockets of vulnerability exist in those institutions subject to less regulatory oversight, including small or local banks, nonbank financial intermediaries (NBFIs), and other shadow banking activities.

Figure E.8. Selected Regions: Changes in Financial Conditions of Property-Related Corporates

Property companies' financial conditions, especially in Plus-3, have worsened in profitability, liquidity, debt servicing, refinancing risk, and leverage compared with pre-pandemic levels and other regions.



Source: Orbis; AMRO staff calculations.
 Note: The larger the shape, the greater the vulnerability in the financial soundness of the companies. The sample consists of publicly listed property construction, developers, and real estate companies. The indices were calculated based on the z-scores using the means and standard deviation of all available values for each financial condition indicator between 2018 and 2023. For ROA (return on assets), Current Ratio, DSR (debt service ratio), and ICR (interest coverage ratio), Z-scores are inverted (multiplied by -1) to denote higher values as riskier. Short-term debt and leverage are not inverted as higher values are already interpreted as riskier. Selected ASEAN economies = Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam. Plus-3 economies = China, Hong Kong, Japan, and Korea. The benchmark advanced and emerging market economies are those with at least 20 listed real estate companies in the Orbis database and are grouped according to the IMF classification (<https://www.imf.org/en/Publications/WEO/weo-database/2023/April/groups-and-aggregates>).

US dollar reliance

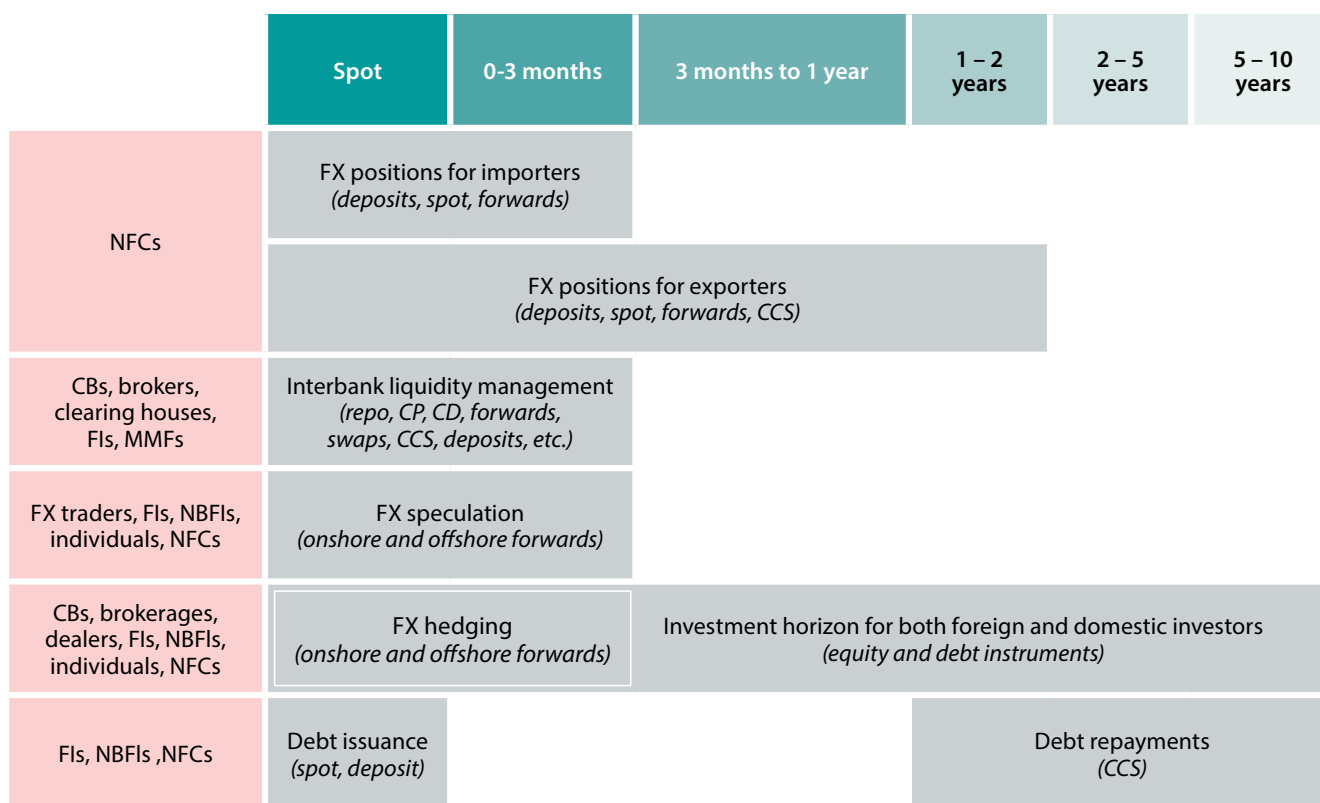
Chapter 3 examines the region’s reliance on the US dollar and the major risks for the ASEAN+3 financial system. The US dollar is widely used for cross-border financial activities, and thus any change in US dollar financing impacts the ASEAN+3 financial system. The extent of this impact depends on the roles and interlinkages of various institutions, including companies, banks, and nonbank financial intermediaries. The chapter explores these aspects in detail, identifying factors that may either exacerbate or mitigate spillovers from changes in the global US dollar financing environment. The interconnectedness of these institutions also introduces risks, such as currency and maturity mismatches (Figure E.9).

The region’s high reliance on US dollars in cross-border financial transactions exposes the ASEAN+3 financial

system to two key risks. First, a US dollar funding shortage heightens stability risks for financial markets and intermediaries. Previous episodes of funding stress, triggered by global economic and financial shocks, created difficulties for ASEAN+3 financial intermediaries to secure liquidity. Empirical studies show cross-border lending decreases during tighter funding conditions, affecting domestic banking stability (Figure E.10), increasing financial market volatility (Figure E.11), and weakening ASEAN+3 assets. Second, the US dollar acts as a transmission channel for shocks from US monetary policy, geopolitical tensions, and other global events. Spillovers from US monetary policy have significantly affected ASEAN+3 financial markets during both prolonged periods of easy conditions and short periods of sharp tightening. The US dollar’s status as a safe asset also transmits global shocks to ASEAN+3 as investors seek safe assets during times of heightened uncertainty.

Figure E.9. Interaction of Various Entities in the US Dollar Supply Chain and Resultant Maturity Mismatches

The participants in the US dollar supply chain operate in different maturities and may create duration mismatches in the financial system.



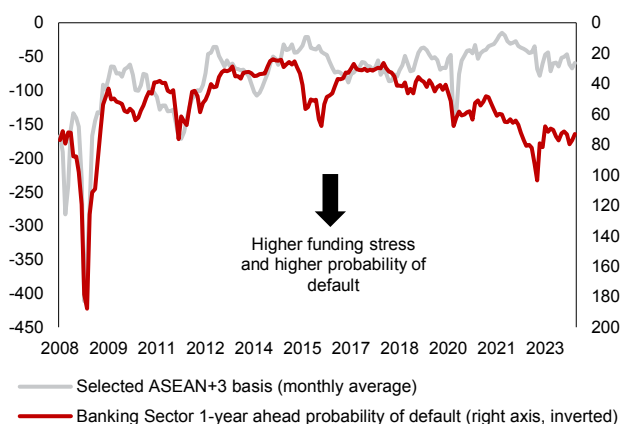
Source: AMRO staff's representation based on inputs from market participants.

Note: The diagram is a simplified and stylized representation of a complex network and is not all encompassing. CCS = cross-currency basis swap; CB = central bank; CD = certificate of deposit; CP = commercial paper; FI = financial institution; FX = foreign exchange; MMF = money market fund; NBFi = nonbank financial intermediary; NFC = nonfinancial corporate.

Figure E.10. Selected ASEAN+3: Average Cross-Currency Basis and Banking Sector 1-Year Ahead Probability of Default

(Basis points; basis points)

The probability of default for banking sector tends to rise when there is US dollar funding stress.

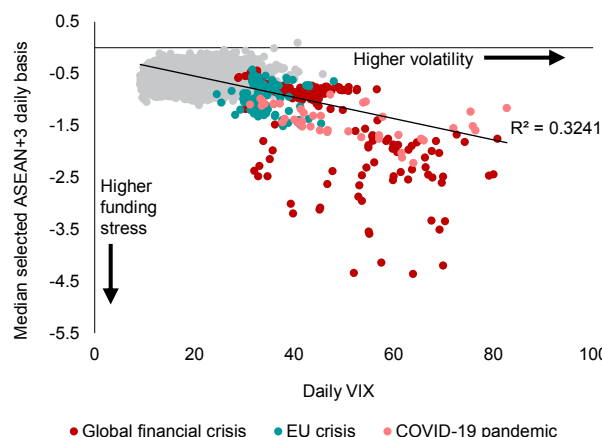


Source: AMRO staff estimates; NUS Credit Research Initiative (NUS-CRI).
 Note: Cross-currency basis ("basis") is the difference between US dollar interbank borrowing rate and the rate for borrowing US dollar through foreign exchange swaps over. A more negative value of the basis shows a higher premium for borrowing in the swaps market, and hence higher US dollar funding stress. Sample is for ASEAN+3 economies which includes China, Hong Kong, Japan, Korea, Malaysia, Singapore, and Thailand.

Figure E.11. Selected ASEAN+3: Volatility Index versus Daily Median Cross-Currency Basis

(Index; percent)

Funding stress tends to be higher in periods of higher market volatility.



Source: Bloomberg Finance L.P.; NUS Credit Research Initiative (NUS-CRI); AMRO staff estimates.
 Note: The volatility index used is the index of expected volatility in S&P 50 Index (VIX Index) derived from option bid and ask quotes. Sample is for ASEAN+3 economies which includes China, Hong Kong, Japan, Korea, Malaysia, Singapore, and Thailand. Data as of 20 September.

Address risks and challenges by building resilience

On balance, the overall financial stability risk across ASEAN+3 in 2024 appears to be lower than in 2023. As such, the authorities can use this period to build policy space while continuing to be vigilant of emerging risks. The environment of robust growth and disinflation can provide an opportunity for ASEAN+3 governments to reduce debt and create more fiscal room to react to shocks. They may also rebuild foreign reserves during periods of capital inflows, to boost market confidence and create policy buffers against extreme market volatility.

Chapter 1 recommends that authorities remain vigilant regarding the upside risk to inflation in the region. If inflation were to rise again, major central banks may adopt a tighter monetary stance, potentially reversing the current easing of financial conditions. Central bank response within ASEAN+3 to a resurgence in inflation would have to depend on domestic circumstances in individual economies and their susceptibility to spillovers from global monetary tightening. The authorities may also need to be mindful of domestic financial stability risks such as exposure of smaller banks and NBFIs to stressed sectors and structural issues such as high debt. The authorities may need to step in to prevent financial contagion if these risks were to escalate while also avoiding moral hazard.

Escalating geopolitical tensions or a global growth slowdown could test the resilience of the ASEAN+3 financial system. Beyond the impact on inflation, severe geopolitical stress or economic slowdown could trigger investor risk aversion, leading to capital outflows and asset price declines, thereby exacerbating market turbulence. Given the increased interconnectedness of ASEAN+3 financial systems, the source and transmission channels of risks from international spillovers must be continuously monitored. ASEAN+3 financial systems have become increasingly interconnected, making robust ASEAN+3-centric surveillance and cooperation vital. By taking a holistic macroeconomic and financial view of the region, authorities can better protect their economies from systemic risks and enhance overall financial resilience. ASEAN+3 economies should strengthen cross-border surveillance and data sharing, regional stress testing, home-host supervision, and liquidity support to effectively manage and mitigate potential spillover risks (Chapter 1 Feature Analysis).

To stabilize the ongoing difficulties from the property sector, Chapter 2 recommends that the authorities implement measures to prevent companies with sound fundamentals from defaulting due to the tight credit environment, based on reasonable criteria for identifying sound companies. Enhancing the resilience of financial institutions, especially smaller banks and NBFIs, through diversification and regulatory oversight is crucial, and prompt government action in times of stress is also necessary. Well-targeted policies aimed at stimulating property demand—tailored to each economy’s unique circumstances—to break the negative cycle should be considered. Ensuring transparency, rigorous credit assessments, and strict regulation will help mitigate the risks associated with overleveraging by property developers.

Chapter 3 discusses policy measures that focus on improving resilience within the dollar-reliant environment in the near term and reducing the structural dependence on the US dollar in the medium term. Strong economic and financial fundamentals have been proven to provide better resilience to withstand external shocks. The authorities should also strengthen the surveillance framework for monitoring US dollar liquidity conditions and enhance the macroprudential frameworks for banks and NBFIs. In times of localized funding stress, the regional financing arrangement can help provide support to an ASEAN+3 member facing US dollar liquidity stresses. In the longer term, authorities should continue with their efforts to reduce their reliance on US dollars by encouraging the use of local currencies and developing the required infrastructure and regulatory frameworks to facilitate the usage.

Beyond the horizon into the far future, authorities must address the financial stability issues arising from the mispricing of climate risks in financial markets. Box 1.4 (in Chapter 1) recommends that central banks explore tools such as incentivizing green projects with lower interest rates and addressing market challenges such as information asymmetry. Enhancing green taxonomies is also vital to clearly define sustainable activities, thereby promoting transparency and protecting issuer credibility.