INTERNATIONAL MONETARY FUND

REGIONAL ECONOMIC OUTLOOK

ASIA AND PACIFIC

Navigating Trade Headwinds and Rebalancing Growth

2025
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Definitions and Country Groupings

In this Regional Economic Outlook: Asia and Pacific, the following groupings are employed:

- "ASEAN" or "ASEAN-10" refers to Brunei Darussalam, Cambodia, Indonesia, Lao P.D.R., Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam, unless otherwise specified.
- "ASEAN-5" refers to Indonesia, Malaysia, the Philippines, Singapore, and Thailand.
- "Advanced Asia" refers to Australia, Hong Kong SAR, Japan, Korea, New Zealand, Singapore, and Taiwan Province of China, unless otherwise noted.
- "Emerging Asia" refers to China, India, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam, unless otherwise noted.
- "Asia" refers to ASEAN, advanced Asia, Bangladesh, Bhutan, China, India, Maldives, Nepal, and Sri Lanka, and other Asian economies.
- "Regional Economic Outlook 14" represents the major 14 economies in Asia, including Australia, China, Hong Kong SAR, India, Indonesia, Japan, Korea, Malaysia, New Zealand, the Philippines, Singapore, Thailand, Taiwan POC, and Vietnam.
- International Organization for Standardization (ISO) country codes for Asia Pacific:

Australia	AUS	Bangladesh	BGD	Bhutan	BTN
Brunei Darussalam	BRN	Cambodia	KHM	China	CHN
Fiji	FJI	Hong Kong SAR	HKG	India	IND
Indonesia	IDN	Japan	JPN	Kiribati	KIR
Korea	KOR	Lao PDR	LAO	Macao SAR	MAC
Malaysia	MYS	Maldives	MDV	Marshall Islands	MHL
Micronesia	FSM	Mongolia	MGN	Myanmar	MMR
Nauru	NRU	Nepal	NPL	New Zealand	NZL
Palau	PLW	Papua New Guinea	PNG	Philippines	PHL
Samoa	WSM	Singapore	SGP	Sri Lanka	LKA
Solomon Islands	SLB	Taiwan POC	TWN	Thailand	THA
Timor-Leste	TLS	Tonga	TON	Tuvalu	TUV
Vanuatu	VUT	Vietnam	VNM		

The following conventions are used:

- In figures and tables, shaded areas show IMF projections.
- "Basis points" refer to hundredths of 1 percentage point (for example, 25 basis points are equivalent to ¼ of 1 percentage point).
- "Billion" means a thousand million; "trillion" means a thousand billion.

As used in this report, the term "country" does not in all cases refer to a territorial entity that is a state as understood by international law and practice. As used here, the term also covers some territorial entities that are not states but for which statistical data are maintained on a separate and independent basis.

Executive Summary

Economies in the Asia-Pacific region have shown resilience amid external and domestic challenges so far in 2025, posting stronger-than-expected economic growth in the first half of the year. Nevertheless, higher US tariffs and increasing protectionism will likely reduce demand for Asian exports and eventually weigh on growth in the near-term. Domestically, slowing growth trends and social tensions pose additional challenges. Amid these forces, reforms to make economic growth more resilient and sustainable will be critical.

Regional economic growth in the first half of 2025 benefitted from strong exports, partly due to frontloading in expectation of higher tariffs, and a buoyant tech cycle. Monetary and fiscal policy easing further supported domestic demand in the region, amid globally accommodative financial conditions and US dollar depreciation.

Despite a stronger-than-expected outcome in the first half of the year, Asia's GDP growth is expected to moderate somewhat in the second half, resulting in modestly lower annual growth of 4.5 percent in 2025 compared to 4.6 percent in 2024. Regional growth is projected to slow further to 4.1 percent in 2026, given the building negative effects of higher US tariffs and headwinds to medium-term potential growth. Risks to the regional outlook are tilted to the downside. While tariffs are lower than announced in April 2025 and tentative new trade deals are emerging, the full negative effect of the tariff increases is uncertain and the intensification of trade tensions continues to be a major downside risk for the region. While trade policy uncertainty has declined somewhat compared to April, it remains high and could weigh on investment and sentiment more than expected. Tighter financial conditions due to domestic or global developments could amplify trade shocks and compound vulnerabilities, and economic vulnerabilities could amplify social tensions. On the upside, the current AI-driven investment boom could deliver a stronger-than-expected boost to exports, investment, and productivity in the region. Further policy support could cushion the shocks more than expected and lift growth prospects. A reduction in geopolitical tensions would help reduce uncertainties and lift investment and productivity.

The external challenges have reinforced recent internal challenges in the region. Domestic demand, particularly consumption, remains below pre-pandemic trends in many countries. Persistent weaknesses in the service sector, property sector downturns, and sluggish consumer sentiment have contributed to a soft post-pandemic recovery in jobs and income growth, dampening consumption. Institutional constraints in the region, including limited scope for fiscal support because of high debt, inadequate social safety nets, or inefficiencies stemming from the financial structure, have hindered a broad-based recovery of domestic demand. In addition, while trade openness has supported growth in the manufacturing sector, broad-based productivity gains have stalled in recent years, along with a rise in capital misallocation.

These challenges underscore the need for Asian economies to make growth resilient and sustainable, by boosting domestic demand, particularly consumption, and reinvigorating productivity growth. In the near term, targeted fiscal and monetary policy should be used to smooth the impact of trade shocks and provide temporary support. At the same time, structural reforms are essential for enhancing the medium-term growth potential and rebalancing the economies. Such reforms should include measures to support the services sector; strengthen the efficiency of financial intermediation; reduce incentives for capital misallocation; and mitigate the impact of population aging. Meanwhile, greater intraregional trade and financial integration will enhance growth resilience and support financial development. Policy tools should also be upgraded. Fiscal reforms would help manage large spending pressures and prepare for future shocks. Emerging challenges and opportunities in artificial intelligence (AI) will need to be monitored and may call for refinement in regulatory frameworks.

1. Outlook for Asia and the Pacific[1]

The Asia and the Pacific region remains the fastest growing region in the world, projected to contribute about 60 percent of global growth in 2025, despite external and domestic headwinds. Regional growth is projected to hold steady at 4.5 percent relative to 2024, and to decrease to 4.1 in 2026. This deceleration is smaller than predicted in April 2025, largely because of a lower increase in US effective tariff rates compared to announcements at the time. The steady growth in 2025 is supported by exports, the technology cycle, and policy easing, amid globally accommodative financial conditions. Despite the resilience, growth still faces challenges, given the less favorable external environment ahead and headwinds to medium-term potential growth. To safeguard resilient and sustainable growth, Asian policymakers will need to address both the near-term risks and the medium-term structural challenges, with a focus on strengthening domestic demand.

1.1 Recent Developments: Resilience amid Uncertainty

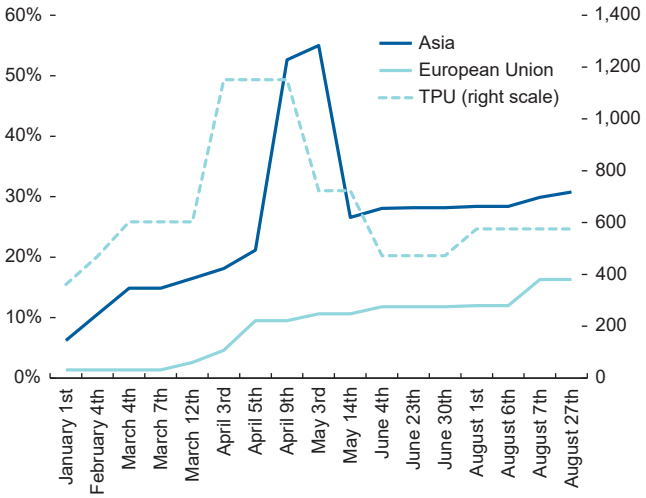
A Sobering Economic and Socio-Political Backdrop

The Asia-Pacific region faces a challenging outlook, notably from sharply higher US tariffs and increased trade policy uncertainty. The sweeping US tariff increases announced on April 2, 2025—underpinning the highest effective US tariff rate in a century, with some of the steepest increases aimed at Asia—and the policy

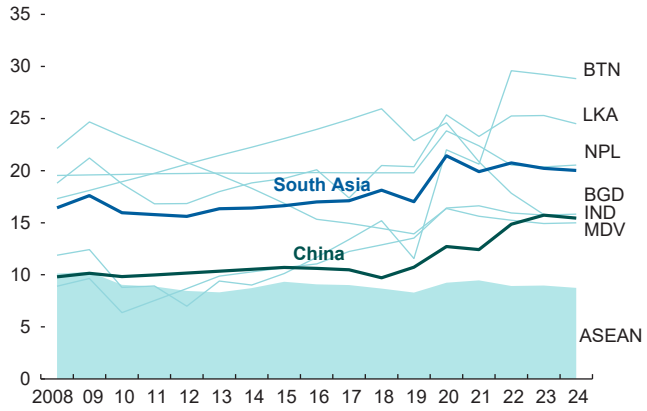
Figure 1.1. Domestic and External Pressures

Uncertainty soared amid tariff announcements… *… and added to internal socio-political pressures*

1. US Effective Tariffs and Trade Uncertainty
(Percent; index, right scale)



2. Youth Unemployment: Emerging and Developing Asia
(Percent)



Sources: World Trade Organization, International Labor Organization; Caldara and others (2020); and IMF staff calculations.
Note: The effective tariffs rates are weighted by US import value by country. Asia includes Australia, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, Fiji, Hong Kong, China, India, Indonesia, Japan, Korea, Lao PDR, Macao, China, Malaysia, Papua New Guinea, the Philippines, Samoa, Singapore, Solomon Islands, Sri Lanka, Thailand, Timor-Leste, Tonga, Vanuatu, and Vietnam. The Trade Policy Uncertainty (TPU) index counts the monthly frequency of articles discussing trade policy uncertainty (as a share of the total number of news articles), normalized to 100 for a one percent article share. For Panel 2, "ASEAN" includes Indonesia, Malaysia, the Philippines, Thailand, and Vietnam.

[1] The authors of this chapter are Sakai Ando, Natalija Novta (lead), and Yuanyang Zhang (co-lead), with contributions from Sofia Felici, Adam Jakubik, Anne Oeking, Anoulat Sinthavy, Haruki Seitani, Yuting Wei, and Ying Xu, with outstanding research support from Sofia Felici, Vyshnavi Thumbala Saikrishnan, and Ruihua Yang and under the guidance of Li Cui and Andrea Pescatori.

actions that ensued, are redefining the geoeconomic landscape and reshaping patterns in global trade and foreign direct investment (FDI). Given the region's deep integration into global value chains, and the rising exposure to United States demand in recent years, the Asia Pacific region is particularly vulnerable to such shifts in trade policy shocks. Some of the tariff shocks turned out to be smaller than expected in April, as some tariff increases were paused or reduced amid negotiations, and a number of preliminary trade agreements between the United States and countries in the region have been reached. Nevertheless, tariffs for some other countries increased markedly in August, and the level of trade policy uncertainty continues to be high (see Figure 1.1, panel 1).

These global conditions are placing additional pressure on a region that has been experiencing slowing growth and increased social tensions in recent years. Subdued productivity growth and population aging have tempered potential growth in several countries in the region. Moreover, after benefiting from spectacular growth in China and integration in global value chains, countries in the region now face spillovers from weakened demand in China due to property sector adjustment and weak consumption. Moreover, deflationary pressures in China and the attendant decline in its export prices have had negative spillovers for some countries in the region, notably in the Association of Southeast Asian Nations (ASEAN) region. More recently, rising youth unemployment and dissatisfaction with political leadership have undermined sentiment and fueled social strains in several countries (see Figure 1.1, panel 2). As a result, economic growth decelerated to a rate in the current decade so far that is about 1.8 percentage points below that of average in the 2010s—0.9 in advanced Asia and 2.3 in emerging Asia. Despite the challenges, Asia has remained the fastest growth region in the world, contributing about 60 percent of global growth in 2024.

Notwithstanding the sobering backdrop, growth in Asia-Pacific was more resilient than expected in the first half of 2025. The resilience of growth in 2025H1 was supported by strong exports, in part reflecting frontloading ahead of higher US tariffs, and policy easing. Across most countries in the region, growth outturns in the first half of 2025 exceeded expectations relative to the April 2025 *World Economic Outlook*. Anticipation of US tariffs spurred a surge in exports early this year which, after temporary disruptions in April, kept net exports a key driver of growth. At the same time, monetary easing across most Asian economies coupled with looser fiscal policy in some countries, helped sustain domestic demand and cushion the trade shock (see Figure 1.2).

While exports to the United States slowed mid-year, consistent with a possible fading of frontloading, Asian exports overall have remained strong. After accelerating from 2024 through early 2025, Asian shipments to the United States lost momentum in Q2 but exports to the region and elsewhere remain robust (Figure 1.3, panels 1 and 2). Export prices—excluding China—have largely stayed firm, suggesting that most exporters have not cut prices in response to tariffs, with exceptions in some sectors such as Japanese car exporters (Figure 1.3, panel 3). Purchasing Manager's Index (PMI) new export orders mostly remain subdued since April, reflecting exporters' cautious outlook amid uncertainty (Figure 1.3, panel 4). The impact of the tariffs will continue to be felt in the region, with recent ones—like the increase on India in August 2025—requiring time to assess their full impact.

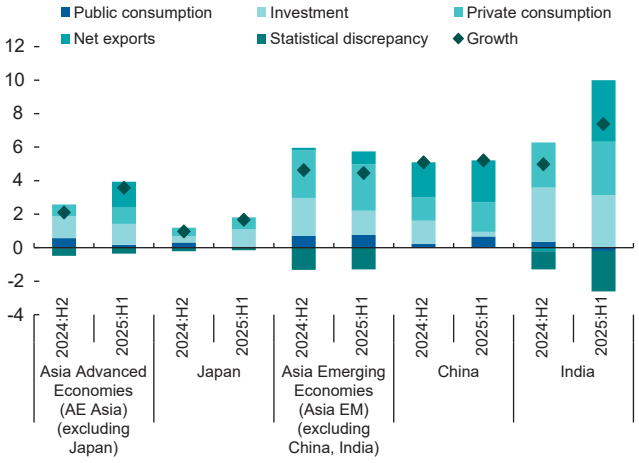
Trade friction with the United States and the strong artificial intelligence (AI)-driven tech cycle have contributed to rising intra-regional trade. China's exports to the United States, as a share of its total exports, have continued to decline, furthering the trend of diversification since 2018, while the share to Asian trade partners has increased, largely reflecting a redirection of intermediate goods to ASEAN for further processing. Similar to the 2018 tariffs episode, there is little evidence that plain trade rerouting is driving these shifts (Schulze and Xin 2025). The increase in intraregional trade has also been supported by Asian advanced economies—particularly Korea, Japan, and Taiwan POC, whose exports have been benefited from the AI-related global investment boom (October 2025 *World Economic Outlook,* Chapter 1) and related demand for tech products. Other Asian emerging markets, particularly in the ASEAN, have also increased their export shares to both

Figure 1.2. Macroeconomic Conditions

Growth has been buoyed by net exports…

1. Contributions to GDP Growth

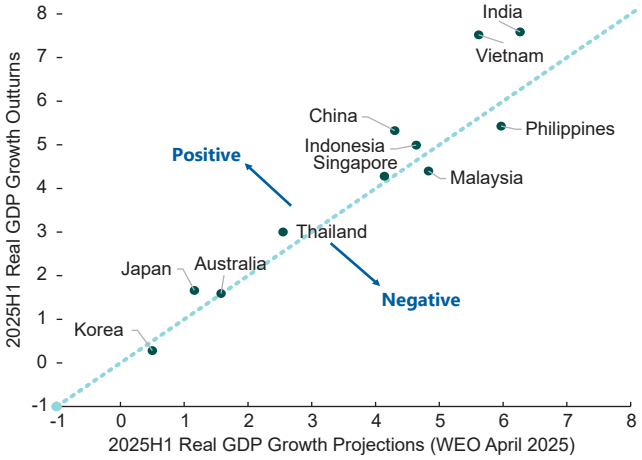
(YoY growth; percent)



… and exceeded expectations in 2025H1

2. Growth Surprises

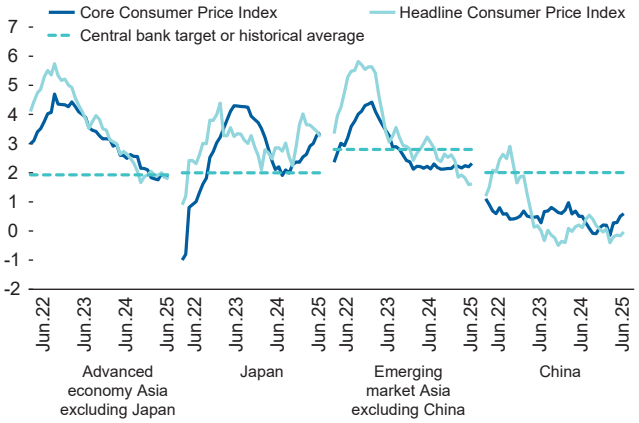
(Percent)



But inflation remains below target in emerging markets…

3. Headline and Core Inflation

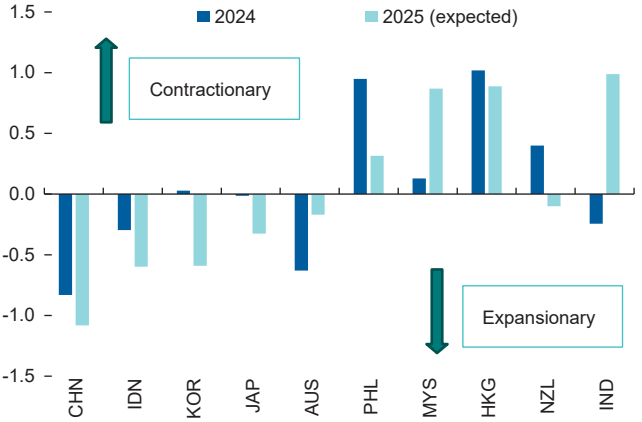
(Percent)



… prompting some countries to introduce fiscal support

4. Fiscal Impulse

(Percent of potential GDP)



Sources: Haver Analytics; WTO; and IMF staff calculations.
Note: For panel 1, AE Asia includes: AUS, HKG, KOR, NZL, SGP, and TWN. EM Asia includes: IDN, MYS, PHL, and THA. Data is not seasonally adjusted, except for China. For panel 3, Core Consumer Price Index (Core CPI) definitions vary slightly across economies. Historical average is used for HKG, CHN, MYS, VNM, otherwise inflation target (or midpoint of target range) is used. For panel 4, the fiscal impulse is calculated based on the difference in the general government cyclically adjusted primary balance as percent of potential fiscal year GDP relative to the year before.

China and other Asian economies in 2025, likely facilitated by free-trade agreements and infrastructure connectivity projects. FDI into ASEAN economies has stayed strong and announcements of future investment suggest that companies continue to pursue supply chain diversification in the region (see Figure 1.3, panels 5 and 6).

Domestic Demand Has Remained Soft in Most of the Region despite Macro Policy Support…

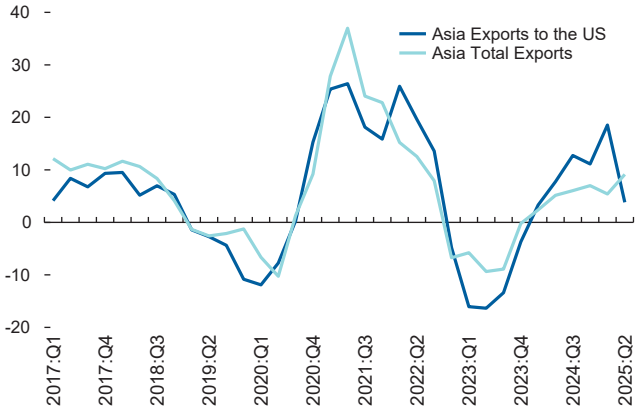
Despite some improvements, domestic demand has remained soft in many Asian economies. Contributions to growth in 2025H1 from domestic demand have been steady or declining, with the exception of Japan (see Figure 1.2, panel 1). Despite recent improvements, retail sales growth generally remains below pre-pandemic

Figure 1.3. External Developments

Asian exports stayed solid despite waning frontloading…

1. Asia Exports

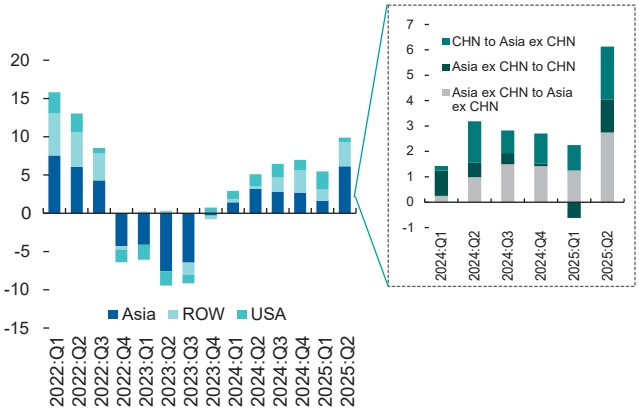
(YoY growth; percent)



… supported also by growing intraregional trade

2. Regional Economic Outlook 14: Strength in Regional Trade

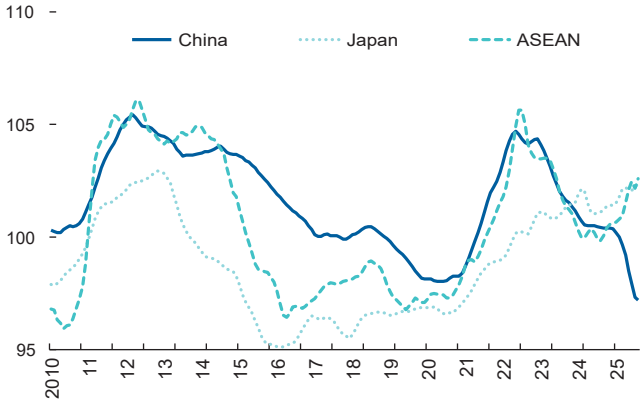
(Percent)



Import prices from Asia mostly held up despite tariffs…

3. US Import Prices by Area

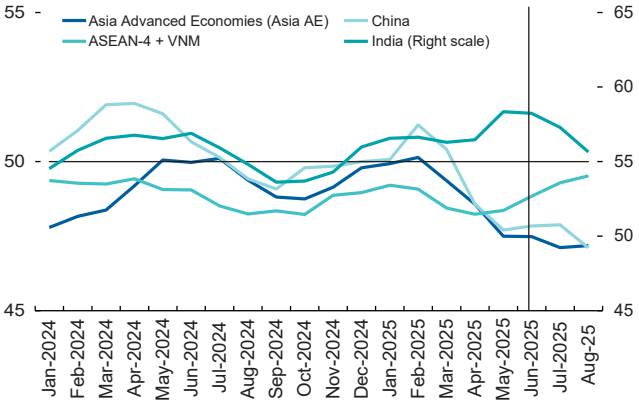
(Index, Dec 2003 = 100, 3-month moving average)



… but exporters are cautious about new orders

4. Manufacturing PMI: New Export Orders

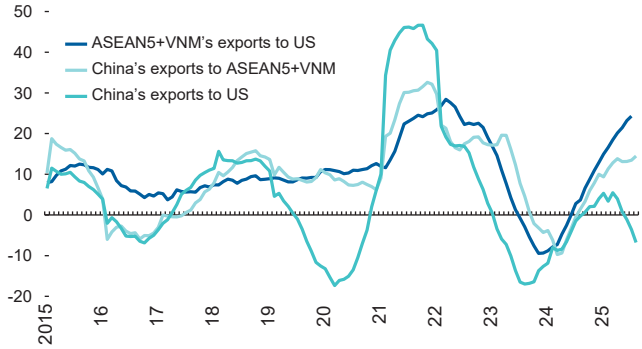
(Index, 50 = no change, 3-month moving average)



Supply chain reconfiguration continues…

5. Supply Chain Trade

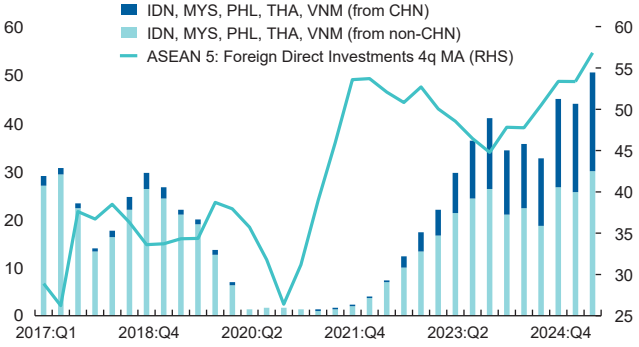
(YoY growth, percent, 12-month moving average)



… bolstered by continued FDI in the region

6. FDI Announcements

(Number of announcements; Right scale – NSA, $ billions)



Sources: Haver Analytics; Trade Data Monitor, WTO; Cross-border Orbis Data and IMF staff calculations.
Notes: For panel 1, US imports exclude pharmaceuticals. For panel 2, year-over-year contributions to regional export growth by destination for the 14 major economies in Asia Pacific are shown, with an additional focus on within APD trade. For panel 3, US import price from Japan is indexed as 2000=100. For panel 4, ASEAN-4 includes IDN, MYS, PHL, and THA. Asia AE includes AUS, KOR, JPN, and TWN POC. For panel 5, ASEAN5 includes IDN, MYS, PHL, THA, and SGP. For panel 6, the chart shows announcements of FDI projects in Indonesia, Malaysia, the Philippines, Thailand, and Vietnam from China and from all other origin countries.

average, reflecting weak consumer confidence (see Figure 1.4, panel 1). Soft domestic demand and negative output gaps have contributed to inflation being below target in many Asian emerging markets (see Figure 1.2, panel 3), with some exceptions (for example, India).

Monetary and fiscal policies have been eased in many countries. In response to tariffs or to support demand more broadly, some countries (for example China, Korea, Indonesia) introduced fiscal stimulus measures. For most countries, the 2025 fiscal impulse is more expansionary than in 2024 (see Figure 1.2, panel 4). In some cases, automatic stabilizers help cushion cyclical fluctuations (for example Australia), while in some others the fiscal impulse is contractionary to offset previous increases in spending (for example, Hong Kong SAR). Most Asian economies have also eased monetary policy in response to low inflation. Policy easing helped offset some of the headwinds from the uncertain trade environment and supported income and growth. With inflation above target and wage growth strengthening, the Bank of Japan (BOJ) is gradually raising its policy rate, with the most recent hike in January.

… Reflecting a Combination of Cyclical and Structural Factors

In large emerging markets in Asia, private consumption is still firmly below the pre-pandemic trends. Persistent weaknesses in the service sector, particularly trade, transport and accommodation, have been a headwind to job and income growth (see Figure 1.4, panels 3 and 4). Tourist arrivals in Asian economies have recovered more slowly than in other regions and are still persistently below the 2015–19 trend (see Figure 1.4, panel 5). The recovery has been held back by several factors, including fewer Chinese tourists (for example, in the Philippines, Thailand, Cambodia, Palau) and country-specific shocks (for example, earthquake and liquidation of the national airline in Vanuatu). High household debt and a downturn in the housing cycle have also dampened consumer demand and construction activities in some countries (for example, Thailand, New Zealand, China, Cambodia) (see Figure 1.4, panel 6). In some countries (for example, Australia, New Zealand), tight credit conditions have contributed to demand weakness. Institutional and structural challenges in the region—such as limited scope for fiscal support because of high public debt, inadequate social safety nets, and inefficiencies in financial intermediation (see Chapter 3)—have contributed to the slow post-pandemic recovery of domestic demand.

Asian Financial Conditions Eased, Aided by a Weak Dollar

Financial conditions have broadly eased. Despite geopolitical tensions in the Middle East and following a brief but sharp tightening in April because of trade policy uncertainty, financial conditions have eased in Asia and globally in 2025 (October 2025 *Global Financial Stability Report*). As elsewhere, the easing reflected lower corporate spreads and, to different degrees, buoyant equity markets and a weaker US dollar. Unlike in advanced economies, the easing in Asian emerging markets also reflected declines in 10-year government bond yields (see Figure 1.5, panels 1 and 2). The latter was also led by decreasing term premia in Asian emerging market economies. The decrease started in 2023, driven primarily by domestic factors such as soft inflation, defying trends in other markets (see Figure 1.5, panel 3). The decline in corporate bond spreads has partly reflected inflows into emerging markets bonds (see below). Asian equities were mixed, with pockets of somewhat stretched asset valuations as well as pockets of potential undervaluation relative to historical trends (for example in some ASEAN countries), based on forward price-to-earnings ratio. Market volatility measures have generally declined, notwithstanding policy uncertainty remaining elevated.

While generally appreciating against the US dollar, real exchange rate performance in Asia diverged in 2025. Currencies in advanced Asia generally appreciated against the dollar but, except for the Japanese yen, remained broadly stable in real effective terms, given broader dollar weakness (see Figure 1.5, panels 4 and 6). Some emerging market currencies in the region appreciated against the dollar but depreciated in nominal and real effective terms, reflecting soft domestic cyclical conditions and a relatively more accommodative domestic monetary policy stance. Since the Chinese renminbi has remained relatively stable against the US dollar in 2025, movements of other Asian currencies against the renminbi have been similar to those against the US dollar. Portfolio inflows to Asian emerging markets have resumed in recent months with the weaker dollar, recovering some of the losses in early 2025.

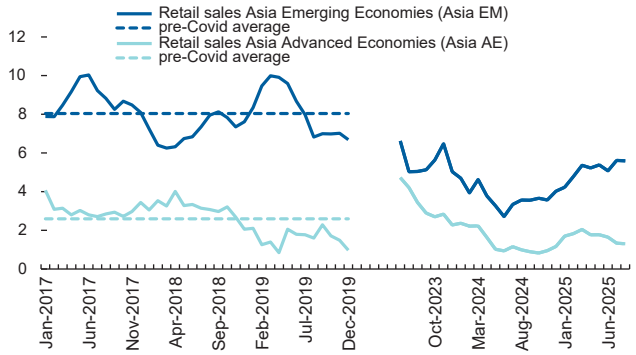
Figure 1.4. Domestic Demand

Retail sales growth is still below pre-COVID averages…

… and consumer confidence is weak

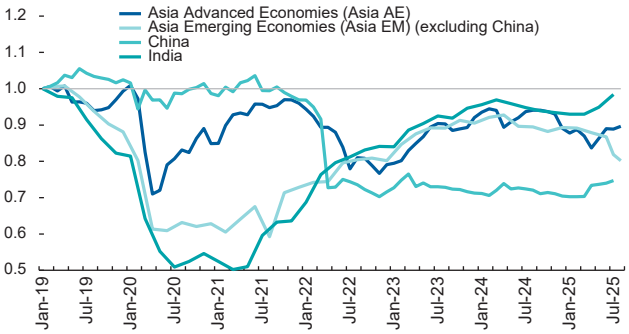
1. Retail Sales

(YoY percent change, simple 3-month moving average)



2. Consumer Confidence

(Index, seasonally adjusted, 2019 Jan=1)

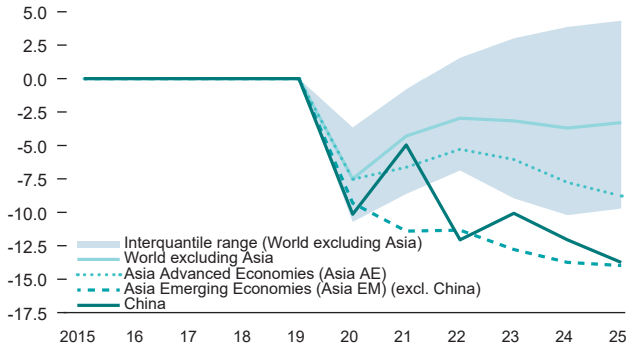


Consumption weakness is longer and deeper in Asia

… with timid recovery in services hindering job growth

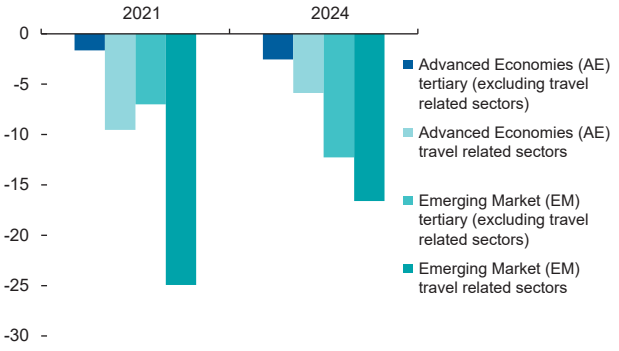
3. Real Private Consumption Deviation from Trend

(Percentage points)



4. Service Sector Real Gross Value Added, Deviation from Pre-pandemic Trend

(Percentage points)

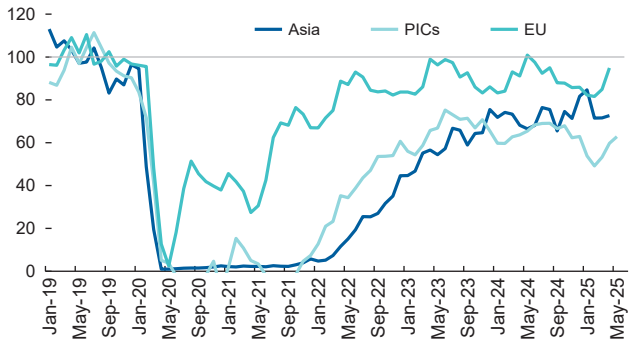


Tourism recovered slowly and remains below trend…

… and housing downturn further weighing on demand

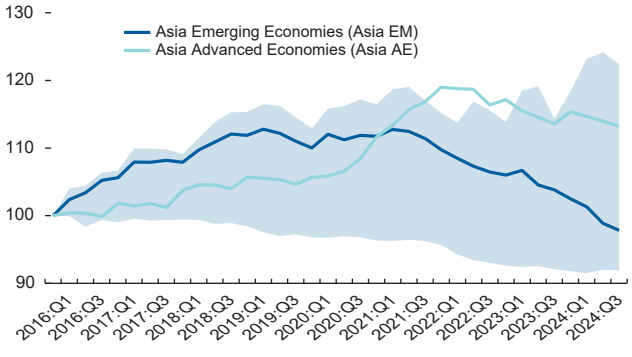
5. Tourist Arrivals

(Index, pre-pandemic trend=100)



6. Real Housing Prices

(Index, 2016Q1=100, weighted average)



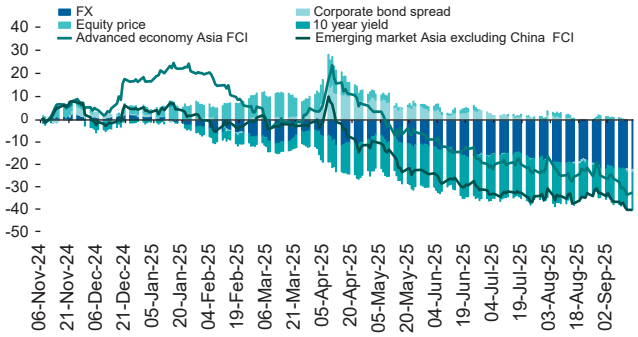
Sources: Haver Analytics; World Economic Outlook Database, Tourism Tracker Database; and IMF staff calculations.
Note: AE = advanced economy; EM= emerging market. For Panel 1, Asia AE: AUS, JPN, KOR, NZL, SGP, and TWN. Asia EM: CHN, IDN, IND, MYS, and VNM. In panel 2, Asia AE: AUS, JPN; EM (excluding China): IND, IDN, THA. Panel 3 shows medians for country aggregates, and the 25th/75th percentile for the world distribution excluding Asia. For Panel 3 and 4, pre-pandemic trend is based on 2015–19, and charts show cumulative changes. In panel 4, travel related sectors include wholesale and retail trade, accommodation, and transportation sectors. Data for Japan and India are until 2023. For panel 5, Asia includes 17 countries that are not Pacific Island Countries (PICs). PICs include Fiji, Palau, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu, and Kiribati. In panel 6, the shaded area represents the max-min range for CHN, IDN, IND, MYS, PHL, and THA. Values are weighted by countries' GDP.

Figure 1.5. Financial Conditions, Exchange Rates, and Capital Flows

After brief turbulence, financial conditions eased… *… with lower rates contributing more to easing in Asia*

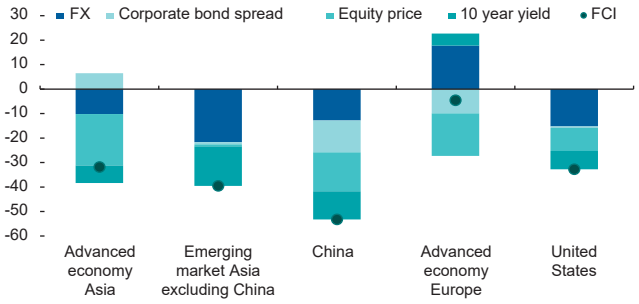
1. Financial Conditions Index Decomposition for Emerging Market Asia excluding China

(+: tighter conditions, -: looser conditions)



2. Financial Conditions across the World

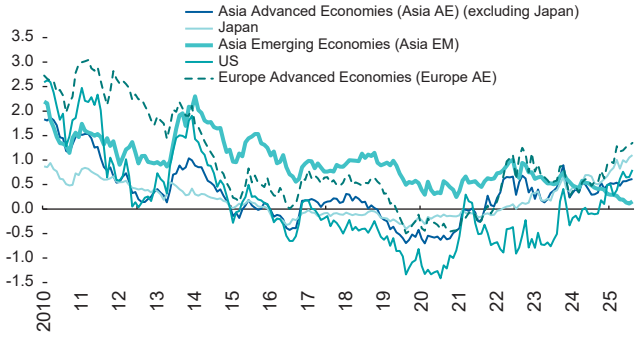
(+: tighter conditions, -: looser conditions)



Term premia compressed in EMs, while rising elsewhere *Portfolio flows resumed, aided by a weak U.S. dollar*

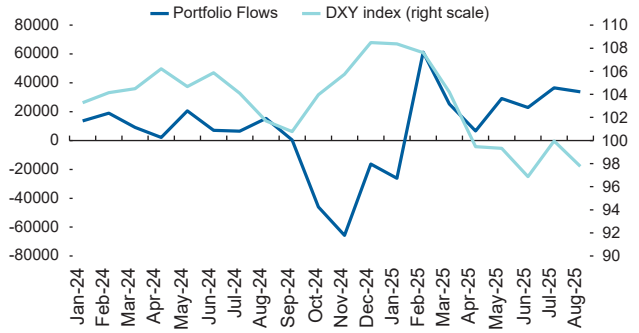
3. Term Premium, 10-year Government Bonds

(Percent)



4. US Dollar and Capital Flows to Emerging Market Asia

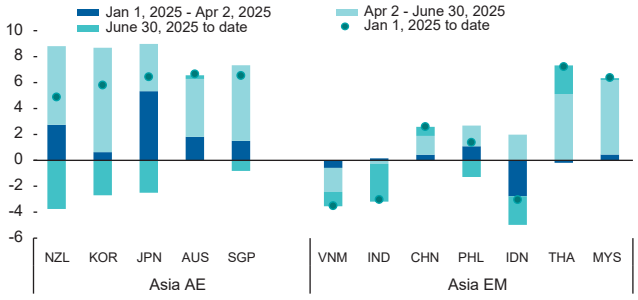
(USD millions; Index)



Asian currencies mostly appreciated against the dollar… *… but not against other trading partners*

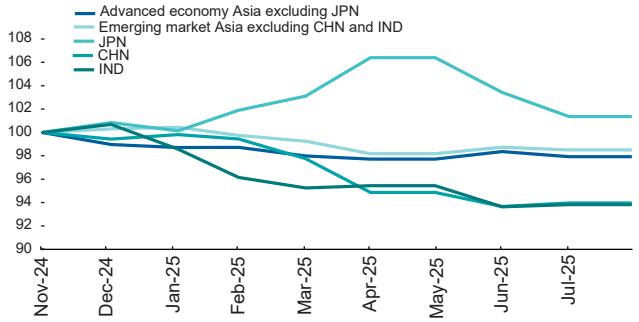
5. Exchange Rates against the US Dollar

(Percent change, positive = appreciation)



6. Real Effective Exchange Rates

(November 2024 = 100)



Sources: Bloomberg Finance L.P. Institute of International Finance and IMF staff calculations.
Note: Construct individual country-level cumulative changes in Financial Condition Index (FCI) taking stock market capitalization as weights. Domestic currency appreciation (NEER), an increase in 10-year yields and spreads, and lower equity prices contribute to tighter financial conditions. The FCI captures the cumulative change in financial variables normalized by the standard deviation of daily changes. The data is as of September 15, 2025, and is cumulative since November 6, 2024. AE Asia includes HKG, SGP, and KOR; EM Asia includes IDN, IND, MYS, PHL, and THA. AE Europe includes Austria, France, Germany, Italy, and Spain. For panel 4, all countries include equity, and debt flows with the exception of MYS, LKA, PHL, and VNM where debt data is unavailable. EM Asia includes CHN, IND, IDN, MYS, LKA, PHL, THA, and VNM. For panel 5, exchange rate data as of September 22, 2025. For panel 6, REER, data as of August 17, 2025 Data labels in the figure and Note use International Organization for Standardization (ISO) country codes. AE = advanced economy; EM = emerging market.

1.2 Outlook and Risks

Trade Policy Shifts and Persistent policy Uncertainty Cloud Asia's Prospects

Growth in Asia is expected to hold broadly steady in 2025 and moderate noticeably in 2026, given building negative effects of higher US tariffs and headwinds to medium-term potential growth. Reflecting the higher tariffs and higher trade policy uncertainty, GDP growth forecasts for most Asian countries in 2025 and 2026 are below those of October 2024—China and India being notable exceptions. Empirical analysis (see Box 1.1) shows that a one-standard-deviation increase in US trade policy uncertainty reduces investment in Asia by about 1 percent in the near term—with effects about twice as large in emerging market economies. So far, this drag has been partly offset by the AI-driven investment boom, which is expected to continue both this and next year. Relative to the April 2025 reference scenario, the current growth forecasts for 2025-26 are higher, as effective tariffs turned out lower than the initial tariff announcements for most economies. As noted in previous *Asia Pacific Regional Economic Outlooks*, headwinds to the medium-term growth potential, including from rapid population aging, are expected to influence growth outcomes to greater extent. Nevertheless, as in recent years, Asia is projected to continue to contribute around 60 percent of global growth in 2025 and 2026. Inflation is expected to stay soft in 2025 in most emerging markets and move closer to targets in 2026.

The overall balance of risks remains tilted to the downside, with further escalation of trade tensions being a key concern. While effective US tariffs on Asian economies are lower than initially announced, US agreements with some Asian countries are still under negotiation, with the possibility of higher tariffs. Prospects for supply chain diversification are subject to uncertainty, given recent ongoing trade policy shifts. A high share of Chinese value added embedded in regional exports (see Figure 1.6, panel 1) leaves many countries exposed to potential "transshipment" tariffs. Higher tariffs and still-elevated trade policy uncertainty and renewed escalation of tensions could further dampen confidence and investment. In Asia, the decline in China's export prices may risk negative spillovers to regional economies, especially in ASEAN (see Figure 1.6, panel 2).

Figure 1.6. Spillovers from China

Rising share of Chinese value added in regional exports

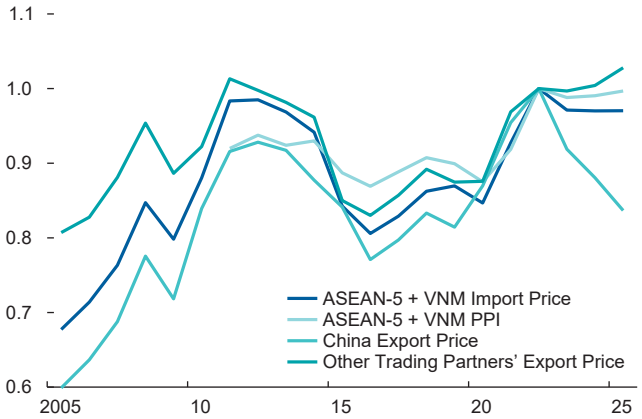
1. Asia's Imports of Intermediate Inputs from China for Exports Production

(Percentage points)

Decline in China's export prices may affect some countries

2. China's Export versus. ASEAN Import Prices and PPI

(Index 2022 = 1)



Sources: World Economic Outlook Database, Eora Global Supply Chain Database and Aslam, Novta and Rodrigues-Bastos (2017); and IMF staff calculations.
Note: For Panel 1, see October 2024 Asia-Pacific *Regional Economic Outlook* for more details. For Panel 2, other main trading partners include the United States, Hong Kong, Japan, Taiwan POC, India, Australia, Germany, France, Italy, United Kingdom, and Switzerland.

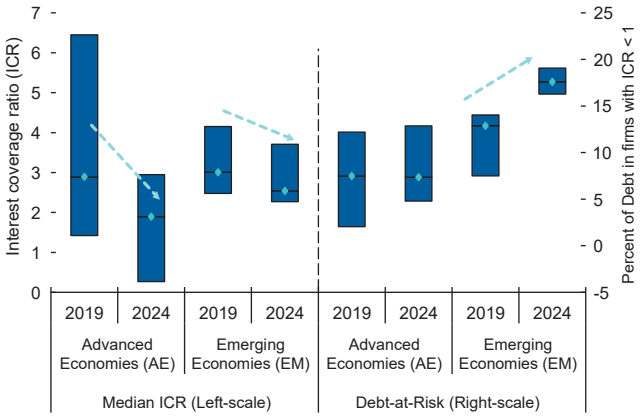
Tighter financial conditions could amplify the impact of trade and demand shocks... While financial conditions in Asia remain accommodative, they could reverse if trade policy uncertainty or geopolitical tensions intensify, or if there is a correction in investor optimism about AI prospects (Figure 1.7, panel 3). A sharp risk-off event in global financial markets could raise external borrowing costs, especially for frontier economies in the region, and put pressure on weaker currencies. In emerging market economies, a reversal of recent term-premium declines or a repricing of inflation expectations could raise yields and worsen debt dynamics (see Box 1.2).

... and increase debt vulnerabilities. A combination of rising debt-service costs and soft domestic demand could create a negative macro-financial feedback loop and further increase debt burdens (see Figure 1.8, panel 4). Easy financial conditions have benefited the corporate sector, including the low productivity

Figure 1.7. Risks

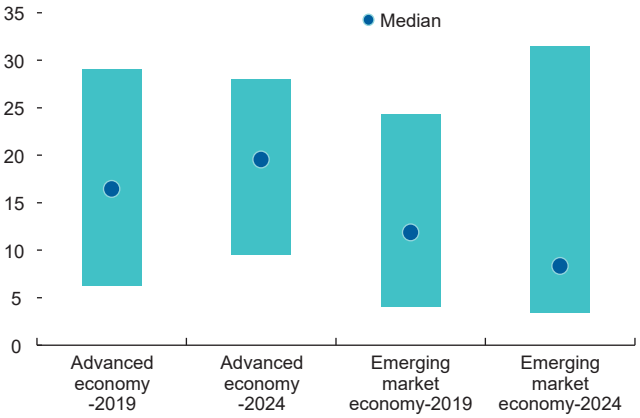
Corporate debt-at-risk has increased...

1. Asia: Corporate Debt Servicing Capacity
(Year-over-year)



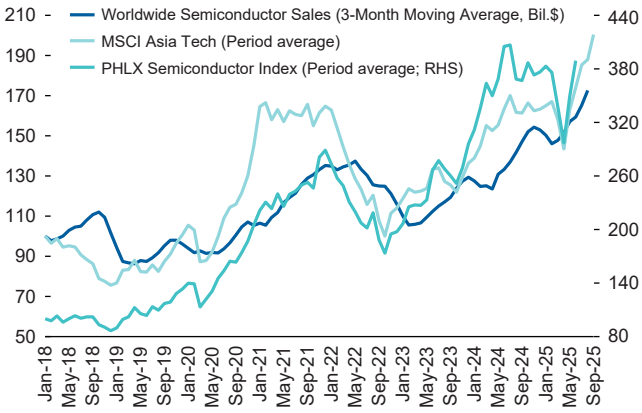
... and some countries face external debt pressures

2. Asia: External Debt of Non-Government and Non-Bank Sectors
(Percent of GDP)



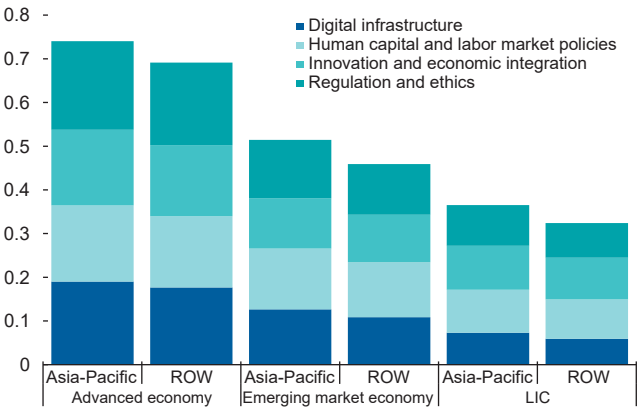
Stretched AI asset valuations pose downside risks...

3. Tech Cycle
(Index)



... but AI adoption may also boost productivity over time

4. Artificial Intelligence Preparedness
(Index, average within each group)



Source: Cazzaniga and others (2024), S&P Capital IQ, World Economic Outlook Database, Quarterly External Debt Statistics, Global Financial Stability Report, Haver Analytics; and IMF staff calculations.
Note: For Panel 1, Debt-at-Risk shows the share of total debt held by firms with an Interest Coverage Ratio (ICR) below 1. Median ICR represents the distribution of median value across countries. Firm-level ICR is calculated using the four-quarter average. Underlying variables and calculated ICR are winsorized at 5%. Financial sector excluded; real estate sector included. For panel 2, the chart show the median, and the minimum-maximum range for each group. For panel 4, ROW = rest of the world. AE = advanced economy; APD = Asia and Pacific Department; EM = emerging market; LIC = low-income country; PPP = public-private partnership; ROW = rest of the world.

"zombie firms" (see Chapter 3). Even so, corporate debt-at-risk in Asian emerging markets has climbed (see Figure 1.7, panel 1), driven by weak demand and property sector issues. Several ASEAN countries face increased external debt exposure (see Figure 1.7, panel 2), and rollover risks and balance sheet distress may arise from external tightening. Meanwhile, rapid population aging adds to long-term fiscal pressures across much of the region.

Economic or debt pressures could amplify socio-political challenges in the region. Weak growth, income gaps, and governance issues have led to demands for greater transparency of public services and more economic opportunities, with rising discontent and protests across the region in recent months. A severe downturn would heighten these tensions and disproportionately impact vulnerable groups that lack adequate access to social safety nets. A decline in international aid from some partners, and climate shocks, could impact smaller, low-income countries, particularly Pacific island countries, hindering growth and public finances.

There are also upside risks to the baseline projections. A stronger-than-expected AI cycle could lead to higher investment and exports, particularly in countries with strong exposure to the tech cycle. The adoption of AI could raise productivity more than projected, especially as the region demonstrates above average AI preparedness (see Figure 1.7, panel 4). Countries may also provide additional macroeconomic policy support to buttress domestic demand or implement more productivity-enhancing structural reforms, including, but not limited to further trade and financial integration, which could boost regional growth. Moreover, a reduction in geopolitical or trade tensions would help reduce uncertainty and boost investment and productivity. Box 1.3 quantifies the impact of selected risks around the baseline using the Fund's Global Integrated Monetary and Fiscal (GIMF) model, providing a model-based illustration of potential downside and upside scenarios—including higher or lower tariffs and higher productivity growth due to faster AI adoption.

Country Groups

Advanced Economies

Growth in advanced Asia is forecast at 1.6 percent in 2025, broadly unchanged from 2024, and though with heterogeneity across countries.

- *Japan's* growth is projected to increase to 1.1 percent in 2025, from 0.1 percent in 2024, reflecting strong private consumption and investment, and the recent rise in real wage growth expected to support consumption in the second half of the year. The forecast for 2025 is 0.5 percentage points higher than in the April 2025 *World Economic Outlook*, reflecting greater-than-expected resilience of domestic and external demand in the first half of the year. Growth in 2026 is projected to moderate to 0.6 percent.
- *Australia and New Zealand* are also strengthening relative to 2024, with private domestic demand expected to accelerate in 2025 and 2026 as monetary policy continues to ease. In 2025, GDP growth is projected at 1.8 percent in Australia and 0.8 in New Zealand, up from 1.0 and −0.6 percent in 2024 for the respective countries.
- In other Asian advanced economies, GDP growth is slowing relative to 2024 and revised down relative to October 2024. In *Korea*, GDP is expected to grow at 0.9 percent in 2025, down from 2.0 percent in 2024, and lower than the April 2025 forecast because of prolonged political and trade policy uncertainties in the first half of the year.
- *Inflation* in *advanced Asia* is forecast at 2.5 percent in 2025, slightly down from 2.6 percent in 2024, and projected to decline further towards central bank targets in 2026 with a projection of 2.1 percent. In Japan, inflation is projected at 3.3 percent in 2025, with an expected decline to 2.1 percent in 2026. In most other AEs, inflation softened in 2025.

Emerging Market Economies

Growth in Emerging Asia is projected to slow to 5.2 percent in 2025, from 5.3 percent in 2024, largely because of higher tariffs and trade policy uncertainty.

- *China's* growth is expected to moderate to 4.8 percent in 2025, from 5.0 percent in 2024. The 2025 forecast has been revised up relative to April 2025, thanks to stronger exports and the impact of increased fiscal stimulus. The lift from export frontloading in early 2025 is expected to be followed by a payback in late 2025 and early 2026, with growth projected to moderate to 4.2 percent in 2026.
- *India* economy is projected to expand at 6.6 percent this year, slightly up from 6.5 percent in 2024. The forecast has improved since April 2025 as strong Q2 growth and the goods and services tax (GST) reform are expected to outweigh the negative effects of higher US tariffs on demand for Indian goods. Growth is expected to moderate to 6.2 percent in 2026.
- Growth in countries of the *ASEAN* is expected to slow to 4.3 percent in 2025 from 4.8 percent in 2024. This is an upward revision of 0.3 percentage points relative to the April 2025 forecast, thanks to lower effective tariffs, stronger demand from trading partners and easier financial conditions.
- *Disinflation* in *emerging Asia* is expected to continue in 2025, with a forecast of 1.6 percent, down from 2 percent in 2024, driven by soft domestic demand and weakness in services inflation. Inflation is expected to go back to 2 percent in 2026, moving toward central bank targets in most countries. In *China*, inflation is forecast at 0 percent in 2025, down from 0.2 in 2024. Weak domestic demand has contributed to low inflation in China, though 2026 inflation is projected at 0.7 with a recovery in domestic demand.

Frontier Economies and Small States

GDP growth in frontier economies and small states is moderating, largely because of tariff-related external demand shocks.

- In *Bangladesh,* growth in FY2025 is projected at 3.8 percent, which is a downward revision relative to October 2024 as a result of political uncertainty, tighter policy stance and subdued investment. In *Mongolia,* 2025 GDP growth is forecast at 5.5 percent, a strengthening relative to 2024 because of a strong rebound in agriculture, but still lower than projected in October 2024. In *Nepal,* 2025:H1 GDP growth strengthened relative to 2024 and is projected at 4.3 percent, owing to stronger-than-expected recovery post-floods, but still lower than projected in October 2024 because of subdued domestic demand.
- *In Pacific Island Countries* 2025 GDP growth (simple average) is projected to moderate to 2.9 percent from 3.6 percent in 2024, which is a small downgrade relative to the forecasts in October 2024 and April 2025 *World Economic Outlook of the* mainly because of idiosyncratic factors.

1.3 Policies

The evolving global environment underscores the urgent need for policies to make growth more resilient and sustainable. Domestic demand, particularly consumption, has remained soft, making the region more susceptible to changes in global demand and trade policies. In addition, while trade openness has supported growth in the manufacturing sector, broad-based productivity gains have stalled in recent years, along with a rise in capital misallocation. Both macro-policy support and structural reforms are needed to help Asian countries navigate the challenging global environment.

Macro Policies Should Focus on Absorbing Shocks and Reducing Uncertainty...

- **Monetary policy easing is appropriate in countries with inflation below target.** Additional easing may be expected in many countries to bring inflation back to target and ensure that inflation expectations are well anchored (see Figure 1.8, panel 1). The weakening US dollar has helped reduce capital outflow pressures for countries in the region, providing additional room for policy rate cuts where needed. In Japan, gradual normalization of monetary policy can support inflation's convergence toward the 2 percent target if the baseline forecast materializes. Exchange rate flexibility should be the first line of defense in case of shocks, though judicious use of foreign exchange (FX) intervention—if needed to maintain stability—could be pursued in line with the Fund's integrated policy framework.

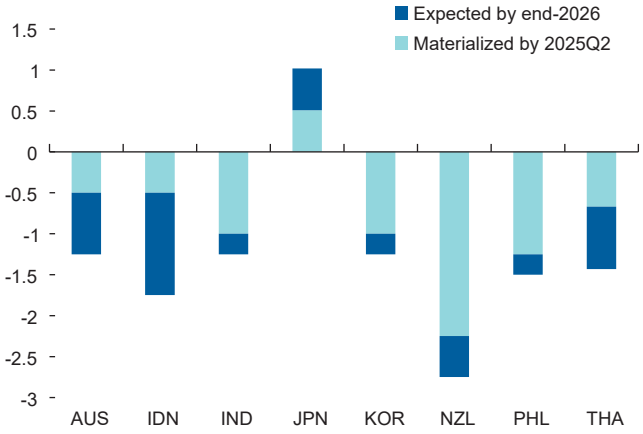
- **In some countries, temporary and targeted fiscal measures could support demand and help vulnerable groups affected by the tariff shock.** The near-term fiscal stance should be calibrated to individual country circumstances. China, Korea, and Vietnam have introduced sizable fiscal packages to support demand and fund priority programs announced before the tariff shock. In countries with high public debt, expansionary fiscal policy needs to be balanced with medium-term consolidation efforts to preserve debt sustainability. Improving the adequacy and coverage of social safety nets in Asia, especially for the population in the bottom 20 percent of the income distribution, which has a high propensity to consume, could help support domestic demand (see Figure 1.8, panels 2-4).

Figure 1.8. Monetary and Fiscal Policy, and Structural Reforms

Monetary policy is expected to ease in most countries… *… in addition to near-term fiscal support*

1. Cumulative Policy Rate Changes since Peak

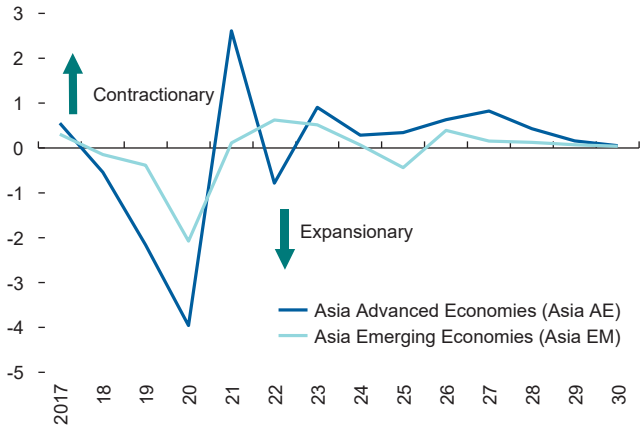
(Percentage Points, quarterly average)



Improving social safety nets could help support demand

2. Fiscal Impulse over Time

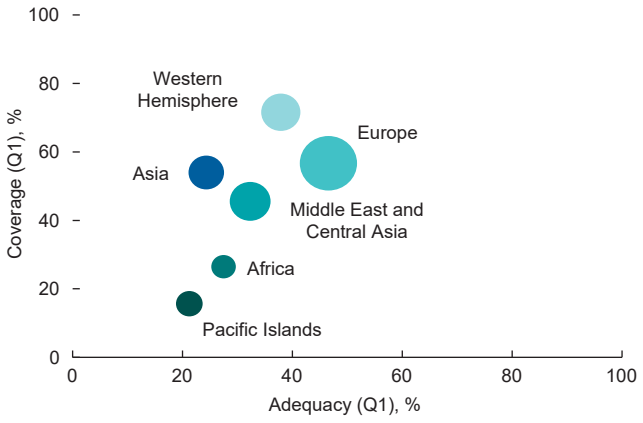
(Percent of potential GDP, simple average)



Fiscal support to be balanced with consolidation needs

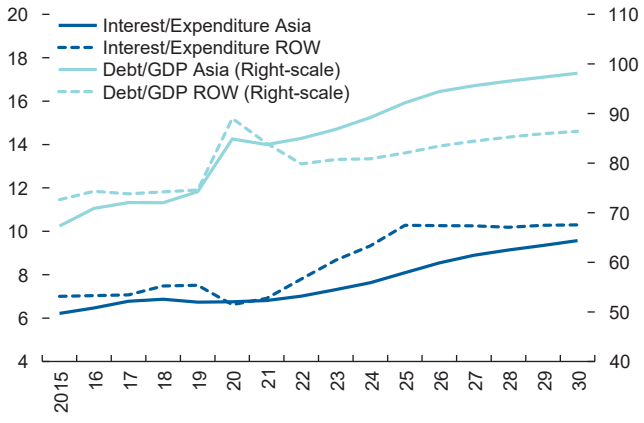
3. Social Safety Nets in Asia

(Percent)



4. Public Debt and Interest Expenses Over Time

(Percent, PPP GDP weighted average)



Sources: Bloomberg Finance L.P., Haver Analytics, World Economic Outlook Database, World Bank ASPIRE Database, CPIS, CDIS, DOTS; and IMF staff calculations.

Notes: For panel 1 Japan data shows the cumulative policy rate changes since trough. "Materialized" reflects cumulative policy rate changes from the peak through 2025:Q2. "Expected" represents staff projections for cumulative policy rate changes from 2025:Q3 until end-2026, except for THA (Bloomberg). For panel 2, The fiscal impulse measures the difference in the general government cyclically adjusted primary balance as percent of potential fiscal year GDP relative to the previous year. For panel 3, Simple averages of a sample of 94 countries. Data refers to the most recent year available. Bubble size represents the difference between poverty pre and post transfers. Adequacy refers to the size of transfer. For panel 4, APD sample includes 38 economies, and the ROW sample includes 158 countries.

… While Structural Reforms Are Needed to Create New Opportunities

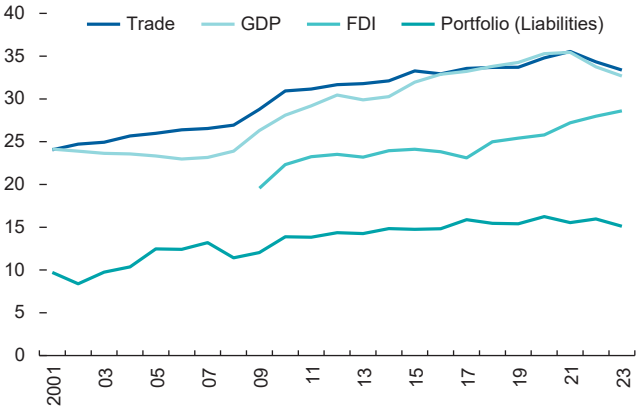
Countries in Asia would benefit from promptly addressing structural impediments to growth. The challenging global environment offers a chance to accelerate reforms to address economic imbalances, boost productivity, and enhance resilience.

- **Structural policies to support continued expansion of the service sector are essential for economic rebalancing.** The structural transformation towards services has slowed in recent years, partly affected by the COVID-19 pandemic, limiting job and income recovery. Continued international integration could boost tradable services, such as education and training that are important for labor to adapt to new technologies (November 2024 *Regional Economic Outlook: Asia and the Pacific*). As credit allocation historically favored manufacturing and real estate, reforms to improve financial intermediation and capital market development are essential to channel credit into more productive service sectors.
- **Financial reforms would boost returns on investment and lift growth.** The decline in productivity growth in recent years has been associated with rising capital misallocation. Diversifying the financial structure, including through capital market development, would help relax financial constraints that may stem from insufficient scale of financing or inadequate financial instruments, and support productive firms and innovation (see Chapter 3). Both private and public debts have risen since the pandemic and evergreening corporate borrowing has increased, weighing on growth and productivity. While macroprudential intervention in real estate and other high-risk credit segments should be used to contain systemic risks, dedicated strategies will help reduce risks from high debt morphing into debt overhangs. Thailand and Korea have introduced measures to tackle household debt. The Chinese authorities have taken steps to refinance developer and Local Government Financing Vehicles (LGFV) debt, but more is needed to restructure non-viable entities.
- **Fiscal reforms are essential to manage large spending pressures and prepare for future shocks.** This requires upgrading medium-term frameworks to anchor budgets and help build transparency while allowing more gradual fiscal adjustment in some countries. It also calls for expanding fiscal coverage to include public banks, SOEs, and subnational governments, given substantial policy support delivered through these entities in Asia. Developing a broader view of the public balance sheet would help better design policies and assess and manage vulnerabilities (IMF 2024). In small and low-income states, the potential decline in international aid flows calls for renewed efforts to mobilize domestic revenues, and where needed, reprioritize spending.
- **Labor market policy reform is needed to mitigate demographic pressures that will intensify in many Asian countries.** Projections indicate rapidly diminishing labor supply over the medium to long term because of aging in major Asian economies such as China, Japan, and Korea, which will dampen potential growth (October 2024 *Regional Economic Outlook: Asia and the Pacific,* Analytical Note). On the demand side, ageing and population decline is expected to curb consumption, with a shift in the composition of consumption toward more old-age services (for example, health) and away from young-age services (for example, education). Policies to increase labor force participation, enhance employee training, and integrate foreign workers could help manage the gradual transition.
- **Advances in AI can lift potential growth but also pose new socio-economic challenges.** These advances offer opportunities to boost productivity growth and offset the negative impact from aging in Asia. However, AI adoption could also increase inequality, exacerbate productivity gaps between large firms that lead in AI adoption and SMEs, and displace workers (IMF 2025). Policies to support AI integration and adoption in SMEs and increase labor market capacity to adapt to AI, including through reskilling, job switching, and strengthening social safety nets, would help to address these challenges.

Greater Regional Trade and Financial Integration Could Further Boost Growth

Further regional trade integration through lower barriers to trade and investments could yield substantial dividends. Asia-Pacific economies tend to maintain more extensive non-tariff barriers, possibly reflecting fractured and shallow trade agreements. Removing intra-regional barriers to trade—even unilaterally—would have positive effects on competition, productivity and growth (see Chapter 2). Coupled with stronger

Figure 1.9. Asia's Share in Global GDP, Trade, FDI and FPI
(Percent)



Sources: CPIS; CDIS; Dot; World Economic Outlook Database; and IMF staff calculations
Note: FDI = Foreign direct investment, FPI = Foreign portfolio investment.

regional demand, it will enable economies to diversify export markets and reduce costs, offsetting some of the headwinds from the tariff shocks. In addition, lowering FDI restrictions and enhancing competitiveness can help attract shifting supply chains.

Deeper regional financial integration could help reduce vulnerabilities to global financial shocks and support financial development. While advanced economies in Asia are well integrated into global financial markets, Asian emerging markets are mostly integrated through cross-border banking and could benefit from further linkages, including FDI and capital markets (see Figure 1.9) (Alonso and others, forthcoming). Further financial integration could improve access to finance and boost productivity, which is crucial at the current juncture, but reforms need to be carefully sequenced to minimize potential amplification of common shocks.

Box 1.1. The Impact of Trade Policy Uncertainty on Trade and Investment

Trade policy uncertainty (TPU) surged to historical highs in 2025 and remains elevated. It peaked in April after the announcement of new US tariffs on strategic sectors (see Figure 1.1, panel 1). Although these measures were later paused, TPU has stayed high across various indicators. Persistent uncertainty makes assessing its impact especially relevant for Asia-Pacific economies.

Uncertainty can affect economic activity through different channels. The real options channel suggests that when firms face heightened uncertainty about the policy environment, they postpone irreversible investments until clarity returns (Bernanke 1983; Pindyck 1991; Dixit and Pindyck 1994), implying a transitory decline in investment. By contrast, the risk premium channel emphasizes that uncertainty raises the required return on investment, increasing discount rates and lowering firm valuations (Cochrane 2005). This raises the cost of capital and can result in a more persistent reduction in investment, particularly for marginal projects.

This box quantifies the short-term effects of TPU on investment, exports, and exchange rates. To capture the relevant uncertainty for the region, the analysis employs a new bilateral TPU index based on text analysis of news reports. Unlike measures derived from corporate earnings calls—which are limited to economies with large capital markets—this approach allows coverage of smaller Asia-Pacific economies. The index focuses specifically on trade with the United States, Asia's key final demand partner, and shows especially pronounced spikes, with the average TPU shock across the region reaching five standard deviations. While the new measure co-moves with existing TPU indicators at the regional level, it is particularly effective in capturing country-level variation.

Empirical estimates confirm that TPU has significant effects on investment[1]. Based on a panel of Asia-Pacific economies from January 1995 to April 2025, a one standard deviation increase in TPU leads to a 1 percent decline in investment within the same quarter. The effect is statistically significant for up to three quarters, consistent with the real options mechanism. Applying the recent shock size of five standard deviations implies a temporary 5 percent decline in investment. The effect is stronger in emerging markets—about twice as large as in advanced economies—possibly reflecting more limited ability to hedge or manage uncertainty (see Figure 1.1.1 and Figure 1.1.2).

By contrast, the short-term effect on exports is limited. This is not inconsistent with theory, as the TPU index captures increases in uncertainty (the second moment) rather than changes in average tariffs (the first moment). Over longer horizons—about 40 months—the decline in investment translates into weaker export capacity, pointing to indirect but meaningful spillovers from TPU to trade performance (see Figure 1.1.3).

There is no evidence of trade frontloading in response to TPU spikes. Likewise, there is no systematic impact on the US dollar—bilateral and effective exchange rate measures show no material movement around TPU episodes. Imports from the United States into Asia-Pacific economies also, typically, remain broadly stable. These patterns suggest that the primary macroeconomic effects of TPU operate through domestic investment responses rather than immediate adjustments in trade flows or exchange rates.

The authors of this box are Sakai Ando, Sofia Felici, Adam Jakubik, Andrea Pescatori, and Yuting Wei.

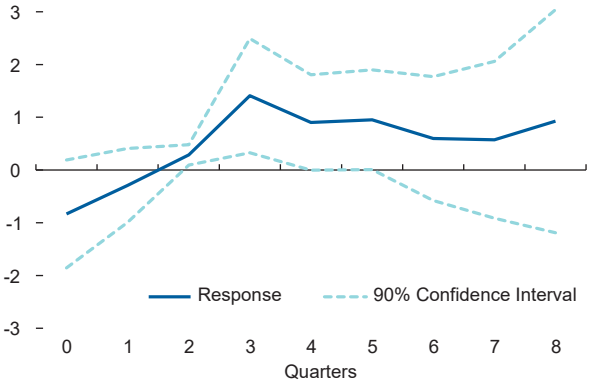
[1] The analysis uses a panel local projections framework covering 16 Asia-Pacific economies from January 1995 to April 2025. The dependent variables are the log differences of bilateral imports (monthly frequency), investment, and household consumption (quarterly frequency). All specifications include partner-country and time fixed effects. Figures report the percent response to a one-standard-deviation TPU shock, with dashed lines indicating 90 percent confidence intervals based on country-clustered standard errors.

Box 1.1. *(continued)*

Figure 1.1.1

Impulse Response Of Asia AE's Real Investments To TPU

(percentage points, response to one standard deviation)

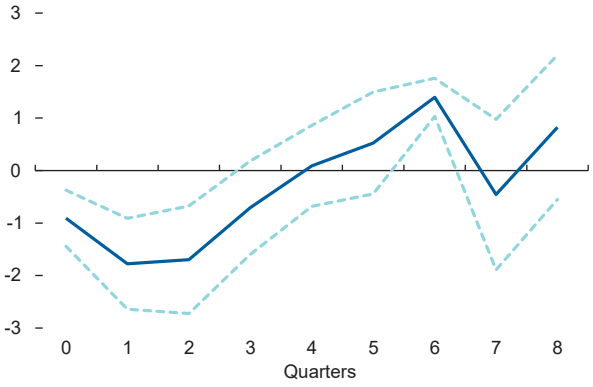


Sources: World Economic Outlook; and IMF staff estimates.
Note: Asia AEs include Australia, Japan, Korea, New Zealand, and Singapore. AE = advanced economy; EM = emerging market; TPU = trade policy uncertainty.

Figure 1.1.2

Impulse Response Of Asia EM's Real Investments To TPU

(percentage points, response to one standard deviation)

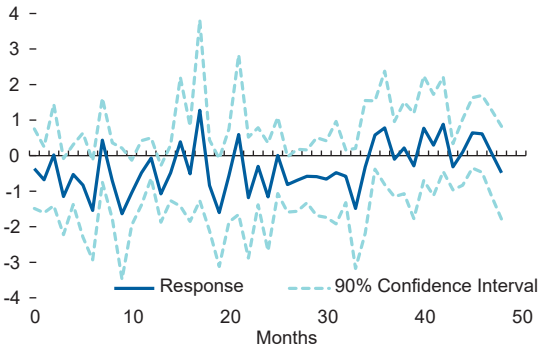


Sources: World Economic Outlook; and IMF staff estimates.
Note: Asia EMs include Brunei, Cambodia, China, India, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Thailand, and Vietnam. AE = advanced economy; EM = emerging market; TPU = trade policy uncertainty.

Figure 1.1.3

Impulse Response Of Asia's Exports To US To TPU

(percentage points, response to one standard deviation)



Sources: World Economic Outlook; and IMF staff estimates.

Historical evidence shows that spikes in TPU have a clear negative impact on investment, with potentially longer lasting effects if uncertainty persists. Policymakers should remain alert to these risks, while recognizing that timely macroeconomic support and structural policies can help offset some of the drag. The overall impact will also hinge on the evolution of tariff measures themselves, which vary across countries and sectors, implying heterogeneous outcomes and the need for tailored policy responses across Asia.

Box 1.2. Financial Spillovers to Asia Pacific[1]

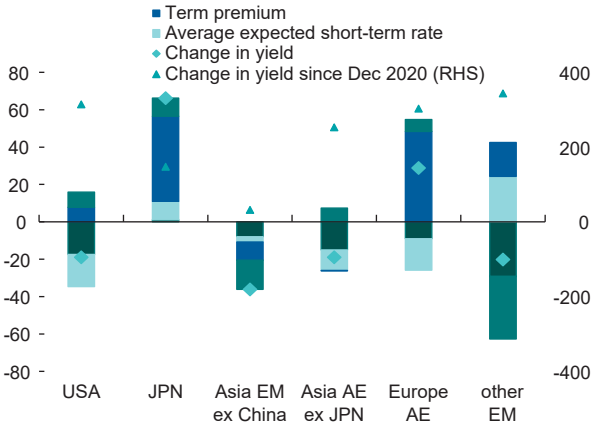
Globally and regionally, government bond yields of major economies have trended upwards since the pandemic, with a few seeing significant increases in recent months (see Figure 1.1.2). Such moves have raised questions about spillovers to Asian markets, as external tightening of financing conditions in the past tended to have negative impacts on the region. More specifically, global long-term rates could affect local borrowing costs, investor risk appetite, and exchange rates. When global investors require more compensation to hold long bonds, financing tends to get tighter. We look at these spillovers to judge how exposed Asian markets are today and whether policy buffers are well placed.

It is important to differentiate factors driving up the yields of major global economies. A decomposition of the long-term yields into two key elements, term premia and the expected policy path, shows that the recent change has been due not only to expected changes in policy rates, but also to an increase in term premia. The latter could reflect heightened uncertainty around the policy outlook, increased fiscal issuance, and shifts in global risk appetite, which affect different countries to varying degrees.[2] We examine the spillover of global yields into regional markets, distinguishing these two channels. Our main findings:

- Global rates affect Asia's long-term rates. Heightened global term premia have put upward pressure on regional term premia. But lower expected external policy rates—particularly in the US—and country-specific conditions—local inflation prospects, foreign exchange (FX) volatility, and domestic policy rates—have provided an offsetting force (see Figure 1.2.2).

Figure 1.2.1

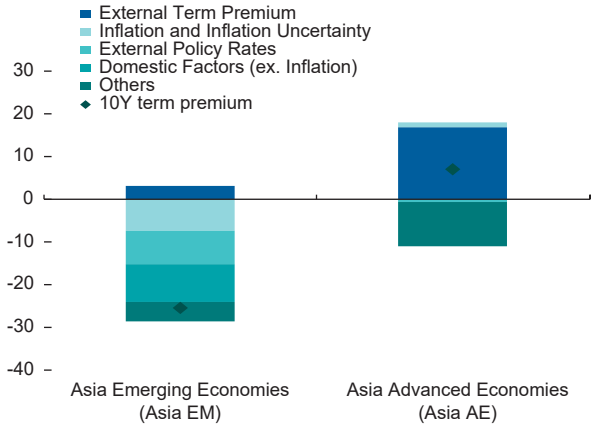
Changes in Long-term Yield Decomposition
(Basis points from Oct. 2024 to Aug. 2025)



Sources: Haver Analytics; IMF, World Economic Outlook Database, Refinitiv Eikon; and IMF staff calculations.
Notes: Asia EMs include India, Indonesia, Malaysia, and Thailand. Asia AEs include Australia, New Zealand, and Korea, based on a simple country average. Solid color represents change from October 2024 to March 2025, patterns represent change from March 2025 to August 2025. Based on 10-year maturities. Decomposition based on a Gaussian Dynamic Term Structure Model. AE = advanced economy; EM = emerging market.

Figure 1.2.2

Term Premium Decomposition in Asia-Pacific
(average year-over-year percentage point change, October 2024 to latest)



Sources: Haver Analytics; CEIC; IMF, World Economic Outlook Database, Refinitiv Eikon; and IMF staff calculations.
Notes: EMs include India, Indonesia, Malaysia, and Thailand. AEs include Australia, Korea, and New Zealand. Estimated by a linear regression of individual countries' 10-year term premia on global and local factors over November 2002 to June 2025. Global factors are proxied using 10-year term premia and policy rates from the United States and Japan, the latter purged of the US impact. Other factors include time trends and residuals. AE = advanced economy; EM = emerging market.

[1] The authors of this box are Anne Oeking, Anoulat Sinthavy, Haruki Seitani, and Ying Xu.

[2] Following standard asset-pricing theory (Cochrane 2005), long-term yields can be decomposed into expected short rates and a term premium—the compensation investors require for bearing duration risk.

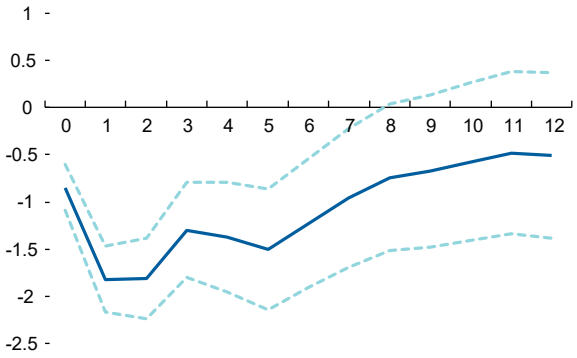
Box 1.2. *(continued)*

- On equities and FX market, we show that when global investors mark up the expected path of policy rates (risk-neutral long rates), Asian equities often rise, and currencies strengthen—consistent with better global growth expectations. By contrast, when global investors demand more compensation for holding duration (a higher term premium), equities soften, and currencies tend to weaken (see Figures 1.2.3 and 1.2.4).
- Across the board, the spillovers into real activity and inflation are modest over the horizons we study, suggesting that recent waves have been absorbed mainly within financial markets rather than spilling heavily into the real economy.

The region has been mostly shielded from global financial spillovers in the past few months. This has been supported by domestic cyclical conditions but also reflects deeper local-currency bond markets and stronger domestic policy frameworks that have anchored inflation expectations and curbed FX market volatility.[3] Still, Asia is not immune to sharp global repricing. Policies should focus on keeping domestic anchors strong, continuing to build market depth so shocks are absorbed rather than amplified, and maintaining FX/liquidity buffers to manage bouts of volatility.

Figure 1.2.3

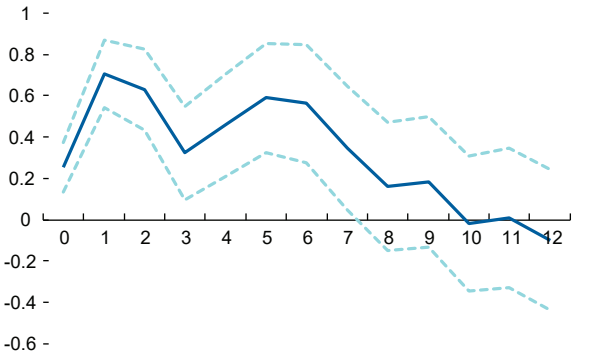
Effects of global term premium shock on regional stock prices
(Monthly percent change to a 1 S.D. shock)



Sources: Haver Analytics; IMF, World Economic Outlook Database, Refinitiv Eikon; and IMF staff calculations.
Note: Estimated by panel local projections with country-fixed effects using individual countries' lagged macro-financial variables and global PMI as controls. The data cover eight countries (Australia, China, India, Indonesia, Korea, Malaysia, New Zealand, Thailand) over August 2005-April 2025. S.D. = standard deviation.

Figure 1.2.4

Effects of global term premium shock on regional exchange rates
(Monthly percent change against USD to a 1 S.D. shock)



Sources: Haver Analytics; IMF, World Economic Outlook Database, Refinitiv Eikon; and IMF staff calculations.
Notes: Estimated by panel local projections with country-fixed effects using individual countries' lagged macro-financial variables and global PMI as controls. The data cover eight countries (Australia, China, India, Indonesia, Korea, Malaysia, New Zealand, Thailand) over August 2005-April 2025. Positive values refer to local currency depreciation. S.D. = standard deviation.

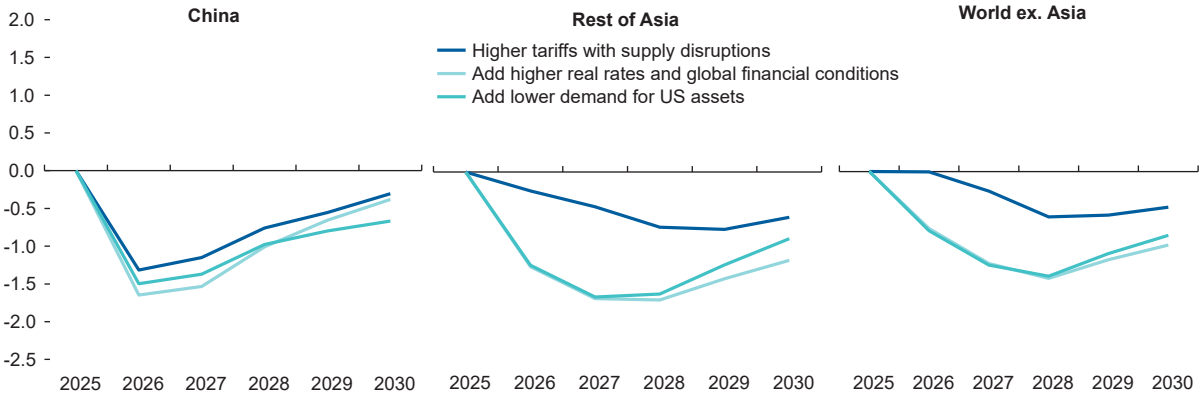
[3] For example, regional local-currency bond markets have been expanding even as foreign investors pull back, and broader financial development has continued to advance. On average across regional EMs, local-currency government debt increased from 26.5 to 44 percent of GDP over the past decade, while foreign holdings of local-currency government bonds dropped from a peak of around 20 percent in 2011 to around 10 percent now.

Box 1.3. Risk Assessment: A Scenario Analysis for Asia[1]

To assess risks around the baseline, the *Regional Economic Outlook* employs the Fund's Global Integrated Monetary and Fiscal (GIMF) model to simulate two multi-layered scenarios—a downside (Scenario A) and an upside (Scenario B)—drawing on the global analysis in Box 1.2 of the October 2025 *World Economic Outlook*. In both cases, monetary policy reacts endogenously, with most regions assumed to have flexible exchange rates, while in Scenario A China's exchange rate is managed through capital flow measures.

Scenario A (Downside). The scenario assumes an additional permanent increase of US tariffs—by 10 percentage points on average, and by 30 percentage points on imports from China—without retaliation. Global supply chains are temporarily disrupted, lowering world total factor productivity by about 1 percent in 2026–27. Sovereign yields rise by 100 basis points through higher term premia (except in China), while corporate spreads widen, more markedly in emerging markets. Finally, reduced foreign demand for US assets raises US risk premia.

Figure 1.3.1. Downside Scenarios
(GDP, percent deviation from baseline)



Source: IMF staff estimates.
Note: The scenarios are cumulative; each layer builds on the previous one. The vertical scale is consistent across all three panels. Rest of Asia refers to Asia excluding China.

In scenario A higher tariffs reduce global goods demand, the impact on Asia is felt mostly in China–because of higher tariffs–where output drops by −1.3 percentage points relative to baseline after one year (Figure 1.3.1). In the Rest of Asia, output declines more modestly by −0.3 percent in 2026, but the downturn deepens over time, reaching a trough of −0.8 percent in 2029. A more moderate pattern is observed outside Asia, with output declining by up to −0.6 percent, on average, over the 2028–2030 period.

Global tighter financial conditions amplify the effects of tariffs shocks across the region, particularly in emerging Asia, reflecting both a sharper widening of corporate spreads and investment compression from higher interest rates. GDP in the Rest of Asia declines by up to 1.7 percent in 2027–28, while China's contraction reaches 1.6 percent already in 2026.

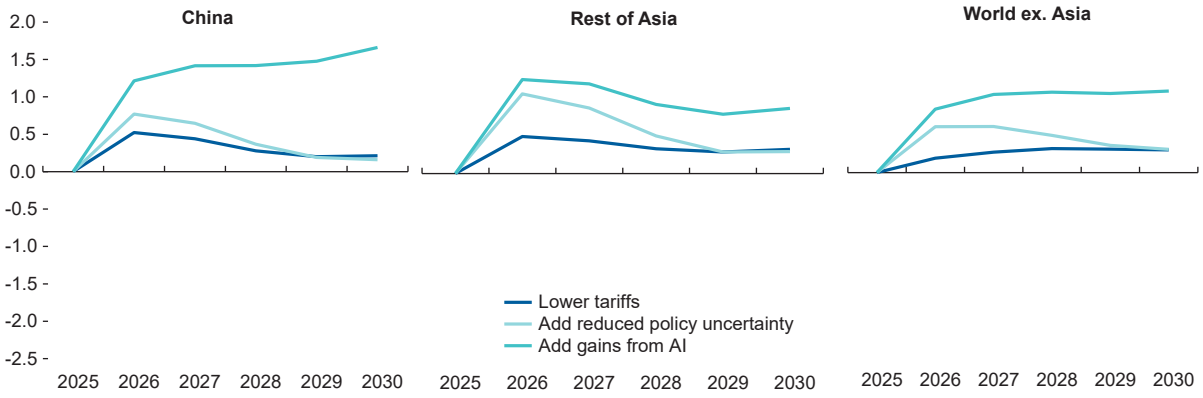
[1] The authors of this box are Sofia Felici and Andrea Pescatori.

Box 1.3. *(continued)*

Finally, a depreciation of the US dollar tends to benefit EM Asia as their currencies are generally less flexible against the dollar than other EM currencies, and, thus, would depreciate against other regions, supporting external demand and partially offsetting the drag from higher interest real rates.

Scenario B (Upside): This scenario assumes that tariffs imposed since January 2025 are permanently removed. Imports from China see the largest decrease in effective tariff rates (about 22 percentage points), followed by Japan, Europe, and emerging Asia (10–20 percentage points). Trade policy uncertainty declines. AI provides higher-than-expected boost to productivity (TFP +0.8 percent over 10 years).

Figure 1.3.2. Upside Scenarios
(GDP, percent deviation from baseline)



Source: IMF staff estimates.
Note: The scenarios are cumulative; each layer builds on the previous one. The vertical scale is consistent across all three panels. Rest of Asia refers to Asia excluding China.

In scenario B, lower tariffs have an opposite effect to the one in scenario A, thereby supporting economic activity across the regions. China and the Rest of Asia see a GDP increase of 0.5 percentage points above the baseline (Figure 1.3.2). The reduction in trade policy uncertainty further benefits these countries, driven by a more favorable environment for investment. This effect is particularly strong in the Rest of Asia, where GDP rises by 1.1 percentage points above the baseline in 2026. When compounded with faster AI-driven productivity growth, the impact on Asian economies is amplified. Output in China increases by 1.2 and in 2026, with the effect peaking after four years, driven by productivity gains, as both countries are well positioned to benefit from the AI boom. For the Rest of Asia, output is boosted by 1.3 percent in 2026, before the impact gradually waning. Outside Asia, the positive effects of tariff removal and productivity gains are also present, with output remaining steadily above +1.1 percent, on average, over the 2027–2030 period.

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Annex Table 1.1. Asia: Real GDP

(Percent; year-over-year change)

	Actuals and Latest Projections			Difference from April 2025 WEO		
	2024	2025	2026	2024	2025	2026
Asia	**4.6**	**4.5**	**4.1**	**0.0**	**0.6**	**0.1**
Advanced Economies (AEs)	**1.6**	**1.6**	**1.4**	**0.1**	**0.3**	**0.1**
Australia	1.0	1.8	2.1	0.0	0.2	0.1
New Zealand	−0.6	0.8	2.2	−0.1	−0.5	−0.5
Japan	0.1	1.1	0.6	0.0	0.5	0.1
Hong Kong SAR	2.5	2.4	2.1	0.0	0.9	0.3
Korea	2.0	0.9	1.8	0.0	−0.1	0.4
Taiwan Province of China[1]	4.8	3.7	2.1	0.5	0.8	−0.4
Singapore	4.4	2.2	1.8	0.0	0.2	−0.1
Macao SAR	8.8	2.6	2.8	0.0	−1.0	−0.7
Emerging Markets and Developing Economies (EMDEs)	**5.3**	**5.2**	**4.7**	**0.0**	**0.6**	**0.1**
Bangladesh	4.2	3.8	4.9	0.0	0.0	−1.6
Brunei Darussalam	4.1	1.8	2.4	0.1	−0.7	−0.2
Cambodia	6.0	4.8	4.0	0.0	0.8	0.6
China	5.0	4.8	4.2	0.0	0.8	0.2
India[2]	6.5	6.6	6.2	0.0	0.4	−0.1
Indonesia	5.0	4.9	4.9	0.0	0.2	0.3
Lao P.D.R.	4.3	3.5	2.5	0.0	1.0	0.6
Malaysia	5.1	4.5	4.0	0.0	0.4	0.2
Myanmar	−1.1	−2.7	3.0	0.0	−4.6	0.9
Mongolia	5.1	5.5	5.5	0.3	−0.5	−0.4
Nepal	3.7	4.3	5.2	0.6	0.3	−0.3
Philippines	5.7	5.4	5.7	0.0	0.0	0.0
Sri Lanka	–	–	–	–	–	–
Thailand	2.5	2.0	1.6	0.0	0.2	0.0
Vietnam	7.1	6.5	5.6	0.0	1.3	1.5
Pacific Island Countries[3]	**3.6**	**2.9**	**2.9**	**0.0**	**−0.2**	**0.2**
Fiji	3.5	3.2	3.1	−0.1	0.6	0.3
Kiribati	5.3	3.9	3.2	0.0	0.0	0.0
Marshall Islands	3.0	2.5	4.1	0.2	0.0	0.0
Micronesia	0.7	1.0	1.4	0.0	−0.1	−0.1
Nauru	1.6	2.1	1.9	−0.2	0.2	0.3
Palau	12.0	4.5	3.3	4.9	−1.2	−0.2
Papua New Guinea	3.8	4.7	3.5	0.0	0.2	0.0

	Actuals and Latest Projections			Difference from April 2025 WEO		
	2024	2025	2026	2024	2025	2026
Samoa	4.6	2.7	3.2	−4.9	−2.7	0.7
Solomon Islands	2.5	2.7	2.8	0.0	0.0	0.0
Tonga[4]	2.1	2.7	2.3	0.0	0.0	0.0
Tuvalu	3.1	3.0	2.6	−0.2	0.2	0.3
Vanuatu	0.9	1.7	2.8	0.1	0.3	0.7
ASEAN[5]	**4.8**	**4.3**	**4.3**	**0.0**	**0.3**	**0.4**
ASEAN-5[6]	**4.6**	**4.2**	**4.1**	**0.0**	**0.2**	**0.1**
EMDEs excluding China and India	**4.8**	**4.4**	**4.5**	**0.0**	**0.2**	**0.1**

Sources: IMF, World Economic Outlook database; and IMF staff estimates and projections.

Note: AE = advanced economy; ASEAN = Association of Southeast Asian Nations; EMDE = emerging market and developing economy.

[1]/ Taiwan Province of China forecast data source is Consensus Forecast

[2]/ India's data are reported on a fiscal year basis. Its fiscal year starts from April 1 and ends on March 31.

[3]/ Pacific island countries aggregate is calculated using simple average, all other aggregates are calculated using weighted average.

[4]/ Tonga's data are reported on a fiscal year basis. Its fiscal year starts from July 1 and ends June 30.

[5]/ ASEAN comprises Brunei Darussalam, Cambodia, Indonesia, Lao P.D.R., Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam.

[6]/ ASEAN-5 comprises Indonesia, Malaysia, Philippines, Singapore, and Thailand.

2. Reshaping Value Chains: The Case for Deeper Asia-Pacific Trade Integration[1]

The Asia-Pacific region has experienced rapid trade growth for decades, propelled by cheap labor and falling trade costs that transformed it into a global manufacturing hub. However, the global landscape is changing with the sweeping United States tariffs in 2025 after earlier trade tensions and pandemic disruptions. Evidence in this chapter indicates that Asia-Pacific supply chains are responsive to tariff differentials, as seen during the US–China trade tensions of 2018–19, which prompted production to relocate from China to some economies with favorable preconditions. While recent trade policy developments heighten risks and pose significant challenges, they also underscore the untapped potential of deeper intra-Asia integration. Simulation exercises point to sizable economic gains from lowering trade barriers, both within the region and globally, while complementary policies would be needed to assist workers through the transition to ensure inclusive outcomes. Policies to promote openness in trade and foreign direct investment, supported by reforms to enhance competitiveness, are key to maintaining trade as an engine of growth.

2.1. Trade as an Engine of Growth

For many Asia-Pacific economies, trade has long been at the core of their growth model. By leveraging exports as an engine of growth, these economies achieved rapid structural transformation toward manufacturing and rising productivity (World Bank 1993; Song, Storesletten, and Zilibotti 2011; and November 2024 *Regional Economic Outlook: Asia and Pacific)*. Beyond growth, trade has also spurred broader development gains, including infrastructure investment, job creation, and poverty reduction. These achievements, however, now face new tests as trade tensions and global fragmentation may slow trade and reshape cross-border production networks ("supply chains").

Within the Asia-Pacific region, trade openness is typically high but varies considerably, as does the exposure to trade shocks. ASEAN economies stand out for their openness, with trade far exceeding GDP as a share of the global economy, even after controlling for size (Figure 2.1). In contrast, South Asia remains relatively less open. At the regional level, although Asia-Pacific accounts for a sizable share of global trade, this broadly reflects its economic weight rather than uniformly high openness (Figure 2.2).

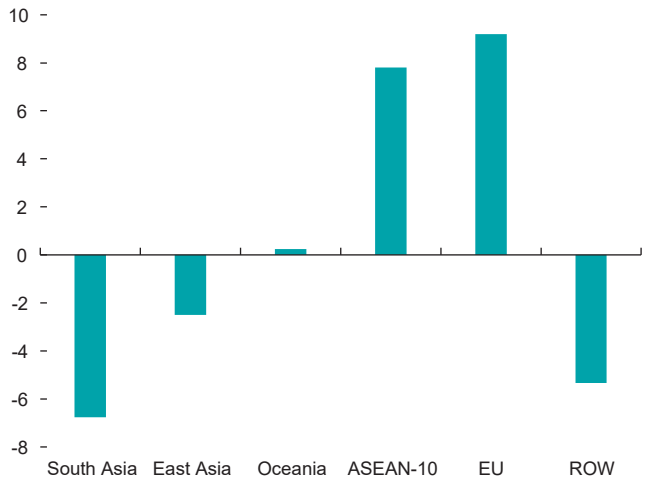
An important feature of trade in the Asia-Pacific region is the significance of China and the US. In 2023, China was the largest export destination for eight economies in the region and the largest import source for 16 economies (representing 99 percent of the region's GDP excluding China). The US was the largest export destination for ten Asia-Pacific economies. Combined with the fact that more than 60 percent of exports from China to the region are intermediate goods (see the online Annex), these patterns underscore China's centrality in the region's supply chains to serve overseas markets, in particular the US. As a result, the US-China trade tensions since 2018 have been particularly relevant for the region and already led to supply chain changes.

What lessons can past tariff shocks offer for today's trade policy environment? This question is particularly relevant as the region confronts a shifting trade policy landscape. Evidence shows that heterogeneous tariff differentials across countries can divert trade flows and reshape supply chains. Consistent with the recent trade-fragmentation literature (Aiyar and others 2023), higher tariffs are therefore likely to generate efficiency losses.

[1] Chikako Baba (co-lead), Rahul Giri (co-lead), Michael Green, Ashique Habib, Sun Young Park, Weining Xin, and Xinrui Zhou, under the guidance of Andrea Pescatori.

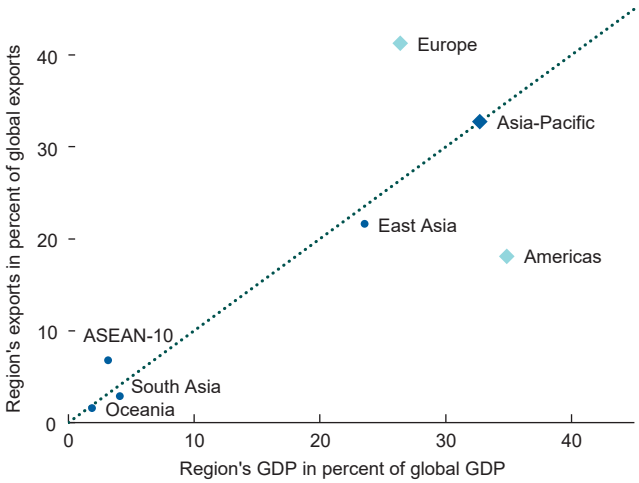
In this context, this chapter first examines how trade policy shocks can reshape regional supply chains—using past US-China trade tensions as a natural experiment—and how countries can better leverage further shifts. It further explores to what extent deeper integration, by lowering trade barriers, could offer resilience and opportunities.

Figure 2.1. Value-Added Exports, Deviations from Global Averages Controlling Economic Size, 2023
(Percentage points of total value added)



Sources: Asian Development Bank (ADB) Multiregional Input-Output Tables (MRIO), World Economic Outlook database, and IMF staff calculations.
Note: Nominal GDP weighted subregional averages are reported. ROW refers to the rest of the world.

Figure 2.2. Export Share versus GDP Share, 2024
(In percent of global exports)



Sources: World Economic Outlook database and IMF staff calculations.
Note: See the online annex for subregional grouping.

2.2. Supply Chain Shifts Following Tariff Shocks

Intra-regional trade in intermediate goods among Asia-Pacific economies surged around 2017, driven by the rise in the region's exposures to China. Exports of intermediate goods within the region increased to nearly 60 percent of total intermediate goods exports by 2019 (Figure 2.3), well above the pre-2017 average of 53 percent. Excluding China, intermediate goods trade among Asia-Pacific economies has remained roughly stable during the same period—indicating that the increase primarily reflects a deepening of linkages between China and its regional partners.

This pattern is consistent with a reconfiguration of trade and supply chains that accelerated with the increase in US-China trade tensions that eventually resulted in a series of tariffs (up to 25 percent) in 2018–19 (see Alfaro and Chor 2023; Freund and others 2023; Fajgelbaum and others 2024; Gopinath and others 2024). In fact, China's increased trade share with the region is concentrated in intermediate goods and does not extend to final goods (Figure 2.4).

In this context, this chapter estimates the country-specific impact of US-China tariff shocks in 2018–19 on three variables related to supply chain reallocation—value-added embedded in exports to the US, intermediate goods imports from China, and inward foreign direct investment (FDI) from China. The econometric specification (see the online Annex) captures the differential growth in outcomes between tariff-targeted sectors—those hit by US tariff hikes —and non-targeted sectors within the same country.[2]

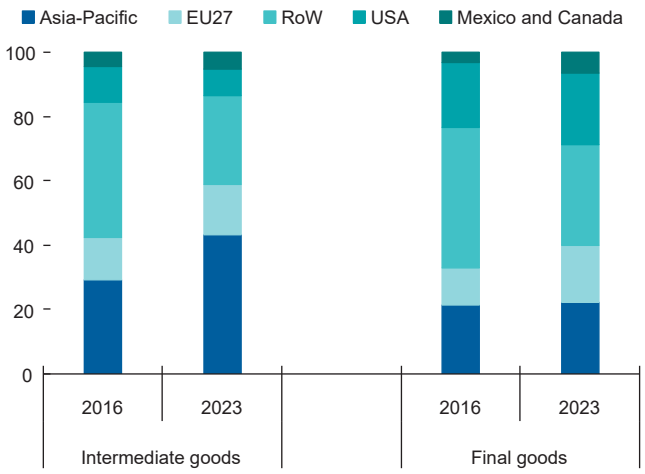
The results indicate that tariff-targeted sectors in countries in the region have experienced both higher growth in exports to the US and intermediate goods imports from China compared to the same variables in unaffected sectors. The higher relative growth in tariff-targeted sectors is evident in Cambodia, Bangladesh, Vietnam, and

[2] The sample covers 45 economies and 35 sectors from 2007 through 2023. This exercise complements the analysis on gross exports to the world in Box 2 of *2024 Regional Economic Outlook: Asia and Pacific* by focusing on value-added exports to the US. The estimates can differ when economies increased their exports, especially those embed lower domestic value added (that is, utilizing intermediate imports in production), to non-US destinations.

Figure 2.3. Intraregional Intermediate Goods Exports
(Percent of total intermediate goods exports)

Sources: ADB MRIO and IMF staff calculations.
Note: The light blue line excludes both China's exports to and imports from Asia-Pacific economies.

Figure 2.4. China Exports by Destination
(Percent of total exports)

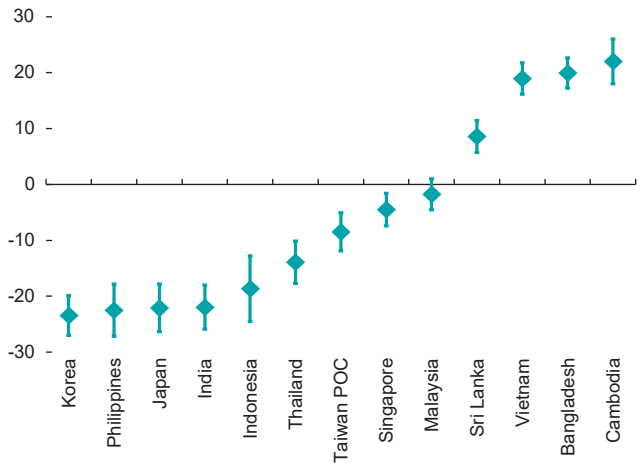


Sources: ADB MRIO and IMF staff calculations.

Sri Lanka, consistent with tariff-induced trade diversion involving higher domestic production, relocation of factors of production towards the targeted sectors, and market-share gains (Figure 2.5).[3] In these economies, intermediate goods imports from China also rise over time (Figure 2.6), pointing to reconfigured ("China-plus-one") supply chains.[4]

Furthermore, the evidence suggests that the supply chain reconfiguration involved partial relocation of production by firms in China. Figure 2.7 plots countries' relative gains in value-added exports to the US versus their gains in FDI inflows from China (measured by the number of announced or completed greenfield FDI projects from China) in tariff-targeted sectors. Countries that successfully exploited the opportunity to expand value-added exports to the US—for example, Bangladesh and Vietnam—have also experienced more FDI from China.[5,6]

Figure 2.5. Relative Growth of Value-Added Export to the US in Tariff-Targeted Sectors, 2018–23
(Percent)



Source: IMF staff estimates.
Note: Countries with small manufacturing exports are excluded. See the online Annex for details on the data and specifications.

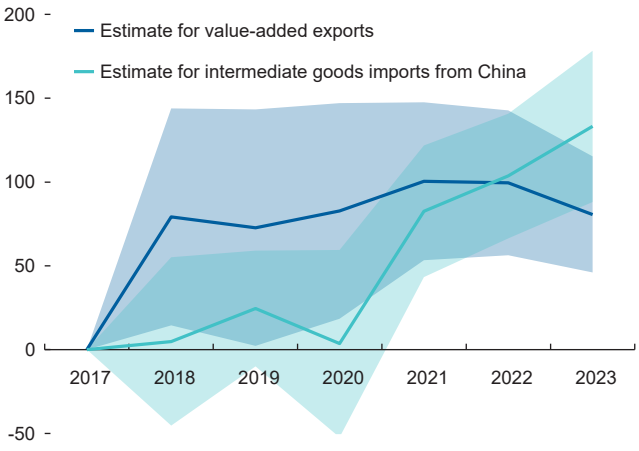
[3] In many economies, tariff-targeted sectors were not found to outperform the other sectors. A few mechanisms likely contribute: (1) a sector composition effect—the recent rapid expansion in non-targeted sectors (notably services in India and the Philippines) lowers the estimated coefficient; (2) timing effect—gains from supply chain shifts are yet to materialize as of 2023; (3) long-term trend—there may be long-term trends of production relocation (notably by Japanese and Korean firms) that were accelerated by the tariffs and not fully captured by the autocorrelation term; and (4) a competition effects, whereby countries that benefited most from supply chain relocation may have crowded out other producers in the same sectors.

[4] The pattern should be distinguished from rerouting of exports for tariff evasion, because the chapter's analysis focuses on value-added embedded in exports.

[5] Rotunno and others (2024), Schulze and Xin (2025) and Donato and Kitsios (forthcoming) also found evidence of production relocation resulting from the US-China trade tensions. Graziano and others (2024) document shifts of multinational firms' production in response to the US-China trade tensions.

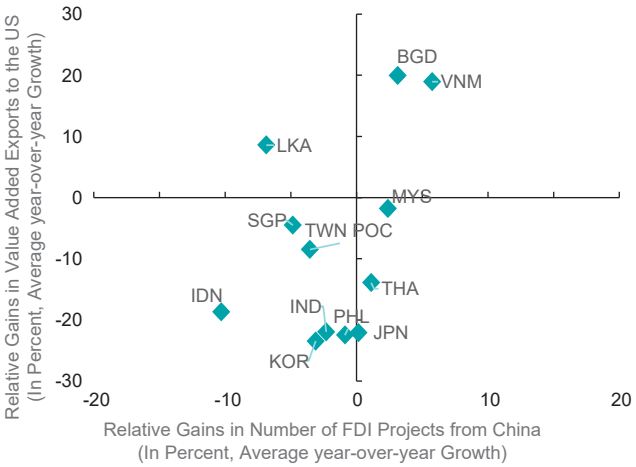
[6] Except Cambodia and Vietnam which have seen a jump in FDI from Korea around 2018, countries with the largest relative gains in value-added exports to the US do not see significant increases in FDI flows from other major economies (US, European Union, Japan, and Korea).

Figure 2.6. Relative Growth in Value-Added Exports to the US and Intermediate Imports from China, in Tariff-Targeted Sectors, 2018–23
(Percent)



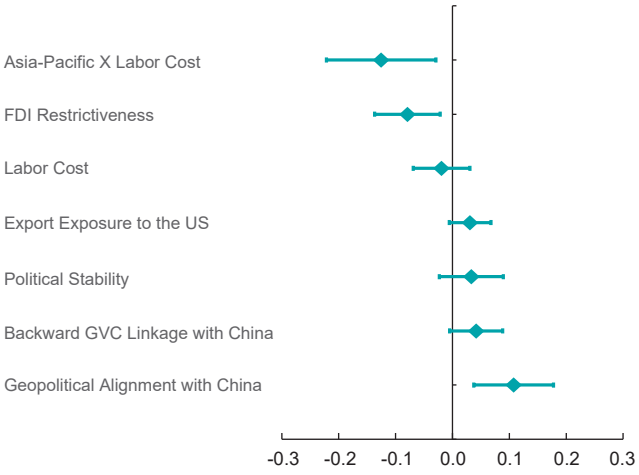
Source: IMF staff estimates.
Notes: The relative cumulative growth from 2017 in value-added exports to the US (the blue line) and in intermediate imports from China (the green line) for the countries with the estimated relative gains in the largest quartile of the distribution.

Figure 2.7. Relative Gains in Value-Added Exports to the US and Relative Gains in the Number of FDI Projects from China



Source: IMF staff estimates.
Note: The x-axis shows the relative growth in the number of announced or completed FDI projects from China in tariff-targeted sectors and the y-axis shows the relative growth in value-added exports to the US in tariff-targeted sectors. Cambodia is not included because of FDI data availability constraint. Data labels in the figure use International Organization for Standardization (ISO) country codes.

Figure 2.8. Factors Correlated with Relative Gains in Value-Added Exports to the US



Source: IMF staff estimates.
Note: Estimated by a regression where the dependent variable is the estimated relative growth in value-added exports to the US in tariff-targeted sectors, with an additional control for Asia-Pacific economies. The sample consists of 45 economies. Country characteristics are as of 2017. Labor cost is proxied by nominal GDP per working-age population.

Countries experiencing relative gains in tariff-targeted sectors share several key characteristics. Regression analysis (Figure 2.8) finds that economies with lower labor cost—measured by lower nominal GDP per working-age population—have seen greater positive impacts, particularly among Asia-Pacific economies. Furthermore, countries with greater openness to FDI are more likely to capture the benefits of supply chain shifts, in line with the finding that FDI has been a key channel for production relocation. In addition, countries with stronger pre-existing trade linkages with both China and the US are better positioned to harness shifting trade flows. Other typical pull factors of FDI relocation such as political stability and geopolitical alignment of source and destination countries have expected signs. These findings highlight that cheaper labor, openness to FDI, and established trade relationships are pivotal for attracting relocated production and increasing value-added exports in response to global tariff shocks (see IMF (2024) for complementary analysis).

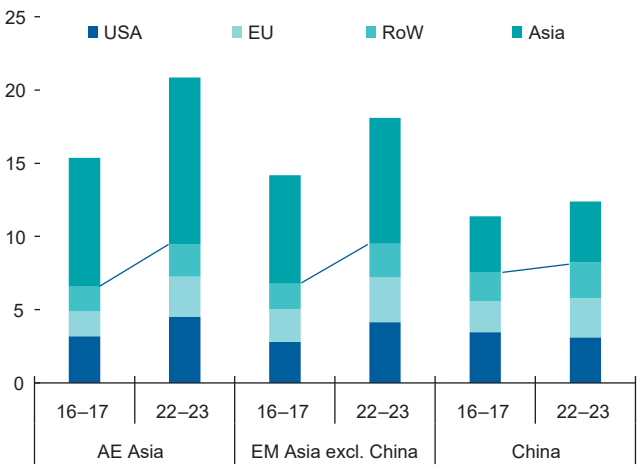
Overall, a lesson from the US-China 2018-19 tariff episode is that tariff shocks lead to supply chain shifts according to tariff differentials and country characteristics. Under the current trade policy environment, supply chain reconfiguration will be more challenging due to heterogeneous tariff differentials among Asia-Pacific economies, high uncertainty around tariff levels, and stricter application of rules of origin. At the same time, the region has become more reliant on external demand from outside the region (Figure 2.9). As such, countries that substantially use foreign inputs for downstream production will need to expand domestic production,

leverage more foreign investments, and diversify their import sources to a broader set of countries. A natural question to ask is: Is there scope for deeper regional integration to further strengthen the region's ability to navigate these evolving challenges?

2.3. The Case for Deeper Regional Integration

The Asia-Pacific region is already highly integrated in intermediate goods trade, but intra-regional trade in final goods has scope to deepen. Figure 2.10 shows that the share of intra-regional goods trade in Asia-Pacific is comparable to the level observed among European or North American countries for intermediate goods, although the share is much lower for final goods. This divergence in part reflects the prevalence of regional supply chain trade to serve final goods exports to overseas markets, and reducing it will require stronger final demand from the region through structural reforms (see Chapter 1). Yet, it also points to the untapped potential of deeper intra-Asia-Pacific integration in trade.

Figure 2.9. Asia's Value-Added Exports by Destination
(Percent of total value added)

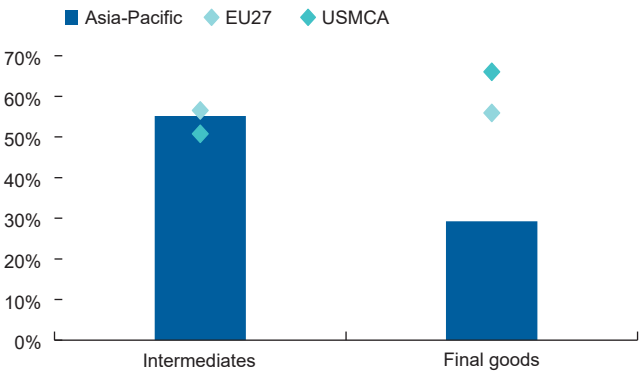


Sources: ADB multi-region input-output tables and IMF staff estimates.

An examination of the legal and institutional architecture of trade agreements—motivated by the literature underscoring the importance of trade agreements in promoting trade growth—reveals areas where improvements are possible for Asia-Pacific economies.

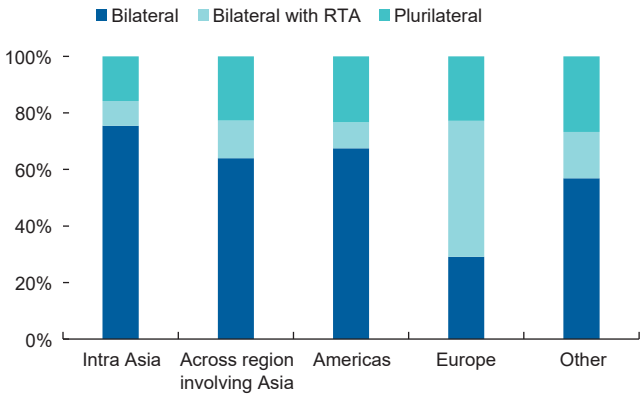
- First, trade agreements among economies in Asia-Pacific tend to be bilateral between two countries or with a regional trade bloc (that is, ASEAN) (Figure 2.11). The reliance on bilateral agreements contrasts with the practice in the other trade areas such as the EU or the United States–Mexico–Canada Agreement (USMCA) zone, where integration is supported by broad-based, legally binding agreements involving large economies in the region. This patchwork of agreements may contribute to overlapping rules, inconsistent standards, and a lack of institutional coherence—particularly within intra-Asia trade (see Asian Development Bank 2025).

Figure 2.10. Intra-regional Goods Exports
(Percent of goods exports, 2023)



Sources: ADB multi-regional input-output tables and IMF staff calculations.

Figure 2.11. Share of Bilateral Trade Agreements
(Percent of total number of trade agreements)

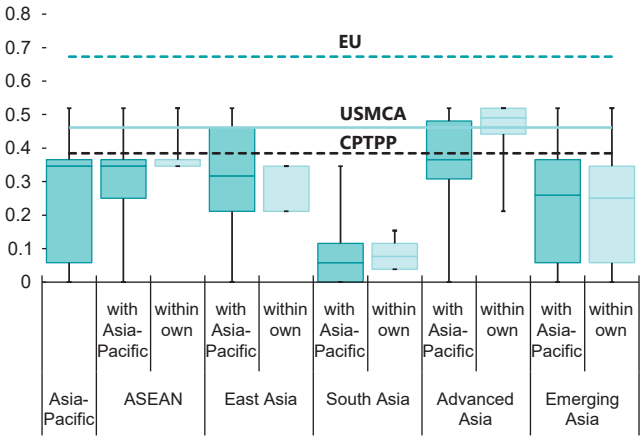


Sources: World Bank Deep Trade Agreement database and IMF staff calculation.
Note: Information covers 1953–2023. Europe includes EU27, United Kingdom, and European Free Trade Association members. Americas includes countries located in North, Central, and South America. Plurilateral agreements refer to those involve more than two countries.

- Second, turning to the contents, the depth and legal enforceability of trade arrangements in Asia-Pacific have scope for improvement. Figure 2.12 presents the distributions of trade agreement depth, measuring the share of provisions that are legally enforceable between regional country pairs. Compared to Europe and North America, the depth of integration in Asia-Pacific tends to be lower especially in areas beyond World Trade Organization's mandate (such as rules on competition policy, environmental protection, e-commerce). Sub-regional disparities are stark: ASEAN is relatively integrated, while South Asia has particularly shallow coverage. Alongside, even while some sub-groups in the region have some depth internally (for example, ASEAN, members of Comprehensive and Progressive Agreement for Trans-Pacific Partnership [CPTPP]), these same economies have limited coverage with other major regional economies.

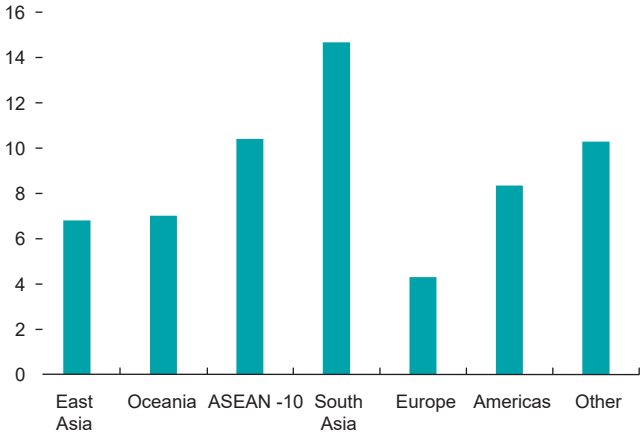
Non-tariff barriers (NTBs) appear to be one factor underlying the region's relatively shallow trade agreements, with their prevalence especially notable in South Asia and parts of ASEAN (Figure 2.13). NTBs are maintained for a variety of reasons, including efforts to manage the distributional impacts of trade and political economy considerations, particularly in a context where tariff policies are constrained by the WTO (Evenett and Fritz 2015; Cadot and Gourdon 2016). NTBs affect both intermediate and final goods trade, whereas some instruments (for example, standards and technical regulations) and some rationales (e.g., firms' desire to prop up their output prices) may particularly affect final goods trade (Shapiro 2020; Fiankor and others 2025). As such, NTBs may be a factor holding back final goods trade in the region. Recently enacted regional agreements could reduce such NTBs (for example, through harmonizing standards) and boost trade integration—if they broaden membership (see Box 2.1). The following exercise hence focuses on the impact of deeper trade agreements, which are shown to play a role in reducing barriers and promoting trade, independent of tariffs.[7]

Figure 2.12. Depth Scores across Trading Partners
(Index, Number of legally enforceable provisions out of 52)



Sources: World Bank Deep Trade Agreements Database; and IMF staff calculations.
Note: The box plot presents the distribution of country-pair depth scores within various groups, vis-à-vis selected countries in Asia-Pacific (dark green) or vis-à-vis other countries in the same group. See the online Annex for country selection.

Figure 2.13. Non-Tariff Trade Restrictions, 2022
(Index, 0–20)



Sources: Estefania-Flores and others (2022) and IMF staff calculations.
Note: Simple average across countries. See the online Annex for subregional grouping.

How large are the potential gains from strengthening trade integration? To address this question, the chapter uses a multi-country, multi-sector quantitative trade model, building on Cuñat and Zymek (2024), to quantify the long-term gains in real GDP from greater integration. The model allows capital to respond endogenously to trade liberalization, shedding light on how investment amplifies output gains by reallocating capital across countries, in line with the supply chain reconfiguration found in the econometric analysis. Following the literature (for example, Dhingra, Freeman, and Huang 2023), the extent of NTBs between country-pairs is proxied by the extent of legally enforceable provisions between them (that is, the depth score). In the model, these depth scores are translated

[7] For example, provisions streamlining technical barriers to trade or investment policy may boost trade by reducing regulatory hurdles and attracting more FDI.

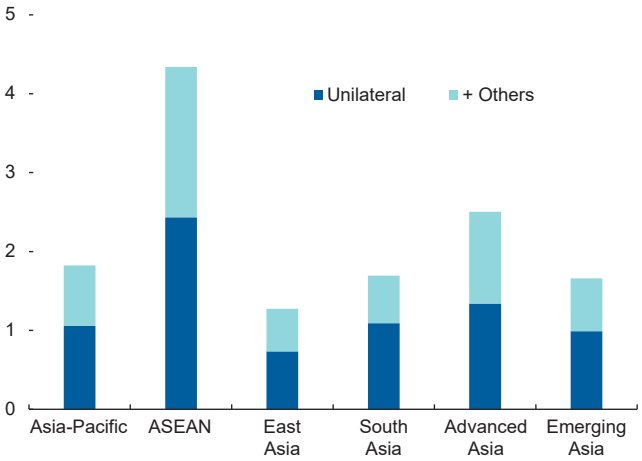
into trade costs ("iceberg costs"), which capture the impact of NTBs.[8] The analysis complements other IMF work on the gains from trade integration, including from the reduction of tariffs (for example, Rotunno and Ruta 2025).

The first set of scenarios quantify the gains if Asia-Pacific economies were to move from their current, relatively shallow, frameworks for integration to the maximum depth (corresponding to 1 in Figure 2.12)—that is, complete the coverage of legally enforceable provisions both within the WTO's mandate and beyond. As Figure 2.14 illustrates, long-term gains are sizable, averaging about 1.8 percent of GDP for the whole region. A decomposition indicates that most of these gains come from unilateral action—economies reducing their own NTBs to imports from regional partners. Such opening up allows producers to use cheaper imported intermediate inputs, favors the reallocation of domestic factors of production toward sectors where the country has a comparative advantage, and, thus, raises the country's aggregate productivity. Higher productivity, in turn, increases the returns to investment, leading to a higher capital stock, further boosting output. Unilateral gains, assessed in isolation, are amplified further when all Asia-Pacific economies, in the same scenario, lower their trade barriers, creating an additional "external demand channel," as stronger regional demand reinforces each country's expansion.

The intensity and channels to achieve gains vary across countries. First, smaller economies, even those with relatively low tariffs (for example, some members of ASEAN), gain more than larger economies from shifts in relative prices, including from cheaper access to final and intermediate inputs. Second, the benefit is higher for countries exporting output using higher share of intermediates (for example, Korea), in line with the evidence of cascading benefits of trade liberalization from earlier steps of supply chains (see Franco-Bedoya and Frohm 2022). Third, countries' and sub-regions' gains rise with the size of the gap between their starting points and the target depth of integration. This is an important driver for regions such as South Asia but also contributes to the gains of a broader set of economies (for example, AEs and ASEAN) which are highly integrated with some regional partners but have scope for deeper integration with others.

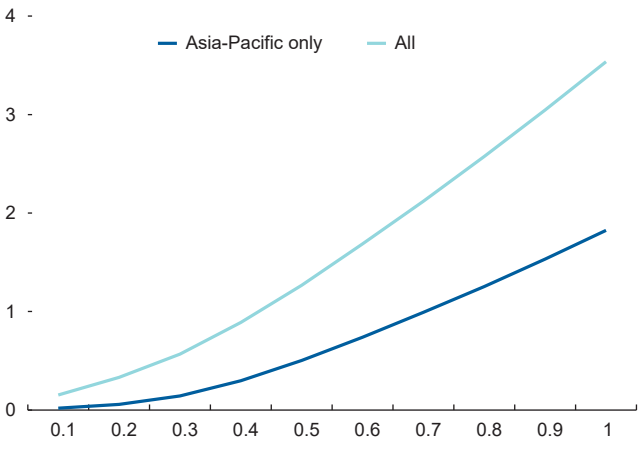
Gains can be even larger if Asia-Pacific economies reduce NTBs vis-à-vis the rest of the world, which may arise from additional policy action or could spillover from the non-excludable nature of various provisions (Mattoo, Mulabdic, and Ruta 2022). The rationale for unilateral opening up by individual countries discussed earlier carries over to the region as a whole; Figure 2.15 illustrates the considerable gains even if the rest of the world does

Figure 2.14. Real GDP Gains by Opening Regionally
(Percent; scenario targets maximum depth)



Source: IMF staff calculations.
Note: Under the "Unilateral" scenario, economies reduce their own NTBs, whereas, under the "+ Others" scenario, all Asia-Pacific economies reduce NTBs.

Figure 2.15. GDP Gains under Different Scenarios
(Percent; PPP GDP weighted regional average)



Source: IMF staff calculations.
Note: Scenario reflects Asia-Pacific economies targeting integration to various depth scores and thereby reducing non-tariff barriers, both within region and asymmetrically towards extra-regional economies.

[8] See the online Annex for model and scenario calibration details.

not reciprocate. In addition, given various constraints discussed earlier which may hinder a full-scale removal of NTBs, the gains from smaller steps to integration could also be significant. As illustrated in Figure 2.15, the gains will vary by the degree of ambition that may be feasible in the region.

Although regional economies are navigating a more fragmented global environment and calibrating policies to balance multiple objectives, the analysis here points to substantial benefits, potentially for final goods, from pursuing trade openness—whether such efforts are taken unilaterally or plurilaterally. It is, however, important to note that some groups, such as less skilled workers, may be adversely affected by trade liberalization (Goldberg and Pavcnik 2007), requiring policies to address these distributional impacts. Finally, greater regional integration will also help external rebalancing through greater diversification of export destinations, complementing domestic rebalancing and stronger growth achieved through better investment efficiency as discussed in Chapter 3.

2.4. Conclusion and Policy Recommendations

Trade has been central to Asia-Pacific's growth, with China at the hub of supply chains and overseas markets providing final demand. Using the US–China trade tensions of 2018–19 as a case study, empirical analysis suggests that tariff hikes by final destination markets can trigger relocation of supply chains along pre-existing networks, with the largest gains accruing to economies that are more cost-competitive, open, and geopolitically aligned. These findings highlight supply chains' adaptability to trade policy shocks. Furthermore, although some Asia-Pacific economies are highly integrated into supply chains, others remain relatively closed, and final goods trade in the region continues to fall short of its potential—underscoring the importance of deeper trade agreements. Model simulations suggest that lowering NTBs could deliver sizable long-term gains, particularly if undertaken jointly across the region.

Together, these findings highlight the importance of continued openness to trade and investment, complemented by policies to mitigate distributional impacts. Deepening regional trade agreements will be central. The economic literature has shown that agreements covering more comprehensive policy areas—such as competition policy, public procurement, or investment policy—tend to reduce non-tariff barriers and promote trade among members. Expanding participation in newer and deeper agreements, such as CPTPP, and improving coherence across overlapping arrangements, can harmonize rules and lower compliance costs. At the same time, appropriate policy measures—such as enhanced social protection and active labor market policies to support reskilling and job transition, alongside well-designed efforts to build support among stakeholders—will be essential to mitigate adverse distributional impacts through the transition.

In addition to lowering trade barriers, policies should aim at enhancing competitiveness and improving macroeconomic stability. The chapter's empirical analysis shows that favorable preconditions including cost competitiveness facilitate relocation of production from countries targeted by trade policy actions. It is also important to liberalize restrictions on foreign firm entry and facilitate their operations, given that Asia-Pacific economies are relatively more restrictive in FDIs. Such reforms would enhance the region's attractiveness amid shifting global supply chains, support resilience in a more fragmented global environment, and unlock long-term growth opportunities.

Box 2.1. Asia's Evolving Regional Trade Architecture

The World Trade Organization has served as a cornerstone of the global trade system over the past three decades. However, its limitations have also been recognized with the rising importance of new policy areas such as digital trade, investment, and sustainability. Facing also recent challenges in multilateral rulemaking and enforcement, some countries opt for regional trade agreements as more flexible and responsive platforms for advancing integration and modernizing trade disciplines.

Two major regional trade agreements were enacted in the Asia-Pacific region recently:

Regional Comprehensive Economic Partnership (RCEP): Signed in 2020, RCEP brings together ASEAN and five major economies—China, Japan, Korea, Australia, and New Zealand—and primarily focuses on trade in goods, tariff liberalization, and strengthening regional production networks. Its legal framework emphasizes inclusiveness and accommodates diverse levels of development (Petri and Plummer 2020).

Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP): The CPTPP, comprising 12 countries, adopts a more comprehensive and legally binding framework than the RCEP, covering areas such as labor standards, environmental protection, digital trade, and investment, underpinned by an enforceable dispute settlement mechanism. Because of this ambitious nature, accession to CPTPP can entail more politically sensitive and costly reforms—particularly in areas such as agriculture, labor, environment, and state-owned enterprise regulation (Ferrantino, Maliszewska, and Taran 2019).

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3. Investment Efficiency and Capital Allocation: The Role of Financial Structure[1]

The growth slowdown since the global financial crisis and rising global trade fragmentation have sharpened the focus on domestic drivers of growth in Asia. The relatively high investment rates in the region have been aided by a financial structure that's conducive to capital-intensive growth, but recent years saw an increase in capital misallocation and a decline in return to investment that has been more prominent than in other regions. Evidence suggests that inadequacies in financial intermediation have contributed to these developments. Financial institutions favored larger, less productive firms at the cost of small and young, more productive firms, and debt evergreening rose. Going forward, policies should focus on improving financial intermediation to meet the demand for both scale and mix of financing for a broader set of firms, and reforms to support timely restructuring of nonviable debt. Creating a broader suite of financing instruments is increasingly important for efficient capital allocation as economies develop. By supporting broad-based growth and improving capital allocation, financial reforms can play a key role in supporting job and income growth, spur domestic demand, and facilitate economic rebalancing.

3.1. Galvanizing Domestic Drivers of Productivity and Growth

Given that international trade and investment have been important engines of productivity growth and demand for the Asia-Pacific region, the broad growth slowdown after the global financial crisis amid rising global trade fragmentation has brought more focus on domestic drivers of growth. The chapter puts the lens on efficiency of investment, assessing its trends, and evaluating the impact of financial structure. Capital has been the key factor driving growth in Asia, and the share of investment in GDP has been higher in Asia compared to other regions (see Figure 3.1).[2] Financial intermediation channels savings into productive investment.[3] The chapter asks, how did distortions and constraints in the allocation of finance affect investment and allocation of capital, and, hence, growth and productivity?

The chapter finds that investment efficiency declined in the region after the global financial crisis, reflected in the high and rising incremental capital–output ratio (ICOR), consistent with a greater decline in returns. Allocative efficiency of capital also worsened, with an increase in evergreening.[4] In a region where finance is largely bank-based, financial intermediation contributed to these trends through financial constraints faced by smaller and more productive firms, more financing allocated toward larger, less productive firms, and a lack of optimal mix of financing. Easier financing conditions in recent years contributed to the rise of zombie firms. Policymakers should aim to diversify the financial structure to improve financial access and restructure nonviable debt. The saliency

[1] Rahul Giri (lead), Natalija Novta, Anne Oeking, Akshat Singh, Jeongwon Son, and Ying Xu, with contributions from Fei Han, Monica Petrescu, and Tatjana Schulze, and outstanding research support from Sofia Felici, Vyshnavi Thumbala Saikrishnan, and Ruihua Yang, under the guidance of Li Cui.

[2] Supported mainly by private investment, but also higher public investment rates (online Annex Figures 2.2 and 2.3). Data on public investment are available for a limited set of 13 economies, based on the *World Economic Outlook*. See online Annex Figure 2.1 and online Annex 1.1 for growth accounting results and methodology.

[3] Financial systems provide functions critical for efficiency and economic growth (Levine 2021): (1) screen investment and allocate resources; (2) provide mechanisms to trade, diversify, and manage risks; (3) mobilize savings; (4) facilitate exchange; and (5) exert corporate governance.

[4] Evergreening refers to provision of financing to firms that exhibit persistent inability to service their debt, based on publicly available income statements.

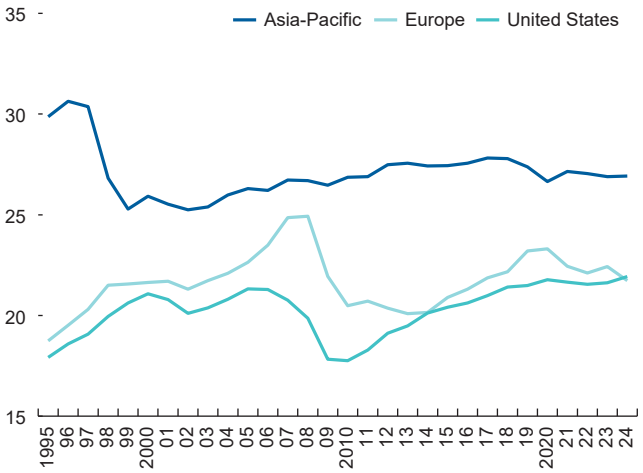
of policies to develop alternative financing instruments rises with the level of development. Improvements in financial intermediation and capital efficiency will boost job and income growth, strengthen domestic demand, and facilitate more balanced growth.

3.2. Decline in Investment Efficiency and Rise in Capital Misallocation

Although investment has stayed robust in Asia, there is evidence of a decline in its efficiency and a rise in capital misallocation. The ICOR (capital needed to produce one additional unit of output) for most Asian economies has risen over time, especially after the global financial crisis when output growth slowed (see Figure 3.2), suggesting a declining efficiency of investment. Although the trend of rising ICOR is also visible in the rest of the world (RoW), the level of ICOR is generally much higher in Asia (less than 3–4 is considered efficient), implying that investment efficiency worsened comparatively more in Asia.[5] Consistent with this, balance sheets of listed firms, excluding the financial sector, show that the average return on assets (ROA) has dropped significantly across the region compared to the period before the global financial crisis (see Figure 3.3). This drop is sharper than in other regions and not concentrated in a few sectors (online Annex Figure 2.4).

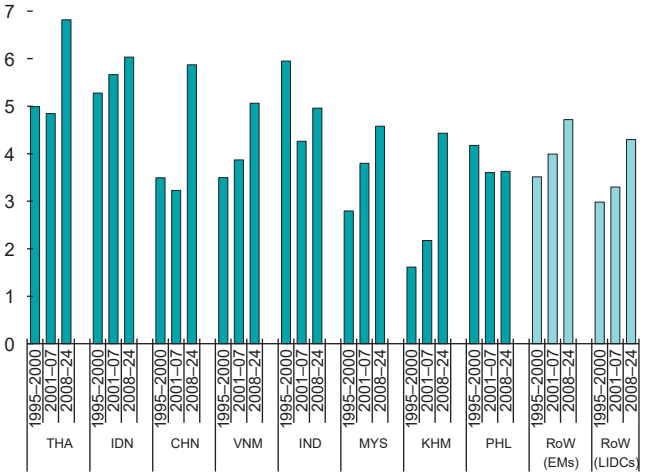
In addition, misallocation of capital, as measured by the dispersion in the marginal revenue product of capital (MRPK) across firms within sectors (following Hsieh and Klenow 2009; Gopinath and others 2017), increased by about 25 percent between the periods before and after the global financial crisis (see Figure 3.4),[6] which lowers total factor productivity (TFP). Furthermore, the higher dispersion in services suggests that service sectors account for a higher proportion of the allocative inefficiency. The rise of misallocation in Asia mirrors that in Europe, though its pace of increase is higher; the United States, in contrast, exhibits a declining trend.

Figure 3.1. Investment Rate, 1995–2024
(Percent of GDP)



Sources: IMF *World Economic Outlook*; and IMF staff calculations.
Note: Regional averages are derived using simple averages across countries.

Figure 3.2. Incremental Capital–Output Ratio, 1995–2024
(Average for each period)

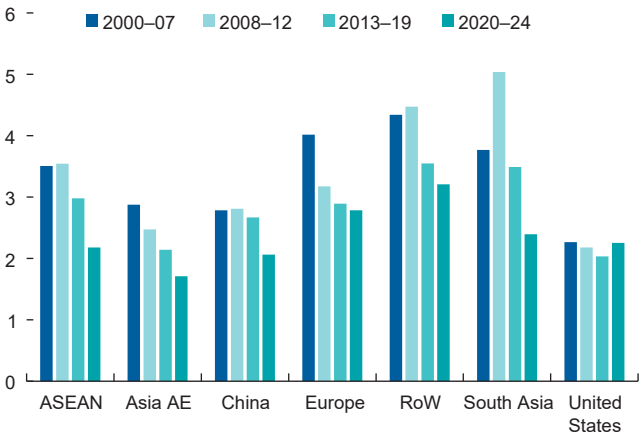


Sources: IMF *World Economic Outlook*; and IMF staff calculations.
Note: ICOR is investment rate divided by real GDP growth rate.
EMs = emerging markets; LIDCs = low-income developing countries; RoW = rest of the world.

[5] Advanced economies are excluded as their growth is structurally lower with volatility around zero resulting in misleadingly large or unstable ICOR, especially during slowdowns. ICOR implicitly assumes a proportional relationship between investment and growth, suitable for capital-scarce, fast-growing economies.

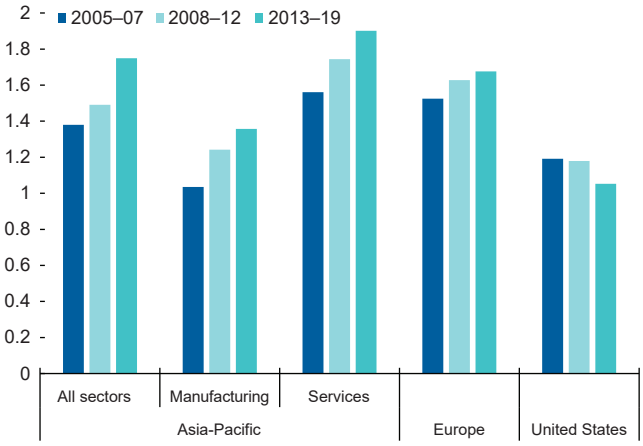
[6] MRPK is the extra nominal revenue that one additional unit of capital generates. Misallocation refers to departure from a frictionless environment where MRPKs are equalized across firms, resulting in zero dispersion in MRPKs. See online Annex 1.2 for details of the methodology and data.

Figure 3.3. Return on Assets
(Percent, average for each period)



Sources: Capital IQ; and IMF staff calculations.
Note: Return on assets (ROA) defined as net income divided by average total assets. AE = advanced economy; ASEAN = Association of Southeast Asian Nations; RoW = rest of the world.

Figure 3.4. Capital Misallocation
(Standard deviation of MRPK)



Sources: Orbis; and IMF staff calculations.
Note: See online Annex 1.2 for methodology and data. MRPK = marginal revenue product of capital.

3.3. Stylized Facts: Structure and Efficiency of Corporate Finance in Asia

The financial system has expanded steadily in Asia-Pacific, and except for a few episodes like the 2013 taper tantrum, financial conditions have been generally supportive of investment after the global financial crisis. Several trends, however, point to inadequacy in financial intermediation contributing to the deterioration in capital efficiency.[7]

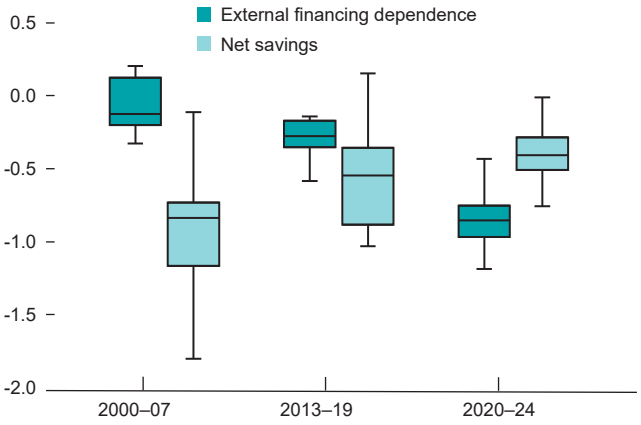
Despite expanding financial systems and accommodative conditions, financing constraints, which result from constrained access to financial resources or mismatches in financial instruments, appear to be rising in Asia. The reliance of listed Asian firms on external financing has fallen since the global financial crisis, whereas net savings have increased (see Figure 3.5). A more conservative approach in response to the 1997 Asian financial crisis, both in terms of financial sector regulation and firms' response to insulate against volatility, and increases in within firm financing for conglomerates may have contributed to this pattern early on, but the sustained trend points to financing constraints faced by firms. IMF (2009) finds that inefficiencies stemming from gaps in the depth of the financial system impacted the rise of corporate savings after the Asian crisis. Financing constraints not only encompass the adequacy of funding, but in the context of accommodative financial conditions, could also reflect the suitability of the available instruments of finance. For the small and medium enterprises (SMEs), surveys show that collateral constraint is more binding in Asia than in other regions (online Annex Figure 2.10), and the limited channel to access equity investors could be particularly constraining for startups.

Second, there has been a shift of financial resources from smaller to larger firms that tend to be less productive. Although the change in leverage at an aggregate level presents a mixed picture across countries, within an industry and country, there is a relative increase in leverage for larger firms (see Figure 3.6), suggesting a skewing of financial resources toward the larger firms. These firms, as we show later, tend to be less productive.

Third, data suggest that evergreening has risen visibly in the region. Evergreening allows financing to firms that exhibit persistent inability to service their debt. The share of these firms, often referred to as zombie firms, in total debt has risen in most economies in the region. What is striking is that although this share has almost tripled for the Asia-Pacific region after the global financial crisis, it has marginally declined in the RoW (see Figure 3.7).

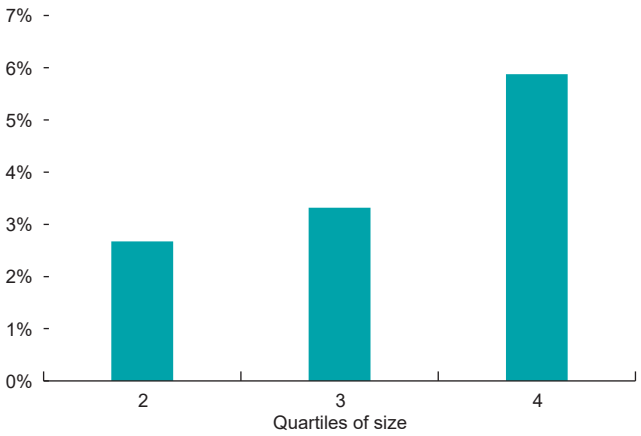
[7] Many recent studies link financial frictions to misallocation-driven TFP losses: Buera, Kaboski, and Shin (2011), Moll (2014), Midrigan and Xu (2014), and Gopinath and others (2017). Furthermore, capital misallocation can stem from credit constraints (Banerjee and Duflo 2005).

Figure 3.5. External Financing Dependence
(Ratios)



Sources: Capital IQ; and IMF staff calculations.
Note: External financing dependence is computed as ([capex – operational cash flow] / capex). Net savings is computed as ([net income – dividends paid – capex] / total assets).

Figure 3.6. Change in Firm Leverage from Before to After Global Financial Crisis, by Firm Size
(Percentage points, normalized relative to 1st quartile)

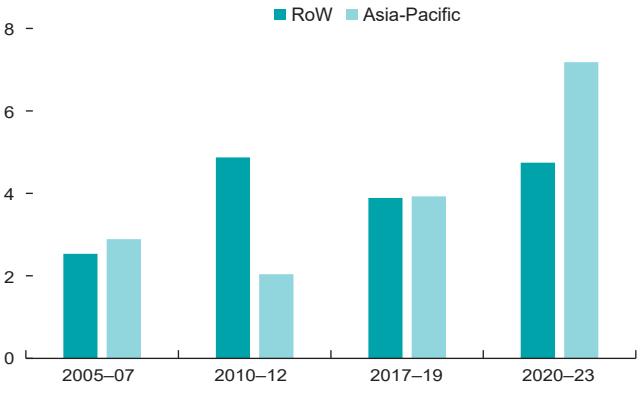


Sources: Orbis; and IMF staff calculations.
Note: Size defined as total net assets and fixed at average for the period before global financial crisis, 2005–07. The period after global financial crisis is 2013–19. Estimates control for country-by-sector fixed effects.

Collectively, these trends indicate that there is rising financial misallocation mirroring the rise of capital misallocation, and plausibly, in part, financial misallocation has contributed to capital misallocation in Asia. Before testing this empirically, we discuss features of Asian financial structure that are likely relevant for the pattern of corporate finance.

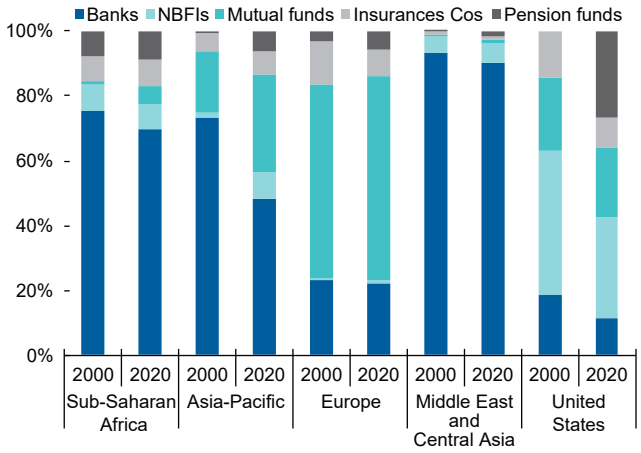
Debt finance, typically through banks, is more dominant in Asia compared to Europe and the United States. Such a structure could limit financial access for a broader set of borrowers, especially riskier, small, and young. Banks dominate financial intermediation in the Asia-Pacific region compared to other regions (see Figure 3.8),[8]

Figure 3.7. Share of Zombie Firms in Debt
(Percent, average for each period)



Sources: Capital IQ; and IMF staff calculations.
Note: Zombie firms are defined as firms older than 10 years that during three consecutive years could not cover interest payments with operating income. RoW = rest of the world.

Figure 3.8. Structure of Financial Sector
(Percent of financial sector total assets)



Sources: Global Financial Development Database; and IMF staff calculations.
Note: NBFIs = non-bank financial institutions.

[8] Financial development appears to be higher among Asian economies relative to peers outside the region with similar GDP per capita (online Annex Figure 2.5).

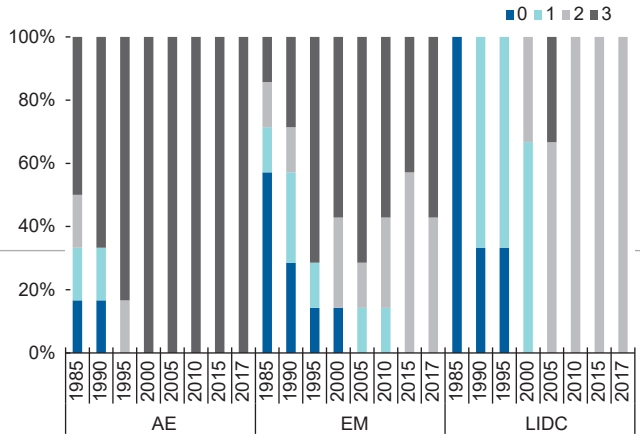
which is not only true for Asian emerging markets and low-income developing economies but also for Asian advanced economies (see online Annex Figure 2.6). Despite the improvement over time, in most Asian economies, the size of nonbank-based private sector financing remains small (see online Annex Figures 2.7 and 2.8). The underdeveloped capital markets in many Asian countries means that most companies rely on banks, which typically favor size and collateral over growth, with limited access to a broader set of investors. Market-based financing instruments, especially equity financing, are better tailored to meet the financing needs of riskier, innovative, and fast-growing companies, including those with fewer tangible assets and attract long-term investors and risk capital.[9] Listing procedures, bond market access for SMEs, and a lack of domestic institutional investor base that provides more stable long-term capital, are among the key areas of reforms needed to support capital market development in the region (OECD 2025).

Evergreening of loans has increased. Historically, weaknesses in the banking system, combined with other policies such as implicit state support or lack of insolvency laws, have often underpinned evergreening. See, for instance, Caballero, Hoshi, and Kashyap (2008), Acharya and others (2019), and Blattner, Farinha, and Rebelo (2023) for Japan in the early 1990s and in Europe in the early 2010s. More recently, Albuquerque and Iyer (2024) find that zombie shares can increase even with a strong banking sector and tight macroprudential policies if insolvency frameworks are not well prepared to deal with restructuring.

In addition, financial controls through interest rate ceilings or credit directives are more prevalent in Asia. Although there has been a sustained liberalization of interest rate controls in Asia over a long period, this trend has been reversed more recently, as the prevalence of interest rate controls increased since the global financial crisis, attributable to Asian emerging markets and low-income developing countries (see Figure 3.9).[10] Compared to peers in RoW (see online Annex Figure 2.9), they tend to have greater inclination to introduce interest rate controls. By distorting market incentives and signals, interest rate controls and financial repression could reinforce sectoral policies and result in rent seeking and efficiency losses, which can pose a drag on growth (see Jafarov, Maino, and Pani 2019).

Figure 3.9. Interest Rate Controls, Asia-Pacific, 1985–2017

(In percent, countries with a level out of all countries)



Sources: Jafarov, Maino, and Pani (2019); and IMF staff calculations.
Note: Smaller values indicate greater interest rate controls, with 3 representing a situation where banks are essentially free to set their own interest rates, subject at most to nonbinding consumer protection limits forbidding usury. AE = advanced economy; EM = emerging market; LIDC = low-income developing country.

3.4. Access to Finance, Investment, and Allocation of Capital: Empirical Test

This section empirically tests the link between financial inputs and capital allocation. In particular, we investigate the role of financial constraints, encompassing both the scale and mix of finance, in shaping the allocation of capital, and whether the impact differs by countries at different levels of development.[11]

Financial constraints curbed growth by making it difficult for small and young firms to expand. The impact is more significant for Asia. In the spirit of

[9] Tangible assets refer to physical assets such as buildings, machinery, or inventory. Intangible assets are nonphysical assets like patents, trademarks, copyrights, and goodwill, which represent intellectual property and brand value. These are typically riskier, and their valuation is generally more volatile.

[10] Data comes from Jafarov, Maino, and Pani (2019), who extend to 2017 the broader database of Abiad, Detragiache, and Tressel (2008) covering the period 1973–2005, but focus only on the interest rate ceiling indicator because of data constraints. Data beyond 2017 is unavailable but given the rise in overall debt and the pandemic's impact, the reversal in trend could have likely persisted.

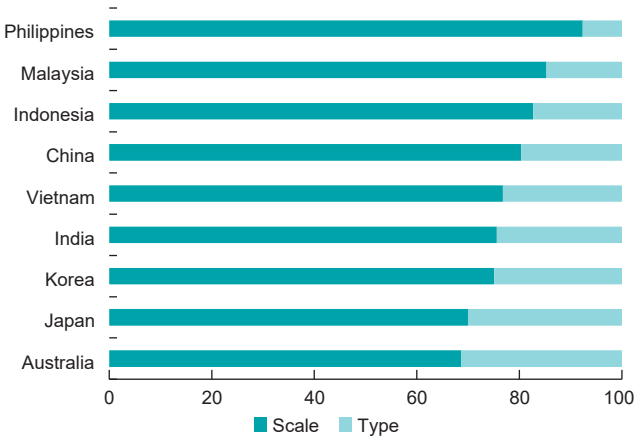
[11] See online Annexes 1.3–1.6 for details of methodologies and data.

Rajan and Zingales (1998), we test whether firms in sectors that have high dependence on external finance grow faster in countries that have more developed financial systems. Following the methodology of Li (2020), we find strong evidence of financing constraints in Asia (see online Annex Table 3.1, column 2), that is, a statistically significant positive interaction between external finance dependence and the level of financial development. Financial constraints are more pronounced in Asia than for the global sample (column 1). It is the small (low asset) and young firms that face the brunt of financing constraints (columns 3 and 5). Online Annex Table 3.2 presents similar evidence for capital expenditure.

Furthermore, financial constraints contributed to misallocation of capital and hence lower aggregate productivity. As demonstrated in Gopinath and others (2017), financing constrained smaller firms need to accumulate sufficient internal savings and cannot expand their capital. As a result, their productivity of capital, MRPK, is higher than that of larger firms who are unconstrained. Hence, leverage and firm size are positively correlated, whereas MRPK and firm size are inversely correlated. We find that these patterns hold in Asia (see online Annex Table 3.3), and that a 1 percent larger firm size before the global financial crisis (net worth) is associated with 2 percent more investment and 0.1 percent more leverage during the period after the global financial crisis. The increase in MRPK dispersion after the global financial crisis stems from greater deterioration in MRPK of larger firms. Going beyond size, Box 3.1 highlights how direct policy distortions from preferential credit policies towards state-owned enterprises (SOEs) have contributed to capital misallocation and lower productivity in Vietnam. Removing such misallocation could potentially raise TFP by over 50 percent. Lower productivity and lower borrowing costs of SOEs relative to private firms are also documented globally (see April 2020 *Fiscal Monitor*).

Among various factors affecting financial constraints, the scale of financing is key in low-income countries, while the diversification of financing instruments becomes increasingly relevant as countries develop. Following Whited and Zhao (2021), the importance of scale versus mix of financing is assessed by treating financial liabilities—debt and equity—as primitive inputs into production and allowing debt and equity to be either perfect or imperfect substitutes.[12] Estimates show that though the scale of financing is the dominant constraint in Asia, the importance of its mix rises with the level of development (see Figure 3.10). Box 3.2 illustrates the importance of financing constraints and financial structure for young high-growth firms called "gazelles." Developing a range of financing options could help expand the role of gazelles in the economy, including through nonbank financing such as venture capital, particularly for firms that have a high share of intangible assets and lack traditional collateral.

Figure 3.10. Scale versus Mix of Financing
(In percent)



Sources: Orbis; and IMF staff calculations.
Note: The figure shows the counterfactual aggregate TFP gains that each country would enjoy if finance misallocation was reversed under empirically estimated elasticity of substitution between debt and equity and under the alternative scenario of perfect substitutability, expressed as shares of the aggregate TFP gain. The chart shows gains for each country averaged over the time period 2010-2022. See online Annex 1.5 for methodology.

The rise of evergreening has been facilitated by easy financing. By crowding out more productive investment, this would further contribute to capital misallocation. Evergreening is a channel through which financing access supports a rise in misallocation of capital. We find strong evidence that the share of zombie firms has risen faster in sectors with high reliance on external sources of financing. Lower costs of financing, proxied by policy rates (see online Annex Figure 2.11), during the periods after the global financial crisis and COVID-19, was associated with an increase in the share of zombie firms in these sectors, by about 0.4 percent for a 1 percent decline in interest

[12] Deviations in debt-to-equity ratios across firms are departures from the first-best (marginal contributions of debt and equity are equalized across firms).

rates (see online Annex Table 3.4). This is similar to what other studies find using different country samples (Banerjee and Hofmann 2018; Albuquerque and Iyer 2024). Lower cost of capital reduces the pressure on creditors to clean up their balance sheets and encourages them to "evergreen" loans. Although other policies (such as subsidies and industrial policies supporting certain sectors or SOEs, fiscal support during the pandemic, and weak insolvency laws) are likely relevant, availability of easy financing contributed to distorting capital allocation toward unproductive firms. An increase in interest rate controls during this period could have exacerbated this effect. Additionally, Albuquerque and Iyer (2024) show spillovers from zombies to non-zombies, including a dampening of investment, productivity, and employment. Developing a strategy to restructure unviable debt is therefore key to improving capital efficiency.

3.5. Conclusion and Policy Recommendations

Asia-Pacific's growth slowdown has been accompanied by a decline in efficiency of investment and rise in capital misallocation. The chapter provides evidence that inefficiencies in financial intermediation have contributed to this phenomenon. To improve the return on investment, policies should aim to broaden financial access for firms and address evergreening. A more diversified financial structure, with a larger role for capital markets, is needed. Compared to banks, capital markets help to mobilize long-term financing and improve financial access to services and innovation intensive firms with larger intangible assets. Areas of focus could include streamlining listing procedures, broadening investor base and fostering long-term financing, and regulatory reforms to lower barriers to nonbank financing. Policy priorities differ by countries' development stage. Access to financing is the bigger constraint in lower income countries, but the importance of mix of financing rises with the level of development, suggesting that developing markets for alternative instruments of financing is more important for higher income countries.

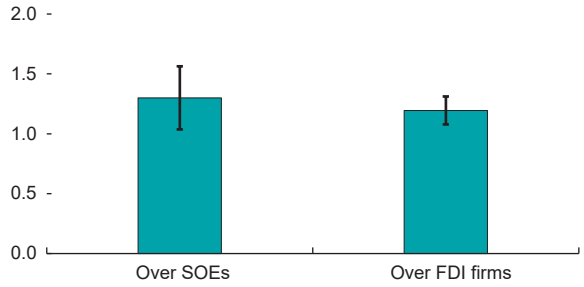
Restructuring nonviable debt would bring allocative efficiency gains. While financial repression may help to manage debt by holding funding costs low, it is likely to increase misallocation and hinder appropriate pricing of risks. It may also raise risks to fiscal sustainability if potential public costs are not accounted for transparently. Reviewing and strengthening financial oversight and risk management will be key to preventing evergreening.

Lastly, improvements in financial intermediation and capital efficiency will help to support job and income growth, particularly in services and smaller firms that tend to face more financing constraints, enabling stronger domestic demand growth. Better financial intermediation also reduces firms' precautionary motives to save and encourages better dividend payout, contributing to stronger consumption in the region. All of this should help Asian economies advance toward more balanced growth without excessively relying on external demand.

Box 3.1. Rising Misallocation and the Importance of Preferential Credit Policies[1]

Despite remarkable growth in the past two decades in Vietnam, misallocation is sizable and has risen—partly reflecting preferential credit policies. Reducing such misallocation can yield large total factor productivity gains.

Figure 3.1.1 Borrowing Cost Premium of Domestic Private Firms
(In percent)



Sources: Vietnam National Statistics Office (NSO); and IMF staff calculations.
Note: Figures in the chart denote domestic private firms' borrowing cost premium over SOEs and FDI firms, estimated from firm-level fixed-effect panel regressions using the Vietnam Enterprise Survey data during 2019–22 and controlling for firm size, leverage, profitability, and other characteristics, as well as sector and time fixed effects. Borrowing cost is approximated as a firm's credit interest expense in percent of the previous year's liabilities because of data constraint. Liabilities include both short- and long-term debt and other liabilities. FDI = foreign direct investment; SOEs = state-owned enterprises.

Resource misallocation, especially capital misallocation, is sizable and rising in Vietnam, notably since COVID-19. Misallocation remains relatively low in manufacturing but high in services, especially real estate services. Capital distortion has been the main source of the rising aggregate misallocation. Removing such misallocation and moving to the efficiency frontier could potentially raise aggregate total factor productivity by over 50 percent (IMF 2025, *forthcoming*).

The capital misallocation in Vietnam is likely related to preferential credit policies. Credit misallocation because of, for example, preferential credit policies, could constrain productive firms from scaling up and gaining market shares (see, for example, Chen and Irarrazabal 2015; Meza, Pratap, and Urrutia 2019; Jurzyk and Ruane 2021). In Vietnam's case, Le (2022) found that preferential treatment for SOEs was the main contributor to the capital misallocation, including, for example, preferential access to credit from development and state-owned banks and the allocation of prime land at below-market prices, which SOEs could in turn use as collateral to obtain bank loans.[2] IMF (2017) also found evidence of credit misallocation between SOEs and non-SOEs among listed firms. Moreover, SOEs' borrowing costs have been significantly lower than those of domestic private firms (see Figure 3.1.1), which could help less-productive SOEs stay competitive and gain market share—depressing overall productivity. Meanwhile, foreign direct investment firms also face lower borrowing costs than domestic private firms, likely reflecting external and parent funding but also banks' preferential policies and government incentives to boost innovation and technology.

[1] Prepared by Fei Han and Tatjana Schulze, in collaboration with the Vietnam National Statistics Office (NSO).

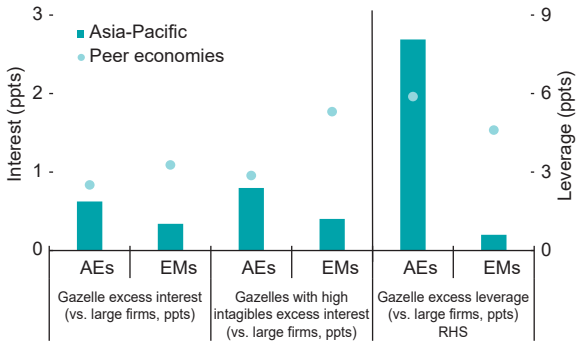
[2] According to Tu (2019), despite the significant reduction in the number of SOEs in Vietnam, which only accounted for 0.5 percent of the total number of firms and employed 9 percent of the labor force, they still held 29 percent of total assets in the economy.

Box 3.2. Role of External Financing in the Lifecycle of Gazelles[1]

Financing constraints are limiting Asian gazelles' contributions to productivity and growth.

Asia's young high-growth firms, or "gazelles,", may experience underfinancing, limiting their economic impact. With higher sales growth and total factor productivity than more established firms, gazelles could boost growth and productivity;[2] however, they make up under 2 percent of Asia's new entrants, potentially because of underfinancing—a global challenge.[3] In Asian advanced economies as in peers, gazelles carry higher leverage than other firms from a young age, signaling access to finance is crucial to foster more gazelle formation. After controlling for leverage, gazelles also face higher borrowing costs than other firms: on average by 63 bps in Asian advanced economies, up to 80 bps for those with more intangible assets, similar to peer economies, reflecting their risk profile (see Figure 3.2.1). In Asian emerging markets, gazelles see no excess leverage or excess interest costs, contrary to expectations. Their share of new entrants is also very low (just one percent). This suggests that access to financing for gazelles has been significantly more constrained than for their peers, likely due to a lack of tailored financing solutions. Across Asia, broadening the range of financing options, including nonbank alternatives, such as venture capital (Ando 2025), could support the emergence and growth of gazelles.

Figure 3.2.1 Financing Costs and Leverage
(In percentage points)



Sources: Orbis; and IMF staff calculations.
Note: Data cover 2008 to 2021. Asia-Pacific includes AUS, CHN, IND, IDN, JPN, KOR, MSY, NZL, PHL, THA, and VNM. Peer economies include BRA, CAN, CHL, GBR, GER, HUN, MEX, POL, ESP, CHE, TUR, and ZAF. Leverage is computed as debt to assets. Excess interest measures exclude KOR, THA, and MSY because of data limitations. Data labels in the figure use International Organization for Standardization (ISO) country codes. AEs = advanced economies; EMs = emerging markets; RHS = right-hand side; ppts = percentage points.

[1] Produced by Monica Petrescu.

[2] Gazelles support productivity, employment, and output as shown in Haltiwanger and others (2016), among others.

[3] Following the literature, gazelles are defined as firms that, between formation and age 10, (1) see a three-year period of annualized growth in deflated sales of 20 percent or more, (2) have at least 100 employees, and (3) reach sales of at least 100,000 in 2015 US$ terms.

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