4 Financial Cooperation

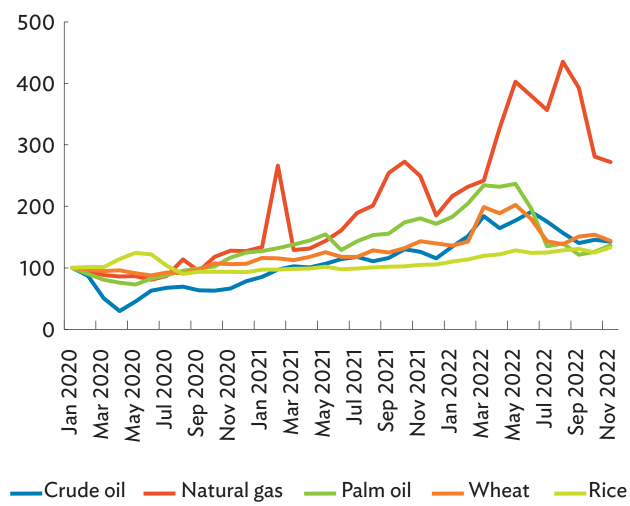
Global monetary and financial conditions are tightening while capital market volatilities are rising.

Inflation has started to weigh on global economic recovery, heightening recession and stagflation risks in major advanced economies.

Persistent, high global inflation pressures are driving central banks to tighten monetary policy quicker than expected, in particular, in the United States (US). Economies in Asia and the Pacific are facing relatively benign inflation pressures due to limited exposure to grain shortages and supply chain disruptions.[59] Nevertheless, recent trends point to growing inflation pressures on regional economies as price pressures spread across broader economies from commodities to agriculture, manufacturing, and services.

Inflation rose to higher levels in most Asian economies in the second quarter (Q2) or Q3 of 2022, compared with 2021 and 2020, especially in Azerbaijan, the Lao People's Democratic Republic, Pakistan, and Sri Lanka. Excessive inflation due to rising food prices was exacerbated by rising oil and gas prices at the onset of the Russian invasion of Ukraine in February 2022 (Figure 4.1). The US Federal Reserve Bank (the Fed) began raising the federal funds rate in March 2022, the first time it has done so since December 2018 (Government of the US, Board of Governors of the Federal Reserve System 2022a). Since then, the Fed has hiked it six consecutive times, reaching a decade high benchmark interest rate (Government of the US, Board of Governors of the Federal Reserve System 2022b, 2022c, 2022d, 2022e, 2022f, 2022g). And federal funds futures indicate the Fed's policy tightening cycle has not peaked yet—indeed, they still point to a hawkish Fed stance. The assessment of the Federal Open Market Committee participants in December 2022, indicates that the Federal funds rate would likely peak in 2023 (Figure 4.2).

Figure 4.1: Selected Commodity Prices (January 2020 = 100)

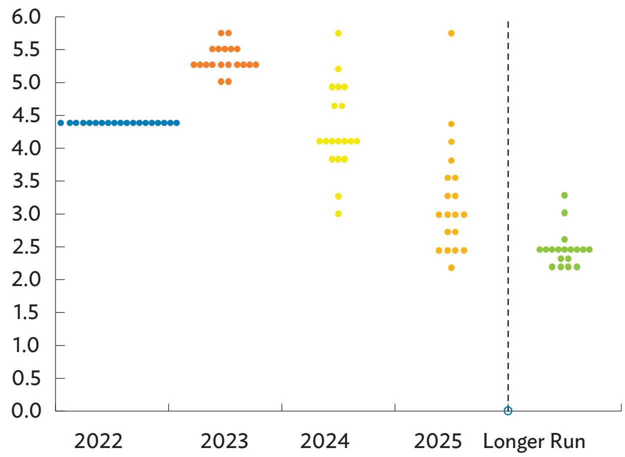


Notes: Crude oil refers to Brent crude oil. Natural gas refers to the United States Henry Hub middle spot price. Palm oil refers to the Malaysian Palm Oil Board Crude Palm Oil freight-on-board spot price. Wheat refers to the Chicago Board of Trade (CBOT) soft red winter wheat 1-month futures settlement price. Rice refers to CBOT rough rice 1-month futures settlement price.

Source: ADB calculations using data from CEIC Data Company.

[59] Asia and the Pacific, or Asia, refers to the 49 regional members of the Asian Development Bank (ADB), which includes Japan and Oceania (Australia and New Zealand) in addition to the 46 developing Asian economies. Subregional compositions for Central Asia, East Asia, the Pacific and Oceania, South Asia, and Southeast Asia are outlined in ADB. Asia Regional Integration Center. Economy Groupings. https://aric.adb.org/integrationindicators/groupings.

Figure 4.2: Federal Open Market Committee Participants' Assessments of Appropriate Monetary Policy (%)



Notes:

(i) The policy rate refers to the midpoint of target range or target level for the federal funds rate.

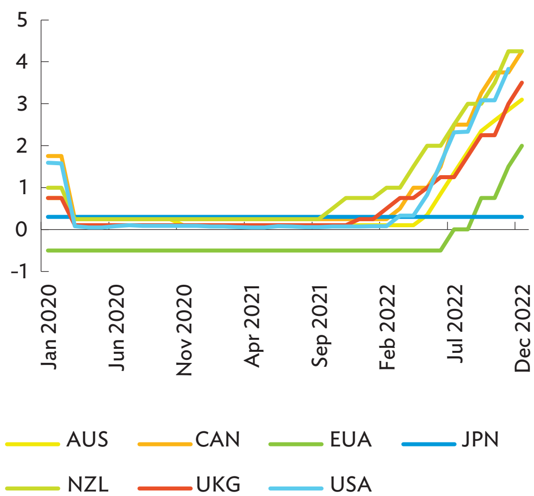
(ii) Each shaded circle indicates the value (rounded to the nearest 1/8 percentage point) of an individual participant's judgment of the midpoint of the appropriate target range for the federal funds rate or the appropriate target level for the federal funds rate at the end of the specified calendar year or over the longer run. One participant did not submit longer-run projections for the federal funds rate.

Source: Government of the United States. Federal Reserve Board of Governors (2022h).

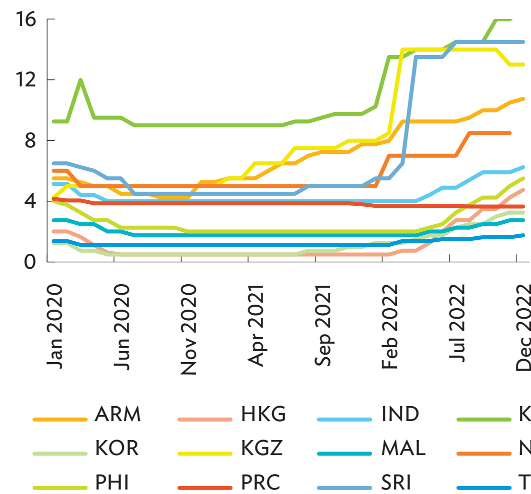
Global inflation pressures have prompted central banks to tighten monetary policy. The European Central Bank ended its Asset Purchase Program in June 2022 and raised all key interest rates in July 2022 (ECB 2022a and 2022b), as did other advanced economies such as Canada and the United Kingdom (Figure 4.3a). Asian economies have also started to raise key interest rates as coronavirus disease (COVID-19) inoculation rates rise and mobility restrictions loosen (Figure 4.3b). The People's Republic of China (PRC) has been the exception in easing monetary policy in 2022 amid worsening outlook in the property sector and overall sluggish economic recovery. Asian economies are increasingly concerned about domestic inflation pressures and potential capital inflow reversals stemming from narrowing interest rate differentials compared with advanced economies outside the region. However, tightening has been relatively more measured due to declining growth momentum as flagging external demand is anticipated amid sluggish global economic growth. Nevertheless, some economies in Central Asia—such as Armenia, Kazakhstan, and the Kyrgyz Republic—have increasingly widened their policy rate gap with that of the US in Q4 2022. Sri Lanka's policy rate gap has also widened amid the economic crisis (Figure 4.4). The yield

Figure 4.3: Benchmark Monetary Policy Rate (%)

(a) Selected advanced economies



(b) Selected Asian economies



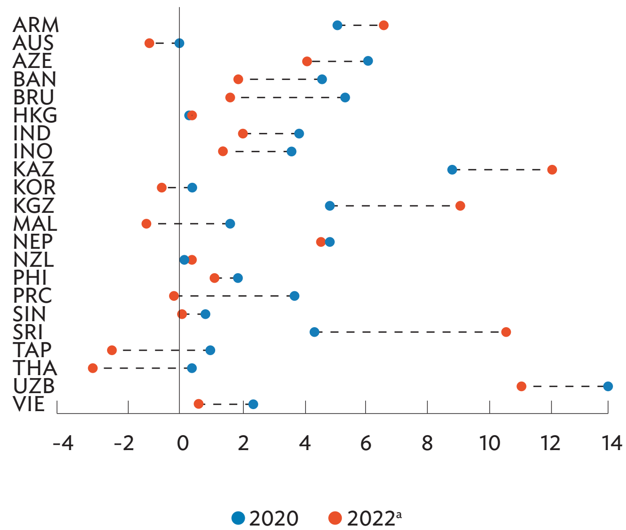
ARM = Armenia; AUS = Australia; CAN = Canada; EUA = euro area; HKG = Hong Kong, China; IND = India; JPN = Japan; KAZ = Kazakhstan; KOR = Republic of Korea; KGZ = Kyrgyz Republic; MAL = Malaysia; NEP = Nepal; NZL = New Zealand; PHI = Philippines; PRC = People's Republic of China; SRI = Sri Lanka; TAP = Taipei,China; UKG = United Kingdom; USA = United States.

Source: CEIC Data Company.

differential between the 2-year US bond and the 2-year bonds of selected Asian economies have narrowed, indeed, much narrower than the yield differential between the 10-year US bond yield and the 10-year bond yield of selected Asian economies. This also coincides with weakening local currency values in these Asian economies (Figures 4.5 and 4.6). Since the front end of the yield curve, particularly 2-year yields, is the most sensitive to changes in benchmark interest rates, this suggests that recent financial market developments are largely due to the divergent monetary policy stances of Asian economies and the US.

The synchronous global monetary policy tightening with faster-than-expected normalization of the US monetary policy has led to tighter financial conditions and heightened default risks for Asian economies, as reflected in credit default swaps (Figure 4.7). Junk bond yields in the euro area, the US, and most especially in Asia, have risen since Q2 2022 (Figure 4.8).

Figure 4.4: Policy Rate Differential with the United States Policy Rate—Selected Asian Economies (%)

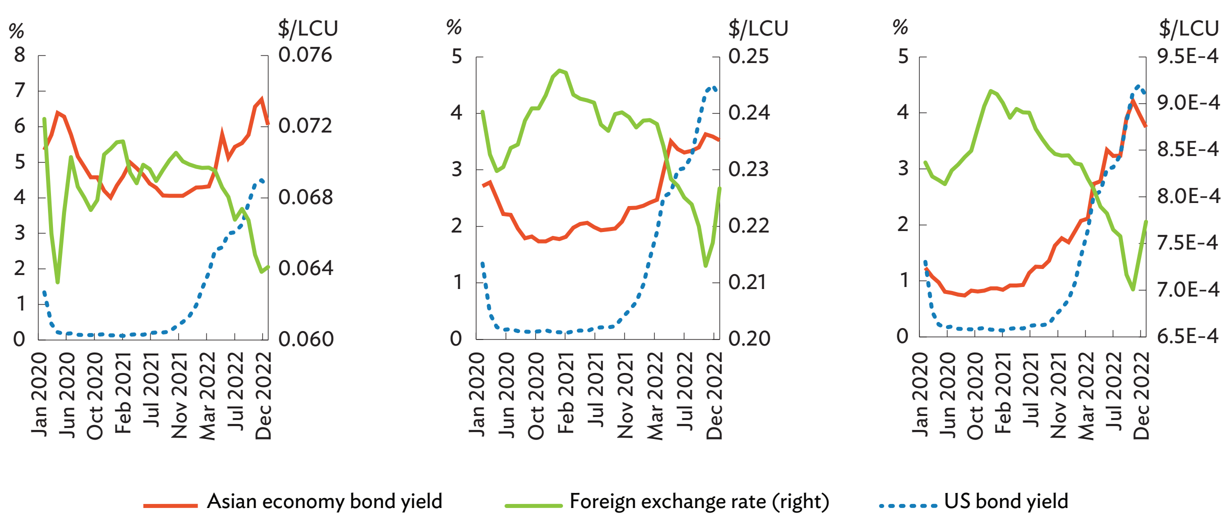


ARM = Armenia; AUS = Australia; AZE = Azerbaijan; BAN = Bangladesh; BRU = Brunei Darussalam; HKG = Hong Kong, China; IND = India; INO = Indonesia; KAZ = Kazakhstan; KOR = Republic of Korea; KGZ = Kyrgyz Republic; MAL = Malaysia; NEP = Nepal; NZL = New Zealand; PHI = Philippines; PRC = People's Republic of China; SIN = Singapore; SRI = Sri Lanka; TAP = Taipei,China; THA = Thailand; UZB = Uzbekistan; VIE = Viet Nam.

[a] As of November 2022.

Source: ADB calculations using data from CEIC Data Company.

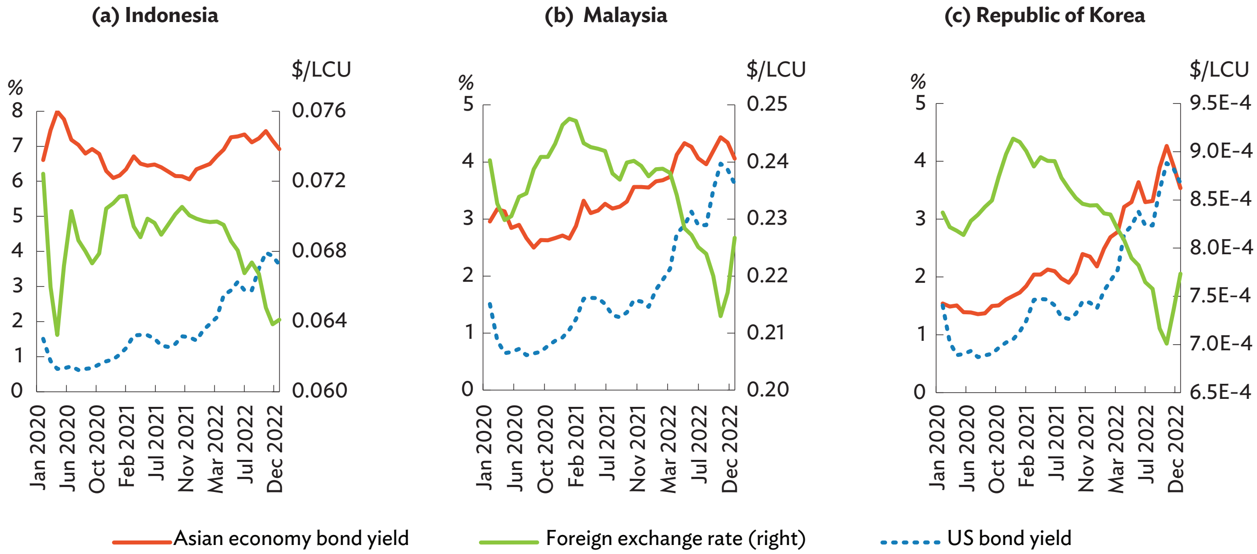
Figure 4.5: 2-Year Bond Yields and Foreign Exchange Rate—Selected Asian Economies and the United States



LCU = local currency unit, US = United States.

Source: ADB calculations using data from Bloomberg.

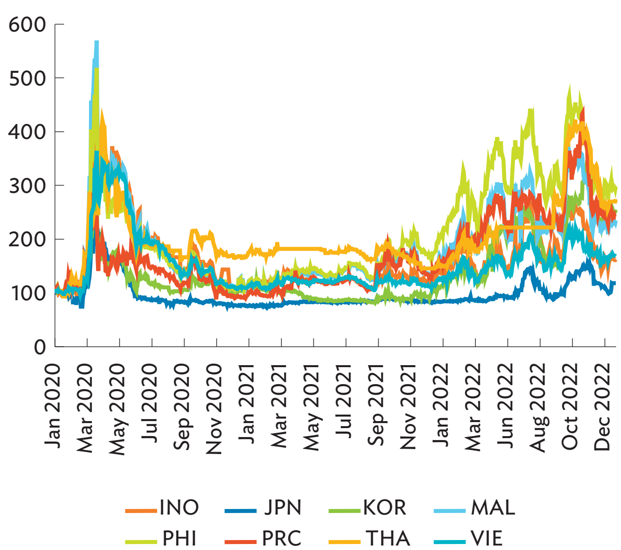
Figure 4.6: 10-Year Bond Yields and Foreign Exchange Rate—Selected Asian Economies and the United States



LCU = local currency unit, US = United States.

Source: ADB calculations using data from Bloomberg.

Figure 4.7: Credit Default Swaps—Selected Asian Economies (2 January 2020 = 100)

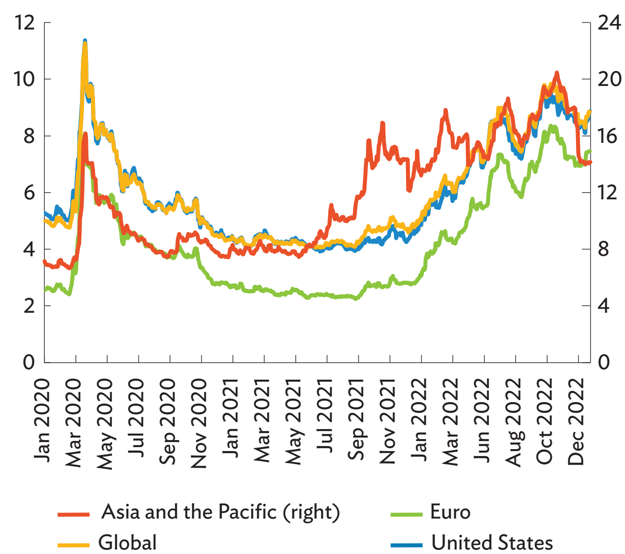


INO = Indonesia, JPN = Japan, KOR = Republic of Korea, MAL = Malaysia, PHI = Philippines, PRC = People's Republic of China, THA = Thailand, VIE = Viet Nam.

Notes: A credit default swap is a financial derivative that insures against the risk of default by one party. A higher index value reflects a higher spread, which is associated with higher default risk.

Source: ADB calculations using data from Bloomberg.

Figure 4.8: High Yield Indexes (%)



ICE BofA = Intercontinental Exchange Bank of America.

Notes: Asia and the Pacific refers to the ICE BofA Asia Dollar High Yield Index. Euro refers to the ICE BofA Euro High Yield Index. Global refers to the ICE BofA Global High Yield Index. United States refers to the ICE BofA US High Yield Index.

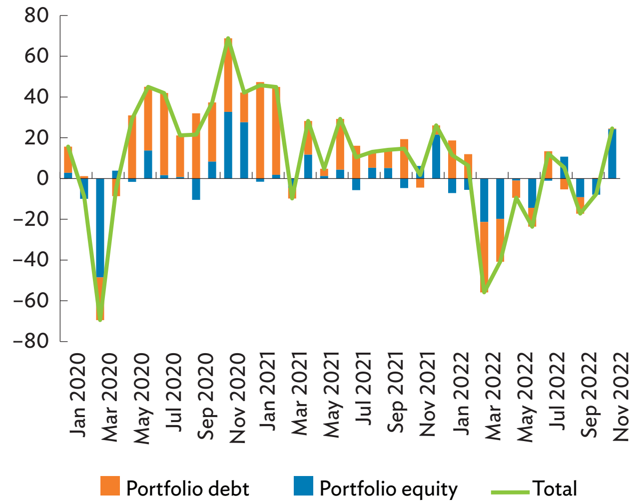
Source: Bloomberg.

Growing uncertainty about global economic growth prospects and financial conditions is posing capital inflow reversal risks for the region, although the scale of outflows is still relatively light.

Nonresident portfolio inflows remained robust in 2021. Nonetheless, portfolio debt inflows had declined by 69% and portfolio equity inflows by 22% in December 2021 compared with December 2020 levels. This was primarily driven by a reversal in the PRC's portfolio debt flows amounting to $13.2 billion, coinciding with the strict lockdown in Shanghai during a COVID-19 outbreak. While nonresident capital inflows remained robust in 2021, nonresident portfolio inflows have declined and eventually reversed at the start of 2022. Since March 2022, nonresident portfolio inflows gradually declined. After marginally increasing in July and August 2022, it was back in the red as of September 2022, yet portfolio equity inflows has slightly recovered in November 2022. (Figure 4.9).

After the Fed began its interest rate raising cycle in March 2022, regional currencies further weakened in the first half of 2022 against the US dollar. The Sri Lanka rupee declined another 45% amid an economic crisis there; and the Japanese yen weakened, by 13%. On average, developing economies' currencies have weakened by 6.2% in 2022 (Figure 4.10).

Figure 4.9: Nonresident Portfolio Flows—Selected Asian Economies ($ billion)

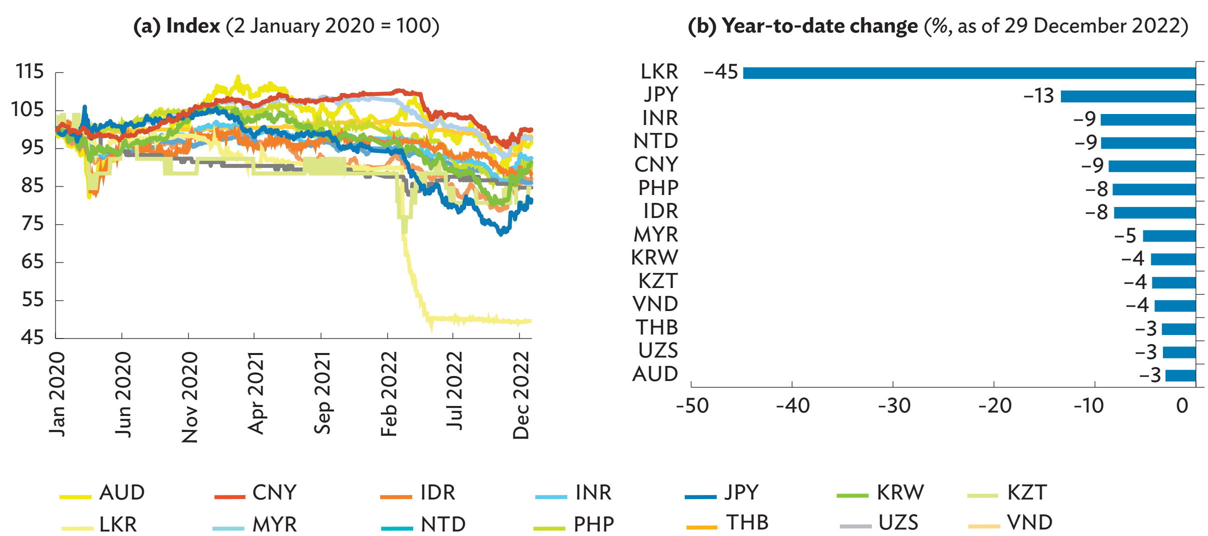


Note: The selected Asian economies are India; Indonesia; Malaysia; Mongolia; Pakistan; the People's Republic of China; the Philippines; the Republic of Korea; Sri Lanka (equity); Taipei,China (equity); Thailand; and Viet Nam (equity).

Source: ADB calculations using data from the Institute of International Finance. Monthly Emerging Markets Portfolio Flows Database. https://www.iif.com/Research/Download-Data#PortFlows (accessed December 2022).

On the policy front, safety nets were not expanding in 2022 to cope with exchange rate pressures. For example, the Fed's temporary dollar swap lines expired in 2021; in Asia, this swap line had provided $60 billion to the central banks of Australia, the Republic of Korea, and Singapore, and $30 billion to the Reserve Bank of New Zealand

Figure 4.10: Foreign Exchange Rate—Selected Asian Currencies ($/LCU)



AUD = Australian dollar, CNY = yuan, IDR = rupiah, INR = Indian rupee, JPY = yen, KRW = won, KZT = tenge, LCU = local currency unit, LKR = Sri Lanka rupee, MYR = ringgit, NTD = NT dollar, PHP = peso, THB = baht, UZS = sum, VND = dong.

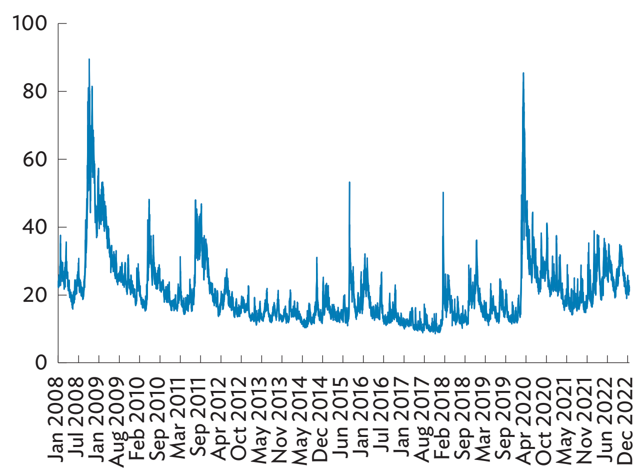
Source: ADB calculations using data from Bloomberg.

(Government of the US, Board of Governors of the Federal Reserve System 2021a). Nevertheless, some bilateral currency swap arrangements in the region were renewed, notably the currency swap arrangement between Japan and the Philippines, and Japan and India (Government of Japan, Ministry of Finance 2022a and 2022b). Bilateral swap arrangements between Australia and Indonesia, and between Indonesia and the PRC were also renewed (Government of Australia, Reserve Bank of Australia 2022; Government of the PRC, People's Bank of China 2022).

Tightening global financial market and liquidity conditions have raised capital market volatility and prompted asset price corrections across the region.

Monetary policy tightening due to globally synchronous inflation increased capital market volatility in the first half of 2022; it declined slightly in August 2022, but the volatility index started picking up again in September and October 2022 (Figure 4.11).

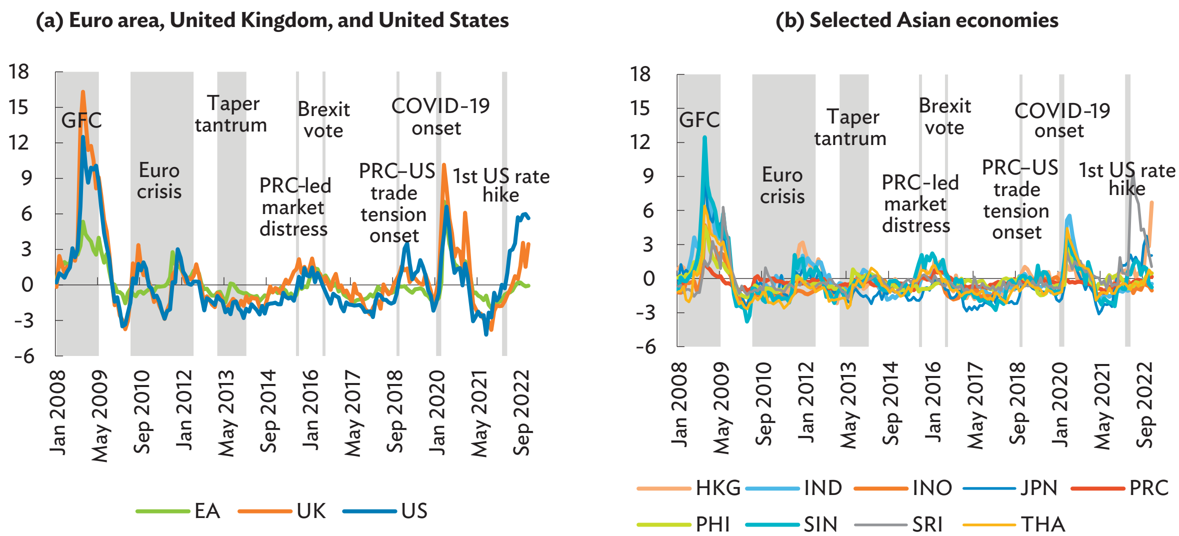
Figure 4.11: Volatility Index



Notes: Volatility index (VIX) refers to the Chicago Board Options Exchange VIX Index's close value. High and low positions are plotted as confidence bands.

Source: Bloomberg.

Figure 4.12: Financial Stress Index



COVID-19 = coronavirus disease; EA = euro area; GFC = global financial crisis; HKG = Hong Kong, China; IND = India; INO = Indonesia; JPN = Japan; PHI = Philippines; PRC = People's Republic of China; SIN = Singapore; THA = Thailand; UK = United Kingdom; US = United States.

Notes:

i. Based on principal components analysis on data from four major finance sectors: banking, debt, equity, and foreign exchange markets.

ii. Principal components are based on the banking sector price index, sovereign yield spreads, stock market volatility, stock price index return, and exchange market pressure index.

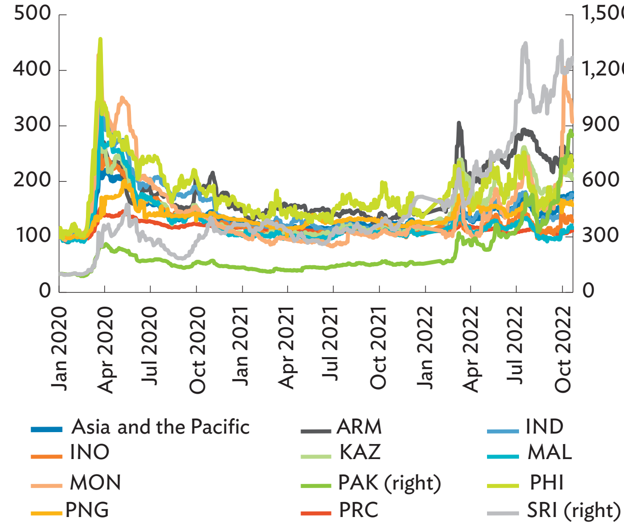
Sources: ADB. Asia Regional Integration Center. Financial Stress Index. https://aric.adb.org/database/fsi (accessed January 2023); and methodology by Park and Mercado (2014).

The heightened financial market risks are evident in the upward trend of the financial stress index and sovereign stripped spreads, both in advanced and emerging Asian economies (Figures 4.12 and 4.13). The financial stress index's uptick in advanced economies is more pronounced at the end of Q3 2022.

Tightening global financial market conditions and nonresident capital inflow reversals in 2022 have accelerated capital market corrections. Stock prices in the region have generally declined since the beginning of the year. Sri Lanka's stock market plunged 33%, following its announcement in April 2022 that it would suspend its debt payments. In May 2022, Sri Lanka finally defaulted on its debt payments for the first time in history. While stock prices in India, Indonesia, and Singapore increased, they declined elsewhere, and by more than 15% in Hong Kong, China; the PRC; the Republic of Korea; Sri Lanka; Taipei,China; and Viet Nam. Stock prices in Australia, Japan, Kazakhstan, and the Philippines have all gone down more than 5% (Figure 4.14).

The prices of sovereign bonds of selected Asian economies have mostly declined in 2022. Prices rose only in India and the PRC in 2022 (Figure 4.15). Sovereign bond prices diverged in 2021 and widened further in 2022 as a broad-based search for yield by investors gradually subsided and the pace of economic recoveries in the region varied.

Figure 4.13: Sovereign Stripped Spreads (basis points)



ARM = Armenia, EMBIG = Emerging Markets Bond Index Global, IND = India, INO = Indonesia, KAZ = Kazakhstan, MAL = Malaysia, MON = Mongolia, PAK = Pakistan, PHI = Philippines, PNG = Papua New Guinea, PRC = People's Republic of China, SRI = Sri Lanka.

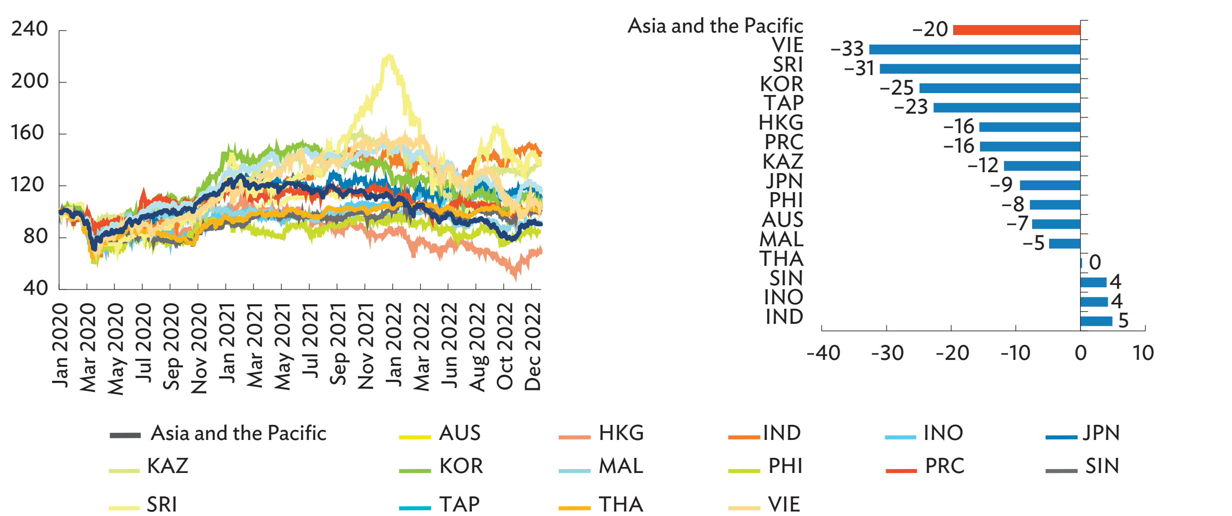
Note: Asia and the Pacific refers to the JP Morgan EMBIG Asia Sovereign Spread.

Source: ADB calculations using data from Bloomberg.

Figure 4.14: Stock Price Index—Selected Asian Economies

(a) Index (2 January 2020 = 100)

(b) Year-to-date change (%, as of 29 December 2022)

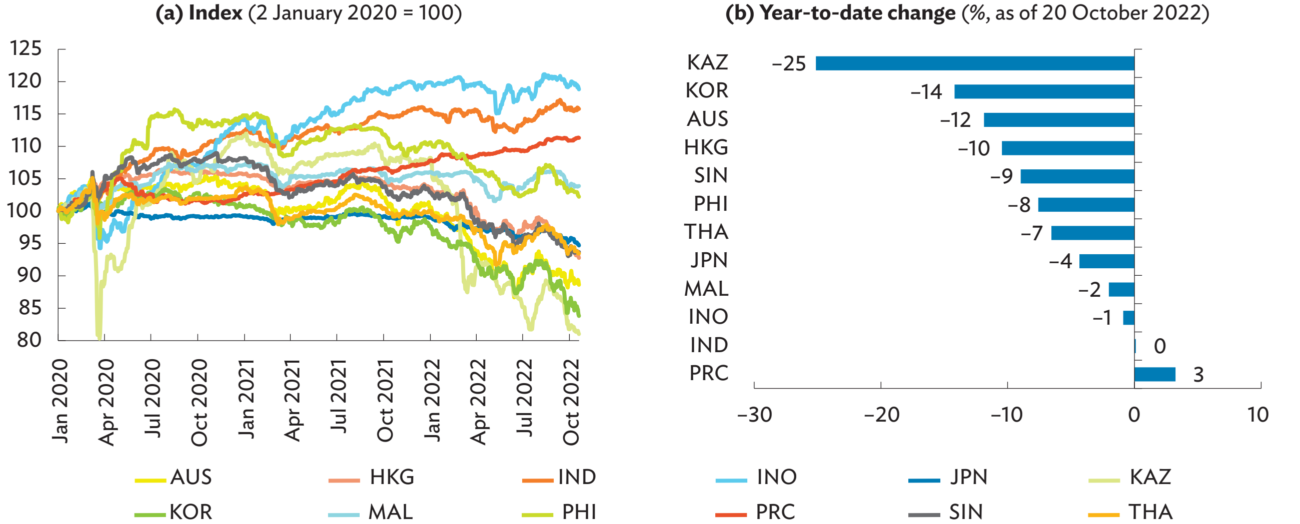


AUS = Australia; HKG = Hong Kong, China; IND = India; INO = Indonesia; JPN = Japan; KAZ = Kazakhstan; KOR = Republic of Korea; MAL = Malaysia; PHI = Philippines; PRC = People's Republic of China; SIN = Singapore; SRI = Sri Lanka; TAP = Taipei,China; THA = Thailand; and VIE = Viet Nam.

Note: Asia and the Pacific refers to the MSCI Asia Index.

Source: ADB calculations using data from Bloomberg.

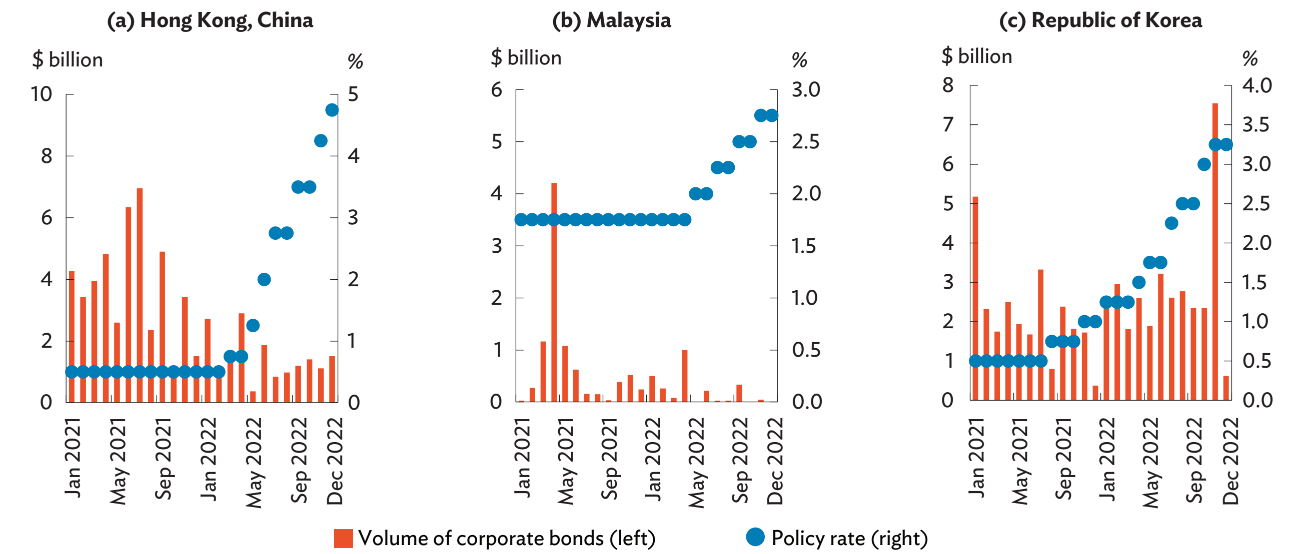
Figure 4.15: Total Bond Return Index—Selected Asian Economies



AUS = Australia; HKG = Hong Kong, China; IND = India; INO = Indonesia; JPN = Japan; KAZ = Kazakhstan; KOR = Republic of Korea; MAL = Malaysia; PHI = Philippines; PRC = People's Republic of China; SIN = Singapore; and THA = Thailand.

Source: ADB calculations using data from Bloomberg.

Figure 4.16: Volume of Corporate Bond Issuance and Policy Rate—Selected Asian Economies

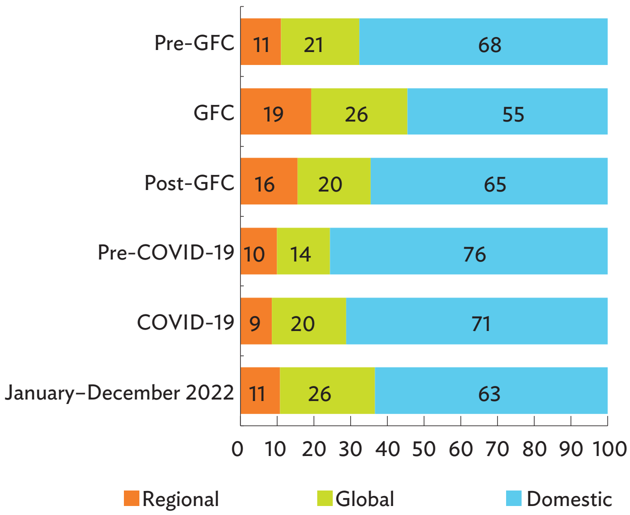


Sources: ADB calculations using data from Bloomberg and CEIC Data Company.

Tightening financial market conditions raised strains in the credit market, as shown in the recent decline in volume of corporate bond issuances alongside policy rate hikes in some economies in the region (Figure 4.16).

The share of global shocks that explain the variation of equity returns in Asia increased from 20% at the onset of the COVID-19 pandemic to 26% in the most recent period (Figure 4.17). The share of regional shocks also grew from 9% at the onset of the pandemic to 11% recently. Across subregions, East Asia's equity markets witnessed a large increase in sensitivity to regional shocks during these periods. In contrast, responsiveness to global factors increased noticeably in Central Asia and South Asia. Responsiveness to regional shocks dropped in South Asia. Meanwhile, the share of domestic shocks explaining the variation of equity returns declined from 71% in the COVID-19 onset period to about 63% recently.

Figure 4.17: Variance Decomposition for Equity Returns—Asia and the Pacific (%)

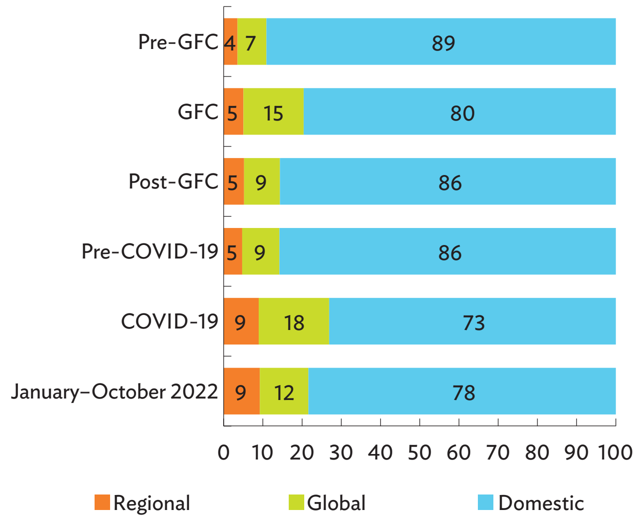


COVID-19 = coronavirus disease, GFC = global financial crisis.

Pre-GFC = January 2005 to September 2007, GFC = October 2007 to June 2009, Post-GFC = July 2009 to December 2011, Pre-COVID-19 = January 2018 to December 2019, COVID-19 = January 2020 to December 2021.

Sources: ADB calculations using data from Bloomberg; CEIC Data Company; and methodology by Lee and Park (2011).

Figure 4.18: Variance Decomposition of Bond Returns—Asia and the Pacific (%)



COVID-19 = coronavirus disease, GFC = global financial crisis.

Pre-GFC = January 2005 to September 2007, GFC = October 2007 to June 2009, Post-GFC = July 2009 to December 2011, Pre-COVID-19 = January 2018 to December 2019, COVID-19 = January 2020 to December 2021.

Sources: ADB calculations using data from Bloomberg; CEIC Data Company; and methodology by Lee and Park (2011).

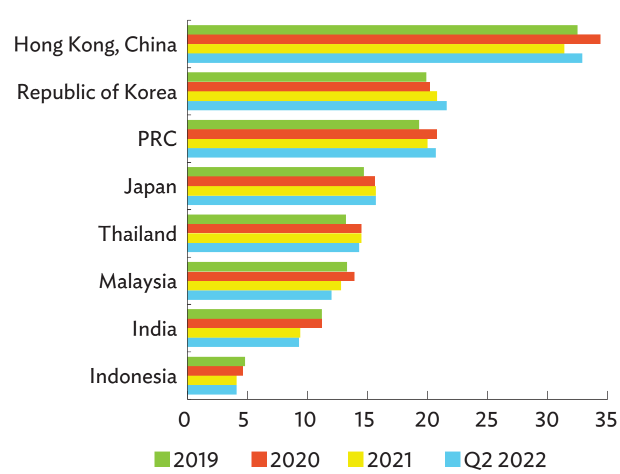
The proportion of global shocks that explain the variation of bond returns declined to 12% in the most recent period, compared with the COVID-19 onset period, at 18%. Meanwhile the proportion of regional shocks that explained the variation of bond returns increased slightly to 9.2% from 8.9%. (Figure 4.18).

Across subregions, the increase in the share of global shocks between the COVID-19 onset period and the most recent period was highest for India, while the increase in the proportion of regional shocks was largest for Australia and New Zealand. The share of domestic shocks explaining the variation of bond returns increased from 73% in the COVID-19 onset period to 78% during the most recent period.

Rising global interest rates, weakening domestic currencies, and constrained fiscal spaces amid the pandemic might have exposed some economies in the region to increasing debt servicing costs and debt management problems.

Slow domestic economic recovery, alongside higher interest rates could make debt servicing difficult—even more so for dollar-dominated external debts, as the US dollar continues to strengthen. The debt servicing ratio of the nonfinancial private sector had risen slightly by Q2 2022 in Hong Kong, China; the PRC; and the Republic of Korea; this ratio declined in India, Malaysia, and Thailand (Figure 4.19).

Figure 4.19: Debt Service Ratio of the Nonfinancial Private Sector (%)



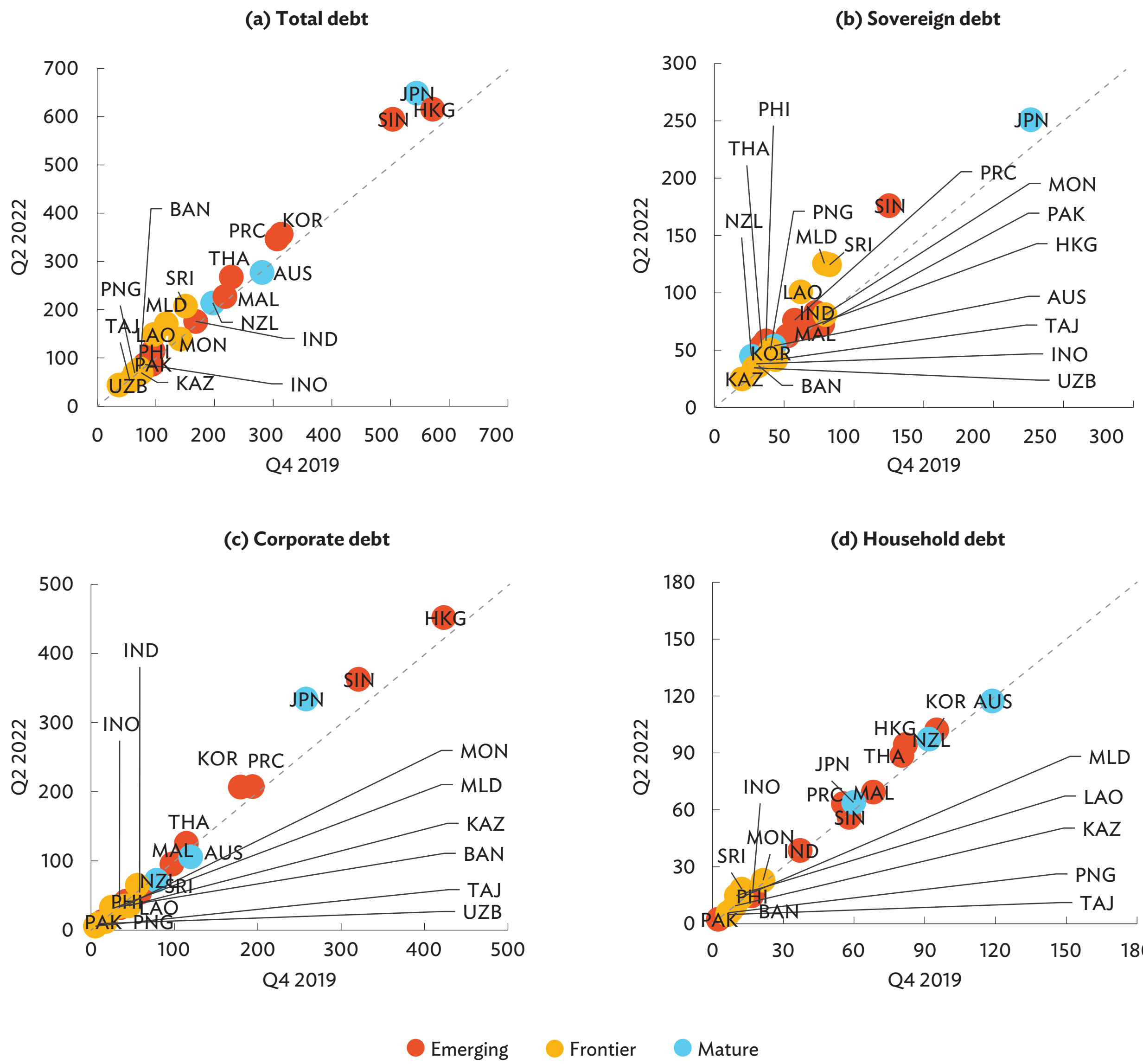
PRC = People's Republic of China, Q2 = second quarter.

Source: Haver Analytics.

As governments and corporations borrowed to weather the pandemic, total, corporate, and sovereign debt ratios increased in the region (Figure 4.20). Between 2019 and Q2 2022, changes in corporate debt ratios for Hong Kong, China; Japan; the Republic of Korea; and Singapore had been greater than 20% of gross domestic product (GDP), while the changes in the sovereign debt of Japan, the Lao People's Democratic Republic, Maldives, the Philippines, Singapore, and Sri Lanka also exceeded 20% of GDP.

As economies in the region rely heavily on bank credit for corporate financing, it adds to concerns as interest rates rise (Figure 4.21). Overall corporate financing rose

Figure 4.20: Sectoral Debt Ratio—Selected Asian Economies (% of GDP)



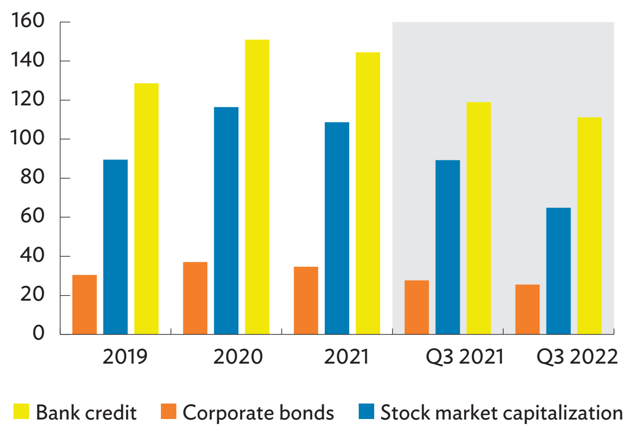
AUS = Australia; BAN = Bangladesh; GDP = gross domestic product; HKG = Hong Kong, China; IND = India; INO = Indonesia; JPN = Japan, KAZ = Kazakhstan; KOR = Republic of Korea; LAO = Lao People's Democratic Republic; MAL = Malaysia; MLD = Maldives; MON = Mongolia; NZL = New Zealand; PAK = Pakistan; PHI = Philippines; PNG = Papua New Guinea; PRC = People's Republic of China; Q = quarter; SIN = Singapore; SRI = Sri Lanka; TAJ = Tajikistan; THA = Thailand; and UZB = Uzbekistan.

Notes: Economy grouping based on Institute of International Finance definition. Emerging Asian economies include HKG, IND, INO, KOR, MAL, PAK, PHI, PRC, SIN, and THA. Frontier Asian economies include BAN, KAZ, LAO, MLD, MON, PNG, SRI, TAJ, and UZB. Mature Asian economies include AUS, JPN, and NZL.

Sources: ADB calculations using data from Institute of International Finance (IIF). Frontier Debt Monitor Database November 2022. https://www.iif.com/Research/Download-Data#DebtMonitors (accessed December 2022); and IIF. Global Debt Monitor September 2022. https://www.iif.com/Research/Capital-Flows-and-Debt/Global-Debt-Monitor (accessed October 2022).

in 2020 and 2021 due to elevated financing needs in navigating the pandemic-related business challenges, but started to decline in 2022. Comparing Q3 2021 and Q3 2022, debt, equity, and bank financing have all declined. This could reflect diminishing financing needs for companies as economies gradually return to a more normal status. But it could also be due to dwindling financing opportunities for them under the tightening financial market environment.

Figure 4.21: Corporate Financing—Emerging Asia (% of GDP)



GDP = gross domestic product.

Note: Emerging Asia includes Hong Kong, China; India; Indonesia; Malaysia; the People's Republic of China; the Philippines; the Republic of Korea; Singapore; Thailand; and Viet Nam.

Sources: ADB calculations using data from ADB. AsianBondsOnline. Data Portal: Bond Market. https://asianbondsonline.adb.org/data-portal (accessed January 2023); and CEIC Data Company.

Higher corporate debt levels along with rising debt servicing costs under rising interest rates could pose risks to financial market stability as well. Should corporations be unable to make their debt payments on time, banks' asset quality could deteriorate. Bank profitability has declined based on return-on-assets and return-on-equity ratios, except in a few regional economies, such as India and the Philippines (Figures 4.22a and 4.22b). In particular, return on asset and return on equity have declined for Hong Kong, China; the PRC; the Republic of Korea; and Thailand. Nonetheless, gross interest margin and capital-to-assets ratio for these economies are staying at a relatively stable level when compared with their pre-pandemic levels (Figures 4.22c and 4.22d).

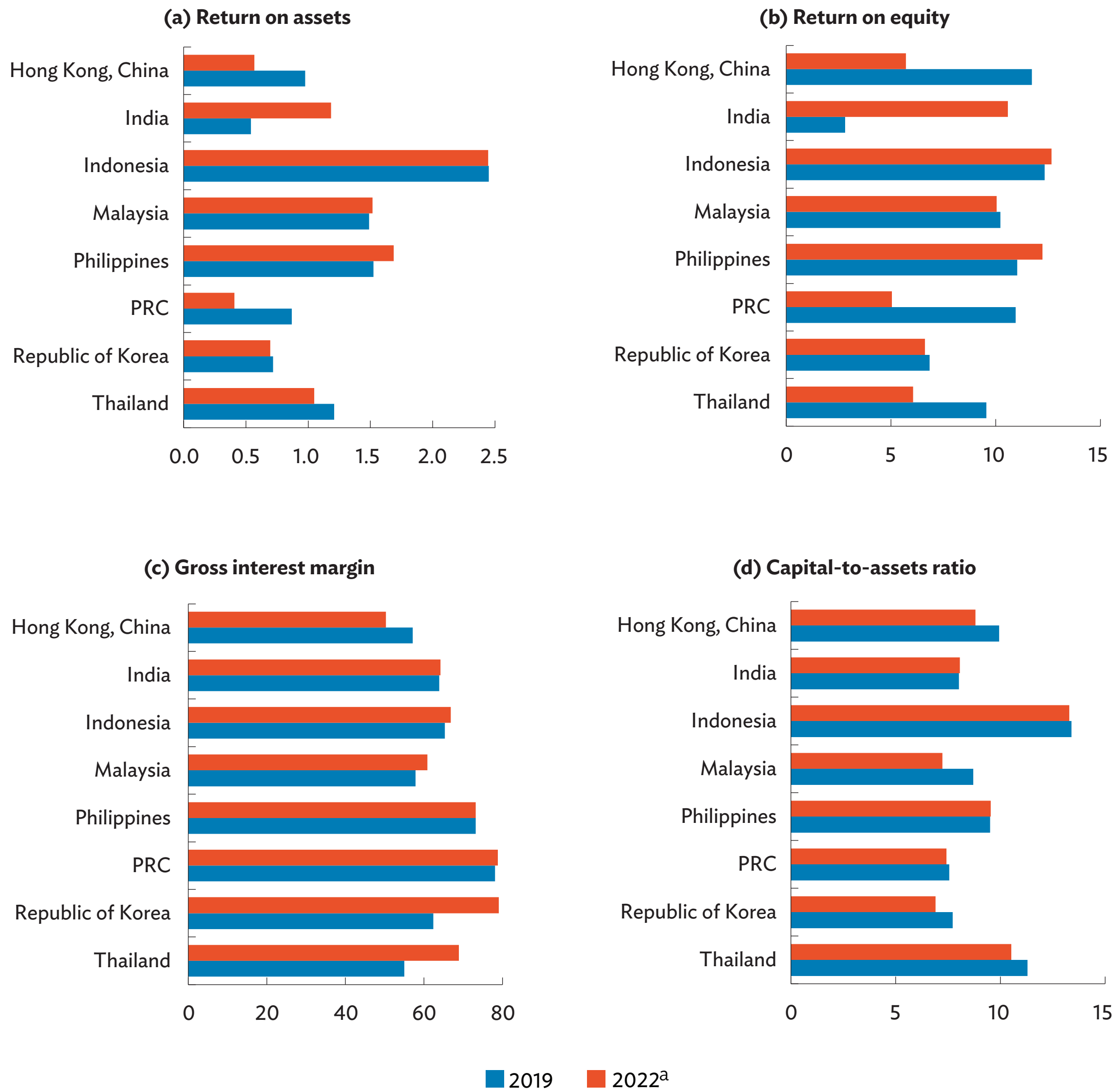
The nonperforming loan (NPL) ratio is already high in the banking sector in 2022 (Figure 4.23). For instance, India's NPL ratio increased from 1.2% in 2019 to 5.8% by March 2022; the Philippines' from 2.0% in 2019 to 3.4% in October 2022; and the Kyrgyz Republic's from 7.6% in 2019 to 12.9% in November 2022. The NPL ratios of Cambodia; Hong Kong, China; Indonesia; Malaysia; and Viet Nam are all higher than their pre-pandemic levels. Higher interest rates and rising NPL ratios may prompt banks to be more cautious in lending, which could lead to shortages in credit for businesses, jeopardizing prospects of stronger recovery in the real sector.

Evolving financial market conditions in the region and the potential negative spillovers from inside and outside the region should be closely monitored and assessed for effective policy responses.

The variance decomposition for equity returns indicates that economies are increasingly more exposed to regional shocks. Heightened financial risk and increased capital market volatility in one part of the region could easily spread to neighboring economies. Where appropriate, central banks in the region should raise benchmark interest rates gradually to contain inflation pressures and stem the risks of capital flow reversals. The need for such measures has yet to be vetted against domestic economy status as blind monetary policy tightening could entail unintended side effects under weakening consumer sentiment and heightened corporate and household debt levels. History demonstrates that rigid foreign exchange regimes can exacerbate capital flow reversals. Economic conditions permitting, enhancing foreign exchange rate flexibility could provide a buffer to improve the stability of the domestic economy.

The Association of Southeast Asian Nations (ASEAN) plus 3 economies in the region can count on and tap the improved Chiang Mai Initiative Multilateralisation agreement when such need arises. In March 2021, members amended the agreement to increase the International Monetary Fund De-linked Portion to 40% from 30% within the total size of $240 billion (AMRO 2021). It is essential that economies in the region be made aware of the availability of this instrument, in the light of shrinking fiscal space (Ferrarini, Giugale, and Pradelli 2022). The ASEAN+3 Multi-Currency Bond

Figure 4.22: Bank Profitability Indicators—Selected Asian Economies (%)



PRC = People's Republic of China.

[a] As of the first quarter (Q1) of 2022 for India and Thailand; as of Q2 2022 for Hong Kong, China; the Philippines; the PRC; and the Republic of Korea; and as of Q3 2022 for Indonesia and Malaysia.

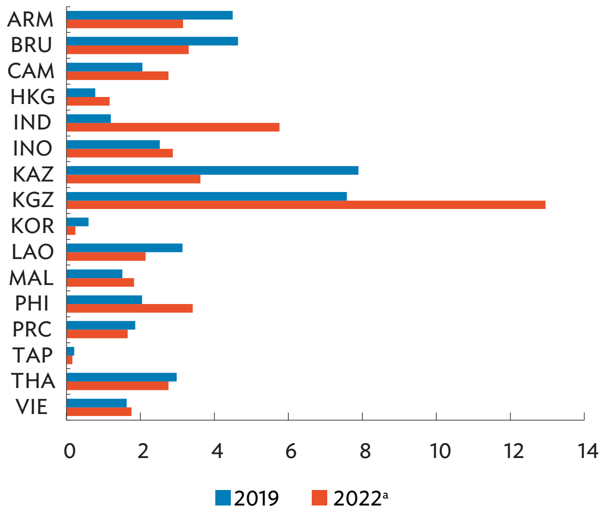
Source: Haver Analytics.

Issuance Framework, a policy initiative under the Asian Bond Markets Initiative could promote a common bond issuance program in the region, reducing the need for non-regional foreign currency borrowing.

Higher interest rates have led to sluggish equity markets in the region, but offer an opportunity to expand local currency bond markets by broadening investor bases as yield-seeking investors might turn to high yield bonds.

Ferrarini, Giugale, and Pradelli (2022) note that thematic bonds have become a "major alternative source of funding for countries and companies ready to make commitments on the use of the proceeds." This should be considered in the development of local currency bond markets. A more in-depth discussion of sustainability and sustainability-linked bonds can be found in Chapter 7: Theme Chapter—Trade, Investment, and Climate Change in Asia and the Pacific.

Figure 4.23: Bank Nonperforming Loan Ratio—Selected Asian Economies (% of total loans)



ARM = Armenia; BRU = Brunei Darussalam; CAM = Cambodia; HKG = Hong Kong, China; IND = India; INO = Indonesia; KAZ = Kazakhstan; KGZ = Kyrgyz Republic; KOR = Republic of Korea; LAO = Lao People's Democratic Republic; MAL = Malaysia; PHI = Philippines; PRC = People's Republic of China; TAP = Taipei,China; THA = Thailand; VIE = Viet Nam.

[a] As of March 2022 for IND; as of August 2022 for INO; as of September 2022 for BRU, CAM, HKG, LAO, PRC, THA, and VIE; as of October 2022 for KOR, PHI, and TAP; and as of November 2022 for ARM, KAZ, and KGZ.

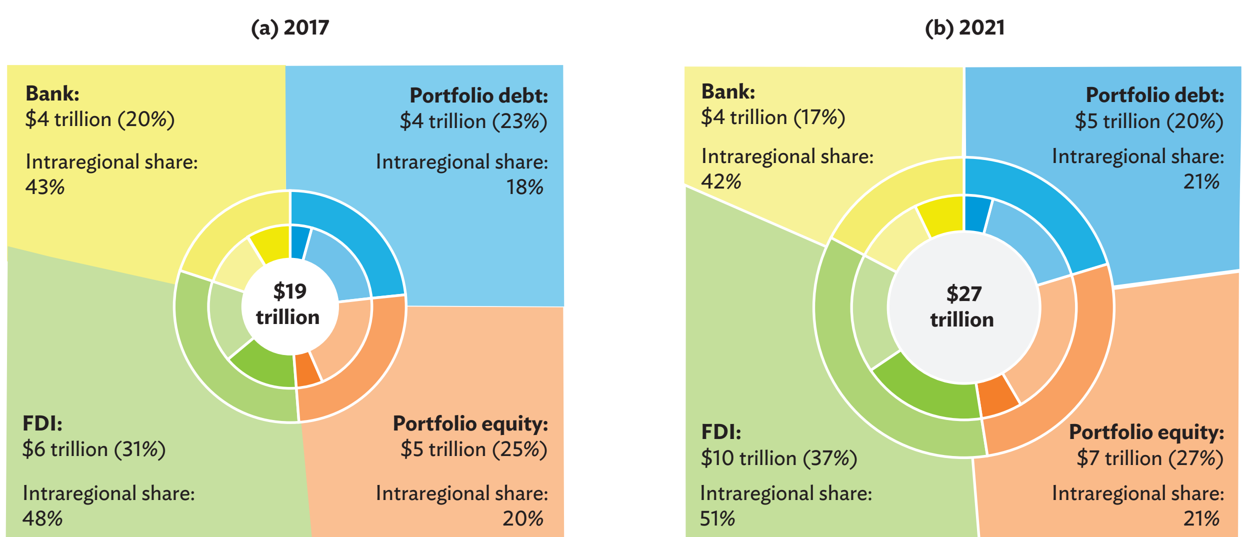
Source: ADB calculations using data from CEIC Data Company.

Asia continues to invest more outside the region but became increasingly integrated in 2021.

Asia's total cross-border financial asset holdings reached $27 trillion as of 2021, which was significantly greater than $19 trillion reported as of the end of 2017 (Figure 4.24). Most of the region's investment holdings in 2021 were foreign direct investment (FDI) assets ($10 trillion), followed by portfolio equity ($7 trillion) and portfolio debt ($5 trillion), and then banking sector loan and deposit holdings ($4 trillion). About two-thirds of Asia's asset holdings were placed in non-regional economies, and only one-third in regional economies. Between 2017 and 2021, investment in the region grew from 33% to 36%.

The value of Asia's cross-border portfolio debt assets declined by $280 billion in 2021 from 2020 (Figure 4.25a). The $21 billion increase in the value of US bond holdings was not enough to offset the declines in portfolio debt investments from the region (-$63 billion), the European Union (EU) (-$162 billion), and the rest of the world (-$77 billion). While Asia's cross-border portfolio equity assets increased by $590 billion in 2021, this is only about half the increase

Figure 4.24: Cross-Border Assets—Asia and the Pacific



FDI = foreign direct investment.

Notes: FDI assets refer to outward FDI holdings. Bank assets (claims) are limited to loans and deposits.

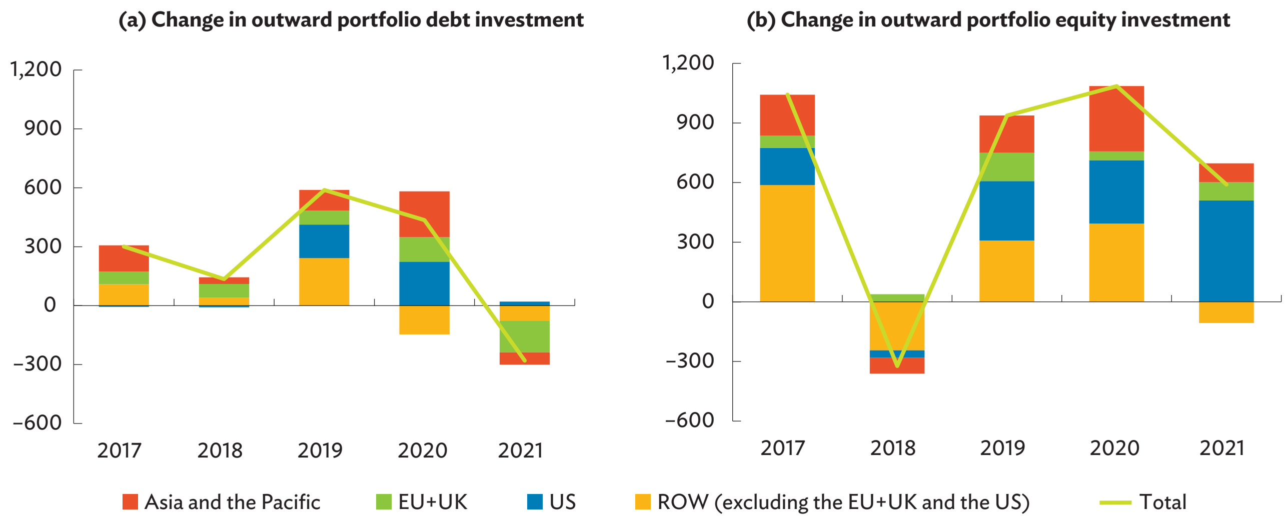
Sources: ADB calculations using data from Bank for International Settlements. Locational Banking Statistics. https://www.bis.org/statistics/bankstats.htm (accessed April 2022); International Monetary Fund (IMF). Coordinated Direct Investment Survey. https://data.imf.org/cdis (accessed December 2022); and IMF. Coordinated Portfolio Investment Survey. https://data.imf.org/cpis (accessed September 2022).

in the region's portfolio equity assets in 2020 (Figure 4.25b). This was due to the reversal of equity investment to the rest of the world, from an increase of $393 billion in 2020 to a decrease of $107 billion in 2021. The increase was due to the region's investment in the EU (+$91 billion), intraregionally (+$95 billion), and in the US (+$510 billion).

In terms of cross-border banking flows, loan and deposit asset flows grew, from $51 billion in 2020 to $127 billion in 2021. Much of the increase can be attributed to the rebound in banking flows to the rest of the world and increase of intraregional banking flows. Asia's loan and deposit inflows reversed from −$33 billion in 2019 to $20 billion in 2021 as the region's intra-loan and deposit liabilities grew to $51 billion from $29 billion (Figure 4.26).

The region's total external financial liabilities also inched higher to $27 trillion in 2021, up from $21 trillion in 2017. Much of the region's liabilities were FDI ($11 trillion),

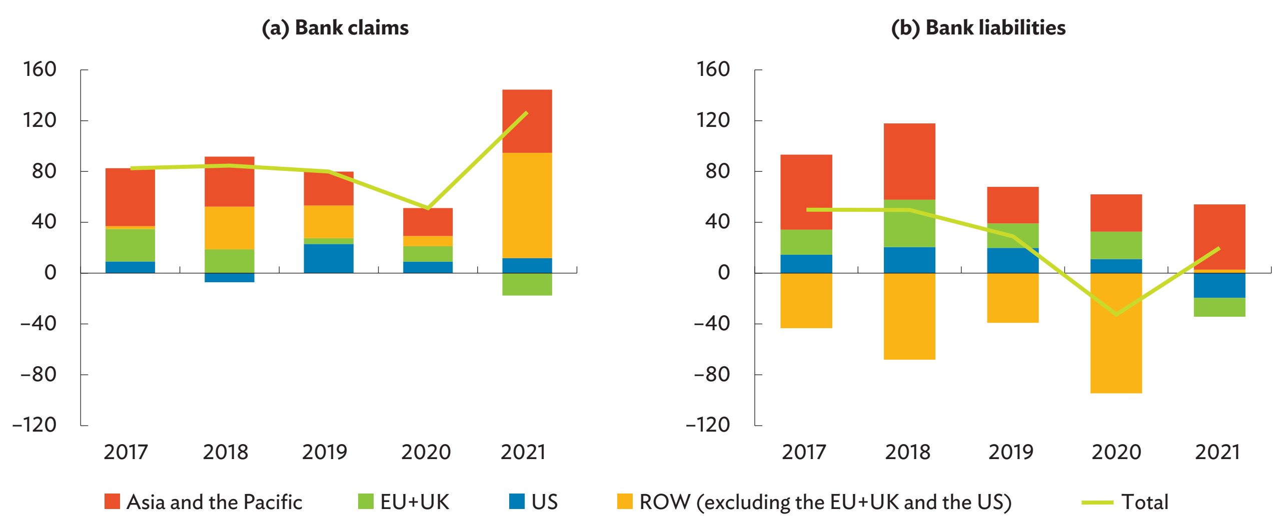
Figure 4.25: Change in Outward Portfolio Investment—Asia and the Pacific ($ billion)



EU = European Union (27 members), ROW = rest of the world, UK = United Kingdom, US = United States.

Source: ADB calculations using data from International Monetary Fund. Coordinated Portfolio Investment Survey. https://data.imf.org/cpis (accessed September 2022).

Figure 4.26: Cross-Border Loans and Deposit Flows—Asia and the Pacific ($ billion)



EU = European Union (27 members), ROW = rest of the world, UK = United Kingdom, US = United States.

Source: ADB calculations using data from the Bank for International Settlements. Locational Banking Statistics. https://www.bis.org/statistics/bankstats.htm (accessed April 2022).

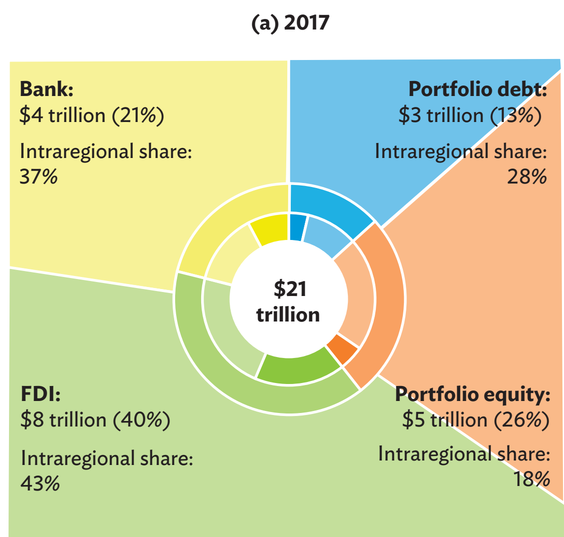
followed by portfolio equity ($7 trillion), banking sector loan and deposit liabilities ($5 trillion), then portfolio debt ($4 trillion). As in previous years, about two-thirds of the region's external investment liabilities were held by non-regional economies and one-third by regional economies (Figure 4.27). Intraregional portfolio debt share has gradually increased to 29% in 2021 from 28% in 2017. Intraregional portfolio equity share increased to 21% from 18%, and bank loan and deposit inflow ratio increased to 38% from 37% in the same time period. The stronger regional financial integration could help recycle a greater portion of regional savings into regional investments. The growing financial interconnectedness, however, also highlights the risks of cross-border spillovers and contagion effects, which might be triggered by regional shocks and financial distress. Economies in the region could strengthen an array of safety nets, such as their international foreign exchange reserves, bilateral swap arrangements, and regional financial arrangements like the Chiang Mai Initiative Multilateralisation. Policy measures to help address the potential adverse impacts of global and regional shocks could include temporary capital flow management and foreign exchange measures, and macroprudential arrangements.

As Asia's outward portfolio debt investment declined in 2021, the portfolio debt investment into the region grew slightly, by $32 billion, with investment from the US (+$44 billion) and the EU (+$52 billion), but was offset by the decline in intraregional portfolio (–$63 billion) and investment from the rest of the world (–$0.3 billion). The portfolio equity investment into the region also grew in 2021 by $213 billion, but less than its growth in 2019 (+$864 billion) and 2020 (+$1 trillion). While the region contributed $95 billion to the growth, the EU contributed $142 billion and the US contributed $133 billion, investment into the rest of the world declined by $157 billion (Figure 4.28).

Special Topic: The Issue of Dollar Dependence in Financing and Trade Invoicing

The US dollar remains the dominant currency of the region's international investment. About 44% of the region's international asset holdings was denominated

Figure 4.27: Cross-Border Liabilities—Asia and the Pacific

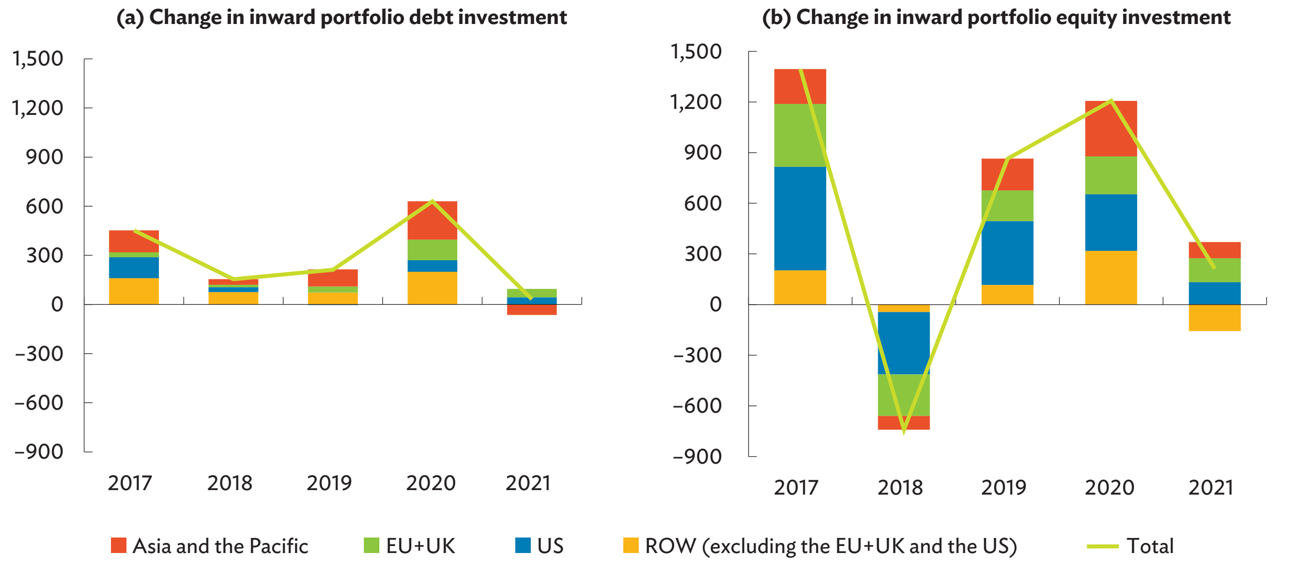


FDI = foreign direct investment.

Notes: FDI liabilities refer to inward FDI holdings. Bank liabilities are limited to loans and deposits.

Sources: ADB calculations using data from Bank for International Settlements. Locational Banking Statistics. https://www.bis.org/statistics/bankstats.htm (accessed April 2022); International Monetary Fund (IMF). Coordinated Direct Investment Survey. https://data.imf.org/cdis (accessed December 2022); and IMF. Coordinated Portfolio Investment Survey. https://data.imf.org/cpis (accessed September 2022).

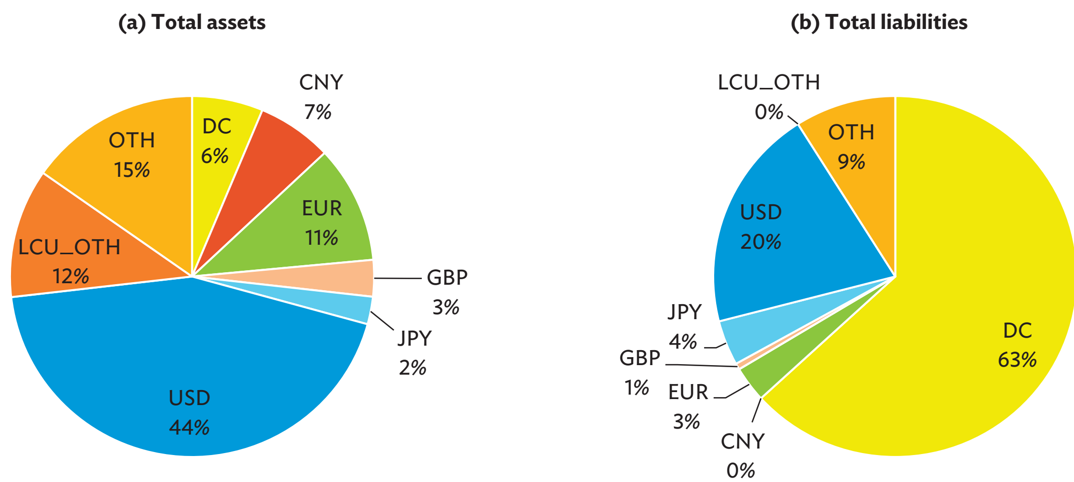
Figure 4.28: Change in Inward Portfolio Investment—Asia and the Pacific ($ billion)



EU = European Union (27 members), ROW = rest of the world, UK = United Kingdom, US = United States.

Source: ADB calculations using data from International Monetary Fund. Coordinated Portfolio Investment Survey. https://data.imf.org/cpis (accessed September 2022).

Figure 4.29: Currency Composition of Asia and the Pacific's International Total Investment, 2021



CNY = yuan, DC = domestic currency, EUR = euro, GBP = pound sterling, JPY = yen, LCU_OTH = regional local currency unit, OTH = other currencies, USD = United States dollar.

Notes: CNY is classified as DC for the People's Republic of China, and JPY is classified as DC for Japan. Asia and the Pacific includes Australia; Bangladesh; Hong Kong, China; India; Indonesia; Japan; Kazakhstan; Malaysia; Mongolia; New Zealand; Pakistan; the People's Republic of China; the Philippines; the Republic of Korea; Singapore; and Thailand.

Sources: ADB calculations using data from Bank for International Settlements. Locational Banking Statistics. https://www.bis.org/statistics/bankstats.htm (accessed August 2022); International Monetary Fund (IMF). Balance of Payments and International Investment Position Statistics. http://data.imf.org/IIP (accessed September 2022). IMF. Coordinated Direct Investment Survey. https://data.imf.org/cdis (accessed December 2022); IMF. Coordinated Portfolio Investment Survey. https://data.imf.org/cpis; and IMF. Currency Composition of Official Foreign Exchange Reserves. https://data.imf.org/COFER (both accessed September 2022).

in US dollar as of 2021. This was followed by other currencies (OTH) at 15%, the Asia and Pacific local currency unit (LCU_OTH) at 12%, and the euro at 11%.

In contrast, almost two-thirds of its external liabilities was dominated in domestic currencies (DC), followed by the US dollar at 20% (Figure 4.29). The region continues to have a foreign currency net asset position and local currency net liabilities position.

Across types of international investment, equity assets, which include FDI and portfolio equity, were mostly denominated in US dollars, then in other Asian currencies, as it is assumed that the currency composition of these investments closely tracks geographic positions. Equity liabilities were denominated in domestic currency as FDI and portfolio equity ownerships were denominated in the host economy's currency (Lane and Shambaugh 2007). For debt assets, which include portfolio debt and other investment, about 58% were denominated in the US dollar, followed by other currencies (14%) and the euro (12%). Similar to debt assets, 48% of debt liabilities were denominated in US dollars. This is also followed by local currencies and other currencies with a combined share of about 33% (Figure 4.30).

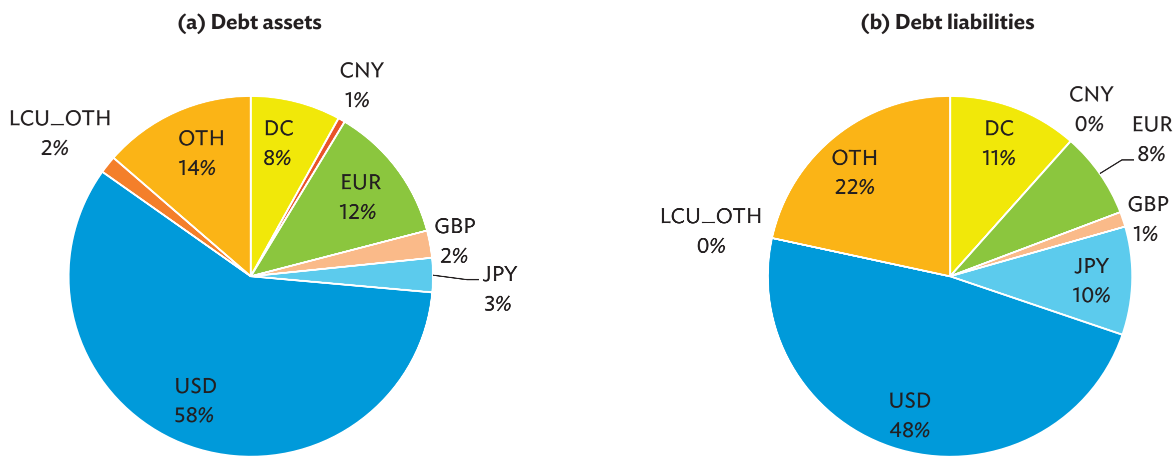
The dominance of the US dollar in international asset investment is a trend shared in the Latin America and the Caribbean region. In 2021, 41% of LAC's asset investments were denominated in US dollars, while 19% were denominated in other currencies and 17% were denominated in euro (Figure 4.31a). The currency composition of LAC's international liability investment is very similar to that in Asia, where 62% of liabilities were denominated in domestic currency. The US dollar comprised 27% of LAC's total liabilities and other currencies comprised 7% (Figure 4.31b).

Asia's and Latin America's international debt investment is also comparable in that more than half of their debt assets and liabilities are denominated in US dollars. Both regions' debt assets had about 60% denominated in US dollars in 2021 (Figure 4.32a). While Asia's debt liabilities had 48% denominated in US dollars, Latin America had 61% (Figure 4.32b).

Because the US dollar remains the dominant currency in the region's international investment, balance sheet effects could be more pronounced to rising interest rates and depreciating local currency values. The rising value of the US dollar will have a stronger valuation and welfare impact than other currencies.

The dominance of the US dollar in the region's asset investment has only marginally progressed, while it has trended downward in the region's liability investment since 2010. This is somewhat consistent with the

Figure 4.30: Currency Composition of Asia and the Pacific's International Debt Investment, 2021

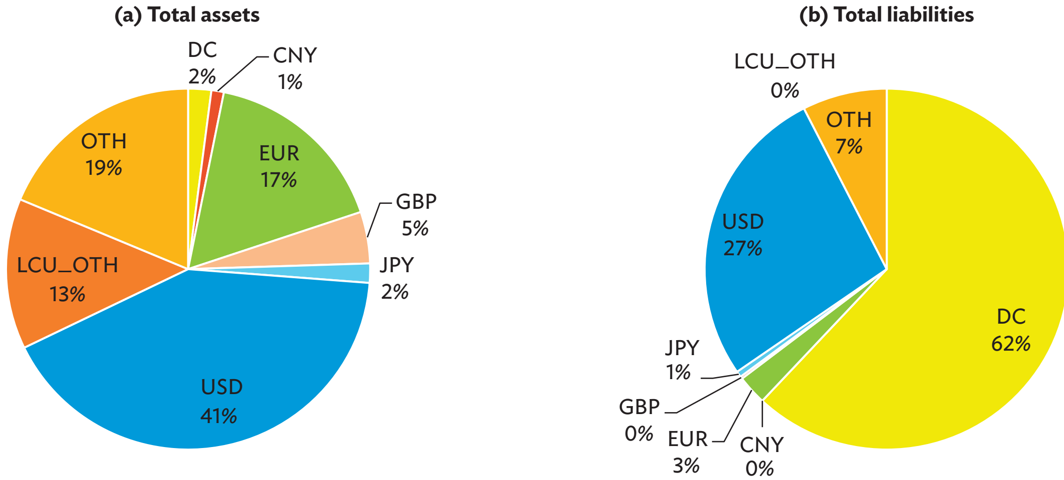


CNY = yuan, DC = domestic currency, EUR = euro, GBP = pound sterling, JPY = yen, LCU_OTH = regional local currency unit, OTH = other currencies, USD = United States dollar.

Notes: CNY is classified as DC for the People's Republic of China, and JPY is classified as DC for Japan. Asia and the Pacific includes Australia; Bangladesh; Hong Kong, China; India; Indonesia; Japan; Kazakhstan; Malaysia; Mongolia; New Zealand; Pakistan; the People's Republic of China; the Philippines; the Republic of Korea; Singapore; and Thailand.

Sources: ADB calculations using data from Bank for International Settlements. Locational Banking Statistics. https://www.bis.org/statistics/bankstats.htm (accessed August 2022); International Monetary Fund (IMF). Balance of Payments and International Investment Position Statistics. http://data.imf.org/IIP (accessed September 2022). IMF. Coordinated Direct Investment Survey. https://data.imf.org/cdis (accessed December 2022); IMF. Coordinated Portfolio Investment Survey. https://data.imf.org/cpis; and IMF. Currency Composition of Official Foreign Exchange Reserves. https://data.imf.org/COFER (both accessed September 2022).

Figure 4.31: Currency Composition of Latin America and the Caribbean's International Total Investment, 2021

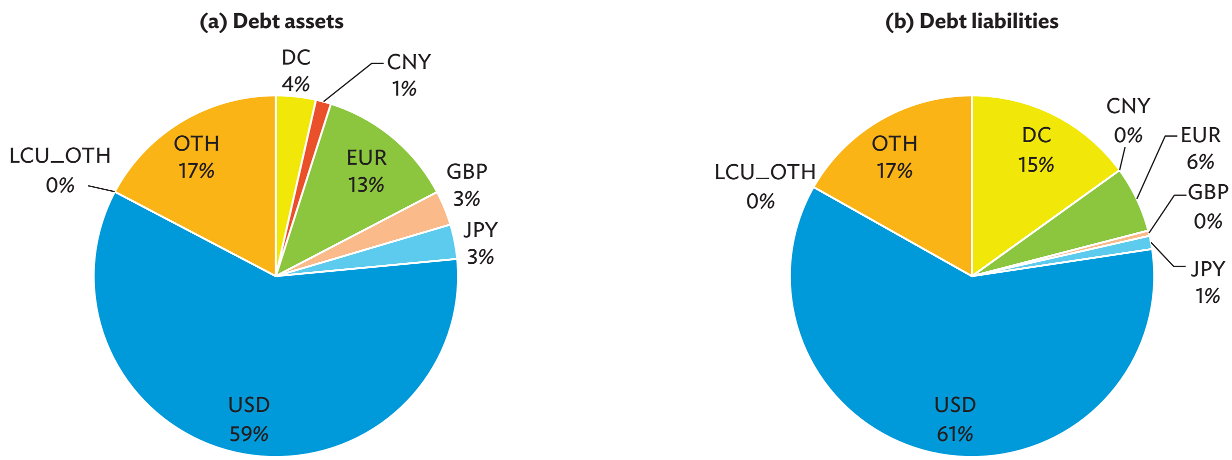


CNY = yuan, DC = domestic currency, EUR = euro, GBP = pound sterling, JPY = yen, LCU_OTH = regional local currency unit, OTH = other currencies, USD = United States dollar.

Note: Latin America and the Caribbean includes Aruba, Argentina, Brazil, Colombia, Costa Rica, Mexico, Peru, the Plurinational State of Bolivia, and Uruguay.

Sources: ADB calculations using data from Bank for International Settlements. Locational Banking Statistics. https://www.bis.org/statistics/bankstats.htm (accessed August 2022); International Monetary Fund (IMF). Balance of Payments and International Investment Position Statistics. http://data.imf.org/IIP (accessed September 2022). IMF. Coordinated Direct Investment Survey. https://data.imf.org/cdis (accessed December 2022); IMF. Coordinated Portfolio Investment Survey. https://data.imf.org/cpis; and IMF. Currency Composition of Official Foreign Exchange Reserves. https://data.imf.org/COFER (both accessed September 2022).

Figure 4.32: Currency Composition of Latin America and the Caribbean's International Debt Investment, 2021

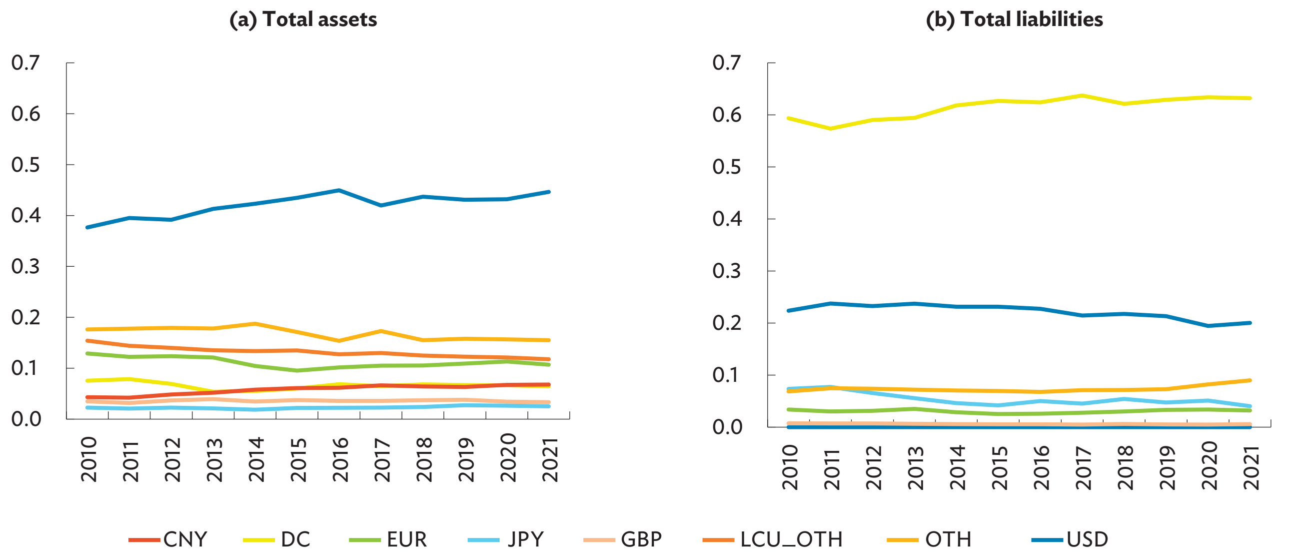


CNY = yuan, DC = domestic currency, EUR = euro, GBP = pound sterling, JPY = yen, LCU_OTH = regional local currency unit, OTH = other currencies, USD = United States dollar.

Note: Latin America and the Caribbean includes Aruba, Argentina, Brazil, Colombia, Costa Rica, Mexico, Peru, the Plurinational State of Bolivia, and Uruguay.

Sources: ADB calculations using data from Bank for International Settlements. Locational Banking Statistics. https://www.bis.org/statistics/bankstats.htm (accessed August 2022); International Monetary Fund (IMF). Balance of Payments and International Investment Position Statistics. http://data.imf.org/IIP (accessed September 2022). IMF. Coordinated Direct Investment Survey. https://data.imf.org/cdis (accessed December 2022); IMF. Coordinated Portfolio Investment Survey. https://data.imf.org/cpis; and IMF. Currency Composition of Official Foreign Exchange Reserves. https://data.imf.org/COFER (both accessed September 2022).

Figure 4.33: Currency Shares of Asia and the Pacific's International Investment Assets and Liabilities (% of total)



CNY = yuan, DC = domestic currency, EUR = euro, GBP = pound sterling, JPY = yen, LCU_OTH = regional local currency unit, OTH = other currencies, USD = United States dollar.

Notes: CNY is classified as DC for the People's Republic of China, and JPY is classified as DC for Japan. Asia and the Pacific includes Australia; Bangladesh; Hong Kong, China; India; Indonesia; Japan; Kazakhstan; Malaysia; Mongolia; New Zealand; Pakistan; the People's Republic of China; the Philippines; the Republic of Korea; Singapore; and Thailand.

Sources: ADB calculations using data from Bank for International Settlements. Locational Banking Statistics. https://www.bis.org/statistics/bankstats.htm (accessed August 2022); International Monetary Fund (IMF). Balance of Payments and International Investment Position Statistics. http://data.imf.org/IIP (accessed September 2022). IMF. Coordinated Direct Investment Survey. https://data.imf.org/cdis (accessed December 2022); IMF. Coordinated Portfolio Investment Survey. https://data.imf.org/cpis; and IMF. Currency Composition of Official Foreign Exchange Reserves. https://data.imf.org/COFER (both accessed September 2022).

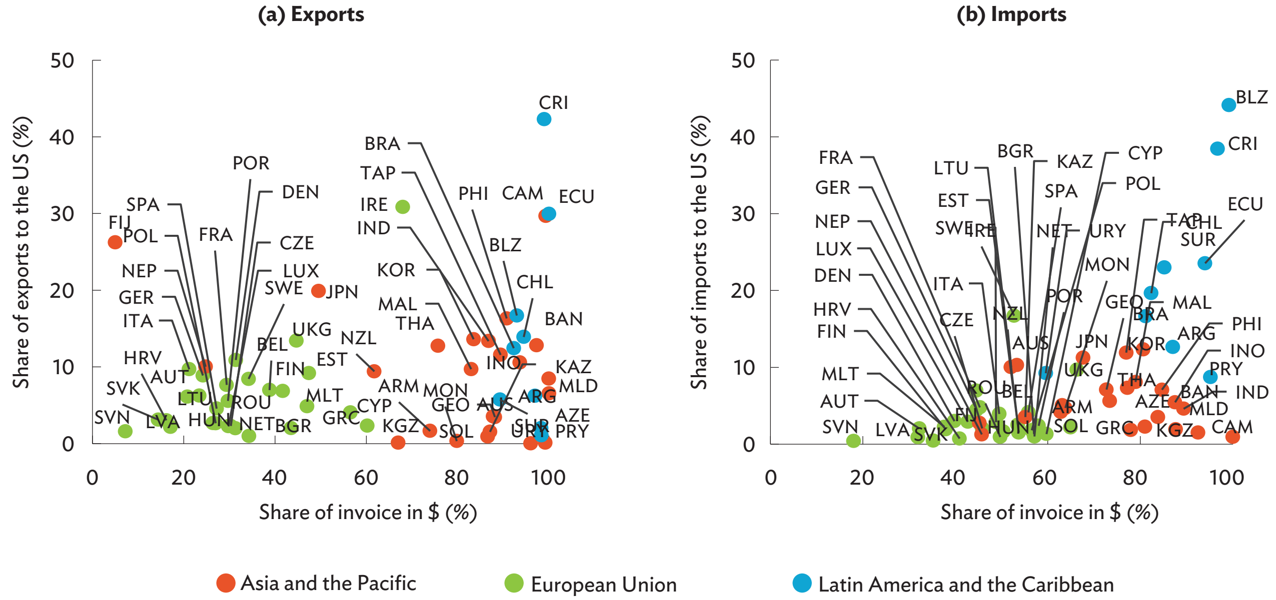
Arslanalp, Eicheengreen, and Simpson-Bell (2022) conclusion, wherein they find a similar trend for the decline of the US dollar as a reserve asset. They also show the increasing share of the yuan and other currencies, which is also consistent with the trend in the region's choice currencies for international investment. (Figure 4.33).

Yet, the US dollar is still the preferred currency for trade invoicing. Recent data indicate that 78% of the region's merchandise goods exports were invoiced in the US dollar, although the US accounted for only about 13% of the region's merchandise exports. The merchandise imports of Asia also indicate that only 9% of total imports came from the US, but about 75% were invoiced in US dollars (Figure 4.34).

While the EU's share of trade with the US is comparable to that of the region (8% of exports and 5% of imports), the share of merchandise goods invoiced in US dollars was lower in the EU than in the region (30% of export invoices and 48% of import invoices). Figure 4.34 shows that economies in the EU are to the left of Asian economies. Meanwhile, Latin America and the Caribbean economies demonstrate larger trade shares with the US (13% of exports, 16% of imports) than Asia with equally larger share of US dollar invoices (94% of export invoices and 84% of import invoices). Dollar invoicing reliance relative to trade share, however, is most pronounced in Asia.

In the short run, the region's reliance on the US dollar may put additional inflationary pressure on the regional economies due to ballooning import prices amid a strengthening US dollar and weakening local currency environment.

Figure 4.34: Share of Trade with the United States and Trade Invoice in United States Dollar *(%)*



ARG = Argentina; ARM = Armenia; AUS = Australia; AUT = Austria; AZE = Azerbaijan; BAN = Bangladesh; BEL = Belgium; BGR = Bulgaria; BLZ = Belize; BRA = Brazil; CAM = Cambodia; CHL = Chile; CRI = Costa Rica; CYP = Cyprus; CZE = Czech Republic; DEN = Denmark; ECU = Ecuador; EST = Estonia; FIJ = Fiji; FIN = Finland; FRA = France; GEO = Georgia; GER = Germany; GRC = Greece; HRV = Croatia; HUN = Hungary; IND = India; INO = Indonesia; IRE = Ireland; ITA = Italy; JPN = Japan; KAZ = Kazakhstan; KGZ = Kyrgyz Republic; KOR = Republic of Korea; LTU = Lithuania; LUX = Luxembourg; LVA = Latvia; MAL = Malaysia; MLD = Maldives; MLT = Malta; MON = Mongolia; NEP = Nepal; NET = Netherlands; NZL = New Zealand; PAK = Pakistan; PHI = Philippines; POL = Poland; POR = Portugal; PRY = Paraguay; ROU = Romania; SOL = Solomon Islands; SPA = Spain; SUR = Suriname; SVK = Slovak Republic; SVN = Slovenia; SWE = Sweden; TAP = Taipei,China; TIM = Timor-Leste; THA = Thailand; UKG = United Kingdom; URY = Uruguay; US = United States; UZB = Uzbekistan.

Sources: ADB calculations using data from Boz et al. (2020 and 2022); Eurostat. Extra-EU exports (imports) by Member State, shares by invoicing currency. https://ec.europa.eu/eurostat/web/international-trade-in-goods/data/main-tables; International Monetary Fund. Direction of Trade Statistics. https://data.imf.org/dot (both accessed September 2022); and domestic sources.

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