AMRO
ASEAN +3 MACROECONOMIC RESEARCH OFFICE

ASEAN+3 REGIONAL ECONOMIC OUTLOOK 2025

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Foreword

The global economy in 2024 was full of twists and turns. Early in the year, persistent US inflation and robust growth led to expectations of prolonged high interest rates. However, by mid-year, signs of weakness in the US labor market had shifted expectations, with markets pricing in Federal Reserve rate cuts before the actual easing cycle started in September. The US presidential election in November added further complexity, creating uncertainties around trade and immigration policies, with potential implications for inflation and monetary policy trajectories.

Despite these external volatilities, the ASEAN+3 region demonstrated remarkable resilience in 2024, achieving steady growth of 4.3 percent. This resilience was underpinned by strong domestic demand, increased investment activity and a rebound in external demand, particularly in the semiconductors and services trade. Meanwhile, moderating inflation supported real income and consumer confidence. Targeted fiscal support and easing monetary policy stance in some economies, contributed to the region's stability. However, the region's resilient growth trajectory should not be taken for granted, as underlying vulnerabilities and external risks could pose challenges ahead.

In Chapter 1 of this year's AREO, the report provides a deeper analysis of the region's near-term outlook, including the risks and vulnerabilities facing ASEAN+3 economies. While the chapter forecasts sustained regional growth in 2025, it also highlights some major risks. Notably, the new Trump Administration has started the year by increasing tariffs on China and imposing heavy tariffs on its two closest trading partners, Mexico and Canada. The Administration has further threatened to impose reciprocally high tariffs on all countries that have high tariffs on US imports. This shift towards highly protectionist trade policy threatens to cause major disruptions to global trade and investment flows leading to higher inflation and a slowdown in the global economy.

These strong external headwinds and uncertainties pose a major challenge for policymakers in the region. It is crucial that policy responses be measured and strategic rather than proportionate and indiscriminate as that would exacerbate economic disruptions. Instead, the focus should be on buffering economic shocks while maintaining steady growth. Any retaliatory measure should be carefully calibrated to minimize self-inflicted harm while safeguarding national interest.

This year, the report introduces a new chapter on conjunctural thematic issues, complementing the usual macroeconomic analysis of near-term prospects. Chapter 2 explores how inflation dynamics have evolved in the region, comparing the underlying drivers and policy measures across the regional economies and with other major regions in the world. Inflation in ASEAN+3 has been relatively moderate and short-lived compared to the rest of the world, reflecting structural factors and policy frameworks that helped contain volatility and anchor price stability. Initially supply shocks drove the post-pandemic inflation surge, but demand pressures have since gained prominence. This chapter examines regional inflation trends and policy responses, as well as future inflation risks amid geopolitical shifts, demographic changes, and the low-carbon transition.

Chapter 3 delves into the factors influencing the region's potential growth. Through a growth accounting exercise, the report assesses the drivers behind ASEAN+3's declining potential growth over the past few decades, partly attributed to declining capital accumulation and weak productivity gains. The analysis further examines the pace of structural transformation across and within sectors, highlighting how many economies have yet to fully capitalize on sectoral reallocation and upgrading for productivity gains. The chapter identifies key policy priorities to boost productivity and potential growth, including upgrading manufacturing capabilities, prioritizing high-skill services, closing investment gaps, leveraging technology—particularly AI—and strengthening state capacity.

As the global economic landscape grows more uncertain, ASEAN+3 economies should continue to strengthen regional cooperation. Rising trade protectionism and geopolitical fragmentation threaten the open and interconnected markets that have been instrumental to the region's growth and prosperity. In the face of these challenges, deeper economic cooperation, coordinated policy responses, and a forward-looking approach to structural transformation will be essential to sustaining growth.

The ASEAN+3 region has proven time and again its ability to adapt and thrive in the face of change and adversity. By leveraging the region’s collective strengths and fostering greater cross-border collaboration, ASEAN+3 can continue to chart a path of resilience and growth in an increasingly uncertain world. Beyond serving as a key driver of global growth, ASEAN+3 should also serve as a beacon of rules-based multilateral cooperation, promoting shared prosperity and mutual benefits in an era of growing fragmentation and division.

Hoe Ee Khor
Chief Economist

Acknowledgments

This report provides AMRO staff's assessment of both the conjunctural and structural issues facing the ASEAN+3 region. It covers the short-term risks, vulnerabilities, and challenges facing member economies, as well as the policy options taken by or that are available to their authorities. It also presents staff's study on conjunctural and longer-term issues that are pertinent to sustained economic growth in the region. The report has been submitted to the Executive Committee of the ASEAN+3 members for discussion.

The analysis in this report was coordinated by the Regional Surveillance team led by Allen Ng; it also draws on the surveillance work of the AMRO country teams. The report was reviewed and cleared by Chief Economist, Hoe Ee Khor. It has also benefited from the guidance of AMRO Director Kouqing Li and other members of the Senior Management team.

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Finally, the views expressed in this report are those of AMRO staff and do not, in any way, implicate ASEAN+3 members.

Abbreviations

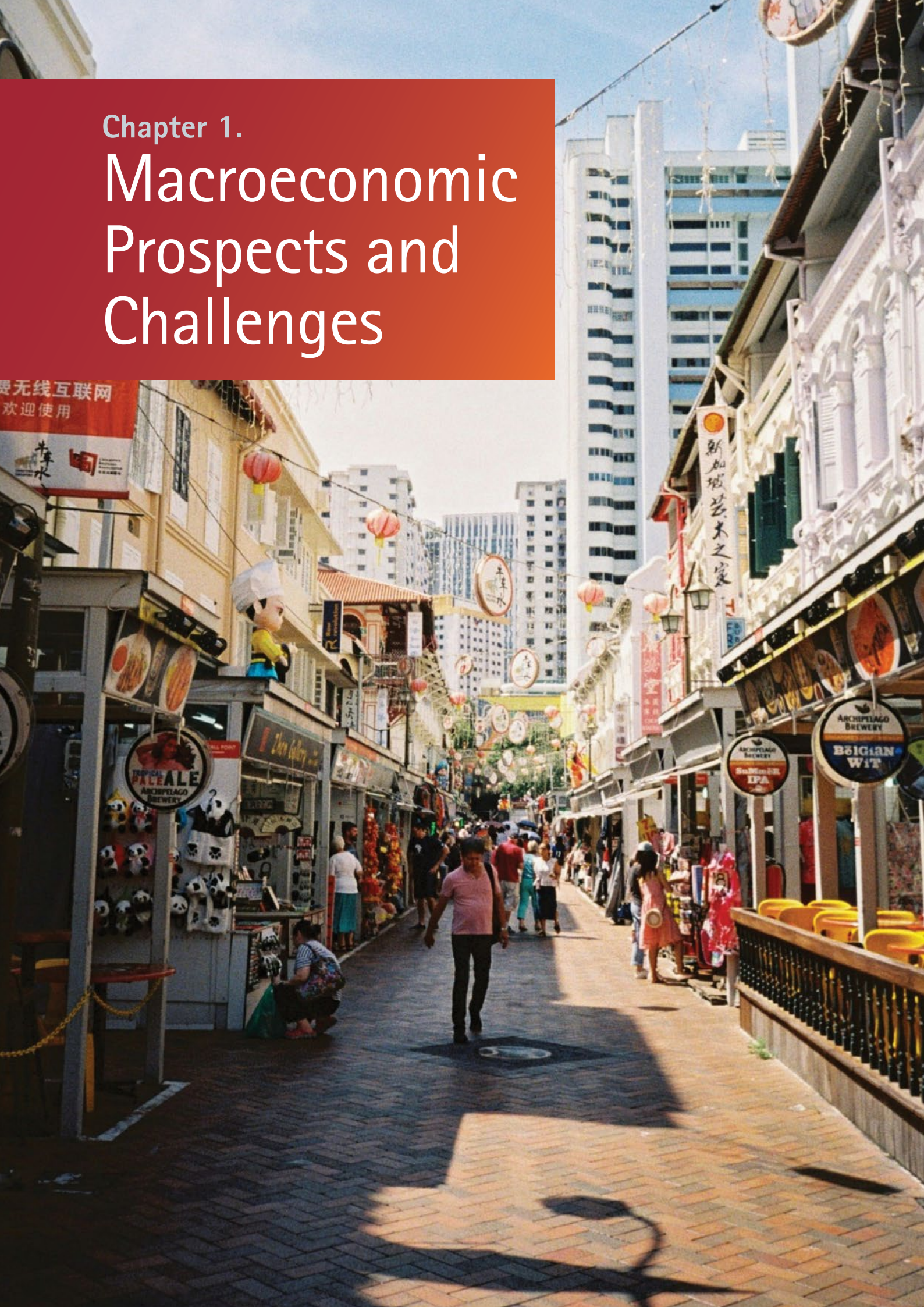
ADB	Asian Development Bank
AE	Advanced economy
AFC	Asian Financial Crisis
AFPR	ASEAN+3 Fiscal Policy Report
AFSR	ASEAN+3 Financial Stability Report
AI	Artificial intelligence
AREO	ASEAN+3 Regional Economic Outlook
ASEAN	Association of Southeast Asian Nations
ASEAN+3	ASEAN plus China (including Hong Kong, China), Japan, and Korea
ASEAN-4	Indonesia, Malaysia, the Philippines, and Thailand
ASEAN-5	Indonesia, Malaysia, the Philippines, Thailand, and Singapore
ASEAN-6	Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam
BCLM	Brunei Darussalam, Cambodia, Lao PDR, and Myanmar
BCLMV	Brunei Darussalam, Cambodia, Lao PDR, Myanmar, and Vietnam
BCLV	Brunei Darussalam, Cambodia, Lao PDR, and Vietnam
BI	Bank Indonesia
BN	Brunei Darussalam*
BND	Brunei dollar
BNM	Bank Negara Malaysia
BOJ	Bank of Japan
BOK	Bank of Korea
BOL	Bank of the Lao PDR
BOP	balance of payments
BSP	Bangko Sentral ng Pilipinas
CAR	capital adequacy ratio
CBM	Central Bank of Myanmar
CLMV	Cambodia, Lao PDR, Myanmar, and Vietnam
CMV	Cambodia, Myanmar, and Vietnam
CN	China
CNY	Chinese yuan
COVID-19	2019 coronavirus disease
CPI	consumer price index
DAO	discrete, analog, and others
ECB	European Central Bank
EMDE	Emerging market and developing economies
EU	European Union
EUR	euro
EV	electric vehicle
FAO	United Nations Food and Agriculture Organization
FDI	foreign direct investment
FY	fiscal year
GDP	gross domestic product
GFC	Global Financial Crisis
GFN	gross financing needs
GMAP	Gender Mainstreaming Action Plan
GNI	gross national income
HK	Hong Kong, China*
HKD	Hong Kong dollar
HKMA	Hong Kong Monetary Authority
IAGDP	import-adjusted GDP
ICT	information and communication technology
ID	Indonesia
IDR	Indonesian rupiah
ILO	International Labour Organization
IMF	International Monetary Fund
IO	Input-Output
IP	industrial policy
IT	information technology
JP	Japan
JPY	Japanese yen

* For brevity, "Brunei Darussalam" is referred to as "Brunei" in the text.
* For brevity, "Hong Kong, China" is referred to as "Hong Kong" in the text.

KH	Cambodia
KHR	Cambodian riel
KR	Korea
KRW	Korean won
LA, Lao PDR	Lao People's Democratic Republic
LAC	Latin America and Caribbean
LAK	Lao kip
LCY	local currency
LFX	Lao Forex Exchange
LSTC	Leading-Edge Semiconductor Technology Center
MAS	Monetary Authority of Singapore
MFI	microfinance institution
MM	Myanmar
MMK	Myanmar kyat
m-o-m	month-on-month
MOS	Metal-Oxide-Semiconductor
MoWA	Ministry of Women's Affairs
MSME	micro, small and medium-sized enterprises
MY	Malaysia
MYR	Malaysian ringgit
NBFI	nonbanking financial institution
NEER	nominal effective exchange rate
NGFS	Network for Greening the Financial System
NIRP	negative interest rate policy
NOAA	National Oceanic and Atmospheric Administration
NODX	non-oil domestic exports
O&G	oil and gas
OECD	Organisation for Economic Co-operation and Development
PH	the Philippines
Plus-3	China (including Hong Kong), Japan, Korea
PPI	producer price index
PPP	purchasing power parity
q-o-q	quarter-on-quarter
QQE	quantitative and qualitative monetary easing
R&D	research and development
RCEP	Regional Comprehensive Economic Partnership
ROW	rest of the world
RRR	Reserve ratio requirements
saar	seasonally adjusted annual rate
SBV	State Bank of Vietnam
SG	Singapore
SGD	Singapore dollar
SIA	Semiconductor Industry Association
SMEs	Small and medium-sized enterprises
SRBI	Bank Indonesia rupiah securities
SSF	social security fund
TFP	total factor productivity
TH	Thailand
THB	Thai baht
UNFCC	United Nations Framework Convention on Climate Change
UNWTO	United Nations World Tourism Organization
US	United States
USD	US dollar
VN	Vietnam
VND	Vietnamese dong
WSTS	World Semiconductor Trade Statistics
WTTC	World Travel and Tourism Council
YCC	yield curve control
y-o-y	year-on-year
YTD	year-to-date

Chapter 1.

Macroeconomic Prospects and Challenges



Highlights

- 2024 was a year of resilient global growth and continued disinflation, despite multiple sources of uncertainty. The global economy entered a new phase as major central banks began monetary easing after three years of tightening. However, challenges mounted throughout the year—geopolitical tensions triggered periodic spikes in commodity prices and the US presidential election campaign raised concerns about major shifts in US trade and broader economic policies. Despite these headwinds, the US economy demonstrated strength, driven by robust consumer spending and tech sector investment, while inflation fell to its lowest since the pandemic began. The euro area, however, maintained modest expansion.

- ASEAN+3 registered stable growth of 4.3 percent in 2024, sustained from a 4.4 percent expansion in 2023. Domestic demand remained the primary driver of growth for most economies, underpinned by strong labor market conditions and a recovery in investment. A rebound in exports, particularly in semiconductors and tourism, provided additional momentum. Inflation continued to moderate, although supply-driven price spikes in energy and shipping costs caused periodic disruptions. Financial markets strengthened in the first half of the year but experienced increased volatility in the second half, with equity markets reversing earlier gains and bond yields rising. Despite heightened global uncertainties and financial market fluctuations, the region's international reserves remained ample, reinforcing external resilience.

- The region is expected to maintain robust growth of above 4 percent in 2025 and 2026. Domestic demand will remain a key pillar of growth, supported by improving investment activity, while external demand—particularly from the technology sector and tourism—will provide additional support. However, the outlook is subject to significant uncertainties, especially from US trade policies, that could weigh on the region's growth. In the medium term, ASEAN+3 is expected to remain a key driver of global growth, contributing about 43 percent of global growth—slightly below its pre-pandemic average. Meanwhile, inflation is expected to pick up slightly but will remain low at 1.7 percent in 2025 and 2026.

- Risks to the near-term outlook are tilted to the downside. The most prominent is the potential for more aggressive protectionist policies from the United States, which could disrupt trade flows and investment and dampen regional growth. Other key risks include tighter global financial conditions, slower growth in major economies, and potential spikes in commodity prices due to geopolitical tensions or weather-related shocks. Over the longer term, structural challenges such as aging populations, climate change, and technological disruptions continue to pose risks to macrofinancial stability.

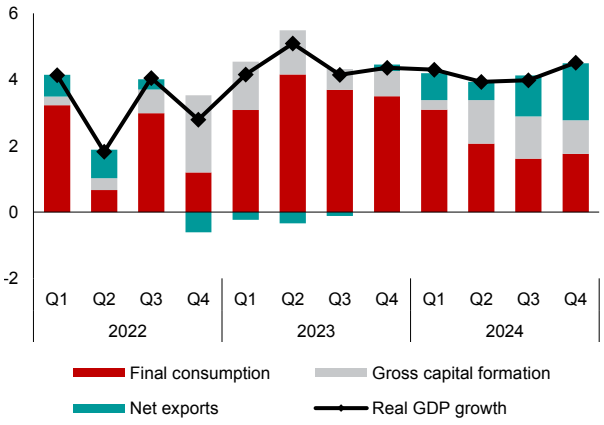
- The favorable baseline outlook for ASEAN+3 provides an opportunity to rebuild policy space, although policymakers must navigate an increasingly uncertain external environment. While both fiscal consolidation and monetary policy easing continued to progress in 2024, policy challenges have become more complex. Looking ahead, policies should focus on strengthening long-term resilience while maintaining flexibility to address near-term challenges, with the appropriate policy mix tailored to each economy's specific circumstances and constraints. On the fiscal front, this means balancing the rebuilding of buffers with providing targeted support for growth. For monetary policy, authorities need to carefully recalibrate policy stance based on domestic conditions while preserving exchange rate flexibility and maintaining vigilance against financial stability risks, particularly given prospects of heightened trade tensions and volatile global financial conditions.

I. Economic Developments in 2024: Solid Growth Despite Rising Uncertainties

The global economy was resilient in 2024, maintaining steady growth and continued disinflation despite mounting uncertainties. Several significant developments shaped the global landscape throughout the year. The shift in monetary policy stance—from tightening to gradual easing after three consecutive years of rate hikes—marked a key turning point. However, geopolitical tensions triggered periodic spikes in commodity prices, while rising trade restrictions pushed protectionist measures to historic highs. The US presidential election campaign added another layer of uncertainty, raising concerns about potential shifts in trade policies, global economic fragmentation, and monetary policy direction. Nevertheless, the US economy proved remarkably resilient, expanding by 2.8 percent, driven by robust consumer spending and sustained investment, particularly in high-tech sectors. US inflation continued its downward trend, moderating to 2.9 percent, the lowest since the pandemic outbreak. Meanwhile, the euro area maintained modest growth despite headwinds from elevated input costs for manufacturing and energy and subdued external demand amid ongoing geopolitical tensions.

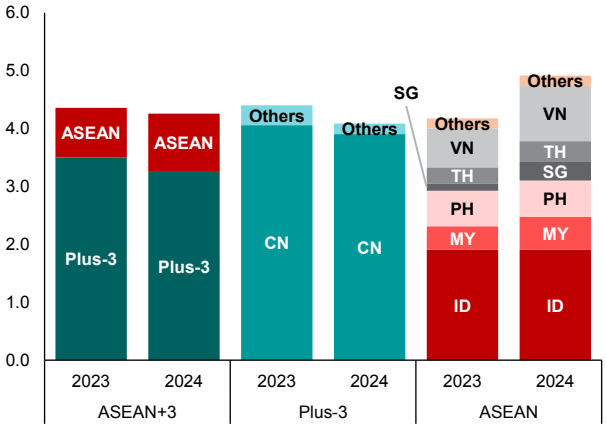
The ASEAN+3 region demonstrated similar resilience, sustaining solid growth of 4.3 percent in 2024 despite heightened external uncertainty. Overall, the region's performance was anchored by robust domestic demand and reinforced by strengthening external demand (Figure 1.1). However, growth dynamics varied across economies. The Plus-3 economies saw growth moderate to 4.1 percent from 4.4 percent in 2023, primarily reflecting China's continued property sector correction despite ongoing policy support (Figure 1.2). In contrast, ASEAN economies gathered momentum, with growth accelerating to 4.9 percent from 4.1 percent in 2023. This stronger performance was underpinned by firm domestic demand—supported by favorable labor market conditions, moderating inflation, and rising investment—and further boosted by a strong rebound in export of goods and services.

Figure 1.1. Selected ASEAN+3: Real GDP Growth
(Percentage point, year-on-year)



Source: National authorities; AMRO staff calculations.
Note: Excludes Cambodia, Lao PDR, Myanmar, and Vietnam due to data unavailability.

Figure 1.2. ASEAN+3: Contribution to Real GDP Growth
(Percentage point, year-on-year)



Source: National authorities; AMRO staff calculations.
Note: CN= China; ID = Indonesia; MY = Malaysia; PH = the Philippines; SG = Singapore; TH = Thailand; VN = Vietnam; Plus-3 = China, Hong Kong, Japan, and Korea.

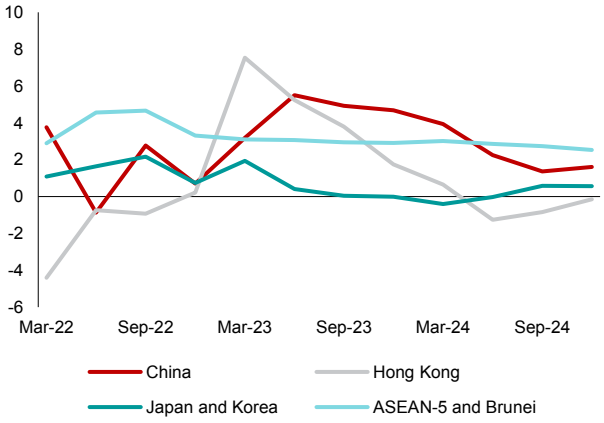
Robust Domestic Demand Anchored Growth

Breaking down the components of growth, private consumption continued to be the primary driver, supported by favorable labor market conditions. Household consumption was particularly robust in ASEAN-5 and Brunei, while in China, subdued consumer confidence dampened spending despite government efforts to boost durable goods consumption (Figure 1.3). Meanwhile, in Japan and Korea, consumption remained subdued overall but showed signs of improvement. The strength in household spending was underpinned by robust income growth, with steady wage growth, declining unemployment rates, and sustained high labor force participation across most economies (Figure 1.4).

The authors of this chapter are Catharine Tjing Yiing Kho (co-lead), Xianguo (Jerry) Huang (co-lead), Megan Wen Xi Chong, Haobin Wang, and Yuhong Wu, under the supervision of Allen Ng, with contributions from Suan Yong Foo, Seung Hyun (Luke) Hong, Vanne Khut, Wee Chian Koh, Byunghoon Nam, and Anthony Chia Kiat Tan, and input from AMRO country desk economists.

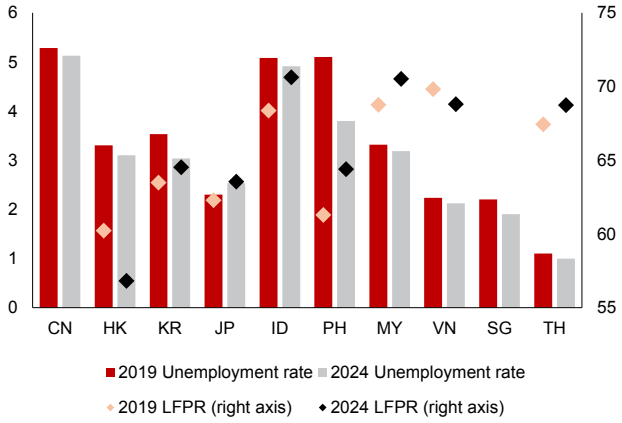
Complementing strong consumption, domestic demand was further bolstered by a pickup in investment activity. Investment accelerated in Japan and most ASEAN economies, particularly in high-growth sectors such as electric vehicles, data centers, and semiconductors, benefitting from improving external demand (Figure 1.5). Similarly, infrastructure investment in Korea gained momentum in the second half of the year, driven by the high demand for advanced semiconductor chips. However, overall investment growth for the year was weighed down by the prolonged slump in the construction sector. In contrast, investment recovery in China remained uneven. While investment in infrastructure, new energy, and high-tech manufacturing continued to expand robustly, capital expenditure in property-related sectors remained sluggish amid the ongoing correction in the sector (Figure 1.6).

Figure 1.3. Selected ASEAN+3: Contribution of Private Consumption to GDP Growth
(Percentage point contribution)



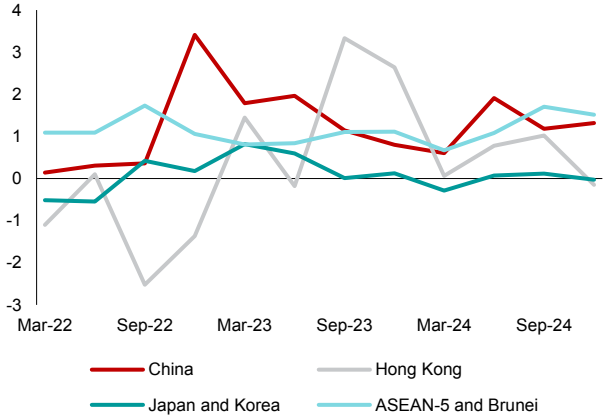
Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: ASEAN-5 = Indonesia, Malaysia, the Philippines, Singapore, and Thailand. Data are unavailable for Cambodia, Lao PDR, Myanmar, and Vietnam. Data for China refers to the contribution of total consumption to year-on-year GDP growth.

Figure 1.4. Selected ASEAN+3: Unemployment Rates and Labor Force Participation
(Percent of working-age population, seasonally adjusted; percent, seasonally adjusted)



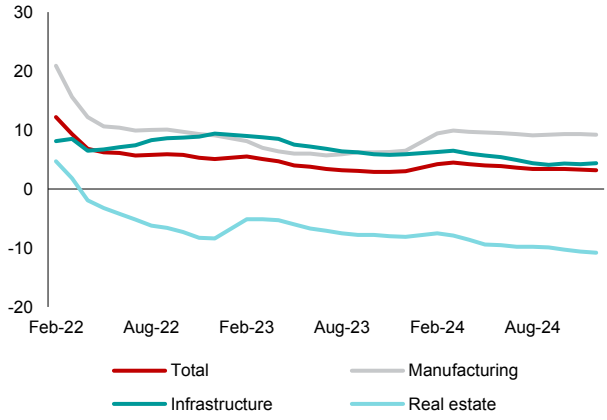
Source: National authorities via Haver Analytics.
Note: CN= China; HK = Hong Kong; JP = Japan; KR = Korea; ID = Indonesia; MY = Malaysia; PH = the Philippines; SG = Singapore; TH = Thailand; VN = Vietnam. Unemployment rate data are up to Q4 2024. Labor force participation rate data are up to Q4 2024, except for Indonesia (August 2024).

Figure 1.5. Selected ASEAN+3: Contribution of Gross Fixed Capital Formation to GDP Growth
(Percentage point contribution)



Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: ASEAN-5 = Indonesia, Malaysia, the Philippines, Singapore, and Thailand. Data are unavailable for Cambodia, Lao PDR, Myanmar, and Vietnam.

Figure 1.6. China: Fixed Asset Investment
(Percent, year-on-year)



Source: National authorities via Haver Analytics; AMRO staff calculations.

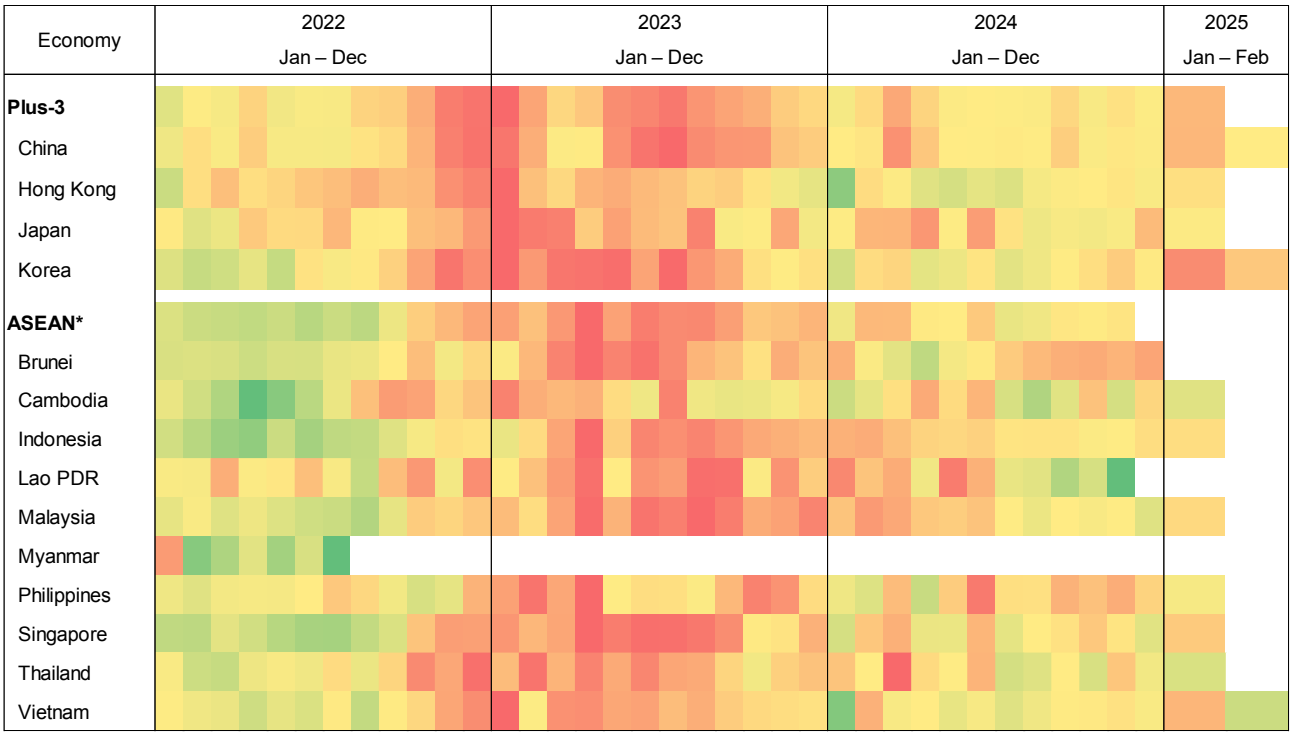
External Sector Recovery Strengthened Growth Momentum

The external sector performance strengthened in 2024, led by a rebound in goods exports amid improving global demand and surging technology orders. After a prolonged semiconductor downcycle in 2023, strong global demand for semiconductors—particularly AI-related chips—boosted semiconductor exports for many regional economies (Figure 1.7). The impact was especially pronounced in high-tech semiconductor manufacturing economies like Korea and Taiwan Province of China, where semiconductor exports rose by 40 percent in the first nine months of 2024—double the growth of global semiconductor sales. The AI-led semiconductor upswing also generated positive spillovers to the mature chip producers across ASEAN (Box 1.1). This, combined

with improving global consumer demand and overall semiconductor upcycle, provided a strong lift to overall goods exports across the region.

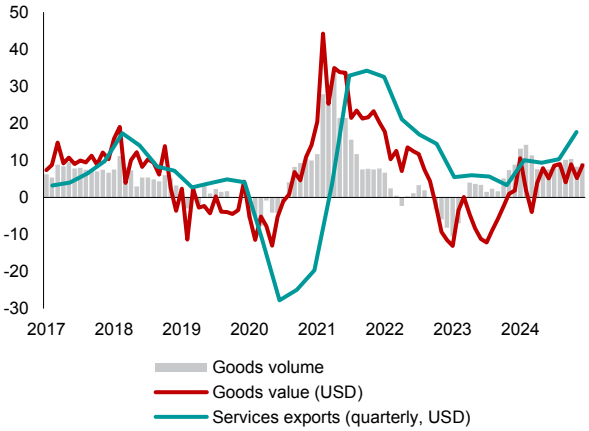
The recovery in services trade provided additional support to external sector growth. Transportation and manufacturing services gained momentum in the first half of 2024, benefiting from strong goods exports (Figure 1.8 and Figure 1.9). Meanwhile, travel services maintained their strong recovery, growing 34 percent in the first half of 2024 compared to the same period in 2023. Tourist arrivals have fully recovered in Japan, while tourist arrivals in Korea, Malaysia, Vietnam, and Cambodia have surpassed pre-pandemic levels in some months during 2024. Monthly tourist arrivals for most other regional economies have also reached over 80 percent of what they were in 2019 (Box 1.2). However, outbound tourism from China continues to lag, with Chinese tourists accounting for 25 percent of the region's arrivals, still below the pre-pandemic average of around 30 percent.

Figure 1.7. ASEAN+3: Goods Export Growth
(Percent, year-on-year)



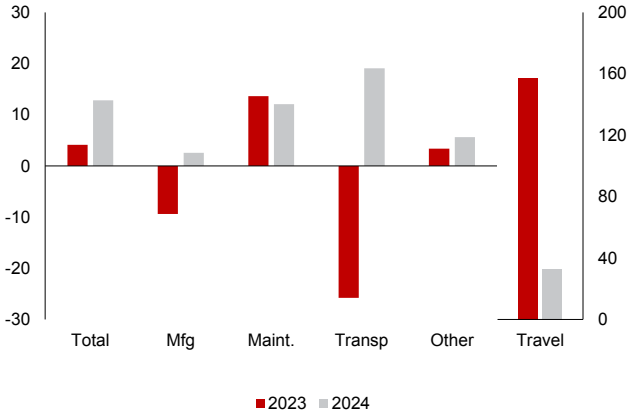
Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: Calculated based on merchandise exports in US dollars for all economies. Colors indicate the size and direction of change: the deeper the shade of red, the larger the negative change, with the darkest shade indicating a decrease of more than 30 percent year-on-year; the deeper the shade of green, the larger the positive change, with the darkest shade indicating an increase of more than 30 percent year-on-year. Regional aggregate for ASEAN excludes Myanmar after July 2022 due to data unavailability.

Figure 1.8. Selected ASEAN+3: Goods and Services Export
(Percent, year-on-year)



Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: Goods exports value data are not available for Lao PDR, and Myanmar. Goods exports volume data are not available for Brunei, Cambodia, Lao PDR, and Myanmar. Services exports data are not available for Brunei and Myanmar.

Figure 1.9. Selected ASEAN+3: Services Exports, by Category
(Percent, year-on-year)



Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: Mfg = manufacturing; Maint. = maintenance and repair; Transp = transport. Data refers to an average of annual growth rates. 2024 data is up to Q3 2024. Excludes Brunei and Myanmar due to data unavailability.

Box 1.1:

Shifting Global Semiconductor Landscape and What it Means for ASEAN+3

In recent years, geopolitical tensions and the push for supply chain resilience have prompted a reconfiguration of the semiconductor supply chain, emphasizing both advanced technology development and regional diversification.

Global semiconductor sales have been on an upward trajectory since late 2023, propelled by rising demand for advanced integrated circuits. After contracting by 8.2 percent in 2023, the Semiconductor Industry Association (SIA) reported an increase in global semiconductor sales by 19.9 percent in the first nine months of 2024—driven by high-speed and high value integrated circuits. Logic chips also continued to expand, while Metal-Oxide-Semiconductor (MOS) memory chips expanded sharply, growing by 89.2 percent during the same period in 2024, driven by the demand for AI developments. The surge in sales was notably led by China and the United States, both of which have significantly increased their use of MOS memory—though China's growth rate has shown signs of deceleration. Other economies such as Japan and Europe also reported increases in sales value. The growth in semiconductor sales in 2024 was significantly influenced by price dynamics, especially pricing recovery in the storage segment related to higher-capacity flash memory.

Korea and Taiwan Province of China have benefited significantly from the current AI-centric tech upcycle while the rebound in other regional peers has been more moderate. Electronics exports from Korea and Taiwan Province of China have expanded by double-digits since the end of 2023 given the strong demand for products linked to the artificial intelligence (AI) boom, such as AI servers, graphics cards, and other devices (Figure 1.1.1). These products require leading-edge logic chips and high bandwidth memory, which are mainly produced in large volume by frontier manufacturers such as TSMC, Samsung, and SK Hynix. Despite being the world's largest semiconductor exporter, accounting for one-quarter of global chip exports, the recovery in ASEAN economies has been more moderate compared to past semiconductor cycles as they are not as plugged into the AI space. Malaysia is primarily an assembly, testing, and packaging hub for legacy chips, while Singapore produces specialty chips that are essential for automotive, consumer electronics, and industrial applications. The Philippines, Vietnam, and Thailand are much smaller semiconductor players in the lower value-add segments (Figure 1.1.2). Similarly, China, which produces a substantial volume of mature and low-end semiconductors, experienced lackluster growth.

The memory-led recovery in the current semiconductor cycle has benefited economies with a larger concentration of memory products more significantly. It is therefore not surprising that Korea has been the frontrunner in the current upcycle, as its product mix is highly concentrated in memory products, including high bandwidth memory, dynamic random-access memory, flash memory, and solid-state drives (Figure 1.1.3). Japan, with about one-third of its product mix in memory, has also performed relatively well.[1] Meanwhile, Singapore and Malaysia, with a larger product mix in discrete, analog, optoelectronics, and sensors, have been slower to recover amid a normalization of inventories.

Economies that are important in areas supporting the semiconductor value chain, such as manufacturing equipment and materials, have also benefited from the semiconductor upcycle. Within the ASEAN+3 region, Japan is a major global player in semiconductor manufacturing equipment, with a 32 percent market share, and the materials market, with a 56 percent share in 2023.[2] Singapore is also an important supplier of semiconductor manufacturing equipment.[3] Exports of semiconductor manufacturing equipment for both Japan and Singapore have seen much higher growth compared to semiconductor exports (Figure 1.1.4).

This box was written by Xianguo (Jerry) Huang and Wee Chian Koh.

1/ Primarily flash memory produced by Kioxia and Western Digital.

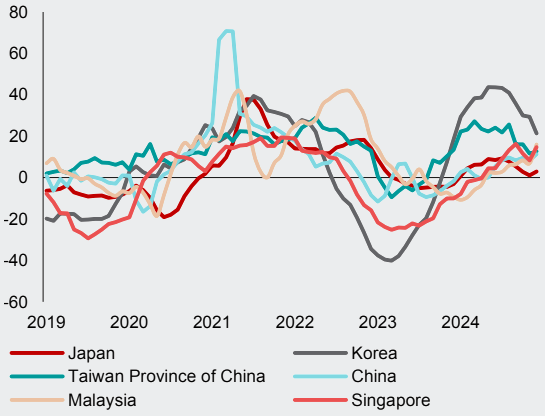
2/ Tokyo Electron and SCREEN have a combined 88 percent market share for coaters/developers, while Advantest has a 58 percent market share for testing equipment. In the photoresist market, four Japanese companies (JSR, Tokyo Ohka Kogyo, Shin-Etsu Chemical, and Fujifilm Electronics Materials) have a combined market share of about 90 percent.

3/ Singapore's semiconductor manufacturing exports are largely attributable to US firms Applied Materials and KLA Corporation. Singapore has been established as their regional headquarters and largest production hub outside the United States.

China and Malaysia have significantly increased their shares in the global semiconductor market, leveraging government support and strategic positioning. China's share grew by 3.7 percentage points, from an average of 9.2 percent in 2015–2017 to 12.9 percent in 2023, because of the 'Made in China 2025' initiative, cost advantages, and its pivotal role in the electronics supply chain. Malaysia gained 1.5 percentage points over the same period by attracting foreign direct investment. It also benefitted from the global semiconductor supply chain reconfiguration amid US-China tensions—with approved investments in the electronics sector reaching a record high in 2021.

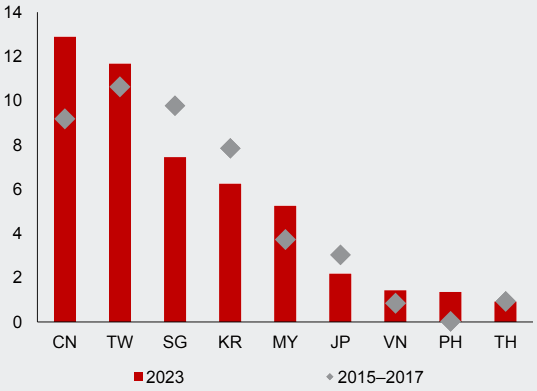
Other ASEAN+3 economies are also making strides in the semiconductor industry through various strategic moves. Despite a decline in Singapore's export share, its electronics investment commitments hit a record high in 2022 due to an exceptional inflow of large manufacturing projects in the electronics sector, which are not captured in merchandise exports. Japan's semiconductor landscape has been reinvigorated by investments from companies like TSMC, supported by government subsidies. The Philippines is poised to further benefit from friendshoring given its access to the US CHIPS Act's ITSI Fund—it has experienced a marked increase in global export share, though starting from a low base. Vietnam, a new semiconductor player, has recently seen a surge in investments in chip design and R&D, thanks to its large pool of affordable engineering talent. Meanwhile, Thailand has lagged in attracting similar investments.

Figure 1.1.1. Selected ASEAN+3: Electronics Exports
(Percent, year-on-year, three-month moving average)



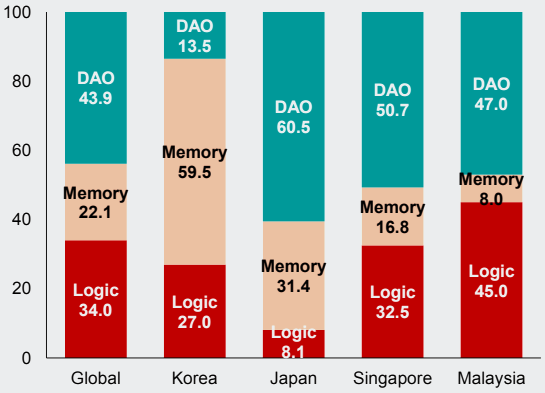
Source: CEIC; National authorities; AMRO staff calculations.

Figure 1.1.2. Selected ASEAN+3: Share of Global Semiconductor Exports
(Percent of total)



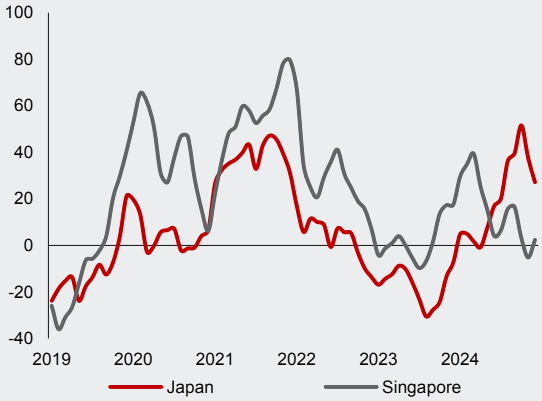
Source: S&P Global Trade Atlas; UN Comtrade; AMRO staff calculations.
Note: CN= China; TW = Taiwan Province of China; SG = Singapore; KR = Korea; MY = Malaysia; JP = Japan; VN = Vietnam: PH = the Philippines; TH = Thailand. Semiconductor exports refer to HS code 8541 and 8542.

Figure 1.1.3. Selected ASEAN+3: Composition of Semiconductor Exports
(Percent of total)



Source: S&P Global Atlas; UN Comtrade; AMRO staff calculations.
Note: Shares are 2019–2023 average. DAO = discrete, analog, and others (including optoelectronics and sensors).

Figure 1.1.4. Japan and Singapore: Semiconductor Manufacturing Equipment Exports
(Percent, year-on-year, three-month moving average)



Source: S&P Global Trade Atlas; UN Comtrade; AMRO staff calculations.

Box 1.2:

Tourism in ASEAN+3: Recovery from COVID-19 and Shifting Trends

Tourism is a key economic sector for the region, contributing a higher share of GDP than the global average for many of the economies (Figure 1.2.1). In economies like Cambodia and the Philippines, the industry accounted for over 15 percent of GDP and total employment in 2023. Over the past two decades, the tourism sector has expanded at a remarkable pace, with tourist arrivals growing at an average annual rate of 6 percent and tourism expenditure rising by 9 percent. This growth was largely fueled by intraregional tourism, with the share of visitors from ASEAN+3[1] rising from 60 percent in 2000 to about 70 percent in 2024 (Figure 1.2.2). China played a significant role in this growth, with its share of total arrivals more than tripling from 11 percent in 2000 to a peak of 37 percent just before the COVID-19 pandemic.

The pandemic had a devastating impact on the tourism sector. Restrictions on international travel caused visitor arrivals to plummet by 85 percent in 2020, and tourism spending to decline by 78 percent. Economies highly reliant on tourism saw sharp contractions, with the industry's contribution to GDP more than halving and its share of employment falling substantially.

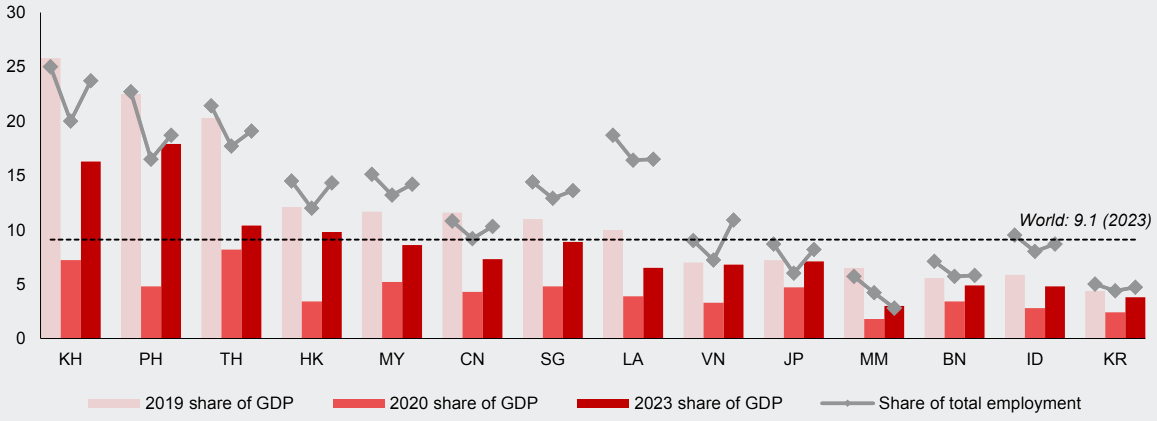
Recovery in the region has lagged behind the global average, with only a few economies—Japan, Korea, Malaysia, Thailand, Vietnam, and Cambodia—seeing tourist arrivals return to pre-pandemic numbers.[2] High transportation and accommodation costs, coupled with broader economic challenges, have been key obstacles to recovery (UNWTO 2024). In Asia-Pacific, 50 percent of experts expect that international tourism will not reach 2019 levels until 2025 or later, compared to just 34 percent globally (UNWTO 2024). While the share of tourist arrivals from China remains below prior to the pandemic, the expected resurgence of outbound Chinese tourism is likely to accelerate the recovery across the region (Figure 1.2.3).

Apart from international tourists, domestic tourism plays a significant role in driving the tourism industry. In 2019, it accounted for 75 percent of total spending—exceeding half of total tourist spending in 8 out of 14 regional economies and surpassing 80 percent in China, Japan, and the Philippines (Figure 1.2.4). This strong domestic tourism growth is driven by a growing or sizable middle-class population, an increase in spending power among domestic consumers, and the large geographical size of some of these economies (WTTC 2018). Domestic tourism played a critical role in supporting the sector's recovery from the pandemic—accounting for 80 percent of total tourist spending in 2023. In 2024, 8 out of 14 regional economies already saw domestic tourist spending reaching or exceeding 2019 levels.

As tourism recovers, shifting preferences are reshaping the sector.

- Average spending per tourist has increased in most economies (Figure 1.2.5), supported by longer

Figure 1.2.1. ASEAN+3: Share of Travel and Tourism in the Economy
(Percent share; 2019, 2020, and 2023)



Source: World Travel and Tourism Council; Organisation for Economic Co-operation and Development; AMRO staff calculations.
Note: Bars and markers refer to the share of travel and tourism to GDP and total employment in 2019, 2020, and 2023.

This box was written by Megan Wen Xi Chong.

1/ Region excluding China, as tourist arrivals by source country is unavailable.

2/ For Cambodia, while total foreign tourist arrivals have surpassed pre-pandemic levels, the increasing share of land arrivals and the lagged recovery in Siem Reap imply relatively shorter stays or lower daily expenditures than pre-pandemic.

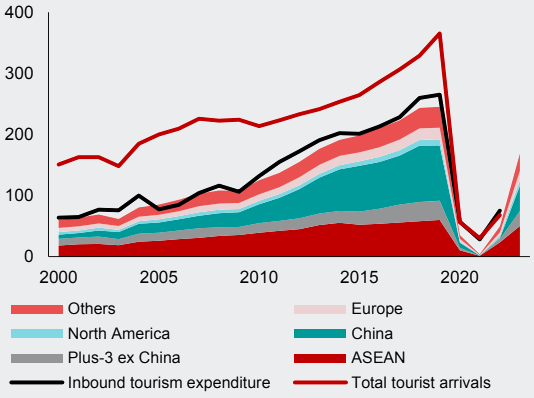
trips; the average length of stay rose from 6.3 days in February 2020 to 7.3 days in March 2024, well above the global average of 5.5 days (Mastercard Economics Institute 2024).[3]

- Travelers are also prioritizing experiences over material purchases. In ASEAN-6 economies, spending on experiences has grown by 60 percent since 2019, far outpacing the 20 percent growth in spending on goods (Mastercard Economics Institute 2023).[4] ADB research also indicates greater preference for proximity tourism and environmentally sustainable tourism, which could boost intraregional tourism (ADB 2022).

- Future trends point to continued emphasis on domestic tourism, driven by shifts in consumer preferences and the economic impact of high inflation (OECD 2023).

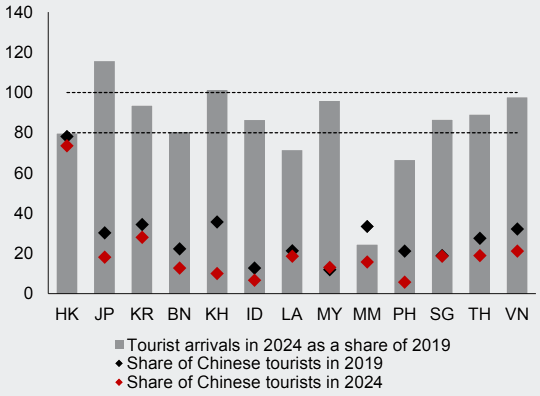
By adapting to these trends, regional economies can harness tourism's potential to remain a key driver of growth and resilience.

Figure 1.2.2. ASEAN+3: Tourist Arrivals by Region
(Million persons; millions of US dollars)



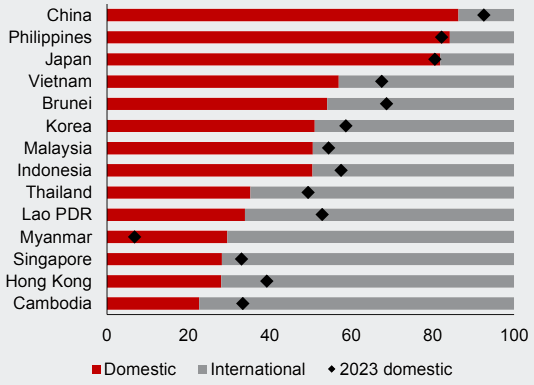
Source: National authorities; ASEANstats; World Tourism Organization via Haver Analytics; AMRO staff calculations.
Note: Plus-3 ex China = Hong Kong, Japan, and Korea. Tourist arrivals by region excludes tourist arrivals in China due to data unavailability.

Figure 1.2.3. Selected ASEAN+3: Tourism Recovery
(Percent of 2019 total; percent share)



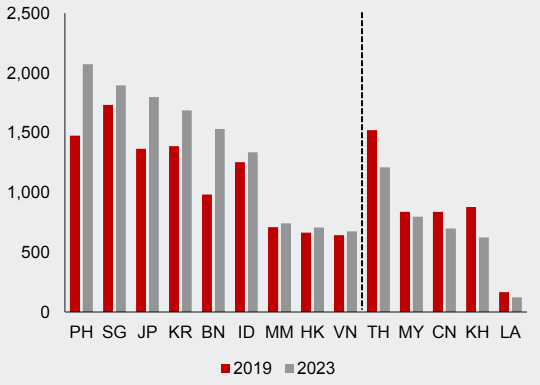
Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: Share of Chinese tourist arrivals data are up to December 2024, except for Japan (November 2024); Brunei, Cambodia, Lao PDR, Myanmar, and Indonesia (2023). Tourist arrivals data are up to December 2024, except for Lao PDR (2023). Horizontal lines are at 80 and 100 percent for ease of reference.

Figure 1.2.4. ASEAN+3: Domestic vs International Visitor Spending
(Percent of total spending)



Source: World Travel and Tourism Council; AMRO staff calculations.

Figure 1.2.5. ASEAN+3: Average Spending Per Tourist
(US dollars)



Source: World Travel and Tourism Council; National authorities via Haver Analytics; National Bureau of Statistics of China; AMRO staff calculations.
Note: BN = Brunei; CN = China; HK = Hong Kong; ID = Indonesia; JP = Japan; KH = Cambodia; KR = Korea; LA = Lao PDR; MY = Malaysia; MM = Myanmar; PH = the Philippines; SG = Singapore; TH = Thailand; VN = Vietnam. Values are calculated as international tourist spending divided by total international tourist arrivals. Values are in constant 2023 prices and exchange rates.

3/ Average across Hong Kong, Indonesia, Japan, Korea, Malaysia, the Philippines, Thailand, and Vietnam.

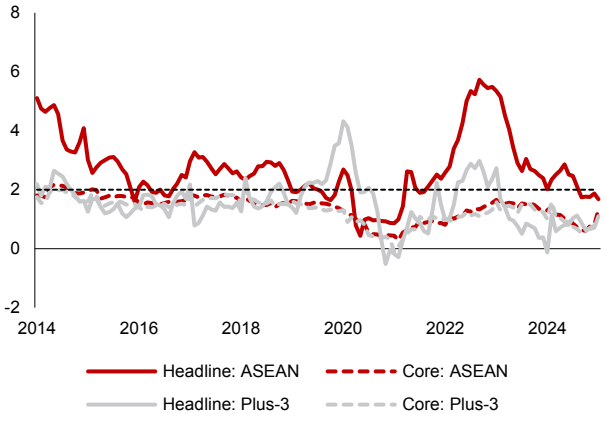
4/ "Experiences" includes tourists spending at restaurants, amusement recreation activities, casinos, nightclubs, bars and other events, while "Things" includes convenience store chains, apparel, cosmetics, sporting goods, jewelry, footwear, bookstores, electronics, toys and department stores. Excludes transportation and lodging spending.

Inflation Normalized from Post-Pandemic Surge

After the extraordinary price pressures of 2022–23, headline and core inflation in ASEAN+3 have normalized to more moderate levels (Figure 1.10). The broad moderation in headline inflation reflected primarily normalizing commodity prices (Figure 1.11), though this trend experienced temporary disruptions throughout the year. Oil prices spiked in April amid escalating Middle East conflicts and rose again in June following OPEC+'s production cuts, pushing up utilities inflation. Shipping disruptions in the Red Sea also led to higher freight costs, temporarily boosting transportation inflation across the region. Rice prices—a food staple in most ASEAN+3 economies—rose in the first half of 2024 as supply was impacted by El Niño and India's rice export ban. Rice prices moderated in the second half of the year due in part to India lifting its export ban on non-basmati rice in September 2024. Core inflation's decline was more gradual but steady, supported by well-anchored inflation expectations and the cumulative effects of earlier monetary policy tightening.

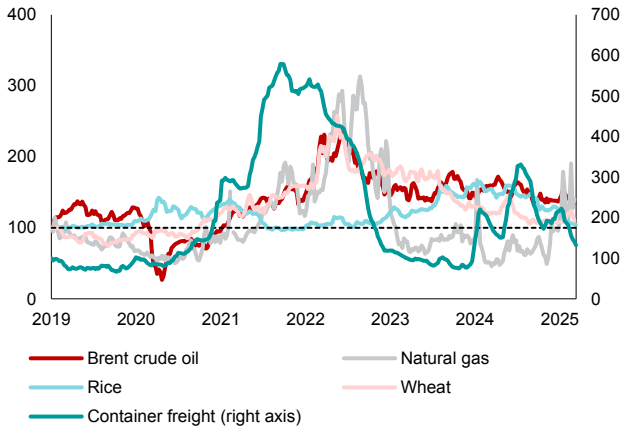
For most ASEAN+3 economies, inflation has stabilized at levels aligned with policy objectives. Headline inflation has retreated from pandemic-period highs across most ASEAN+3 economies, with inflation rates now in line with their pre-pandemic levels. For some economies like Korea and Singapore, inflation remained higher than historical averages but have stabilized at about or below 2 percent, while it has remained above the target in Japan (Figure 1.12). However, Lao PDR and Myanmar have yet to see significant reduction in price pressures, reflecting persistent currency weakness, although in Lao PDR, the exchange rate has stabilized recently due to the adoption of tight monetary policy. A detailed analysis of the region's inflation dynamics during and after the pandemic period is presented in Chapter 2.

Figure 1.10. ASEAN+3: Headline and Core Inflation
(Percent, year-on-year)



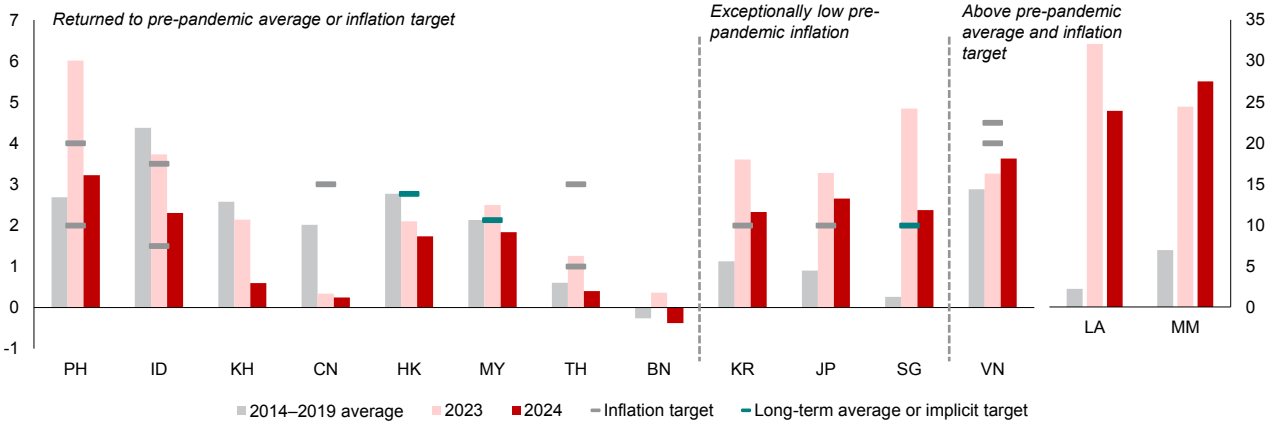
Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: Plus-3 = China, Hong Kong, Japan, and Korea. Regional aggregates are GDP-weighted. Data up to December 2024, except Myanmar (September 2024). Core inflation data excludes Brunei and Myanmar due to data unavailability.

Figure 1.11. World: Selected Commodity and Shipping Prices
(Index, January 4, 2019 = 100)



Source: Energy Information Administration, Drewry Shipping Consultants Ltd via Haver Analytics; AMRO staff calculations.
Note: Freight costs refer to the Drewry Composite Freight Rate for 40-foot containers.

Figure 1.12. ASEAN+3: Headline Inflation
(Percent, year-on-year)



Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: CN= China; HK = Hong Kong; JP = Japan; KR = Korea; ID = Indonesia; MY = Malaysia; PH = the Philippines; SG = Singapore; TH = Thailand; BN = Brunei; KH = Cambodia; LA = Lao PDR; MM = Myanmar; VN = Vietnam. 2024 inflation for Myanmar refers to AMRO staff estimates due to data unavailability. Markers for Hong Kong and Malaysia refer to 2014–2019 average inflation. Singapore's inflation target refers to MAS' implicit target of just under 2 percent for core inflation.

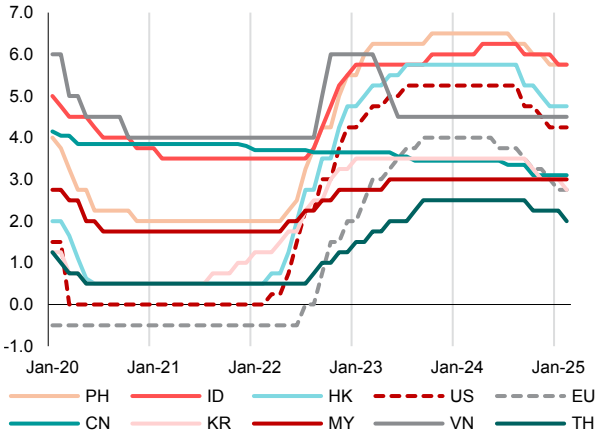
Financial Conditions Continued to Ease

Overall financial conditions in ASEAN+3 tightened in the first half of 2024, but eased in the latter half of the year. The global monetary easing cycle which started with the ECB reducing its policy rate in June, followed by the US Federal Reserve in September, set the stage for most regional central banks to adopt more accommodative stance as inflation had moderated significantly (Figure 1.13). Financial markets reflected this transition with regional sovereign yields declining while equity markets' performance stabilized, particularly after September. Corporate credit conditions also improved with narrowing spreads, while the Federal Reserve's monetary easing and consequent US dollar weakness—particularly in the third quarter of the year—supported regional currencies and portfolio inflows (Figure 1.14). The policy measures introduced by China in the third and fourth quarters to spur domestic demand boosted investor confidence and led to a strong recovery in the equity markets in China and Hong Kong in the last few months of the year.

Credit growth across most ASEAN+3 economies grew at a moderate pace. Bank lending to the nonfinancial private sector was sustained for most regional economies, in line with robust private sector activity (Figure 1.15). However, credit growth in China, Korea and Hong Kong slowed further, reflecting lingering weakness in the real estate sector, while credit in Vietnam and Thailand grew at a slower pace following more moderate domestic economic activities. Nonperforming loan ratios declined for most regional economies, except Cambodia, Vietnam, the Philippines, and Hong Kong reflecting economy-specific factors, including distress in the real estate sector, and the impact of high interest rate and inflationary pressures on the repayment ability of firms and consumers (Figure 1.16). Despite the different trends in credit conditions across the region, ASEAN+3 banks remain well-capitalized, with capital buffers increasing, and remaining well above the regulatory minima (Figure 1.17). See the *ASEAN+3 Financial Stability Report (AFSR) 2024* for more detailed discussions on financial sector developments.

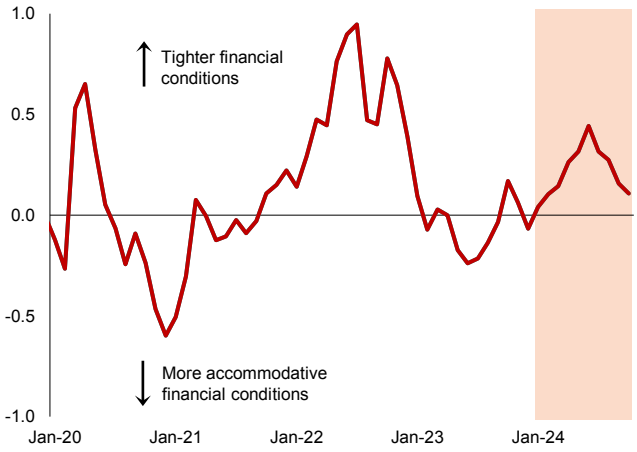
Financial markets' performance broadly improved in the first half followed by increased volatility and reversal in the second half of 2024. In the first half of the year, regional equity market price indices generally rose or remained stable, buoyed by positive investor sentiment and strong performance in the tech sector (Figure 1.18). Bond yields trended downward during this period, as weaker US economic data fueled expectations of rate cuts (Figure 1.19). In the second half, weaker US economic data and renewed tariff concerns triggered financial market volatility leading to a sharp, but brief sell-off in US and regional equities. The sell-off was likely compounded by an unwinding of the yen carry trade, which was triggered by multiple factors including Bank of Japan's monetary policy tightening on 31 July 2024. While most regional equity markets rebounded, Korea's performance remained subdued due to weaker economic indicators and political turmoil. Meanwhile, China's equity markets rallied sharply in late-September following the introduction of major government stimulus measures, and then partially corrected. Bond yields across the region (except China and Korea) rose toward the end of the year as stronger US job data and expectations of sustained higher-than-expected US policy rate reversed prior easing expectations.

Figure 1.13. Selected ASEAN+3: Policy Interest Rates
(Percent)



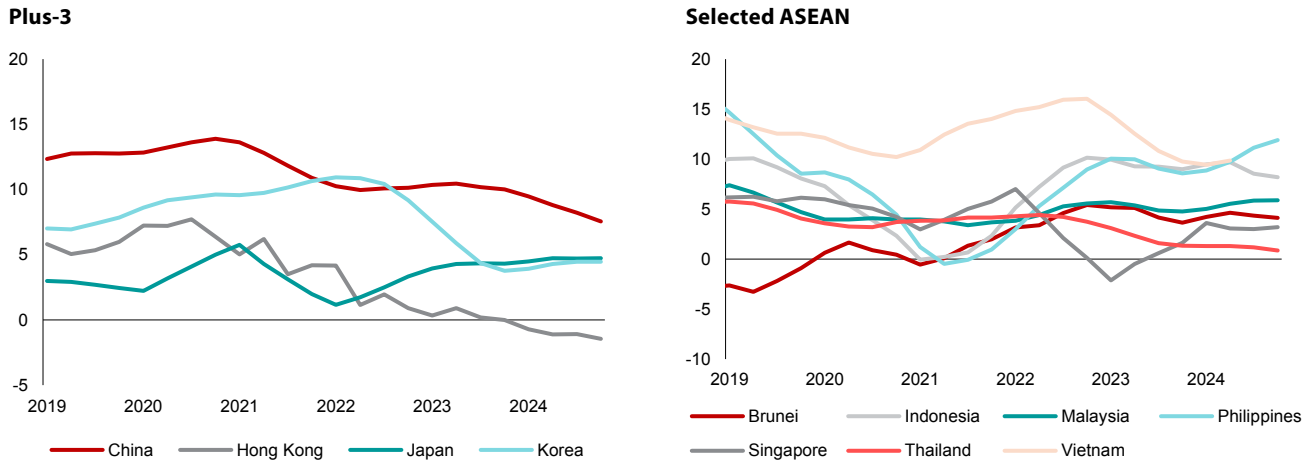
Source: National authorities via Haver Analytics.
Note: Policy rates refer to one-year loan prime rate (China, CN); BI Rate (Indonesia, ID); base rate (Hong Kong, HK; Korea, KR); overnight policy rate (Malaysia, MY); target reverse repurchase rate (the Philippines, PH); one-day repurchase rate (Thailand, TH); refinancing rate (Vietnam, VN); federal funds rate (upper range) (United States, US).

Figure 1.14. Selected ASEAN+3: Financial Conditions Index
(Normalized scores)



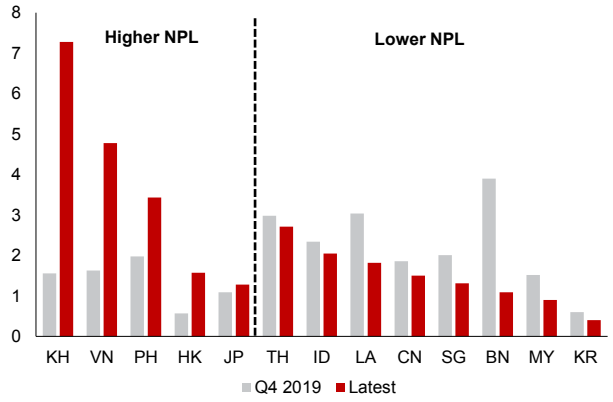
Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates.
Note: AMRO's financial conditions index is based on indicators covering the banking system, foreign exchange market, bond and equity markets. Data covers China, Hong Kong, Indonesia, Korea, Malaysia, the Philippines, Singapore, and Thailand.

Figure 1.15. Selected ASEAN+3: Growth in Credit to Private Nonfinancial Sector
(Percent, year-on-year, four-quarter moving average)



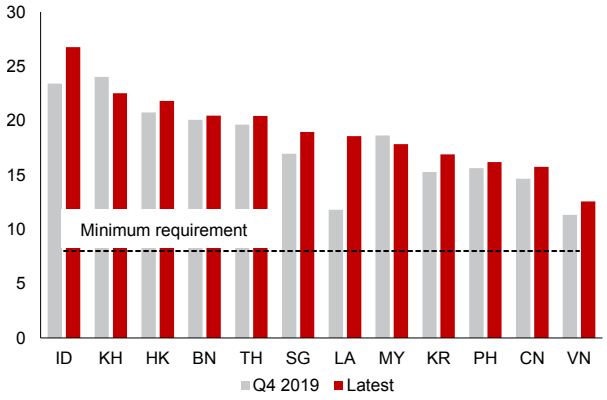
Source: National authorities and International Monetary Fund via Haver Analytics; AMRO staff calculations.
Note: The private nonfinancial sector includes nonfinancial firms and households. Data refer to: claims on nonfinancial institutions and other resident sectors by depository corporations other than the central bank (China); loans and advances by authorized institutions to nonfinancial sectors (Hong Kong); loans to corporations and households by domestic banks (Japan); claims on nonfinancial corporations and households by depository corporations other than the central bank (Korea); claims on the private sector by commercial and rural banks (Indonesia); loans by the banking system (Malaysia); claims on private sector by depository corporations other than the central bank (the Philippines); the sum of household liabilities and credit to nonfinancial corporations (Singapore); and claims on private nonfinancial corporations and other resident sectors by depository corporations other than the central bank (Thailand). Credit growth is calculated based on local currency terms. Remaining economies are omitted due to data unavailability.

Figure 1.16. Selected ASEAN+3: Banking Sector Nonperforming Loan Ratios
(Percent)



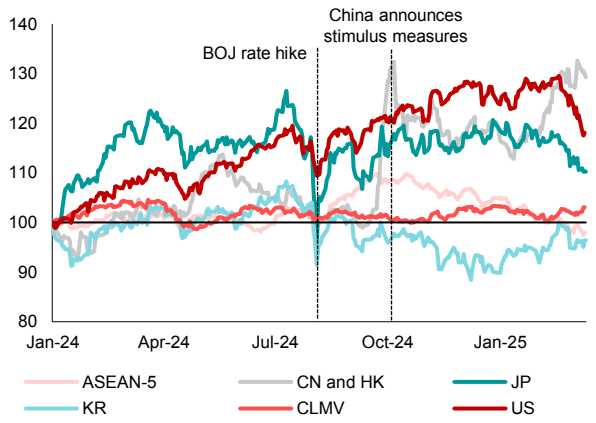
Source: National authorities via Haver Analytics; IMF.
Note: CN= China; HK = Hong Kong; JP = Japan; KR = Korea; ID = Indonesia; MY = Malaysia; PH = the Philippines; SG = Singapore; TH = Thailand; BN = Brunei; KH = Cambodia; LA = Lao PDR; VN = Vietnam. Data are up to Q4 2024, except for Hong Kong, Indonesia, Lao PDR, Philippines (Q3 2024); Japan (Q1 2024), and Vietnam (Q1 2024). Data for Myanmar are unavailable.

Figure 1.17. Selected ASEAN+3: Capital Adequacy Ratio
(Percent of Risk-Weighted Assets)



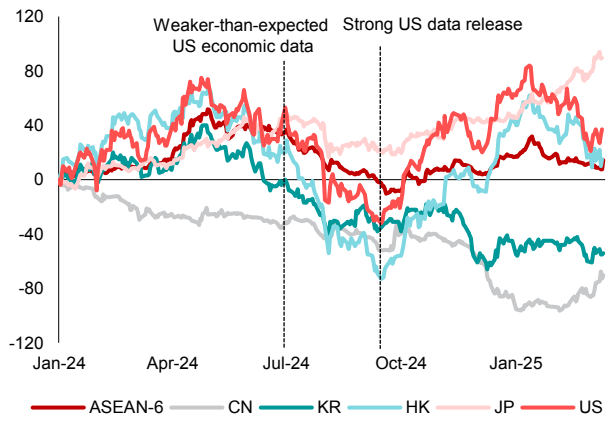
Source: National authorities via CEIC.
Note: CN= China; HK = Hong Kong; KR = Korea; ID = Indonesia; MY = Malaysia; PH = the Philippines; SG = Singapore; TH = Thailand; BN = Brunei; KH = Cambodia; LA = Lao PDR; VN = Vietnam. Data are up to Q4 2024, except for Lao PDR, Singapore, Korea, and Vietnam (Q3 2024).

Figure 1.18. Selected ASEAN+3: Equity Market Indices
(Index, January 2, 2024 = 100)



Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: CN= China; HK = Hong Kong; JP = Japan; KR = Korea; ASEAN-5 = Indonesia, Malaysia, the Philippines, Singapore, and Thailand; CLMV = Cambodia, Lao PDR, Myanmar, and Vietnam. US = United States. Data for Brunei are unavailable.

Figure 1.19. Selected ASEAN+3: 10-year Government Bond Yields
(Basis point change from January 2, 2024)



Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: CN= China; HK = Hong Kong; JP = Japan; KR = Korea; ASEAN-6 (average) is the simple mean of changes for Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam. US = United States. Data are up to March 13, 2025.

External Position Remained Resilient

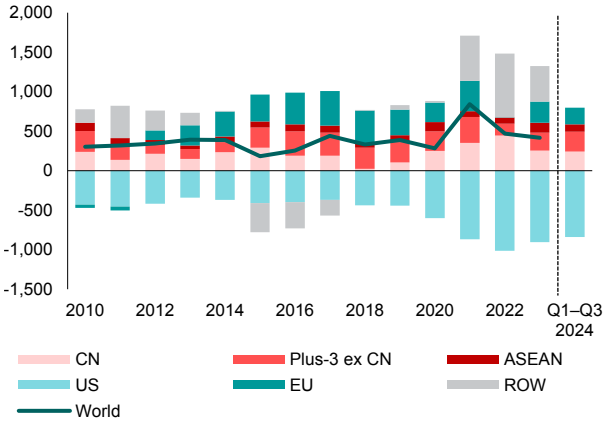
ASEAN+3 maintained a current account surplus and continued to attract foreign direct investment (FDI). Strong exports of goods and services led to a widening of the region's aggregate current account surplus (Figure 1.20). FDI inflows also remained robust, despite shifting investment patterns resulting from ongoing geoeconomic reconfiguration. In terms of subregions, FDI inflows to China continued to moderate, while ASEAN-5 saw higher inflows, and Plus-3 economies, excluding China, continued to receive stable investments (Figure 1.21). For many ASEAN economies, the increase was primarily due to higher FDI from China. The aggregate FDI from China to Indonesia, Malaysia, the Philippines, and Thailand rose from 5.2 percent of total FDI inflows in 2019 to 9.5 percent in the first 3 quarters of 2024—surpassing Japan as the primary source of intraregional FDI.

Meanwhile, nonresident portfolio flows saw strong inflows in the first half before reversing in the second half of the year. ASEAN+3 received nearly USD 100 billion in portfolio inflows in the first half of 2024, as improved global financial conditions and expectations of US monetary policy easing supported investor sentiment. These inflows were mainly channeled into China's bond market and into equity investments in Japan and Korea. In September, China's equity market temporarily surged following the announcement of a major stimulus package to reinvigorate the domestic economy, especially the real estate sector. However, portfolio flows reversed in the second half of the year, with moderate outflows from both bond and equity markets, driven by shifts in global investor sentiment, including expectations of prolonged high US interest rates and concerns over trade policies (Figure 1.22).

Regional exchange rates were also impacted by the shifting expectations of US monetary policy direction. All ASEAN+3 currencies depreciated against the US dollar in the first half of 2024 as a robust US economy fueled expectations of higher-for-longer interest rates (Figure 1.23). This trend reversed from mid-2024 through September with regional currencies appreciating sharply, as weaker US labor market data and declining inflation led to market reassessment of the timing and pace of the Federal Reserve's policy action. However, the appreciation momentum for regional currencies began to wane in the last quarter of the year following concerns over potential US trade policy changes—particularly, increases in US import tariffs and their implications for US inflation and consequently its policy rate trajectory. Both nominal and real effective exchange rates followed similar trajectories with the bilateral exchange rate, although with more moderate fluctuations (Figure 1.24).

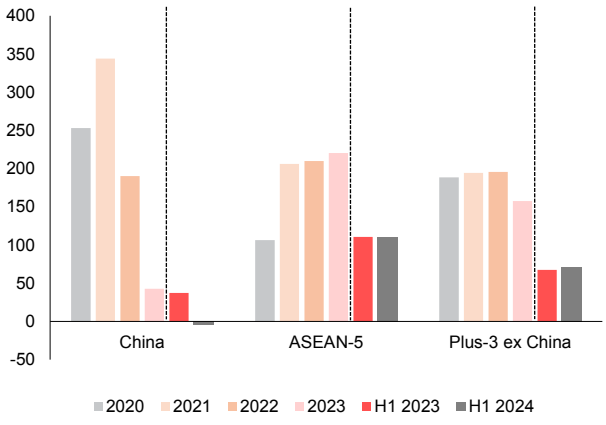
Despite greater global uncertainties and financial market volatility, international reserves for the region remained ample. Regional reserves held steady at around USD 6 trillion or about 23 percent of GDP and more than 40 percent of global reserves—providing a strong buffer against external shocks (Figure 1.25). In particular, the ASEAN-5 region accumulated reserves steadily throughout the year and surpassed its 2021 levels by late-2024. Meanwhile, Plus-3 and BCLV (Brunei, Cambodia, Lao PDR, and Vietnam) economies maintained relatively stable reserves (Figure 1.26).

Figure 1.20. World: Current Account Balance
(Billions of US dollars)



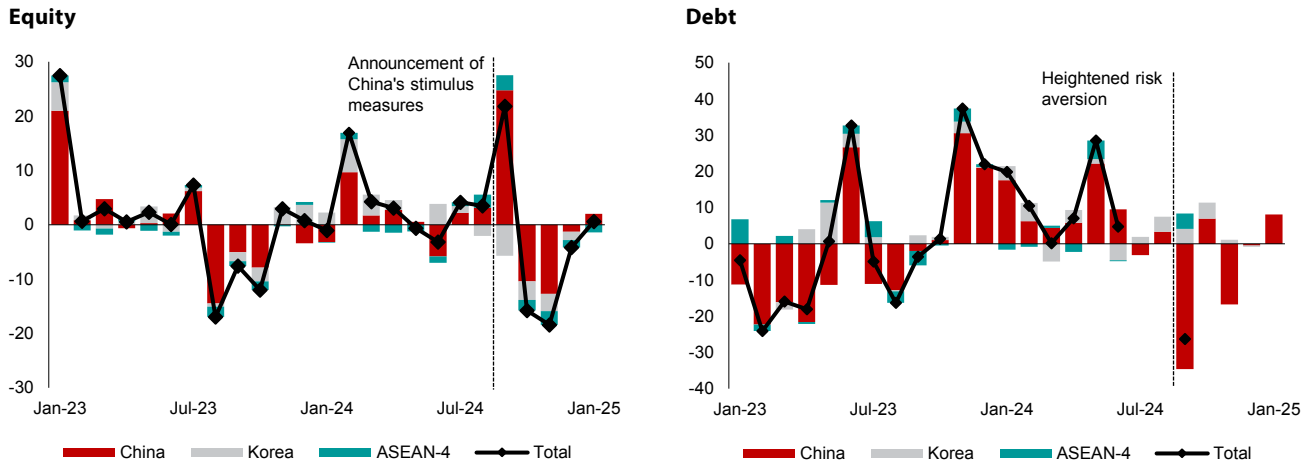
Source: IMF via Haver Analytics; AMRO staff calculations.
Note: Data for Myanmar is up to 2019. CN= China; Plus-3 ex CN = Hong Kong, Japan, and Korea; EU = Euro area; ROW = rest of the world. Data for 2024 are up to Q3, except for Brunei, Lao PDR, and euro area (Q2 2023). Aggregate data for the world is only available up to 2023.

Figure 1.21. Selected ASEAN+3: Foreign Direct Investment, by Regional Grouping
(Billions of US dollars)



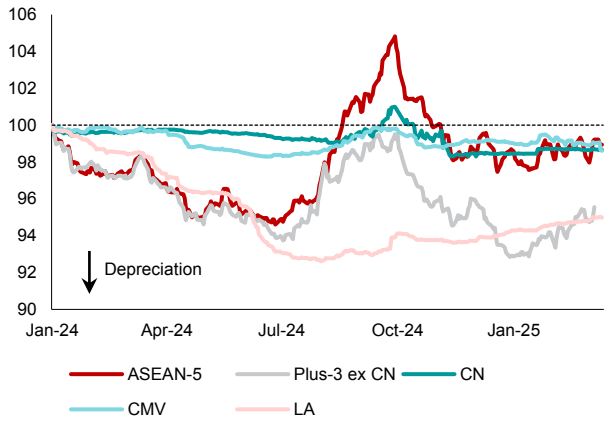
Source: International Financial Statistics database, IMF; AMRO staff calculations.
Note: ASEAN-5 = Indonesia, Malaysia, the Philippines, Singapore, and Thailand; Plus-3 ex China = Hong Kong, Japan, and Korea. Data refer to the direct investment liabilities item in the balance of payments.

Figure 1.22. Selected ASEAN+3: Nonresident Portfolio Flows by Economy
(Billions of US dollars)



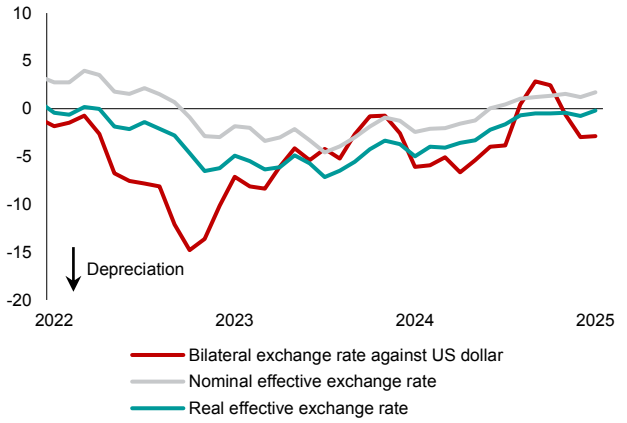
Source: Institute of International Finance via Haver Analytics; AMRO staff calculations.
Note: ASEAN-4 = Indonesia, Malaysia, the Philippines, and Thailand. Data may differ from official balance of payments statistics due to several factors, including differences in data sources, timing of recording (settlement-based vs. trade-based), and scope of transactions included (e.g., reinvested earnings, offshore trading).

Figure 1.23. ASEAN+3: Exchange Rates against the US Dollar
(Index, January 2, 2024 = 100)



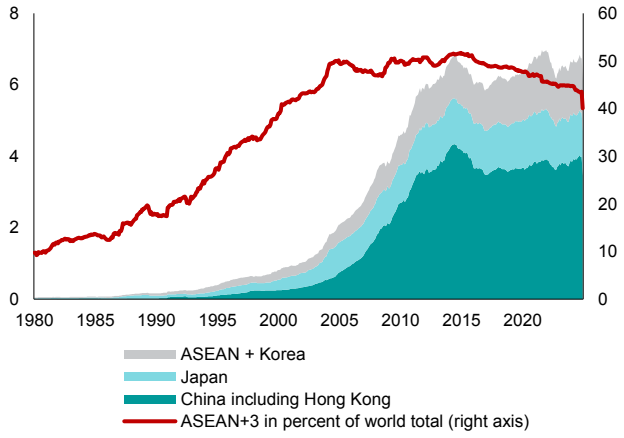
Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: ASEAN-5 = Indonesia, Malaysia, the Philippines, Singapore, and Thailand; CMV = Cambodia, Myanmar, and Vietnam; CN = China; LA = Lao PDR; Plus-3 ex CN = Hong Kong, Japan, and Korea. Exchange rate data are up to March 13, 2025.

Figure 1.24. Selected ASEAN+3: Nominal and Real Effective Exchange Rates
(Percent, year-on-year)



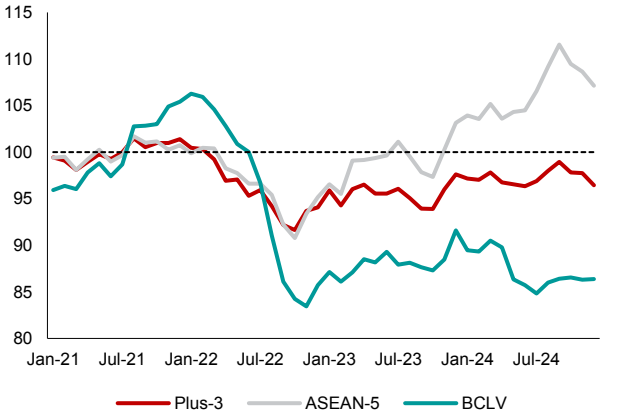
Source: Haver Analytics; Bank for International Settlements via Haver Analytics; AMRO staff calculations.
Note: Selected ASEAN+3 includes China, Hong Kong, Indonesia, Japan, Korea, Malaysia, the Philippines, Singapore, and Thailand. Exchange rate averages are weighted by GDP.

Figure 1.25. ASEAN+3: Net International Reserves
(Trillions of US dollars; percent of total)



Source: IMF via Haver Analytics; AMRO staff calculations.
Note: Data are up to December 2024, except Myanmar (March 2024), Lao PDR (June 2024), and Vietnam (November 2024).

Figure 1.26. Selected ASEAN+3: Net International Reserves by Subregion
(Index, 2021 average = 100)



Source: National authorities; IMF via Haver Analytics; AMRO staff calculations.
Note: ASEAN-5 = Indonesia, Malaysia, the Philippines, Singapore, and Thailand; BCLV = Brunei, Cambodia, Lao PDR, and Vietnam; Plus-3 = China, Hong Kong, Japan, and Korea. Data excludes scheduled contractual commitments in foreign currencies. Data are up to December 2024, except Lao PDR (June 2024), and Vietnam (November 2024). Singapore's foreign exchange reserves have been adjusted for transfers to its sovereign wealth fund. Myanmar is omitted due to data unavailability.

II. Outlook for ASEAN+3: Steady Growth amid Heightened Uncertainties

AMRO staff expect growth for the ASEAN+3 region to remain above 4 percent in 2025 and 2026. Regional growth is projected to remain resilient at 4.2 percent in 2025, before moderating to 4.1 percent in 2026 (Table 1.1). The outlook reflects steady expansion in Plus-3 economies in 2025, which helps offset an expected moderation in ASEAN growth. As both subregions trend toward their respective potential growth rates, regional growth is anticipated to move closer to 4 percent in 2026.

- ***Plus-3.*** Growth is projected to remain steady in 2025, supported by stronger activity in Japan as private sector spending picks up. However, growth in other Plus-3 economies is expected to moderate. In China, while the property sector is showing signs of stabilization, growth is likely to face headwinds from higher US tariffs. The impact of rising global trade tensions is also expected to weigh on activity in Hong Kong and Korea. Growth across Plus-3 economies is projected to moderate further in 2026 as output gaps close.

- ***ASEAN.*** Growth is expected to ease in 2025–2026, following the strong export recovery in 2024. Indonesia, the Philippines, Vietnam, and Cambodia are projected to lead growth in the subregion, growing above the ASEAN average. Other economies are likely to experience more moderate growth amid increased external headwinds. In Myanmar, economic activity is expected to remain subdued due to the continuing prolonged state of emergency.

Headline inflation is expected to rise in 2025 but is estimated to remain low at 1.7 percent.[1] Aggregate regional inflation is projected to increase from 1.2 percent in 2024 to 1.7 percent in 2025 and 2026, primarily reflecting higher inflation in the Plus-3 economies. In China, inflation is projected to rise gradually from a low base, driven mainly by improving domestic demand. Inflation in some ASEAN economies is expected to face temporary upward pressures in 2025 due to planned subsidy rationalization measures, with these effects likely to dissipate in 2026. In Lao PDR and Myanmar, continued currency depreciation and base year effects are expected to keep headline inflation elevated. Excluding these two economies, regional inflation is projected to remain stable at about 2 percent over 2025–2026, supported by stable global commodity prices and well-anchored inflation expectations (see further analysis of inflation dynamics in Chapter 2).

ASEAN+3 is set to remain a key driver of global growth in the medium term. The region is forecast to expand by an average of 4.3 percent in 2025–2030, outpacing global growth of 3.2 percent (Figure 1.27). The medium-term outlook is underpinned by the region's strong macroeconomic fundamentals and domestic demand from its rapidly growing middle class, as well as the prospects of improvements in technological capabilities and further deepening production networks, with Plus-3 economies leading in advanced technologies and ASEAN economies moving up global value chains (Box 1.3 and Chapter 3 feature analysis of the long-term growth drivers for the region). However, in the short-to-medium term, external challenges remain, with global trade uncertainty and shifting supply chains posing headwinds to growth. Nonetheless, resilient domestic demand and strengthening intraregional trade will help offset some of these pressures. ASEAN+3 is thus poised to contribute about 43.4 percent of global growth, slightly below its pre-pandemic average of 44.6 percent due mainly to a moderation in potential growth of China as it moves towards advanced economy status (Figure 1.28).

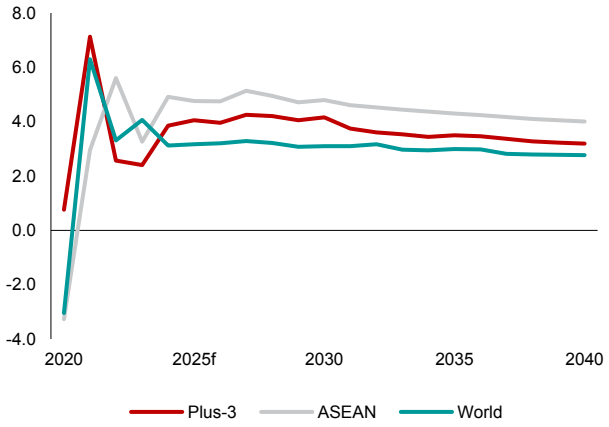
[1/] Regional inflation aggregates are now weighted by 2024 GDP at purchasing power parity, whereas previous reports used simple averages.

Table 1.1. ASEAN+3: AMRO Staff Growth and Inflation Estimates and Forecasts, 2025–26
(Percent, year-on-year)

Economies	GDP Growth			Inflation		
	2024e	2025f	2026f	2024e	2025f	2026f
ASEAN+3	**4.3**	**4.2**	**4.1**	**1.2**	**1.7**	**1.7**
Plus-3	**4.1**	**4.1**	**4.0**	**0.7**	**1.4**	**1.5**
China	5.0	4.8	4.7	0.2	1.1	1.3
Hong Kong	2.5	2.4	2.3	1.7	2.2	2.0
Japan	0.1	1.3	1.0	2.7	2.5	2.1
Korea	2.0	1.6	1.9	2.3	1.9	1.8
ASEAN	**4.9**	**4.7**	**4.7**	**2.9**	**3.0**	**2.9**
Brunei	4.2	2.6	2.6	–0.4	0.6	0.4
Cambodia	6.0	5.8	6.0	0.8	2.9	2.5
Indonesia	5.0	5.0	5.1	2.3	2.2	2.7
Lao PDR	4.5	4.6	4.6	23.1	10.1	6.4
Malaysia	5.1	4.7	4.5	1.8	2.7	2.5
Myanmar	3.2	1.0	1.0	27.5	25.0	18.0
Philippines	5.7	6.3	6.3	3.2	3.3	3.2
Singapore	4.4	2.7	2.4	2.4	1.8	1.8
Thailand	2.5	2.9	3.0	0.4	1.2	1.3
Vietnam	7.1	6.5	6.2	3.6	3.5	3.0

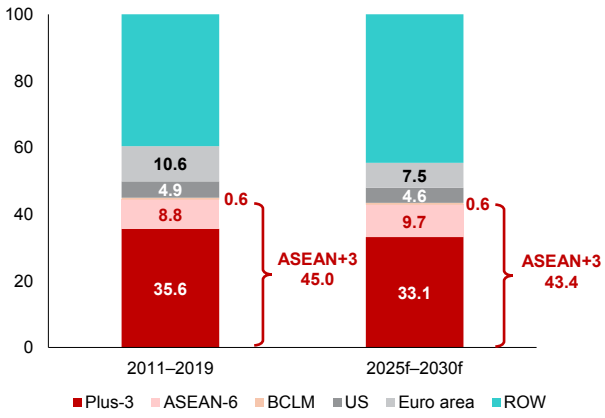
Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates and forecasts.
Note: e = estimates; f = forecast. Myanmar's growth and inflation numbers are based on its fiscal year, which runs from April 1 to March 31. Inflation estimates and forecasts refer to the yearly average; regional aggregates for growth and inflation are estimated using the weighted average of 2024 GDP on purchasing power parity basis.

Figure 1.27. World: Real GDP Growth on PPP Basis
(Percent, year-on-year)



Source: National authorities via Haver Analytics; Oxford Economics; AMRO staff calculations.
Note: Plus-3 = China, Hong Kong, Japan, and Korea; f = forecast. Real GDP is forecast in local currency and converted to purchasing power parity (PPP).

Figure 1.28. World: Contribution to Real GDP Growth on PPP Basis
(Percent share)



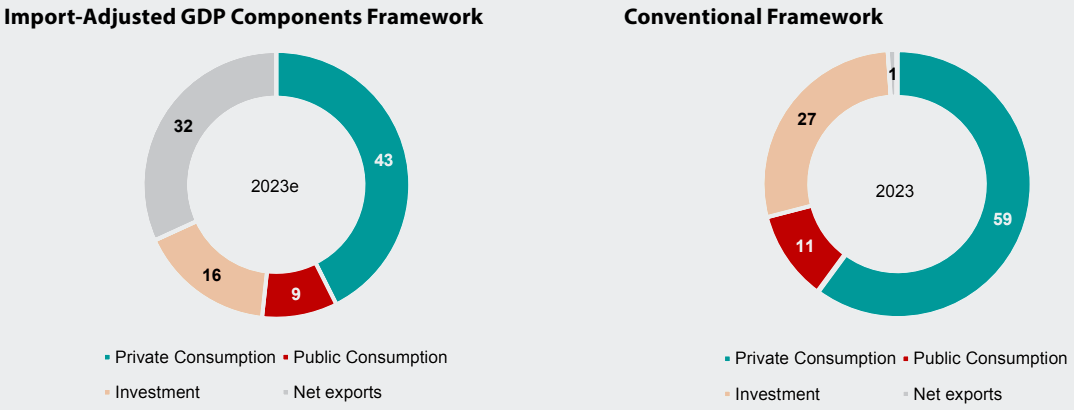
Source: National authorities via Haver Analytics; Oxford Economics; IMF *World Economic Outlook* January Update 2024; AMRO staff calculations
Note: ASEAN-6 = Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam; BCLM = Brunei, Cambodia, Lao PDR, and Myanmar; Plus-3 = China, Hong Kong, Japan, and Korea; ROW = rest of the world. f = forecast. Real GDP is forecast in local currency and converted to purchasing power parity (PPP).

Box 1.3:

Evolution of Growth Drivers in ASEAN-4 and Vietnam: Analysis Using the Import-Adjusted GDP Component Framework[1]

Over the past decades, ASEAN-4 (Indonesia, Malaysia, the Philippines, Thailand) and Vietnam have emerged as a key growth powerhouse in the region, shaped by a dynamic mix of export-oriented industrialization, expanding domestic consumption fueled by a growing middle class, and sustained foreign direct investment. However, the composition and the relative contributions of these drivers have evolved over time. Conventional methods of analyzing growth drivers, while useful for deriving the contribution of net exports to GDP growth, can obscure true growth drivers by overstating the true impact of domestic demand on domestic value-added, as imports that help satisfy domestic demand (consumption and investment) are not netted out (Figure 1.3.1). This box examines the evolution of growth drivers in ASEAN-4 and Vietnam using the import-adjusted GDP (IAGDP) framework.

Figure 1.3.1. ASEAN-4 and Vietnam: GDP Decomposition (Expenditure Components)
(Share of GDP, 2023)



Source: National authorities; Organisation for Economic Co-operation and Development; AMRO staff estimates.
Note: Data may not add up because statistical discrepancies are not shown. Regional aggregations are based on simple averages.

Pre-2008/2009 Global Financial Crisis: Toward a More Export-Oriented Economy

Applying the IAGDP framework to the demand components in ASEAN-4 and Vietnam reveals key insights into the drivers of economic expansion before the global financial crisis. During this period, aggressive export-oriented industrialization drove rapid growth, leveraging comparative advantages in manufacturing to penetrate global markets and deepen integration into the global economy.

A study by Tan and Khut (2024) revealed that exports accounted for about half of the bloc's growth during this period (Figure 1.3.2a). The United States and the European Union were key export markets, driving demand for goods from electronics and textiles to palm oil and rubber. This fueled the expansion of manufacturing sectors, creating jobs and driving technological and productivity improvements. As these countries developed their export capabilities, they cemented their positions in global supply chains, which not only facilitated foreign direct investment but also fostered technology transfer and skill development, further enhancing the region's economic resilience.

ASEAN-4 and Vietnam's reliance on external markets underscored their deep integration with global economic trends. Before the global financial crisis, their strategies focused on enhancing competitiveness and attracting investment, leading to a robust growth trajectory. This increasing openness made them more dependent on external demand until the outbreak of the crisis.

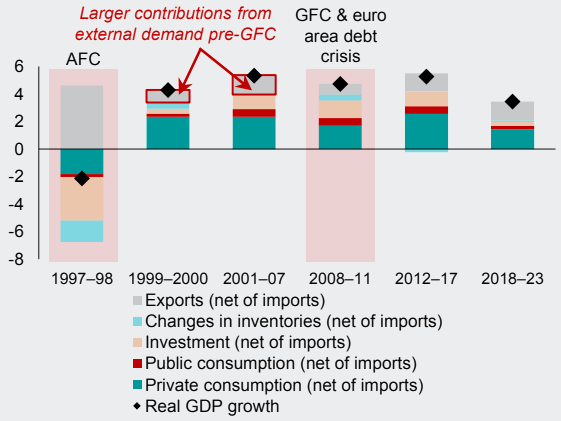
This box was written by Anthony Tan and Vanne Khut.

1/ This box is based on AMRO staff working paper "Changing Growth Drivers in the ASEAN+3 Region: An Import-Adjusted GDP Component Approach" by Anthony Tan and Vanne Khut, published on October 18, 2024.

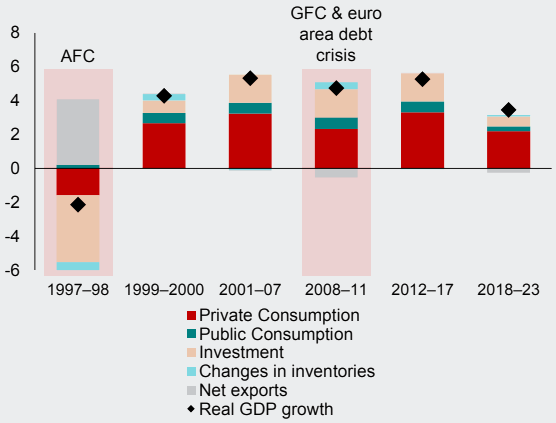
In contrast, the conventional growth accounting framework suggests that external demand contributed little to GDP growth, despite strong evidence that exports drove recovery from the Asian Financial Crisis till 2001–2007 (Figure 1.3.2b).[2] This underestimation overlooks the crucial role of exports in the recovery and the profound impact on these economies' growth trajectories in the period before the global financial crisis.

Figure 1.3.2. ASEAN-4 and Vietnam: Contributions to Real GDP Growth (Conventional vs IAGDP Framework)
(Percentage point contributions)

(a) IAGDP Framework



(b) Conventional Framework



Source: National authorities; Organisation for Economic Co-operation and Development; IMF; World Bank; AMRO staff estimates.
Note: Statistical discrepancies are not shown. AFC = Asian Financial Crisis; GFC = global financial crisis; ASEAN-4 = Indonesia, Malaysia, the Philippines and Thailand. Growth is aggregated based on simple averages.

Post-Crisis: Emerging Strength of Domestic Demand Amid Weaker Global Trade

The global financial crisis marked a turning point for the global economy. Along with the euro area sovereign debt crisis, it led to a collapse in global trade, which weakened global growth expectations as the United States and Europe underwent multiyear deleveraging. With weak growth in advanced economies, regional economies saw a relative shift toward domestic demand, which anchored the region's robust growth over the past decade (Hinojales and others 2023; AMRO 2018; AMRO 2020).

Several factors drove the strengthening of regional domestic demand. Rapid urbanization has expanded cities and new economic hubs, increasing demand for housing, infrastructure, and services. A growing middle class with higher disposable incomes has boosted consumption, particularly in retail, healthcare, and education (Tan and Khut 2024). Furthermore, regional integration through trade agreements and improved infrastructure has strengthened intraregional trade and investment, reducing reliance on external demand, especially from major advanced economies. In ASEAN-4 and Vietnam, the share of exports in real GDP is estimated to have fallen from nearly 40 percent in 2005 to about 30 percent in 2023 (Figure 1.3.3). This is also reflected in international trade statistics, where the United States and European Union share of the region's gross exports fell from 18 percent in 2005 to 13 percent in 2023.[3] Recent escalation of global trade tensions and rising protectionism have further weighed on exports over the last five years.

Although domestic demand has become the primary growth engine after the global financial crisis, exports remain crucial, especially for trade-dependent economies like Hong Kong, Singapore, Korea, Vietnam, and Cambodia. Nevertheless, deeper regional integration through trade agreements and improved connectivity has significantly increased intra-regional trade, reducing their reliance on external demand. In particular, ASEAN economies have also seen structural changes in sources of demand, moving away from traditional markets like United States and the European Union. With deeper regional integration, China has emerged as a key export partner for both intermediate and final goods, absorbing about 16 percent of ASEAN's total domestic value-added in gross exports in 2023—double the 8 percent in 2005—surpassing the United States (Figure 1.3.4).

2/ Growth in ASEAN-4 economies rebounded in 1999, mainly attributable to the increase in exports, particularly electronics-related goods to the United States and Japanese markets as well as intraregional trade (Fujita and Noguchi 2000).

3/ Source: World Integrated Trade Solutions by World Bank; AMRO staff calculations.

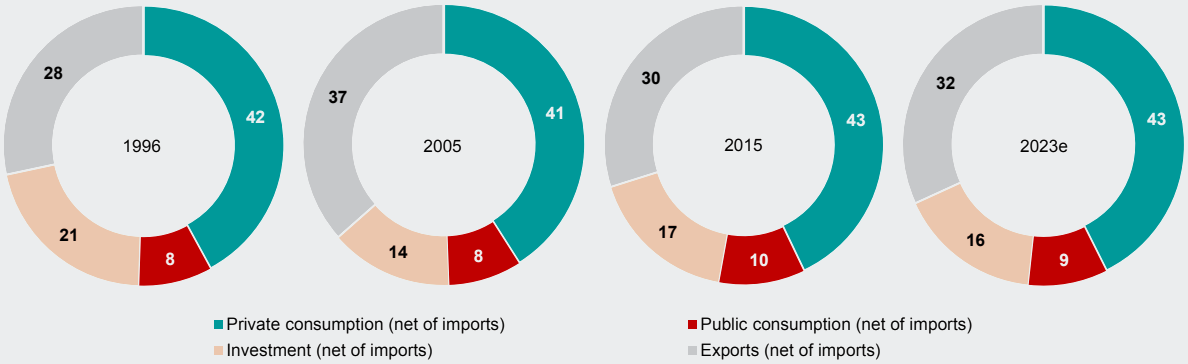
Looking Ahead: Strengthening Intraregional Connectivity and Bolstering Regionalism

Intensifying geostrategic rivalry, alongside ongoing geopolitical conflicts in Europe and the Middle East, has highlighted ASEAN's need to safeguard growth, stability, and strategic autonomy. External challenges like rising protectionism and trade disruptions have prompted ASEAN to deepen regional economic integration as a buffer against external shocks. Strengthening intraregional connectivity and regionalism has become central to building economic resilience.

In this context, the Regional Comprehensive Economic Partnership (RCEP), which took effect on January 1, 2022, was a pivotal achievement. It aims to reduce tariffs and nontariff barriers, facilitate freer trade in goods and services, promote investment, and strengthen supply chains. By harmonizing trade rules across diverse economies, RCEP offers ASEAN countries a platform to deepen economic ties with regional partners while reducing reliance on traditional markets like the United States and the European Union. In addition, it enables ASEAN to assert a role in shaping regional economic architecture amid global uncertainties. As a cornerstone for trade diversification, enhanced competitiveness, and inclusive growth, RCEP reflects ASEAN's commitment to resilience and its proactive approach to navigating the complexities of an evolving global order.

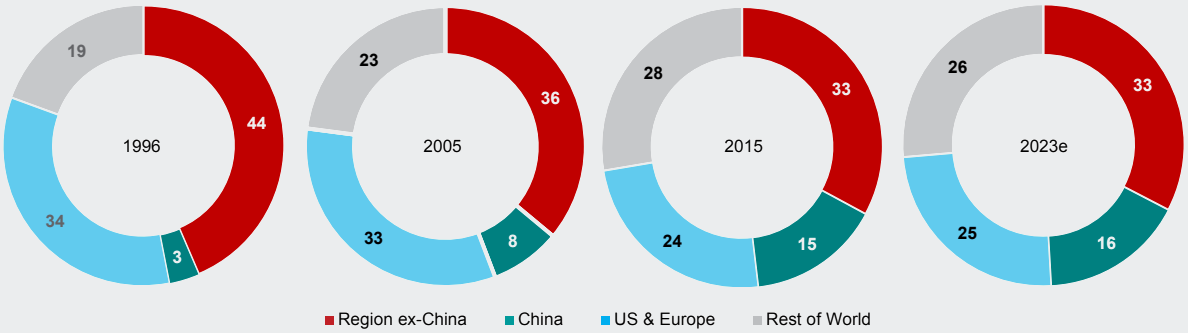
ASEAN's shifting growth dynamics reflects a broader evolution toward resilience and adaptability. While domestic demand has become a primary growth driver, exports remain crucial for trade-dependent economies, albeit with more diversified destinations. Rising intraregional trade and investment have also reduced vulnerability to external shocks. Amid geopolitical tensions and increasing protectionism, deeper regional cooperation in trade, investment, and financial integration is essential. Such efforts will help ASEAN strengthen its internal market, leverage its collective economic potential, and maintain its position as a vital contributor to global growth.

Figure 1.3.3. ASEAN-4 and Vietnam: GDP Decomposition (IAGDP Framework), Selected Years



Source: National authorities; Organisation for Economic Co-operation and Development; AMRO staff estimates.
Note: Data may not add up due to rounding. Regional aggregations are based on simple averages.

Figure 1.3.4. ASEAN: Domestic Value-Added Embodied in Gross Exports
(Selected Final Demand Destinations)



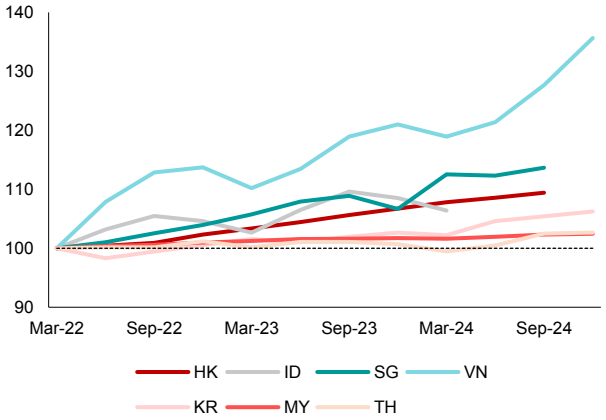
Source: Organisation for Economic Co-operation and Development TiVA; AMRO staff estimates.
Note: Domestic value-added content of gross exports includes the value-added generated by the exporting industry during its production processes as well as any value-added coming from upstream domestic suppliers that is embodied in the exports. Region refers to ASEAN+3 economies, excluding Lao PDR and Myanmar due to data unavailability. Europe refers to EU28. The data points refer to the median shares.

Key Factors Shaping Near-Term Outlook

ASEAN+3 growth is expected to remain steady in 2025 and 2026, but the baseline outlook is subject to significant uncertainties. Under AMRO's baseline forecast, growth is projected to remain firm, underpinned by strong domestic demand, with external demand providing additional support. Private consumption and investment will be the main growth drivers, supported by rising wages, stable inflation, and sustained FDI inflows. Support from external demand is expected to come from the semiconductor cycle, steady US demand, and continued recovery and expansion in tourism, though this contribution will be restrained by slower global trade growth and rising trade protectionism. AMRO's baseline projection assumes the imposition of 10 percent tariff on US imports from China beginning in the first quarter of 2025, followed by another 10 percent tariffs beginning in the second quarter and a further increase of 5 percent in the third quarter of 2025. This baseline outlook, however, is subject to considerable uncertainties. In particular, disorderly escalation of trade tension driven by erratic US trade policies could upend the anticipated steady growth path of the region.

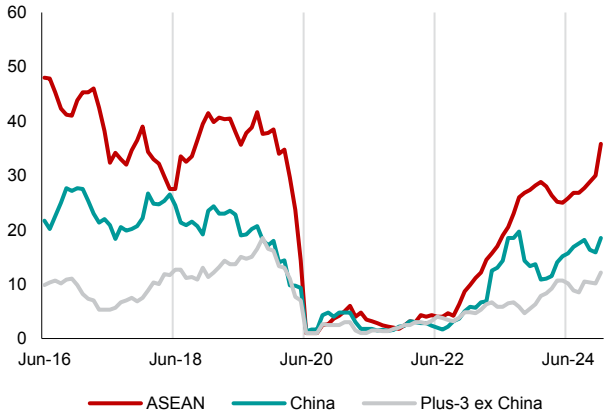
Robust domestic demand will be the key driver of growth. Private consumption is set to remain strong, supported by rising household incomes, improving labor market conditions, and low inflation (Figure 1.29). At the same time, domestic investment is gaining momentum, buoyed by sustained FDI inflows. The region continues to attract substantial FDI commitments, reflecting investor confidence in its long-term prospects—underpinned by a large and growing consumer base, competitive labor costs, expanding digital economy, a well-developed manufacturing ecosystem, and strategic position in global supply chains (Figure 1.30). Investment activity is expected to be reinforced by infrastructure development and the ongoing expansion in export-oriented sectors. In China, ongoing policy measures are likely to continue to provide support to overall investment activities and recovery in the real estate sector (Box 1.4).

Figure 1.29. Selected ASEAN+3: Nominal Wages
(Index, Q1 2022 = 100, seasonally adjusted)



Source: National authorities via Haver Analytics; AMRO staff calculations.
HK = Hong Kong; ID = Indonesia; KR = Korea; MY = Malaysia; SG = Singapore; TH = Thailand; VN = Vietnam.

Figure 1.30. ASEAN+3: Aggregate Inward Investment Announcements by Subregion
(Number of projects)



Source: Orbis Crossborder; AMRO staff calculations.
Note: Plus-3 ex China = Hong Kong, Japan, and Korea. Data refers to the six-month moving average number of announced projects for each month. Data is up to December 2024.

Box 1.4:

China's Growth and Policy Outlook: A Brief Overview

China's gradual and still-uneven economic recovery extended into 2024, supported by policy measures that kept growth on track and a recovery in exports. After a strong start, growth weakened between March and September, before picking up in October, for a 5.0 percent annual growth (Figure 1.4.1). Recovery gained traction after September as the authorities' comprehensive fiscal, monetary, and real estate policy measures bolstered confidence. After expanding significantly at the start of the year, industrial production slowed thereafter, while consumption growth fluctuated before stabilizing in the fourth quarter. Fixed asset investment excluding real estate grew robustly, led by high-tech sectors, but lost momentum in the second quarter. Export recovered strongly led by an upswing in the semiconductor cycle and stronger consumer spending in the US and Europe. In December 2024 and January 2025, authorities signaled more expansionary policies in the year ahead to support growth and address challenges.

Inflation remains low, reflecting weak demand, strong competition, and a bumper harvest of agricultural products, with consumer price inflation at 0.2 percent in 2024 (Figure 1.4.2). Some supply-side factors that contribute significantly to low inflation have benefited businesses and households. For example, the fall in factory-gate prices, coupled with the depreciation of the renminbi, has lowered China's export prices, making its manufacturing exports more competitive.

Adjustments in the real estate sector are ongoing, facilitated by an array of policy measures, with the sector likely to bottom out by mid-2025. However, property prices have continued to fall across most of the 70 major cities, although housing transactions have started to pick up from a low base. These trends are consistent with the real estate cycle being in the early phase of recovery. AMRO staff's recent discussions with property developers and analysts suggest that the sector may bottom out around the middle of 2025, as policy measures take fuller effect.

China's near-term economic growth outlook is relatively positive, though risks remain. Consumption will be a key driver, supported by lower interest rates and improved local government finances. Investment in infrastructure, high-tech manufacturing, and services are expected to gain traction in 2025, while real estate investment is expected to bottom out by middle of 2025. This economic recovery should be further enhanced by policy measures aimed at boosting enterprises' upgrading of industrial equipment. The strong export sector is likely to moderate due to a turnaround in the tech cycle and other headwinds from US protectionist policy. After expanding by 5 percent in 2024, AMRO projects China's GDP growth to moderate to 4.8 percent in 2025, and 4.7 percent in 2026, before slowing to its estimated potential of 4.0 percent in 2030.

China faces several risks. Externally, escalating geopolitical tensions and emerging protectionist measures by the new US administration could slow global growth and weigh on exports, dampen investment sentiment, and increase financial market volatility. Domestically, real estate sector uncertainty, local governments financial strains, and weaker asset quality in some banks pose challenges. While the likelihood of near-term risks materializing is moderate, longer-term challenges—such as climate change, population aging, labor force shrinkage, and geoeconomic fragmentation—represent greater threats.

Nonetheless, China has policy space to manage these risks, undertake further economic restructuring, and continue pursuing high-quality growth. Macroeconomic fundamentals remain sound, supported by structural reforms that have strengthened the economy and financial system. Fiscal and monetary policy space remains sizable to safeguard macro stability and support economic restructuring. The external position remains strong, with sustained current account surpluses and ample foreign reserves (Figures1.4.3 and 1.4.4). The banking system remains sound with strong capital buffers,

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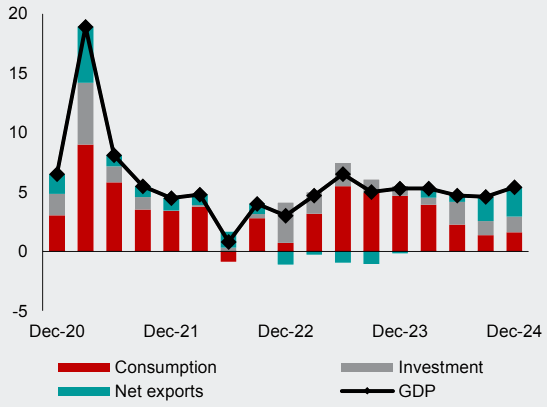
This box was written by Suan Yong Foo.

though some banks with large exposures to the real estate sector may need capital injection (Figure 1.4.5). On the fiscal front, authorities are balancing proactive fiscal policy measures with restoring fiscal buffers. In the near term, a proactive fiscal stance remains appropriate. Fiscal policy should continue to provide targeted support for economic recovery and job creation while keeping the budget deficit in check (Figure 1.4.6).

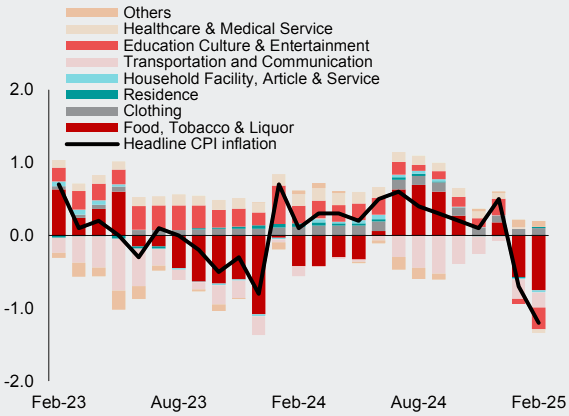
To fully realize its economic potential, China would need to strengthen reforms, rebalance the economy towards domestic demand, and leverage technology to drive productivity and new growth engines—including the development of emerging strategic industries and the "low-altitude economy". Efforts to strengthen resilience against trade sanctions include expanding high-tech manufacturing, particularly advanced semiconductors, and growing the renewable energy sector. Key policy priorities include comprehensive, multiyear plans focused on revitalizing real estate, enhancing production capacity, diversifying markets to counter protectionism, and collaborating with partners to strengthen a rules-based multilateral trading system, including regional free trade arrangements.

Figure 1.4.1. China: GDP Growth
(Percent, year-on-year)



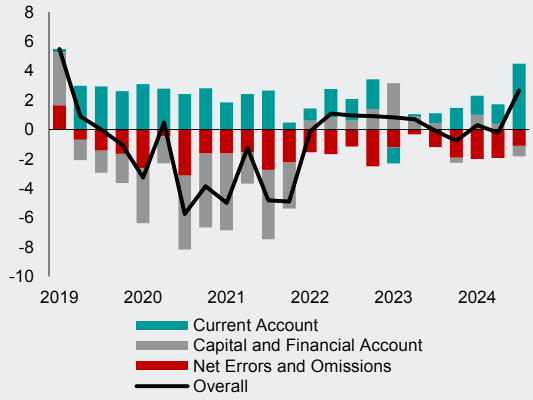
Source: China NBS; Wind.

Figure 1.4.2. China: CPI Inflation
(Percent, year-on-year)



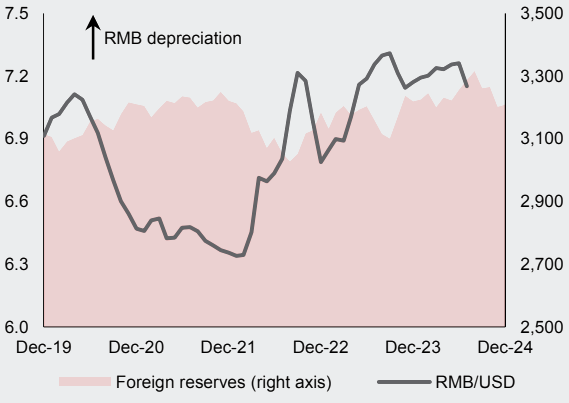
Source: China NBS, CEIC.

Figure 1.4.3. China: Balance of Payments
(Percent of GDP)



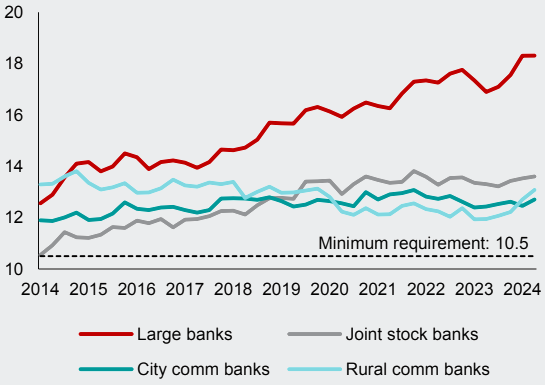
Source: China NBS, CEIC.

Figure 1.4.4. China: Foreign Currency Reserves
(RMB per USD; USD Billion)



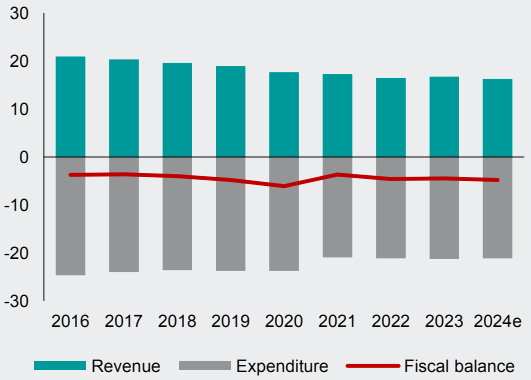
Source: China NBS, CEIC.

Figure 1.4.5. China: Banking System Capital Adequacy Ratio
(Percent)



Source: China NBS, CEIC.

Figure 1.4.6. China: Total Fiscal Revenue and Total Fiscal Expenditure
(Percent of GDP)



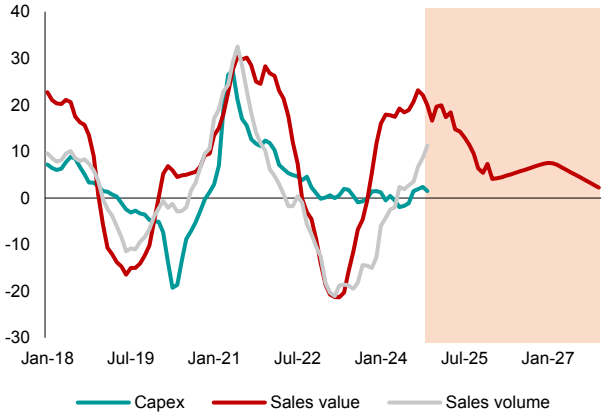
Source: China NBS, CEIC; AMRO staff estimation.
Note: Fiscal balance is derived based on the revenue and expenditure from China's general public budget. e = estimates.

External demand is expected to provide additional lift to growth. The US economy is projected to remain resilient and continue to support demand for ASEAN+3 exports. In the technology sector, global semiconductor sales are forecast to grow by 11.2 percent in 2025, moderating from the 19 percent rebound in 2024 (Figure 1.31). While demand for advanced integrated circuits remains firm and a rebound in sensors and optoelectronics is anticipated, semiconductor-related capital expenditure has begun to moderate, suggesting softening exports demand in the second half of 2025. Services exports, particularly tourism and modern services, offer brighter prospects. Tourist arrivals are set to increase further, supported by normalized travel patterns, visa-free policies, improved flight connectivity, and rising Chinese outbound tourism (Figure 1.32). Modern services exports are also expanding, driven by continued growth in IT, software development, and healthcare services.

The near-term outlook for the region is subject to considerable uncertainties. Studies have shown that heightened uncertainty can adversely affect growth through both real and financial sector channels (Londono, Ma, and Wilson 2021; Miescu 2023). Faced with elevated uncertainty, firms typically adopt a "wait-and-see" approach, leading to reduced private investment as businesses hesitate to initiate new projects or expand existing ones (Leduc and Liu 2016). This conservative stance in business planning and investment can persist even after the initial source of uncertainty subsides. Consumer behavior is similarly affected, with households often postponing major purchases and adjusting spending patterns. These changes in firm and household behavior can create a self-reinforcing cycle of slower economic activity. In financial markets, heightened uncertainty tends to increase market volatility, affecting asset prices and complicating the management of capital flows and exchange rates. These effects can amplify the impact on real economic activity through tighter financial conditions and increased borrowing costs.

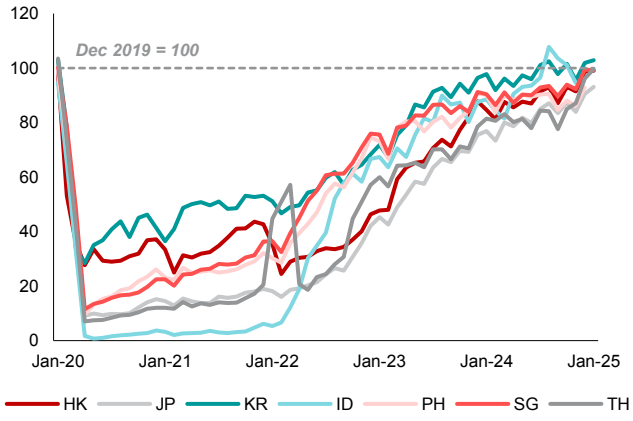
Trade policy uncertainty from the United States currently stands as the foremost source of uncertainty to the region's near-term outlook. Recent tariff threats from the new US administration have heightened concerns about potential disruptions to regional trade (Figure 1.33). AMRO's empirical analysis suggests that increased trade policy uncertainty can have material and lasting effects on regional economic activity. The impact unfolds in stages—beginning with an immediate decline in exports, followed by spillovers to manufacturing activity as firms adjust their production plans, and eventually affecting broader economic growth as households and businesses modify their spending and investment decisions. Estimates indicate that a one-standard-deviation shock to measured trade uncertainty can reduce the region's export growth to the United States by up to 2 percentage points, with recovery taking six quarters, while industrial production could decline by up to 1.9 percentage points (Figure 1.34). The effect on overall GDP emerges more gradually, declining by up to 0.9 percentage points from the second quarter, but persists throughout the two-year forecast horizon—suggesting that trade policy uncertainty can have lasting consequences for economic activity even after export growth recovers.

Figure 1.31. World: Semiconductor Sales Forecast
(Percent, year-on-year, three-month moving average)



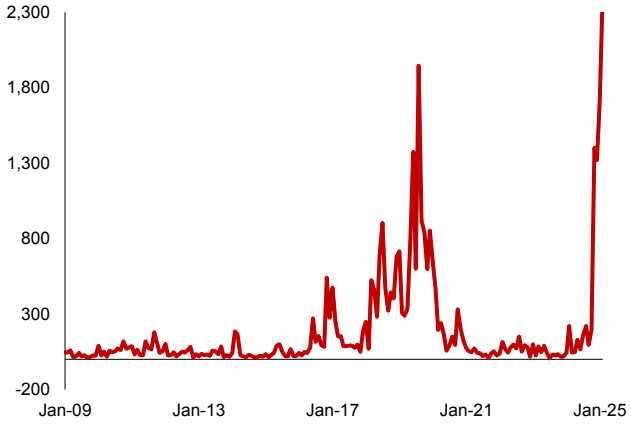
Source: World Semiconductor Trade Statistics; AMRO staff estimates.
Note: Forecast is made by World Semiconductor Trade Statistics as updated in November 2024.

Figure 1.32. Selected ASEAN+3: International Flight Arrivals
(Index, December 2019 = 100)



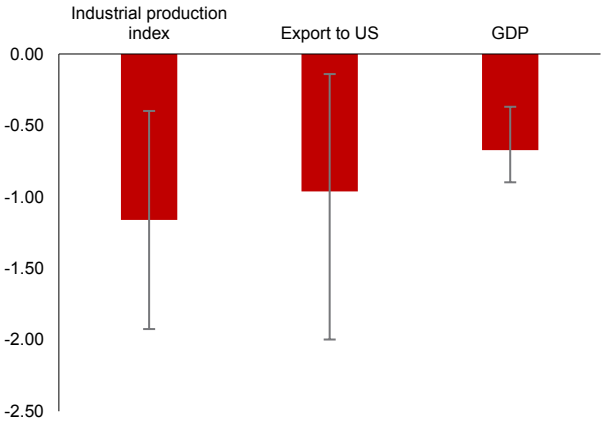
Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: HK = Hong Kong; ID = Indonesia; JP = Japan; KR = Korea; PH = the Philippines; SG = Singapore; TH = Thailand. Brunei, Cambodia, China, Lao PDR, Malaysia, Myanmar, and Vietnam are excluded due to data unavailability. Data for Japan include both arrivals and departures. Data for Indonesia refer to departures only.

Figure 1.33. United States: Trade Policy Uncertainty
(Index, 1985–2010 = 100)



Source: Baker, Bloom, and Davis (2016).
Note: Daily US Economic Policy Uncertainty (EPU) index is based on news-based measures by Baker, Bloom, Davis (2016). Each categorical series is multiplicatively normalized to have a mean of 100 from 1985–2010.

Figure 1.34. ASEAN+3: Impulse Response to Trade Policy Uncertainty Shock
(Percentage points)



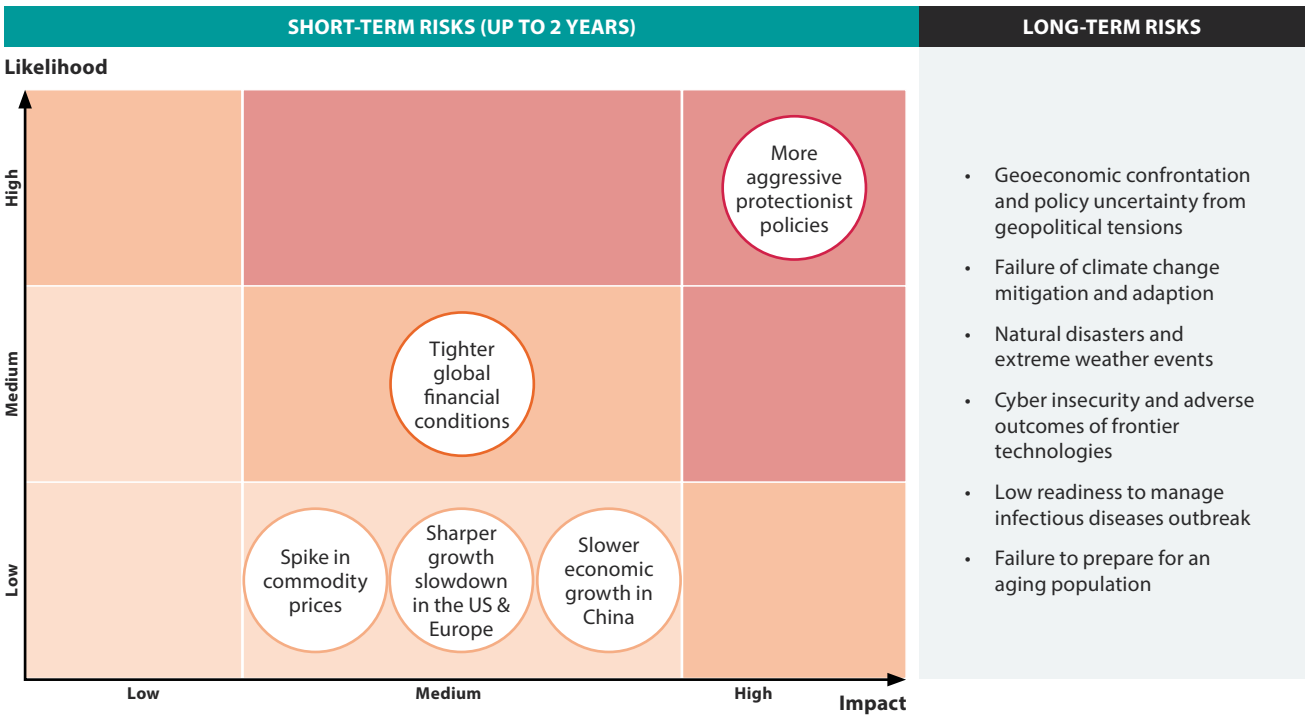
Source: National authorities via CEIC and Haver Analytics; AMRO staff calculations.
Note: The results are based on a panel vector autoregression estimated for Q1 2010 to Q4 2024 for China, Hong Kong, Japan, Korea, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam. The model includes, in this order, the Trade Policy Uncertainty (TPU) index from Baker, Bloom, Davis (2016), log S&P 500 index, the effective federal funds rate, Industrial Production Index growth, Exports growth, Inflation, and GDP growth, with two lags. Bars show the decline in growth rates of respective variables to a one-standard-deviation increase in uncertainty in the TPU index.

III. Risks to the Outlook: Tilted to the Downside

The balance of risks to the region's outlook is tilted to the downside, with external risks being the most prominent. The most immediate concern is potential shifts in trade policy under the new US administration, which could significantly impact global trade flows, financial markets, and weigh on the region's growth. In addition, tighter global financial conditions, growth slowdowns in major economies, and potential spikes in inflation remain key downside risks.

The key risks facing the region are summarized in AMRO's Regional Risk Map (Figure 1.35).

Figure 1.35. Regional Risk Map, April 2025



Source: AMRO staff.
Note: The Regional Risk Map captures those risks and challenges that could derail the region's macro-stability. These are in relation to (1) growth and inflation outlook, (2) financial stability concerns, and (3) other key long-term challenges. The risks and challenges are divided into two categories; (1) short-term risks (these are conjunctural risks, up to two years, where the risks represent scenarios that could materially alter the baseline path), and (2) long-term risks (these are more persistent or secular trends and/or challenges, including perennial risks).

- ***More aggressive protectionist policies from the United States.*** The new US administration has signaled readiness to impose wide-ranging tariff measures on all trading partners to achieve a broad range of economic and noneconomic objectives. While the exact details of these measures remain uncertain—including their timing, scope, and implementation—their enactment could significantly impact the ASEAN+3 region through multiple channels. Higher tariffs would directly reduce the region's exports to the United States, particularly affecting economies deeply integrated into US-centric supply chains. The impact could be amplified if affected economies retaliate with countermeasures, potentially triggering a broader trade conflict that would further dampen global demand and disrupt regional supply chains. The spillover effects could extend beyond trade, as reduced external demand could weigh on domestic investment and consumption, while heightened trade tensions could increase financial market volatility and affect capital flows to the region. Other contemplated measures such as expanded "Buy American" requirements, stricter investment screening, and broader export controls on critical technologies could compound these effects.

  Model-based scenario analysis suggests that the impact of potential US tariffs on the region could vary considerably, depending on their scope and implementation. Under a scenario where tariffs are confined to 10 percent on imports from China, regional growth in 2026 could decline by 0.4 percentage points. In a more adverse scenario where tariffs are levied on a broader range of economies, the growth impact could reach 1.7 percentage points.[2] The effects would be substantially larger if affected economies retaliate. These negative impacts would accumulate over time, potentially leading to regional GDP being up to 2.5 percent lower by the end of the current US administration's term in 2029. Box 1.5 provides detailed analysis of these scenarios.

- ***Sharper growth slowdown in the United States and Europe.*** In the United States, heightened uncertainty over trade, fiscal, and immigration policies could lead to increased market volatility and risk aversion. In particular, tighter immigration policies—including large-scale deportations—could adversely affect labor supply and wage growth, dampening consumer demand and investment. In Europe, escalating global trade tensions and spikes in energy and shipping costs due to geopolitical conflicts could stall recovery. If growth in the United States and Europe were 1 percentage point lower in 2025, ASEAN+3 growth could be lower by 1.3 percentage points (Figure 1.38).

- ***Tighter global financial conditions.*** Recent US economic indicators, such as a persistently tight labor market and firmer core inflation, have fueled concerns about sustained inflationary pressures and prolonged high interest rates. Furthermore, policy shifts by the new US administration, including higher tariffs and tax cuts, may further heighten stagflation risks—with tariffs increasing production costs and consumer prices, and tax cuts widening the fiscal deficits and spurring stronger demand. A resurgence of inflation in the United States could lead to higher interest rates, leading to a stronger US dollar and overall tighter global financial conditions. The upward revision in US interest rate expectations could widen the divergence between US and regional interest rate paths, complicating the conduct of monetary policy for ASEAN+3 economies as central banks may be compelled to raise or maintain high policy rates in response to capital outflows and sustained exchange rate depreciation. Economic activity across the region could moderate further as a result.

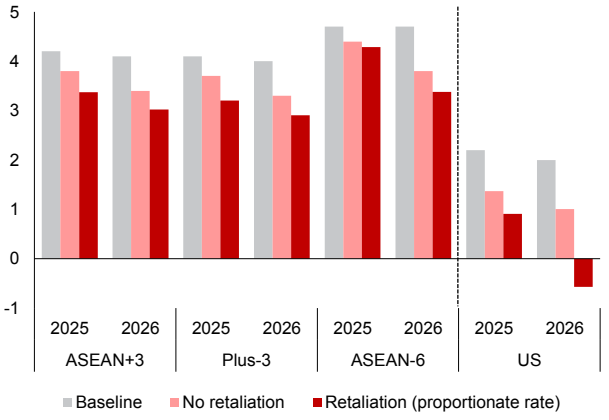
- ***Spike in global commodity prices.*** The risk of a spike in global commodity prices has moderated as geopolitical conflicts have shown signs of stabilizing, but it remains a concern. While the Gaza-Israel conflict has de-escalated following recent ceasefires, tensions remain high, posing risks of renewed hostilities that could drive up global energy prices and fuel inflationary pressures across the region. At the same time, weather-related factors could cause global food prices to spike. La Niña conditions, expected to last through April 2025, could increase the likelihood of extreme weather and climate hazards such as droughts, floods, excessive rainfall and cyclones (NOAA 2025). This could threaten agricultural productivity, potentially affecting the global supply of key food products such as grain and oilseed (FAO 2024).

- ***Slower economic growth in China.*** Economic growth in China has remained resilient, supported by targeted policy measures. However, although China's property sector has shown tentative signs of stabilization, a further weakening of the real estate sector remains a key risk, as property price declines and financial strain on developers continue to weigh on consumer and investor confidence. Sudden shifts in US protectionist policies toward China could also worsen investor and consumer confidence, further weighing on growth. Slower growth in China, in turn, would adversely impact trade, investment, and tourism flows in the rest of the region. In the event that China's growth were to slow to 4 percent in 2025, ASEAN+3 growth could be reduced by 0.6 percentage point (Figure 1.39).

2/ Assumes 60 percent tariff on China, 25 percent on Mexico, Canada, euro area and ASEAN—with proportionate retaliation by affected economies.

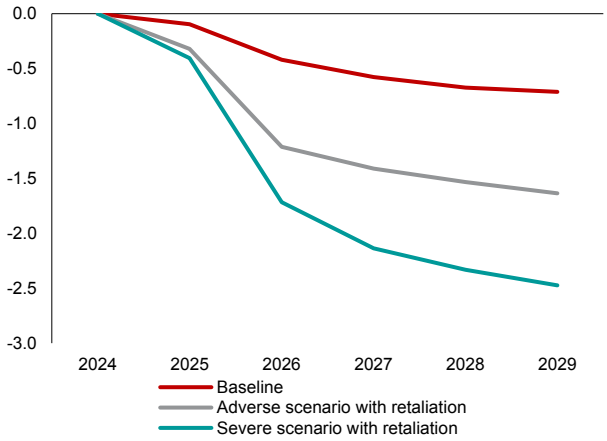
Beyond the near-term, the region also faces significant structural challenges that could weigh on long-term economic stability and growth prospects. In addition to higher protectionism, the ongoing geoeconomic fragmentation remains a key risk, as escalating geopolitical tensions and economic decoupling continue to reshape global trade, supply chains, and investment flows. The shift toward greater fragmentation could disrupt ASEAN+3's trade relationships, making economies—especially trade-dependent ones—more vulnerable to external shocks. At the same time, the region is confronting demographic shifts, with rapidly aging populations posing risks to labor supply, productivity, and fiscal sustainability. Meanwhile, the region also confronts several other pressing long-term challenges. First, rapidly aging populations pose mounting risks of shrinking labor supply, lower productivity growth, and fiscal unsustainability. At the same time, climate change and extreme weather events increasingly threaten food security, infrastructure, and economic resilience, with the region particularly vulnerable to rising sea levels and natural disasters. Furthermore, while the accelerating pace of technological change creates new opportunities, it also brings emerging risks such as dislocations in labor markets, cybersecurity threats, and potential financial instability as digital adoption increases. Lastly, the COVID-19 pandemic highlighted the continuing importance of health security, with model simulations suggesting a 50 percent likelihood of another pandemic within the next 25 years (UNDP 2023).

Figure 1.36. Selected Economies: Real GDP under Different Scenarios
(Percent, year-on-year)



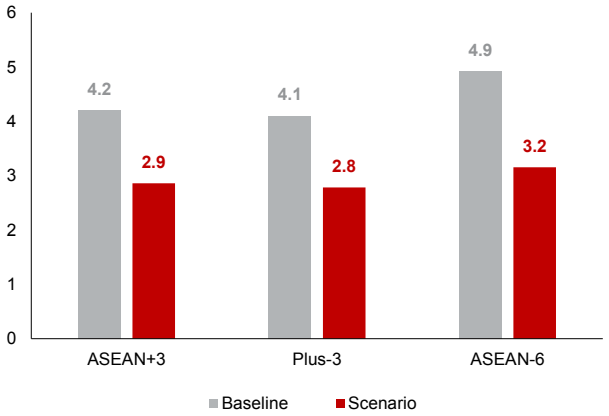
Source: Oxford Economics Model, AMRO staff calculations.
Note: Regional aggregates are weighted using 2023 GDP on PPP basis. Brunei, Cambodia, Lao PDR and Myanmar are excluded due to data unavailability. Estimates do not account for the indirect impact(s) that could arise from the tariff measures such as those from adverse sentiments channel.

Figure 1.37. ASEAN+3: Impact of US Tariffs on Real GDP
(Percent deviation from baseline)



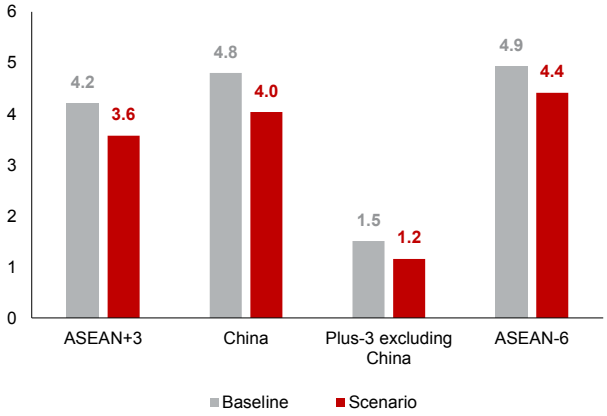
Source: Oxford Economics Model; AMRO staff calculations.
Note: Regional aggregates are weighted using 2023 GDP on PPP basis. Brunei, Cambodia, Lao PDR and Myanmar are excluded due to data unavailability. Estimates do not account for the indirect impact(s) that could arise from the tariff measures such as those from adverse sentiments channel.

Figure 1.38. Selected ASEAN+3: Impact of 1 Percentage Point Lower Growth in the United States and Europe on Baseline GDP Growth
(Percent, year-on-year, 2025)



Source: Oxford Economics Global Economics Model; AMRO staff estimations.
Note: ASEAN-6 = Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam; Plus-3 = China, Hong Kong, Japan, and Korea. Estimates refer to the impact on Plus-3 and ASEAN-6 economies, which account for 99 percent of ASEAN+3's GDP in 2023 (purchasing power parity basis). Remaining economies are omitted due to data unavailability.

Figure 1.39. Selected ASEAN+3: Impact of Slower Growth in China on Baseline GDP Growth
(Percent, year-on-year, 2025)



Source: Oxford Economics Global Economics Model; AMRO staff estimations.
Note: ASEAN-6 = Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam; Plus-3 = China, Hong Kong, Japan, and Korea. Estimates refer to the impact on Plus-3 and ASEAN-6 economies, which account for 99 percent of ASEAN+3's GDP in 2023 (purchasing power parity basis). Remaining economies are omitted due to data unavailability.

Box 1.5:

Scenario Assessment: Impact of US Import Tariffs on ASEAN+3

The wide range of possible tariff escalation scenarios under the new US administration could introduce significant disruptions to the global economy. To assess the potential economic impacts, AMRO staff have run simulations on three scenarios—Baseline, Adverse, and Severe—each with different degrees of tariff implementation and disruption (Table 1.5.1).

Baseline: Incorporates tariffs impacting regional economies that are already announced by the new US administration. This includes a 10 percent tariff on imports from China that took effect on February 4, 2025, and another 10 percent increase on March 4, 2025. In view of the continued escalation of trade tensions, AMRO staff assumes another 5 percent increase to be levied by the third quarter of 2025. As a result, trade-weighted tariff rates are expected to rise sharply, from 19 percent in 2024 to nearly 45 percent by the end of 2025 (Figure 1.5.1). In this scenario, no additional tariffs are imposed on imports from the rest of the world.[1]

Adverse scenario: Assumes a broader escalation of tariffs beyond China. Canada and Mexico face 25 percent tariffs on non-energy goods and a lower 10 percent tariff on energy imports from Canada. These tariffs had been planned to take effect in February 2025, but have been delayed subject to further negotiation on a broad range of bilateral geopolitical and economic issues. Under this scenario, it is assumed that these tariffs are reinstated and take effect in the second quarter of 2025, with the euro area similarly subjected to a 25 percent tariff. Furthermore, to curb the rerouting of Chinese exports, the United States is assumed to impose a 10 percent tariffs on imports from remaining ASEAN+3 economies[2], starting in the second quarter of 2025.

Severe scenario: Tariffs are assumed to be levied on all economies—to varying degrees. Tariffs on Chinese imports are raised to 60 percent, fulfilling election campaign promise made by President Trump during the run-up to the US elections in November 2024. Other ASEAN+3 economies face higher tariffs of 25 percent starting in the second quarter of 2025. In addition, a 10 percent tariff is levied on all imports from the rest of the world, amplifying global trade disruptions.

Each of the above scenarios together with a more adverse one where affected economies retaliate proportionately by imposing their own tariffs on imports from the US over the next five years, are simulated and the results are reported in Table 1.5.2.

This box was written by Catharine Kho and Megan Chong.

1/ Although various tariffs have been announced against Canada, Mexico and euro area at the time of writing, their implementation remains subject to complex negotiations, with significant fluctuations in dates and details, complicating their inclusion into AMRO staff's baseline assumption. On March 12, 2025, a 25 percent tariff has been imposed on steel and aluminum imports. However, these products account for less than 3 percent of total US imports and are therefore not included in the baseline. The US administration has also threatened to impose reciprocal tariffs on all nations, set to take effect on April 2, 2025. The specific tariff rate remains unclear, as multiple measures are under consideration; however, a 10 percent tariff increase is estimated to reduce GDP for affected economies by 0.1 to 0.8 percent in 2026. Due to the lack of details, this measure is not assumed under the baseline.

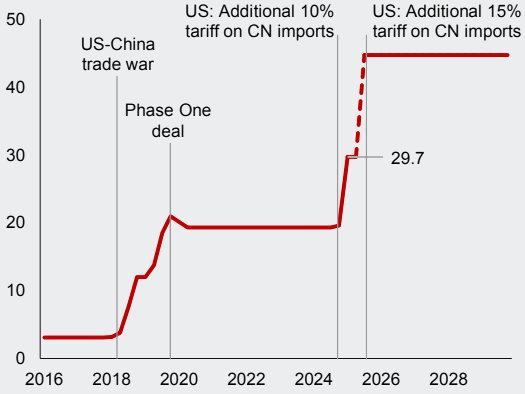
2/ Direct tariff is only applied to Japan, Korea, Malaysia and Vietnam due to the limitations of the Oxford Economics Global Economic Model. For other economies, the impact reflects the spillover effects of reduced demand from these economies.

Table 1.5.1. United States: Tariffs on Imports
(Percent)

Scenarios	China	ASEAN+3 (excluding China)	Mexico, Canada and the euro area	Rest of the world
Baseline	45	0	0	0
Adverse	45	10	25	0
Severe	60	25	25	10

Source: AMRO staff estimates.

Figure 1.5.1. United States: Tariff on Imports from China
(Import-weighted percent)



Source: PIIE, Oxford Economics Global Economics Model.

Table 1.5.2. ASEAN+3: Impact on Real GDP Under Various Scenarios of US Import Tariffs
(Percent deviation from baseline; 2025–2029)

Scenarios	Impact on Real GDP (Percent deviation from baseline)		
	ASEAN+3	Plus-3	ASEAN
Baseline US implements 10 percent additional tariffs China beginning 1Q 2025, followed by another 10 percent tariffs beginning in the second quarter and a further increase of 5 percent in 3Q 2025.	–	–	–
Affected economies retaliate proportionately.	–0.1	–0.1	–0.1
Adverse scenario US implements 45 percent tariffs on imports from China, 25 percent tariffs on imports from Mexico and Canada, and 10 percent tariff on imports from ASEAN+3 (excluding China).	–0.4	–0.3	–0.6
Affected economies retaliate proportionately.	–0.7	–0.6	–1.1
Severe scenario US implements 60 percent tariffs on imports from China, 25 percent tariffs on Mexico, Canada and ASEAN+3 (excluding China), and 10 percent tariff on imports from all other economies.	–0.8	–0.5	–0.9
Affected economies retaliate proportionately.	–1.3	–1.2	–1.8

Source: Oxford Economics Model; AMRO staff calculations
Note: Regional aggregates are weighted using 2023 GDP on PPP basis. Brunei Darussalam, Cambodia, Lao PDR and Myanmar are excluded due to data unavailability. Estimates do not take into account the indirect impact(s) that could arise from the tariff measures such as those from adverse sentiments channel etc.

IV. Policy Considerations: Preparing for a Highly Uncertain Environment

The favorable growth and inflation baseline outlook for ASEAN+3 provides an opportunity to rebuild policy space, even as policymakers navigate an increasingly uncertain and treacherous external environment. While several regional central banks have begun to ease monetary policy and consolidate their fiscal positions, the pace and scope of policy normalization varies across economies, reflecting differences in growth momentum, inflation dynamics, and available policy buffers (Table 1.2). The unpredictable nature of externally driven policy changes—particularly potential shifts in US trade and monetary policy—demands that authorities maintain flexibility to implement countercyclical measures if needed. This challenging environment is further complicated by persistent supply-side inflation risks and the need to safeguard financial and external stability amid volatile global financial markets. Looking ahead, policies should focus on enhancing long-term resilience while preserving capacity to address near-term challenges, with the appropriate policy mix determined by each economy's specific circumstances and constraints.

Table 1.2. ASEAN+3 Policy Matrix: AMRO Staff Assessment of Current Policy Stance and Recommendations

	Fiscal Policy				Monetary Policy			
	2024 Policy Stance	2025 Policy Stance	2025 Policy Space	Recommended Policy Direction	2024 Policy Stance	2025 Policy Stance	2025 Policy Space	Recommended Policy Direction
Plus-3								
China	Expansionary	Expansionary	Moderate	↓	Expansionary	Expansionary	Moderate	↑
Hong Kong*	Expansionary	Contractionary	Ample	↔	Contractionary	Contractionary	Limited	↑
Japan*	Neutral	Contractionary	Limited	↓	Expansionary	Expansionary	Moderate	↓
Korea	Neutral	Contractionary	Moderate	↑	Contractionary	Contractionary	Moderate	↑
ASEAN								
Brunei*	Expansionary	Expansionary	Ample	↓	Contractionary	Contractionary	Limited	↑
Cambodia	Contractionary	Neutral	Moderate	↓	Expansionary	Expansionary	Limited	↔
Indonesia	Expansionary	Neutral	Moderate	↔	Contractionary	Contractionary	Moderate	↑
Lao PDR	Contractionary	Expansionary	Limited	↓	Expansionary	Contractionary	Limited	↔
Malaysia	Neutral	Neutral	Moderate	↓	Neutral	Neutral	Moderate	↔
Myanmar*	Expansionary	Expansionary	Limited	↓	Expansionary	Expansionary	Moderate	↓
Philippines	Contractionary	Neutral	Moderate	↓	Contractionary	Contractionary	Moderate	↑
Singapore*	Neutral	Neutral	Ample	↔	Contractionary	Contractionary	Moderate	↑
Thailand*	Neutral	Expansionary	Moderate	↓	Contractionary	Neutral	Moderate	↑
Vietnam	Neutral	Expansionary	Moderate	↑	Expansionary	Expansionary	Moderate	↔

Legend

AMRO's assessment of current policy stance

- Expansionary/Accommodative
- Neutral
- Contractionary/Tight

AMRO's recommendation

- ↑ More expansionary/accommodative (Less contractionary/tight)
- ↓ Less expansionary/accommodative (More contractionary/tight)
- ↔ Maintain current policy stance

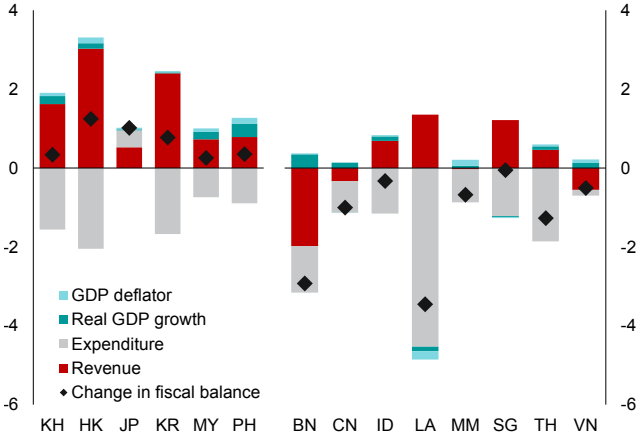
Note: Asterisk (*) denotes fiscal year from April 1 to March 31. The fiscal policy stance is assessed by the fiscal impulse based on structural primary balance. The fiscal policy stance in 2024 is based on 2024 estimates, while the fiscal stance in 2025 is based on the 2025 budget. The 2024 monetary policy stance refers to the monetary policy stance as of *AREO 2024* or the respective economy's Annual Consultation Report, whichever is later. For Brunei and Hong Kong, which have a currency board arrangement, the current monetary stance refers to current monetary condition.

Fiscal Policy

Fiscal developments across ASEAN+3 showed mixed progress in FY2024, with fiscal deficit (surplus) of member economies generally remaining larger (smaller) than pre-pandemic levels. While both revenue and expenditure increased as a share of GDP in most economies, the pace of fiscal consolidation moderated in several members due to higher-than-planned spending to promote growth—through measures such as supplementary budgets in Japan and targeted social transfers in Thailand—and prolonged temporary support programs. Revenue performance was generally positive, supported by a broad-based increase in tax collection amid economic recovery. Most economies maintained expansionary or neutral fiscal stances in FY2024, as several adopted more expansionary policies to support weak recovery or slowing growth. Looking ahead to FY2025, fiscal stances are projected to be contractionary or neutral in economies operating at or near potential output (Figure 1.40 and Table 1.3). However, the extent of fiscal improvement will vary significantly across economies, as some members maintain more accommodative stances to support growth and development priorities. Notably, while government debt ratios have begun declining or stabilizing in several economies including Indonesia, Japan, Lao PDR, the Philippines, and Vietnam, they are projected to remain significantly higher than FY2019, highlighting the continued need for medium-term consolidation to rebuild fiscal buffers (Box 1.6).

The favorable baseline growth outlook presents an opportunity for rebuilding fiscal buffers, while maintaining flexibility to respond to evolving economic conditions. Given the gradual pace of fiscal consolidation and generally narrowed fiscal space post-pandemic, steady efforts to strengthen fiscal positions over the medium term would help rebuild fiscal space for future countercyclical responses. Meeting the twin objectives of sustainable growth and fiscal sustainability calls for careful calibration of revenue and spending measures, guided by medium-term consolidation frameworks. The current environment of heightened uncertainty underscores the importance of preserving policy flexibility. Alignment with monetary policy would enhance the effectiveness of any fiscal response. However, for economies where monetary policy space may be constrained by external sector considerations, fiscal policy could play a more active role in responding to adverse shocks, with pre-emptive measures potentially warranted when downside risks appear imminent. The fiscal response measures should be carefully calibrated to target areas with significant economic spillovers, and transparent exit strategy will help maintain progress toward medium-term consolidation goals while balancing near-term stability with longer-term resilience.

Figure 1.40. Selected ASEAN+3: Contribution to the Change in Fiscal Balance, FY2025
(Percent of GDP)



Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates.
Note: Change and contribution are computed by comparing the 2025 budget with the estimated or realized 2024 budget.

Table 1.3. ASEAN+3: Fiscal Stance, FY2024–2025

FY2024 \ FY2025	Expansionary	Neutral	Contractionary
Expansionary	BN, CN, MM	ID	HK
Neutral	TH, VN	MY, SG	JP, KR
Contractionary	LA	KH, PH	

Source: AMRO staff assessment.
Note: Fiscal stance assessment is based on the fiscal impulse, measured by the changes in the budgeted structural primary balance in FY2025 compared to the actual or estimated structural primary balance in FY2024. The fiscal stance of Brunei is assessed by the change in expenditure growth as its GDP and revenue is heavily dependent on oil and gas sector.

Box 1.6:

Fiscal Development, Government Debt and Financing Needs in ASEAN+3 Economies

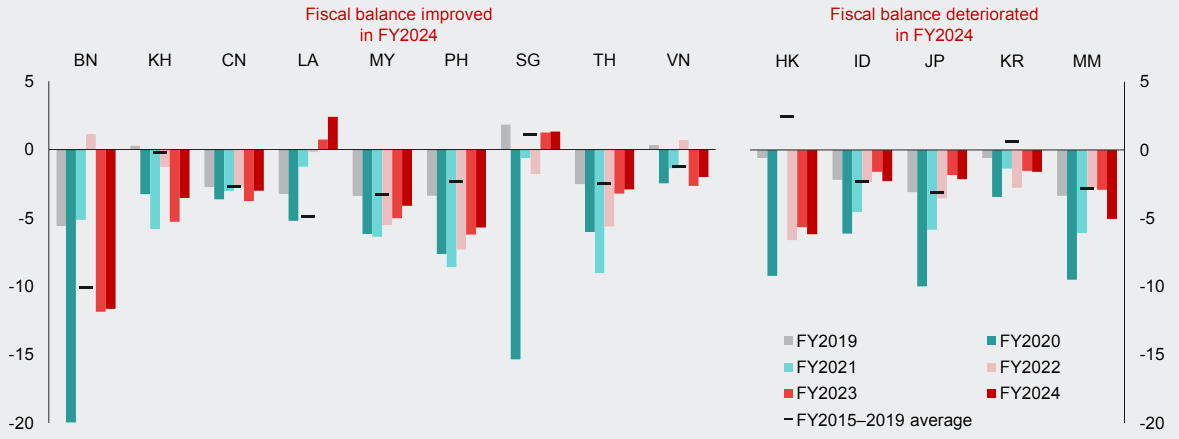
Fiscal developments in FY2024 were mixed, with the fiscal deficit (surplus) of most economies remaining larger (smaller) than pre-pandemic levels due to a stronger increase in expenditure (Figure 1.6.1). The pace of improvement in fiscal position generally slowed as fiscal spending exceeded initial budget in order to support economic recovery (e.g., supplementary budgets in Japan and the digital wallet program in Thailand) and revenue fell short of projections due to unexpected weak business performance (e.g., semiconductor downcycle in Korea and a weaker property market in Hong Kong). Compared to FY2015–2019 averages, the fiscal balance in FY2024 improved only in Japan, Indonesia, Lao PDR, and Singapore.

- Robust income- and consumption-based tax collections supported revenue growth in most economies, except for Korea where corporate income tax revenue declined due to the prolonged semiconductor downcycle. Despite stabilizing global commodity prices, resource revenue in Brunei is estimated to have increased, benefiting from the commencement of production of a new offshore oil field in late 2023. In most economies, growth in nontax revenue further supported overall revenue performance.

- Expenditure increases were primarily driven by growing current outlays, including targeted measures to mitigate high living costs or boost weak household spending, increased administrative spendings or higher interest payments.

The government debt-to-GDP ratio has begun to decline or stabilize in more economies, including Indonesia, Japan, Lao PDR, Malaysia, the Philippines, and Vietnam. In other economies, the debt ratio continued to rise, mostly at a slower rate (Figure 1.6.2). Reductions in the debt ratio were supported by nominal GDP growth, while elevated primary deficits and high effective interest rates contributed to upward pressures. Additionally, significant currency depreciation in Lao PDR and Myanmar inflated the nominal value of their foreign currency (FCY) denominated debt (Figure 1.6.3). The debt ratio is projected to rise further in FY2025 in half of the member economies, where the budgeted primary balance falls below the debt-stabilizing primary balance (Figure 1.6.4).

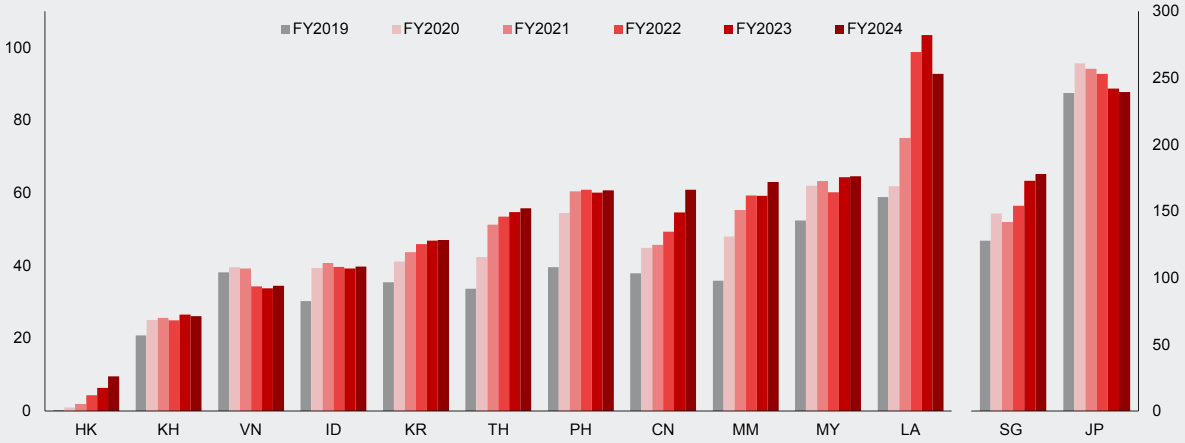
Figure 1.6.1. ASEAN+3: Fiscal Balance, FY2019–2024
(Percent of GDP)



Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates.
Note: (1) Fiscal indicators for FY2024 are based on AMRO staff estimates, except for Thailand; (2) Fiscal indicators closely follow the authorities' published data except for the followings: (a) Japan: fiscal indicators are based on general government; (b) Myanmar: fiscal indicators for FY2018–2021 (October to September) were converted to April-March based on quarterly data, and revenue excludes borrowing and expenditure excludes principal repayments; (c) Singapore: fiscal balance is based on the overall budget surplus/deficit, while excluding top-ups to endowment and trust funds and including spending from those funds; (d) Thailand: expenditure includes off-budget emergency loans.

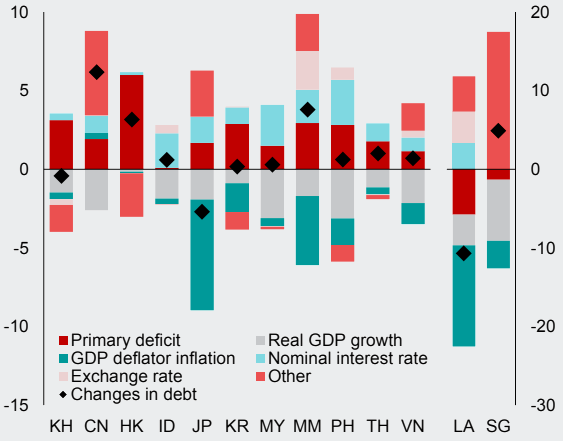
This box was written by Byunghoon Nam.

Figure 1.6.2 ASEAN+3: Government Debt, FY2019–2024
(Percent of GDP)



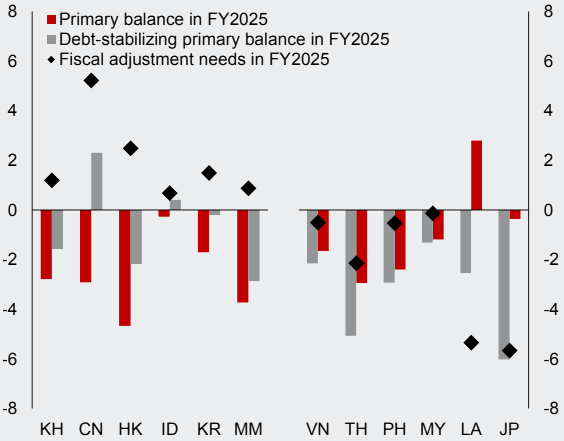
Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates.
Note: CN = China; HK = Hong Kong; ID = Indonesia; JP = Japan; KH = Cambodia; KR = Korea; LA = Lao PDR; MY = Malaysia; MM = Myanmar; PH = the Philippines; SG = Singapore; TH = Thailand; VN = Vietnam. (1) Government debt in Lao PDR includes the suspended interest payments; (2) Brunei is not shown as it has virtually zero government debt.

Figure 1.6.3. Selected ASEAN+3: Contribution to the Change in Debt-to-GDP Ratio in FY2024[1]
(Percent of GDP)



Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates.
Note: CN = China; HK = Hong Kong; ID = Indonesia; JP = Japan; KH = Cambodia; KR = Korea; LA = Lao PDR; MY = Malaysia; MM = Myanmar; PH = the Philippines; SG = Singapore; TH = Thailand; VN = Vietnam. Brunei is not shown as it has virtually zero government debt.

Figure 1.6.4. Selected ASEAN+3: Debt-stabilizing Primary Balance and Fiscal Adjustment Needs
(Percent of GDP)



Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates.
Note: CN = China; HK = Hong Kong; ID = Indonesia; JP = Japan; KH = Cambodia; KR = Korea; LA = Lao PDR; MY = Malaysia; MM = Myanmar; PH = the Philippines; SG = Singapore; TH = Thailand; VN = Vietnam. The debt-stabilizing primary balance in FY2025 is the primary balance to maintain the debt ratio at the end of FY2024 level. The fiscal adjustment need in FY2025 is defined as the difference between the budgeted primary balance in FY2025 and the debt-stabilizing primary balance in FY2025, which captures how much the primary balance should be improved additionally compared to the budgeted primary balance in FY2025 to stabilize the debt ratio.

The gross financing needs (GFN) to GDP ratio remains elevated (Figure 1.6.5). The increase in the GFN ratio in FY2024 was primarily driven by higher primary deficits (Hong Kong, Indonesia, and Myanmar) or by rising amortization (Lao PDR, the Philippines, Singapore, and Thailand) (Figure 1.6.6).[2] Looking ahead, increased principal payments on maturing debts across various tenors are projected to keep GFNs elevated over the medium term in most member economies (Figure 1.6.7). The interest

1/ Decomposition:

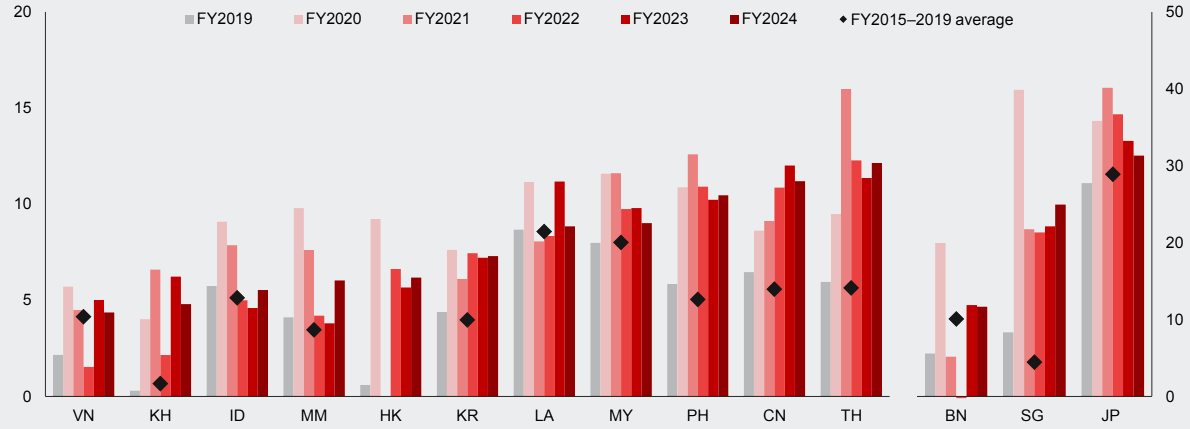
$$d_t - d_{(t-1)} = \underbrace{\left[\frac{i_t^w}{(1+g_t)(1+\pi_t)}\right] d_{t-1}}_{\text{contribution of nominal interest rate}} - \underbrace{\left[\frac{\pi_t(1+g_t)}{(1+g_t)(1+\pi_t)}\right] d_{t-1}}_{\text{contribution of GDP deflator inflation}} - \underbrace{\left[\frac{g_t}{(1+g_t)(1+\pi_t)}\right] d_{t-1}}_{\text{contribution of real GDP growth}} + \underbrace{\left[\frac{\varepsilon_t a_{t-1}(1+i_t^f)}{(1+g_t)(1+\pi_t)}\right] d_{t-1}}_{\text{contribution of exchange rate}} - \underbrace{pb_t}_{\text{contribution of primary deficit}} + \underbrace{o_t}_{\text{contribution of other flows}}$$

where d=debt-to-GDP ratio, pb=primary balance, o=other flows, i^w=effective interest rate of total debt, i^f=effective interest rate of external debt, g=real GDP growth, π=GDP deflator inflation, ε=exchange rate against USD, and a=share of external debt.

2/ The increase in amortization is mainly due to the maturing government bonds that were extensively issued during the pandemic.

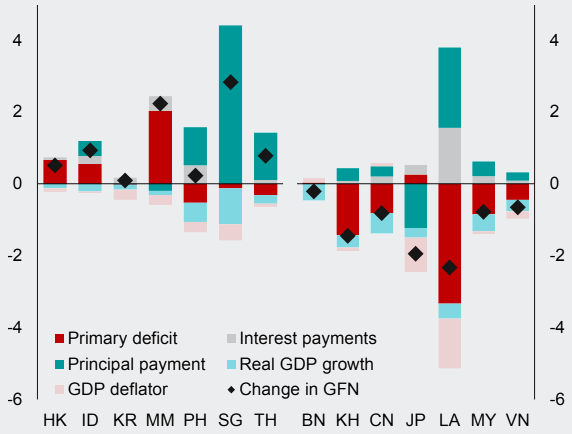
burden is also expected to remain high due to accumulated debt, as policy rate cuts may have only a gradual impact on new borrowing costs due to other risks factors affecting the passthrough to sovereign bond coupon rates and on the average borrowing costs given the medium- to long-term debt maturity structure with fixed coupon rates. Although the debt profiles of member economies are broadly sound, economies with a significant share of foreign-currency denominated debt face heightened risks of rising nominal debt values and debt service burdens in the event of currency depreciation.

Figure 1.6.5. ASEAN+3: Gross Financing Needs, FY2019–2024
(Percent of GDP)



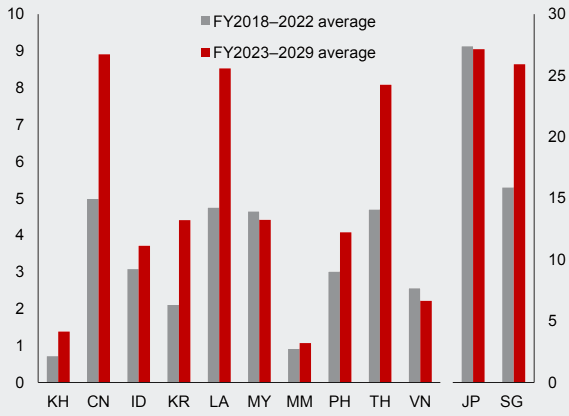
Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates.
Note: (1) Debt service in Lao PDR is based on its original amount, including debt restructuring under negotiation; (2) Amortization in the Philippines includes the redemption by the bond sinking fund; (3) Amortization in Singapore includes the redemption of publicly held Singapore government securities and Treasury bills; (4) For Brunei, there is no issuance of debt to finance fiscal needs.

Figure 1.6.6. ASEAN+3: Contribution to the Change in GFN-to-GDP Ratio in FY2024[3]
(Percent of GDP)



Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates.
Note: 1) Debt service in Lao PDR is based on its original amount, including debt restructuring under negotiation; 2) Amortization in the Philippines includes redemptions by the bond sinking fund; 3) Amortization in Singapore includes the redemption of publicly-held Singapore government securities and Treasury bills; 4) For Brunei, there is no issuance of debt to finance fiscal needs; 5) See footnotes for the decomposition methodology.

Figure 1.6.7. Selected ASEAN+3: Amortization Needs, FY2018–2029
(Percent of GDP)



Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates.
Note: Amortization needs over the medium term are projected, based on AMRO staff's debt projections, assuming the same average maturity of government debt outstanding as of 2025.

3/ Decomposition:

$$gfn_t - gfn_{t-1} = \underbrace{\Delta pd_t}_{\text{contribution of primary deficit}} + \underbrace{\Delta ip_t}_{\text{contribution of interest payment}} + \underbrace{\Delta pp_t}_{\text{contribution of principal payment}} - \underbrace{\frac{gfn_{t-1}}{(1+g_t)(1+\pi_t)}\, g_t}_{\text{contribution of real GDP growth}} - \underbrace{\frac{(1+g_t)gfn_{t-1}}{(1+g_t)(1+\pi_t)}\, \pi_t}_{\text{contribution of GDP deflator inflation}}$$

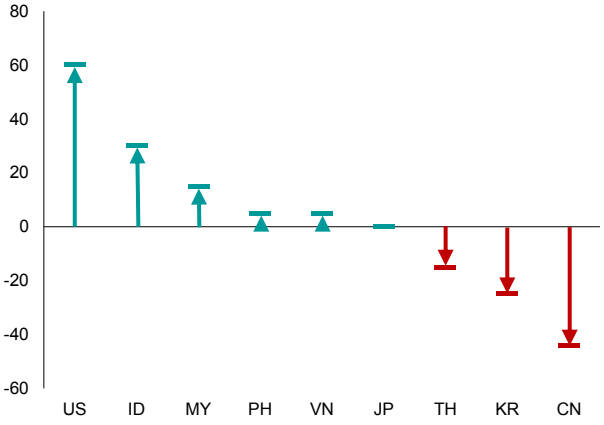
where $\Delta pd_t = \frac{PD_t - PD_{t-1}}{P_t Y_t}$, $\Delta ip_t = \frac{IP_t - IP_{t-1}}{P_t Y_t}$, $\Delta pp_t = \frac{PP_t - PP_{t-1}}{P_t Y_t}$, and *gfn*=gross financing needs as a percentage of GDP, *PD*=primary deficit, *IP*=interest payment, *PP*=principal payment, *P*=GDP deflator, *Y*=real GDP, *g*=real GDP growth, π=GDP deflator inflation.

Fiscal policy should remain responsive to near-term shocks while continuing medium-term fiscal consolidation and addressing structural challenges through a comprehensive policy framework. The effectiveness of fiscal consolidation could be improved through sound public financial management practices and realistic medium-term fiscal frameworks, with the pace of adjustment varying across economies depending on their growth and consolidation needs. Fiscal consolidation should involve a combination of revenue-enhancing measures and spending rationalization, while emergency support measures introduced during and after the pandemic to support the economy should be withdrawn. On the revenue side, opportunities exist to strengthen tax administration, improve compliance, and streamline tax expenditures in line with evolving global tax reforms. Expenditure policies could benefit from a systematic review and reallocation of resources to align with national development priorities, while safeguarding and enhancing the efficiency of public investment and social safety nets that support long-term growth and basic welfare for the poor and vulnerable. These efforts to strengthen fiscal sustainability become particularly important when addressing structural challenges such as aging populations and climate change, which demand comprehensive policy responses extending beyond fiscal measures alone. The *ASEAN+3 Fiscal Policy Report (AFPR) 2025* provides more detailed analysis and policy considerations on these fiscal challenges facing the region.

Monetary Policy

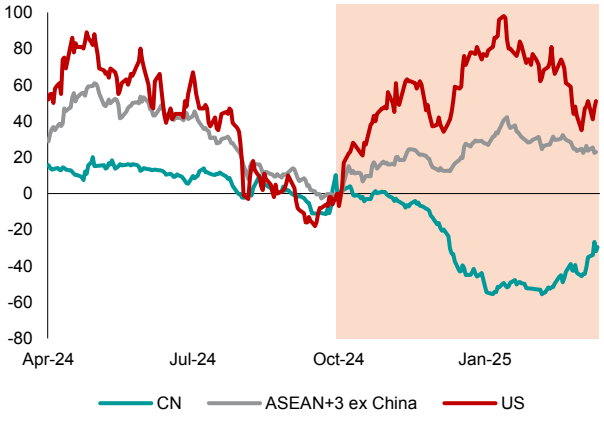
Most ASEAN+3 central banks pivoted toward a less restrictive monetary policy stance in 2024 as inflation pressures moderated and inflation returned to pre-pandemic levels. The Philippines, Indonesia and Thailand lowered policy rates in the second half of the year—with the Philippines being the first to cut rates in August. Among Plus-3 economies, China and Korea also lowered policy rates during the same period to support their economies. Japan stood out as an exception, ending its long-standing unconventional monetary stimulus program and raising its policy rate as inflation remained above its 2 percent target level. Despite episodes of market volatility throughout the year, financial markets continued to function in an orderly manner, supported by central bank liquidity measures. However, since September 2024, interest rate expectations between the United States and the region have widened substantially. Policy rate forecasts for the United States have increased due to persistent labor market tightness and core inflation stickiness, leading to rising expectations of high interest rates for longer. By contrast, policy rate expectations for regional economies have mostly remained unchanged or even declined—especially for China, where forecasts have dropped amid expectations of more monetary policy support for the economy (Figure 1.41). Long-term yields have also moved in tandem: China's 10-year government bond yield fell below 1.6 percent in early January 2025, while rates in Japan, Korea, and ASEAN-6 either declined or showed minimal increases (Figure 1.42). This has widened interest rate differentials with the United States, putting pressure on regional currencies and making monetary policy management more challenging.

Figure 1.41. United States and Selected ASEAN+3: Change in Policy Rate Forecasts for Q4 2025
(Basis point change between September 2024 and January 2025 forecasts)



Source: Bloomberg, Consensus Economics; AMRO staff calculations.
Note: US = United States, CN = China, ID = Indonesia, JP = Japan, KR = Korea, MY = Malaysia, PH = the Philippines, TH = Thailand. Data shows the changes in Q4 2025 policy rate forecasts between Bloomberg's September 2024 and January 2025 median forecasts. Data for China refers to the change in one-year-ahead forecast for One-Year Loan Prime Rate from Consensus Economics over the same period.

Figure 1.42. Selected ASEAN+3: 10-year Government Bond Yields
(Basis point change from September 30, 2024)



Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: ASEAN+3 ex China = Hong Kong, Japan, Korea, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam. Data for ASEAN+3 ex China refers to simple average of the changes in 10-year government bond yields since September 30, 2024.

The highly uncertain operating environment calls for careful calibration of monetary policy adjustments across the region. With most economies assessed to have moderate policy space amid expectations of low and stable inflation, scope exists for supporting growth should downside risks to the outlook materialize. Nevertheless, economies that are facing continued inflationary pressures have more limited room to maneuver. Supply-side factors present additional challenges for monetary policy calibration—energy price volatility, supply chain disruptions, and extreme weather events could reignite inflationary pressures, potentially complicating the path of policy normalization. The growing interest rate differential with the United States introduces further complexity, potentially affecting capital flows and exchange rates. A careful data-driven and outlook-dependent approach to policy adjustments, with close attention to both domestic and external conditions, would help policymakers strike the right balance in the growth-inflation trade-off while taking into consideration financial and external stability risks in this challenging and highly uncertain environment.

Looking ahead, financial and external stability considerations warrant continued attention. High household debt in several economies highlight the need for policymakers to balance the need to normalize interest rate to support the economy with the implications of lower interest rates for household debt. Sectoral vulnerabilities—particularly in real estate markets, household debt, and financial market intermediation—could be addressed more effectively by complementing monetary policy with targeted macroprudential measures (see *ASEAN+3 Financial Stability Report 2024* for further discussion). External sector resilience also requires careful consideration, with exchange rate flexibility and reserves adequacy serving as important buffers against volatile capital flows and external shocks. Exchange rate flexibility will be particularly important in the near term to help absorb the impact of potential new tariffs and partially offset losses in export competitiveness. However, policymakers must carefully calibrate currency adjustments to avoid disorderly movements that could trigger financial instability or spark competitive devaluation. Overall, the foundation for effective monetary policy lies in monetary authorities' capacity to navigate increasingly complex domestic and external conditions while maintaining price stability. These considerations become particularly relevant given the prospects of more volatile global financial conditions and ongoing changes in the financial systems amid greater use of technology. Building and maintaining policy credibility while preserving flexibility to respond to shocks remains central to monetary policy effectiveness over the longer term.

Overall, ASEAN+3 policymakers face a delicate balancing act in the period ahead. While the region's solid foundations provide a strong basis for rebuilding policy space, shifting global conditions require continued policy agility. The normalization of fiscal and monetary policy settings in the post-pandemic period needs to be balanced against readiness to respond if the outlook deteriorates. At the same time, ongoing structural reforms to lift potential growth and strengthen resilience remain essential even as near-term stability is prioritized. Clear and credible policy frameworks, underpinned by strong buffers and regional cooperation, could help anchor this challenging transition while reinforcing ASEAN+3's role as a key driver of global growth and stability.

Appendix: Selected Key Macroeconomic and Financial Indicators

	2023	2024e	2025f	2026f
Brunei Darussalam				
Real GDP growth (percent, year-on-year)	1.4	4.2	2.6	2.6
Headline inflation (period average, percent, year-on-year)	0.4	–0.4	0.6	0.4
Current account balance (percent of GDP)	12.9	13.8	13.0	10.4
Government fiscal balance (percent of GDP)	–11.9	–11.7	–9.6	–9.1
Cambodia				
Real GDP growth (percent, year-on-year)	5.0	6.0	5.8	6.0
Headline inflation (period average, percent, year-on-year)	2.1	0.8	2.9	2.5
Current account balance (percent of GDP)	1.3	–0.1	–2.2	–4.1
Government fiscal balance (percent of GDP)	–5.3	–3.6	–3.2	–2.7
China				
Real GDP growth (percent, year-on-year)	5.2	5.0	4.8	4.7
Headline inflation (period average, percent, year-on-year)	0.2	0.2	1.1	1.3
Current account balance (percent of GDP)	1.5	2.3	1.0	1.1
Government fiscal balance (percent of GDP)	–3.8	–3.0	–4.0	–4.0
Hong Kong, China				
Real GDP growth (percent, year-on-year)	3.2	2.5	2.4	2.3
Headline inflation (period average, percent, year-on-year)	2.1	1.7	2.2	2.0
Current account balance (percent of GDP)	8.5	10.7	10.5	10.6
Government fiscal balance (percent of GDP)	–3.4	–1.5	0.2	0.9
Indonesia				
Real GDP growth (percent, year-on-year)	5.0	5.0	5.0	5.1
Headline inflation (period average, percent, year-on-year)	3.7	2.3	2.2	2.7
Current account balance (percent of GDP)	–0.1	–0.6	–0.8	–1.3
Government fiscal balance (percent of GDP)	–1.6	–2.3	–2.7	–2.7
Japan				
Real GDP growth (percent, year-on-year)	1.5	0.1	1.3	1.0
Headline inflation (period average, percent, year-on-year)	3.3	2.7	2.5	2.1
Current account balance (percent of GDP)	3.8	4.8	4.1	4.0
Government fiscal balance (percent of GDP)	–1.9	–2.1	–2.9	–1.2
Korea				
Real GDP growth (percent, year-on-year)	1.4	2.0	1.6	1.9
Headline inflation (period average, percent, year-on-year)	3.6	2.3	1.9	1.8
Current account balance (percent of GDP)	1.9	5.3	4.9	4.3
Government fiscal balance (percent of GDP)	–3.6	–3.9	–3.0	–2.9

Appendix: Selected Key Macroeconomic and Financial Indicators

	2023	2024e	2025f	2026f
Lao PDR				
Real GDP growth (percent, year-on-year)	4.2	4.5	4.6	4.6
Headline inflation (period average, percent, year-on-year)	31.2	23.1	10.1	6.4
Current account balance (percent of GDP)	2.9	0.6	0.7	0.4
Government fiscal balance (percent of GDP)	0.7	2.4	–0.8	–0.9
Malaysia				
Real GDP growth (percent, year-on-year)	3.6	5.1	4.7	4.5
Headline inflation (period average, percent, year-on-year)	2.5	1.8	2.7	2.5
Current account balance (percent of GDP)	1.5	1.7	1.6	1.8
Government fiscal balance (percent of GDP)	–5.0	–4.1	–3.9	–3.6
Myanmar[1]				
Real GDP growth (percent, year-on-year)	3.5	3.2	1.0	1.0
Headline inflation (period average, percent, year-on-year)	27.5	25.0	18.0	18.0
Current account balance (percent of GDP)	–2.1	–1.7	–0.8	–
Government fiscal balance (percent of GDP)	–3.7	–4.1	–5.0	–
Philippines				
Real GDP growth (percent, year-on-year)	5.5	5.7	6.3	6.3
Headline inflation (period average, percent, year-on-year)	6.0	3.2	3.3	3.2
Current account balance (percent of GDP)	–2.8	–3.8	–2.4	–2.1
Government fiscal balance (percent of GDP)	–6.2	–5.7	–5.6	–4.7
Singapore				
Real GDP growth (percent, year-on-year)	1.8	4.4	2.7	2.4
Headline inflation (period average, percent, year-on-year)	4.8	2.4	1.8	1.8
Current account balance (percent of GDP)	17.7	17.5	19.9	21.3
Government fiscal balance (percent of GDP)	–0.4	0.9	0.9	0.5
Thailand				
Real GDP growth (percent, year-on-year)	2.0	2.5	2.9	3.0
Headline inflation (period average, percent, year-on-year)	1.2	0.4	1.2	1.3
Current account balance (percent of GDP)	1.5	2.3	1.2	0.5
Government fiscal balance (percent of GDP)	–3.3	–4.0	–4.4	–3.6
Vietnam				
Real GDP growth (percent, year-on-year)	5.0	7.1	6.5	6.2
Headline inflation (period average, percent, year-on-year)	3.3	3.6	3.5	3.0
Current account balance (percent of GDP)	5.8	4.2	5.1	4.7
Government fiscal balance (percent of GDP)	–2.7	–2.0	–2.5	–2.4

Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates.
Note: Numbers in red are AMRO staff estimates and forecasts. Data refer to calendar year; except for government fiscal balances, and Myanmar, which refer to fiscal year. Data for 2024 refer to AMRO staff estimates, for data releases that are not yet available. Government fiscal balance refers to balance of the central and local governments for Cambodia; general government for Japan; and central government for all other economies. e = estimates; f = forecasts.

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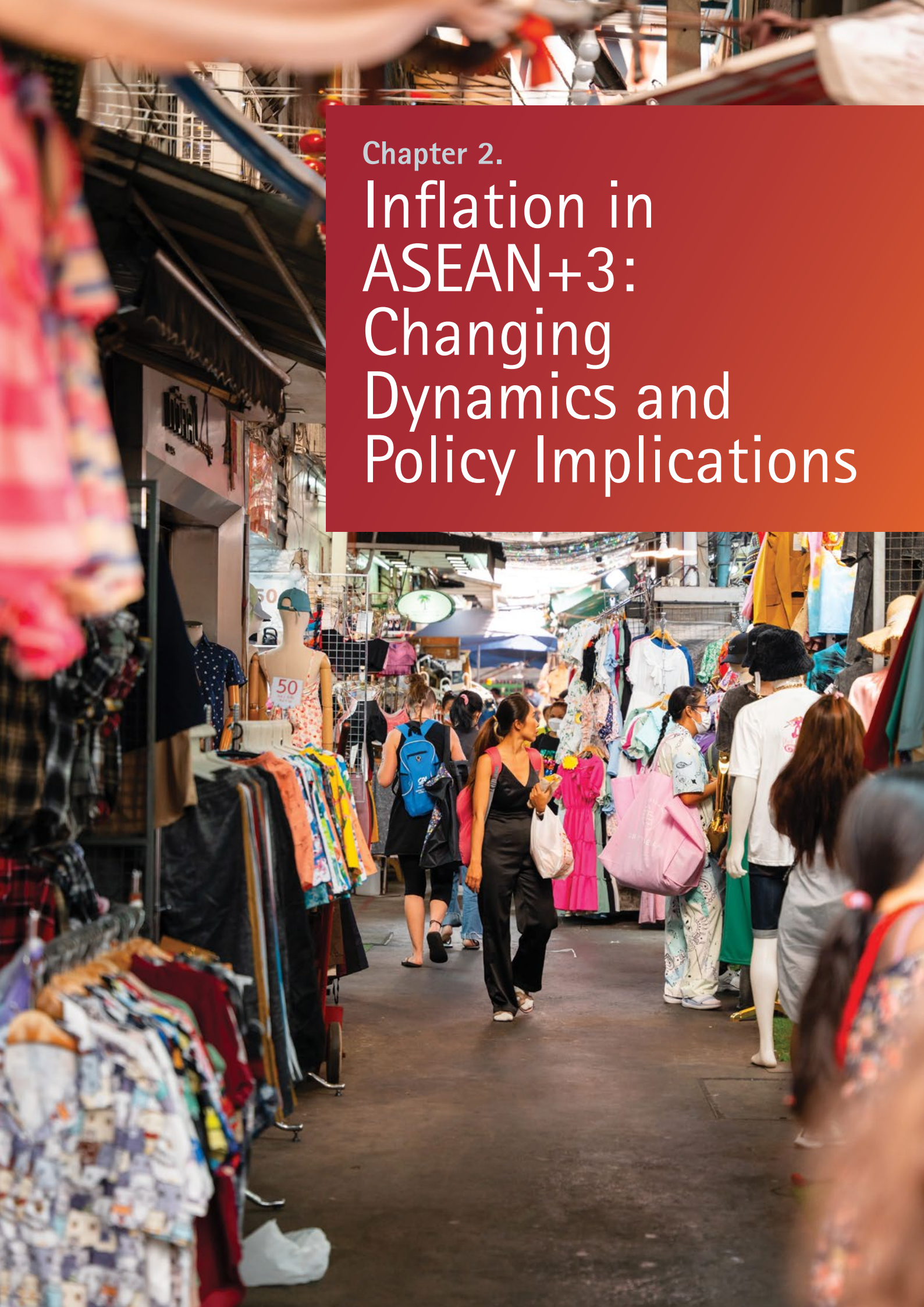


Chapter 2.

Inflation in ASEAN+3: Changing Dynamics and Policy Implications

Highlights

- After more than two decades of low and stable inflation in ASEAN+3, inflation surged in 2021 due to a confluence of the COVID-19 pandemic and multiple global supply shocks. However, the surge was moderate and short-lived compared to other regions, which helped limit welfare losses. While global commodity price pressures led to broad-based price increases initially, inflation began moderating toward the end of 2022 as commodity prices eased and global supply chains normalized. Notably, the composition of the drivers of inflation has shifted post-pandemic, with goods inflation initially dominating, while services inflation became the more persistent source of price pressures during the disinflationary period. Despite these dynamics, inflation expectations in ASEAN+3 remained well-anchored, underscoring confidence in price stability over both the short- and medium-term.

- Analysis reveals the evolving interplay of supply and demand forces in the region. Supply factors became more important during 2021–2022, contributing significantly more to both headline and core inflation compared to pre-pandemic period. The impact was particularly pronounced through global commodity prices and supply chain disruptions. As external supply pressures moderated by late-2022, demand factors emerged as the main driver amid economic reopening. Plus-3 (China, Hong Kong, Japan, and Korea) and ASEAN economies experienced different inflation trajectories. Whereas Plus-3 economies saw inflation moderating steadily from end-2022 to average below 1 percent by mid-2023, ASEAN economies maintained higher inflation rates due to stronger recovery in domestic demand.

- ASEAN+3 economies employed a mix of monetary and non-monetary measures to manage inflationary pressures effectively. Monetary policy tightening across most regional economies since 2022 was crucial in anchoring inflation expectations and containing demand pressures. Concurrently, fiscal measures such as energy and food subsidies, cash transfers, and tax adjustments helped to contain the price increase and provided critical support to households. Other supply adjustment interventions such as price regulation, stockpile management, and trade measures helped ensure essential goods and services remain available and affordable.

- The ASEAN+3 experience offers important lessons for managing inflation in an environment of complex supply-demand dynamics. The effectiveness of policy responses depends critically on accurately diagnosing inflation drivers and calibrating the appropriate policy mix. While monetary policy remains the primary tool for managing demand pressures and anchoring expectations, targeted non-monetary measures have proven valuable in addressing supply bottlenecks, capping temporary price increases of essential items, and protecting vulnerable groups.

- Looking ahead, managing inflation may become more challenging as structural shifts like geopolitical tensions, demographic changes, and climate transition increase the likelihood of supply disruptions. Monetary authorities may need to consider more forceful responses even to supply shocks if inflation expectations risk becoming de-anchored, particularly given more frequent and persistent supply disruptions. Enhanced monitoring is crucial to better distinguish between supply and demand factors in real time, helping minimize risk of delayed policy responses. However, such responses would need to carefully weigh trade-offs, as monetary policy tightening to contain supply-driven inflation can exacerbate economic downturns. Building adequate policy buffers and maintaining strong surveillance capabilities will be crucial for effectively navigating these challenges.

I. Introduction

Prior to the COVID-19 pandemic, ASEAN+3 economies had experienced more than two decades of low and stable inflation, marking a significant departure from the high inflation environment of the 1970s and 1980s (Figure 2.1). This period of low inflation has coincided with key structural changes and institutional reforms after the Asian financial crisis, including the adoption of inflation-targeting frameworks[1] and enhanced central bank independence, which has helped anchor inflation expectations in the region. The region's growing integration into global value chains, particularly following China's accession to the World Trade Organization in 2001, further contributed to this trend by improving supply chain efficiency and lowering production costs. Core inflation globally and in ASEAN+3 has followed a similar downward trend, with ASEAN+3's core inflation[2] remaining consistently lower than both the global and advanced economy averages, largely influenced by Japan's persistently low inflation due to weak domestic demand and demographic factors (Uchida 2024). Notably, inflation rates across regional economies showed steady convergence over time, with the dispersion of inflation—as measured by the interquartile range—narrowing from 15 percentage points in the 1980s to below 3 percentage points between 2020 and 2023, more closely aligning with patterns observed in advanced economies (Figure 2.2).

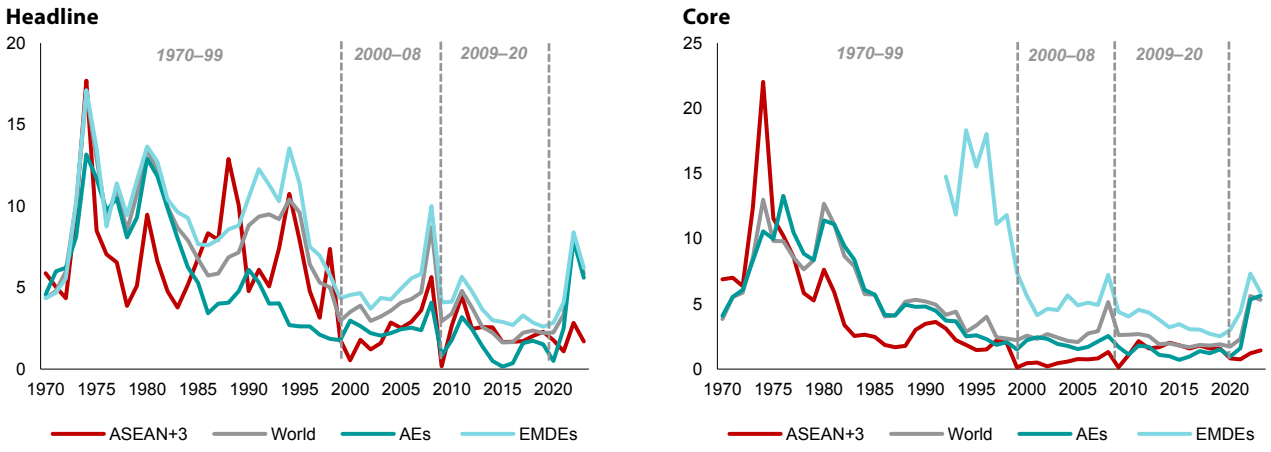
The period since 2020 has witnessed an unprecedented shift in the region's inflation dynamics. Following initial deflationary pressures during the pandemic lockdowns, ASEAN+3 experienced a sharp spike in inflation beginning in mid-2021, driven by supply chain disruptions, commodity price shocks, and post-pandemic demand recovery. While the region's headline inflation peaked in 2022 at less than half that of other major economies—and has since moderated to below pre-pandemic levels, the breadth and speed of price increases represented significant departures from historical patterns. This chapter examines the region's inflation dynamics during this exceptional period:

- ***Section II*** summarizes the key differences in the region's recent inflation dynamics compared to other regions and its own historical experience, providing context within the broader global landscape and against the region's past trends.

- ***Section III*** examines the key drivers of inflation during the recent period—distinguishing between supply and demand factors. To enhance understanding, the supply and demand factors are further explored through the lens of economic conditions and structural changes, assessing their role in driving inflation and its persistence.

- ***Section IV*** looks at policies the region has employed in managing inflation, distilling key lessons learned. Building on these and findings from the previous section, it proposes some policy considerations, including for addressing ongoing structural shifts.

Figure 2.1. Selected Economies: Consumer Price Inflation
(Percent, year-on-year)



Source: World Bank; AMRO staff calculations.
Note: AEs = advanced economies; EMDEs = emerging market and developing economies. Data refers to median inflation within each country group; ASEAN+3 refers to the GDP-weighted mean inflation across economies. Core inflation excludes Brunei, Cambodia, Lao PDR, and Myanmar due to data unavailability. Country groups are defined based on IMF's classification.

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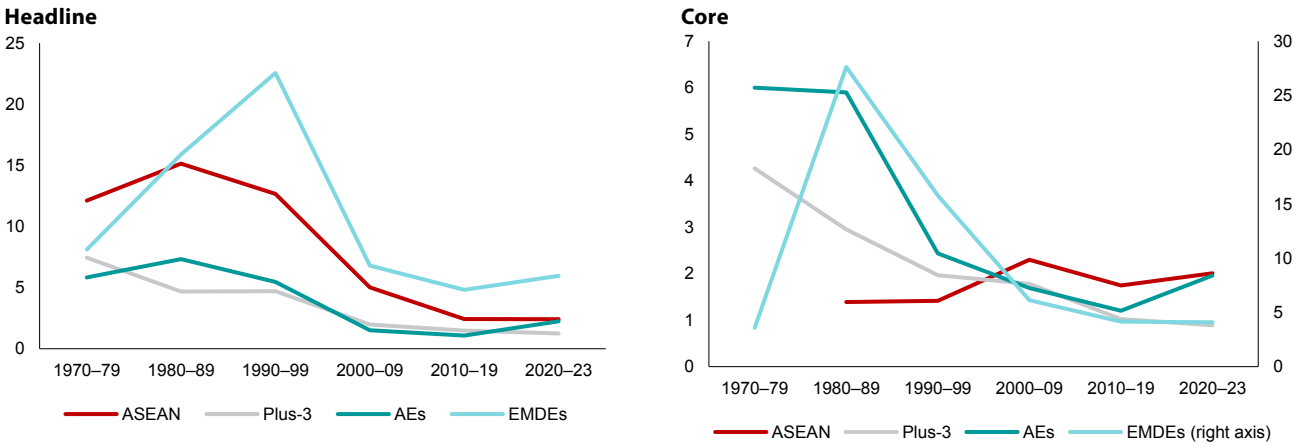
1/ Within ASEAN+3, five economies—Indonesia, Japan, Korea, the Philippines, and Thailand—have an inflation targeting framework for monetary policy.

2/ Core inflation in this chapter refers to the official core inflation statistics from each regional economy, which have varying definitions but commonly aim to filter out volatile and transient price changes. The compilation of official definitions of core inflation for ASEAN+3 can be found in Kho, Chong, and Tsang (2024).

Figure 2.2. Selected Economies: Interquartile Range of Consumer Price Inflation
(Percent)



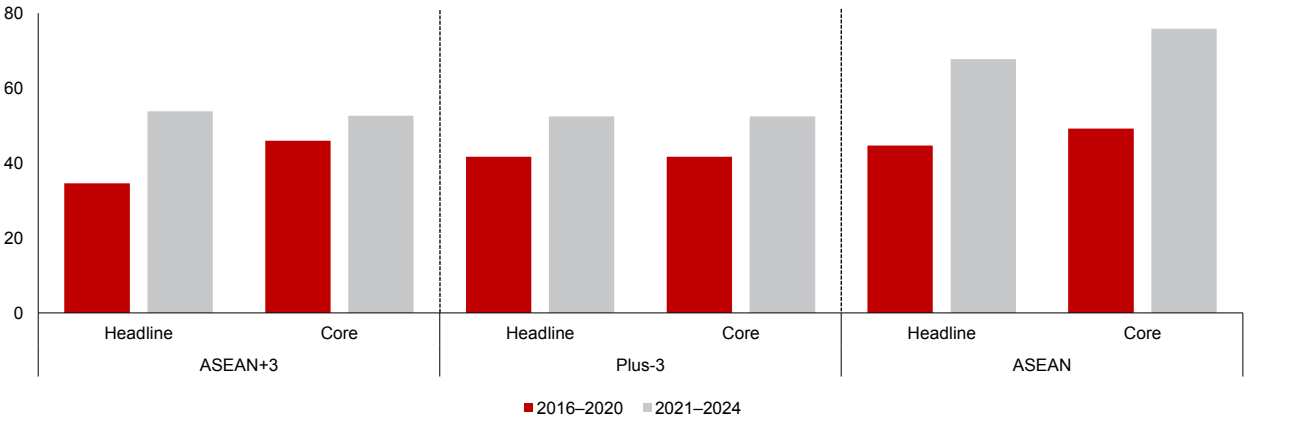
Source: World Bank; National authorities via Haver Analytics; AMRO staff calculations.
Note: AEs = advanced economies; EMDEs = emerging market and developing economies; Plus-3 = China, Hong Kong, Japan, and Korea. Country groups are defined based on the International Monetary Fund's classification.

II. Contextualizing the Recent ASEAN+3 Inflation Experience

This section examines the distinctive features of ASEAN+3's recent inflation experience compared to other major economies and the region's own historical patterns. Since the pandemic, global factors have become increasingly important in driving regional inflation, with the global common factor now explaining between one-half (Korea and Japan) and two-third (ASEAN) of inflation variation in the region (Figure 2.3).

This increased synchronization reflects the growing influence of external factors in shaping regional price dynamics. However, despite stronger global connections, the magnitude, duration, and impact of price increases in ASEAN+3 have differed notably from other regions. Understanding these differences provides crucial insights into the region's inflation dynamics and their implications for policy responses.

Figure 2.3. ASEAN+3: Percent of Variance Explained by First Principal Component
(Percent)



Source: World Bank; National authorities via Haver Analytics; AMRO staff calculations.
Note: Principal component analysis was performed on price indices of regional economies to derive the first principal component. Headline inflation excludes Lao PDR and Myanmar; core inflation excludes Brunei, Cambodia, Lao PDR, Myanmar, and Vietnam.

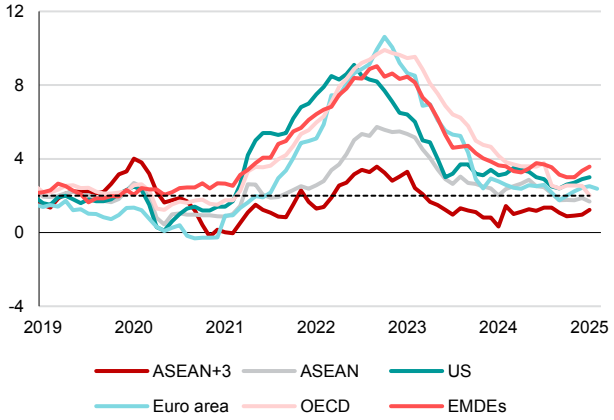
Lower and More Short-Lived Inflation

ASEAN+3's inflation experience since 2020 has been distinctly milder and shorter-lived than that of other major economies. While headline inflation in the region began rising in mid-2020 along with global trends, it peaked at 3.6 percent in September 2022—less than half the maximum rates seen in the US (9.1 percent), the Organisation for Economic Co-operation and Development (OECD, 9.9 percent), and euro area (10.6 percent) (Figure 2.4). Moreover, the region's inflation moderated more quickly, stabilizing at an average of 1.2 percent since June 2023, below its pre-pandemic average of 2 percent (2014–2019). This contrasts sharply

with the US and OECD, where inflation has remained elevated, and above pre-pandemic levels (Figure 2.5). Core inflation in ASEAN+3 peaked four months later than headline inflation and has also moderated to below its pre-pandemic average.

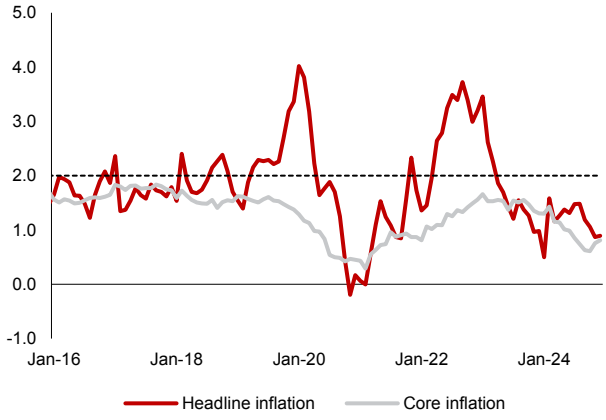
The moderate increase in regional inflation has helped limit welfare losses across ASEAN+3 economies. While high inflation from 2021 to 2023 has raised prices by 20 percent to 23 percent in the US and OECD, the increase in ASEAN+3 was a more modest 5.8 percent (Figure 2.6), with all regional economies, except Lao PDR and Myanmar, experiencing increases of less than 20 percent (Figure 2.7). This difference in cumulative price increases has likely been crucial in limiting welfare losses[3] in ASEAN+3 compared to other economies (Pallotti and others 2024). The region's slower price growth has therefore helped contain cost-of-living pressures for most households, though vulnerabilities remain—particularly for poorer households who spend a larger share of their income on food and energy (Bobasu, di Nino, and Osbat 2023).

Figure 2.4. Selected Economies: Headline Inflation
(Percent)



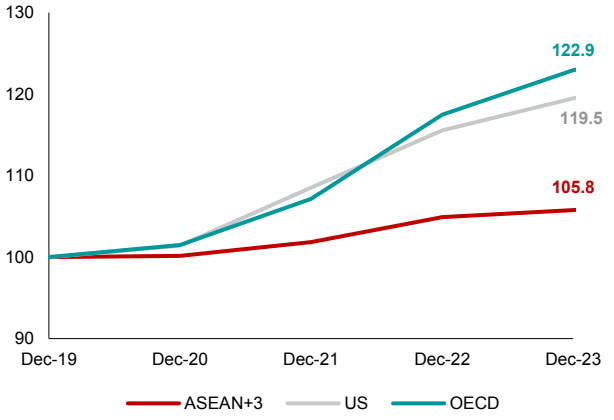
Source: National authorities via Haver Analytics; World Bank; AMRO staff calculations.
Note: EMDEs = Emerging market and developing economies. The Organisation for Economic Co-operation and Development (OECD) excludes Türkiye and euro area economies. ASEAN+3 and ASEAN exclude Myanmar, and refer to the GDP-weighted mean inflation across economies. EMDEs refers to median inflation across 78 economies.

Figure 2.5. ASEAN+3: Headline and Core Inflation
(Percent, year-on-year)



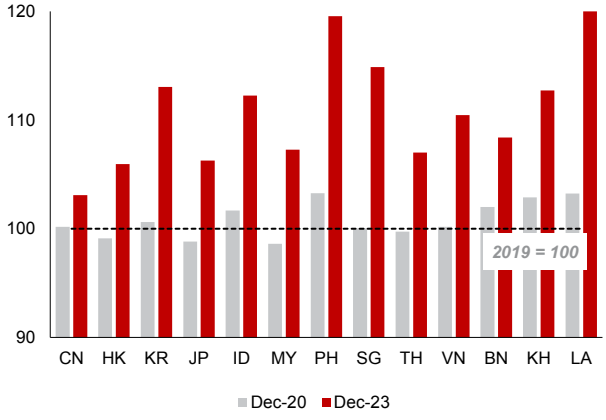
Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: Regional aggregates are GDP-weighted. Data up to December 2024, except Myanmar (September 2024). Core inflation data excludes Brunei and Myanmar due to data unavailability.

Figure 2.6. Selected Economies: Price Levels
(Index, 2019 = 100)



Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: ASEAN+3 price levels are calculated using the GDP-weighted mean inflation for the ASEAN+3 economies. Excludes Myanmar.

Figure 2.7. Selected ASEAN+3: Price Levels
(Index, 2019 = 100)



Source: National authorities via Haver Analytics; AMRO staff calculations.

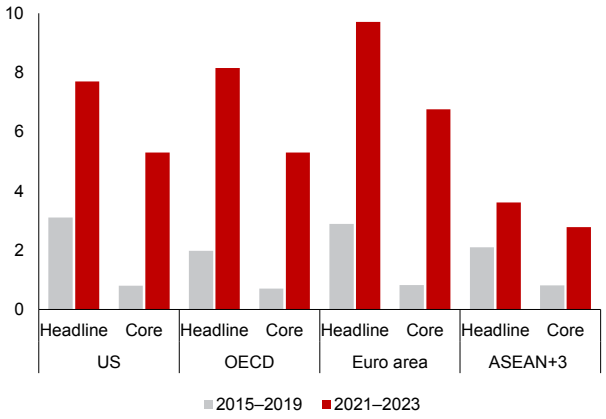
3/ Higher inflation typically reduces real income and erodes household wealth, with no immediate compensating rise in income, housing prices, or financial assets.

Relatively Moderate Volatility Despite Wider Sectoral Variability

Despite increasing, inflation volatility in ASEAN+3 has remained notably contained compared to other regions. From 2021 to 2023, the range of headline inflation nearly tripled, while core inflation rose more than sixfold compared to the pre-pandemic period (Figure 2.8). However, the region's inflation swings have been more moderate—monthly headline inflation fluctuated within 4.2 percentage points, less than half of the 9-percentage point range seen in the US and OECD (Figure 2.9). Within the region, ASEAN economies experienced greater volatility, with fluctuations of 7 percentage points, compared to 4 percentage points for the Plus-3 economies (Figure 2.10). Core inflation followed similar patterns, with Plus-3 economies (China, Hong Kong, Japan, and Korea) in particular showing narrow fluctuations within a 1.5 percentage point range (Box 2.1). This relative stability in consumer prices, however, stands in marked contrast to producer price inflation, which has shown significantly higher volatility throughout this period (Box 2.2).

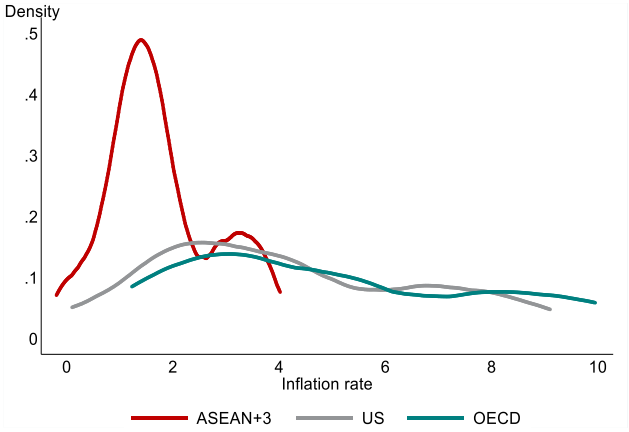
Beyond these aggregate patterns, the post-pandemic period has revealed significant variability in sectoral inflation rates across the region. The dispersion of inflation across components of the consumer price index (CPI)—measured by their standard deviations—initially spiked in April 2020 as COVID-19 containment created opposing pressures: suppressing services demand while driving up goods prices through supply chain disruptions (Figure 2.11). This sectoral divergence reached its peak in June 2022, driven by global supply shocks that disproportionately affected energy, food, and transportation prices, with spillover effects across other sectors. Price increases became increasingly pervasive, with a larger share of the CPI basket experiencing above-average monthly increases compared to pre-pandemic norms (Figure 2.12). Whereas some sectors like education and healthcare remained relatively insulated from global price pressures, others such as rental and property markets responded to economy-specific factors. The sectoral divergence began narrowing from the end of 2022 as commodity prices moderated and demand conditions normalized.

Figure 2.8. Selected Economies: Range of Headline and Core Inflation
(Percentage points)



Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: OECD = Organisation for Economic Co-operation and Development. Range of inflation refers to the difference between the maximum and minimum value of the regional aggregate within the time period.

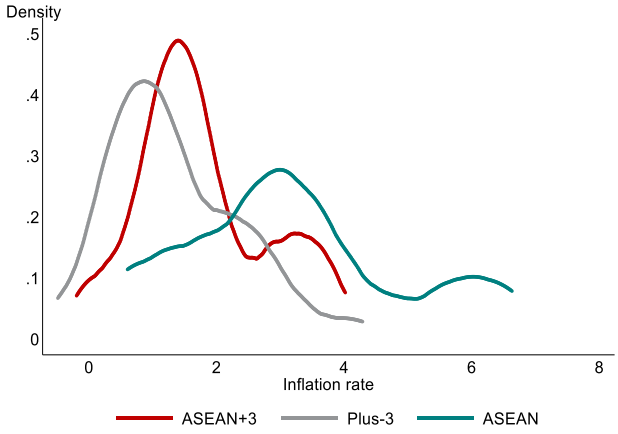
Figure 2.9. Selected Economies: Distribution of Monthly Headline Inflation
(Density, 2020–2024)



Source: National authorities via Haver Analytics; World Bank; AMRO staff calculations.
Note: Organisation for Economic Co-operation and Development (OECD) excludes Türkiye and euro area economies. ASEAN+3 refer to the GDP-weighted inflation rates.

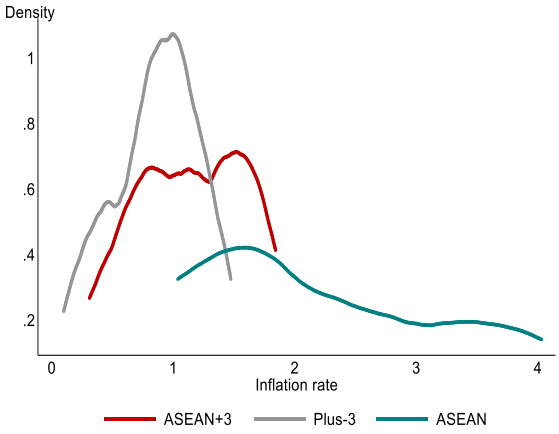
Figure 2.10. ASEAN+3: Distribution of Monthly Consumer Price Inflation
(Density, 2020–2024)

Headline



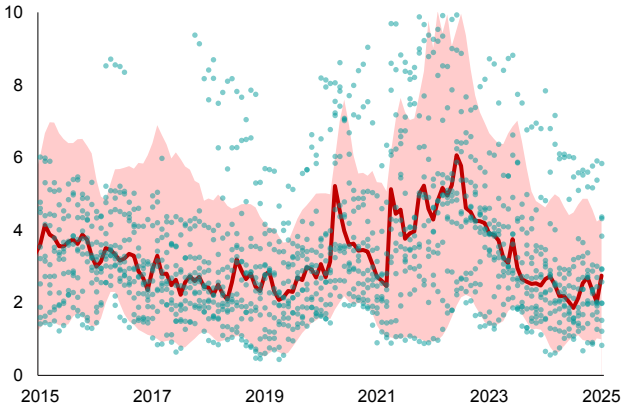
Source: National authorities via Haver Analytics; World Bank; AMRO staff calculations.
Note: Regional inflation is GDP-weighted.

Core



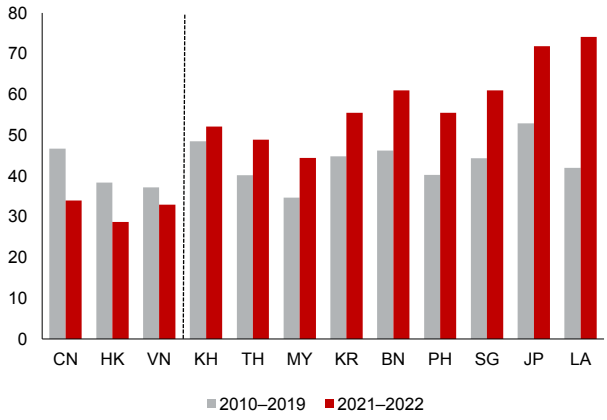
Source: National authorities via Haver Analytics; World Bank; AMRO staff calculations.
Note: Regional inflation is GDP-weighted. Brunei and Myanmar are omitted due to data unavailability.

Figure 2.11. ASEAN+3: Inflation Dispersion
(Percent, year-on-year)



Source: National authorities; AMRO staff calculations.
Note: Dispersion refers to the standard deviation of inflation categories within each economy. Each dot corresponds to an economy within ASEAN+3. Line refers to the median for the region.

Figure 2.12. ASEAN+3: Share of CPI Basket Recording Month-on-Month Price Increases
(Percent share of CPI basket)



Source: National authorities via Haver Analytics; World Bank; AMRO staff calculations.
Note: Inflation pervasiveness is measured as the share of CPI basket with month-on-month price increase that is above its long-term average (2010–2019).

Box 2.1:

The Prevalence of Low-Inflation Products in Thailand's Core Inflation Basket

Thailand's core inflation has experienced much lower volatility since the pandemic compared to regional peers. This stability has been crucial in keeping overall inflation contained, as headline inflation quickly retreated below the Bank of Thailand's 1 percent to 3 percent target range in May 2023 after peaking at 7.9 percent in August 2022. Despite fluctuations in headline inflation, Thailand's core inflation has remained exceptionally low relative to ASEAN peers (Figure 2.1.1), showing marked stability even during the global inflation surge. This analysis examines the structure of product-level inflation to shed some light on Thailand's uniquely low and stable core inflation.

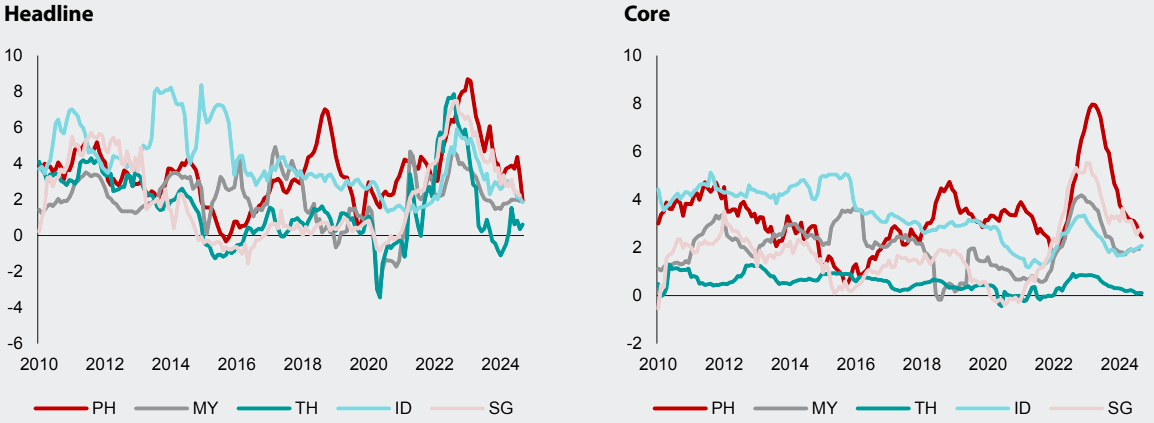
The prevalence of low-inflation items in the core basket appears to drive Thailand's consistently low and stable core inflation. Historically, Thailand has had an exceptionally high proportion of products with inflation below 1 percent, well under the central bank's target range. Between 2010 and 2019, prices of around 80 percent of items in Thailand's core inflation basket rose at below 1 percent (Figure 2.1.2), with most categories, except prepared food items, consistently registering inflation below the target range (Figure 2.1.3). The proportion of products with inflation below the central bank's target decreased from 87.4 percent in late 2019 to a still-high 61.3 percent during peak inflation in August 2022, and has since recovered to 75.7 percent as of September 2024, though remaining below pre-pandemic levels.

Products with historically lower inflation saw relatively milder inflation increases during the pandemic. This is shown by the positive correlation between historical inflation and pandemic-period inflation increases at the product level (Figure 2.1.4). This pattern may reflect well-anchored inflation expectations among low-inflation product categories, which helped prevent expectation-driven price spikes (Goel and Tsatsaronis 2022; IMF 2023a).

Products with historically low inflation also demonstrated faster inflation moderation after the August 2022 peak, reinforcing Thailand's low-inflation dynamics (Figure 2.1.5). These products' low inflation characteristic may reflect Thailand's diversified manufacturing base and established global trade networks (Manopimoke and Direkudomsak 2015; IMF 2024a), which enabled faster recovery from supply disruptions and helped maintain price stability.

Further research could explore the structural factors behind Thailand's distinctively large share of low-inflation products. While this may reflect Thailand's diversified domestic and external supply networks and well-anchored inflation expectation, the key question remains: Why do so many products in Thailand's core basket show persistently low inflation compared to regional peers? Understanding what drives Thailand's high proportion of low-inflation products could provide valuable insights into inflation dynamics across the region.

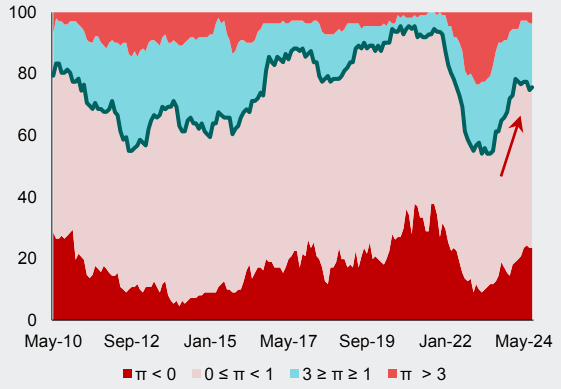
Figure 2.1.1. ASEAN-5: Consumer Price Inflation
(Percent, year-on-year)



Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: ID = Indonesia; MY = Malaysia; PH = the Philippines; SG = Singapore; TH = Thailand. The core inflation has been recalculated using consistent weights and product basket to improve comparability across economies.

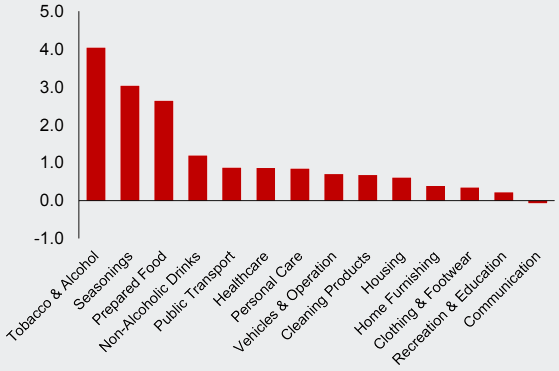
This box was written by Haobin Wang.

Figure 2.1.2. Thailand: Share of Products within Various Inflation Ranges
(Percent)



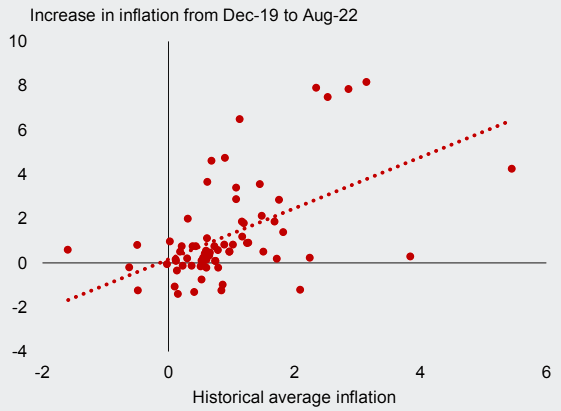
Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: The chart shows the share of products in the core inflation basket corresponding to different inflation ranges. This estimate covers approximately 100 products, classified at the 3-digit level of the Classification of Individual Consumption by Purpose.

Figure 2.1.3. Thailand: Average Inflation by Products, 2010–2019
(Percent, year-on-year)



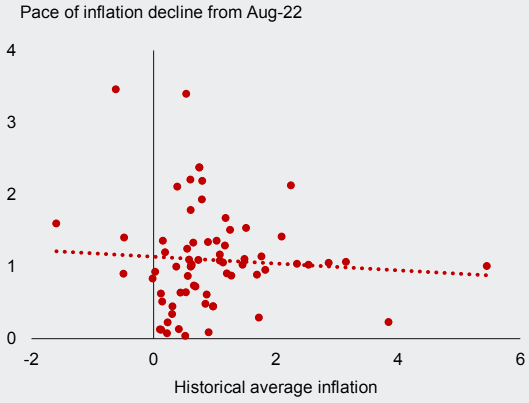
Source: National authorities via Haver Analytics; AMRO staff calculations.

Figure 2.1.4. Thailand: Historical Inflation versus Inflation Increase During the Pandemic
(Percentage points; percent, year-on-year)



Source: National authorities via Haver Analytics; AMRO staff calculations.

Figure 2.1.5. Thailand: Historical Inflation versus Pace of Inflation Decline After the Pandemic
(Percentage points; percent, year-on-year)



Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: Pace of inflation decline from peak is computed as the ratio between the absolute value of inflation change from August 2022 to September 2024 and that from December 2019 to August 2022.

Box 2.2:

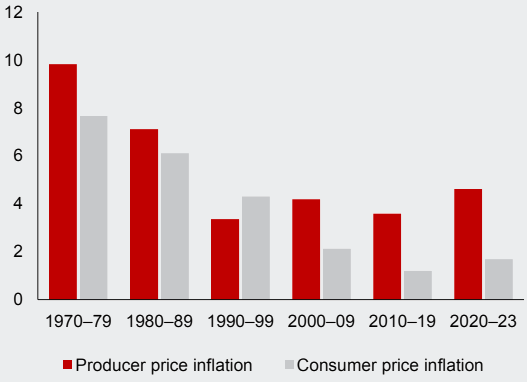
Differences between Producer Prices and Consumer Prices

Producer price inflation in ASEAN+3 exhibits different trends from headline and core consumer price inflation. Producer price inflation (PPI) in ASEAN+3 has generally been more volatile, with a larger standard deviation than consumer price inflation (CPI) over most periods (Figure 2.2.1). This volatility reflects the region's role in global value chains, where regional economies are mainly price takers in global goods markets. The reliance on imported inputs as part of this intermediary role makes exchange rate fluctuations another key driver of the PPI.

PPI is more sensitive to global price fluctuations as it consists mostly of goods. Given the region's significant integration in the global value chain, the PPI basket for most ASEAN+3 economies is dominated by goods, particularly intermediate goods used in manufacturing (Figure 2.2.2). In contrast, services account for 30–55 percent of the CPI basket. A study across 10 Asian economies found that global oil and food prices, along with exchange rates, have a greater effect on producer prices than consumer prices (Jongwanich, Wongcharoen, and Park 2016). The study also found that external cost-push factors, such as global oil and food prices, explain about 32 percent of PPI variation but only 20 percent of CPI variation.

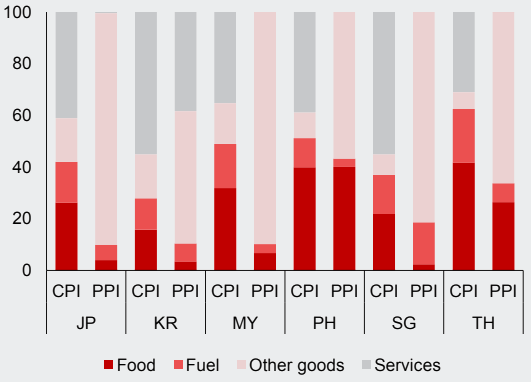
Exchange-rate passthrough also has a greater effect on PPI than CPI across all economies. However, exchange-rate passthrough is likely to be incomplete across all economies owing to firm pricing behavior—exporting firms may lower prices during currency appreciation to maintain market share and increase profit margins during depreciation, while importing firms adjust prices inversely. Similarly, an IMF (2010) study on China found that nominal exchange rate appreciation has a moderate passthrough effect on producer prices but minimal impact on consumer prices, likely because imports are predominantly composed of intermediate goods. Imported consumer goods also constitute a small share of the consumption basket (weighted average of 5 percent of regional consumer goods).

Figure 2.2.1. ASEAN+3: Standard Deviation of Producer and Consumer Price Inflation
(Percent, year-on-year)



Source: National authorities via Haver Analytics; World Bank; AMRO staff calculations.
Note: Values refer to median standard deviation of economies within the country group for the time period.

Figure 2.2.2. Selected ASEAN+3: Composition of Producer Price Index versus Consumer Price Index
(Percent share of basket)



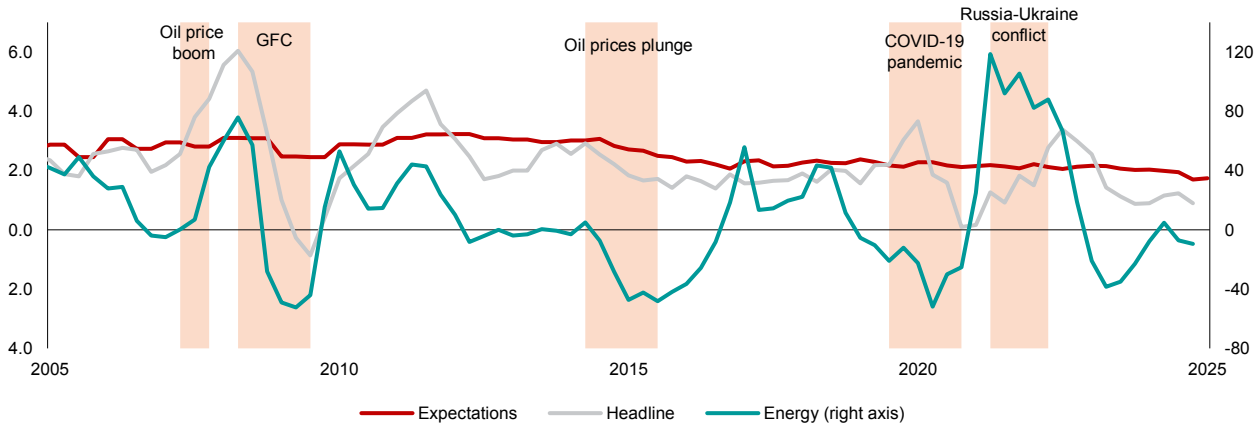
Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: JP = Japan; KR = Korea; MY = Malaysia; PH = Philippines; SG = Singapore; TH = Thailand; CPI = consumer price index, PPI = producer price index.

This box was written by Megan Chong.

Well-Anchored Inflation Expectations

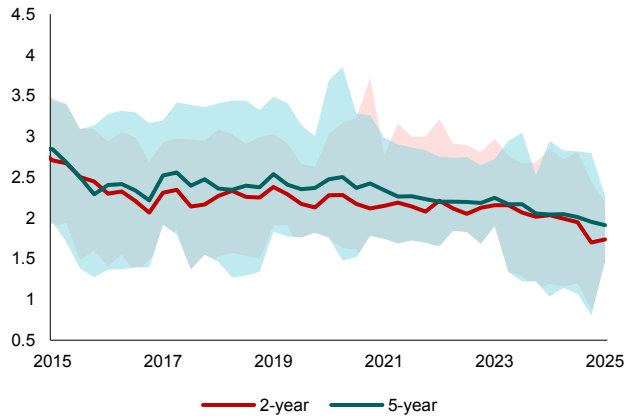
Despite elevated and prolonged inflationary pressures, ASEAN+3 has maintained well-anchored inflation expectations throughout the post-pandemic period. As with previous episodes of significant global prices fluctuations, inflation expectations[4] in the region have remained stable (Figure 2.13). Similar to the experience of the US and OECD economies, despite inflation reaching multiyear highs in 2021–2022, changes to inflation expectations over the next two years and five years were minimal—reflecting confidence in price stability over both the short and medium terms (Figure 2.14). This finding mirrors the experience of both advanced economies and emerging market and developing economies (IMF 2024b). Notably, inflation expectations have broadly remained close to regional economies' inflation targets or long-term averages (Figure 2.15), a feature that has supported the region's moderate inflation experience by helping prevent the emergence of persistent price pressures that could arise when expectations become unanchored. The stability in expectations has been remarkable given the multiple supply shocks that hit the region in this period, including pandemic-related disruptions and commodity price surges.

Figure 2.13. Selected ASEAN+3: Headline Inflation and Two-Year Ahead Inflation Expectations
(Percent, year-on-year)



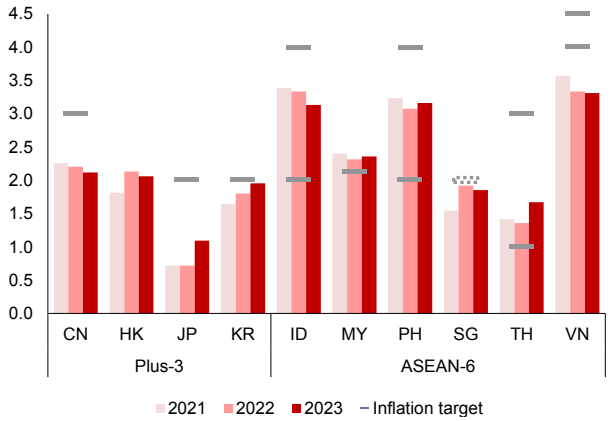
Source: Consensus Economics; National authorities via Haver Analytics; World Bank; AMRO staff calculations.
Note: GFC = global financial crisis. Headline inflation is the GDP-weighted headline inflation for selected ASEAN+3 economies. Energy price inflation refers to the World Bank's commodity price index for energy. Selected ASEAN+3 includes China, Hong Kong, Indonesia, Japan, Korea, Malaysia, Philippines, Singapore, Thailand, and Vietnam.

Figure 2.14. Selected ASEAN+3: Two- and Five-Year Ahead Inflation Expectations
(Percent, year-on-year)



Source: Consensus Economics; International Monetary Fund via Haver Analytics; AMRO staff calculations.
Note: Lines refer to GDP-weighted average of median inflation forecast, bands refer to GDP-weighted average of highest and lowest inflation forecasts from Consensus Economics.

Figure 2.15. Selected ASEAN+3: Two-Year Ahead Inflation Expectations
(Percent, year-on-year)



Source: Consensus Economics; National authorities via Haver Analytics; AMRO staff calculations.
Note: BN = Brunei; CN = China; HK = Hong Kong; ID = Indonesia; JP = Japan; KR = Korea; MY = Malaysia; PH = Philippines; SG = Singapore; TH = Thailand; VN= Vietnam. Inflation expectations refer to the median two-year ahead inflation expectations in that year. Markers refer to the economy's inflation target or target range, or 2014–2019 average headline inflation. Hong Kong does not have an inflation target, but follows the Linked Exchange Rate System (LERS), which keeps the HKD trading within HKD 7.75–7.85 to one USD and restricts the HKMA's discretion on matters of monetary policy. Singapore's inflation target refers to MAS' implicit target of just under 2 percent for core inflation.

[4/] Measured by Consensus Economics Survey of Professional Forecasters, a monthly survey that collects forecasts of a wide range of macroeconomic indicators, including inflation, from economists around the world.

Evolving Dynamics Between Goods and Services Inflation

The composition of inflation in ASEAN+3 has shifted markedly throughout the post-pandemic period, with goods and services prices following distinct trajectories. During the COVID-19 lockdown, goods demand surged while services demand collapsed (Figure 2.16). Supply chain disruptions and spikes in global energy and food prices exacerbated goods inflation, with significant spillover effects as these key inputs affected prices across sectors. This led to a broad-based increase in goods inflation that exceeded services inflation. However, as global commodity prices declined, the moderation in headline inflation was tempered by rising services prices, particularly in more price-inflexible sectors. By early 2023, services inflation had overtaken goods inflation.

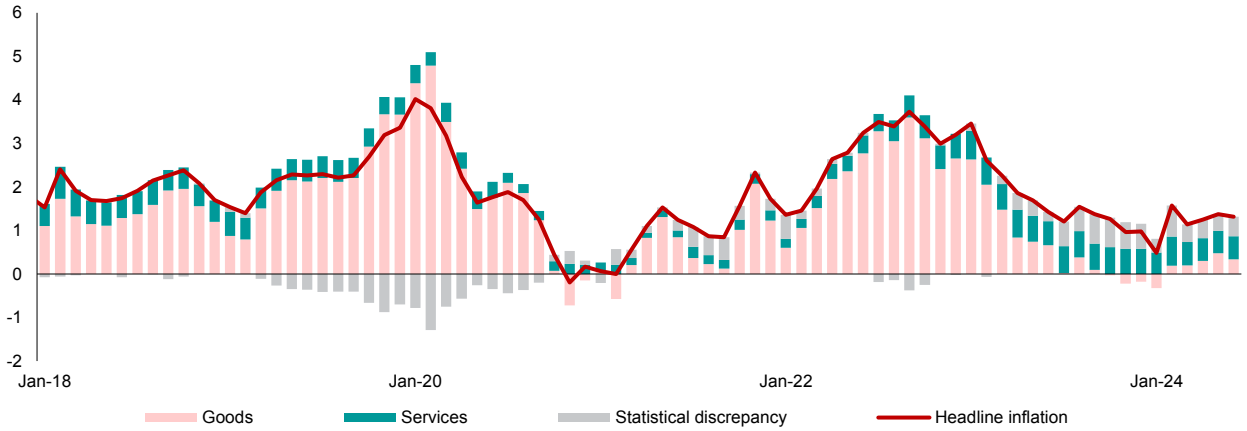
The goods sector initially dominated the region's inflation dynamics. Following an initial decline in early 2020 because of mobility restrictions, goods prices began rising by mid-2020 amid global supply chain disruptions (Figure 2.17, AMRO 2022). Multiple factors amplified this trend: increased demand for durables and health-related products (Tauber and Van Zandweghe 2021), energy price spikes from reopening and supply constraints (Alvarez and Molnar 2021), and food price increases driven by pandemic-related demand shifts and weather conditions (Bogmans, Pescatori, and Prifti 2021). The Russia-Ukraine conflict which escalated into a crisis further intensified these pressures before goods inflation peaked in September 2022 and began moderating as supply conditions improved.

Services inflation has since emerged as a more persistent source of price pressures during the disinflationary period. The services sector, after experiencing suppressed demand during the pandemic, saw prices rise steadily as economies reopened and border restrictions eased. Several factors have contributed to this persistence: labor market tightness from workforce disruptions (AMRO 2024a), elevated transportation costs due to disruptions in global shipping routes, and higher housing costs and rents reflecting continued supply-demand imbalance since the pandemic. Services inflation tends to moderate more slowly because of its lower sensitivity to energy prices and higher labor intensity, with wage adjustments occurring less frequently (Amatyakul, Igan, and Lombardi 2024).

These broad patterns mask important differences between Plus-3 and ASEAN economies. Both subregions experienced similar goods inflation trends until September 2022, though Plus-3's trajectory was influenced by preexisting factors such as China's pork-price dynamics. Subsequently, Plus-3's goods inflation turned negative by July 2023, while ASEAN saw a more gradual decline to 1.9 percent by January 2024. Services inflation has followed even more divergent paths, with ASEAN maintaining higher rates of about 3 percent due to strong tourism recovery and elevated accommodation costs, while Plus-3 saw more moderate increases peaking at 2.5 percent in February 2024 (Figure 2.18; Figure 2.19). These differences persisted into the second half of 2024, with services inflation moderating in Plus-3 while remaining stable in ASEAN economies.

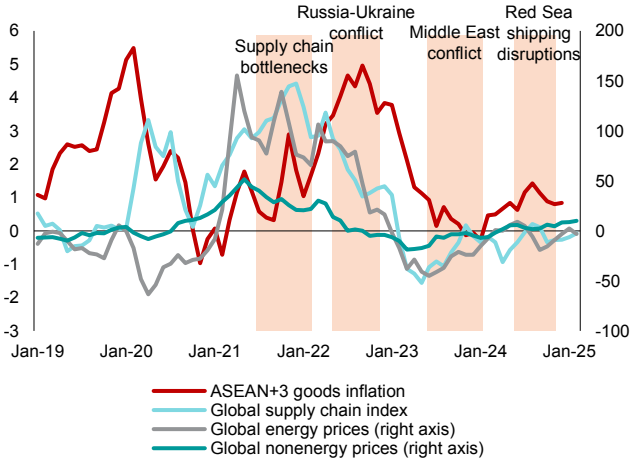
Overall, ASEAN+3 region's inflation experience since 2020 reveals several distinctive characteristics that set it apart from both global trends and historical patterns. While global factors have been increasingly important in driving regional inflation—as evidenced by greater synchronization across economies—the region has maintained notably lower and more short-lived price pressures compared to other major economies. This more moderate inflation experience, coupled with well-anchored expectations, has helped limit welfare losses across the region. However, beneath these aggregate trends lies considerable complexity in how inflation has evolved, particularly in the shifting dynamics between goods and services prices and the varying experiences of Plus-3 and ASEAN economies. Understanding the forces behind these patterns—particularly the interplay between supply and demand factors—is crucial for assessing their persistence and implications for policy responses.

Figure 2.16. ASEAN+3: Goods and Services Inflation
(Percentage point contribution; percent, year-on-year)



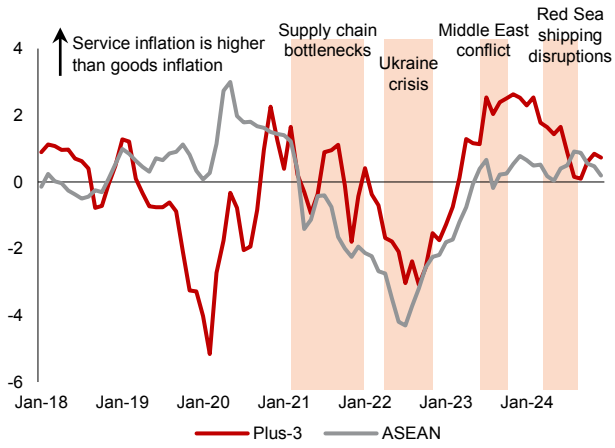
Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: Regional aggregation is done using 2023 GDP purchasing power parity weights. Breakdown for Myanmar is unavailable from August 2022 onward. Statistical discrepancy refers to the difference between headline inflation and the sum of goods and services contribution, which is attributable to the difference in product classification across economies.

Figure 2.17. Selected Economies: Global Commodity Prices and ASEAN+3 Goods Inflation
(Percent, year-on-year; standard deviation points)



Source: National authorities via Haver Analytics; World Bank, Federal Reserve of New York, AMRO staff calculations.
Note: Global energy and nonenergy prices refer to the World Bank Commodity Price Index. Data are up to December 2024, except Myanmar's latest data which are up to September 2024.

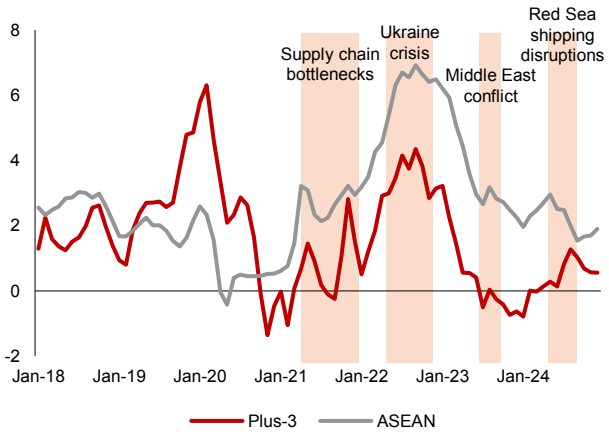
Figure 2.18. ASEAN+3: Services-Goods Inflation Gap
(Percentage points)



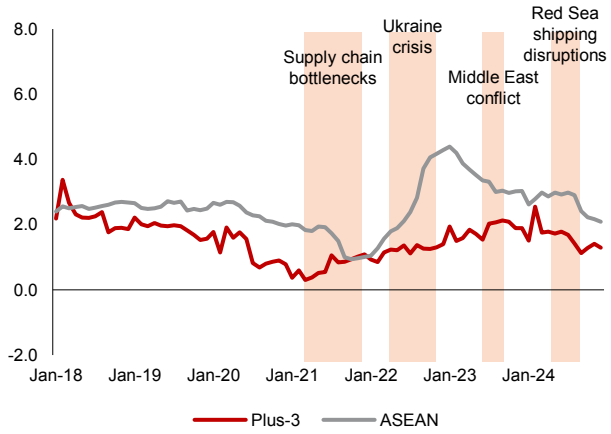
Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: Plus-3 = China, Hong Kong, Japan, and Korea. Difference between services and goods inflation. Positive values refer to services inflation outpacing goods inflation, while negative values refer to periods where goods inflation outpace services. Data are up to December 2024, except Myanmar's latest data which are up to September 2024.

Figure 2.19. ASEAN+3: Goods and Services Inflation
(Percent, year-on-year)

Goods



Services



Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: Plus-3 = China, Hong Kong, Japan, and Korea. Headline inflation excludes Myanmar due to data unavailability. Data are up to December 2024, except Myanmar's latest data which are up to September 2024.

III. Disentangling the Underlying Shifts in Inflation Dynamics

The evolving inflation dynamics in ASEAN+3 reflect complex interactions between supply and demand forces, shaped increasingly by global factors. Since the pandemic, the region has experienced more frequent global shocks alongside stronger international linkages, making the distinction between supply and demand drivers crucial for policy formulation. Understanding these dynamics—particularly how global and domestic forces interact—is now essential for designing appropriate policy responses, especially as the channels through which these forces affect inflation have become more intricate and interrelated. This section examines how supply and demand forces have evolved, while also exploring the interplay between global and domestic factors in shaping regional inflation.

Rising Role of Supply Factors in Driving Inflation

Overall, the post-pandemic period has seen supply factors playing a larger role as a driver of regional inflation. Following the approach in Shapiro (2022), analysis shows supply-side factors became significantly more pronounced in 2021 and 2022 than in the pre-pandemic period across most ASEAN+3 economies (Figure 2.20; while Annex 1 describes the methodology). Several major supply shocks amplified inflationary pressures: supply chain bottlenecks and labor shortages in 2021 led to broad cost-push inflation, while the Ukraine crisis disrupted supplies of key commodities, especially fuel and grains, causing substantial price increases worldwide. However, demand factors also contributed—particularly as economies reopened in early 2022 with pent-up demand and stimulus spending, which led to surge in consumer spending that also put upward pressure on prices.

The larger role of supply factors has been remarkably consistent across the region, with only two notable exceptions. Cambodia and Singapore experienced lower contributions from supply factors in 2021–2022. In Cambodia, the decline mainly reflects a high base effect. Before the pandemic, inflation was almost entirely supply-driven, with limited influence from demand as fiscal policy was very conservative. However, as the economy began to recover post-pandemic, demand factors grew in importance, reflecting expansionary fiscal policy to support economic activity. In Singapore, the sharp increase in demand-driven inflation since 2021 was primarily fueled by highly expansionary fiscal policy aimed at supporting the economy, while higher accommodation rents were mainly due to increased demand for rental and private housing—which was exacerbated by a supply shortage caused by the pandemic-induced shutdown of the construction industry.

The dissipation of supply shocks since the end of 2022 contributed to the disinflation trend across the region. Supply shocks eased toward the end of 2022 as global supply chains normalized, containment measures were lifted and economies were reopened, and global energy supply-demand dynamics stabilized. As a result, demand factors became more prominent in driving inflation, coinciding with stronger economic growth across the region (Figure 2.21).[5]

Despite the dissipation of supply shocks, supply factors remain a more significant contributor to core inflation than in the period prior to the pandemic (Figure 2.22). The rise in supply factors, which were significant in driving core inflation across most economies in 2021 and 2022, was largely the result of broad-based increases in input costs from supply shocks and services inflation, which fed into non-volatile price items (Kho, Chong, and Tsang 2024). While core inflation has moderated to below pre-pandemic levels in 2023, supply factors continue to be more prominent than before. The persistence in supply factors partly reflect the scarring effects of the pandemic, the spillovers from supply shocks that are embedded in non-volatile price items, and subdued demand in the Plus-3 economies. In fact, supply-driven factors have contributed to core inflation in Japan rising to its highest levels in the past two decades (Box 2.3).

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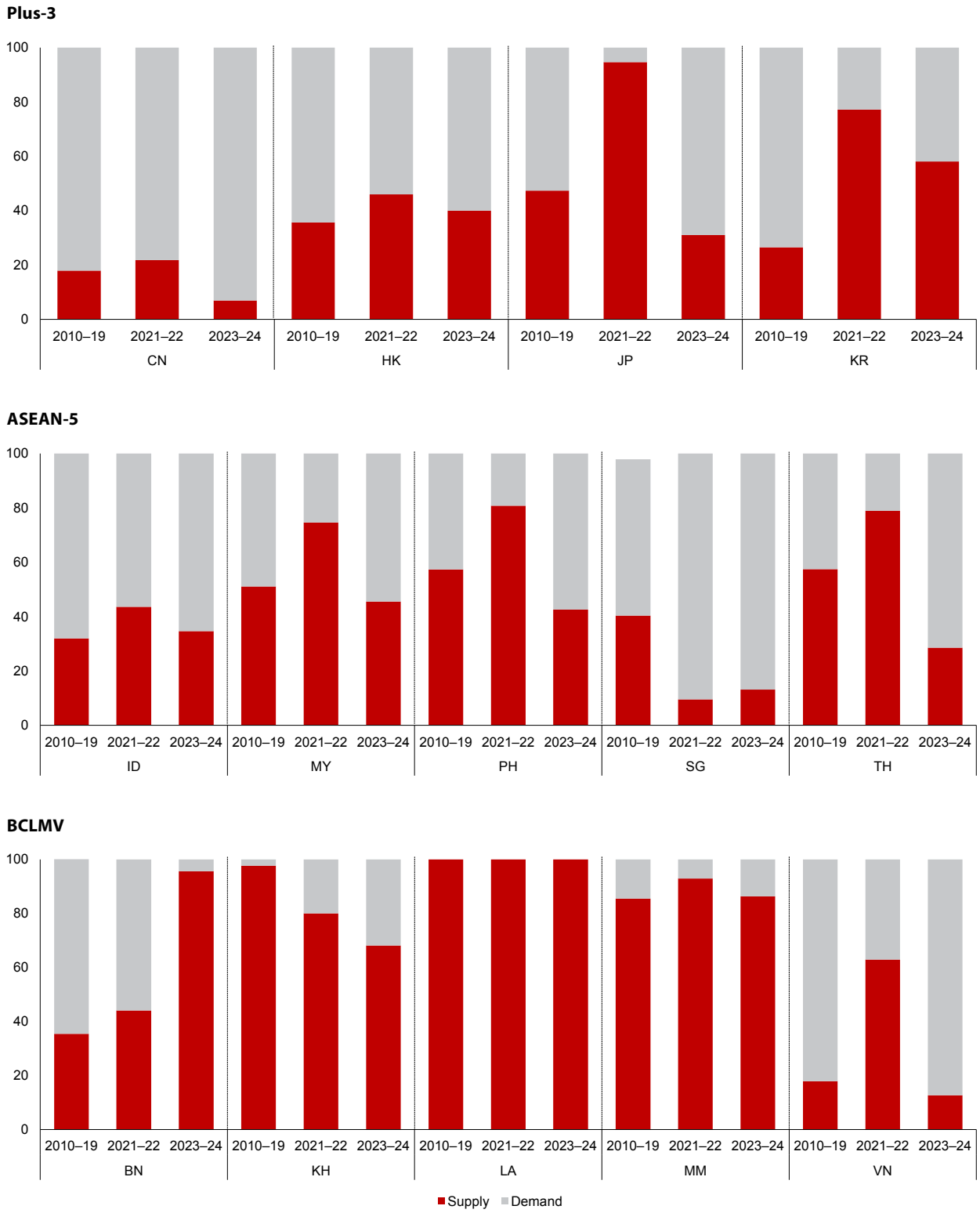
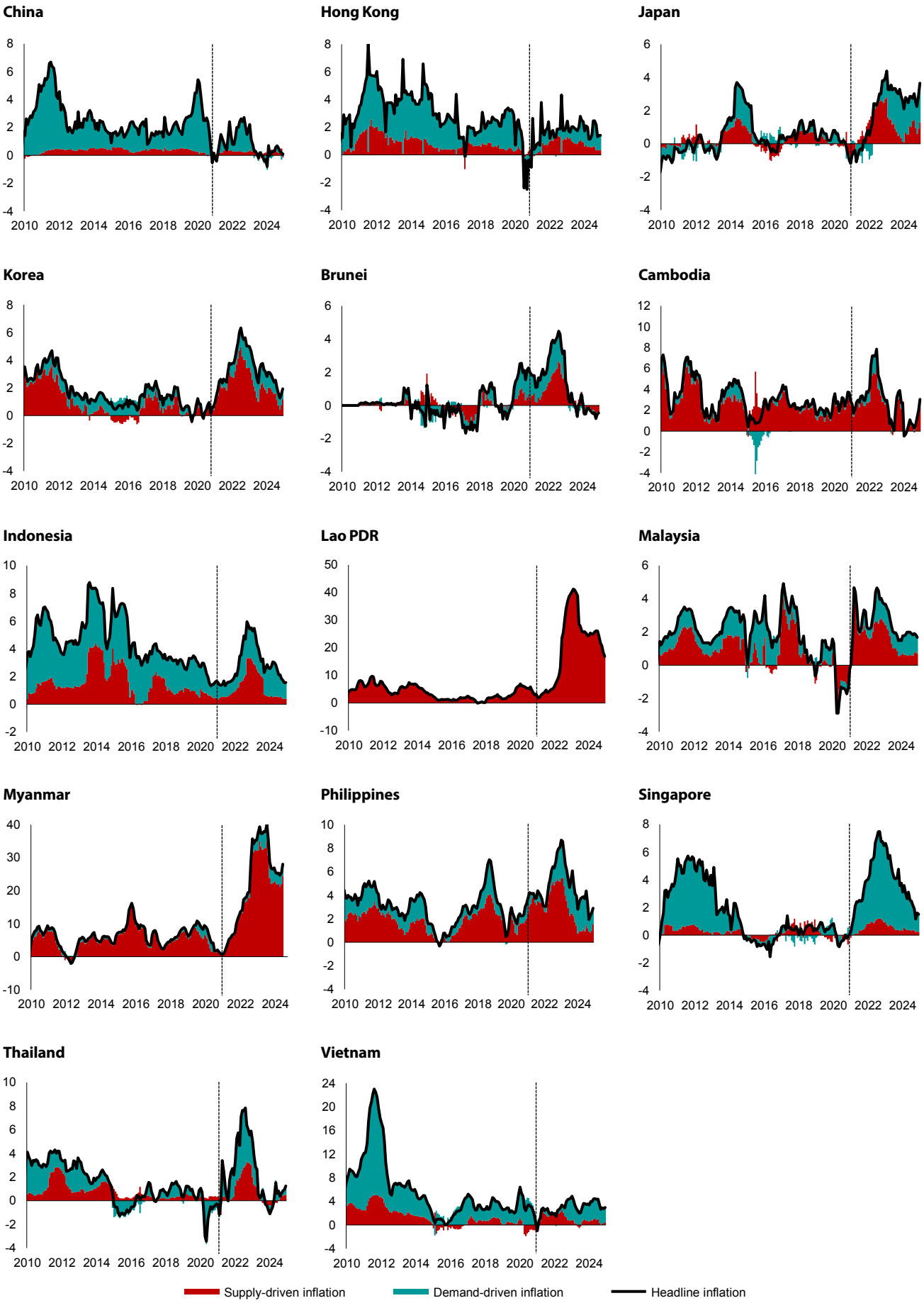
[5] Lao PDR is an exception, in which supply factors continue to dominate inflation dynamics due mainly to the prolonged weakness of the kip. This is explored further in Box 2.4.

Figure 2.20. ASEAN+3: Average Contribution to Headline Inflation, 2010–2024
(Percent share)



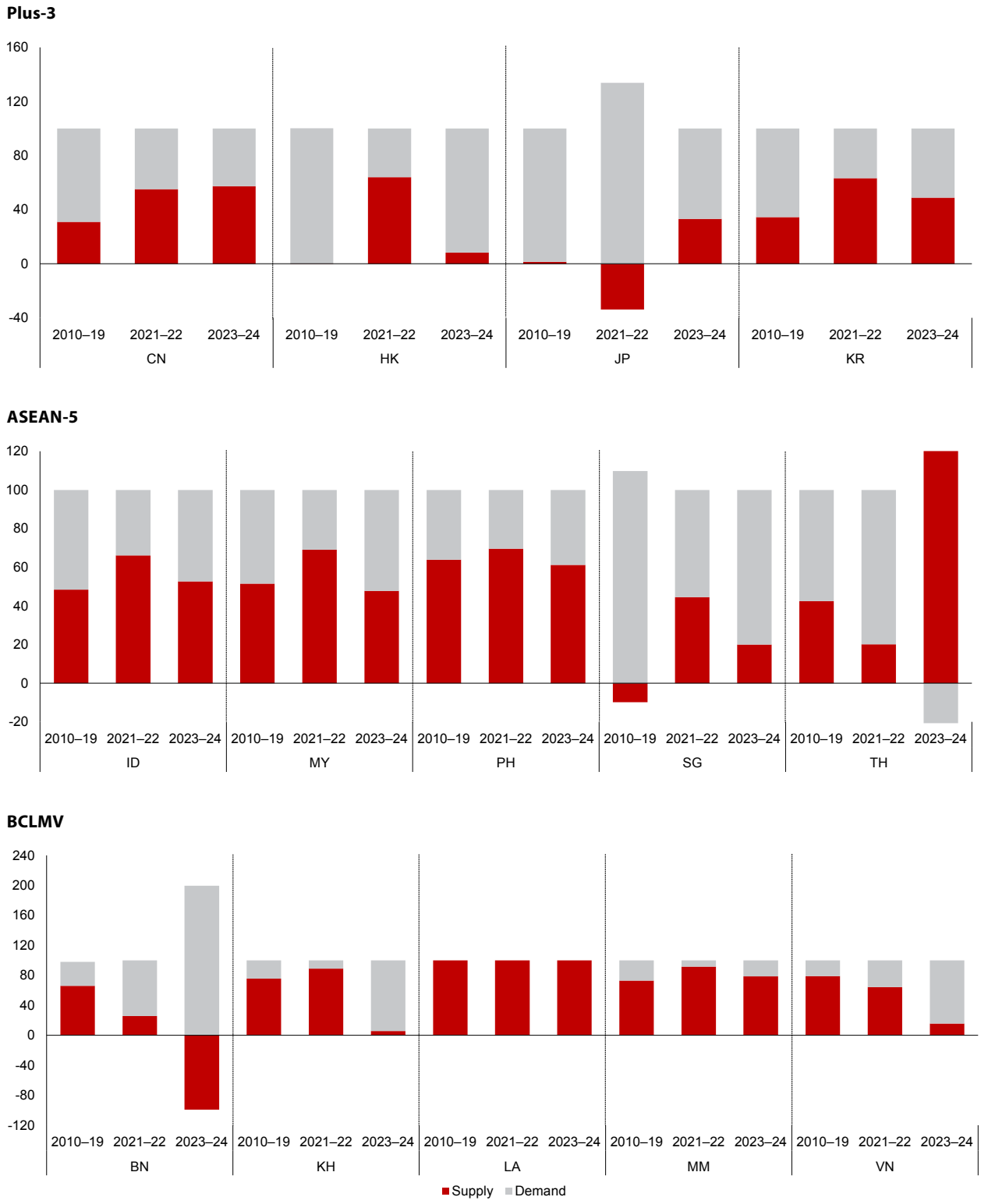
Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: ASEAN-5 = Indonesia, Malaysia, the Philippines, Singapore, and Thailand; BCLMV = Brunei, Cambodia, Lao PDR, Myanmar, and Vietnam; Plus-3 = China, Hong Kong, Japan, and Korea. Data are up to December 2024, except Myanmar's latest data which are up to September 2024: BN = Brunei; CN = China; HK = Hong Kong; ID = Indonesia; JP = Japan; KH = Cambodia; KR = Korea; LA = Lao PDR; MM = Myanmar; MY = Malaysia; PH = Philippines; SG = Singapore; TH = Thailand; VN= Vietnam

Figure 2.21. ASEAN+3: Supply and Demand Drivers of Headline Inflation
(Percentage points; percent, year-on-year)



Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: Vertical line denotes January 2021. Data are up to December 2024, except Myanmar's latest data which are up to September 2024. These estimates are based on AMRO's calculations as outlined in Annex 1 and may differ from estimations by others.

Figure 2.22. ASEAN+3: Average Contribution to Core Inflation, 2010–2024
(Percent share)



Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: ASEAN-5 = Indonesia, Malaysia, the Philippines, Singapore, and Thailand; BCLMV = Brunei, Cambodia, Lao PDR, Myanmar, and Vietnam; Plus-3 = China, Hong Kong, Japan, and Korea. Data are up to December 2024, except Myanmar's latest data which are up to June 2024. These estimates are based on AMRO's calculations as outlined in Appendix I and may differ from estimations by others.

Box 2.3:

Changing Inflation Dynamics in Japan

Japan's consumer price inflation (CPI) has experienced a notable shift in its underlying dynamics since 2020, reflecting both external shocks and domestic factors. The CPI trend has been characterized by distinct phases, beginning with subdued inflation during the early pandemic and evolving into a period of heightened price pressures from 2021 onward (Figure 2.3.1). This shift coincided with global supply chain disruptions, surging commodity prices, and yen depreciation.

A conventional breakdown of core CPI (excluding fresh food) inflation by key commodities reveals that food, energy, and durable goods contributed significantly to the rise in prices, particularly during 2021–2023 (Figure 2.3.2). Meanwhile, services inflation remained relatively stable until 2022, when a recovery in consumer demand led to stronger price pressures. These trends underscore the critical interplay between supply and demand factors in shaping Japan's inflationary landscape.

Decomposition of Core CPI Inflation: Supply and Demand Dynamics

A decomposition of Japan's core CPI inflation using the Shapiro (2022) methodology[1] reveals the evolving dynamics of pressures driven by supply and demand (Figure 2.3.3).

Four key patterns emerge from this analysis:

- ***Supply-driven inflation dominates during crises:*** The COVID-19 pandemic (2020–2021) and subsequent global economic disruptions saw supply-driven factors, such as rising import costs, logistical bottlenecks, and yen depreciation, become the primary drivers of inflation.
- ***Temporary supply shocks from policy changes:*** Japan's consumption tax hikes (e.g., October 2019) introduced temporary, policy-induced supply shocks that sharply increased inflation in the short term, although these effects dissipated relatively quickly.
- ***Demand-driven inflation leads during recoveries:*** As the economy reopened in 2022, pent-up demand, supported by accumulated household savings and large fiscal stimulus, drove demand-driven inflation, particularly in the services sector.
- ***Crisis-induced inflation marked by volatility:*** Periods of crisis-induced inflation, such as 2008–2009 and 2020–2022, were characterized by heightened volatility, with alternating surges in supply- and demand-driven factors, reflecting the impact of external shocks and domestic adjustments.

These findings highlight the dual role of supply and demand in shaping Japan's inflation, with supply-driven factors dominating in periods of crisis and demand-side pressures emerging during recoveries.

Evolving Dynamics of Goods and Services CPI Inflation

The decomposition of goods and services CPI inflation highlights distinct dynamics, with goods inflation driven by temporary external supply shocks and services inflation increasingly led by domestic demand and sticky second-round effects of supply shocks.

Goods CPI inflation, accounting for 48 percent of core CPI, has exhibited significant volatility, largely driven by supply-side factors (Figure 2.3.4). In 2021–2022, global commodity price surges and yen depreciation led to sharp increases in food and fuel prices, exacerbating

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This box was written by Jinho Choi, and is largely based on Choi and Kim (forthcoming).

1/ The methodology suggests identifying sectoral inflation as either supply-driven or demand-driven based on the signs of residuals from estimating a vector autoregression (VAR) model. Specifically, if the residuals in both price and quantity equations share the same sign, inflation in an expenditure item is categorized as "demand-driven". Conversely, if the residuals exhibit opposite signs, sectoral inflation is classified as "supply-driven". See Shapiro (2022) for the details.

supply-driven inflation. In contrast, demand-driven inflation in goods was more episodic, peaking briefly during the post-pandemic recovery as households resumed spending on durable items such as furniture and appliances. However, this effect waned by 2023 as demand softened.

A deeper analysis of 10 categories within the goods CPI basket (Figure 2.3.5) highlights notable shifts in the composition of supply- and demand-driven shocks prior to and after the pandemic:

- Food (excluding fresh food) inflation, accounting for 40 percent of the goods CPI, has been dominated by supply shocks, particularly during 2021–2023, as rising global commodity prices and transportation costs pushed up food prices. Negative supply shocks intensified post-pandemic owing to heightened import costs and yen depreciation.

- Fuel and energy product inflation, with a weight of 16 percent, has also been supply-driven, with sharp increases during 2021–2022 reflecting global energy price surges. However, government subsidies in 2023 led to a temporary reduction in prices, easing inflationary pressures in this category.

- Furniture and household goods inflation, representing 8 percent of the goods basket, shifted from demand-driven before the pandemic to supply-driven after, reflecting rising raw material costs and logistical disruptions. Brief spikes in inflation during 2022 reflected pent-up demand for home improvement, but this effect had diminished by 2023.

Meanwhile, ***services CPI inflation***, contributing 52 percent to core CPI, has been relatively stable, with demand factors playing a more central role (Figure 2.3.6). Post-2022, as mobility restrictions eased, demand-driven inflation strengthened across key sectors such as transportation, communication, and recreation. The easing of Japan's travel restrictions in October 2022 and April 2023[2] boosted demand-driven inflation in services, as rising tourist arrivals amplified spending on transportation, recreation, and lodging. However, second-round effects from external supply shocks, such as rising operational costs from earlier fuel and energy price increases, have persisted longer in services inflation owing to its inherent stickiness. Administrative measures, such as mobile phone charge reductions in 2021, temporarily eased supply-driven inflation, while rapidly rising wages in a tight labor market and other operational costs in 2023 contributed to increased price pressures in the sector.

Similarly, a closer look at key categories within the services CPI basket (Figure 2.3.7) reveals:

- Housing rent inflation, accounting for 39 percent of the services basket, became increasingly demand-driven post-pandemic, supported by urban migration and seasonal relocations. Supply shocks in housing rent, though less frequent, boosted inflation through operational cost increases.

- Transportation and communication inflation, with a weight of 24 percent, saw a resurgence in demand pressures post-pandemic, with stronger contributions in 2023 as mobility and consumer spending recovered. Negative supply shocks also increased, reflecting rising fuel and operational costs.

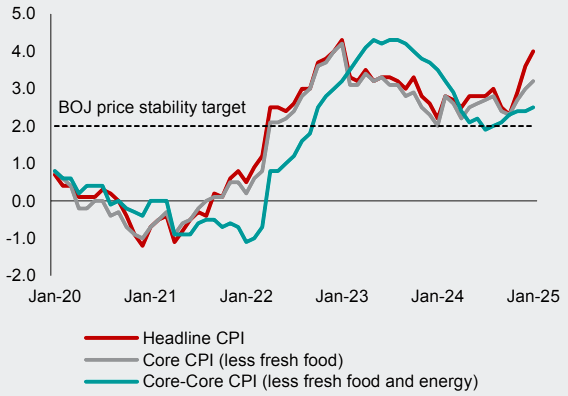
- Cultural and recreation inflation, representing 10 percent of the services CPI, was driven by strong pent-up demand post-COVID, with spending shifting from goods to leisure activities. Demand-driven inflation dominated, with supply shocks playing a lesser role, arising mainly from rising operational expenses.

This comparison between goods and services inflation, with subcategory breakdowns, underscores the distinct post-pandemic roles of supply and demand shocks, reflecting structural differences between the two.

The changing inflation dynamics in Japan highlight the importance of analyzing price changes using disaggregated sectoral data. Goods inflation remains vulnerable to external supply shocks, necessitating measures to stabilize import costs. Conversely, the growing role of demand-driven inflation in services requires careful monitoring, as it could lead to more persistent inflationary pressures.

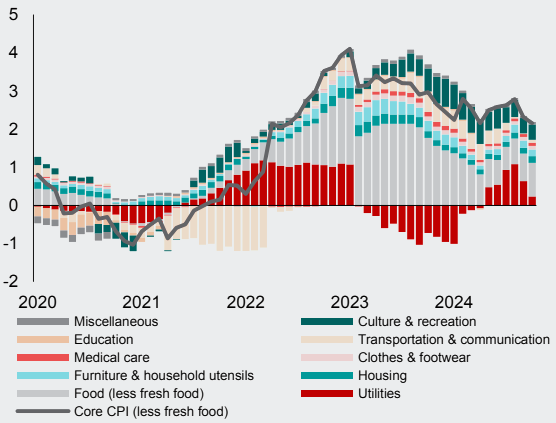
[2/] Japan eased inbound travel restrictions in stages, resuming visa exemptions and individual tourism on 11 October 2022, and lifting COVID-19 entry requirements on 29 April 2023.

Figure 2.3.1. Japan: CPI Inflation
(Percent, year-on-year)



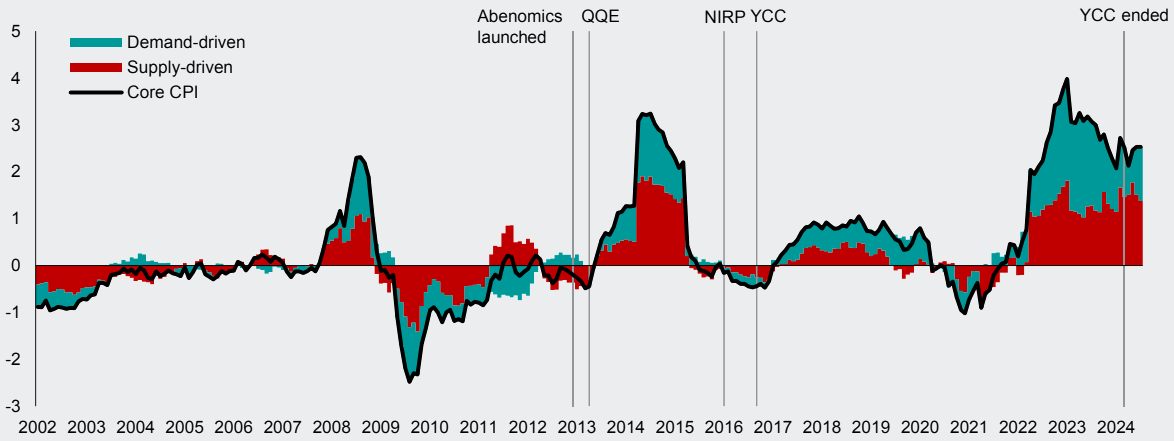
Source: Ministry of International Affairs and Communications via Haver Analytics.
Note: CPI = consumer price index.

Figure 2.3.2. Japan: Contribution to Core CPI Inflation by Key Commodities
(Percent, year-on-year)



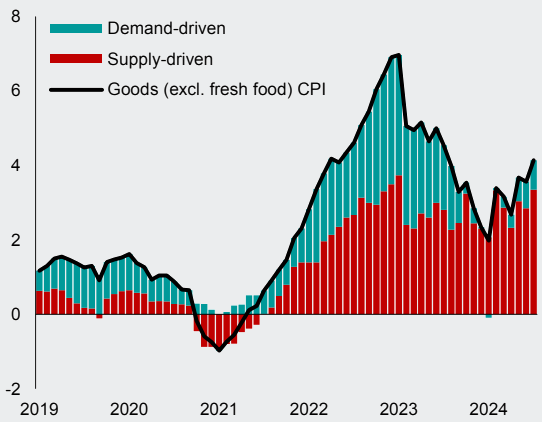
Source: Ministry of International Affairs and Communications via Haver Analytics.
Note: CPI = consumer price index.

Figure 2.3.3. Japan: Decomposition of Core CPI Inflation by Supply and Demand Drivers
(Percent, year-on-year)



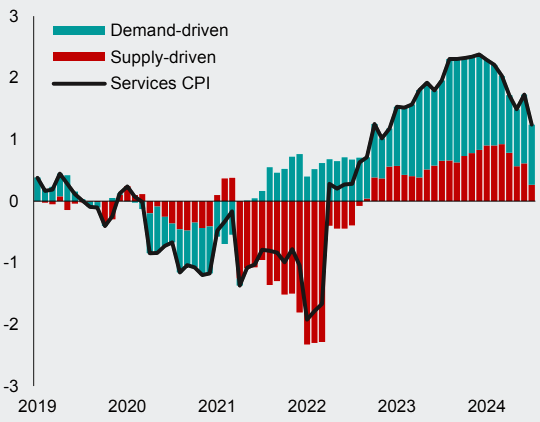
Source: Ministry of Internal Affairs and Communications via Haver Analytics; AMRO staff estimation.
Note: CPI = consumer price index, QQE = quantitative and qualitative monetary easing, NIRP = negative interest rate policy, YCC = yield curve control. Contributions of supply- and demand-driven inflation to core CPI were estimated using bivariate VAR models based on the Shapiro (2022) methodology, covering the period from January 2002 to July 2024.

Figure 2.3.4. Japan: Decomposition of Core Goods CPI Inflation by Supply and Demand Drivers
(Percent, year-on-year)



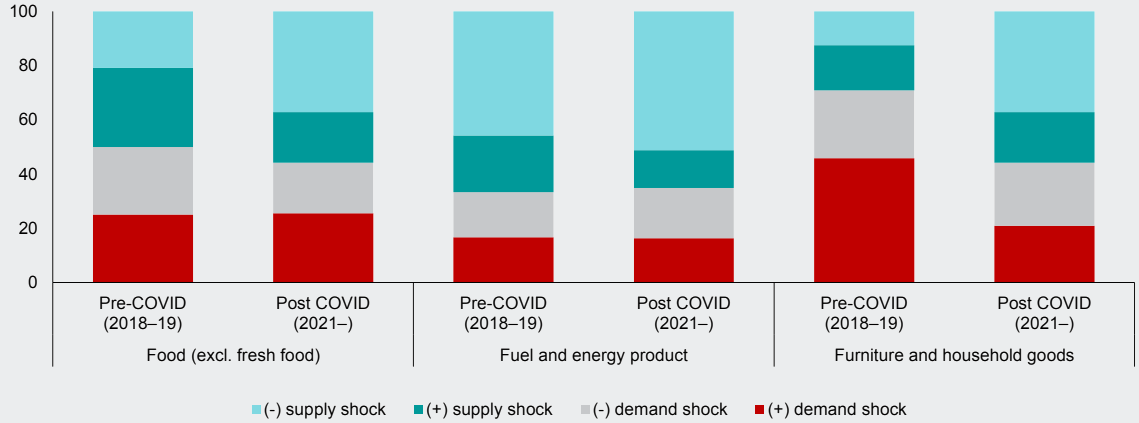
Source: Ministry of Internal Affairs and Communications via Haver Analytics; AMRO staff estimation.
Note: CPI = consumer price index.

Figure 2.3.6. Japan: Decomposition of Services CPI Inflation by Supply and Demand Drivers
(Percent, year-on-year)



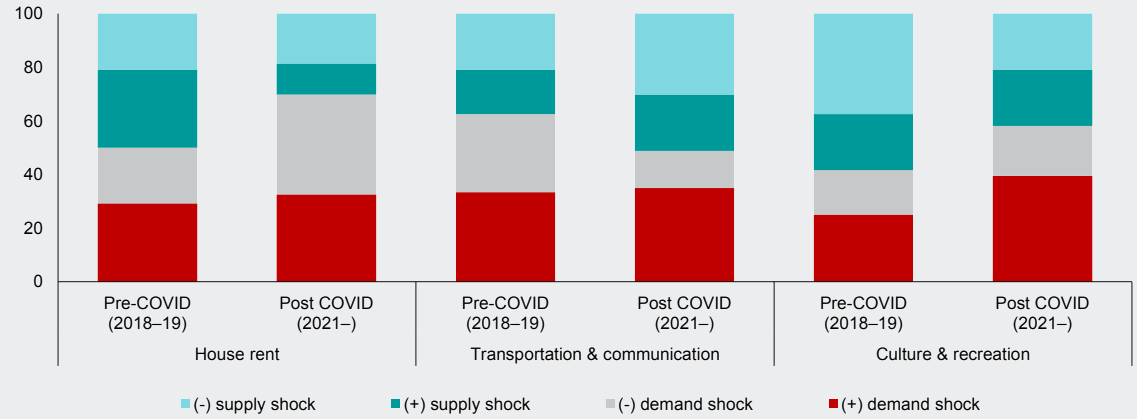
Source: Ministry of Internal Affairs and Communications via Haver Analytics; AMRO staff estimation.
Note: CPI = consumer price index.

Figure 2.3.5. Japan: Relative Frequency of Demand- and Supply-driven Shocks by Key Goods CPI Commodities
(Percent)



Source: Ministry of Internal Affairs and Communications via Haver Analytics; AMRO staff estimation.
Note: CPI = consumer price index.

Figure 2.3.7. Japan: Relative Frequency of Demand- and Supply-driven Shocks by Key Services CPI Commodities
(Percent)



Source: Ministry of Internal Affairs and Communications via Haver Analytics; AMRO staff estimation.

Interplay of Global and Domestic Forces in Shaping Inflation

The evolution of inflation in ASEAN+3 in this period reflects an intricate interaction between external pressures and domestic conditions. As discussed, global commodity prices surged as a result of geopolitical developments and supply chain disruptions, while the COVID-19 pandemic triggered both an initial economic shock and subsequent demand surge as economies reopened. The policy environment added further complexity—monetary policy rates were reduced to exceptionally low levels during the pandemic to ease financing conditions, while a highly expansionary fiscal stimulus program was adopted in the US and many other countries to provide income support for the households and firms. However, the highly expansionary monetary and fiscal policies, coupled with the synchronized economic reopening and the surge in oil and grain prices due to the outbreak of the Ukraine crisis in early 2022, led to a surge in global inflation, which caused the Fed, ECB and other central banks to go into a rapid tightening cycle. This tightening cycle, particularly the aggressive moves by the US Federal Reserve, led to capital outflows and currency depreciation across the region, prompting regional central banks to tighten their monetary policy to support their exchange rates and contain the rapidly rising inflationary pressure (ADB 2023). Building on the earlier analysis of supply and demand drivers, a detailed examination of these factors' relative importance was conducted for each economy (Figure 2.23; Annex 2 describes details on the methodology). This is to isolate the role of external supply-side effects through global commodity prices and exchange rates, while capturing domestic demand conditions through the output gap and policy rates, thereby providing a more granular understanding of how these channels have shaped regional inflation dynamics.

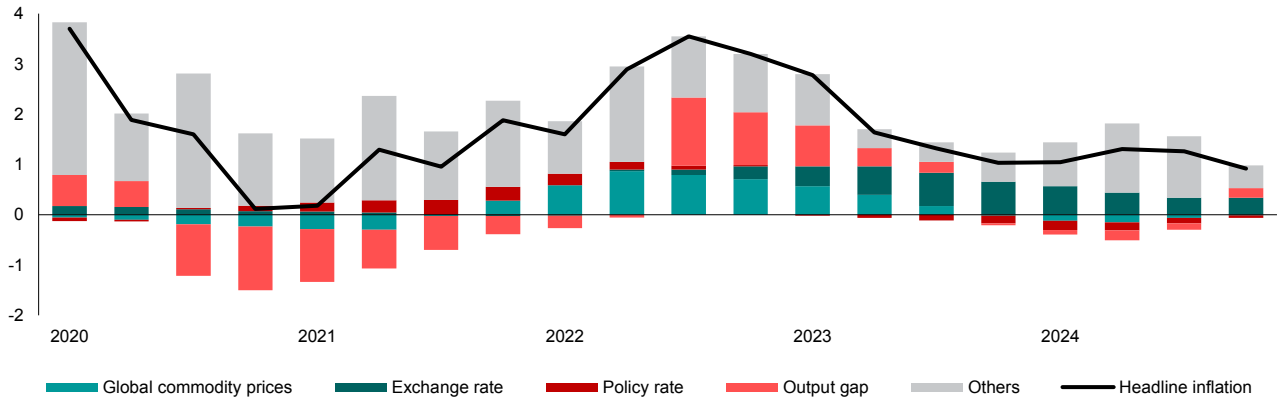
The empirical analysis reinforces the key role of global factors in driving the regional inflation surge while domestic policy responses helped moderate price pressures subsequently. The dominance of supply-side shocks is evident in the strong contribution from global commodity prices, which peaked in the second quarter of 2022 before gradually moderating and dissipating by the end of 2023. Exchange rate depreciation emerged as another significant external factor from the second quarter of 2022, as US monetary tightening widened interest rate differentials with regional economies. On the domestic front, the analysis shows that exceptionally low policy rates in 2020–2021 initially supported economic recovery, evidenced by the diminishing negative contribution from the output gap. As economic momentum gained strength with the reopening of the economies, output gaps turned positive in 2022, adding to inflationary pressures. However, the gradual monetary tightening in the ASEAN+3 region that began in August 2021, albeit at different timing and pace, started to show its dampening effects on inflation by early 2023.

Global and domestic forces continued to shape inflation dynamics through disinflationary period of 2023–2024, although their relative importance shifted. The analysis shows two main factors driving disinflation: lower international commodity prices and the lagged effects of monetary tightening (Figure 2.24). The impact of these forces, however, differed across subregions. Among ASEAN-5 economies, monetary policy played the primary disinflationary role in Indonesia, Malaysia, and Singapore, while falling commodity prices largely contributed to the moderation in inflation in the Philippines[6] and Thailand. In other regional economies, easing commodity prices and monetary tightening contributed to lower inflation. Lao PDR and Myanmar continued to experience high inflation because of persistent currency depreciation (Box 2.4). China's experience has been distinct, as inflation remained very low, reflecting weak domestic demand that had been exacerbated by strict containment measures in earlier years, a downturn in the real estate cycle, and an excess supply of consumer goods (Box 2.5). Given China's significant role in regional trade networks and global value chains, these developments have had broader implications for regional price dynamics through trade price channels (Box 2.6). Despite these disinflationary trends, some inflationary pressures persist across the region, particularly from currency movements and recovering domestic demand.

Overall, the analysis of inflation dynamics in ASEAN+3 since 2020 reveals several important patterns with significant policy insights. The increased importance of supply factors in driving inflation highlights the importance of supply-side measures to compliment conventional demand management tools. Meanwhile, the increased role of global factors—from commodity prices to monetary policy spillovers—has complicated the domestic policy landscape. These developments, combined with varying domestic circumstances across the region, underscore the need for carefully calibrated policy responses that can address both external pressures and internal stability objectives. The next section examines how regional policymakers have navigated these challenges and the lessons learned for future policy response.

6/ Despite the overall moderation in global commodity prices, the surge in rice prices, particularly in the second half of 2023 to 2024 exerted upward pressure on inflation in the Philippines.

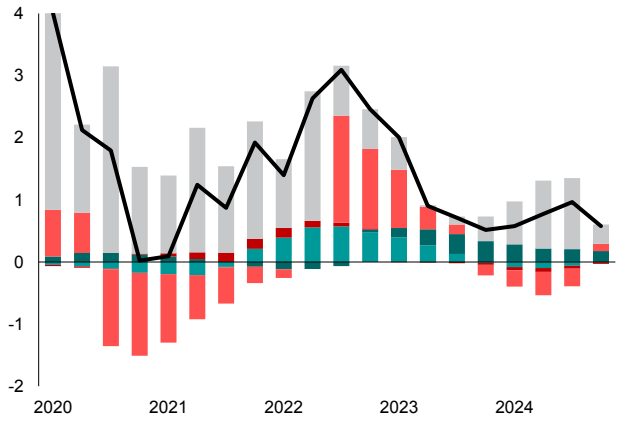
Figure 2.23. ASEAN+3: Contribution of Global and Domestic Factors to Headline Inflation
(Percentage point contribution, percent year-on-year)



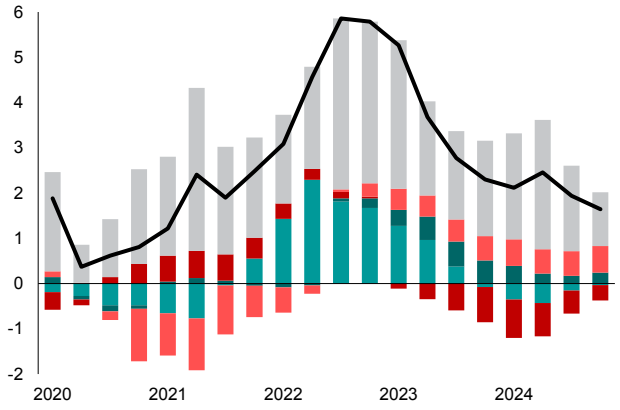
Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: Data are up to December 2024, except Myanmar's latest data which are up to June 2024.

Figure 2.24. ASEAN+3: Contribution by Determinants to Headline Inflation by Country Groups, 2020–2024
(Percentage points, year-on-year)

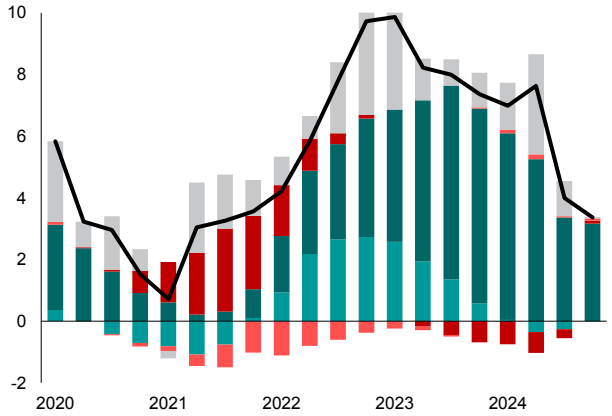
Plus-3

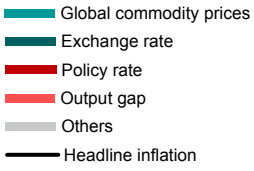


ASEAN-5



BCLMV





Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: ASEAN-5 = Indonesia, Malaysia, the Philippines, Singapore, and Thailand; BCLMV = Brunei, Cambodia, Lao PDR, Myanmar, and Vietnam; Plus-3 = China, Hong Kong, Japan, and Korea. "Others" refer to the impact of factors other than the four listed factors (for example, domestic and global supply disruptions, non-monetary measures to contain inflation, stickiness of local price expectations). Data are up to December 2024, except Myanmar's latest data which are up to June 2024. These estimates are based on AMRO's calculations as outlined in Annex 2 and may differ from those of other agencies.

Box 2.4:

Factors Behind Lao PDR's Persistently High Inflation Since 2022

Inflation in Lao PDR surged sharply beginning 2022 in a way that the economy had never experienced in the past two decades. Similar to other ASEAN+3 economies, the consumer price index (CPI) inflation in Lao PDR accelerated in early 2022 primarily because global commodity prices, especially oil, spiked. Sharp depreciation of the kip exacerbated the situation since Lao PDR is heavily reliant on imported goods for consumption. Although inflation moderated from a 41.3 percent peak in February 2023, it remained elevated, staying above 15 percent consistently for over a year (Table 2.4.1). This differs from other ASEAN+3 economies' inflation trends which decelerated to less than 5 percent from their peaks in 2022.

The price increases in Lao PDR have been broad-based, negatively affecting people's real income and purchasing power. Food and transport prices, which account for more than half of the CPI basket weight, have been the main contributors to headline inflation. In 2023, these prices rose by an average of 38.0 percent for food and 25.6 percent for transport, while inflation remains elevated in 2024 (Table 2.4.2). Almost all the CPI basket items continue to experience double-digit inflation. The services sector and imported goods, such as medical-related items and clothing, continue to exhibit strong inflationary momentum.

Conventional factors cannot fully explain the recent inflation in Lao PDR. Historically, prices in Lao PDR were strongly influenced by external factors such as the kip exchange rate, inflation in Thailand, and global oil prices (AMRO 2017 and 2020; IMF 2023b). As an import-dependent economy, these are very important inflation drivers of Lao PDR. In fact, the persistent kip depreciation would likely continue to exert stress on domestic prices. However, global oil prices have moderated since the second half of 2022. Moreover, overall inflation in Thailand and food prices in northern Thailand, from where Lao PDR imports most of its food, decelerated in 2023. The protracted inflation despite the easing of external pressures suggests the existence of other drivers.

One potential factor is household and business expectations of inflation and kip depreciation. The unprecedented and prolonged sharp increases in domestic prices and the depreciation of the kip may have triggered and amplified expectations of further high inflation and kip depreciation. As a result, businesses continue to set prices based on the price increases experienced, making the high inflation sticky. Inflation and the gap between the commercial bank and parallel market exchange rates in previous months have been shown to correlate positively with current inflation (Figure 2.4.1, Figure 2.4.2).[1] In fact, a 1 percent month-on-month increase (m-o-m) in the CPI could explain about a 0.34 percent increase in the next month's inflation, likely because of persistence in inflation expectations (AMRO 2024c). In addition, a 1 percent increase (m-o-m) in the gap between the parallel and commercial bank LAK/USD exchange rate could lead to a 0.14 percent increase in next month's CPI. Notably, the contribution of expectations has likely increased in recent years (Figure 2.4.3). AMRO (2024c) also assessed exchange rate depreciation and changes in broad money as key inflation drivers. On the other hand, inflation in Thailand and global oil prices were statistically insignificant, suggesting recent inflation in Lao PDR is driven more by its unique domestic factors than global factors.

It would therefore be critical for the authorities to demonstrate a strong commitment to containing inflation and anchor expectations as much as possible. The central bank should continue maintaining tight monetary policy measures and avoiding injecting liquidity into the system. Market-friendly foreign exchange rate policies including timely adjustment of the reference and commercial bank rates are also essential to stabilize the foreign exchange market.

This box was written by Naoaki Inayoshi, based on AMRO (2024c).

1/ There are multiple exchange rates in Lao PDR: reference rate, commercial bank rate, and parallel market rate. The reference rate is set by the central bank. The commercial bank rate is set by commercial banks and could fluctuate within a certain band from the reference rate. The parallel market rate applies to foreign exchange transactions outside of the banking system based on demand and supply conditions.

Table 2.4.1. ASEAN+3: Headline Inflation
(Percent, year-on-year)

Economies	2021	2022	2023	2024	2025 Jan
Brunei	1.7	3.7	0.4	–0.4	–0.4
Cambodia	2.9	5.3	2.1	0.8	6.0
China	0.9	2.0	0.2	0.2	0.5
Hong Kong	1.6	1.9	2.1	1.7	2.0
Indonesia	1.6	4.2	3.7	2.3	0.8
Japan	–0.2	2.5	3.3	2.7	4.0
Lao PDR	3.8	23.0	31.2	23.1	15.5
Malaysia	2.5	3.3	2.5	1.8	1.7
Myanmar	14.6	24.3	27.5	25.0	18.0
Philippines	3.9	5.8	6.0	3.2	2.9
Singapore	2.3	6.1	4.8	2.4	1.2
South Korea	2.5	5.1	3.6	2.3	2.2
Thailand	1.2	6.1	1.2	0.4	1.3
Vietnam	1.8	3.2	3.3	3.6	3.6

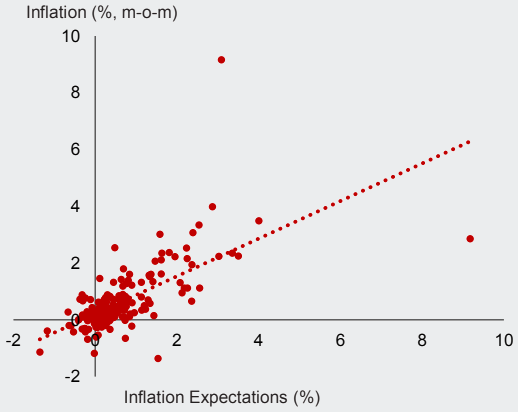
Source: National authorities via CEIC; AMRO staff calculations.
Note: Inflation rates are period averages. Myanmar's inflation numbers are based on its fiscal year, and its 2023 to 2025 numbers are AMRO staff estimates. The inflation rates are color-coded for easy reference; the deeper the red (green), the higher (lower) the inflation rate within the table.

Table 2.4.2. Lao PDR: Inflation by CPI Basket Category
(Percent, year-on-year)

Categories	2021	2022	2023	2024	2025 Jan
Foods, Beverages	3.0	22.0	38.0	22.3	14.4
Alcohol, Tobacco	4.5	14.2	24.8	26.1	19.4
Clothing, Footwear	3.9	16.3	27.6	27.2	15.8
Housing, Water	3.0	16.4	21.1	27.6	24.7
Furnishings, HH Equipment	3.8	18.7	28.5	27.0	22.2
Medical Care	4.2	27.6	30.4	33.8	23.3
Transport	6.4	41.3	25.6	19.0	11.4
Telecom	4.2	7.7	10.6	4.0	2.1
Entertainment, Recreation	1.2	10.7	18.3	22.6	17.9
Education	0.5	6.4	10.9	23.4	22.4
Restaurants, Hotels	3.1	18.8	34.7	31.9	20.3
Miscellaneous	8.1	21.3	19.5	24.9	18.7

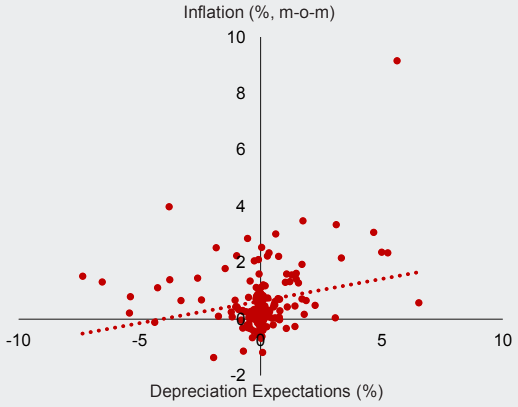
Source: Lao Statistics Bureau; AMRO staff calculations.
Note: Inflation numbers are period averages, and color-coded for easy reference; the deeper the red (green), the higher (lower) the inflation rate within the table.

Figure 2.4.1. Lao PDR: Inflation Expectations versus Inflation



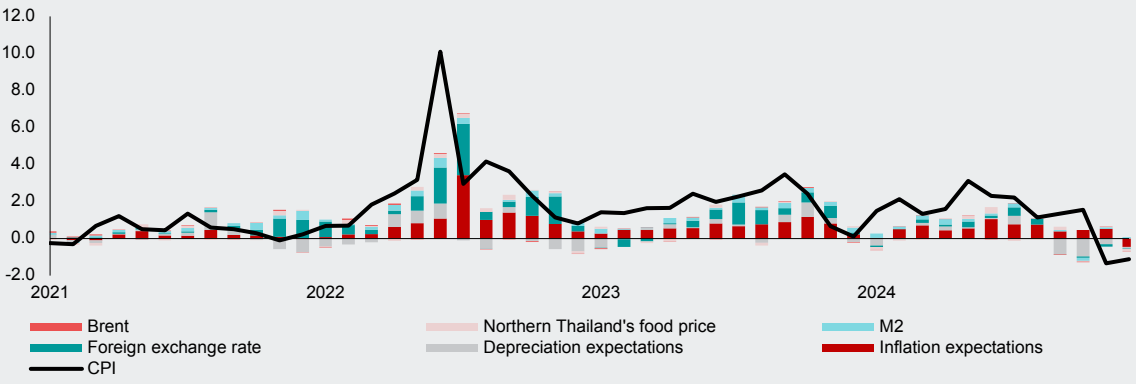
Source: Lao Statistics Bureau; AMRO staff calculations.
Note: Data cover from January 2010 to December 2024. The dotted line represents the fitted line of the plot. The inflation expectations in this figure are represented by the month-on-month Consumer Price Index inflation of the previous month.

Figure 2.4.2. Lao PDR: Depreciation Expectations versus Inflation



Source: BOL; Lao Statistics Bureau; AMRO staff calculations.
Note: Data covers from January 2010 to December 2024. The dotted line represents the fitted line of the plot. The depreciation expectations in this figure are represented by the previous month's monthly change in the gap between the parallel and commercial bank rates of the Nominal Effective Exchange Rate.

Figure 2.4.3. Lao PDR: Inflation Decomposition
(Percentage points, month-on-month)



Source: BOL; Lao Statistics Bureau; CEIC; AMRO staff calculations.
Note: CPI = consumer price index; M2 = broad money. The calculations cover up to June 2024 due to data availability. The LAK/USD exchange rate case of the regression results of AMRO (2024) is used for the computation.

Box 2.5:

Understanding the Low Inflation in China

Inflation in China has been persistently low even after the economy reopened following the COVID-19 pandemic. Headline CPI in China fell into negative territory in the second half of 2023 and has remained comparatively low in 2024. The low inflation in China, alongside a significant downturn in the property market has sparked speculations and discussions on whether China is heading towards or is already experiencing deflation. This box examines recent inflation dynamics in China and discusses its key drivers.

The low inflation in China reflects a disinflation process, primarily driven by a stronger recovery on the supply side than on the demand side, coupled with intense competition in industries such as EVs and other consumer products. Such imbalances between supply and demand date back to the COVID-19 years when support measures focused more on the supply side. Unlike many economies, China avoided upward price pressure from global oil supply shocks and instead was able to maintain the operation of its domestic supply chain and boost production for exports due to effective COVID-19 containment measures in 2020–2022. Consumption, on the other hand, weakened because of strict lockdown and containment measures across the country as well as the drag from the downturn in the real estate sector. China also did not implement extensive cash handouts to households to boost household spending during the COVID-19 period. Following China's economic reopening in 2023, these demand-supply dynamics persisted, resulting in a decline in prices.

The rebound in demand remains notably subdued, reflecting the ongoing property market distress and sluggish wage growth. Consumer confidence remained weak, in part dragged by the prolonged distress in the property market including the negative wealth effect from declining property prices (Figure 2.5.1). Labor market improvement has also been modest, with youth unemployment remaining higher than pre-pandemic levels. Wages grew at a slower pace than pre-pandemic across the board, and certain sectors even experienced wage reductions. As a result, post-reopening revenge spending proved to be short-lived in China, and the recovery in consumption of goods has lagged behind production.

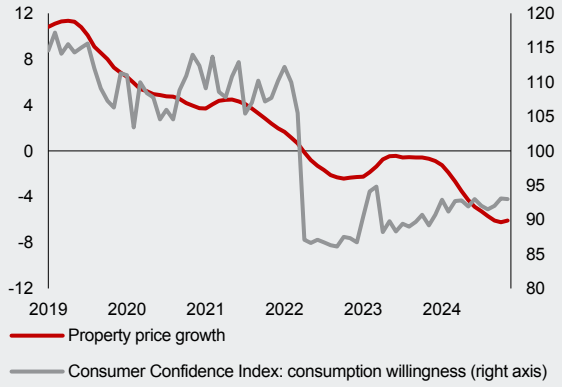
The recovery in retail sales has been uneven as well. While some high-value products, such as automobiles and cellphones, experienced stronger growth, the demand for household appliances, furniture and other durable goods has been weak, likely associated with sluggish home sales amid the ongoing property market distress (Figure 2.5.2). The ongoing property market distress has also dampened private investment at large. Real estate investment fell by 8.1 percent in 2023 and 10.6 percent in January–November in 2024, with developers hesitant to commit to new projects amid declining property prices and subdued home sales. The decrease in property investment coupled with its knock-on effects continues to weigh on investment demand.

On the other hand, the strong recovery in production has led to a surplus of goods and services, creating disinflationary pressure. A closer examination of the CPI components reveals that the recent low inflation rates in China following its reopening is primarily due to falling prices of food and goods. In particular, food prices fell by 0.3 percent in 2023 and by 2.7 percent y-o-y in the first half of 2024. Pork prices was a major driver, experiencing significant price decline as hog supply increased amid the hog cycle upturn before rebounding since mid-2024 (Figure 2.5.3). In addition, consumer goods contributed to reducing headline CPI by 0.15 percentage points in 2023 and by 0.22 percentage points in the first half of 2024, before showing signs of a mild recovery from July 2024. The prices of transportation facilities and household appliances have also declined significantly since 2023. At the same time, the production of a wide range of products has surged over the past year. For instance, the "new three" manufactured products in China—namely solar cells, EVs, and batteries—achieved extraordinary growth in production volume at 61 percent, 35 percent, and 6 percent respectively in 2023 (Figure 2.5.4). This rapid production expansion has intensified competition and triggered price reductions in those industries.

This box was written by Ke Ji and Jungsung Kim, based on Ji and Kim (2025).

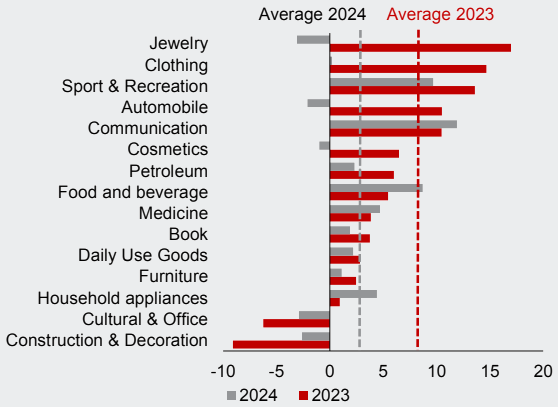
While China does not yet exhibit symptoms of significant deflation, disinflationary forces do persist, and the authorities must act to prevent these from evolving into a prolonged deflationary spiral. Both demand and supply are growing, albeit at different paces especially across sectors. The housing market distress has not caused broad deleveraging of the household and corporate sector. In the near term, strong policy responses are crucial for China to keep deflation at bay. Stabilizing the property market remains essential to restore consumer confidence. Monetary and especially fiscal policies should provide more support to stimulate domestic demand. Fiscal policy also needs to play a key role in improving income distribution, social welfare, and public spending to boost consumer confidence.

Figure 2.5.1. China: Property Prices and Consumer Confidence
(Percent, year-on-year; index)



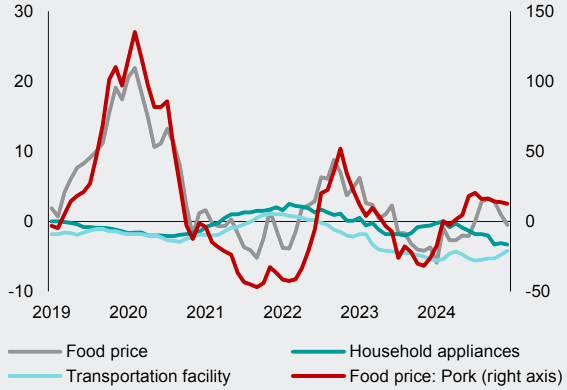
Source: China NBS via CEIC; AMRO staff calculations.
Note: Consumer Confidence Index readings above 100 indicate that consumers are optimistic while readings below 100 suggest that consumers are pessimistic. Property price growth is the average of new residential housing in 70 cities.

Figure 2.5.2. China: Retail Sales Growth
(Percent, year-on-year)



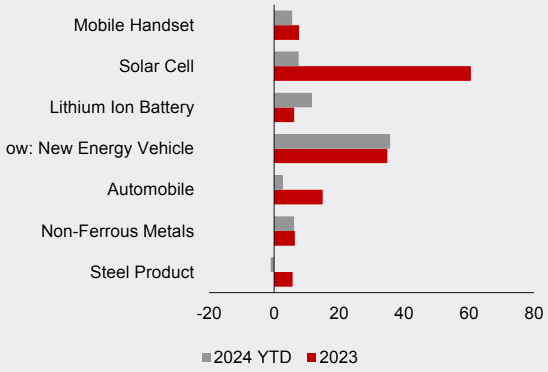
Source: China NBS via CEIC; AMRO staff calculations.
Note: 2024 data is up to September 2024.

Figure 2.5.3. China: Food and Selected Consumer Goods Prices
(Percent, year-on-year)



Source: China NBS vis CEIC; AMRO staff calculations.

Figure 2.5.4. China: Industrial Production Growth: Selected Products
(Percent, year-on-year)



Source: China NBS via CEIC; AMRO staff calculations.
Note: Data 2024 is up to September 2024.

Box 2.6:

The Impact of US and China Trade Prices on ASEAN+3 Inflation

Inflation across regional economies exhibits a strong common trend. Principal component analysis reveals significant co-movement, with a common factor accounting for about 60 percent of local variations in the producer price index (PPI) and 40 percent of consumer price index (CPI) and core CPI variations. The degree of synchronization varies across economies, with Korea, Singapore, and Thailand showing the strongest co-movement with regional PPI and CPI trends, while others like Hong Kong and Indonesia display weaker correlation (Box 1 in the 2024 AREO October Update).

The presence of strong regional inflation trend may reflect regional economies' common exposure to external factors. Regional economies' inflation dynamics are exposed to external factors through international trade linkages, particularly through their deep trade integration with China and the United States. With China serving as a key import source (30 percent of total imports) and the United States as a key export destination (17 percent of exports), their trade prices play a crucial role in regional price synchronization (Figure 2.6.1).

Results from panel regression[1] show that inflation is significantly influenced by global inflation trends. As trade prices and oil prices tend to move in tandem with global inflation, the effect of global inflation is isolated from these prices before the regression (Figure 2.6.2). The coefficient for global inflation was found to be the largest for PPI, followed by CPI, and core CPI, all statistically significant at 1 percent. This finding likely reflects regional producers' deep integration in global value chains. Traditional determinants like output gap, oil prices, and exchange rates are also significant, with oil price effects impacting PPI the most. The lagged policy rate is most significant for CPI, which reflects CPI's role as the major price target for policymakers.

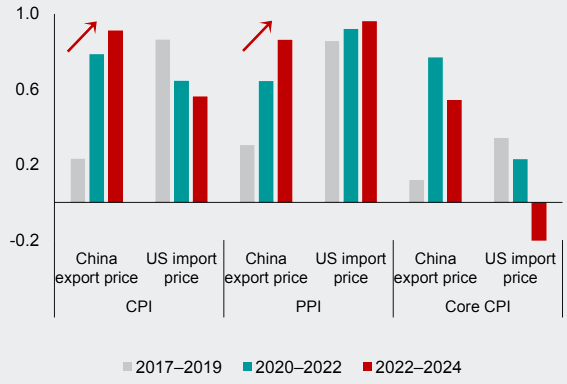
China and US trade prices demonstrate significant influence on regional inflation, reflecting the region's extensive trade linkages with both economies. The effects of trade prices are strongest on PPI and have intensified since the rise in trade tensions in 2017 (Figure 2.6.3, Figure 2.6.4). US import price effects remain consistently stronger across all inflation measures compared to China's export prices, suggesting regional prices may be more sensitive to external demand conditions than supply factors. The effects of US and China trade prices on CPI and core CPI, on the other hand, have diminished since 2017.

The growing influence of China and US trade prices on regional inflation may reflect shifts in regional trade patterns since 2017. The region's import dependence on China has risen, particularly for the economies of Indonesia, Malaysia, the Philippines, Singapore, and Thailand (ASEAN-5) and Brunei, Cambodia, Lao PDR, Myanmar, and Vietnam (BCLMV), as shown in Figure 2.6.5. The simultaneous rise in BCLMV imports from China and exports to the United States, coupled with declining direct China-US trade, suggests potential trade diversion through the regional production network (Figure 2.6.6). This reorientation of trade flows may reinforce the influence of US and China trade prices on regional PPI. Meanwhile, the weakening impact on consumer prices likely reflects domestic structural changes, such as the rising services component in consumer baskets, or producers absorbing more trade price changes rather than passing them to consumers. Further studies are needed to further explore the factors driving the diverging impact of trade prices on producer and consumer prices.

This box was written by Haobin Wang and Yuhong Wu.

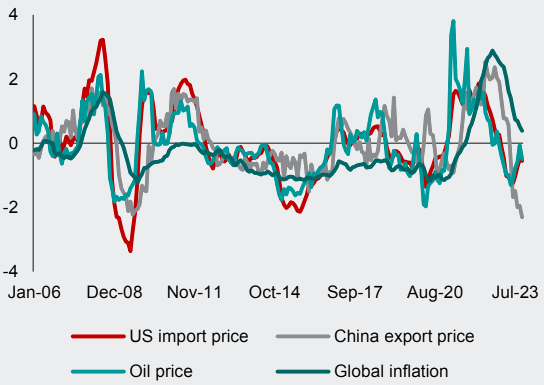
1/ A panel regression was conducted on headline inflation using the annual change in China export price, US import price, global price, global oil price, bilateral exchange rates against the USD, lagged headline inflation; and the respective economies' output gap and lagged policy rate in levels. To avoid multicollinearity, the global inflation trend was first extracted using principal component analysis across 56 economies. Orthogonal components of China and US trade prices and oil prices were then obtained as residuals from the regression on global inflation. Headline inflation and policy rate were included with a 12-month lag.

Figure 2.6.1. Selected ASEAN+3: Correlation between First Principal Components of Regional Inflation and Trade Prices
(Correlation)



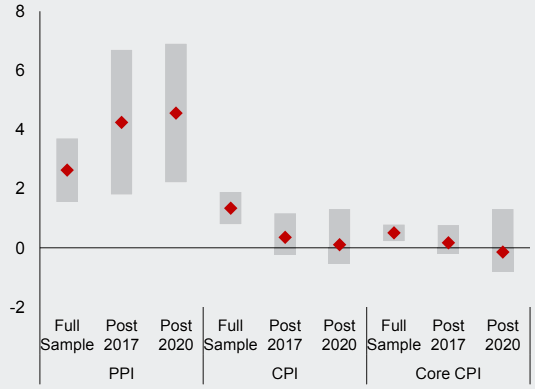
Source: National authorities via Haver Analytics, World Bank; AMRO staff calculations.
Note: CPI = consumer price index; PPI = producer price index. First principal component of regional inflation excludes China for analysis with China export prices; and Myanmar, Lao PDR (from CPI and Core CPI); Brunei, Cambodia, Myanmar, Lao PDR (from PPI) due to data unavailability.

Figure 2.6.2. World: Global Inflation, Oil Price, US and China Trade Prices
(Percent, year-on-year)



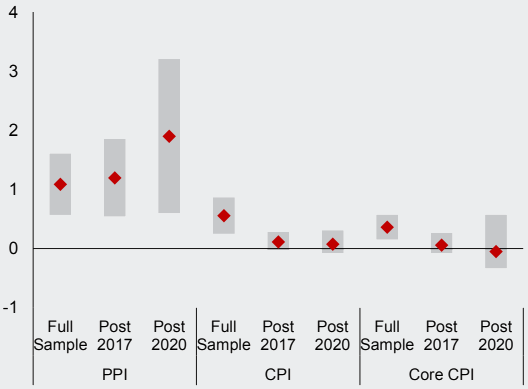
Source: National authorities via Haver Analytics, World Bank; AMRO staff calculations.
Note: Global inflation is the first component of headline CPI across 56 economies from the World Bank Global Inflation Database. The oil price is the European free market price of Brent crude oil.

Figure 2.6.3. ASEAN+3: Change in Headline Inflation due to 1 Percent Change in US Import Prices
(Percentage points)



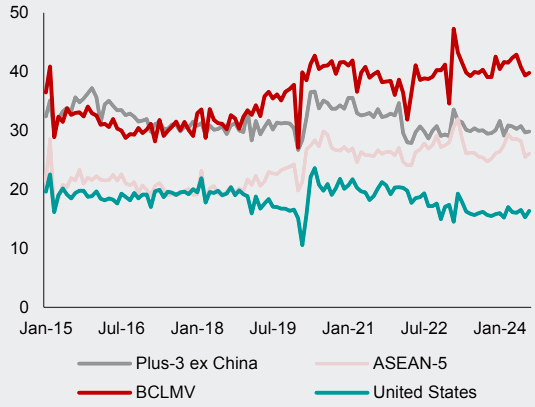
Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: CPI = consumer price index; PPI = producer price index. The chart shows the panel regression coefficient of US import price (orthogonal to global inflation and oil prices). The line shows the 95 percent confidence interval.

Figure 2.6.4. ASEAN+3: Change in Headline Inflation due to 1 Percent Change in China Export Prices
(Percentage points)



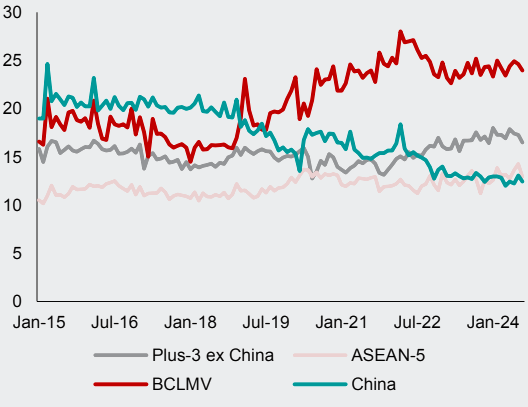
Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: CPI = consumer price index; PPI = producer price index. The chart shows the panel regression coefficient of China export price (orthogonal to global inflation and oil prices). The line shows the 95 percent confidence interval.

Figure 2.6.5. ASEAN+3: Imports from China
(Percent of total imports)



Source: International Monetary Fund; AMRO staff calculations.
Note: ASEAN-5 = Indonesia, Malaysia, the Philippines, Singapore, and Thailand; BCLMV = Brunei, Cambodia, Lao PDR, Myanmar, and Vietnam; Plus-3 ex China = Hong Kong, Japan, and Korea. The chart shows the seasonally adjusted share of imports from China over total imports from the world to the region.

Figure 2.6.6. ASEAN+3: Exports to the United States
(Percent of total exports)



Source: International Monetary Fund; AMRO staff calculations.
Note: ASEAN-5 = Indonesia, Malaysia, the Philippines, Singapore, and Thailand; BCLMV = Brunei, Cambodia, Lao PDR, Myanmar, and Vietnam; Plus-3 ex China = Hong Kong, Japan, and Korea. The chart shows the seasonally adjusted share of exports to the United States over total exports from the region.

III. Policy Experience and Lessons Learnt

With supply-side factors and global developments increasingly influencing inflation, policy considerations in the region have become more complex. Despite significant inflationary pressures in the past four years, ASEAN+3 authorities have managed to keep inflation lower than many other regions, offering valuable lessons for future policy response. Inflation dynamics will likely remain challenging with significant macroeconomic uncertainty, volatile global commodity prices reflecting ongoing geopolitical developments and climate-related events, and structural shifts such as aging population and technological change that realign inflation patterns. The recent experience therefore offers crucial lessons in preparing for price stability challenges—balancing domestic and external factors, while calibrating policy mixes to meet the needs of each economy.

Policy Responses by ASEAN+3 Economies

ASEAN+3 economies have implemented a range of policy measures in response to shifting inflation dynamics over the past four years (Table 2.1). Most regional economies have tightened monetary policy when inflation surged in 2021–2022 to prevent inflation from becoming entrenched—and to a lesser extent, mitigate excessive exchange rate depreciation that could exacerbate imported inflation. Fiscal policy support was deployed where possible to cushion the impact of inflation. In addition, some economies imposed price ceilings to ensure that fuel and other essential goods and services remained affordable. Regional economies with significant domestic production of essential goods, such as rice or cooking oil, controlled exports and calibrated production to prevent self-induced shortages and price hikes. The specific policies, timing, and extent of support varied depending on each economy's circumstances, policy space, and framework.

Monetary Tightening to Stem Demand Pressures

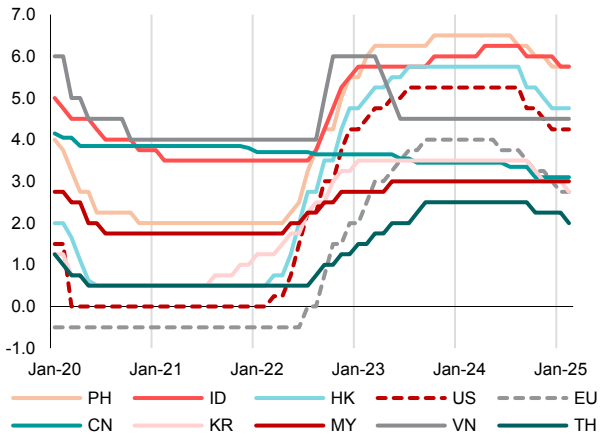
Monetary policy tightening was broadly synchronized across the region, though the magnitude, timing, and pace varied. As economies reopened in 2021 and inflation began to surge due to pent-up demand, supply chain disruptions, and commodity price shocks, most monetary authorities started tightening monetary policy to contain inflationary pressures, prevent robust domestic demand recovery from fueling rapidly-rising inflation, and to anchor inflation expectations (Figure 2.25). Monetary policy tightening was faster and to a greater extent for monetary authorities with explicit targets such as an inflation target, or currency stability. Inflation targeters such as Korea, Thailand, and the Philippines raised policy rates at a faster pace and with greater magnitude than other regional economies in line with their commitment to the inflation targeting framework and robust economic growth. Similarly, the Monetary Authority of Singapore, which sets the path for the Singapore dollar nominal effective exchange rate, has tightened monetary policy five times in one year, including through two off-cycle monetary policy decisions—marking the most aggressive tightening in more than two decades.

Monetary policy was not tightened in China and Japan because of country-specific factors. China eased monetary policies, with the People's Bank of China gradually cutting various policy rates and the reserve requirement ratio (RRR) as inflation was very low, owing to subdued domestic demand, intense price competition in the electric vehicle, solar panel, and other consumer goods industries, and a weak real estate sector. Similarly, the Bank of Japan maintained its yield curve control (YCC) and negative interest rate policy (NIRP) until March 2024, when it terminated YCC and NIRP and started raising its policy rate as signs of sustained inflation, wage growth, and economic recovery became more evident.

For the CLMV countries, persistent currency depreciation led to high inflation in Lao PDR and Myanmar due to high exchange-rate passthrough, while the effectiveness of monetary policy tools was limited. Inflation in Lao PDR is declining but remains high because of persistent currency depreciation, which was exacerbated by a massive supply of base money to liquidate government arrears bonds. The large supply of base money fueled the depreciation of the Lao kip due to currency substitution. Since 2023, the Bank of the Lao PDR (BOL) has tightened monetary policy by issuing bills to absorb excess liquidity in kip and raising the RRR. As a result, the kip exchange rate has stabilized, and inflation has begun to trend down gradually. Similarly, Myanmar's inflation has been driven by currency depreciation, reflecting a sharp deterioration in its balance of payments following the military coup in 2021. While Cambodia's economy is highly dollarized, it has followed a very conservative fiscal policy in the past and has ample fiscal and foreign reserves. As a result, the Cambodian riel exchange rate has been very stable, which helped to contain inflationary pressures and anchor inflation

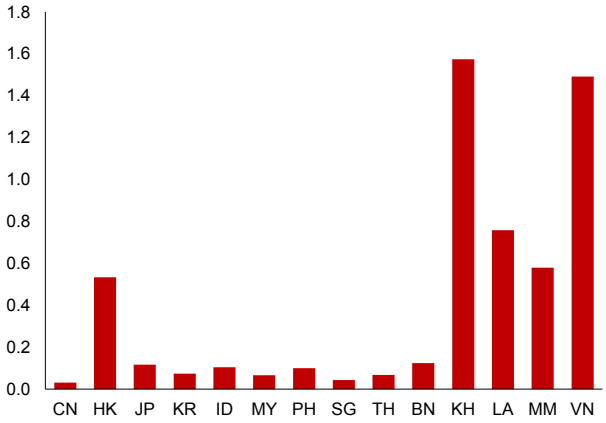
expectations. In contrast, Vietnam has sharply reduced the dollarization of its economy over the past decade and its monetary policy framework is relatively autonomous. Vietnam initially raised its policy rate in September 2022 in response to the surge in inflation but reversed course in March 2023 following signs of weaker domestic economic activity. AMRO estimates that exchange-rate passthrough is higher in CLMV economies—where a 1 percent depreciation of the local currency against the US dollar would raise the headline inflation by 0.5 percentage points to 1.5 percentage points (Figure 2.26). For the rest of the ASEAN+3 economies, exchange-rate passthrough ranged from 0.03 percentage points to 0.12 percentage points.

Figure 2.25. Selected Economies: Policy Interest Rates
(Percentage points)



Source: National authorities via Haver Analytics.
Note: Data are up to February 2025. Policy rates refer to one-year loan prime rate (China, CN); BI Rate (Indonesia, ID); the target rate for the 10-year government bond yield (Japan, JP); base rate (Hong Kong, HK; Korea, KR); overnight policy rate (Malaysia, MY); overnight reverse repo rate (the Philippines, PH); one-day repurchase rate (Thailand, TH); refinancing rate (Vietnam, VN); federal funds rate (upper range) (United States, US); and deposit facility rate (euro area, EU).

Figure 2.26. ASEAN+3: Exchange-Rate Passthrough
(Percentage points)



Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: BN = Brunei; KH = Cambodia; CN = China; HK = Hong Kong; ID = Indonesia; JP = Japan; KR = Korea; LA = Lao PDR; MY = Malaysia; MM = Myanmar; PH = Philippines; SG = Singapore; TH = Thailand; VN= Vietnam. Exchange-rate passthrough is defined as the increase in percentage points of year-on-year headline inflation due to 1 percent year-on-year depreciation (lagged moving four-quarter average).

Fiscal Support to Minimize Inflation Passthrough

Energy and food subsidies[7] played a major role in shielding consumers and producers from sharp global commodity price increases. The region generally faced lower energy price inflation than the global average. In particular, ASEAN+3 economies with energy subsidies experienced significantly lower fuel price inflation compared to the global economy (Figure 2.27). In 2022, AMRO estimates that energy subsidies prevented headline inflation in Indonesia and Malaysia from rising by an additional 0.9 and 4.8 percentage points, respectively (Figure 2.28).[8] In energy-importing economies, such as Japan, Korea, and Thailand, energy subsidies were temporarily introduced to prevent large price spikes. Subsidies on fertilizers and agricultural inputs were also provided to farmers to stabilize food production costs in Cambodia, China, Malaysia, Philippines, Thailand, and Vietnam.

Besides stemming direct price increases domestically, governments provided cash assistance to help vulnerable groups and ensure essential services remain accessible. ASEAN+3 economies have implemented various forms of targeted cash transfers to help lower-income households manage the increased cost of living during the high inflationary period. For example, Singapore offered utility rebates to lower-income households to cushion the impact of rising electricity and gas prices. At the same time, governments tightened control and oversight over healthcare, education, housing, and public transportation to keep price increases in these essential services moderate. In Hong Kong, special relief was provided to public housing tenants following the upward adjustment in public housing rent.

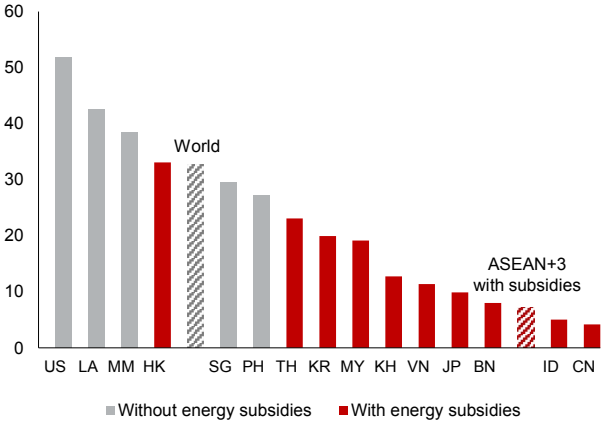
In addition to direct fiscal support, most ASEAN+3 governments adjusted tax measures to increase disposable income for households and businesses. To ease the burden of rising cost of living, Indonesia postponed its planned value-added tax increase by about two years and applied it mainly to luxury goods, while Singapore staggered its planned goods

7/ Energy subsidies include gasoline, diesel, liquefied petroleum gas, and electricity, while food subsidies cover essential items such as cooking oil, rice, and sugar.

8/ The estimates are based on a counterfactual scenario in which domestic fuel prices are market-determined. In the case of Malaysia, RON95 and diesel prices are regressed against RON97 prices during the managed float system period (2015–2018) to obtain the coefficients. For Indonesia, Pertalite prices are assumed to follow Pertamax prices, while Solar prices follow Dex prices.

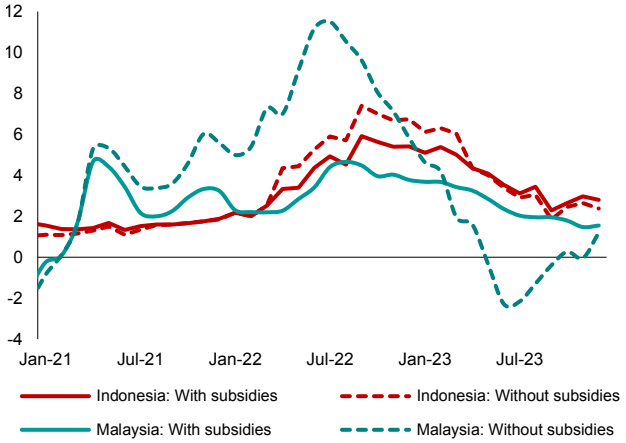
and services tax rate hike and provided consumption vouchers. Regional economies across both Plus-3 and ASEAN also expanded personal income tax deductions to include essential goods and services such as healthcare and education. In addition, corporate tax relief was extended to small and medium enterprises in sectors hit hardest by the pandemic and inflation, such as tourism and manufacturing. For example, the Philippine government introduced a value-added tax refund mechanism to boost tourism.

Figure 2.27. Selected ASEAN+3: Energy Inflation
(Percent, year-on-year)



Source: World Bank Global Database of Inflation; AMRO staff calculations.
Note: Global and regional aggregation is done using 2023 GDP purchasing power parity weights.

Figure 2.28. Indonesia and Malaysia: Headline Inflation with and Without Energy Subsidies
(Percent, year-on-year)



Source: National Authority via Haver Analytics; AMRO staff calculations.
Note: Counterfactual headline inflation refers to AMRO's estimate of headline inflation if pump prices for Pertalite and Solar (Indonesia) and RON95 and diesel (Malaysia) are fully market-determined.

Supply Management to Stabilize Domestic Prices

Strategic stockpile management and administered pricing have been crucial in stabilizing rice prices, a staple food essential for food security and economic stability in the region. Most ASEAN economies, including Brunei, Indonesia, Malaysia, Philippines, Thailand, and Vietnam, have implemented price ceilings on rice to ensure affordability. Government agencies also manage national rice stockpiles, releasing additional supply when market prices have risen sharply. Thailand, a major rice exporter, has a rice price guarantee scheme to maintain stable incomes for farmers and steady rice supply and prices. Similarly, Korea operates a rice price support system, purchasing rice from farmers when prices drop and selling it when prices become too high. The Philippines lowered the tariff rates for rice and other food items, with an aim to lower the overall domestic food prices and augment local supply.

Trade-related measures were used by several countries to manage domestic supply and inflation. During times of local shortages or volatile international prices, some economies restricted exports to ensure adequate domestic supply and stable prices, such as for rice (Myanmar), sugar (Thailand), chicken (Malaysia), and coal and palm oil (Indonesia). As most ASEAN+3 economies are food importers, easing import restrictions helped to stabilize local prices. These include the Philippines' rice tariffication law—implemented in 2019—which replaced quantitative restrictions on rice imports with tariffs; relaxation of imports of wheat (Japan), meat (Thailand), and fertilizers (Indonesia, Malaysia, Thailand, Vietnam); and reduction in import tariffs on fuel and energy products (Korea, Philippines, Vietnam).

Policy Lessons Learnt to Safeguard Price Stability

The ASEAN+3 experience highlights that a combination of both monetary and non-monetary measures is often necessary to effectively control inflation (Table 2.1). Monetary tightening may be less effective in addressing inflation driven by commodity price surges or supply disruptions due to its long transmission lag and broad-based impact. In such instances, non-monetary measures such as fuel price subsidies or price controls can have an immediate impact but entail fiscal costs and potential resource allocation distortions. Most ASEAN+3 economies adopted a mix of policies tailored to the individual economy's specific circumstances, balancing monetary tightening with energy or food subsidies. Economies with little or no price controls, such as the Philippines and Singapore, tend to be more aggressive on monetary tightening, while economies like Malaysia and Indonesia have employed fiscal subsidies alongside policy rate hikes to contain inflation (Khor and Pongsaparn 2024).

Table 2.1. ASEAN+3: Major Policies to Combat Consumer Price Inflation and/or Address the Inflationary Impact in ASEAN+3 Economies, 2021–2023

	Monetary policy	Fiscal policy					Other measures	
		Energy subsidies	Administered prices or subsidies for staple food	Cash assistance	Income tax relief	Consumption tax reduction or exemption	Stockpile management	Trade-related measures
Brunei		✓	✓	✓			✓	
Cambodia		✓	✓	✓			✓	
China		✓	✓	✓	✓	✓	✓	
Hong Kong		✓	✓	✓				
Indonesia	✓	✓	✓	✓	✓		✓	✓
Japan		✓	✓	✓	✓		✓	✓
Korea	✓	✓	✓	✓	✓		✓	✓
Lao PDR	✓		✓	✓				
Malaysia	✓	✓	✓	✓	✓	✓	✓	✓
Myanmar			✓	✓				✓
Philippines	✓		✓	✓	✓	✓	✓	✓
Singapore	✓		✓	✓				
Thailand	✓	✓	✓	✓	✓	✓	✓	✓
Vietnam	✓	✓	✓	✓	✓	✓	✓	✓

Source: AMRO staff compilation from news flows and reports by national authorities.

In periods of inflationary shocks, more effective support can be achieved by targeting non-monetary measures at the most vulnerable populations, thereby ensuring protection without imposing a large fiscal burden. Non-monetary measures such as energy and food subsidies can directly relieve the cost of living, but these measures often entail significant budgetary costs, especially when the subsidies are broad-based. Broad-based subsidies should generally be used temporarily during periods of stress and phased out once the situation normalizes. The removal or rationalization of subsidies must be carefully timed and replaced with measures that focus on vulnerable groups, such as lower-income households, who would benefit more from these subsidies.

Over the medium to long term, structural measures could also help address supply-side challenges and help manage inflation. Structural supply-side measures to help manage inflation over the medium to long terms include improving supply chain efficiency, diversifying supply sources, encouraging sustainable domestic production, and incentivizing use of renewable energy. Significant investments have been made in logistics and transportation infrastructure to help facilitate smoother movement of goods and reduce costs. Many countries have also sought to diversify supply chains by reducing dependence on specific countries or supplies. In addition, many governments seeking to reduce reliance on imports and enhance self-sufficiency have provided incentives for local production by encouraging the application of technology to raise productivity and promote sustainable agricultural practices. Governments, especially in advanced economies, are also making significant investments in green technologies such as solar power and electric vehicles to reduce exposure to global energy price fluctuations.

Ongoing structural shifts are likely to affect inflation dynamics going forward. Geoeconomic fragmentation and supply chain reconfiguration precipitated in part by escalating trade and technology tensions between the United States and China have shifted inflationary pressures across sectors and economies. Recent developments, including renewed threats of higher tariffs, are likely to accelerate this fragmentation process. The region's rapidly aging population is changing saving and investment behavior and inflation dynamics. The transition to net-zero emissions would also contribute to inflation, due mainly to increased costs arising from carbon pricing, higher regulatory and compliance costs, and green investments. However, these structural shifts may also have deflationary effects. The inflation outcomes of these structural changes would also depend on policy choices by central banks and governments. Inflation dynamics are therefore likely to have even more facets, with supply factors becoming more significant, making the task of devising an optimal policy response increasingly complex.

- ***Geoeconomic fragmentation:*** Increased geoeconomic fragmentation could lead to more volatile inflation in the ASEAN+3 region (AMRO 2024b). Globalization has historically reduced inflation by shifting supplies to countries with the lowest cost of production and by increasing competition and efficiency, but fragmentation risks reversing this trend by reducing imports from lower-cost economies and

raising imports from economies with higher cost of production. Price volatility is therefore expected to rise, particularly in highly concentrated markets, with estimates showing substantial price increases for key commodities like lithium, iron ore, and copper.

- ***Aging population:*** While favorable demographics have kept inflation low, a shrinking labor force is expected to reverse this trend and create inflationary pressures (AMRO 2024b). Shifting consumption preferences between younger people who spend more on goods and older individuals who spend more on services would also change inflation dynamics. However, aging may also exert downward pressure on prices due to expectations of weaker growth, complicating central banks' efforts to manage inflation, especially in economies with already low inflation like Japan.

- ***Climate change:*** Policies like carbon taxes and emissions trading schemes can raise the price of polluting goods, while investments in green sectors may increase costs for specific industries, especially for minerals essential to low-carbon technologies. Limited supply and high demand for critical minerals, such as lithium and cobalt, can exacerbate inflationary pressures. The scale of the inflationary effect will depend on the speed of the transition, with a rapid shift potentially causing greater price increases, although renewable energy costs are expected to decrease over time, which could ease the cost of transition (Box 2.7).

The evolving nature of supply shocks may require monetary authorities to reconsider their traditional approach to supply-driven inflation. Experience shows that central banks typically respond less forcefully to supply-driven than demand-driven inflationary pressures, since supply shocks create a direct trade-off between stabilizing inflation and output—tightening policy to contain inflation from negative supply shocks could exacerbate the decline in economic activity. This more muted response has historically helped manage growth-inflation trade-offs when inflation expectations remained well-anchored, but may become increasingly difficult to maintain (Hofmann, Manea, and Mojon 2024).

Looking ahead, ASEAN+3 policymakers could come under pressure to respond more forcefully even to supply shocks. This concern is more salient if risks of de-anchoring inflation expectations emerge, particularly amid more frequent and persistent supply disruptions from geopolitical tensions, climate change, and demographic shifts. Careful monitoring and accurate diagnosis of inflation drivers would be crucial in the calibration of such responses. The post-pandemic experience illustrates these challenges: what was initially viewed as primarily supply-driven inflation from supply disruptions and commodity price hikes contained significant demand elements arising from expansionary monetary and fiscal policies, which contributed to delayed policy adjustments in many economies (Hofmann, Manea, and Mojon 2024). This suggests potential benefits from enhanced surveillance frameworks and analytical tools to better distinguish between supply and demand factors in real time, helping minimize diagnostic errors and support appropriately calibrated responses. At the same time, timely and effective communication—tailored for different audience—to convey the assessment of inflation drivers and policy response is an essential complement to anchor inflation expectations amid the implementation of appropriate policy measures.

A skilful mix of monetary policy and non-monetary measures is therefore key to ASEAN+3 economies' effectiveness in containing inflation. An increasing role of supply-side factors in driving inflation dynamics highlights the need for effective use of supply-side policies alongside monetary policy. The optimal ingredients for the policy mix depend on country specific circumstances, the nature of shocks, and the state of the economy. Whereas monetary policy is broad-based and needs to be calibrated to strike a good balance between inflation and growth objectives, non-monetary measures can be temporary and more targeted to minimize potential fiscal costs and market distortions. At a time when global uncertainties—including potential US tariff actions—are elevating inflation risks, structural challenges will further complicate inflation dynamics, making it imperative for economies to rebuild policy buffers to effectively navigate both immediate and longer-term challenges.

Box 2.7:

Carbon Taxes and ASEAN+3: What Will It Mean for Prices?

Understanding the impact of a carbon tax policy across different industries provides an additional view of how the transition to net zero can reverberate across ASEAN+3. Some sectors face more risks from the implementation of carbon taxes, by increasing their costs of production. Depending on how much of this burden is passed on to consumers, certain commodities or services may also experience a fall in demand as the market moves toward less carbon-intensive or "clean" substitutes.

To estimate the industry-level *price* effects that could arise from the imposition of a carbon tax policy, AMRO staff employed the Leontief Price Model, a supply-driven model derived from the Input-Output accounting framework that estimates the change in prices of finished output that results from a change in factor costs.[1] The price shock was made consistent with the Network for Greening the Financial System (NGFS) Net Zero 2050 scenario—the NGFS' most ambitious scenario that limits global warming to below 1.5° Celsius—to give a sense of how ASEAN+3 economies' inflation trajectories could evolve should very stringent climate policies be put into place (NGFS 2024). By design, this scenario carries significant transition risks.

With the energy sector comprising about 80 percent of ASEAN+3's carbon dioxide emissions (AMRO 2023), the utility sector will face the highest average effective carbon tax rates, following a tax hike policy (Figure 2.7.1). This is followed by the transport sector, but especially aviation and shipping. The range of tax rates suggests that the cost of transition for several ASEAN+3 sectors could be significant. In particular, large cost increases in sectors that provide intermediate inputs to other industries would materially impact overall price levels across the region.

The initial, substantial increase in producer prices will be primarily concentrated in a few ASEAN+3 sectors—mostly within the five most carbon-intensive industries (Figure 2.7.2). Nevertheless, the overall increase in prices is primarily driven by the carbon tax hike's *indirect* impact, rather than the *direct* rise in factor costs (Figure 2.7.3). Tight industry linkages in ASEAN+3 will play a key role in transmitting the impact of the carbon price to the rest of the economy through higher *intermediate* input costs.[2] Clearly, transition risks can spread beyond individual industries—with implications on economy-wide price and economic stability.

Hefty or multiple price increases can translate into lower demand for a sector's goods or services, and consequently, revenues. To gauge which ASEAN+3 sectors could face the largest revenue declines, estimates from the Leontief Price Model were fed into a second demand-driven Input-Output (IO) model that takes on two different demand scenarios: one with a (1) *moderate* shock and another with a (2) *severe* shock.[3] The two differ in their price elasticity assumptions. The first scenario assumes perfectly elastic pricing for a subset of industries, while the second extends this assumption to all sectors.[4]

Under a *moderate* demand shock scenario (where, in response to the carbon tax policy, demand only falls in certain industries faced with discretionary spending), the larger revenue losses will cut across ASEAN+3 manufacturing—especially transport equipment, furniture, and electronics—and services, especially aviation (Figure 2.7.4, Figure 2.7.5). In ASEAN-5, services related to tourism and travel, as well as to motor vehicles, could face significant revenue declines, especially as the transportation sector remains as one of the largest emitters in

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This box was written by Marthe M. Hinojales. An earlier version of this analysis can be found in MAS (2024).

1/ The analysis was implemented across 35 industries for nine ASEAN+3 economies, following the structure of the Asian Development Bank's Multiregional Input-Output Tables (2023), from which the latest available IO data—for 2022—were sourced.

2/ Whereas the derived sector-level carbon tax rates can be viewed as the direct price effect of the tax, there is also the indirect effect: those arising from higher intermediate input prices passed on by supplier industries that similarly face a carbon tax.

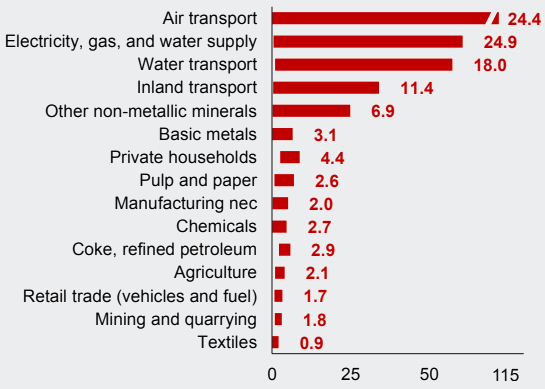
3/ This refers to the Leontief Output Model, which estimates the change in sector-specific revenues that results from a change in final demand.

4/ As in Kay and Jolley (2023), the moderate shock scenario assumes $\Delta p' = \Delta x$ (perfectly elastic pricing) for a subset of 11 sectors, where consumer spending tends to be discretionary. The severe shock scenario assumes $\Delta p' = \Delta x$ for all 35 sectors; that is, the change in price caused by the carbon tax will lead to a decline in final demand—of the same magnitude—for all sectors of the economy.

the region (AMRO 2023). The negative impact on revenues is especially magnified when considering the *indirect* revenue loss, or the corresponding reduction in supply chain/procurement activity because of the fall in final demand. On average, economy-wide revenue losses across the ASEAN+3 sample could be about 1.5 times higher, once the fall in supply chain activity is fully considered.

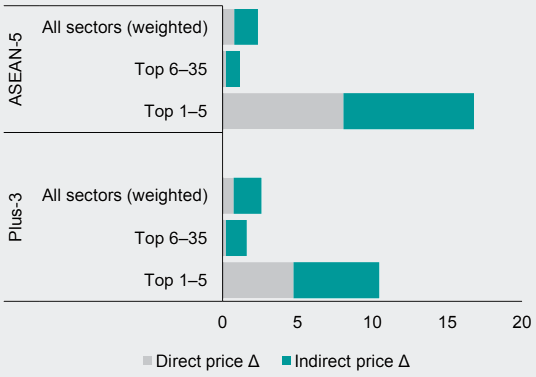
These results carry key policy implications for ASEAN+3 economies. *First*, the overall cost of net zero transition would be significantly lower than estimated if households and firms switch to cheaper, less carbon-intensive alternatives (Figure 2.7.6). This would, of course, rely on the wider availability and reliability of "clean" alternatives for firms to switch into—otherwise, energy and energy-related prices would be significantly higher until the transition to clean energy is complete (AMRO 2023). The estimated price changes and revenue losses discussed above therefore technically represent the upper-bound of the impact of carbon pricing if there are no factor substitution (Perese 2010).[5]

Figure 2.7.1. Selected ASEAN+3: Top Sectors with Highest Effective Carbon Tax Rates
(Range of rates, percent)



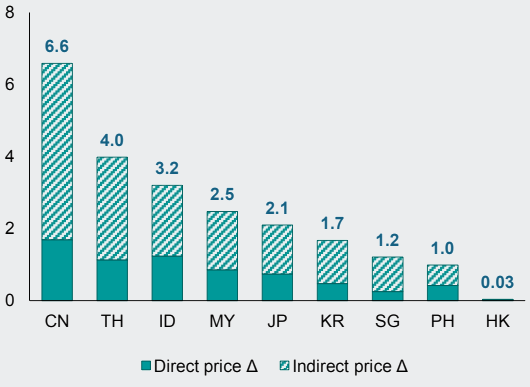
Source: Global Trade Analysis Project; Asian Development Bank Multiregional Input-Output Tables; AMRO staff calculations.
Note: Chemicals include chemical products. Private Households (are those with employed persons). Figures in blue represent average tax rates.

Figure 2.7.2. Selected ASEAN+3: Change in Producer Prices due to Carbon Tax Hike, by Sector Distribution
(Percent)



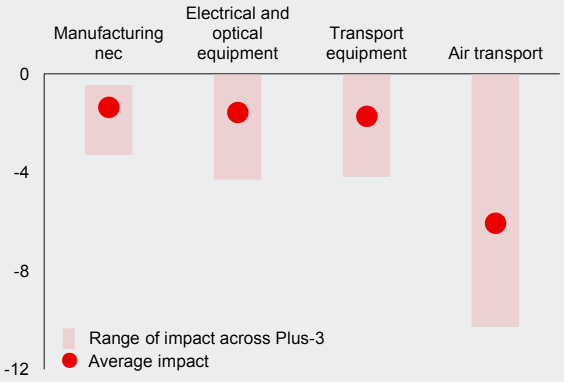
Source: AMRO staff calculations.
Note: Each industry's share to total output were used as weights.

Figure 2.7.3. Selected ASEAN+3: Change in Producer Prices based on a Net Zero 2050 Scenario, by Economy
(Percent change from reference year)



Source: AMRO staff calculations.
Note: CN = China; HK = Hong Kong; ID = Indonesia; JP = Japan; KR = Korea; MY = Malaysia; PH = the Philippines; SG = Singapore; TH = Thailand. The numbers in the chart represent *total* producer price increase.

Figure 2.7.4. Plus-3: Top Sectors with Highest Revenue Decline, based on a Net Zero 2050 Scenario
(Percent change from reference year)

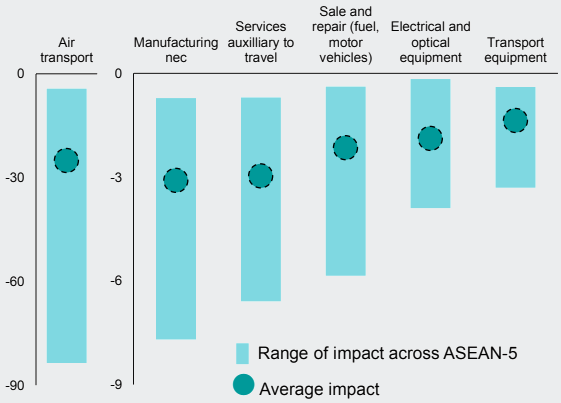


Source: AMRO staff calculations.
Note: nec = not elsewhere classified. Sectors identified above are included in the top 4 most affected sectors for China, Hong Kong, and Japan. For Korea, electrical and optical equipment is in the top 9, while the rest are in the top 4.

5/ Critical to this are two assumptions of the IO model: *first*, that labor and capital are perfectly competitive, thus allowing the carbon tax hike to be passed full on to consumers through higher prices of carbon-intensive products and services; and *second*, the model's fixed production function implies no factor substitution.

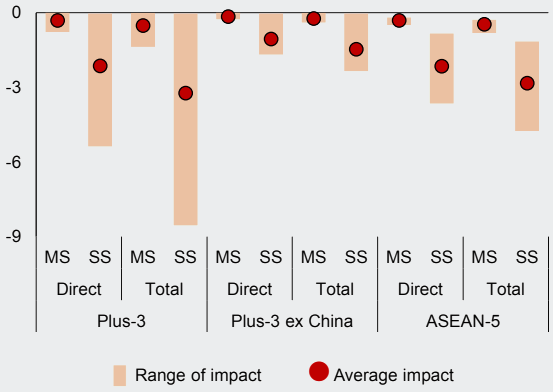
Second, the overall economic impact could be less severe if sectors are given a clear, gradual, and predictable timeline of policy implementation. The results above illustrate how prices and output in ASEAN+3 will react to a sudden, one-off increase in carbon tax: for some in ASEAN, this represents a sudden cost of USD 160 for every ton of carbon dioxide equivalent, from essentially zero. The timeline would also benefit from accounting for different end-consumer spending behaviors, and the indirect transmission channels of the carbon tax. Given the estimated size of the indirect price and output effects, managing transition risks implies a granular view of emissions along ASEAN+3's domestic supply chains; this will be especially crucial for economies where there is a large presence of small and medium-sized enterprises.

Figure 2.7.5. ASEAN-5: Top Sectors with Highest Revenue Decline, based on a Net Zero 2050 Scenario
(Percent change from reference year)



Source: AMRO staff calculations.
Note: ASEAN-5 = Indonesia, Malaysia, the Philippines, Singapore, and Thailand. Sectors identified above are included in the top 6 most affected sectors for all of ASEAN-5 except electrical equipment for Singapore (top 11), and transport equipment for Thailand (top 9).

Figure 2.7.6. Selected ASEAN+3: Estimated Revenue Losses, by Subgroup and Scenario
(Percent change from reference year)



Source: AMRO staff calculations.
Note: ASEAN-5 = Indonesia, Malaysia, the Philippines, Singapore, and Thailand; MS = moderate shock; Plus-3 = China, Hong Kong, Japan, and Korea; SS = severe shock. The difference between the "direct loss" and the "total loss" corresponds to the "indirect loss," or all corresponding reduction in supply chain activity across the entire economy.

Annex 1. Methodology: Supply and Demand Decomposition

Demand and supply factors driving inflation of all economies in the region are decomposed using the Federal Reserve's framework in Shapiro (2022). The decomposition is obtained by classifying inflation subcomponents into demand- and supply-driven factors of each economy. The subcomponents with the same driving forces are then aggregated by multiplying the CPI weights by the year-on-year inflation of the corresponding subcomponents. The demand- and supply-driven classification is made based on the results of the following equation:

$$\Delta ln\,(P_{it}) = c + \sum_{j=1}^{4} \beta_j \Delta ln\,(FP_{t-j}) + \beta_5\, OutputGap_{t-1} + \beta_6 \Delta ln\,(P_{it-1}) + \varepsilon_{it}$$

(Equation A1.1)

where P_{it} is the quarterly price index for subcategory i of the CPI at time t; FP_{t-j} is foreign price index, represented by the IMF's International Commodity Price Index (the IMF's International Food Price Index is applied to food subcategories) denominated in local currency at lag j; $OutputGap_{t-1}$ is defined as (Actual GDP–Potential GDP)/ Potential GDP at lag 1, in which the Potential GDP is estimated by applying the Hodrick-Prescott (HP) filter to quarterly GDP. All series are seasonally adjusted, and the sample period is from the first quarter of 2001 to the fourth quarter of 2024, subject to data availability.

Inflation subcomponents that are driven by supply and demand factors are classified based on the signs of the price and quantity equations for each subcomponent in the CPI basket. Specifically, demand shocks move prices and quantities in the same direction along the upward-sloping supply curve, while supply shocks move prices and quantities in opposite directions along the downward-sloping demand curve. As the data on quantities of goods transacted are not available, the output gap is used as a proxy in Equation A1.1, and the drivers of inflation are assigned as follows:

- ***Supply-driven inflation components:*** Sum of the coefficients of all lagged foreign prices is positive and has a p-value of Wald F-statistics < 0.2; and/or negative sign for output gap.

- ***Demand-driven inflation components:*** All components are not driven by foreign prices and have a positive sign for the output gap.

Annex 2. Methodology: Global and Domestic Factors

The decomposition of headline inflation for each economy are estimated by regressing the headline inflation on the output gap, the change in the bilateral exchange rate against the US dollar, the policy rate, and global commodity price inflation, as in the following equation.

$$CPI_t^{YoY} = c + \beta_1 OutputGap_{t-j} + \beta_2 ER_{t-k}^{YoY} + \beta_3 \Delta_4 PR_{t-1} + \beta_4 CommodityPrice_{t-m}^{YoY} + \varepsilon_t \quad \text{(Equation A2.1)}$$

where CPI_t^{YoY} is the year-on-year headline CPI inflation at quarter t; $OutputGap_{t-j}$ is the estimated output gap at lag j, where the output gap is calculated as in *Annex 1*; ER_{t-k}^{YoY} is the year-on-year change in the bilateral exchange rate against the US dollar at lag k; $\Delta_4 PR_{t-1}$ is the change in policy rate over four quarters at lag l; $CommodityPrice_{t-m}^{YoY}$ is the year-on-year change in IMF's International Commodity Price Index at lag m. For all independent variables, the four-quarter or eight-quarter moving average is applied, and the lags (j,k,l,m) are chosen from lag 1–lag 4, based on the signs and significance of the variables. Country-specific factors are added if needed. The sample period is from the first quarter of 2010 to the fourth quarter of 2024, subject to data availability.

The coefficients in Equation A2.1 represent the sensitivity of CPI inflation to the changes in different independent variables. Specifically, β_2 is the exchange-rate passthrough, that is, the percentage point change in year-on-year CPI inflation subject to a 1 percent increase in the four-quarter moving average of the bilateral exchange rate (local currency depreciation against the US dollar) over a year.

Based on the estimation results in Equation A2.1, headline inflation could be decomposed by the contributions of different economic factors, including the output gap, the exchange rate, the policy rate, global commodity prices, and "Others" which reflect the impacts of the country-specific factors other than the four factors above.

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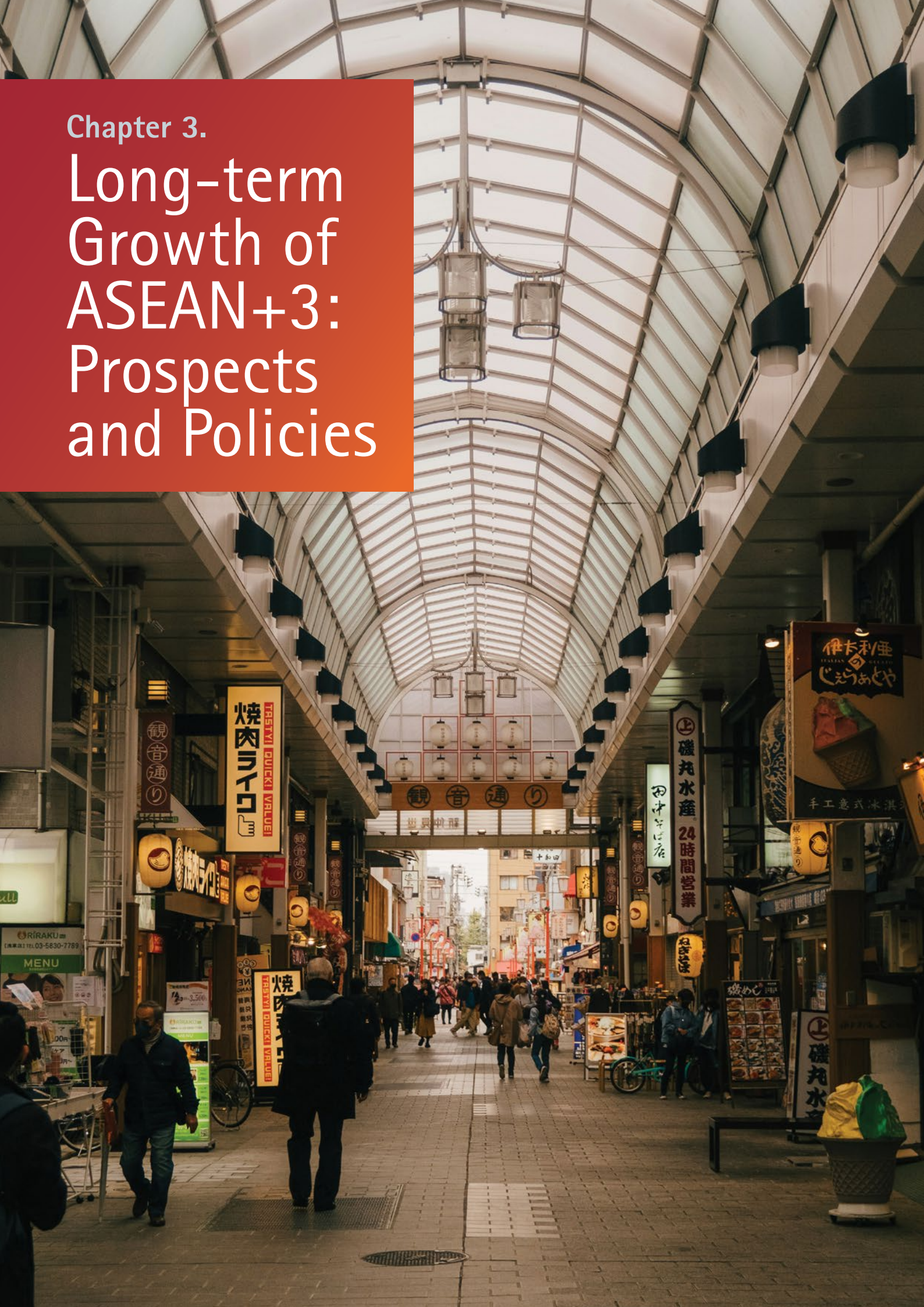
Chapter 3.

Long-term Growth of ASEAN+3: Prospects and Policies



Highlights

- The ASEAN+3 region remains well-positioned to be a key global growth driver in the next few decades. However, its pace of expansion has been slowing since the global financial crisis, further exacerbated by the pandemics and other shocks in the past 10 years. Amid major secular trends confronting the region's economies—such as rapid aging, climate change, and global trade reconfiguration—its declining growth momentum raises critical questions about the region's ability to manage new and emerging risks while sustaining its long-term potential growth.

- Potential growth in the region has decelerated from about 6.0 percent in the early 2000s to 4.0 percent in 2023. About 70 percent of the decline is due to slower capital accumulation, with sluggish total factor productivity accounting for another 10 percent. In some economies, slow human capital development and a shrinking labor force have also limited the boost to growth from increased investment. The growth potential is projected to further ease to about 3.0 percent by the end of 2050—but it could fall below that if downside risks, such as deeper geoeconomic fragmentation, failure to contain climate change, and more rapid fertility rate declines, were to materialize.

- The productivity slowdown is due in part to the scarring effects of the pandemic which impaired the balance sheets of households and firms and the diverse pace of structural change and industrialization experienced across the region. In particular, productivity gains from structural change have fallen by a third of those over the past two decades. In some economies, industrialization has stalled, while shares of manufacturing in employment and output have not increased. In addition, sectoral productivity gaps compared to the global frontier remain wide in most economies, while the shift to services has primarily been toward lower-productivity activities.

- The region is facing not only the enormous task of revitalizing economic growth but also ensuring its future pathway is dynamic and can respond to challenges ahead. While there is no "one-size fits all" formula for sustaining high-quality growth, ASEAN+3's long experience with economic transformation helps provide a compass for development strategies. However, it is imperative that these new growth strategies be tailored to address the new economic challenges that ASEAN+3 economies are facing, including aging workforces, climate change, and geoeconomic fragmentation.

- While the precise policy prescription will differ across ASEAN+3 economies based on their specific context, this chapter identifies five policy themes that could guide the region's policymakers craft new growth pathways for the future. These encompass (1) upgrading existing manufacturing capabilities to respond to new demand dynamics; (2) prioritizing the shift toward high skills and quality services; (3) closing investment gaps, especially in productivity-enhancing infrastructures; (4) boosting innovation and leveraging on technology to redefine traditional development pathways; and (5) strengthening state capacity, without which successful growth outcomes would be impossible. Undertaking these policy adjustments would be, in many ways, bolstered by stronger regional cooperation, helping ensure that the ASEAN+3 region of the future not only exhibits high growth, but also growth that is inclusive, equitable, and sustainable.

I. Introduction

"The advantage of economic growth is not that wealth increases happiness, but that it increases the range of human choice."

W. Arthur Lewis, The Theory of Economic Growth (1955)

ASEAN+3 is one of the world's most dynamic regions, and a significant driver of global growth. In the last 10 years, nearly 45 percent of global economic growth was contributed by ASEAN+3 economies (Figure 3.1). For the rest of the decade, the ASEAN+3 region is projected to grow by 4.0 percent on average—outpacing the world economy's forecast growth of 3.2 percent (Figure 1.27). A key node of global trade and manufacturing activity, home to some of the world's most innovative economies and fast-growing cities, and possessing a large labor force, the ASEAN+3 region is well-positioned to be a global growth driver—with some of its middle-income economies forecast to drive a larger portion of global economic activity in the years to come (Figure 3.1).

However, its pace of economic expansion has been slowing down in the last two decades, especially in the aftermath of the global financial crisis and the pandemic health crisis. From an average of about 6.5 percent annually between 2000 and 2007, the region's average growth rate has slowed to around 5.1 percent over 2008 – 2024 (Figure 3.2).[1] This represents a deceleration in ASEAN+3's growth momentum by about 20 percent since 2008, which has also been exacerbated by the scarring effects of the COVID-19 pandemic (Figure 3.3). Along with slowing productivity gains, these trends raise valid concerns about the ASEAN+3 economies' ability to sustain their robust growth and development in the period ahead. While a slowdown in growth has been experienced by many other economies in the world since the global financial crisis, the more pertinent issue is that ASEAN+3 economies are experiencing this slowdown amid major secular trends that pose considerable headwinds and uncertainty to long-term growth, including rapid demographic changes, global trade reconfiguration, and heightened geopolitical tensions (AMRO 2024b). With the more complicated landscape, the current consensus expectation is that ASEAN+3's overall growth by the end of the next decade would be around 3.0 percent—or two-thirds of what it was in the preceding decade (Figure 3.4).

In this context, this thematic chapter dives deep into the underlying factors driving the long-term growth trend in ASEAN+3 and explores how structural transformation is influencing productivity growth across the region.

- ***Section II*** unpacks the region's growth dynamics from a growth accounting perspective to provide an understanding of which production factors—capital, labor inputs, human capital, or productivity gains—are primarily driving the downward trend in ASEAN+3's potential growth. These are projected into the future to explore a long-term trajectory for the region, given existing trends.

- ***Section III*** hones in on the slowdown in ASEAN+3's long-term growth and productivity gains over time, examining the issue from the perspective of structural change and tracking the transitions of the region's economies across different economic sectors. ASEAN+3 economies' experience is benchmarked against global peers to identify the salient characteristics of structural change in the region over the last three decades.

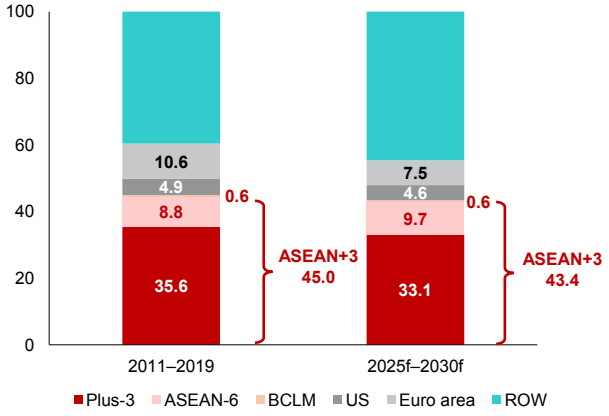
- ***Section IV*** offers five key policy considerations, informed by the foregoing analyses, for the region's policymakers as they explore new growth strategies for a high-quality, inclusive economic future. While ASEAN+3's long experience with economic transformation and development policies provides insights that are helpful for the future, new growth strategies must also consider the new realities that the region is facing and how to leverage on the rapid technological advances to meet the challenges.

This chapter follows up on several annual editions of the *ASEAN+3 Regional Economic Outlook (AREO)*, which together provide a panoramic, *extrospective* view of major secular shifts confronting the region and how they affect the region's long-term prospects. This year's chapter follows up with an *introspection* of the region's growth experience, with the objective of uncovering insights on the region's potential growth and structural transformation that could, in turn, help inform the path toward high-quality, inclusive, and sustainable growth for ASEAN+3 economies amid ongoing global shifts.

The authors of this chapter are Marthe M. Hinojales (co-lead), Naoaki Inayoshi (co-lead), Haobin Wang, and Yuhong Wu, under the supervision of Allen Ng, with contributions from Lay Lay Aung, Wee Chian Koh, Anthony Tan, and Chunyu Yang.

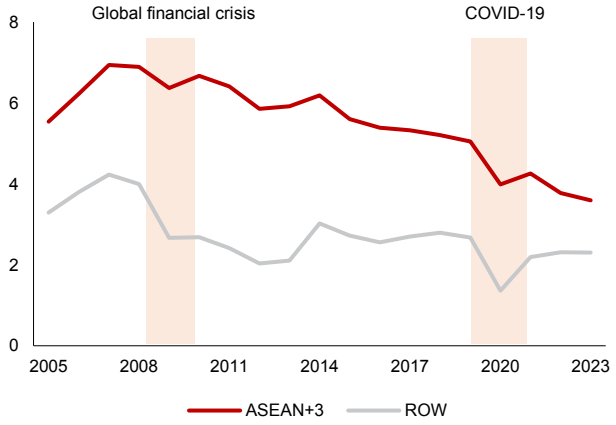
[1] If excluding the pandemic years 2020 and 2021, ASEAN+3 aggregate growth over this period is 5.4 percent.

Figure 3.1. World: Contribution to Real GDP Growth, on PPP Basis
(Percent share)



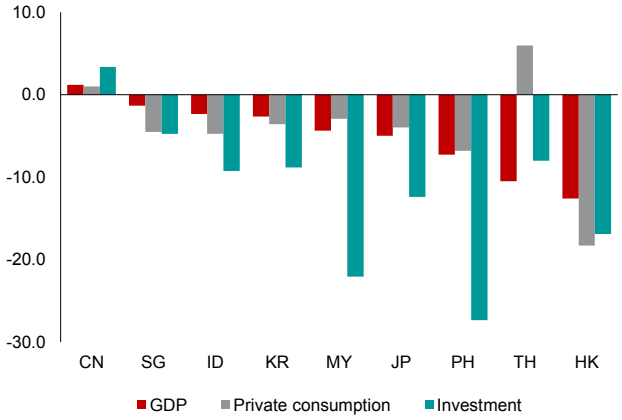
Source: National authorities via Haver Analytics; Oxford Economics; International Monetary Fund; AMRO staff calculations.
Note: f = forecast; ASEAN-6 = Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam; BCLM = Brunei, Cambodia, Lao PDR, and Myanmar; Plus-3 = China, Hong Kong, Japan, and Korea; ROW = rest of the world. Real GDP is forecast in local currency and converted to purchasing power parity (PPP).

Figure 3.2. ASEAN+3 and World: GDP Growth
(Percent year-on-year, five-year moving average)



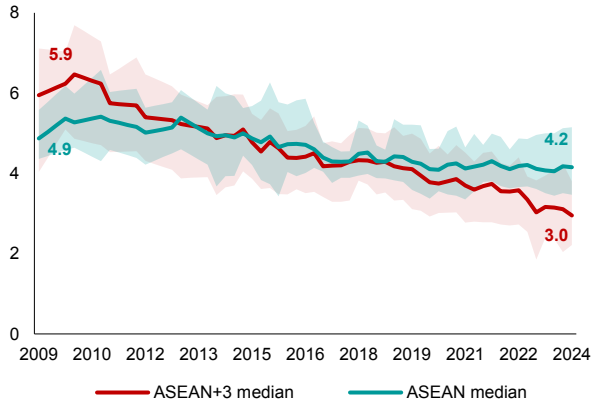
Source: International Monetary Fund; AMRO staff calculations.
Note: ROW = rest of the world. The aggregate growth is weighted by purchasing power parity-adjusted GDP.

Figure 3.3. Selected ASEAN+3: Deviation of GDP, Investment, and Private Consumption from Pre-Pandemic Trend Level
(Percent of pre-pandemic trend, 2024)



Source: National authorities via Haver Analytics; AMRO staff calculations.
Note: CN = China; HK = Hong Kong; ID = Indonesia; JP = Japan; KR = Korea; MY = Malaysia; PH = Philippines; SG = Singapore; TH = Thailand. One-sided HP filters are applied to quarterly data to obtain pre-pandemic (2010Q1–2019Q4) and post-pandemic trends (2020Q1–2024Q4). Deviation is calculated as a percentage difference between the post-pandemic trend and the pre-pandemic trend for 2024 (Q1–Q4) quarterly data (2024 yearly data for China's investment and private consumption). Some economies are excluded due to data availability.

Figure 3.4. Selected ASEAN+3: Consensus Forecast of Long-Term Growth
(Percent, year-on-year)



Source: Consensus Economics; International Monetary Fund; and AMRO staff calculations.
Note: Figures for each year represent the 10-year-ahead growth forecast. Regional aggregate is the weighted average (using purchasing power parity-adjusted GDP) of growth expectations for China, Hong Kong, Japan, Korea, Indonesia, Malaysia, the Philippines, Singapore and Thailand.

II. Long-term Trend Growth in ASEAN+3

ASEAN+3's "catch-up" with richer peers was already slowing down in the years following the global financial crisis as global growth slowed, but even more so with the shocks from the COVID-19 pandemic. In the aftermath of the pandemic health crisis, some economies shifted to even lower growth trajectories, in part because of scarring effects on labor supply, the balance sheets, and capital stock (AMRO 2022). However, the pandemic also accelerated the shift to digital technology which provided a boost to factor productivity and mitigated the impact of the pandemic. Altogether, this growth slowdown has raised critical questions about the structural factors determining ASEAN+3's long-term potential growth. Understanding the causes of this decline—whether stemming from demographic shifts, slowing capital accumulation, or varying rates of productivity improvement—is becoming increasingly crucial for policymakers seeking to reinvigorate economic dynamism in their respective economies.

The region's longer-term growth trend and potential growth can be analyzed from a growth accounting perspective. Potential growth refers to the rate at which an economy can grow while at full capacity and full

employment without triggering inflationary pressure or external imbalance. First, ASEAN+3 economies' growth is decomposed into four underlying factor inputs—capital accumulation, labor input, human capital, and total factor productivity (TFP)—to understand how each has driven past economic growth and their role in the observed growth slowdown.[2] Second, while growth accounting through a production function approach has been widely used to analyze historical developments, this study extends the analysis to project long-term growth for the ASEAN+3 region, based on how each of the four drivers is expected to evolve in the next decades to 2050. By doing so, the analysis aims to offer a novel perspective on ASEAN+3's historical and future growth dynamics, in turn helping identify areas that need to be prioritized to ensure long-term growth resilience.

Understanding the Past

ASEAN+3's potential growth has decelerated from around 6.0 percent in 2001 to 4.0 percent in 2023; more than two-thirds of this decline is due to decelerating capital accumulation and TFP growth.[3] Capital accumulation—or the process of increasing productive assets through investment in physical capital like machinery and infrastructure—has been the primary growth driver across ASEAN+3 economies since the early 2000s, accounting for about 70 percent of potential growth (Figure 3.5). However, its contribution gradually declined as economies matured, lowering ASEAN+3 regional growth by half a percentage point between 2001 and 2023. The contribution from TFP, which measures productivity gains in combining the different factor inputs and technological progress, has also fallen over the same period, reducing regional growth by about 1.0 percentage point. Altogether, these two factors account for 90 percent of the decline in ASEAN+3's potential growth over 2001–23. Human capital—measured by education attainment—and labor inputs have seen milder declines in their historical growth contributions. The declining trend observed from labor inputs, in particular, largely reflects the region's rapidly aging demographic profile (AMRO 2024b).[4]

Potential growth in the Plus-3 fell from 5.6 percent in 1980 to 4.3 percent in 2023—reflecting slower capital and TFP growth in China and lower capital accumulation in Japan and Korea. China's potential growth rate increased from about 9 percent in the late 1970s and early 1980s to over 10 percent in the early 2000s, driven by robust capital accumulation and TFP growth—fueled by rapid industrialization and economic reforms following its accession to the World Trade Organization (Cheremukhin and others 2015). Growth began to taper off in the late-2000s, as capital accumulation decelerated and TFP growth began to slow (Figure 3.6, left panel). A similar pattern is observed in Japan and Korea, where potential growth began to decline noticeably in the late 1980s (Figure 3.6, right panel). Japan's potential growth declined from around 4 percent in the 1980s to less than 1 percent by the early 2000s, in part due to the persistent negative contribution of labor inputs since the early 1990s and the sharp slowdown in capital accumulation after the bursting of the asset bubble at around the same time. Meanwhile, Korea's potential growth has averaged about 2.5 percent in the last five years—less than a third of the 9 percent growth in the 1980s—because of a marked decline in capital accumulation over the years.

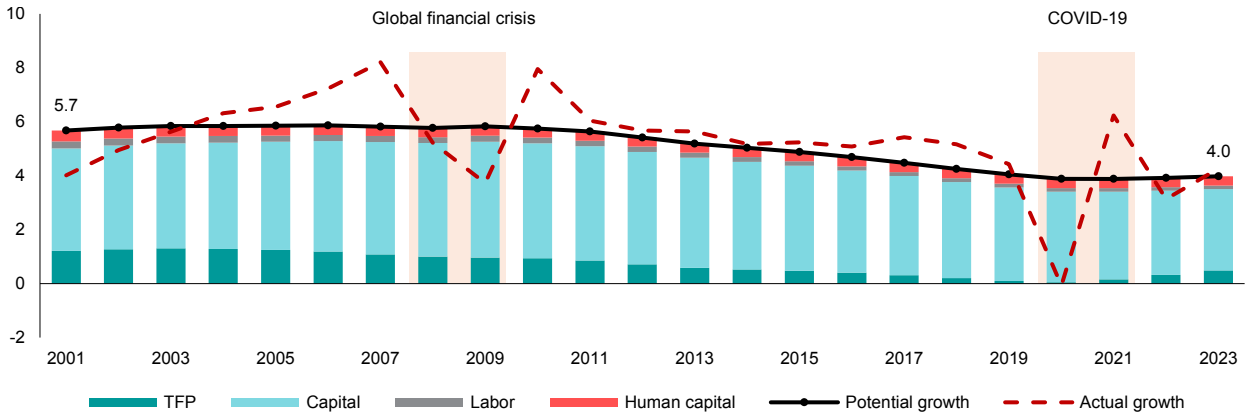
In ASEAN-5, potential growth slowed from 6.2 percent in 1986 to 3.9 percent in 2023, with broad declines seen across labor, human capital, and TFP growth. Capital accumulation has remained the primary engine of growth in ASEAN-5 economies, but this has not been matched by corresponding improvements in TFP and human capital development, thus limiting the efficiency gains from growing capital stock (Figure 3.7, left panel). Decomposing growth in the past two decades at the individual-economy level also reveals the ASEAN-5 economies' unique experience in sustaining balanced growth drivers (Online annex 2). Despite its substantial room to "catch up" with advanced economies in terms of productivity levels, Indonesia's potential growth has been hampered by a weak contribution from TFP and human capital growth. Malaysia has experienced a significant decline in capital accumulation since the Asian Financial Crisis, but neither TFP growth nor human capital improvements have increased sufficiently to offset the fall in investment. Thailand, on the other hand, appears to have struggled with a sharp decline in capital accumulation in both the public and private sector reflecting the political uncertainties and weak state capacity despite a relatively steady contribution from TFP (AMRO 2024a). This is in contrast with the Philippines, which has managed to increase its rate of capital investment steadily in the past two decades but appears to have difficulty in shoring up its TFP. Reflecting its higher income status, Singapore has demonstrated more mature growth dynamics with steady but moderating contributions across all four components (Online annex 2).

2/ The growth accounting exercise conducted by AMRO staff in this section draws on data from the Penn World Tables, World Development Indicators, United Nations Population Prospects, and national sources to estimate historical growth drivers and their evolution through time. Online annex 1 features indicators used and other technical details.

3/ Although the data used in the analysis extends to 1970 for some individual economies (Online annex 2), the regional aggregates can only be computed from 2001 due to data availability.

4/ More specifically, labor inputs are measured as total hours worked, adjusted for participation rates and employment.

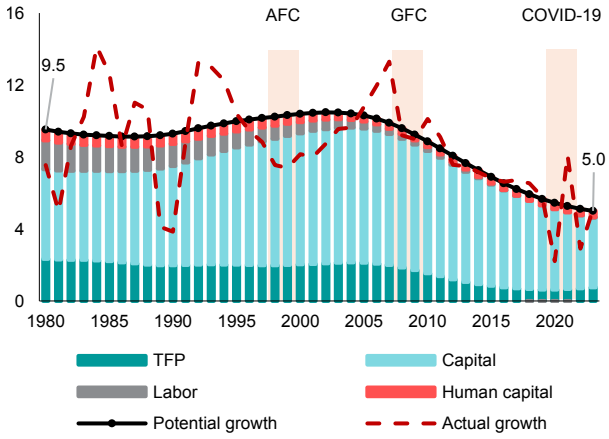
Figure 3.5. ASEAN+3: GDP Growth, by Factor Input
(Percent, year-on-year)



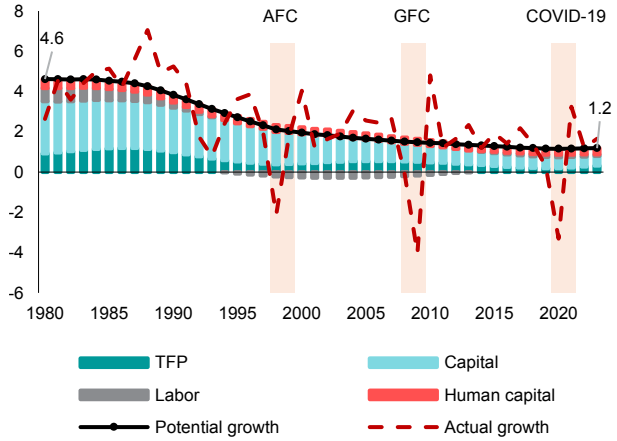
Source: International Labour Organization; International Monetary Fund; National authorities via Haver Analytics; Penn World Table; United Nations World Population Prospects; World Bank; AMRO staff calculations.
Note: TFP = total factory productivity. The aggregate growth and components are weighted by purchasing power parity-adjusted GDP. Data for Cambodia are up to 2022 and AMRO staff forecast is used for 2023.

Figure 3.6. Plus-3: GDP Growth, by Factor Input
(Percent, year-on-year)

China



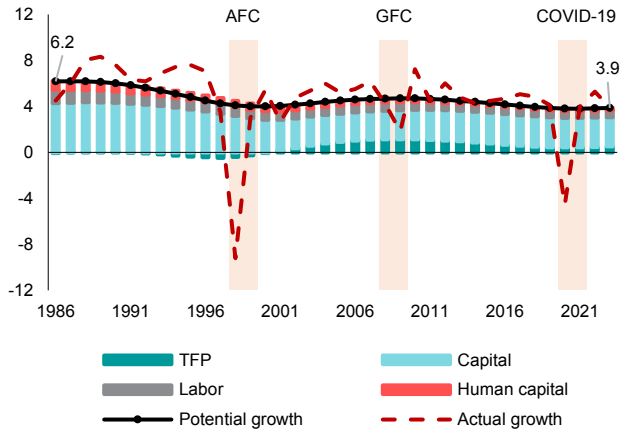
Plus-3 ex China



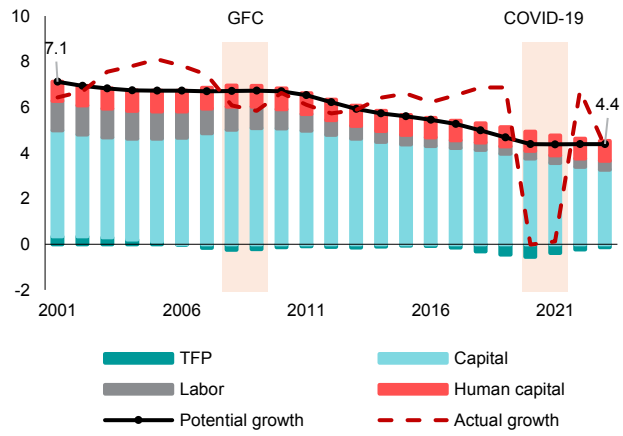
Source: International Labour Organization; International Monetary Fund; National authorities via Haver Analytics; Penn World Table; United Nations World Population Prospects; World Bank; AMRO staff calculations.
Note: Plus-3 ex China = Hong Kong, Japan, and Korea. AFC = Asian financial crisis; GFC = global financial crisis; TFP = total factor productivity. The aggregate growth and components are weighted by purchasing power parity-adjusted GDP.

Figure 3.7. ASEAN: GDP Growth, by Factor Input
(Percent, year-on-year)

ASEAN-5



BCMLV



Source: International Labour Organization; International Monetary Fund; National authorities via Haver Analytics; Penn World Table; UN World Population Prospects; World Bank; AMRO staff calculations.
Note: ASEAN-5 = Indonesia, Malaysia, the Philippines, Singapore, and Thailand; BCLMV = Brunei, Cambodia, Lao PDR, Myanmar, and Vietnam. AFC = Asian financial crisis; GFC = global financial crisis; TFP = total factor productivity. The aggregate growth and components are weighted by purchasing power parity-adjusted GDP.

Potential growth in BCLMV —while higher than other subregions, at 4.4 percent in 2023—also eased owing to the slowdown in capital accumulation since 2010 and notably weak TFP growth.[5] Capital accumulation has been the primary growth driver for these economies, typical for those in earlier stages of development, in part thanks to increasing foreign direct investment (FDI) (Figure 3.7, right panel). While capital accumulation contributed about two-thirds of historical potential growth, economies have varied significantly in their ability to translate this investment into productivity gains. Vietnam stands out, in particular, having achieved a higher TFP contribution of nearly 10 percent to overall growth over the most recent decade (Online annex 2). Cambodia, Lao PDR, and Myanmar have yet to increase the growth in their respective TFP contributions in line with the stronger accumulation of capital, indicating potential inefficiencies in resource allocation. This was also the case for Brunei, where weak TFP growth fully offset the positive effect of capital deepening on labor productivity, especially in the years prior to the pandemic (Box 3.1). This observation aligns with other studies that highlight sluggish TFP growth in these economies (Asian Development Bank [ADB] 2017; International Monetary Fund [IMF] 2019; World Bank 2023a).

5/ The BCLMV economies include Brunei, Cambodia, Lao PDR, Myanmar, and Vietnam.

Box 3.1:

Spurring Growth through Productivity Enhancements in Brunei

Sustaining long-term economic growth requires a strong focus on productivity improvements. For resource-rich economies like Brunei, prioritizing this is vital to mitigate the risks associated with the exhaustibility of non-renewable resources (Auty 1993; Sachs and Warner 1995; Gylfason 2005; Van der Ploeg 2010). By investing in technology diffusion and fostering innovation, resource-rich economies can leverage their resource wealth to diversify their economies, while creating productivity spillovers across various sectors. In the context of Brunei's aging population, enhancing both total factor productivity (TFP) and labor productivity becomes especially fundamental to unlock new growth potential, shifting the focus from not just increasing primary inputs—like labor and capital—to prioritizing the adoption and spread of innovative technologies.

Key drivers of productivity shifts in Brunei: 2005–2023

Output decomposition using the production function approach reveals that between 2005 and 2019, Brunei's economic growth was largely driven by increases in primary inputs (Figure 3.1.1). Labor played a key role, supported by peak labor force participation rates and robust employment growth, particularly in the mid-2000s. Similarly, capital stock expanded significantly, spurred by substantial investments in downstream fertilizer and petrochemical projects. However, while the volume of labor and capital inputs grew sharply during this period, TFP was a drag on overall output growth.[1]

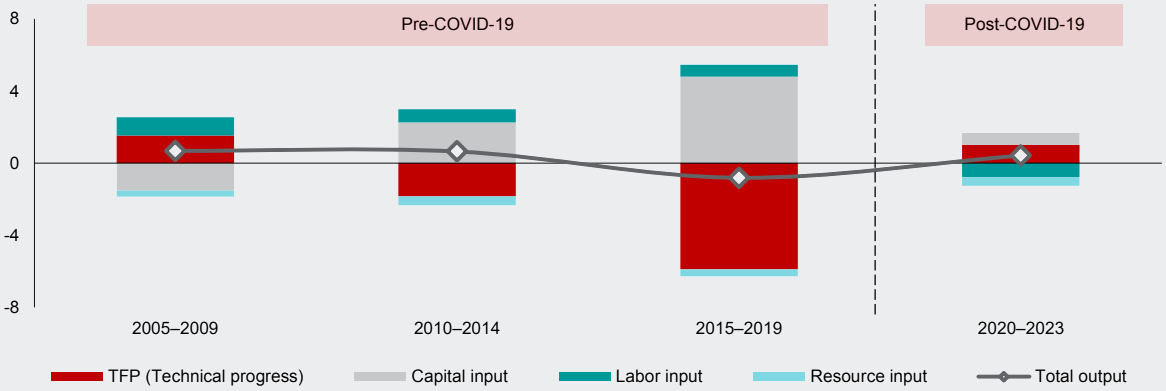
Similarly, factor decomposition revealed that even though increased investments in capital goods—such as machinery and equipment—supported gains in labor productivity (i.e., capital deepening), TFP consistently weighed on labor productivity throughout most of the pre-pandemic years (Figure 3.1.2, left panel). Sectoral analysis showed that the oil and gas (O&G) sector, despite being a central pillar of Brunei's economy, struggled with declining output resulting from maturing fields and aging infrastructure that led to negative labor productivity growth (Figure 3.1.2, right panel). The non-O&G sector also faced challenges, such as shortages of skilled labor and slower technology adoption especially among smaller enterprises. These findings highlight the challenges to technological innovation and efficiency improvements in Brunei (Cheong 2013; Koh 2014).

Encouragingly, between 2020 and 2023, Brunei achieved significant gains in TFP, driven by rapid digital transformation that accompanied the transition to the post-pandemic environment. The swift adoption of digital tools, automation, and e-commerce platforms allowed businesses to maintain operations despite mobility restrictions—a trend that has continued to drive efficiencies until today. The non-O&G sector saw the most pronounced TFP improvements. The sector was supported by government-led initiatives such as the BRUHealth system and the Smart Nation projects, which significantly modernized Brunei's digital infrastructure. These advancements not only streamlined service delivery and enhanced connectivity but also laid the groundwork for sustainable productivity growth across various sectors. As a result, the economy is better positioned to leverage technology for economic diversification, reducing its dependency on oil and gas while fostering long-term resilience.

This box was written by Anthony Tan and Lay Lay Aung.

1/ The growth accounting framework, based on the Cobb-Douglas production function, has some limitations. It treats productivity as a residual, which can overlook the effects of important factors like institutional quality, infrastructure improvements, and spillovers. For example, positive spillovers from technology adoption or negative ones like environmental damage may not be fully captured, resulting in an incomplete picture of the actual drivers behind economic growth and efficiency.

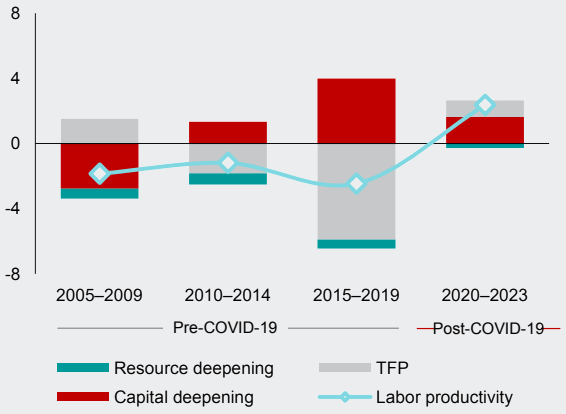
Figure 3.1.1. Brunei: Decomposition of Output Growth
(Percentage point contribution)



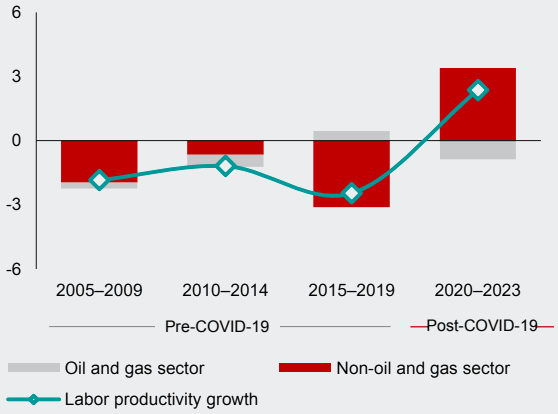
Source: National authorities; Penn World Tables; United Nations Development Program; World Bank; AMRO staff estimates.
Note: TFP = total factor productivity. The decomposition of output growth is estimated using the extended Cobb-Douglas production function, which incorporates natural resources as an additional factor of production. This extended model is better suited for analyzing growth in economies where natural resources—such as oil, gas, and minerals—are central to output (Tan and Aung 2025).

Figure 3.1.2. Brunei: Decomposition of Labor Productivity Growth
(Percentage point contribution)

Factor Decomposition



Sectoral Decomposition



Source: National authorities; Penn World Tables; United Nations Development Program; World Bank; AMRO staff estimates.
Note: TFP = total factor productivity.

Strategic approaches and policy priorities for enhancing productivity growth

Brunei's focus on enhancing productivity has been a key priority since the early days of its national development plans. The emphasis on productivity can be traced back to the 2nd National Development Plan, which is aligned with the Wawasan Brunei 2035 (also known as Brunei Vision 2035). While the government has made strides in targeting labor market efficiency, human capital development, and private sector innovation, there is significant potential for further progress in these three areas.

- ***Promoting greater labor market competition and flexibility.*** Addressing structural rigidities in the labor market remains key to promoting labor market competition and flexibility. This would require a suite of complementary and market-based policies. First, encouraging greater mobility of migrant workers would help reduce labor market segmentation. Currently, local and foreign workers occupy distinct roles with differing wages, job security, and working conditions. Second, narrowing wage differentials between locals and migrant workers would help promote flexible wage dynamics. One feasible option is to target mid-skill, mid-wage jobs where local employees can contribute more significantly to the workforce. To support this, a productivity-based wage subsidy, funded by migrant worker

levies, would not only make local hires more affordable but also incentivize employers to invest in training and upskilling (Koh 2020).

- ***Addressing staffing gaps.*** To close the talent gap, deliberate and targeted policies to align educational and training programs with industry needs are key priorities. The establishment of the Manpower Planning and Employment Council and the Manpower Industry Steering Committee is vital for fostering collaboration between industry, regulators, and educational institutions. Their focus on identifying critical occupations and developing competency frameworks is a step in the right direction. Further, strengthening public-private collaboration—such as through the i-Ready Apprenticeship Program—will bridge the gap between academic knowledge and practical skills, enhancing job readiness among graduates. Continued reform of the Technical and Vocational Education and Training system is essential to better align curricula with market demands. It is crucial that these policies align with efforts to enhance labor market competition, as misalignment could distort education choices and lead to skills and qualifications that do not meet industry demand.

- ***Promoting technological innovation.*** To drive productivity in non-O&G sectors, a "whole-of-nation" approach needs to be geared toward enhancing digital infrastructure and innovation. The Digital Economy Masterplan 2025 is a key initiative that focuses on building a robust digital foundation to support economic diversification. Continuing investments in cloud computing, artificial intelligence, and digital literacy are essential to modernizing industries and creating high-value job opportunities. Encouraging micro, small, and medium-sized enterprises to adopt digital technologies is also crucial, alongside policies that improve firms' access to finance, reduce regulatory burdens, and provide incentives for research and development.

By working to solve structural challenges using targeted strategies, Brunei can make significant strides toward enhancing overall productivity, supporting economic diversification, and achieving the ambitious goals outlined in Wawasan Brunei 2035.

Exploring the Future

Extending the analysis to the long term, ASEAN+3's potential growth is projected to decelerate from around 4.0 percent in 2023 to less than 3.0 percent by the end of 2050. Long-term growth projections for the region combine two key assumptions: one, that historical growth trends continue; and two, that ASEAN+3 economies will be able to "catch up" over time, which means that their TFP, capital stock (per capita), and human capital will gradually converge with levels in more advanced peers. Future growth thus reflects the pace at which the region's economies close their respective gaps with frontier economies. In the next 10 years, potential growth for the region will remain resilient at above 4 percent through 2030 but will moderate to 2.8 percent by 2050 (Figure 3.8). This projected slowdown is also consistent with the market consensus on the region's long-term outlook for the next decade (Figure 3.4).

This deceleration over the next three decades primarily reflects weaker contribution from capital accumulation and slower labor force growth in ASEAN+3. Capital accumulation, historically the dominant engine powering the region's above-global-average growth rates, is projected to contribute significantly less across all subregional aggregates (Figure 3.9). The growth rate of capital stock is projected to gradually decline as ASEAN+3 economies continue to mature in the next 20–30 years. The contribution from human capital—while showing consistent growth contributions across economies—is likely to be insufficient to offset the projected decline in capital stock accumulation, which in part could be owing to underinvestment in skills upgrading in some economies. TFP growth for the region as a whole is projected to increase driven by productivity convergence to the frontier, but there is substantial variation across economies. As the roles of capital stock and human capital in ASEAN+3's long-term growth gradually decline over time, boosting TFP will become even more critical for sustaining the region's growth momentum. Individual economies' capabilities to enhance productivity will be the key differentiator of long-term growth—with successful ones being those who can generate sustained productivity improvements such as through technological progress or structural transformation (Dieppe 2021; Zymek 2024).

Demographic headwinds could heavily constrain potential growth across the Plus-3 economies over the projection horizon, with China facing the additional challenge of decelerating capital accumulation. Aggregate potential growth in Plus-3 economies is projected to slow to 3.0 percent by 2050; absent China, potential growth is estimated to fall below 1.0 percent beginning in 2040. China's potential growth, while moderating, is projected to remain at a relatively robust level of above 4.5 percent through 2035, before declining to 3.3 percent by 2050 (Figure 3.10, top panel). Primarily this is due to a gradual reduction in capital and TFP contributions coupled with declining labor contribution because of demographic headwinds. This suggests that China's growth will increasingly rely on innovation and technological advancements to offset the diminishing returns from traditional capital investments (World Bank 2019; IMF 2024b).[6] In Japan, the projected potential growth below 1.0 percent in the next 30 years reflects persistent demographic challenges that are unlikely to be counterbalanced by the stable—though modest—TFP gains (Online annex 2). Korea, while facing similar demographic constraints, is likely to experience a more gradual transition path—with potential growth slowing to around 1.6 percent by 2050. Long-term projections for these economies—alongside China—show that as economies advance in growth and development, generating sustained TFP improvements and enhancing productivity gains are key to sustaining long-term growth momentum, especially as the contributions of traditional factors (like labor) inevitably decline (Figure 3.10, bottom panel).

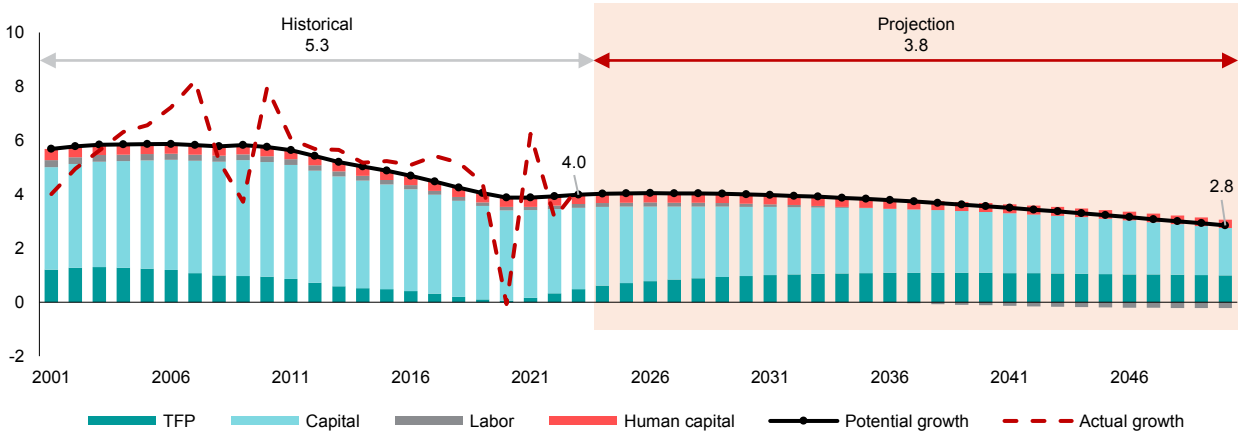
ASEAN-5's potential growth is projected to decline but remain above 3.0 percent in the next three decades (Figure 3.11). Notwithstanding the projected decline, Indonesia, Malaysia, and the Philippines are still anticipated to maintain potential growth above 3.5 percent through 2040. Indonesia's projected slower growth in the baseline scenario stems from weakening capital accumulation as well as lower contributions from labor and human capital (Online annex 2). In contrast, Malaysia and the Philippines are projected to maintain resilient capital accumulation, but face constraints from declining labor inputs and weak TFP growth. On the other hand, Thailand's potential growth could fall to about 2.4 percent by 2050—the lowest among the ASEAN-5 except Singapore—amid demographic pressures and the baseline expectation of continued weak investment rates. While ASEAN-5's growth outlook remains relatively resilient compared to Plus-3 peers, these baseline projections highlight that sustaining productivity growth is crucial for these economies to transition from upper-middle income to high-income status.

6/ Note, however, that despite China's impressive capital buildup, its capital stock per capita remains significantly below frontier economies, indicating considerable room for further capital-driven growth (Figure 3.16).

BCLMV economies as a whole, are also expected to maintain relatively high potential growth above 3.4 percent until 2050—but with limited productivity growth (Figure 3.12). While earlier development stages should allow for more substantial productivity gains, growth across the group remains heavily reliant on capital accumulation, with low TFP contributions that largely reflect historical patterns. Vietnam's long-term growth projections show a better balance between capital and TFP growth over the projection period (Online annex 2). However, under the baseline scenario and following historical trends, Cambodia and Lao PDR's growth in the next three decades will continue to be predominantly driven by capital accumulation, with productivity improvements materializing only gradually. Myanmar's outlook is particularly concerning, with growth heavily dependent on capital accumulation while productivity gains remain notably absent from its growth trajectory (Online annex 2).

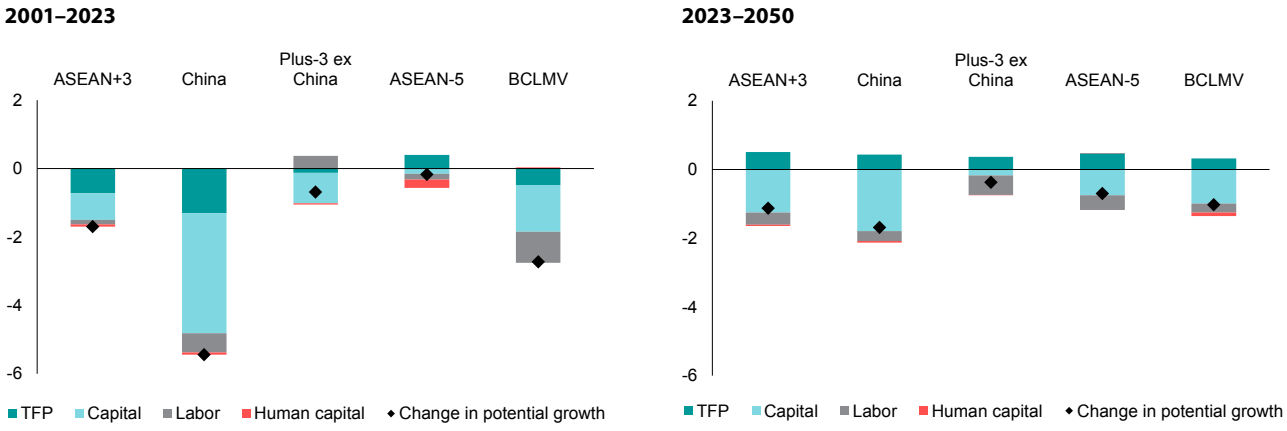
A scenario exercise is also conducted to see how downside risks could affect the ASEAN+3 region's baseline potential growth. The projected decline in potential growth under the baseline could be exacerbated by a variety of long-term risks confronting ASEAN+3 economies. These include geoeconomic fragmentation, and risks emanating from climate change, technological disruptions, and demographic pressures (Figure 1.35).[7] Two adverse scenarios are introduced to the baseline to see how ASEAN+3's potential growth trajectory could be affected if they materialize: one, intensified geoeconomic fragmentation hampering technological diffusion and productivity growth; and two, accelerated demographic aging leading to faster workforce decline.

Figure 3.8. ASEAN+3: Potential Growth Projections, by Factor Input
(Percent, year-on-year)



Source: International Labour Organization; International Monetary Fund; National authorities via Haver Analytics; Penn World Table; United Nations World Population Prospects; World Bank; AMRO staff calculations.
Note: TFP = total factor productivity. The aggregate growth and components are weighted by purchasing power parity-adjusted GDP. Data for Cambodia is up to 2022 and AMRO staff forecast is used for 2023.

Figure 3.9. ASEAN+3: Decomposition of Decline in Potential Growth
(Percentage points)

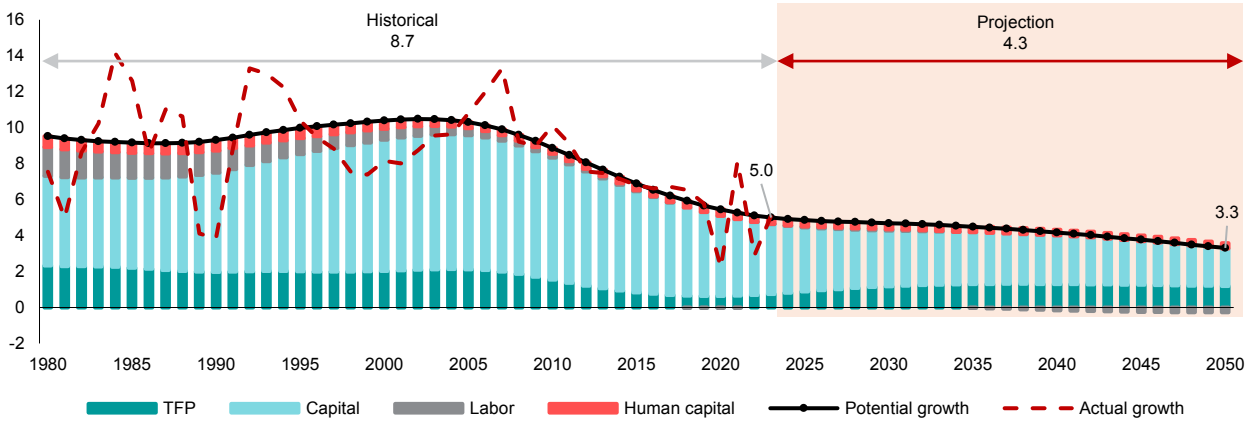


Source: International Labour Organization; International Monetary Fund; National authorities via Haver Analytics; Penn World Table; United Nations World Population Prospects; World Bank; AMRO staff calculations.
Note: ASEAN-5 = Indonesia, Malaysia, Philippines, Singapore, and Thailand; BCLMV = Brunei, Cambodia, Lao PDR, Myanmar, and Vietnam; Plus-3 ex China = Hong Kong, Japan, and Korea; TFP = total factor productivity. The decomposition is based on the simple difference in growth and contribution of components over the longest available estimation period between 2001 and 2023, per each group of economies.

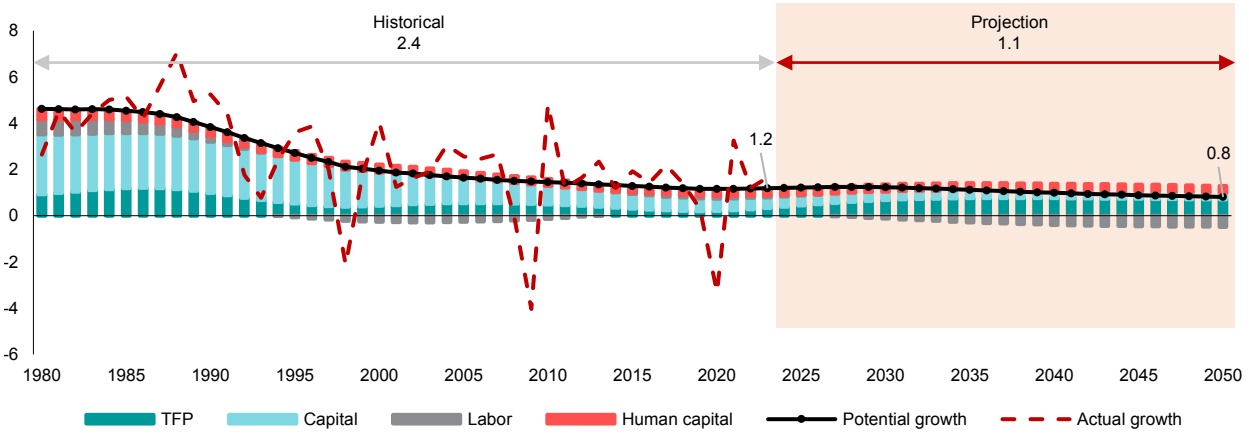
7/ Geoeconomic fragmentation refers to the increasing division of the global economy into distinct blocs, driven by heightened geopolitical tensions and a surge in inward-looking policies aimed at strengthening economic and national security.

Figure 3.10. Plus-3: Potential Growth Projections, by Factor Input
(Percent, year-on-year)

China

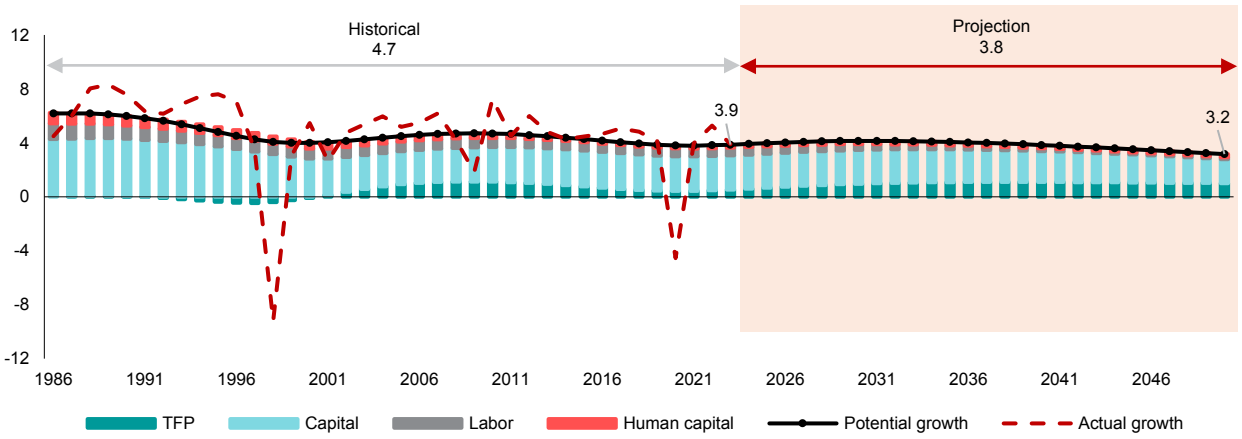


Plus-3 ex China



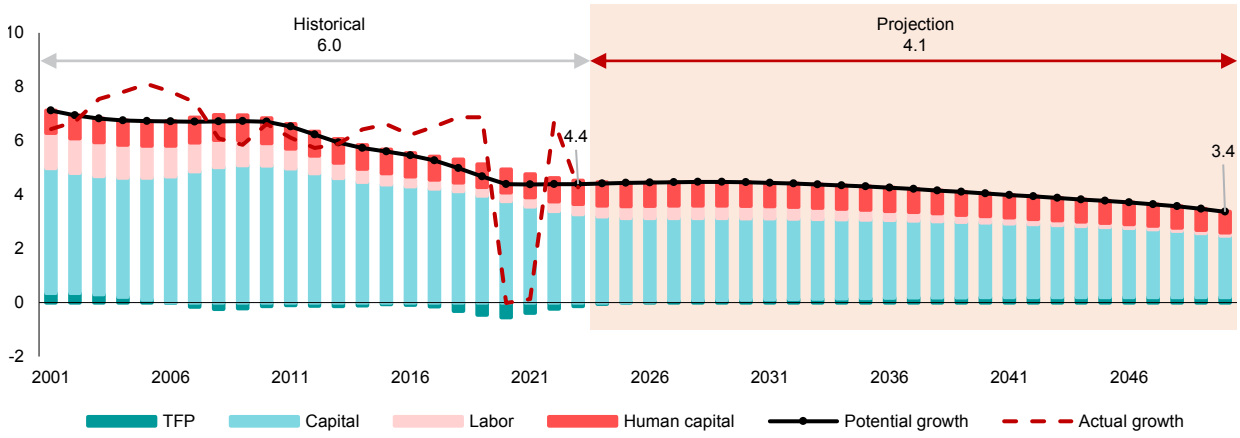
Source: International Labour Organization; International Monetary Fund; National authorities via Haver Analytics; Penn World Table; United Nations World Population Prospects; World Bank; AMRO staff calculations.
Note: Plus-3 ex China = Hong Kong, Japan, and Korea; TFP = total factor productivity. The aggregate growth and components are weighted by purchasing power parity-adjusted GDP.

Figure 3.11. ASEAN-5: Potential Growth Projections, by Factor Input
(Percent, year-on-year)



Source: International Labour Organization; International Monetary Fund; National authorities via Haver Analytics; Penn World Table; United Nations World Population Prospects; World Bank; AMRO staff calculations.
Note: ASEAN-5 = Indonesia, Malaysia, the Philippines, Singapore, and Thailand; TFP = total factor productivity. The aggregate growth and components are weighted by purchasing power parity-adjusted GDP.

Figure 3.12. BCLMV: Potential Growth Projections, by Factor Input
(Percent, year-on-year)



Source: International Labour Organization; International Monetary Fund; National authorities via Haver Analytics; Penn World Table; United Nations World Population Prospects; World Bank; AMRO staff calculations.
Note: BCLMV = Brunei, Cambodia, Lao PDR, Myanmar, and Vietnam; TFP = total factor productivity. The aggregate growth and components are weighted by purchasing power parity-adjusted GDP. Data for Cambodia is up to 2022 and AMRO staff forecast is used for 2023.

The region's potential growth could drop from 2.8 percent to 2.3 percent by 2050 if geoeconomic fragmentation deepens—with ASEAN economies more negatively affected. Geoeconomic fragmentation would reduce the region's growth potential, given its various transmission channels, one of which is through diminished technology diffusion (Góes and Bekkers 2022). A division of the global economy along geopolitical lines would hinder the potential for global technology spillovers and international knowledge sharing, effectively reducing the pace of technological advancement for all economies worldwide (Aiyar and others 2023). In the projection framework, geoeconomic fragmentation is assumed to manifest as a negative shock to the convergence effect for ASEAN+3's long-term TFP growth.[8] In a scenario where deepening geoeconomic fragmentation removes all of the convergence effects for TFP, the ASEAN+3 region's annual growth over the projected horizon will be lower by 0.5 percentage point, on average, relative to the baseline (Figure 3.13). The cumulative impact is substantial, representing a loss of 15 percent of the region's projected output in 2050—larger than the estimated size of Japan's economy that year. The negative impact on ASEAN-5 and BCLMV's potential growth in 2050 would range from 0.5 to 0.8 percentage point, respectively (Figure 3.14). Limited technology diffusion would also limit economies' ability to tackle pressing growth challenges coming from climate change and aging while hindering their transition toward productivity-driven growth.

Similarly, ASEAN+3's potential growth would be reduced to 2.6 percent in 2050—from 2.8 percent in the baseline—should the working-age population decline even more rapidly. Aging is happening faster in the ASEAN+3 region than in many parts of the world; in fact, the region's working-age population will begin to shrink before the current decade ends. Ultimately, this decline will translate into lower labor inputs available for future production (AMRO 2024b). Using the United Nations World Population Prospects (2024) projections under a "low fertility" scenario to illustrate the impact of a more drastic fall in fertility rates across the region, ASEAN+3's average growth potential would be cut by 0.2 percentage point in 2050 (Figure 3.15).[9] The GDP loss in 2050 would be about 5.3 percent of the region's 2050 GDP. While the impact would vary across economies based on their demographic profiles and development stages, these results highlight the critical challenge of boosting productivity and human capital to counterbalance the declining size of the labor force (Table 3.1).[10]

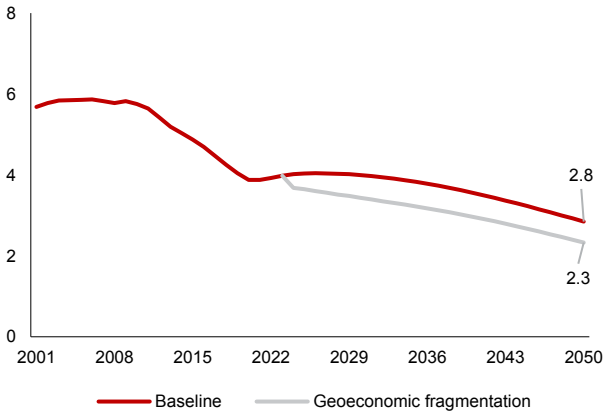
In sum, the growth slowdown experienced by the ASEAN+3 region in recent decades is a consequence of slower capital accumulation, coupled with lower TFP growth. AMRO staff analysis—using growth accounting to decompose historical growth into factor contributions and projecting these trends forward—suggests that strong economic growth requires a balanced interaction between factor accumulation and productivity. While underlying dynamics driving potential growth vary across economies, a key insight emerges that successful transitions to higher-income status took place where capital accumulation was accompanied by strong TFP growth and human capital development (Box 3.2). For many ASEAN+3 economies, however, wide gaps exist on these dimensions in relation to the frontier (Figure 3.16). These, in turn, are among the many factors that constrain room for further productivity growth across ASEAN+3 (Box 3.3). This slowdown in productivity across the region—examined especially from the perspective of structural change—is discussed in detail in the next section.

8/ Geoeconomic fragmentation negatively impacts total factor productivity growth by disrupting trade, hindering technology diffusion, destabilizing supply chains, and creating investment uncertainty—all of which reduce economic efficiency and innovation. To simulate its impact, convergence growth is cut from 0.5 percent to zero percent. Online annex 1 features the details on the convergence effect.

9/ In the low fertility scenario, total fertility is projected to remain 0.5 births below that in the medium scenario of the United Nations World Population Prospects (2024).

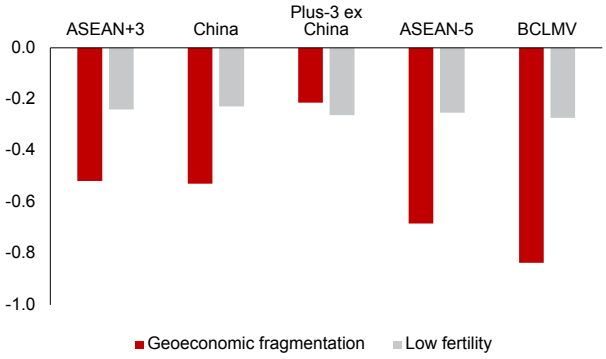
10/ ASEAN+3 economies are at different stages of demographic transition, depending on where their fertility rates and the working-age population shares are. Two-thirds of ASEAN+3 economies are already in the advanced to late stages of the transition (AMRO 2024b).

Figure 3.13. ASEAN+3: Potential Growth Under Geoeconomic Fragmentation Scenario
(Percent, year-on-year)



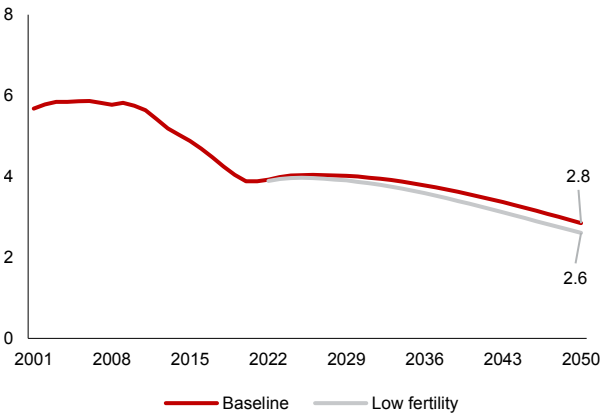
Source: International Labour Organization; International Monetary Fund; National authorities via Haver Analytics; Penn World Table; United Nations World Population Prospects; World Bank; AMRO staff calculations.
Note: This scenario assumes that there is no convergence effect for ASEAN+3's total factor productivity growth in the projection period.

Figure 3.14. ASEAN+3: Potential Growth Under Low Fertility Scenario
(Percentage point difference from the baseline)



Source: International Labour Organization; National authorities via Haver Analytics; Penn World Table; United Nations World Population Prospects; World Bank; AMRO staff calculations.
Note: ASEAN-5 = Indonesia, Malaysia, Philippines, Singapore, and Thailand; BCLMV = Brunei, Cambodia, Lao PDR, Myanmar, and Vietnam; Plus-3 ex China = Hong Kong, Japan, and Korea. The aggregate decline is the weighted average of the declines in the projected growth of regional economies in 2050.

Figure 3.15. ASEAN+3: Potential Growth Under Low Fertility Scenario
(Percent, year-on-year)



Source: International Labour Organization; International Monetary Fund; National authorities via Haver Analytics; Penn World Table; United Nations World Population Prospects; World Bank; AMRO staff calculations.
Note: The population projection uses the low fertility scenario as in the United Nations World Population Prospects (2024). In the low fertility scenario, total fertility is projected to remain 0.5 births below the total fertility in the medium scenario.

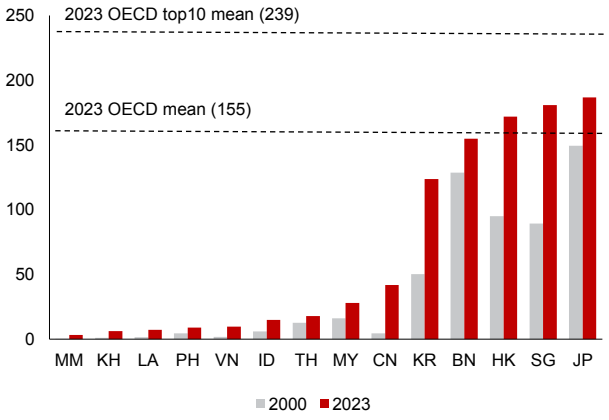
Table 3.1. ASEAN+3: Potential Growth Scenarios
(Percent, year-on-year)

Scenarios	2001–23	2024–30	2031–40	2041–50
	Actual	Projections		
Baseline	**5.3**	**4.0**	**3.8**	**3.2**
Scenario: Geoeconomic fragmentation				
TFP convergence effects fully eliminated due to barriers to technology diffusion	5.3	3.6	3.2	2.6
Scenario: Low fertility				
Accelerated population decline (Fertility rate at 0.5 births below United Nations median assumption)	5.3	3.9	3.6	2.9

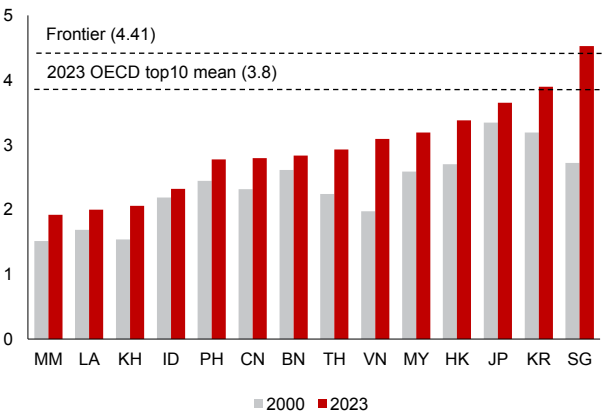
Source: International Labour Organization; International Monetary Fund; National authorities via Haver Analytics; Penn World Table; United Nations World Population Prospects; World Bank; AMRO staff calculations.
Note: TFP = total factor productivity. The potential growth is the aggregate regional growth weighted by purchasing power parity-adjusted GDP, averaged over time.

Figure 3.16. ASEAN+3: Selected Physical and Human Capital Indicators
(Thousands; Index)

Capital stock per capita



Human capital



Source: National authorities via Haver Analytics; Penn World Table; United Nations World Population Prospects; World Bank; and AMRO staff calculations.
Note: BN = Brunei; CN = China; HK = Hong Kong; ID = Indonesia; JP = Japan; KH = Cambodia; KR = Korea; LA = Lao PDR; MY = Malaysia; MM = Myanmar; PH = Philippines; SG = Singapore; TH = Thailand; VN = Vietnam. The frontier of the human capital index is set at 4.41, computed as 16 years of schooling with the assumed rate of return to education from Psacharopoulos (1994). The Organisation for Economic Co-operation and Development (OECD) mean excludes Japan and Korea and the OECD top10 mean represents the mean of top10 highest-performing OECD members.

Box 3.2:

Middle-Income Breakthroughs and the Critical Role of Productivity: The ASEAN+3 Experience

How some economies successfully navigate the transition between the various stages of development, while others struggle, has been explored in many empirical studies. This question becomes especially critical for middle-income economies since the growth model necessitates a fundamental transformation to transition well and successfully into an advanced stage of development (Felipe and others 2012; AMRO 2022; World Bank 2024c). The varied experience of ASEAN+3 economies offers particularly rich insights into why some economies can break through this critical threshold while others have remained in their middle-income status for a much longer time.[1]

The distinction between successful transitions and less successful ones can be gleaned from examining how economies rebalance their growth drivers as they develop. Analysis of the growth composition during middle-income phases—based on the World Bank's income classification—reveals marked differences between ASEAN+3 economies that have achieved high-income status and those that are still aspiring to do so.[2] In this context, "successful" economies transitioned from upper-middle-income to high-income status through sustained high growth. This includes Japan, Korea, Singapore, and Hong Kong, which transitioned from upper-middle to high-income status within six to eight years with 7–10 percent average growth during their transitions (Japan: 1961–67; Singapore: 1979–87; Korea: 1988–95; Hong Kong: 1970s-1977). "Aspiring" economies have reached the upper-middle-income threshold and have yet to transition to high-income economies. Malaysia (upper-middle-income since 1992), Thailand (since 2011), China (since 2010), Indonesia (since 2020, but reclassified to lower-middle-income status in 2021 owing to COVID-19, but regained upper-middle-income since 2023), and the Philippines (since 2020) exemplify this.

In ASEAN+3, "successful" and "aspiring" economies differ in their ability to generate total factor productivity (TFP) and human capital growth alongside capital accumulation. While strong capital accumulation has been common in both groups, the key differentiator lies in whether it is accompanied by commensurate productivity growth and human capital development. Successful transitions not only registered significantly higher TFP growth during their upper-middle-income phase but also higher contributions from human capital (Figure 3.2.1). They also maintained a much higher ratio of TFP to capital—with a ratio almost double that of aspiring cases—which could also indicate more balanced growth and more effective resource allocation. These suggest the necessity of policy measures to enhance productivity and facilitate swifter movement toward high-income status. One way this can be achieved is through structural reforms that facilitate the mobility of productive labor (Section III).

Successful transitions to high-income status in ASEAN+3 appear to follow a sequence: strong initial capital accumulation evolving toward generating sustained productivity gains. However, this does not imply a strict sequential order: productivity improvements have occurred alongside capital accumulation, with their relative contribution to growth increasing over time. The extent to which capital investment generates concurrent productivity gains is a key indicator of investment efficiency and resource allocation. In other words, economies need to shift from predominantly investment-driven growth toward productivity-led expansion, and importantly, this should begin before diminishing returns to capital accumulation become apparent.

Ultimately, future growth potential across all ASEAN+3 economies—regardless of their stage of development—will hinge on their ability to generate

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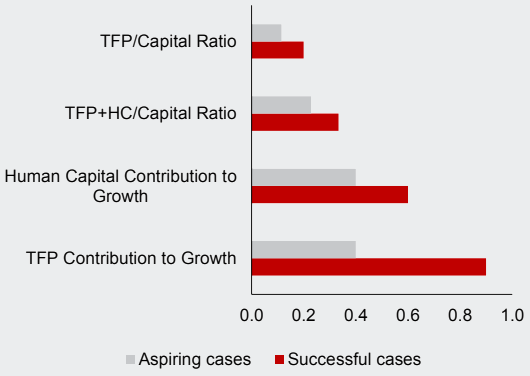
This box was written by Haobin Wang and Yuhong Wu.

1/ The middle-income trap refers to a situation where middle-income countries experience a slowdown in growth and struggle to transition to high-income status. This phenomenon often occurs when the factors that propelled initial growth, such as low-cost labor and capital accumulation, become less effective, and the economy fails to utilize new drivers of growth like innovation and more advanced technologies.

2/ According to the World Bank, upper-middle-income economies are those with a gross national income (GNI) per capita between USD 4,516 and USD 14,005; high-income economies are those with a GNI per capita above USD 14,005.

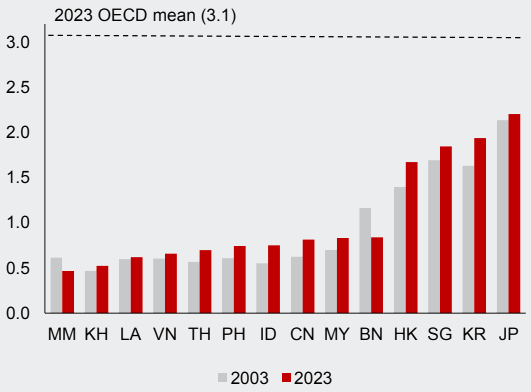
sustained productivity growth. The broad-based decline in capital contribution across subregional aggregates suggests that future growth will depend increasingly on productivity improvements (Figure 3.2.2). However, AMRO staff's long-term projections point to modest TFP contributions across most economies, with significant implications for overall economic growth in the next three decades. In addition, the modest human capital contributions suggested by the long-term growth projections imply that approaches to skills development and education across the region may not be keeping pace with future growth needs, particularly given the increasing importance of human capital for innovation and productivity growth in advanced stages of development.

Figure 3.2.1. Selected ASEAN+3: Growth Components and Factor Mix
(Percentage point contribution to total growth)



Source: International Labour Organization; National authorities via Haver Analytics; Penn World Table; United Nations World Population Prospects; World Bank; AMRO staff calculations.
Note: HC = human capital; TFP = total factor productivity. Successful cases include Japan, Korea, and Singapore. Aspiring cases include China, Indonesia, Malaysia, the Philippines and Thailand. The contribution to growth and the component ratios are averaged over the period when economies transitioned from one income category to another.

Figure 3.2.2. ASEAN+3: Comparison of Productivity between 2003 and 2023
(TFP)



Source: International Labour Organization; National authorities via Haver Analytics; Penn World Table; United Nations World Population Prospects; World Bank; AMRO staff calculations.
Note: BN = Brunei; CN = China; HK = Hong Kong; ID = Indonesia; JP = Japan; KH = Cambodia; KR = Korea; LA = Lao PDR; MY = Malaysia; MM = Myanmar; PH = Philippines; SG = Singapore; TH = Thailand; VN = Vietnam. OECD mean refers to the mean of the Organisation for Economic Co-operation and Development members excluding Japan and Korea.

Box 3.3:

The Global and Regional Decline in Productivity: A Brief Review

The global economy has experienced a broad-based slowdown in productivity growth since the 2007-09 global financial crisis (GFC), affecting about 70 percent of advanced economies and emerging market and developing economies (EMDEs) (World Bank 2020b). The decline has been substantial across all groups: advanced economies saw their annual total factor productivity (TFP) growth fall from 1.3 percent in the pre-GFC period to 0.2 percent after the pandemic, while the EMDEs experienced a drop from 2.5 percent to 0.7 percent over the same period (International Monetary Fund [IMF] 2024c).

Several key factors have contributed to this slowdown. The fundamental drivers that previously supported strong productivity growth have faltered since the GFC: working-age population growth has decelerated; human capital accumulation has stagnated; and the momentum in global value chain upgrading has weakened (World Bank 2020b). Another crucial factor has been the inefficient reallocation of resources both within and between sectors. The reallocation of labor toward higher-productivity sectors—which historically accounted for about two-fifths of overall productivity growth in EMDEs—has weakened significantly since the GFC (World Bank 2020b; IMF 2024c; Section III). Within sectors, the misallocation of capital and labor across firms has reduced TFP growth by 0.6 percentage point annually (IMF 2024c).

Various other explanations have been proposed for the productivity slowdown. Some view it as a transitional phase during the adoption of new digital technologies (Brynjolfsson and others 2021). Others emphasize structural factors: fading gains from information technology (Fernald 2015), declining business dynamism (Decker and others 2016), and credit constraints limiting technology adoption (Duval and others 2020). An alternative perspective links the broad-based slowdown to persistent demand weakness (Summers 2015).

The ASEAN+3 region has shown similar trends, with TFP growth declining by 1 percentage point from 2001 to 2023 (Section II). Most economies in Asia experienced lower average TFP growth in 2015–2022 compared to the previous decade. The slowdown was particularly pronounced in ASEAN-6 (Brunei, Indonesia, Malaysia, the Philippines, Singapore, and Thailand), which recorded zero TFP growth during 2015–2022 (Asian Productivity Organization 2024).

The underlying factors underpinning these trends are multifaceted, with both globally common and region- and economy-specific challenges having been identified. Region-specific challenges include a widening productivity gap between the many regional economies and the global frontier, especially in digital-intensive sectors like electronics (World Bank 2024b). The region's productivity challenge stems from both incentive and capacity constraints. The capability constraints manifest in both human capital and digital infrastructure gaps. While basic mobile broadband is widespread, advanced digital technology adoption remains limited due to uneven high-speed connectivity and insufficient skills. Over half of innovating firms in Indonesia, Malaysia, Myanmar, the Philippines, Thailand, and Vietnam cite a lack of managerial and leadership skills as a challenge when hiring new workers (World Bank 2021). In this thematic chapter of the ASEAN+3 Regional Economic Outlook, the region's declining productivity is explored within the broader context on structural change since the late 1990s.

This box was written by Yuhong Wu.

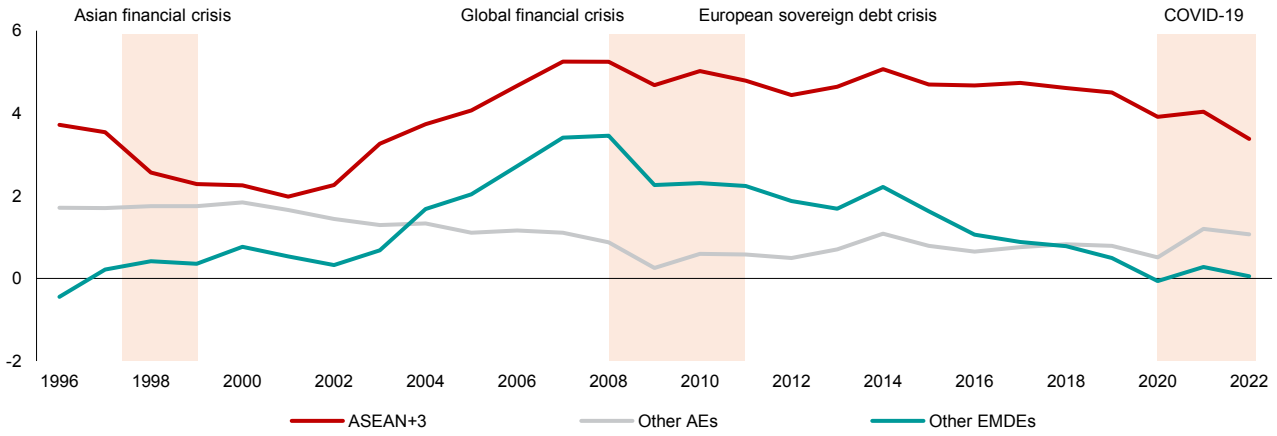
III. Productivity Growth and Structural Change in ASEAN+3

ASEAN+3's productivity growth, while remaining higher than the rest of the world, is slowing down. Over the past three decades, the region has consistently outperformed the rest of the world in terms of labor productivity growth (Figure 3.17). Between 2018 and 2022, productivity growth in ASEAN+3 grew at an annual average of 3.9 percent, at least four times faster than that of other advanced, emerging market, and developing economies. This was largely bolstered by robust investment activity and strong improvement in human capital (Mischke and others 2024; World Bank 2024b). However, this still represents a slowdown in productivity gains compared to the decade prior: from a peak of 5.2 percent in 2008, productivity growth in ASEAN+3 in the aftermath of the global financial crisis has gradually trended down to levels seen in the mid-1990s.

This productivity slowdown in ASEAN+3 was partly because of declining gains from structural change. Labor productivity gains in the region can be decomposed into various components that could shed further insight into the role of structural change in driving productivity trends (Figure 3.18). Over the last three decades, the ASEAN+3 region has expanded the intra-sector component, reflecting increasing productivity *within* a sector.[11] Structural change—which captures the shift of labor from low- to high-productivity sectors—also bolstered the region's rapid productivity growth. This experience sets the ASEAN+3 apart from regions like Latin America or sub-Saharan Africa, where structural change had been growth-reducing at some point (Pagés and others 2010; McMillan and Rodrik 2011; Diao and others 2017).[12] However, in the past decade, structural change has contributed two-thirds of its historical share, driving down productivity across various subgroups in the region (Figure 3.19). Nevertheless, there are a few differences across subgroups: Plus-3 economies saw diminished contributions across both intra-sector and structural change components, while the slowdown in ASEAN-5 economies was primarily because gains from structural change were weaker (Figure 3.20). The recovery of productivity in the BCLMV economies in the past decade was due to structural change, but gains remained subdued compared to the late 1990s and early 2000s.

In this context, the rest of this section systematically analyses ASEAN+3's decelerating productivity growth from the perspective of structural change. Since Arthur Lewis' seminal work on the dual-sector model for development economics, the process of structural change has been key to understanding the underlying dynamics of long-term economic growth for developing economies.[13] In particular, examining structural change in ASEAN+3—and its role in the productivity slowdown—requires analyzing economies' industrialization experience, because the

Figure 3.17. ASEAN+3 and Selected Economies: Labor Productivity Growth
(Percent, five-year moving average)



Source: International Labour Organization; United Nations Industrial Development Organization; United Nations Statistics Division; AMRO staff calculations.
Note: Labor productivity is the aggregated sectoral value added per employment and is a five-year moving average weighted by the value-added at constant price and employment size. "Other advanced economies (AEs)" and "Other emerging market and developing economies (EMDEs)" follow the International Monetary Fund's classification.

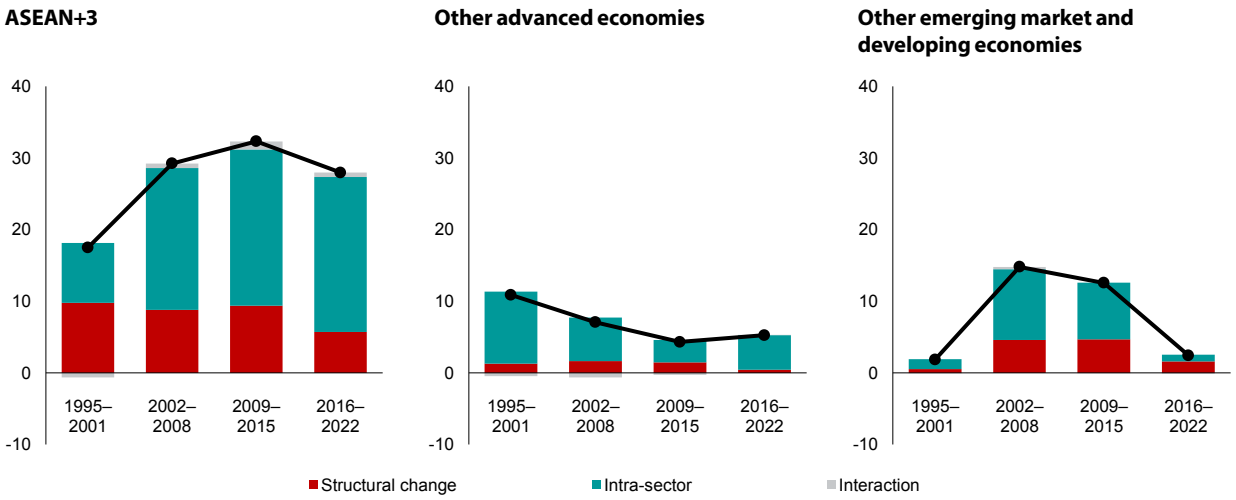
11/ Online annex 3 features the decomposition methodology.

12/ These studies found that while structural change had been growth-enhancing for Asian economies, this was the reverse for some economies in Latin America and sub-Saharan Africa. In particular, some economies underwent structural change that has reduced economic growth since 1990, and this is in part attributed to the movement of labor to less productive activity, including in informal sectors.

13/ This refers to Lewis' "dual economy model," the classic theoretical framework explaining how underemployed workers move from low-productivity, traditional sectors to high-productivity, capital-intensive modern sectors, with the productivity differential driving sufficiently large wage differences. Under this model, the modern sectors' employment increases because of growing labor demand originating from an increase in output. Since the modern-sector wages are higher than in traditional sectors, the modern sector experiences labor influx without increasing wages. Meanwhile, the decrease in employment results in wages increasing in traditional sectors. Once the wage level of both sectors equalize, the labor shift to the modern sector ends (Lewis 1954, 1979).

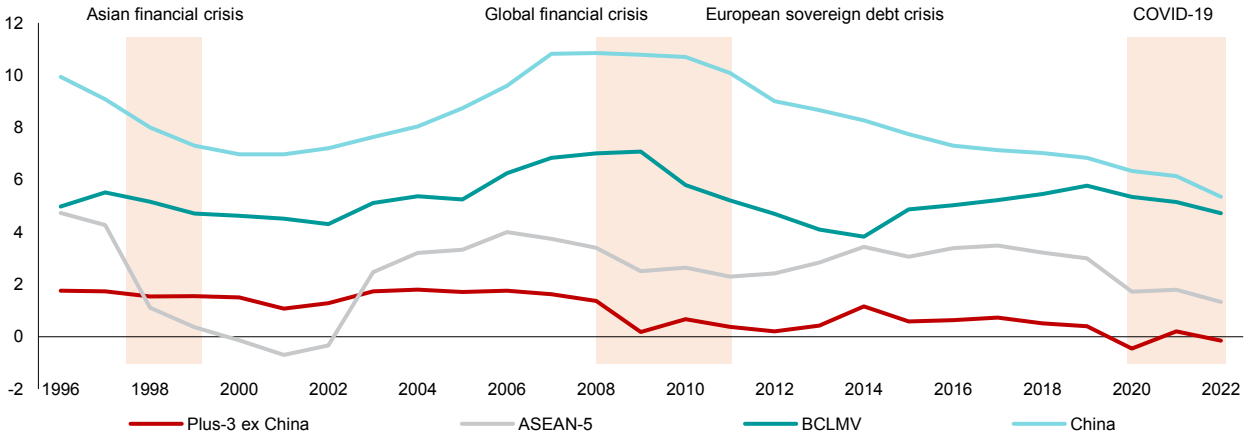
shift toward manufacturing activities from agriculture has historically underpinned successful growth models (Rodrik 2013; Herrendorf and others 2014). However, the experience of structural change, which conventionally saw industrialization followed by a shift to services, has become increasingly diverse (Sen 2023). For instance, some developing economies are reaching "peak" industrialization earlier and at lower income levels, than economies that industrialized earlier (Rodrik 2016; Atolia and others 2020).[14] This phenomenon is largely attributed to increased manufacturing competition owing to globalization, sectoral productivity gaps, and differences in technological advancement across sectors (Huneeus and Rogerson 2020; Sposi and others 2021; Fujiwara and Matsuyama 2024). Examining the evolution of structural change in ASEAN+3 since the 1990s—vis-à-vis global peers and those within the region—helps provide a better understanding of the ongoing decline in ASEAN+3's productivity growth.[15]

Figure 3.18. World: Decomposition of Labor Productivity Gains
(Percent, growth over seven years)



Source: International Labour Organization; United Nations Industrial Development Organization; United Nations Statistics Division; AMRO staff calculations.
Note: The figure decomposes the productivity growth over seven years. The structural change represents the labor shift to the more productive sector. The intra-sector component depicts productivity improvement within the sector. Interaction is positive when labor shifts to the sector where productivity is higher and growing. "Other advanced economies" and "Other emerging market and developing economies" follow the International Monetary Fund's classification. Online annex 3 features the details.

Figure 3.19. ASEAN+3: Labor Productivity Growth
(Percent, five-year moving average)

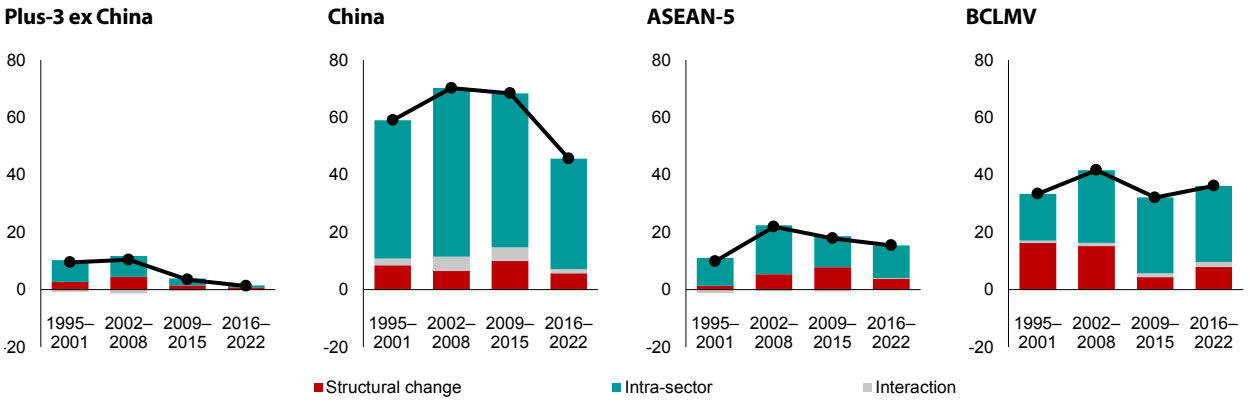


Source: International Labour Organization; United Nations Industrial Development Organization; United Nations Statistics Division; AMRO staff calculations.
Note: ASEAN-5 = Indonesia, Malaysia, the Philippines, Singapore, and Thailand; BCLMV = Brunei, Cambodia, Lao PDR, Myanmar, and Vietnam; Plus-3 ex China = Hong Kong, Japan, and Korea. Labor productivity is the aggregated sectoral value added per employment and is a five-year moving average weighted by the value-added at constant price and employment size.

[14] Rodrik (2016) found that the peak of manufacturing employment and output shares has decreased from the 1960s, 1970s, 1980s, 1990s, and after the 2000s—suggesting an accelerated deindustrialization in recent periods. The study also revealed that since 1990, economies have seen their manufacturing employment and output shares peak at an income level that is only at about 40 percent of pre-1990 levels.

[15] The data used for the analysis covers relevant information for 178 economies from 1995 to 2022, sourced primarily from the United Nations Industrial Development Organization, United Nations Statistics Division, and International Labour Organization. This comprehensive data allows the section to study structural change patterns within and beyond ASEAN+3.

Figure 3.20. ASEAN+3: Decomposition of Labor Productivity Gains, by Subregion
(Percent, growth over seven years)



Source: International Labour Organization; United Nations Industrial Development Organization; United Nations Statistics Division; AMRO staff calculations.
Note: ASEAN-5 = Indonesia, Malaysia, the Philippines, Singapore, and Thailand; BCLMV = Brunei, Cambodia, Lao PDR, Myanmar, and Vietnam; Plus-3 ex China = Hong Kong, Japan, and Korea. The figure decomposes the productivity growth over seven years. The structural change represents the labor shift to the more productive sector. The intra-sector component depicts productivity improvement within the sector. Interaction is positive when labor shifts to the sector where productivity is higher and growing. Online annex 3 features the details.

Analyzing Structural Change in ASEAN+3: The Frameworks

To facilitate analysis, ASEAN+3 economies can be categorized under three stages of structural change: early, middle, and late. Expanding on the methodology in Baymul and Sen (2020), these categories combine information across two components: each economy's (1) employment shares of agriculture, manufacturing, and services; and (2) sectoral value-added shares to total output (Online annex 4). These are compared across time to identify phases of structural change.[16] An economy is in the "early stage" when agriculture is the dominant economic activity; in the "middle stage" when economic activities are shifting away from agriculture to manufacturing; and eventually, in the "late stage" once services dominate. As of 2022, most of the region's economies are considered to be in the middle or late stages of structural change—highlighting the rapid transformation that the region has undergone since 1995 (Figure 3.21).[17] Conventionally, the higher the economies' income, the more advanced they are in structural change (Figure 3.22).[18] For the purpose of analysis, China is categorized separately: its unique economic characteristics, especially its massive size, differentiate it in many ways from the rest of the regional economies. As a continental size economy, China comprises many provinces that are very diverse in terms of levels of economic development and hence, hard to aggregate and categorize. For example, with its share of agriculture employment being higher than manufacturing, it would be identified as the middle stage in the framework used. However, the technological capabilities of China in many industries within manufacturing are considerably more advanced than most middle-stage peers in ASEAN+3 and are at the forefront of advanced economies (AMRO 2024b).[19] From this perspective, China can be more reasonably identified to be late-stage.

In addition, the process of industrialization can be categorized into five phases. As in Kim and Sumner (2019), an economy can be at (1) "primary industrialization," when employment shifts to the manufacturing sector; (2) "upgrading industrialization," when the manufacturing value-added share increases with more labor influx; (3) "advanced industrialization," when manufacturing become less labor-intensive; (4) "secular deindustrialization," when the economy shifts to other sectors beyond manufacturing; and lastly, (5) "stalled industrialization," when the share of

16/ Various studies have attempted to group economies to analyze the process of structural change. Chenery and Syrquin (1975) once classified economies by trade specialization and policy regime. However, given the evolving landscape of trade policies and goods, the most recent approaches exemplified by Baymul and Sen (2020) distinguish economies based on the sectoral composition of employment. In this approach, the "stage" of structural change generally correlated with income levels, with structurally developed economies being the wealthiest (Sen 2023). Online annex 4 features the detailed criteria of the framework.

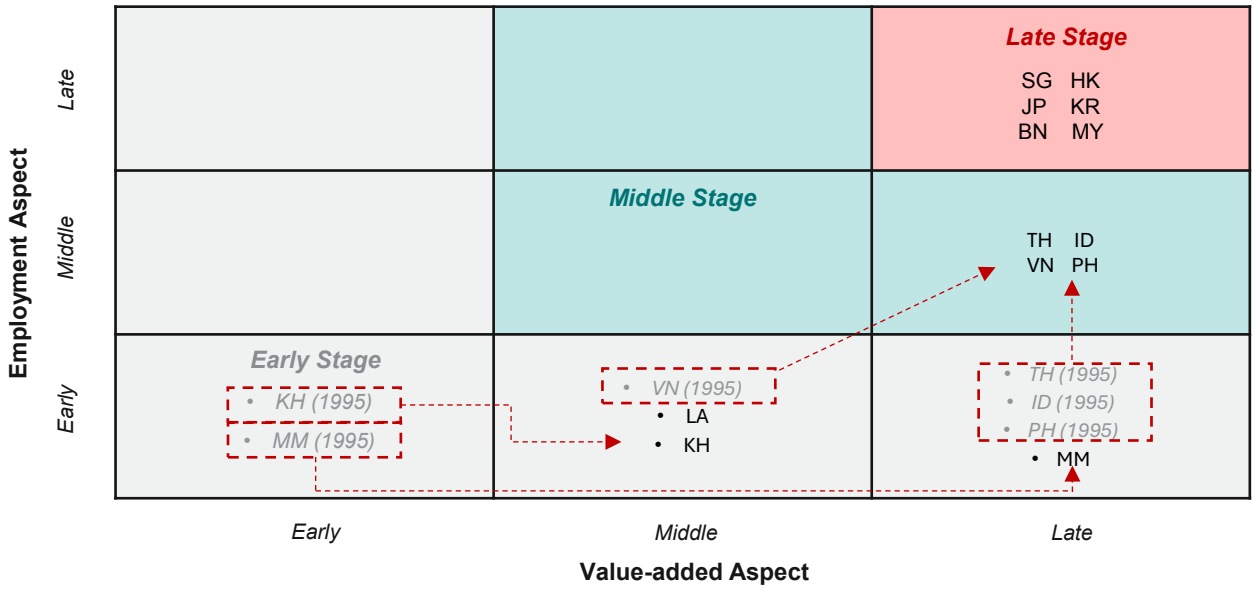
17/ While Brunei is a resource-rich economy and relies predominantly on its oil and gas industry rather than services, the same criteria were systematically applied across all economies for analytical consistency, which identifies Brunei as a late-stage economy. Box 3.1 provides a more specific discussion on Brunei's long-term growth experience and challenges. Online annex 4 features the comparison with other regions and the historical evolution in individual ASEAN+3 economies.

18/ However, as in Sen (2023), there could be a few caveats: for example, the income level in the top quartile of one stage could be higher than the bottom two quartiles of the proceeding stage. In the region, this is the case for Malaysia, which is categorized as a late-stage economy as of 2022, despite having a lower income level than some economies in the middle stage.

19/ For example, China is ranked 12th globally in terms of various innovation metrics, exceptional research credentials, and substantial contribution to patent applications, reflecting its ability to operate at the frontier of technological advancement.

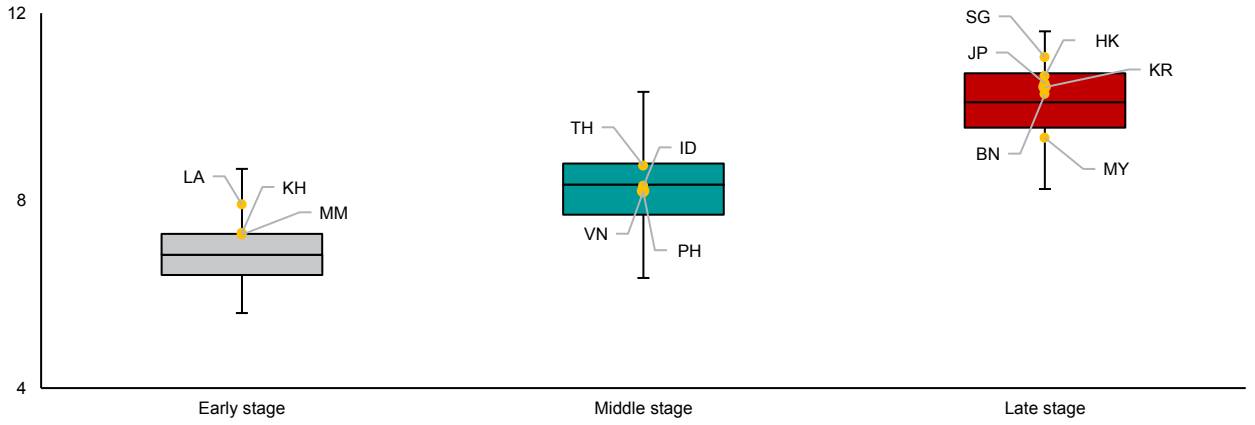
manufacturing in total employment or output are no longer increasing. Over the last three decades, ASEAN+3 has been upgrading its industrialization, maintaining positive growth in both manufacturing value-added and employment shares (Figure 3.23). This, in part, reflects ASEAN+3's strong comparative advantage in manufacturing that the region has built and established over the years (Rodrik 2016; Kruse and others 2023). However, some emerging market and developing economies also appeared to have been experiencing stalled industrialization. In contrast, many advanced economies have experienced secular deindustrialization with significant reductions in manufacturing's share of total employment and output.

Figure 3.21. ASEAN+3: Stage of Structural Change, 2022



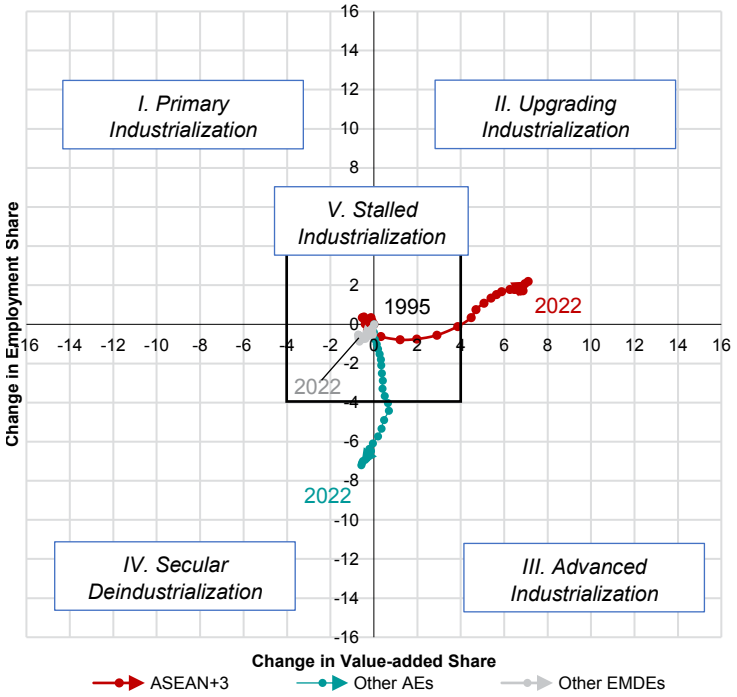
Source: International Labour Organization; United Nations Industrial Development Organization; United Nations Statistics Division; AMRO staff calculations.
Note: BN = Brunei; HK = Hong Kong; ID = Indonesia; JP = Japan; KH = Cambodia; KR = Korea; LA = Lao PDR; MM = Myanmar; MY = Malaysia; PH = the Philippines; SG = Singapore; TH = Thailand; VN = Vietnam. China is not listed for its unique economic characteristics. Economies without parenthesis have remained in the same stage since 1995. Online annex 4 features the details.

Figure 3.22. World: Income Level, by Stage of Structural Change, 2022
(Real GDP per capita, natural log)



Source: United Nations Statistics Division; AMRO staff calculations.
Note: Data covers 178 economies. The early stage includes 39 economies, the middle stage 70 economies and the late stage 69 economies. Online annex 4 features the details.

Figure 3.23. ASEAN+3 and Selected Economies: Phases of Industrialization, 1995–2022



Source: Kim and Sumner (2019); Alisjahbana and others (2022); International Labour Organization; United Nations Industrial Development Organization; United Nations Statistics Division; AMRO staff calculations.
Note: Value-added and employment shares are five-year moving averages weighted by the GDP at constant price and employment size. "Other advanced economies (AEs)" and "Other emerging market and developing economies (EMDEs)" follow the International Monetary Fund's classification. Online annex 5 features details.

Combining these two frameworks of structural change and stages of industrialization reveals three key patterns behind recent growth and productivity dynamics across ASEAN+3 economies: (1) some economies are experiencing stalled industrialization; (2) productivity gaps in ASEAN+3 economies relative to aspirational peers are wide, and continue to widen; and (3) there appears to be a lot of room for transformation by shifting to the services sector—but gains are constrained by low skill levels, which in turn dampen higher value-added generation. These are elaborated in the subsequent sections.

Industrialization Stalling in Some Economies

While deindustrialization has yet to be seen in ASEAN+3 as a whole, this masks the diversity of experience across economies. The overall trend in ASEAN+3's industrialization is heavily influenced by the weighting of China, which transitioned to "upgrading industrialization" in the early 2000s from "primary deindustrialization" in the late 1990s, following its accession to the World Trade Organization. Elsewhere in the region, industrialization patterns differ—highlighting diverse experiences with structural change. Middle-stage economies, for example, are experiencing stalled industrialization: the value-added share of manufacturing has declined since 2009, while the sector's share of employment gradually grew (Figure 3.24). This experience coincided with overall weaker manufacturing activities in many ASEAN economies since the global financial crisis, alongside slower expansion in global value chains and growth in major advanced economies (AMRO 2024b).[20] In contrast, those in the early stage consistently grew both manufacturing value-added and employment shares—partly facilitated by strong inflows of FDI over the years.[21] Economies in the late stage also saw an increased manufacturing value-added share between 1995 and 2022, which—if taken alongside the declining employment share of manufacturing—indicates enhanced manufacturing productivity.

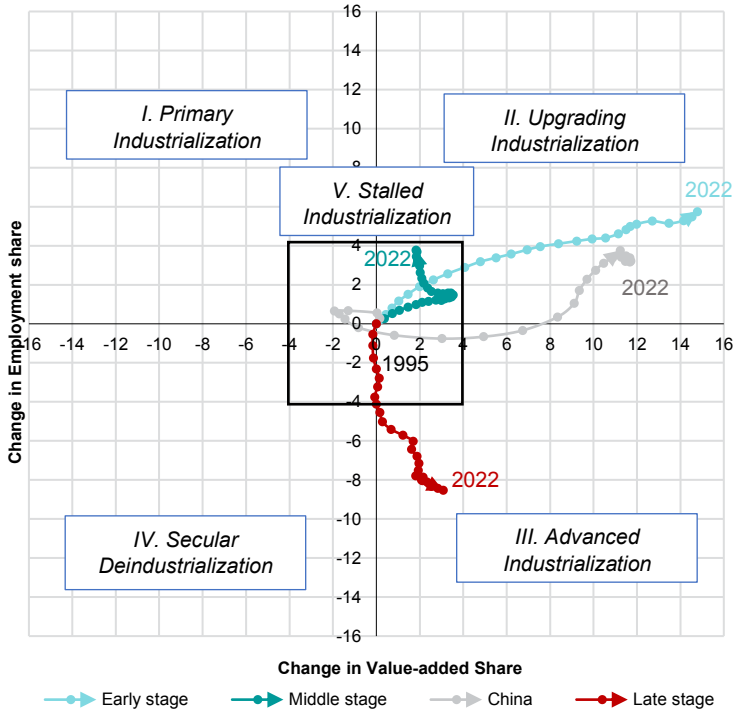
These different industrialization experiences are also consistent with the varying levels of measured economic complexity across ASEAN+3 economies. Economic complexity, in some ways, quantifies the knowledge within the economy to produce a diverse range of products, including ones that require sophisticated know-how (Hidalgo and Hausmann 2009). Complexity tends to increase as an economy advances through the different stages of

20/ Paragraph 22 explores some of the global factors underlying the slowdown in the manufacturing sector. Other studies also highlight elements such as the lack of homegrown multinational corporations, the overreliance on commodity sectors, constrained access to finance, and the lack of skilled workers as region-specific conditions. (Alcorta and Nixson 2011; Haraguchi 2009; Hsieh 2011; Tho 2013; Sen 2016; Kumagai 2019; Verico 2021; Lee 2022; Balaoing-Palkmans and Mendoza 2024; Madeira 2024).

21/ Online annex 5 features the industrialization patterns of individual ASEAN+3 economies.

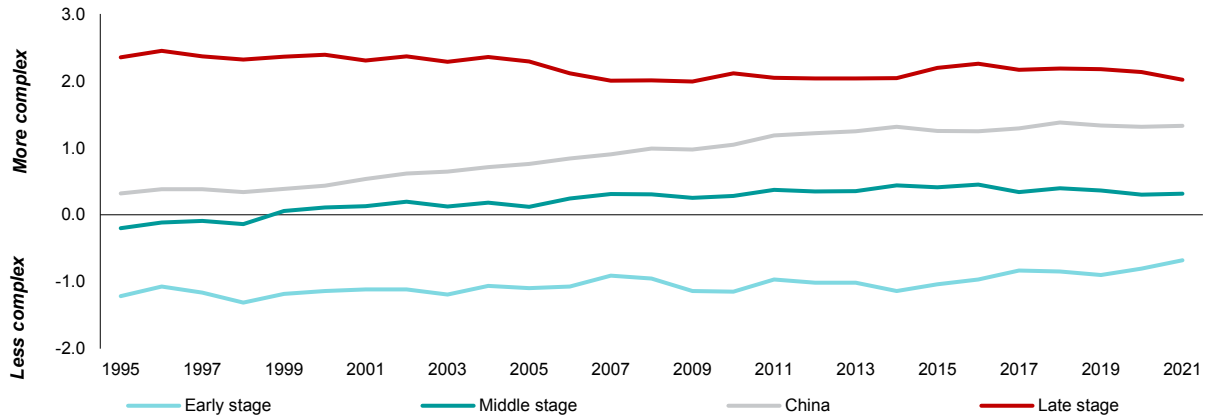
structural change: late-stage economies in the region exhibit higher complexity, which they have maintained in the last two decades (Figure 3.25). In middle-stage economies, where industrialization has stalled, complexity appears to have stagnated at a low to middle level. In contrast, early-stage economies and China—those that experienced growing industrialization—have improved their capacity to produce a more diverse array of products although the complexity of early-stage economies remains at a relatively low level. This suggests a virtuous cycle of industrialization enhancing production know-how, which further bolsters industrialization (Hausmann and Hidalgo 2010). Nevertheless, significant room exists to move toward higher-value products, especially for early-stage industrializing economies (Box 3.4).

Figure 3.24. ASEAN+3: Phases of Industrialization, 1995–2022



Source: Kim and Sumner (2019); Alisjahbana and others (2022); International Labour Organization; United Nations Industrial Development Organization; United Nations Statistics Division; AMRO staff calculations.
Note: Value-added and employment shares are five-year moving averages weighted by the GDP at constant price and employment size. See Figure 3.21 for the economies in each structural change stage. Online annex 5 features the details.

Figure 3.25. ASEAN+3: Economic Complexity, by Stage of Structural Change
(Index)

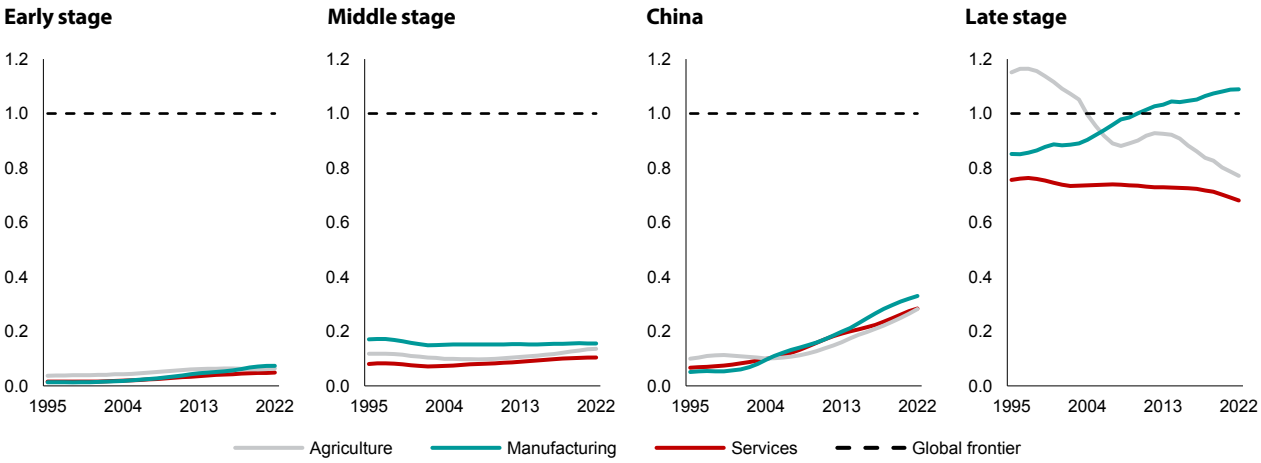


Source: The Growth Lab at Harvard University (2019); AMRO staff calculations.
Note: Weighted average of economic complexity index. See Figure 3.21 for the economies in each stage of structural change.

Wide Productivity Gaps Against the Frontier

The diverse pace of structural change across ASEAN+3 economies also reflects their long distance from the global productivity frontier. In the last three decades, China has made the most strides in narrowing the gap with frontier economies—proxied by selected OECD economies—and this also coincides with its progress of structural change. Yet, even China is only at about 30 percent of the distance from the global productivity frontier (Figure 3.26).[22] Similarly, early-stage economies have also gradually made some improvements—but have only reached a tenth of the frontier benchmark. Middle-stage economies, on the other hand, showed modest improvements in the productivity of their services and agriculture sectors, but that of the manufacturing sector has stagnated—which is consistent with the experience of stalled industrialization during this period (Figure 3.24). Late-stage economies have seen the productivity of their manufacturing outpace the frontier; however, the productivity of services and agriculture has continuously declined. This suggests that productivity improvements in these sectors have not been apace with advancements in frontier economies. To some extent, this widening gap is consistent with the falling gains from the intra-sector productivity growth (Figure 3.20).

Figure 3.26. ASEAN+3: Labor Productivity Distance to the Frontier, by Stage of Structural Change
(Index, distance to the frontier)



Source: International Labour Organization; United Nations Industrial Development Organization; United Nations Statistics Division; AMRO staff calculations.
Note: Labor productivity is measured as the sectoral value added per employment and is a five-year moving average weighted by the value-added at constant price and employment size. Global frontier refers to the weighted average of non-ASEAN+3 OECD members. See Figure 3.21 for the economies in each structural change stage. Online annex 6 features the details.

Services Development Still Lagging

Substantial room exists to shift toward the services sector to help enhance ASEAN+3's productivity. While manufacturing will retain a key role in helping drive ASEAN+3's structural change, the services sector is an equally pivotal source of economic growth and job creation. The sector currently employs approximately half of the region's workforce—from only 26.8 percent in the mid-1990s. In some ASEAN+3 economies, however, the share of services to total employment is still smaller than in "stage peers," defined as non-ASEAN+3 economies in the same stage of structural change (Figure 3.27). This potential for shifting workers to services becomes even bigger when compared with the "aspirational peers"—proxied by economies in the next stage of structural change. From the point of view of value-added, the share of services for ASEAN+3 is also smaller—and its catch-up with peers has been especially slow.[23] As of 2022, these gaps relative to aspirational peers range from as small as 7.5 percentage points (late-stage) to as wide as 27.0 percentage points (middle-stage) in employment shares, and as high as 20 percentage points for value-added, especially for middle-stage economies. Narrowing these distances—particularly in higher value-added services—can lift economy-wide productivity, especially as services become increasingly integrated across multiple sectors as an intermediate input (Nayyar and others 2021). Moreover, demand for services could expand as ASEAN+3 economies increase income levels (World Bank 2023b).

The wide gap in services value-added across ASEAN+3 against peers has come about because the shift in employment from other sectors has gone mostly to lower productivity services. Between 1995 and 2022, services' share of employment in the region increased by 65.2 percent, on

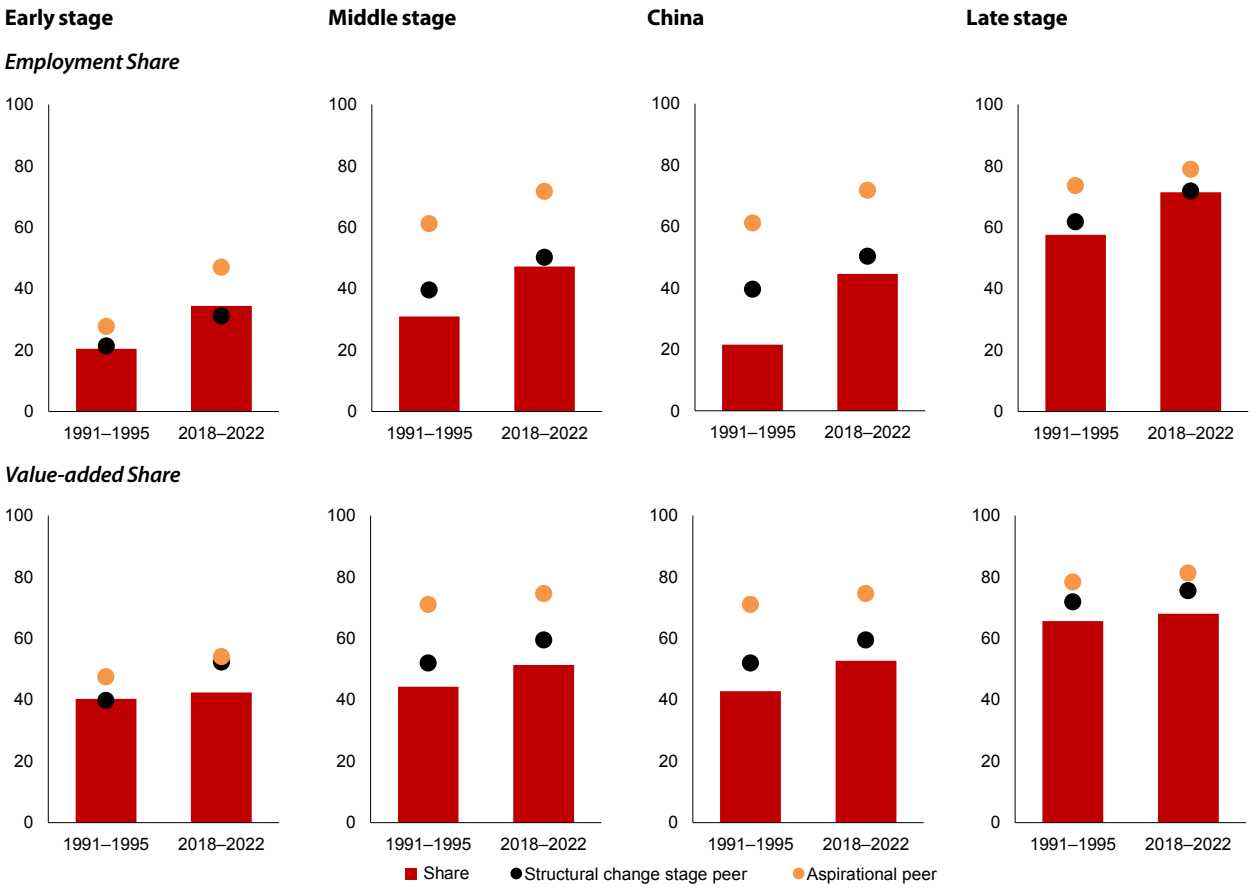
22/ Selected OECD economies refer to the 36 members, excluding ASEAN+3 economies (Japan and Korea). Online annex 6 features the full list of frontier economies and the distance to the frontiers of individual ASEAN+3 economies.

23/ Online annex 7 features the peer comparison of individual ASEAN+3 economies.

average—but its share to value-added has only increased by 12.3 percent. Despite the substantial labor shift to the services sector, most had gone to subsectors such as retail and transport—where the skill levels are relatively lower and labor-intensive than those demanded in industries such as professional and business services (Figure 3.28). About 75 percent of ASEAN+3's services sector employment remains in low- and medium-skill positions (Figure 3.29). This share has been relatively unchanged for decades, especially for economies in the initial stages of structural change.

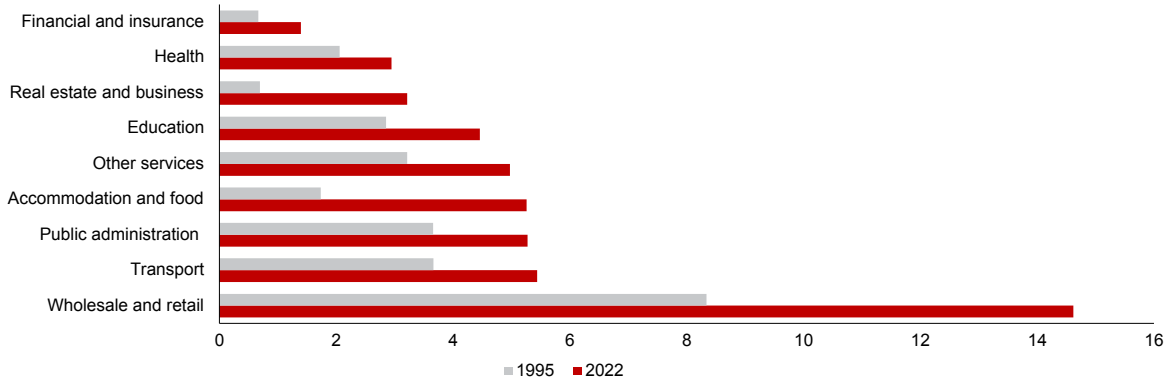
Particularly in early-stage economies, the proportion of low and medium-skilled service workers has even increased. Consequently, the value added by the services sector to the total economy did not grow as rapidly as the influx of labor, which in turn slowed productivity gains. Some late-stage economies in the region have been able to increase the proportion of highly-skilled service workers (Figure 3.30). Yet, this group still lags other advanced economies by about 10 percentage points as of 2022, suggesting room for further improvement.

Figure 3.27. ASEAN+3: Services Employment and Value-added Shares Relative to Peers
(Percent)



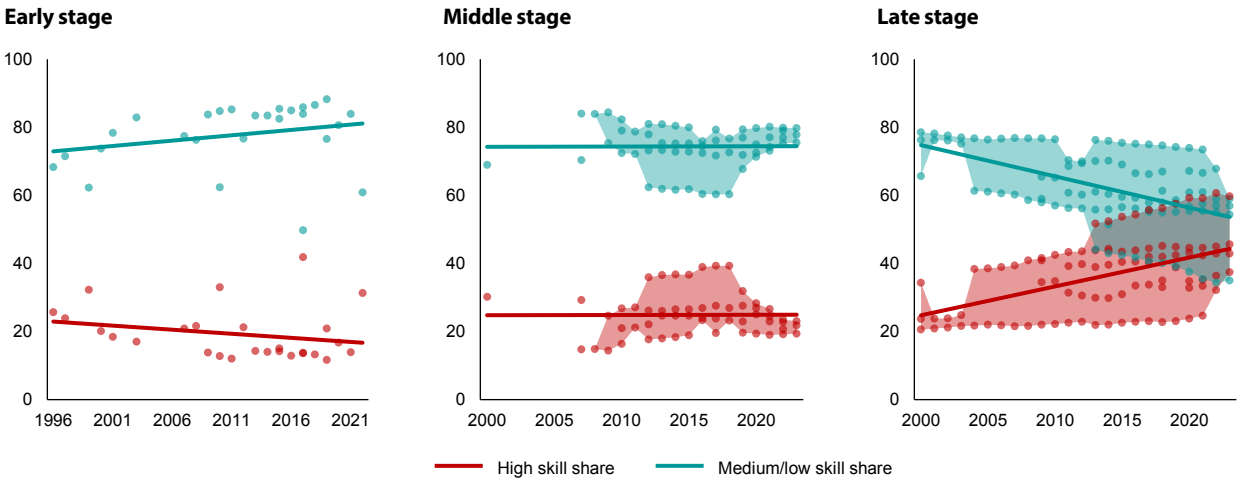
Source: International Labour Organization; United Nations Industrial Development Organization; United Nations Statistics Division; AMRO staff calculations.
Note: Employment and value-added shares are five-year moving averages weighted by employment size and GDP at constant price. Structural change peer refers to the weighted average of the economies (excluding those in ASEAN+3) in the same structural change stage. Aspirational peer is the weighted average of the economies (including those in ASEAN+3) in the next structural change stage. For the late stage, the United States is the aspirational peer. See Figure 3.21 for the economies in each structural change stage. Online annex 7 features the details.

Figure 3.28. ASEAN+3: Services Employment, by Sector
(Percent of total employment)



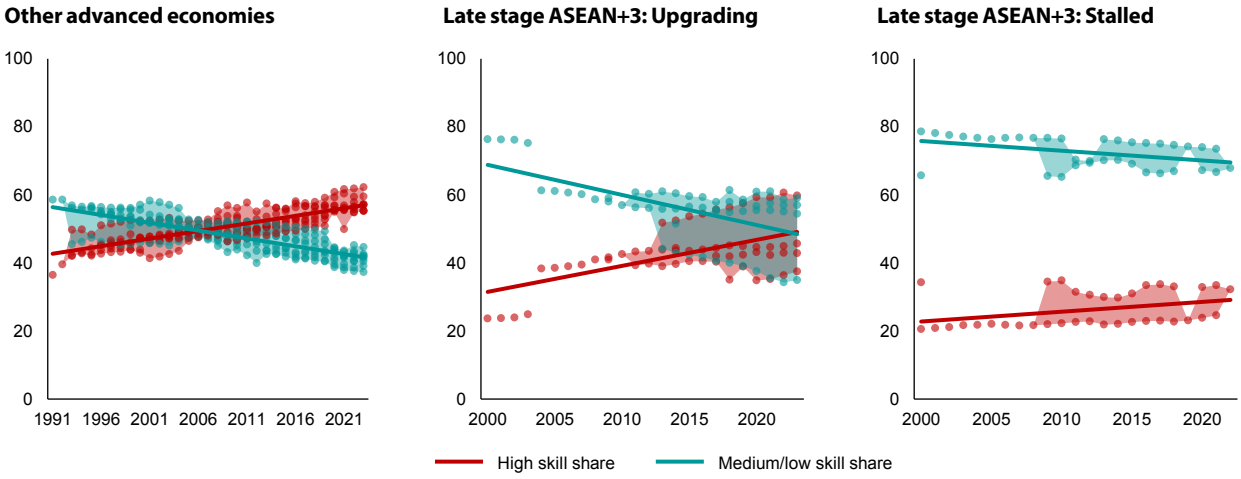
Source: International Labour Organization; AMRO staff calculations.
Note: Employment share is a five-year moving average, weighted by the employment size.

Figure 3.29. ASEAN+3: Services Sector Employment, by Skill Level
(Percent of total services employment)



Source: International Labour Organization; AMRO staff calculations.
Note: Early-stage economies include Cambodia, Lao PDR, and Myanmar; middle-stage includes Indonesia, the Philippines, Thailand, and Vietnam, while late-stage includes Brunei, Hong Kong, Japan, Korea, Malaysia, and Singapore following the classification in Figure 3.21.

Figure 3.30. Selected Economies: Services Sector Employment, by Skill Level
(Percent of total services employment)



Source: International Labour Organization; AMRO staff calculations.
Note: Advanced economies include Iceland, Israel, Netherlands, Norway, Sweden, Switzerland, the United Kingdom, and the United States. Late-stage ASEAN+3 economies are further divided into "upgrading" (Brunei, Hong Kong, Korea, and Singapore) and "stalled" economies (Japan and Malaysia), based on whether high-skill service employment shares are increasing relative to medium/low-skill shares.

In sum, the slowdown in ASEAN+3 productivity growth over the last three decades can be partly explained from the perspective of structural change that the region was going through. Except for Cambodia, Lao PDR, and Myanmar, the region's economies are now in the middle to late stages of structural change. Broadly, while ASEAN+3 continues to industrialize, the aggregate experience masks the diversity of trends within the region:

- ***Economies in the early stage of structural change.*** In these economies, employment shifted rapidly from agriculture to other sectors. In contrast to the global deindustrialization trend, the early-stage economies saw a continued increase in both the manufacturing value-added and employment shares. Concurrently, the capability to produce a broader set of products has expanded. Their distance to the productivity frontier has also narrowed. However, the economic structure remains less complex, with a significant productivity differential relative to the global frontier. The services sector exhibits lagging performance versus peers, with lower shares in value-added and a heavy concentration in low to medium-skilled occupations.

- ***Economies in the middle stage of structural change.*** In these economies, industrialization stalled particularly after the global financial crisis with the slowdown in the US and Europe, and the rebalancing of growth in the region towards domestic demand. The manufacturing sector's value-added and employment shares have plateaued, and improvements in economic complexity have stagnated. Concurrently, the group has shifted strongly toward the services

sector, reallocating employment from agriculture and modestly increasing the former's value-added share. However, the influx of employment has primarily been toward low- and medium-skilled services, leading to a relatively slow improvement in productivity. As such, the productivity of the services sector is currently only at about one-tenth of the frontier benchmark.

- ***China.*** Structural change has progressed along both the employment and value-added dimensions. Industrialization continued, and the economy rapidly increased in complexity, especially as it deepened its integration into global value chains. China's robust structural change has corresponded with its emergence as a global innovation and technological center. Over the past three decades, China has been narrowing its distance to the productivity frontier across all three sectors, although substantial room for convergence remains. In addition, the value-added share of the services sector continues to trail its peers.
- ***Economies in the late stage of structural change.*** In these economies, employment has shifted toward services from agriculture and manufacturing. Industrialization has also continued, with manufacturing increasing its value-added share as activities became less labor-intensive. Consequently, manufacturing productivity has improved to outpace the global frontier. However, the productivity gap of the services sector relative to the frontier has widened, in part owing to the higher share of low- and medium-skilled service workers—in contrast to the transition to high-skilled services observed in other advanced economies.

This heterogeneity carries important and different policy implications for different groups of economies, in order to reverse the observed slowdown in productivity and chart a higher growth trajectory for the ASEAN+3 region moving forward.

Box 3.4:

Export Competitiveness in Lao PDR

Despite having a geographical disadvantage, Lao PDR goods exports have grown significantly in the past decade. As the only landlocked economy in Southeast Asia, Lao PDR has no direct access to maritime trade, which carries 90 percent of global goods trade (Organisation for Economic Co-operation and Development 2022).[1] The economy faces challenges in expanding its trade network and deepening its integration into global value chains compared to other ASEAN+3 economies. In 2021, Lao PDR's export value was the lowest in ASEAN and represented a mere 0.03 percent of global goods trade. Still, it has made firm progress in strengthening its export performance: export values have tripled since 2010, growing by 12.8 percent on average annually, the second-fastest in ASEAN (Figure 3.4.1). This is also consistent with Lao PDR's continuous improvement in the economic complexity index, although its production capability has generally remained in the less complex zone (Figure 3.4.2).

Between 2010 and 2021, Lao PDR increased its export competitiveness, mostly in lower value-added products. In 2021, the economy had a comparative advantage in exporting 98 types of goods (out of 529 types of exported goods), increasing from 83 types in 2010, and it was most competitive in exporting (1) chemical wood pulp; (2) vegetable products; (3) natural rubber latex; (4) electricity; and (5) live bovine animals.[2] However, the number of competitive goods could fluctuate every year: for instance, other economies' export promotion or import substitution measures could make Lao PDR exports less attractive. In addition, Lao PDR's share of competitive goods in the total number of goods exported decreased as the economy continued to broaden the types of goods it exports (Figure 3.4.3).

Lao PDR is among the top competitive exporters of primary (and lower value-added) goods in ASEAN, including food and live animals; beverages and tobacco; crude materials; and minerals and fuels (Figure 3.4.4). However, the economy lags in exporting higher-value-added goods—like chemicals and machinery equipment—reflecting its nascent economic development stage. Lao PDR's negative score for economic complexity also implies limited capacity to produce products that require specialized knowledge (Figure 3.4.2).

Furthermore, the economy's export competitiveness has not diversified. For instance, among the 64 food and live animal products that Lao PDR exported in 2021, only 25 were deemed as competitive, while the majority of its exported food and live animal goods were not (Figure 3.4.5). Moreover, Lao PDR's overall competitiveness in the food and live animal product group is primarily supported by only the top three competitive food and live animal goods—vegetables, live bovine animals, and bananas—constituting 62.7 percent of the product group's total export value.

Lao PDR also remains dependent on a few trading partners, making its export performance highly susceptible to demand conditions in these economies. Despite expanding its trade network from 74 to 95 economies between 2010 and 2021, Lao PDR's export performance is heavily reliant on three markets—Thailand, China, and Vietnam—which collectively account for over 80 percent of its exports. This high concentration on three partners means that economic fluctuations and policy changes in these markets could substantially disrupt Lao PDR's export performance.

A well-thought-out export promotion strategy would help sustain and enhance Lao PDR's export growth momentum. While the Laotian government's trade facilitation measures under the 9th Five-Year National Socio-Economic Development Plan provide a foundation, a clear road map for enhancing export competitiveness remains crucial. One strategy could be to incrementally improve competitiveness, initially prioritizing products of lower-value-added sectors like food and live animals (which are closer to the competitive threshold), rather than immediately promoting products of higher-value-added sectors

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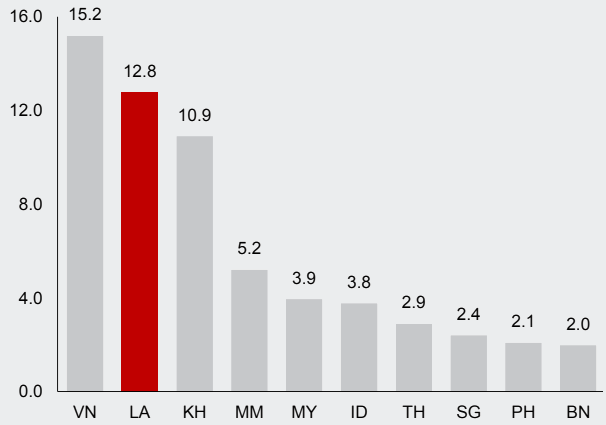
This box was written by Naoaki Inayoshi, based on Inayoshi (forthcoming).

1/ Maritime transport totals about 11 billion tons of cargo per year and is the main transport mode for global goods trade (World Bank 2020a).

2/ Competitiveness is measured using the revealed symmetric comparative advantage (RSCA) of goods that Lao PDR exports. It is measured at various product levels: from Standard International Classification 1 to 4 digits level. See Inayoshi (forthcoming) for the detailed methodology and assessments.

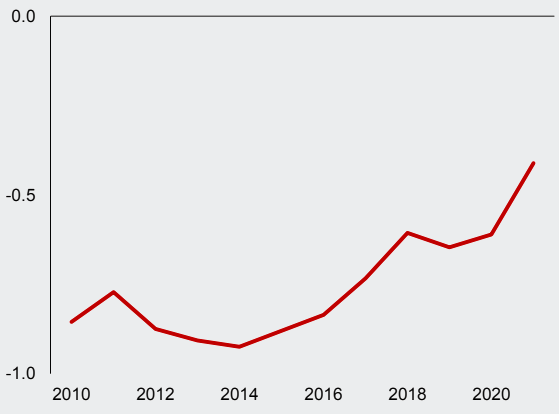
(like machinery equipment). This approach may involve facilitating knowledge sharing among businesses in similar industries and targeting products with characteristics similar to existing competitive exports. In parallel, the ecosystem for domestic industries needs to be improved to build expertise in higher-value-added products, which are currently significantly underperforming. Potential measures could include enhancing vocational training, developing critical infrastructure, and creating targeted support mechanisms. Given the varied competitiveness of Lao PDR's exported goods, a methodical, step-by-step approach with clear milestones is essential for the economy to navigate the rapidly evolving global goods market and gradually upgrade its export capabilities.

Figure 3.4.1. ASEAN: Growth of Goods Exports, 2010–2021
(Percent)



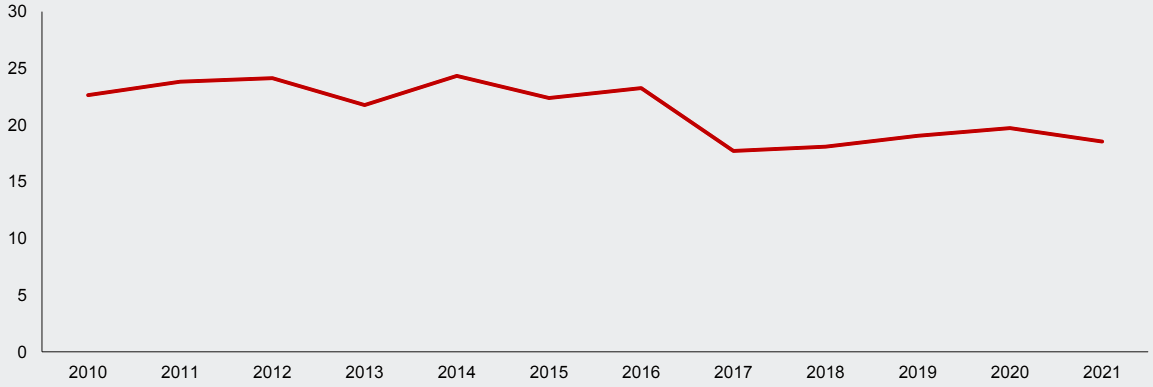
Source: United Nations Comtrade; AMRO staff calculations.
Note: BN = Brunei; ID = Indonesia; KH = Cambodia; LA = Lao PDR; MY = Malaysia; MM = Myanmar; PH = the Philippines; SG = Singapore; TH = Thailand; VN = Vietnam. Data use compounded annual growth rate.

Figure 3.4.2. Lao PDR: Economic Complexity
(Index)



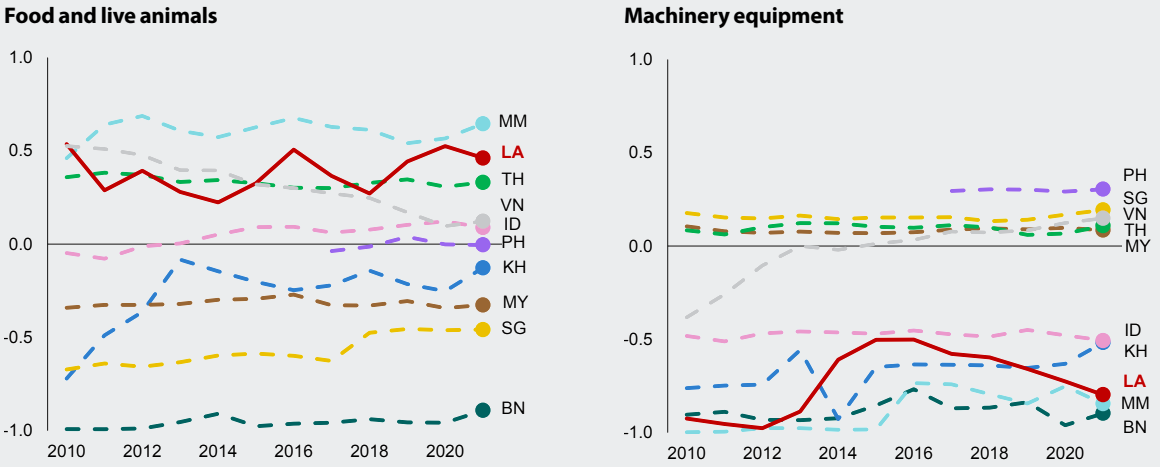
Source: The Growth Lab at Harvard University (2019).
Note: Economic complexity measures the level of know-how in an economy to produce a wide variety of goods including the sophisticated ones requiring specialized know-how (Hidalgo and Hausmann, 2009). An economy with a positive value is considered to be more complex while the negative value is less complex. The higher the value, the more complex the economy is.

Figure 3.4.3. Lao PDR: The Share of Competitive Goods in the Total Number of Goods Exported
(Percent)



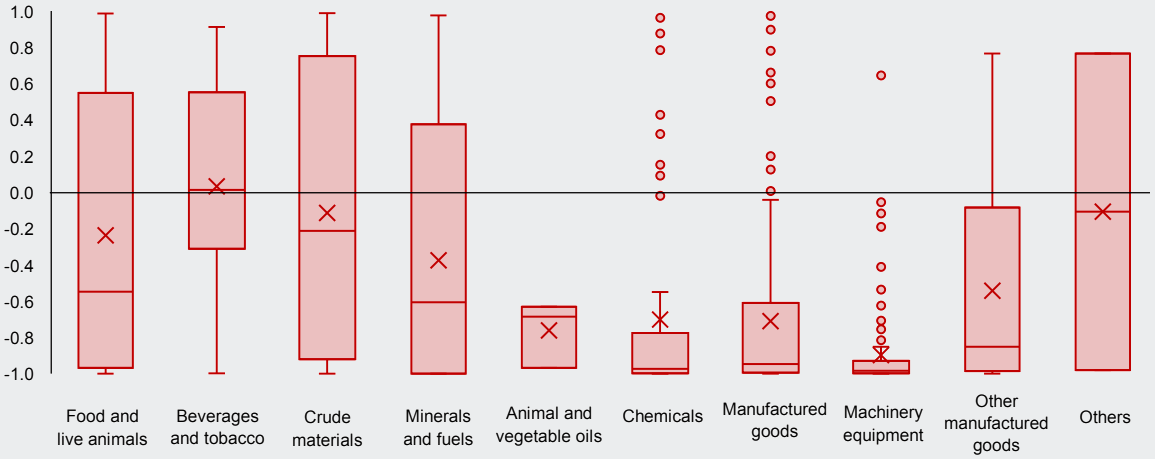
Source: United Nations Comtrade; AMRO staff calculations.
Note: Competitive goods are those with revealed symmetric comparative advantage above zero. See Inayoshi (forthcoming) for details.

Figure 3.4.4. ASEAN: Competitiveness of Selected Products
(Index)



Source: United Nations Comtrade; AMRO staff calculations.
Note: BN = Brunei; ID = Indonesia; KH = Cambodia; LA = Lao PDR; MY = Malaysia; MM = Myanmar; PH = the Philippines; SG = Singapore; TH = Thailand; VN = Vietnam. Competitiveness is measured using revealed symmetric comparative advantage. An economy is deemed competitive when the value is positive (i.e., between 0 and 1) and not competitive when the value is negative (i.e. between -1 and 0).

Figure 3.4.5. Lao PDR: Distribution of Competitiveness, by Export Group, 2021
(Index)



Source: United Nations Comtrade; AMRO staff calculations.
Note: Competitiveness is measured by computing the revealed symmetric comparative advantage (RSCA). A product is deemed competitive when the RSCA value is positive (i.e., between 0 and 1) and not competitive when the value is negative (i.e. between -1 and 0). The box and the line illustrate the distribution of each product's RSCA value in the same product group. Box shows the range of the central 50 percent of the RSCA values, with a central line indicating the median value. Lines extending from the box show the range of remaining RSCA values: the lower end is where the minimum RSCA value is, and the upper end is where the maximum RSCA value is. Dots beyond the line are the outliers. "X" denotes the average RSCA value within the product group.

IV. Policy Considerations and the Way Forward

The ASEAN+3 region is facing not only the enormous task of revitalizing economic growth—but also ensuring that its future pathway is dynamic and responsive to the challenges ahead. By the end of this decade, economic growth in the ASEAN+3 region is projected to outpace the rest of the world, eventually accounting for about two-fifths of global output, and equipped with solid macroeconomic fundamentals, strong institutions, and lessons from the past (Figure 3.1). Still, the reality is that all ASEAN+3 economies now must contend with decelerating long-term growth potential (Section II). As some economies are experiencing diminishing gains from structural change, this slowdown calls into question not only the region's ability to deal with looming risks but also its capacity to capture and leverage emerging opportunities (Section III). Unlocking higher growth pathways in a global environment fraught with uncertainties necessitates new ways of thinking about growth and development. Otherwise, many in ASEAN+3 will not be able to attain higher-income status, with far-reaching implications on socioeconomic stability, equality, and overall quality of life.

Reigniting growth and productivity gain is becoming one of the most pressing global concerns. This is true for both emerging and advanced economies. The current policy discussion tends to view this issue from the lens of industrial policy.[24] Yet, in the context of many emerging market economies—such as those in ASEAN+3—these policies have been deployed for objectives that are beyond the goal of industrialization, such as achieving a more resilient global value chain, redistributing economic activity, or facilitating technology diffusion. As such, these have also been described as productive development policies, innovation policies, or structural transformation policies (Juhasz and others 2023).[25] It is only quite recently that the global discussion on growth is once again being dominated by policies that focus explicitly on certain economic sectors, leading to what some call an industrial policy renaissance (Johnston 2023). Still, these pronouncements—mostly coming from the world's largest economies—again encompass a wide variety of economic and developmental objectives: from shoring up domestic competitiveness, responding to the climate transition, embracing digitalization, securing supply chain resilience, and achieving geopolitical imperatives.[26] Similar policy moves have also emerged in ASEAN+3 to ensure higher growth amid growing global uncertainty—such as Indonesia's "downstreaming" policy, and Japan and Malaysia's semiconductor sector revitalization plans, among others (Box 3.5).

24/ This is because industrial policy—by targeting certain sectors such as heavy industries and strategically-important manufacturing sectors—has allowed many economies to achieve economic transformation in the past.

25/ A discussion on industrial policy (IP) is way beyond the coverage of this section. Nevertheless, it would be useful to note that definitions of IP can be very narrow—"government action that encourages or directly subsidizes the expansion of certain economic sectors over others" —as in Hillman and Manak (2023), or very broad—"….policies that explicitly target the transformation of economic activity in pursuit of some public goal" as in Juhasz and others (2023). The rest of this section adopts the broad definition, especially given the experience of ASEAN+3 economies.

26/ In the last 10 years, notable structurally-transforming strategies include China's Made in China 2025, announced in 2015; the European Union's Green Deal Investment Plan and the Next Generation EU economic recovery package, announced in 2019 and 2020; and the United States, the CHIPS Act and the Inflation Reduction Act—both announced in 2022.

Box 3.5:

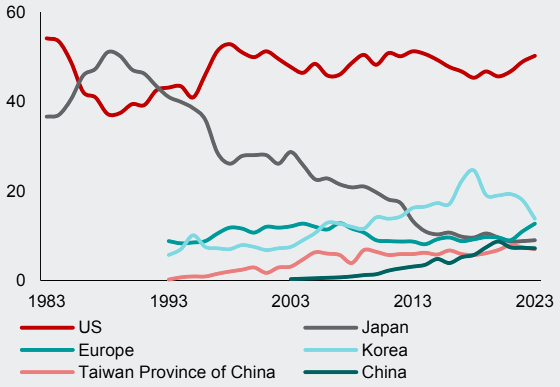
New Industrial Policy for Semiconductors: Insights from Japan and Malaysia

Recent geopolitical developments, particularly US-China trade and technology tensions, and the rapidly evolving semiconductor landscape have led to a major rethink of industrial policy globally. In response to these shifts, Japan and Malaysia—key semiconductor players in the ASEAN+3 region—have adopted new industrial policies to revitalize their respective sectors.

Japan was once a global leader in semiconductors, but its market share has fallen from 50 percent in the mid-1980s to less than 10 percent today (Figure 3.5.1). Japan has fallen about a decade behind technology leaders in Korea, Taiwan Province of China, and the United States. Factors contributing to Japan's declining share include trade frictions with the United States in the 1980s, rapid appreciation of the yen after the 1985 Plaza Accord, failure to invest in logic chips during the personal computer era (which limited their ability to compete in the increasingly important high-volume markets), and the inability of Japanese companies to adapt to a new fabless-foundry business model. On the other hand, Malaysia—with its semiconductor history spanning more than half a century—has an entrenched position in the latter stages of the semiconductor supply chain, particularly chip assembly, testing, and packaging. It holds 13 percent of the global market in these areas. However, this lower value-adding segment has neither improved manufacturing technology nor led to higher wages (Figure 3.5.2).

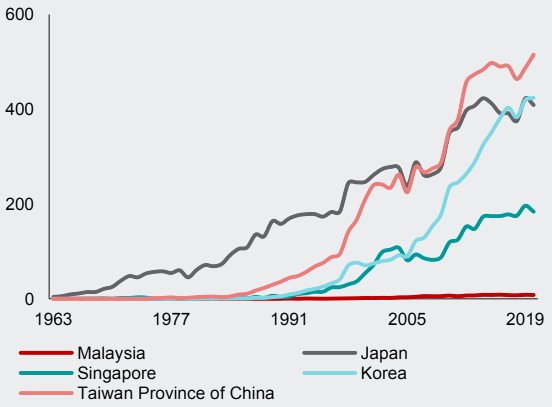
Thus, Japan sees the current juncture as the "last chance" to revive the international competitiveness of its semiconductor industry, while Malaysia hopes to seize this "once-in-a generation" opportunity to revitalize its industrialization, spur an economic take-off, and become a high-income nation.

Figure 3.5.1. Selected Economies: Share of Global Semiconductor Sales
(Percent)



Source: Semiconductor Industry Association; World Semiconductor Trade Statistics; AMRO staff calculations.
Note: The reported figures are based on the parent company's economy of origin.

Figure 3.5.2. United States: Patents Granted, by Economy of Origin
(Per million people)



Source: United States Patent and Trademark Office; World Bank; AMRO staff calculations.

Areas of Focus

Japan's semiconductor revitalization strategy consists of three steps: (1) strengthening domestic production capacity; (2) forming alliances with the United States on next-generation technology; and (3) developing game-changing future technology. As part of the first step, Japan Advanced Semiconductor Manufacturing (JASM)—a joint venture between TSMC, Sony, and Denso—has opened a new plant in Kumamoto to produce 12–28 nanometer (nm) logic chips. Construction of a second plant was set to start at the end of 2024, with the same partners, plus Toyota, focusing on 6–40nm chips. The second step involves Rapidus, a government-backed startup with a consortium of

This box was written by Wee Chian Koh.

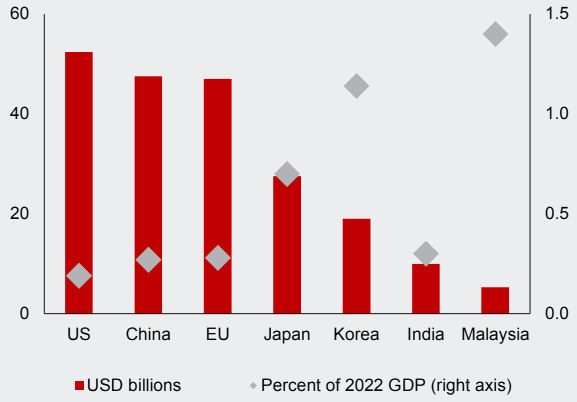
major Japanese corporations and banks. Rapidus is collaborating with IBM and IMEC—Europe's leading microelectronics research and development (R&D) center—to mass-produce 2nm chips by 2027. Also crucial to this step is the establishment of the Leading-Edge Semiconductor Technology Center (LSTC), which spearheads R&D while Rapidus handles production. In the third step, Japan aims to produce game-changing technology based on the convergence of photonics and electronics. These would benefit artificial intelligence data centers and 6G technologies that demand ultra-high-speed data transmission, low latency, and energy efficiency.

Malaysia's new semiconductor strategy—with its three phases—aims to reposition the country from an assembly and testing hub to one with higher value-added activities in chip design, fabrication, and advanced packaging. In the first phase, the focus of Malaysia's National Semiconductor Strategy (NSS) will be on expanding production capacity in trailing-edge chips (28nm chips or larger), particularly power chips, plus developing globally competitive local chip design companies. The second phase involves attracting more advanced chip manufacturers to Malaysia to allow local design firms to integrate into the ecosystem of these advanced fabs. The final phase envisions world-class Malaysian chip design, advanced packaging, and manufacturing equipment firms that can attract buyers of advanced chips—such as Apple, Huawei, and Lenovo—to set up advanced manufacturing facilities in Malaysia.

Support Measures

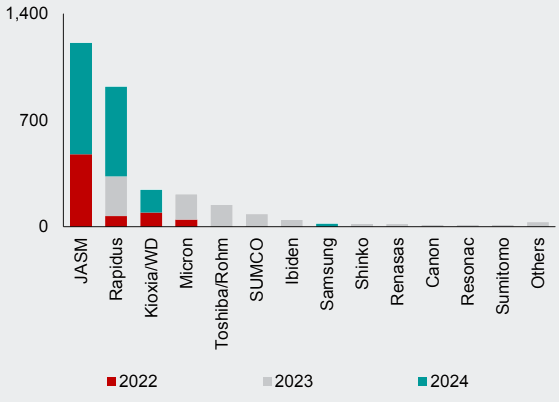
Fiscal support for the semiconductor industries in Japan and Malaysia outpaces those in other major economies in terms of GDP. The Japanese government earmarked JPY 3.9 trillion (USD 27 billion) from fiscal years 2021 to 2023 to support the industry, equivalent to 0.7 percent of GDP—larger than the corresponding size of support under the US CHIPS Act and the European Chips Act (Figure 3.5.3). Most of the allocation have gone to JASM and Rapidus (Figure 3.5.4). About two-fifths of the capital cost of JASM's Kumamoto semiconductor fabrication plant was subsidized—based on the condition that it will have a minimum of 10 years of domestic production and will prioritize domestic shipments at times of global shortage. For Rapidus, one-fifth of the cost to begin mass production will be borne by the government. In November 2024, the Japanese government announced a plan to provide an additional JPY 10 trillion (USD 65 billion) through fiscal year 2030, in the form of subsidies, investments through government-affiliated institutions, and debt guarantees for loans originating from private financial groups. Meanwhile, the Malaysian government has committed to allocate at least MYR 25 billion (USD 5.3 billion) in fiscal support to operationalize the NSS. Policy initiatives include providing capital grants, funding for training and R&D programs, and establishing semiconductor industrial parks. Two chip design parks will be operational by early 2025.

Figure 3.5.3 Selected Economies: Fiscal Support for the Semiconductor Sector
(Billions of US dollars; Percent of GDP)



Source: National authorities; various media articles; World Bank; AMRO staff calculations.
Note: Duration of fiscal support varies across economies.

Figure 3.5.4. Japan: Subsidies to Semiconductor Firms
(Billions of yen)



Source: Japan Ministry of Economy, Trade, and Industry; AMRO staff calculations.

Challenges

Both Japan and Malaysia face significant challenges, however, including competition from other semiconductor players, dependence on imported technology, and a shortage of engineers. While the potential economic gains from the new semiconductor revitalization plans may be substantial, they are far from guaranteed. Major competitors and new entrants (such as India and Vietnam) have similar ambitions to capture a larger share of the global semiconductor market. An endless global subsidy race can result in wasteful government resources if they fail to ignite technological breakthroughs. Japan and Malaysia do not have advanced chip fabrication capabilities. Instead, they rely on foreign-owned fabs to increase domestic production capacity. Japan's bet on Rapidus for advanced semiconductor manufacturing is also dependent on IBM's 2nm technology. Nonetheless, there are plans to produce indigenous technology, such as through LSTC in the case of Japan, and the MIMOS and CREST agencies in Malaysia.[1] In this regard, encouraging stronger tripartite collaboration among academia, government, and industry can help to bridge R&D and commercialization.

Another challenge is a severe shortage of engineers. Experienced Japanese semiconductor engineers have left for larger markets (such as China, Korea, and Taiwan Province of China), and most are already in their 50s. Student interest in science, technology, engineering, and mathematics fields has also waned. In Malaysia, social stigma against technical and vocational education and training, as well as high failure rates in mathematics among high school students add to talent woes. That said, measures are in place to foster talent development. In Japan, tripartite collaboration within each major region (Kyushu, Tohoku, Chugoku, Chubu, Hokkaido, and Kanto) to develop human resources for semiconductors is underway. Malaysia recently set up a chip design academy in Penang and upgraded a school in Selangor into an advanced semiconductor academy.

Breaking from the Past

In both economies, these new semiconductor policies mark a clear departure from past policies. Unlike previous attempts, Japan's latest semiconductor industrial policy leverages strong international technology alliances and provides massive subsidies to foreign firms.[2] This reflects policymakers' renewed sense of urgency to strengthen supply chain resilience and regain competitiveness. For Malaysia, the government did not have a national semiconductor strategy until 2024. Industry development has been largely led by the private sector, after the success of free trade zones in attracting foreign direct investment and incentivizing multinational corporations to set up assembly and testing facilities (as part of its export-oriented industrialization strategy in the 1970s).

If these new policies translate into concrete gains, both economies will be well-positioned to realize their ambitions for their respective semiconductor industries. US-China tensions have led to some investments switching to Southeast Asia, providing an opportunity for Malaysia to advance its semiconductor industry and reclaim its status as the 'Silicon Valley of the East'. Similarly, Japan is taking this opportunity to position itself as an indispensable node in the US-led chip alliance, hopeful to reclaim its past glory in semiconductors.

1/ MIMOS is an agency under the Ministry of Science, Technology, and Innovation set up as an applied R&D center in semiconductors and microelectronics. CREST is an agency of the Ministry of Investment, Trade, and Industry to develop the electronics ecosystem through collaborative R&D and talent development.

2/ Japan's longstanding practice in the postwar era emphasized independent technology development and a risk-averse attitude of disallowing foreign-owned semiconductor firms to operate in Japan.

The ASEAN+3 region's long experience with economic transformation can provide a compass for future development strategies. Several ASEAN+3 economies have demonstrated remarkable growth, especially since the middle of the 20th century, evident in the sustained rise in national incomes and broad improvements in living standards. Even with the Asian financial crisis and various shocks of the 1990s and 2000s, the region's economies are typically seen as among the best examples of sustained growth and poverty reduction—so much so that other regions have looked to ASEAN+3 for lessons. Over time, ASEAN+3 economies have implemented and experimented with a broad and diverse basket of growth strategies (Figure 3.31). Yet, despite common objectives, economies in the region chose different policy instruments, prioritized some over others, and followed various pathways that make the region's overall experience difficult to generalize (Hernandez 2005). Nevertheless, the pursuit of a "manufacturing-for-exports" strategy contributed significantly to the region's overall economic success (Foo and Khut 2019) (Figure 3.32). Several studies have attributed the region's rapid economic growth to its exports or "outward orientation," which helped increase TFP, and in some ways created a virtuous cycle between exports and TFP growth (World Bank 1993). ASEAN+3 economies, by accessing the global market, were able to boost export earnings that, in turn, facilitated access to more technologies and innovative ways of production.

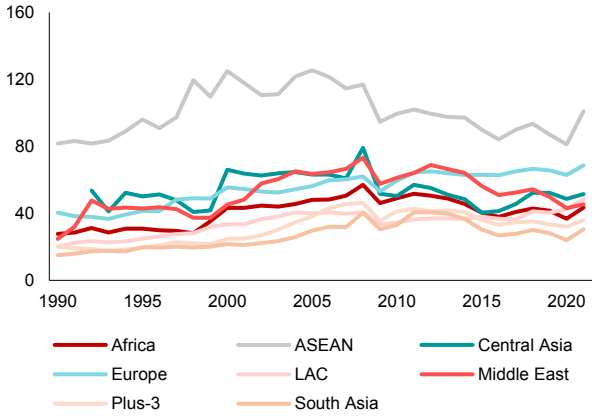
Experience in Plus-3 economies shows how critical state intervention has been in driving structural transformation. Japan and Korea—considered late-stage economies in terms of structural change—have often been cited as successful examples of the "developmental state"—a model of development where industrial policy is at the forefront of the policy agenda (Cheang 2022). Developmental states tend to be "state-heavy," where the role of the state is not limited to merely stepping in to correct market inefficiencies, such as when it comes to resource allocation or to prevent coordination failures. In this model, the state's role is more extensive in ensuring that economic activities contribute to increasing overall welfare, sustainability, and equitable development (Ambashi 2023).[27] This can be achieved, for example, through extensive use of state-owned enterprises and other forms of direct government intervention to deal with critical economic challenges. This could be seen in Japan's postwar promotion of heavy industries and protection of domestic companies, Korea's "Heavy Chemical Industry" drive to help rain in rising external imbalances, and China's establishment of special economic zones to attract FDI and promote export-oriented manufacturing industries and projects (Table 3.2).

In ASEAN, export-oriented manufacturing—powered primarily by FDI—is a key feature of the growth strategy. ASEAN's experience highlights two lessons: first, that protectionist policies are not necessary (and could even be detrimental) for structural transformation; and second, FDI can—in many ways—help enhance international competitiveness. Initially, most of the foreign capital that flowed into individual economies was directed into special export processing sites—part of a domestic "hosting" strategy—which allowed authorities to provide foreign investors with ways to reduce their costs (through more affordable utilities, tax deductions for certain expenses, and specific infrastructure, among others) as well as easier regulatory rules that are more conducive to investment, that would not have been available outside the zone (Montes 2018). The basket of instruments included tax deductions or exemptions, policies to reduce the

Figure 3.31. ASEAN+3: Broad Development Strategies

Source: AMRO staff compilation.
Note: FDI = foreign direct investment.

Figure 3.32. World: Trade Openness
(Percent of GDP)



Source: Asia Regional Integration Center, Asian Development Bank; AMRO staff.
Note: ASEAN = Association of Southeast Asian Nations; LAC = Latin America and Caribbean; Plus-3 = China, Hong Kong, Japan, and Korea.

27/ This contrasts with the view of mainstream neoclassical economists, which justifies the state's intervention to the extent that its goal is to correct inefficiencies and other market failures related to economies of scale, information asymmetry, and coordination failures, among others.

costs of imported raw materials and components, and allowing for wholly owned foreign subsidiaries, among others (Table 3.2). While several studies saw ASEAN's development strategy success as coming from a market-friendly and highly-open attitude, some attribute it more to highly favorable external conditions during that time—with Japanese companies looking for overseas production sites after the Plaza Accord—rather than because of proactive economic policymaking (Jomo 2001).

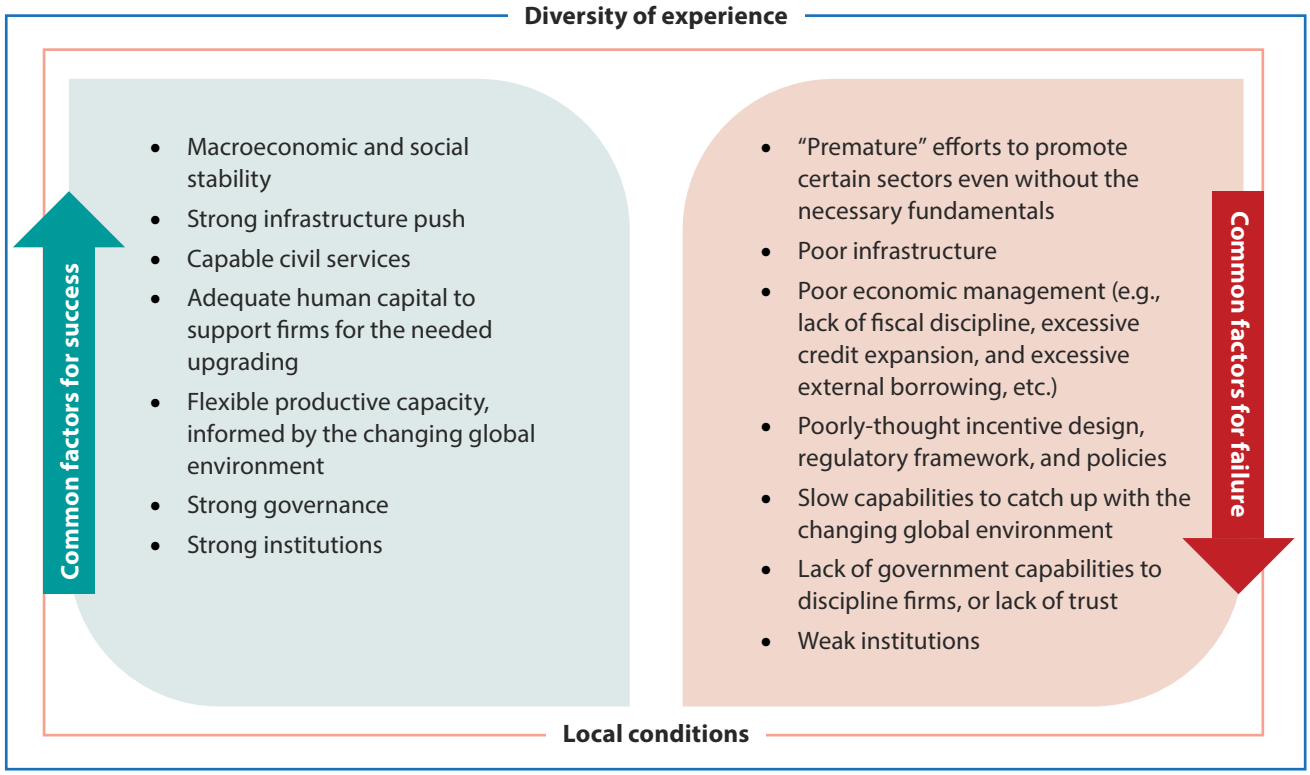
ASEAN+3's development path provides a trove of lessons—what worked, what did not, and why some strategies may not necessarily succeed in other parts of the world. There is a rich empirical literature that has explored the "replicability" of the East Asian experience. While some commonalities exist from a broad macroeconomic point of view, the instruments and policies employed in successful strategies varied widely. More importantly, the suite of tools was highly influenced by domestic conditions facing policymakers during that time. Notwithstanding this diversity and varied experience, there is broad consensus about what facilitated a successful structural transformation in East Asia: a combination of (1) favorable economic fundamentals, backed by (2) strong institutions and a governance architecture that was nimble and responsive to changing global landscape (Figure 3.33). Japan's success, for example, was supported by strong state capacity and the economy's ability to adapt to the shifting global geoeconomic environment (Haggard 2018; Wade 2018). Historical regional comparisons suggest that when either component fails, the entire growth strategy can fail. This is the case in Latin America, for example, or in Africa, where some economies also chose the route of export promotion but did not fare as well (Harrold and others 1996; Cardenas and others 2003). In the context of the Middle East, despite relatively stable macro fundamentals, the replicability of East Asia's growth strategy could be constrained by institutional factors and the relatively lower priority given to education (Noland and Pack 2005).

Table 3.2. ASEAN+3: Selected Features of Past Development Strategies

Economy	Key Features
Plus-3	• Japan and Korea initially promoted domestic heavy industries with high potential to drive growth—such as steel and automobiles—and also employed trade protection through higher import tariffs, price-support subsidies, and capital financing to support domestic firms (Kuchiki 2007). Policy attention eventually shifted to promoting high-tech and knowledge-intensive sectors (e.g., electronics and semiconductors). As their comparative advantage evolved toward more advanced value generation, support for research and development and subsidies for cutting-edge technology, among others, replaced traditional policy instruments (Hernandez 2005). • In China, policies to transform the economy came much later than Japan and Korea but, in some ways, these have also been informed by the success of Japan and Korea. For example, the establishment of special economic zones attracted foreign direct investment (FDI), fostered the building of industrial clusters, and facilitated technological and knowledge spillovers (Wang 2013; Zeng 2015). Other factors included the state-owned enterprise reforms and the "specific project financing" by the state-owned banks where the planning committee and central bank participated in discussions to help drive industrial development. At the same time, the economy also had to adapt to the evolving nature of globalization, where market competition and international competitiveness had a prominent influence in steering the direction of economic transformation—unlike in Japan and Korea during their earlier development strategies (Kuchiki 2007).
ASEAN-5	• Malaysia and Thailand employed a variety of preferential policies like tax incentives, easier access to credit, and more relaxed import guidelines to attract (Japanese, US, and European) multinational corporations looking to expand their production overseas for cost efficiency—mostly in manufacturing sectors like electronics, electrical machinery, and transport. Indonesia adopted import substitution policies and did not rely as much on preferential policies, but allowed for 100 percent ownership for foreign investors similar to Malaysia and Thailand in specific industries, which substantially eased market entry and attracted FDI. The Philippines, on the other hand, took a slightly different route by liberalizing imports to increase competition in the domestic market (Aldaba 2013). It also provided incentives to foreign investors and developed infrastructures to attract priority industries including business process outsourcing industry. Economies took deregulation measures in select, priority industries. Singapore also took a similar export promotion route initially, but—constrained by the size of the population and its geography—gradually lost its edge in labor-intensive manufacturing. Policy focus shifted to transforming toward services and high-tech sectors, where Singapore enjoyed a strong competitive advantage.
BCLMV	• Economies such as Lao PDR, Myanmar, and Cambodia also relied (and continue to rely) on export promotion. Besides leveraging their natural resource endowments, some also relied on their ability to provide (relatively) lower labor costs and offer multinational enterprises more flexible overseas production, especially for less-complex manufacturing products or those that did not require high value-addition from the host economy. Vietnam actively sought FDI, and continues to do so, in order to boost exports as a tool for growth and development. Policy choices such as privatization were key components of shoring up investment attraction, although their take on foreign investment was much more gradual and controlled than their bigger peers (Montes 1997).

Source: AMRO staff compilation.
Note: As for China, Kuchiki (2007) argues that China's reliance on foreign capital, for example, and the imperative for international competitiveness make it a "hybrid case" between the Japan/Korea models and the strategy pursued by ASEAN. As for the Philippines, both fiscal and non-fiscal incentives were provided to priority industries identified in its Strategic Investment Priority Plan, while the 19 investment promotion agencies also offered specialized services and additional incentives to attract and sustain investments. As for Singapore, similar to Japan and Korea, it is also seen as a successful model of the "developmental state," and sometimes as the best-case scenario of industrial policy (Cheang 2022). The economy utilized industrial policies to promote services industries that were attractive to FDI (e.g., medical, professional, and financial services), and the auxiliary, high-tech services sectors that supported them (e.g., information and communications, life sciences).

Figure 3.33. World: Development Strategies—A Comparison of Elements



Source: AMRO staff.

Future Growth Pathways for ASEAN+3: Five Policy Considerations

In the decades to come, achieving high growth rates for the ASEAN+3 region will no longer be enough: growth must also be high-quality, inclusive, and sustainable. Inclusivity ensures that economic gains are distributed more fairly and evenly across different segments of society (Box 3.6). Sustainability demands that meeting the needs of the current economy do not compromise future generations.[28] The ASEAN+3 region can also no longer ignore green and clean growth imperatives when thinking about new development pathways (Box 3.7). An ASEAN+3 region with high-quality growth is one that is more innovative, more balanced, and more sustainable. There is no one route to achieving this set of complex objectives, especially as they involve policy trade-offs in an era of limited fiscal space.

There is no "one-size fits all" approach for sustained high-quality growth. No generic formula exists for ASEAN+3 economies—especially those in the early stages of structural change—to simply copy. At the same time, relying too much on past tools or instruments may no longer be prudent, especially as the region's future trajectory is made even more opaque and complex by major secular shifts: population aging, climate change, rapid technological changes, global trade reconfiguration, and heightened geopolitical tensions (AMRO 2024b). Nevertheless, successful experiences of economies that were able to achieve high, sustained growth in the last five decades can be distilled into five common characteristics: (1) economic openness; (2) strong and stable macroeconomic fundamentals; (3) a future-oriented approach to policymaking; (4) well-functioning markets that provided the correct signals and incentives; and (5) capable, committed, and credible leadership (Commission on Growth and Development 2008). As structural transformation can take years to materialize, these distinctive characteristics make up the foundation that would allow growth-enhancing transformation to successfully take shape over time.

While a comprehensive set of policies and strategies for all 14 ASEAN+3 economies is beyond the scope of this chapter, there are five overarching themes that can help guide the region's policymakers in crafting new growth pathways for the future. These policy themes are grounded in the systematic analysis in sections II and III. The various factors behind the slowdown in ASEAN+3's potential growth along with the diverse pace of structural change across the region—as discussed in detail in sections II and III—mean that the policy mix will greatly differ across individual economies. Nevertheless, by reflecting on the region's current vulnerabilities and strengths, and how the future economic landscape could take shape, these five priority themes can help policymakers in their search for future growth solutions, while accounting for their economy's unique characteristics, lessons from the past, and new economic realities.

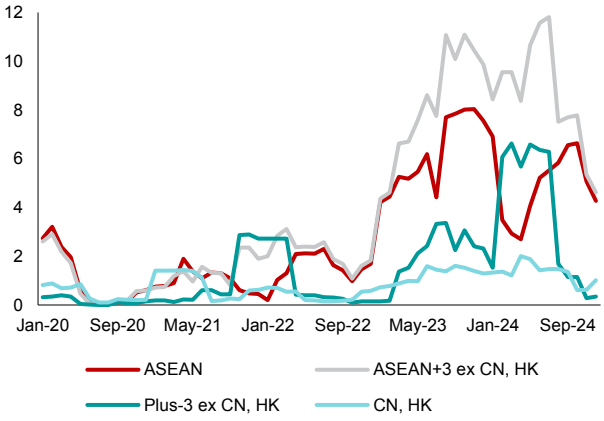
28/ This is first defined by the United Nations in its 1987 Brundtland Report.

1: Upgrading Manufacturing Capabilities

The manufacturing sector will remain key to ASEAN+3's future growth trajectory. Since the 1960s, the manufacturing sector has consistently seen a dwindling role in domestic job creation and economic activity in many economies globally (Rodrik 2016). In the case of ASEAN+3, rapid technological advances, protectionist policies and political pressure to "reshore" jobs back to advanced economies, and various macroeconomic shocks—especially in the past five years—also added to concerns about the role of manufacturing-for-exports as a future driver of growth (AMRO 2022). The stalled industrialization seen in middle-stage ASEAN+3 economies, for example, means that manufacturing is no longer benefiting output and employment as it once did (Figure 3.24). But, industrialization—especially one that is sustainable—will continue to be a powerful catalyst for global economic progress (United Nations Industrial Development Organization 2024). Manufacturing will stay as a critical force behind economic growth for many advanced and emerging market economies, offering solutions to key global challenges such as aging populations and climate change. The application of digital technology to manufacturing will enable economies to capture the benefits of automation to complement a shrinking labor force, while the production of low-emissions and cleaner-energy products will facilitate a successful global climate transition. These manufacturing-enabled solutions pave the way toward more robust and resilient growth, for the region and globally.

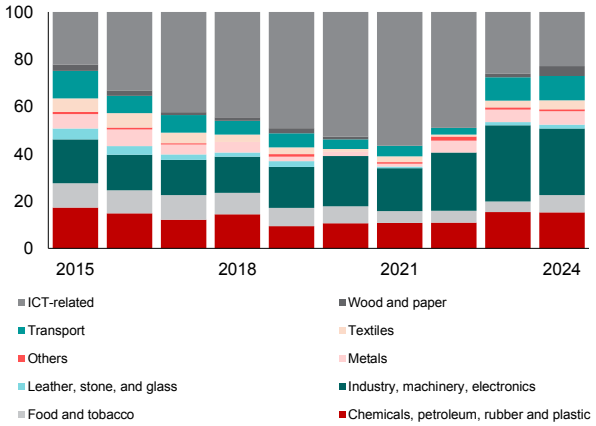
Manufacturing will still boost ASEAN+3's ability to accelerate catch-up. In an innovation-led global economy, new manufacturing sectors continue to emerge—such as the green transition, sustainable infrastructure, and the "silver economy" (AMRO 2024b).[29] ASEAN+3 economies—given diverse development levels, strong appetites for technology, and well-established manufacturing ecosystems—are well-placed to find multiple, feasible entry points to continue participating in these new and transformed global value chains. The continued influx of FDI to these new and emerging manufacturing sectors in the region attests to ASEAN+3's future as a key global manufacturing hub—including in advanced electronics, clean-energy vehicles, and new sustainable materials (Figures 3.34 and 3.35). This outcome is not necessarily guaranteed, however. The challenge to ASEAN+3 economies is to continuously retool their existing comparative advantage in manufacturing to adapt to the forces that are increasingly driving international trade and investment patterns (Figure 3.36).

Figure 3.34. ASEAN+3: Capital Expenditure of Announced FDI Projects
(Billions of US dollars)



Source: Orbis Crossborder; AMRO staff calculations.
Note: CN = China; HK = Hong Kong: FDI = foreign direct investment. Data as of December 2024, and refer to the six-month moving average of the capital expenditure of announced projects for each month. The figure includes projects that have been announced but not yet completed, and those that have already materialized and are now operational.

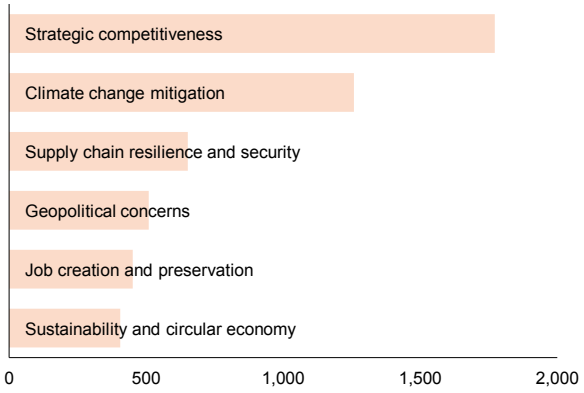
Figure 3.35 ASEAN: Manufacturing FDI Announcements, by Target Sector
(Percent of total announcements)



Source: Orbis Crossborder; AMRO staff calculations.
Note: FDI = foreign direct investment. Data as of November 2024. ICT-related includes manufacturing of communications equipment, IT hardware, and IT software. Leather, stone, and glass also include clay; metals include metal products.

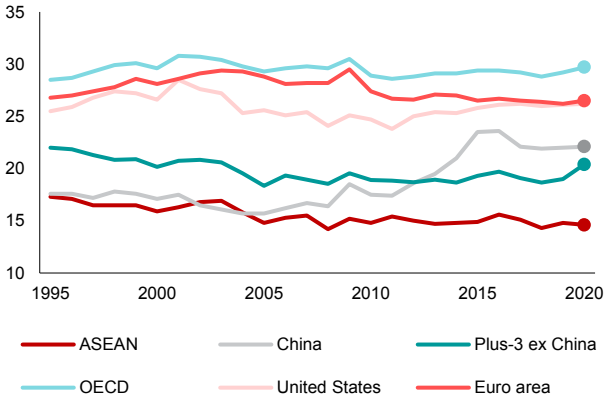
29/ The "silver economy" can be taken as the "sum of all economic activity that serve the needs of people aged 50 and over, including the products and services they purchase directly and the further economic activity this spending generates" (European Commission 2018). As such, it is not a single sector. The term is also used closely with the "silver market," a concept that emerged in Japan in the 1970s in relation to the age-inclusive provision of goods, services, and facilities.

Figure 3.36. World: Motives Driving Industry Policy Interventions, since 1 January 2023
(Times cited)



Source: New Industrial Policy Observatory, Global Trade Alert.
Note: Data as of 27 November 2024.

Figure 3.37. ASEAN+3 and Selected Economies: Services Content of Manufacturing Exports
(Percent of manufacturing export value)



Source: Trade in Value Added database, Organisation for Economic Co-operation and Development (OECD); AMRO staff calculations.
Note: Plus-3 ex China = Hong Kong, Japan, and Korea.

2: Prioritizing High Skills and Quality Services

Growing the services sector is a complementary pathway—and not a substitute—to manufacturing. The path to structural transformation is conventionally viewed as a sequential movement of workers from agriculture to manufacturing, then to services—a progression that is widely seen as favorable, in part owing to the successful experience of the US, Europe, and East Asian economies in the 1990s (Sen 2019). However, services should not be seen as a replacement for manufacturing: ASEAN+3's experience in the last three decades shows that the shift in labor to the services sector did not bring about higher productivity—but instead reduced overall productivity (Figure 3.26). In the current landscape, growing these two sectors can no longer be pursued as mutually exclusive development strategies but rather as complementary. Manufacturing and services activities are now increasingly intertwined, with services inputs accounting for about 30 to 35 percent of manufacturing goods traded globally (Figure 3.37). Growing "servicification", in turn, should also benefit the dynamism of ASEAN+3 manufacturing (AMRO 2018).[30] In general, the share of service inputs embedded in ASEAN+3 manufacturing exports remains relatively low in comparison to other parts of the world, reflecting how the region's overall productivity lags the frontier across both manufacturing and services (Section III).

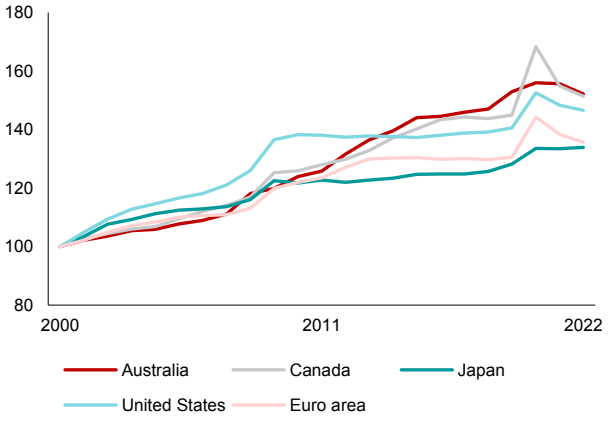
The shift to services needs to be pursued with an eye on high skills and high quality. Services will offer ASEAN+3 economies new options for job creation as the landscape of global manufacturing changes. Technological advances have increased the capital intensity of manufacturing while shortening production stages that would otherwise require human labor (Figure 3.38). This means that the manufacturing sector of the future is unlikely to generate as many jobs as it has in the past. Developing the services sector would help ASEAN+3 economies overcome this constraint, especially with the significant untapped potential in the region to grow services trade (Figure 3.39). Services-led development can unlock new employment opportunities for a bigger share of the ASEAN+3 workforce—including women and small and medium-sized enterprises—helping drive the region toward more inclusivity and sustainability (ADB 2013; United Nations Conference on Trade and Development [UNCTAD] 2024).[31] Yet, not all services are created equal. The challenge for ASEAN+3 economies is to ensure that services-led growth strategies are targeted toward high-skilled and high-value activities such as medical tourism, graphic design outsourcing, or film production. A good example is the business process outsourcing industry in the Philippines which has grown rapidly across the archipelago and created high-skilled jobs that have attracted local talents. This is especially true for middle-stage ASEAN+3 economies, where labor has been absorbed in services that exhibit lower productivity gains than manufacturing (Figure 3.29). Highly-knowledge-intensive services still form a smaller portion of service inputs to ASEAN+3 manufacturing exports—suggesting a large room for

30/ Servicification is defined here as the growing use of services as inputs by manufacturing firms. In exports, these will be the *indirect* services exports (as opposed to *direct* exports of services).

31/ Several studies show how services are typically greener and more inclusive than manufacturing. For example, Stolzenburg and Nano (2022) highlight that services global value chains tend to employ more women, including in leadership positions, and that services micro, small, and medium-sized enterprises (MSMEs) appear to face fewer barriers to export than manufacturing MSMEs. Services also require relatively more localized infrastructure investments, especially regarding digital connectivity, and are less dependent on large upfront foreign direct investment into factories and machinery than manufacturing—allowing more companies to participate in services value chains.

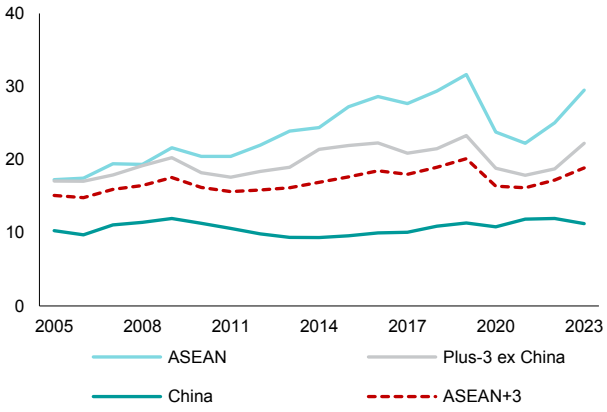
growth (Figure 3.40). Upgrading the service sector quality through technology is another key priority. For instance, the retail and wholesale industry, which has absorbed a significant portion of the region's workforce, could undergo substantial transformation through e-commerce adoption by eliminating market barriers and reducing information asymmetry (World Trade Organization 2013). Additionally, digital technologies could make traditionally location-bound services like education and healthcare increasingly tradable, creating new opportunities for business growth (World Bank and World Trade Organization 2023). Furthermore, new technology, such as artificial intelligence, could improve the productivity of low-skilled workers in various service industries (Baily and Kane 2024). This point is further elaborated in policy theme four.

Figure 3.38. Selected Economies: Capital Intensity
(2010 US dollars per hour)



Source: Bergeaud and others (2016).
Note: Capital intensity is defined as the total stock of capital divided by the total hours worked.

Figure 3.39. ASEAN+3: Total Services Trade
(Percent of ASEAN+3 total goods trade)



Source: United Nations Conference on Trade and Development; AMRO staff calculations.
Note: Plus-3 ex China = Hong Kong, Japan, and Korea. Data refers to imports and exports of services.

3: Closing Investment Gaps

The ASEAN+3 region continues to face investment gaps that must be narrowed to boost long-term, high-quality growth. While the contribution of capital accumulation to growth is forecast to gradually decline in the next three decades—shrinking by half in 2050 compared to current levels—it will still be the largest driver of growth across ASEAN+3 (Figure 3.8). Reigniting industrialization and enlarging the services sector will be contingent on economies' ability to mobilize both public and private investments toward sectors and activities that promote productivity and resilience. However, private investment activity across the region remains well-below what it was before the COVID-19 pandemic. In some economies, narrower fiscal space has constrained public investment too (Table 1.3).[32] Except for most late-stage ASEAN+3 economies, capital stock per capita across the region, including in China, is no more than a quarter of the OECD average—suggesting the need for more investment, especially in infrastructure (Figure 3.16). Mobilizing private investment—with the right enablers and incentives—would be instrumental not only in narrowing this gap; it would also help in funding about USD 1.9 trillion worth of infrastructure investments needed to address various needs in the next two decades, especially for middle-stage economies (Figures 3.41 and 3.42).[33] On top of this, the breadth and scope of investment required for ASEAN+3 to respond to ongoing major secular shifts continue to increase.

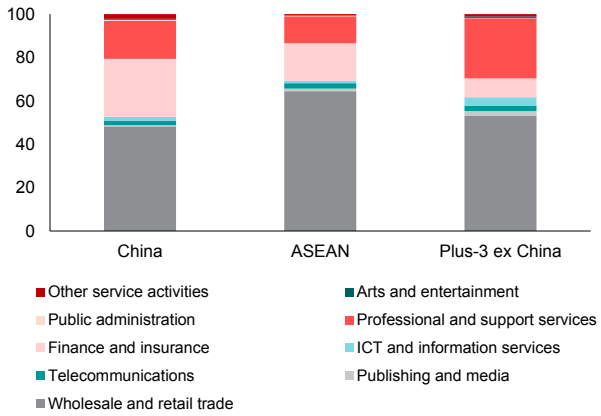
The gap is not only in physical infrastructure but also in human capital, especially in sectors and skills that are increasingly in demand globally. Investment can only be deployed efficiently by an increasingly skilled workforce—rather than merely accumulating physical assets—to generate productivity gains. Specific policy priorities will be informed by where an economy is in the stages of structural change. For example, reskilling and upskilling would be particularly relevant for middle-stage and late-stage ASEAN+3 economies, especially where demographic headwinds are constraining the size of the labor force. In addition, as technology transforms the nature of the job market, the demand for digital literacy

32/ However, even with limited fiscal space, development expenditure can be strategically prioritized for growth. For example, in the case of Malaysia, public investment is being directed towards high-impact infrastructure, digital transformation, and green initiatives, supported by targeted fiscal incentives to crowd in private sector participation. These investments are managed within a framework of fiscal discipline, with the Public Finance and Fiscal Responsibility Act 2023 (Act 850) enhancing governance mechanisms and ensuring capital efficiency.

33/ ASEAN+3's investment "gap" averages about USD 128 billion annually, at the very least (Global Infrastructure Hub 2018).

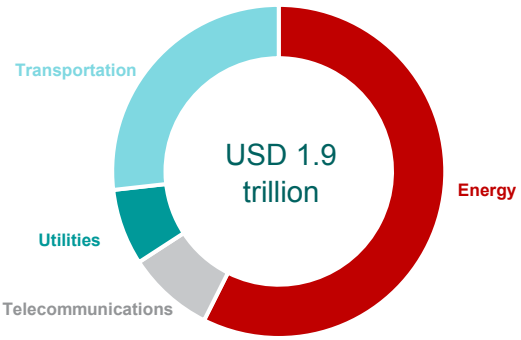
and proficiency will increase rapidly. However, many of the region's economies have marked deficiencies in highly-in-demand skills, especially those related to technology and data science (Figure 3.43). Closing this gap—with parallel investments in healthcare—will facilitate ASEAN+3 economies' ability to successfully transition to the next stage of structural change. Technology would be a crucial tool for investing better in ASEAN+3's human capital, helping remove some barriers to education access for some sectors of the economy and allowing for more inclusive job generation, especially as the region continues to age (AMRO 2024b).

Figure 3.40. ASEAN+3: Digital-Intensive Services Embodied in Manufacturing Exports, by Service Type
(Percent of total)



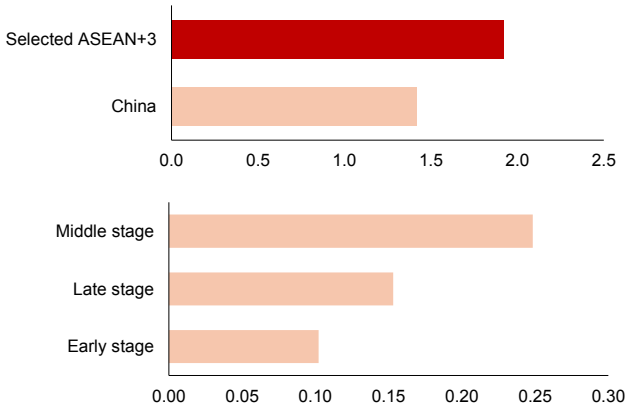
Source: Trade in Value Added (TiVA) database, Organisation for Economic Co-operation and Development (OECD); AMRO staff calculations.
Note: Plus-3 ex China = Hong Kong, Japan, and Korea. Data refers to domestically produced services (as opposed to foreign services embedded in domestic manufacturing). Service types included all those classified by the OECD as medium-high to high digital intensive-sectors.

Figure 3.41. ASEAN+3: Investment Requirements over 2025–40, by Sector
(Percent of total)



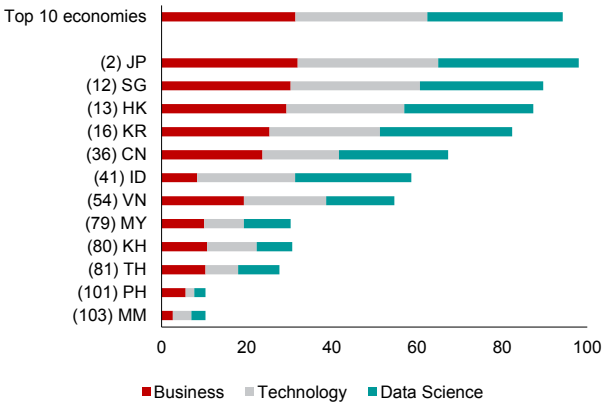
Source: G20 Global Infrastructure Outlook; AMRO staff calculations.
Note: Utilities mainly cover water. Transportation infrastructure covers ports, rail, roads, and airports.

Figure 3.42. Selected ASEAN+3: Investment Needs over 2025–40, by Stage of Structural Change
(Trillions of US dollars)



Source: Global Infrastructure Hub (2018); AMRO staff calculations.
Note: Selected ASEAN+3 includes Cambodia, China, Indonesia, Japan, Korea, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam. Early stage include Cambodia and Myanmar. Middle stage include Indonesia, the Philippines, Thailand, and Vietnam. Late stage invcludes Japan, Korea, Singapore, and Malaysia. Section III features a detailed discussion.

Figure 3.43. ASEAN+3: Global Skills Scores
(Index, 100 = highest)



Source: Coursera (2024); AMRO staff calculations.
Note: BN = Brunei; CN = China; HK = Hong Kong; ID = Indonesia; JP = Japan; KH = Cambodia; KR = Korea; LA = Lao PDR; MY = Malaysia; MM = Myanmar; PH = the Philippines; SG = Singapore; TH = Thailand; VN = Vietnam. The Coursera scores have been transformed such that the highest score for each domain is 33.33, and the total for all three domains is 100. The top 10 economies are Switzerland, Japan, Germany, Netherlands, France, Sweden, Spain, Austria, Denmark, and Belgium. Numbers in parenthesis represent rank out of 109 economies.

4: Boosting Innovation and Leveraging on Technology

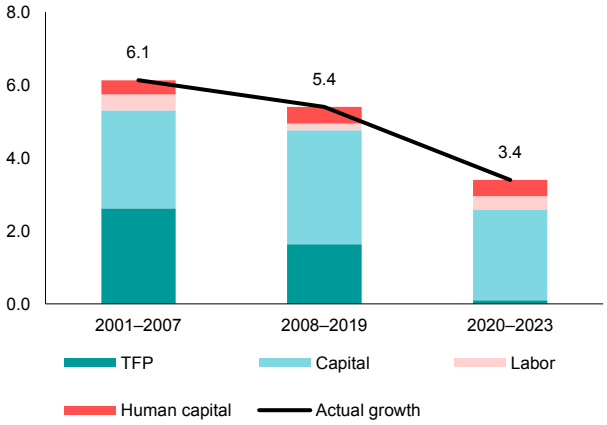
Prioritizing innovation and competition is key to improving resource allocation across sectors and protecting ASEAN+3's growth momentum against secular decline. The deceleration in TFP accounted for over half of global growth's slowdown since the mid-2000s, mainly owing to inefficient resource allocation across firms stemming from barriers including policies that prevented capital and labor from reaching the most productive companies (Li and Noureldin 2024). In ASEAN+3, about 80 percent of the fall in historical growth between 2001 and 2023 was because of weakness in TFP (Figure 3.44). The growth effect of structural reforms that direct resources toward the most productive firms and sectors—for example, by promoting market competition and

rewarding innovation—is substantial (IMF 2024c).[34] To create a more efficient economy, an environment that deploys targeted incentives, robust support to facilitate the flow of knowledge, easier access to financing and talent—especially for innovative firms—and puts in place mechanisms that do not excessively protect incumbents is instrumental (AMRO 2024b; World Bank 2024b). In some economies, competition and innovation could be made more dynamic by reassessing the use of strict public procurement rules, price controls, barriers to foreign trade and investment, and static competition rules or frameworks (Figure 3.45).[35, 36]

Fostering innovation can also lift productivity within sectors, narrowing the productivity gaps in middle- and late-stage ASEAN+3 economies. This will be especially critical for the late-stage group as, given the economic maturity in some economies, room for labor movement toward more productive sectors is already limited and the quality of human capital is already very high. In other words, the key source for future growth for some late-stage ASEAN+3 economies would primarily come from productivity improvements, including closing their distance to their more advanced peers, for example by adopting technologies or inventing new ones, especially those related to services (Figure 3.26). Innovative technologies can also drive productivity gains essential for addressing structural challenges in advanced economies, such as aging populations and demographic headwinds. Breakthroughs in life sciences can mitigate the impacts of aging by improving healthcare and workforce efficiency, while automation and "smart" supply chains enhance resilience against trade and logistics disruptions. In ASEAN+3, significant disparities in technological capabilities—both between and within economies—highlight the potential for innovation to lift productivity constraints and adapt to these pressures (AMRO 2024b).

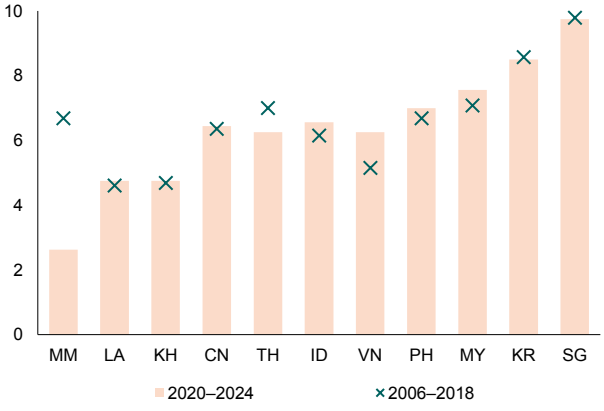
By leveraging advances in new technology, such as artificial intelligence, economies can fundamentally redefine structural transformation, creating pathways for simultaneous advancement and deeper integration across sectors. In agriculture, innovations like precision farming, automated crop monitoring, and resource optimization enhance yields and reduce waste, while in manufacturing, automation, predictive maintenance, and supply chain optimization support higher-value production while reducing labor. Digital platforms and other technological advancements have expanded the tradability of services, enabling cross-border delivery of healthcare, education, and financial services (World Bank 2024b; AMRO 2024b). These technologies can also drive structural transformation by altering economic interactions (Figure 3.46), such as enabling the servicification of manufacturing through activities like customization, after-sales support, and real-time analytics (United Nations Economic and Social Commission for Asia and the Pacific and UNCTAD 2019). Furthermore, technology-enabled digital services create new opportunities for ASEAN+3 economies to integrate into global trade networks, enhancing competitiveness and connectivity. However, rapid adoption also poses

Figure 3.44. ASEAN+3: Contribution of Components to GDP Growth
(Percentage points)



Source: AMRO staff calculations.
Note: TFP = total factor productivity. The actual growth and factor contributions are the simple average in the time period.

Figure 3.45. Selected ASEAN+3: Market-based Competition Scores
(10 = highest score)



Source: Bertelsmann Stifung's Transformation Index (BTI) (2024); AMRO staff calculations.
Note: CN = China; ID = Indonesia; KH = Cambodia; KR = Korea; LA = Lao PDR; MY = Malaysia; MM = Myanmar; PH = the Philippines; SG = Singapore; TH = Thailand; VN = Vietnam. The "Organization of Market and Competition" of the BTI assesses the clarity and stability of market-based competition rules across four areas: market organization, competition policy, foreign trade liberalization, and banking system.

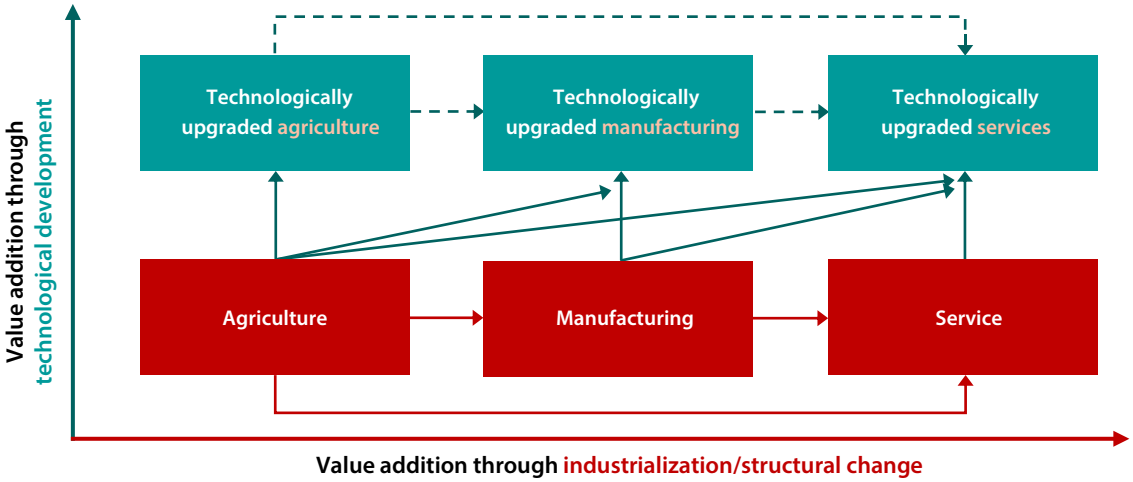
34/ One reason is that higher competition encourages innovation and rapid diffusion of technology, pressuring inefficient companies to exit, which in turn releases resources to more innovative firms (OECD 2024).

35/ OECD's product market regulation study—which covers four economies in the region: China, Indonesia, Japan, and Korea.

36/ For example, in the Philippines, the New Government Procurement Act was signed into law in July 2024 to modernize and enhance transparency in government procurement by mandating public disclosure of procurement data. The Implementing Rules and Regulations of the Republic Act No. 12009 was also published in February 2025 to ensure efficiency, accountability, and participatory governance in the use of public resources.

risks, including job displacement in automation-prone sectors and widening inequality, particularly in economies reliant on routine jobs like business process outsourcing, such as the Philippines (AMRO 2024b). To ensure inclusive growth, governments should invest in science, technology, engineering, and mathematics education and advanced digital skills, support small, and medium-sized enterprises in adopting new technologies, and implement ethical regulatory frameworks to promote transparency, accountability, and data privacy. Regional cooperation is essential to align shared values, shape global norms, and ensure the equitable distribution of technological benefits, particularly as advances in technologies such as artificial intelligence continue to reshape economic possibilities across economies and societies.

Figure 3.46. ASEAN+3: Potential Technology-Enhanced Development Pathways



Source: United Nations Conference on Trade and Development (2019); AMRO staff

5: Strengthening State Capacity

A strong capable state is a prerequisite for growth-enhancing structural transformation (Figure 3.47). State capacity broadly refers to the ability of the government to execute policy priorities effectively. This ranges from finding adequate solutions to implementing them; a task beyond just saying what they are (Linz 1978). Growing manufacturing and services, mobilizing investment, and driving innovation are key prescriptions for ASEAN+3 to advance toward high-quality growth—but these are irrelevant if the governments are not able to actualize them. As ASEAN+3 economies move to the next stage of growth and development become more complex, so in tandem should their state capabilities strengthen (Figure 3.48). The very idea of structural transformation rests on an assumption that the state has the capacity to design, formulate, and implement the necessary policies to achieve the transformation: for example, on the ability of policymakers to establish macroeconomic and social stability, or on fiscal authorities' ability to generate revenues that can be used to invest in productivity-enhancing infrastructure (Figure 3.33).

Successful development strategies do not only invest in infrastructure and people but also in administrative capacity (Juhasz and Lane 2024). Amid common challenges, the key determinant of success will be how economies are able to improve public administration to reach their goals: how effectively the state can coordinate *internally*, and how effectively it can engage *externally*—that is, with other parts of the economy. Effective within-government coordination reduces the risks of oversight and redundancies, especially as growth challenges increasingly span the mandates of multiple ministries and agencies. Externally, facilitating the flow of knowledge with and from the private sector, and enhancing public-private interaction allows for better discovery of policy solutions and objective evaluation as to whether policies are working as intended. A more iterative and collaborative partnership with the private sector and academia would enable rapid transfer of knowledge—such as over new technologies—and help policymakers gather information on the technical issues at play, allowing for a more dynamic and responsive state.[37]

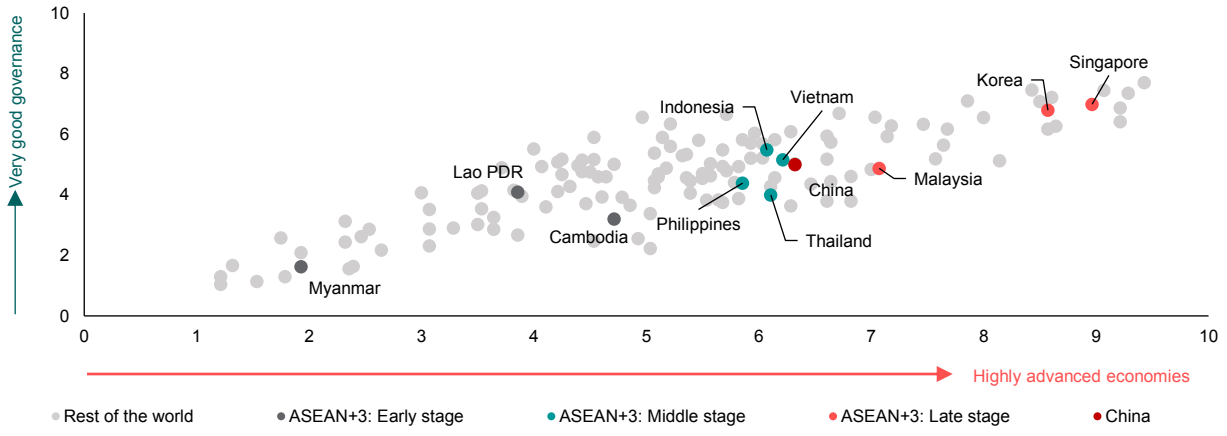
[37] This is what Evans (1995) calls "embedded autonomy," where he attributed the success of East Asia's growth experience to policymakers being able to combine autonomy from private interest groups with "embeddedness" in social ties. These links were essential to ensure that governments had access to information needed to design workable policies, adjust to changing circumstances, and prod firms along new, more efficient trajectories in the most effective way.

Scenario analysis suggests that ASEAN+3 can materially boost long-term growth relative to the baseline by implementing a variety of growth-enhancing policies. Among various policies, boosting TFP growth will be the most crucial to all economies—regardless of their stage in structural change. The rapid advancement of new technologies—particularly artificial intelligence and other frontier innovations—makes this goal more achievable by offering unprecedented opportunities to transform industries and boost productivity across sectors, as discussed in policy theme 4 on boosting innovation and leveraging on technology. Under a scenario where ASEAN+3 economies narrow their productivity gap to the frontier by 30 percent through the effective adoption of these technological advances, growth could improve by 1 percentage point annually, on average, from 2025 to 2050 (Figure 3.49). Across the region, ASEAN economies would benefit considerably from ramping up their infrastructure, while the Plus-3 economies will see relatively higher gains from shoring up human capital (relative to physical capital accumulation). In a scenario where the state can operate at its most efficient and effective, where policies are implemented successfully across all three policy dimensions, ASEAN+3 growth could be as much as 2.5 percentage points higher in the next 10 years relative to the baseline—equivalent to a growth boost of nearly 60 percent, if supportive policies are put in place.

These, and many other sustained high growth outcomes, will need to be supported by stronger multilateral cooperation. ASEAN+3 has leveraged economic openness and international cooperation to grow rapidly, create internationally competitive business sectors, and improve the living standards for more than half of the world's population. This receptiveness—to the extent that it enhances domestic productivity—should remain relevant in the coming decades. The pursuit of new global markets provides an opportunity for diversification and resilience. Continued commitment to rules-based trade will underpin higher resource efficiency across ASEAN+3, while openness should hasten technological diffusion which is critical to boosting overall productivity. ASEAN+3 economies should capitalize on regional and multilateral cooperation platforms to gain wider access to expertise and new technologies, learn from peers, build capacity, and discover innovative financing solutions. The massive investments required to promote high-quality growth—such as for improved logistics, climate resilience, and productive aging—can be much easier to attain through collective action than an individualistic approach.

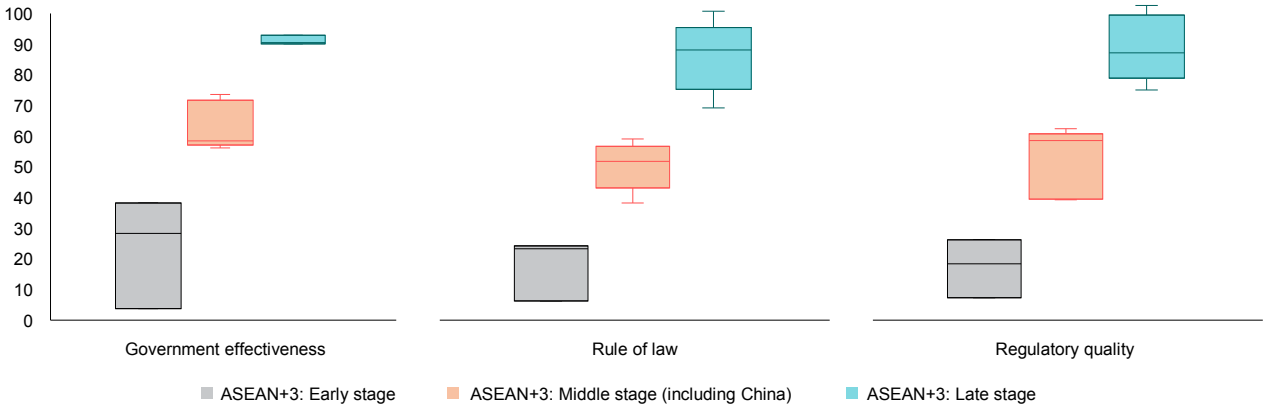
Low growth and productivity need not be the destiny of ASEAN+3 in the future. By continuing to leverage manufacturing capabilities to adapt to the rapidly evolving global landscape and developing the higher-skilled services sector, ASEAN+3 economies can be well on-track to achieving sustained, high-quality economic growth. These changes will materialize from a mix of policies that target investment gaps (especially infrastructure that enhances productivity and resilience), foster economic dynamism, and nurture innovation, backed by a strong, credible state mechanism to implement them. In addition, ASEAN+3 economies need to leverage regional cooperation: doing so expands their available options for sourcing the finance, technologies, and know-how necessary to undertake these transformative changes. With strong policy adjustments that reflect the lessons of the past and are tailored to new economic realities, ASEAN+3 should be able to secure its future not only as a center of economic gravity but also as a successful model for inclusive and sustainable growth that other regions can look up to.

Figure 3.47. World: Governance and Economic Growth
(Scores, 10 = highest score per dimension)



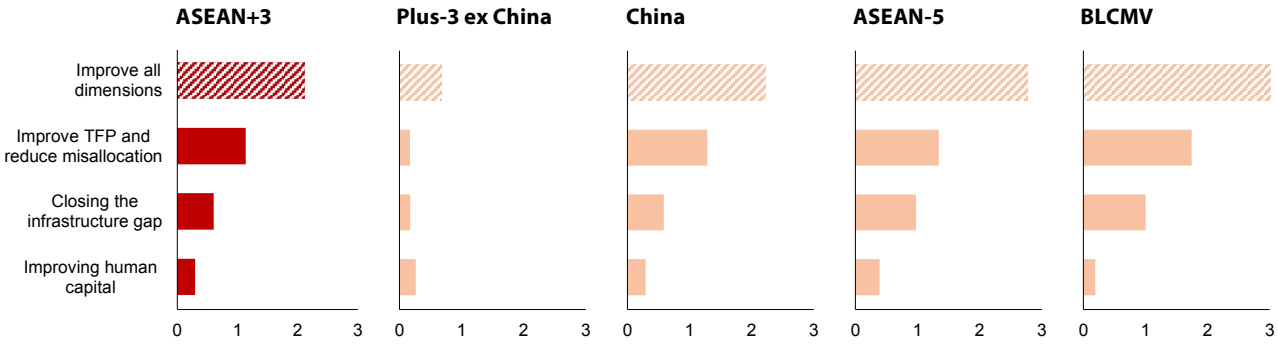
Source: Bertelsmann Stifung's Transformation Index (BTI) (2024); AMRO staff calculations.
Note: The vertical axis is the scores from the BTI's Governance Index, while the horizontal axis is the scores from the Economic Transformation Index. Data is not available for Brunei and Japan. ASEAN+3 economies are grouped by where they are in terms of structural change. Early stage economies include Cambodia, Lao PDR, and Myanmar. Middle stage economies include Indonesia, the Philippines, Thailand, and Vietnam. Late stage economies are Brunei, Hong Kong, Japan, Korea, Singapore, and Malaysia. Section III features a detailed discussion.

Figure 3.48. ASEAN+3: Selected Governance Indicators, by Stage of Structural Change
(Percentile rank, 0–100)



Source: Worldwide Governance Indicators (2023), World Bank; AMRO staff calculations.
Note: Government effectiveness "captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies;" Rule of law "captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence;" and Regulatory quality "captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development." ASEAN+3 economies are grouped by where they are in terms of structural change. Early-stage economies include Cambodia, Lao PDR, and Myanmar. Middle-stage economies include Indonesia, the Philippines, Thailand, and Vietnam. China is included in the middle-stage group for brevity. Late-stage economies are Brunei, Hong Kong, Japan, Korea, Singapore, and Malaysia. Section III features a detailed discussion.

Figure 3.49. ASEAN+3: Impact of Selected Policy Interventions on Annual Growth to 2050
(Percentage point increase relative to the baseline)



Source: AMRO staff calculations.
Note: ASEAN-5 = Indonesia, Malaysia, Philippines, Singapore, and Thailand; BCLMV = Brunei, Cambodia, Lao PDR, Myanmar, and Vietnam; Plus-3 ex China = Hong Kong, Japan, and Korea. TFP = total factor productivity. Upside scenarios assume all regional economies converge to the respective Organisation for Economic Co-operation and Development members or the theoretical frontiers at the historical convergence rate achieved by the four leading ASEAN+3 economies (Hong Kong, Japan, Korea, and Singapore).

Box 3.6:

Gender-Inclusive Growth in Cambodia: Achievements and Challenges

Gender inclusion fuels economic growth and financial resilience through multiple channels (Figure 3.6.1). For example, higher female labor force participation has a positive and statistically significant effect on economic growth (Baerlocher and others 2021). One channel is through human capital accumulation: increased female labor participation is consistently associated with a reduced gender education gap, which can foster economic diversification in low-income and developing economies (Kazandjian and others 2019). Another channel is through improved resource allocation, which expands and diversifies the talent pool to include more women. This enables the generation and implementation of more innovative ideas, in turn boosting total factor productivity (TFP) growth (Cuberes and Teignier 2016; Ostry and others 2018). In addition, greater inclusion of women as users, providers, and regulators of financial services is associated with greater financial stability (Goyal and Sahay 2024). Perrin and Weill (2022), for example, show that women generally outperform men in terms of loan repayment, and a narrower gender gap in access to credit correlates with stronger financial stability. Sahay and Cihak (2018), on the other hand, find that a higher representation of women on the boards of banking supervision agencies is associated with greater bank stability.

Economic development, such as rapid industrialization, could also foster women's economic empowerment, with Cambodia being a notable example in ASEAN+3. Cambodia has been one of the fastest-growing economies in the region, averaging 7.6 percent growth from 2010–2019 (Figure 3.6.2). The influx of foreign direct investment (FDI) has bolstered manufacturing, especially the garment sector, which contributes over 70 percent of total exports.[1] The domestic garment sector employs more than one million workers—nearly 80 percent of whom are women (International Labour Organization [ILO] 2018). As FDI inflows help reduce gender inequality, for example as in Ouedraogo and Marlet (2018), Cambodia has also achieved significant gains in increasing its female labor force participation rate (Figure 3.6.3). The gender wage gap—or the ratio of female to male wages—also improved from 73.0 percent in 2009 to 82.0 percent in 2019, driven by progress in the manufacturing sector (Figure 3.6.4). These labor market achievements have also gone hand-in-hand with progress in education: as of 2022, a higher percentage of girls (67.5 percent) than boys (57.1 percent) in Cambodia complete lower secondary school. This difference between girls and boys is about three times larger than the East Asia and Pacific regional average (World Bank Gender Data 2024).

However, challenges remain for promoting gender equality in the post-pandemic era, and addressing them could further unlock Cambodia's economic potential. The agriculture and services sectors continue to show a wider gender wage gap, and a large share of the workforce remains in vulnerable informal employment (Figure 3.6.4). While the vulnerable employment ratio for women has declined, the gender gap has widened, reflecting slower progress for women (Figure 3.6.5).[2] This, in part, reflects the unequal impact of COVID-19 across genders (ILO 2021). Pandemic scarring reduced Cambodia's potential growth by an average of 1.95 percentage points during 2020–2022, with human capital stock and TFP contributing about 0.5 percentage point each (Tsang and others 2024). However, women were more affected than men by the pandemic, owing to their prevalence in the tourism sector and cultural norms where women are responsible for domestic care and household chores (Royal Government of Cambodia 2023). In the area of financial inclusion, men are more likely than women to have bank accounts, or to have made or received digital payments (World Bank 2024a). Addressing gender disparities is vital to mitigating these scarring effects and fostering higher and more inclusive economic growth in the economy.

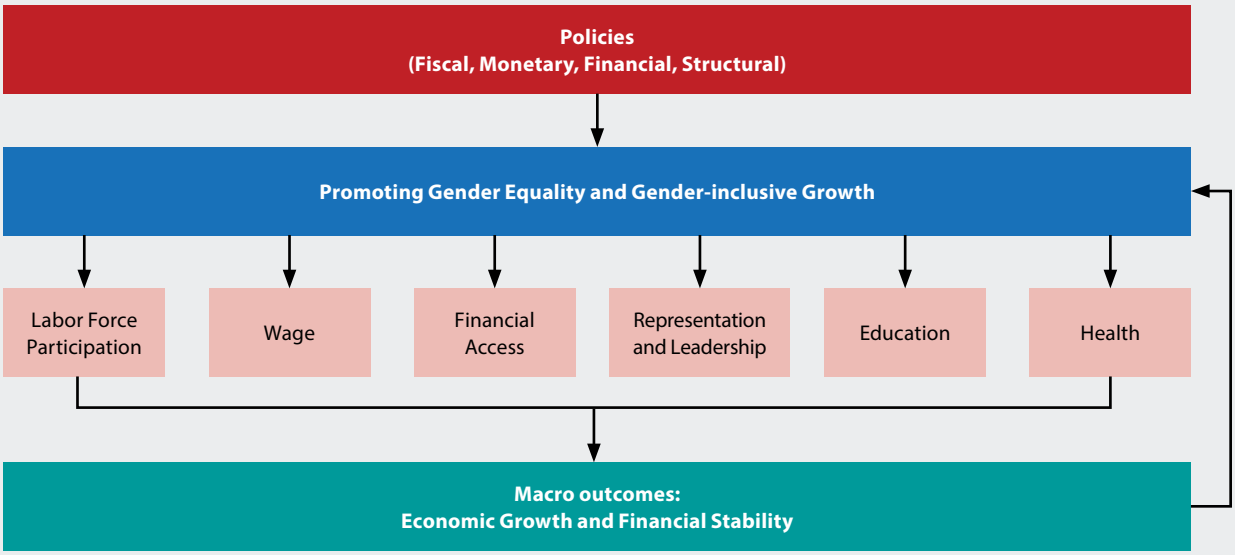
This box was written by Chunyu Yang.

1/ More formally, the garment, textile, and footwear sector.

2/ The vulnerable employment ratio is contributing family workers and own-account workers as a percentage of total employment.

The Cambodian government has taken commendable steps toward advancing gender equality, with continued efforts needed to ensure impactful outcomes. Currently, two national women's institutions—the Cambodian National Council for Women and the Ministry of Women's Affairs (MoWA)—have been leading efforts to promote and protect women's empowerment in Cambodia. In addition, all line ministries were tasked to develop Gender Mainstreaming Action Plans, or GMAPs, in their respective technical sectoral fields.[3] The government is also drafting the national policy on gender equality for the next decade, along with a road map to introduce gender budgeting.[4] The Cash Transfer Program for Pregnant Woman and Children—established in 2019—has provided social protection stipends totaling USD 10 million to over 170,000 pregnant women and children under the age of two since its inception (MoWA 2024). Moving forward, government efforts toward a tailored approach that incorporates gender in fiscal, monetary, financial, and structural policies should bring benefits to growth (International Monetary Fund 2024a). Support from development partners and international organizations, such as through surveillance and technical assistance, among others, can play a crucial role in identifying gender-related challenges and providing tailored policy advice to promote inclusive macroeconomic outcomes in Cambodia.

Figure 3.6.1. World: Gender Inclusion and Economic Outcomes

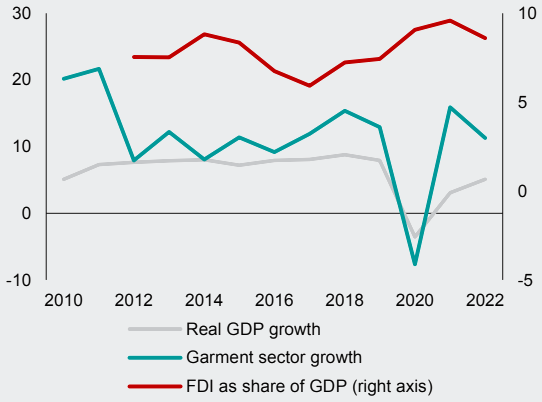


Source: Goyal and Sahay (2024); AMRO staff.

3/ Gender mainstreaming is the process of assessing the implications for women and men of any planned action, including legislation, policies, or programs, in all areas and levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring, and evaluation of policies and programs in all political, economic, and societal spheres so that women and men benefit equally. The ultimate goal is to achieve gender equality (United Nations Women 2022).

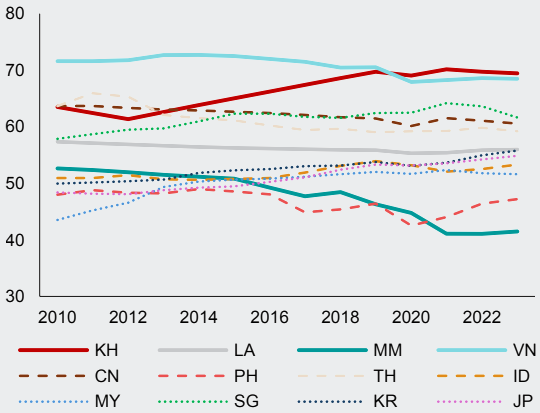
4/ Gender budgeting or gender-responsive budgeting is an approach that uses fiscal policy and public financial management to promote gender equality and women's and girls' development (ADB 2024).

Figure 3.6.2. Cambodia: GDP Growth, Garment Sector Growth, and FDI
(Percent year-on-year; Percent of GDP)



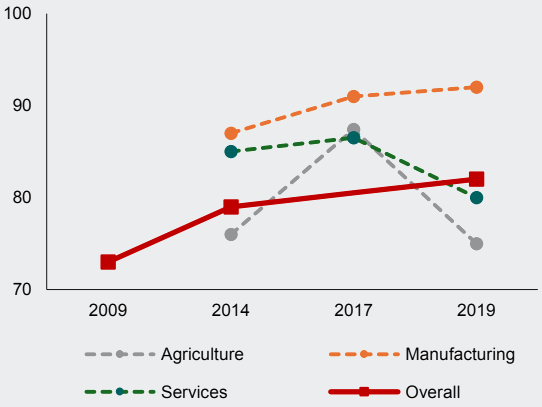
Source: National Institute of Statistics, Cambodia; National Bank of Cambodia; AMRO staff calculations.
Note: FDI = foreign direct investment.

Figure 3.6.3. Selected ASEAN+3: Female Labor Force Participation Rate
(Percent of female population aged 15 and above)



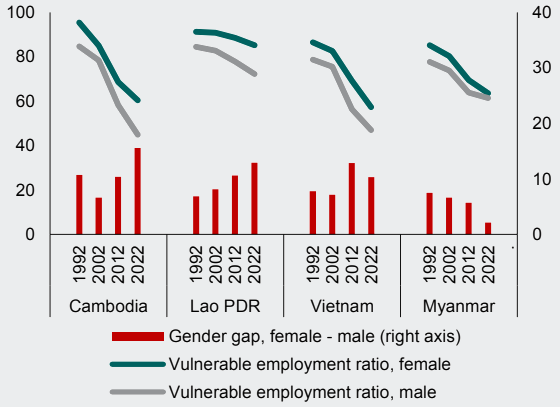
Source: International Labour Organization (ILO).
Note: CN = China; ID = Indonesia; JP = Japan; KH = Cambodia; KR = Korea; LA = Lao PDR; MY = Malaysia; MM = Myanmar; PH = Philippines; SG = Singapore; TH = Thailand; VN = Vietnam.This is based on ILO estimation model. Data on the labor force used in the model are compiled by the ILO from labor force surveys, censuses, and establishment censuses and surveys.

Figure 3.6.4. Cambodia: Gender Wage Gap, by Sector
(Ratio of female to male wages, in percent)



Source: Cambodia Socio-Economic Survey Reports via United Nations Development Programme (2021) and Kokas and others (2024); AMRO staff calculations.

Figure 3.6.5. CLMV: Vulnerable Employment and Gender Difference
(Percent; Percentage points)



Source: ILO; AMRO staff calculations.
Note: This is based on ILO estimation model. Data are drawn from labor force surveys and household surveys, supplemented by official estimates and censuses for a small group of countries.

Box 3.7:

Moving Towards Cleaner and Greener Growth in ASEAN+3

Carbon emissions from the ASEAN+3 region, while still on the uptrend, have decelerated in recent years compared to the previous decade (Figure 3.7.1). This improvement reflects a combination of two factors: (1) easing emissions in the more carbon-intensive member economies—those in ASEAN and China, and (2) the continued fall in emissions in more advanced economies in the region, like Japan and Korea. This slower increase in emissions has been especially notable since the landmark Paris Agreement came into effect at the end of 2016 (United Nations Framework Convention on Climate Change [UNFCC] 2015). Through their submission of their nationally determined contributions—or NDCs—to the UNFCC, all ASEAN+3 economies have committed to taking specific actions and measures to help limit global warming to well below 2 degrees Celsius—preferably to 1.5 degrees—by 2050, which is the central goal of the Paris Agreement (AMRO 2023).[1]

ASEAN+3's commitment to climate action means that any future growth strategy will need to be aligned and consistent with a further lowering of carbon emissions. As in Kaya (1990), an economy's carbon emissions arise from four factors: (1) population growth; (2) income levels; (3) energy intensity of growth; and (4) the carbon intensity of energy. The first three components relate to an economy's demand for energy, while the last one is closely related to its choice of energy sources. Thus, if the ASEAN+3 region aims to experience robust growth in the future (translating to higher energy demand), the remaining lever to reduce overall carbon emissions—and meet their Paris Agreement commitments—is by reducing their respective carbon intensities.

In some ways, the more advanced economies in the region have achieved this balance of higher income growth and lower carbon emissions (Figure 3.7.2). Some are also in the late stage of structural change, where technological capabilities tend to be relatively high compared to other ASEAN+3 peers (Figure 3.21). The fall in average energy intensity (of GDP) in these economies suggests higher efficiency in producing energy that is needed to generate economic activity. There has also been a faster decline in the carbon intensity of their energy usage, showing an increasing reliance on cleaner energy sources. Japan and Korea, for example, are among the top economies in ASEAN+3 in terms of installed capacity for renewable energy, and are also in the top globally, in terms of operational nuclear capacity (AMRO 2023). These trends, in turn, have helped offset the strong influence of growing incomes and energy demand on overall emissions (Figure 3.7.2).

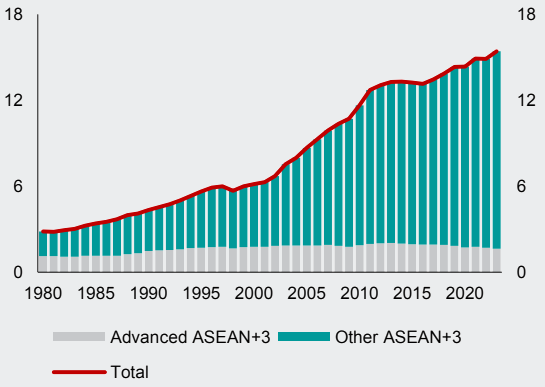
Elsewhere in ASEAN+3, resilient income growth has also pushed up overall emissions—but their average energy and carbon intensities have not fallen significantly. In fact, barring pandemic years, intensities have trended higher compared to the mid-2000s (Figure 3.7.3). Most of these economies are in the early to middle stages of structural change—and the challenge for domestic policymakers is to be able to advance into the next phase of economic transformation without relying as much on fossil fuels. For middle-stage economies that are experiencing stalled industrialization, in particular, this would mean seriously incorporating more energy-efficient and low-carbon technologies in efforts to revitalize their manufacturing industries. The rising use of renewables in ASEAN+3 is highly encouraging, but there is still significant room to scale up its usage to all sectors (Figure 3.7.4). Upgrading and greening power-generating technologies should also be developed in tandem with the promotion of clean energy sources, as well as exploring the use of cleaner forms of hydrogen—typically used by "hard-to-abate" sectors, many of which also happen to be key contributors to ASEAN+3 economic activity. Regulations can play a significant role in reducing energy and carbon intensities, through the introduction of more stringent energy performance and fuel-economy standards, or instruments like carbon taxes.

This box was written by Marthe M. Hinojales.

1/ This is compared to pre-industrial global average temperatures.

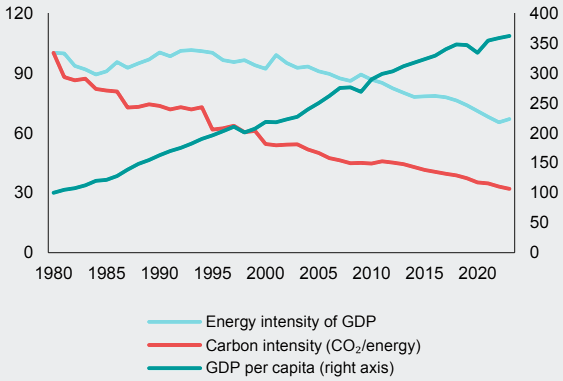
At the current juncture, however, many of the technologies required to lower these energy and carbon intensities are not yet widely available to many economies in the region. Some of these technologies are either still in the early stages of commercialization or carry prohibitive costs. The different trends between these two groups in the region highlights a huge opportunity and rationale for ASEAN+3 economies to collaborate, exchange knowledge and expertise, and learn from the experience of successful peers. Without these technologies—and supporting policies—in place, there can be a real risk of some ASEAN+3 economies needing to forfeit a portion of their future economic growth to meet their climate goals. With regional cooperation and coordination, this need not be the case; after all, given very strong regional ties, the ASEAN+3 region is only as strong as its weakest link.

Figure 3.7.1. ASEAN+3: Annual Carbon Dioxide Emissions
(Billions of tons)



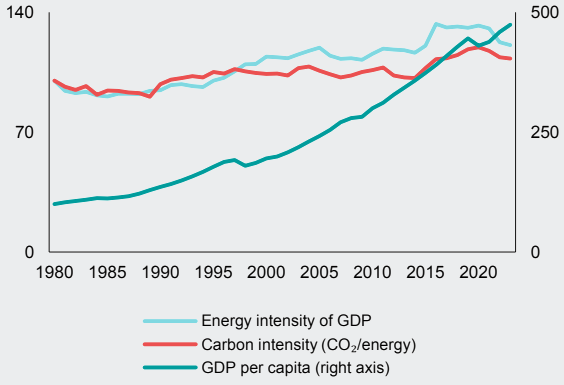
Source: Global Carbon Budget via Our World In Data; AMRO staff calculations.
Note: "Advanced ASEAN+3" includes Hong Kong, Japan, Korea, and Singapore. "Other ASEAN+3" includes the remaining ASEAN economies, plus China. The grouping follows the International Monetary Fund's classification.

Figure 3.7.2. Plus-3 ex China and Singapore: Selected Drivers of Carbon Dioxide Emissions
(100 = 1980)



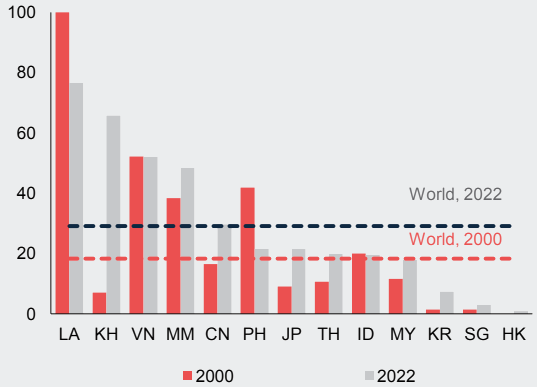
Source: Global Carbon Budget via Our World In Data; AMRO staff calculations.

Figure 3.7.3. Selected ASEAN and China: Selected Drivers of Carbon Dioxide Emissions
(100 = 1980)



Source: Global Carbon Budget via Our World In Data; AMRO staff calculations.
Note: Data for ASEAN excludes Singapore.

Figure 3.7.4. ASEAN+3: Renewable Electricity Generation
(Percent of total generation)



Source: International Renewable Energy Agency; AMRO staff calculation.
Note: CN = China; HK = Hong Kong; ID = Indonesia; JP = Japan; KH = Cambodia; KR = Korea; LA = Lao PDR; MM = Myanmar; MY = Malaysia; PH = Philippines; SG = Singapore; TH = Thailand; VN = Vietnam.

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Annex:

Developments in ASEAN+3 Economies

Brunei Darussalam

Brunei's economy experienced broad-based growth in 2024, marking its strongest expansion in decades. Real GDP expanded by 4.2 percent in 2024. Activities in the upstream O&G sector recovered strongly, benefiting from the accelerated production from newly developed oil wells which came on stream earlier-than-expected in October 2023. The completion of major post-pandemic rejuvenation works further supported growth in the sector. Similarly, in the non-O&G sector, growth was driven by a strong rebound in downstream activities, and the continued expansion of the services sector.

Labor market conditions remained stable. Employment grew by 2.8 percent in 2024, mainly led by expansion in local hires notably in the accommodation and food services, education as well as other services sectors. The strong job creation in the non-O&G sector, coupled with the active participation of locals in the workforce have supported the labor market. This helped to bring the unemployment rate down to 4.8 percent in 2024 from 5.2 percent in 2023, even though migrant worker levels remained below pre-pandemic figures.

Headline inflation has turned negative since February 2024. In 2024, the inflation reading came in at –0.4 percent, driven mainly by declines in prices of transport, communication, clothing and footwear. Of significance, transport CPI fell by 1.2 percent, driven by falling prices of vehicles and transport services. In contrast, food prices moderated sharply to 0.5 percent during the same period.

Overall balance of payments (BOP) position weakened slightly in June 2024, amid larger net outflows in the financial account. Despite a large surplus in the current account in the first half of 2024 (18.9 percent of GDP), net capital outflows were sizeable, amounting to USD 1.5 billion. As a result, overall BOP registered a deficit of 3.9 percent of GDP during the period. This is reflected in lower international reserves, which fell to USD 4.2 billion as of June 2024. For the year, the current account surplus is estimated to be largely sustained, at 13.8 percent of GDP, mainly on account of stronger export outlook in both the upstream O&G and downstream non-O&G sectors.

Bank lending continued to be broad-based and robust. Total banking sector credit strengthened by 7.9 percent (year-on-year) in 2024, in line with the sustained expansion in economic activity. From the sectoral point of view, household and other services sectors continued to be important drivers of credit growth. Banks' offshore financing activities—mainly in the financial and commercial property sectors—were also important in supporting lending activities.

Key financial soundness indicators showed that banking institutions remain highly capitalized with ample liquidity. The aggregate capital adequacy ratio stood at 20.5 percent in 2024, staying well above the minimum regulatory requirement. Asset quality has strengthened, with nonperforming loan ratio decreasing further to 2.0 percent in 2024. Key liquidity metrics also point to ample buffers in the banking system.

Brunei's fiscal balance reversed to a large deficit in FY2023 due to weaker O&G revenue. The deficit outturn stood at 11.9 percent of GDP in FY2023 (from 1.1 percent of GDP in FY2022), as O&G revenue collection nearly halved from the previous fiscal year. This reflects the headwinds in O&G production and lower energy prices relative to the previous fiscal year, which impacted export receipts. In FY2024, the fiscal deficit is estimated at 11.7 percent of GDP.

Risks to the growth outlook are broadly balanced. Since late 2023, the outlook has improved, benefiting from new O&G field discoveries, offering significant upsides to growth. Downside risks in the near-term stem from potential production headwinds from the maturation of O&G fields and supply chain disruptions due to heightened geopolitical tensions in the Middle East. In the medium term, maintaining economic diversification momentum will remain challenging, especially in an increasingly less friendly global environment. Geostrategic competition and shifting trade patterns add to the complexities of sustaining economic diversification. These global dynamics heighten uncertainty and intensify competition for foreign direct investment (FDI), making it more challenging to attract strategic capital and technology flows critical to diversification.

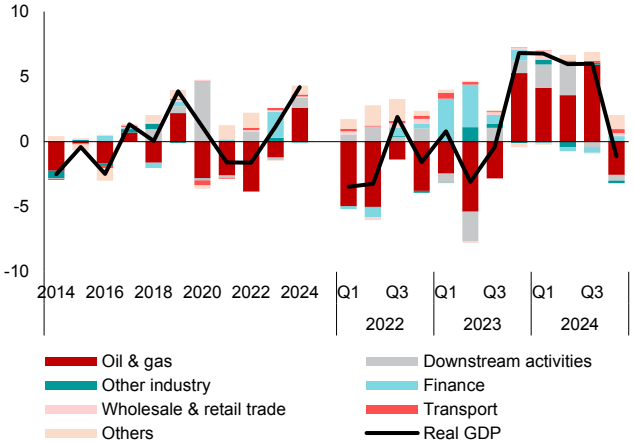
Structural transformation to achieve a more diversified and inclusive economic structure remains a key long-term challenge. To achieve sustained and well-balanced economic growth that is inclusive, the government has identified five priority areas for targeted development—downstream O&G, food, tourism, ICT, and services. However, the diversification progress across these sectors has so far been uneven. These efforts are complicated by the dominant role the O&G sector plays in upholding the current high standard of living, which poses difficulties in attracting investment in other industries.

The author of this note is Vanne Khut.

Brunei Darussalam: Selected Figures

The economy has seen a strong recovery since the fourth quarter of 2023.

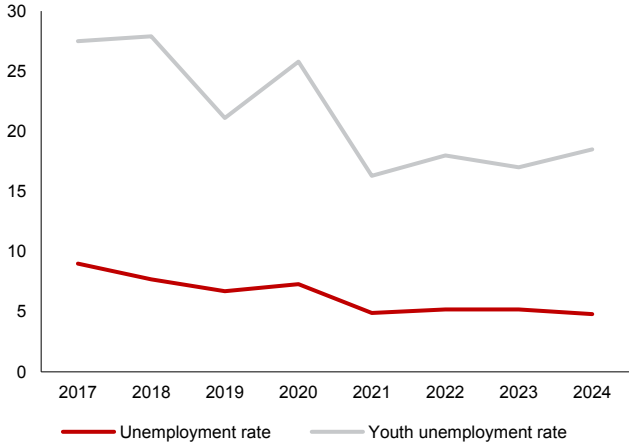
Contributions to Real GDP Growth (Production-Side)
(Percentage points, year-on-year)



Source: Department of Economic Planning and Statistics; AMRO staff calculations.

Labor market conditions have remained generally stable.

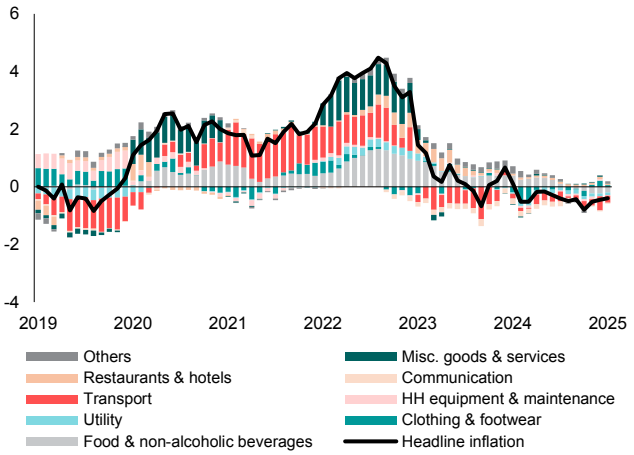
Unemployment Rate and Youth Unemployment Rate
(Percent)



Source: Department of Economic Planning and Statistics.

Inflation has moderated sharply since early 2023.

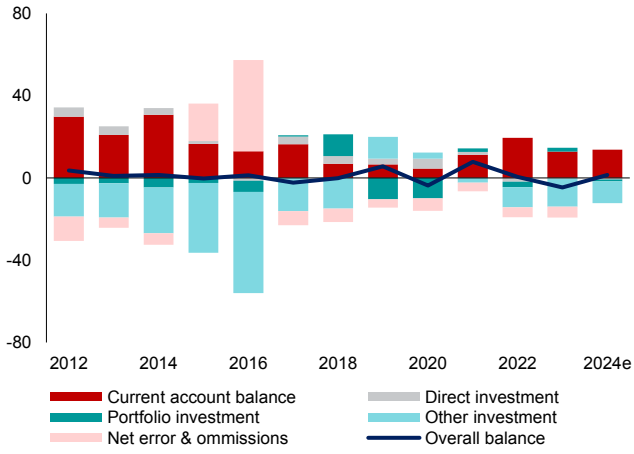
Contributions to Consumer Price Inflation
(Percentage points, year-on-year)



Source: Department of Economic Planning and Statistics; and AMRO staff calculations.
Note: HH = household; Misc. = miscellaneous.

The external position remains strong, supported by a sustained current account surplus.

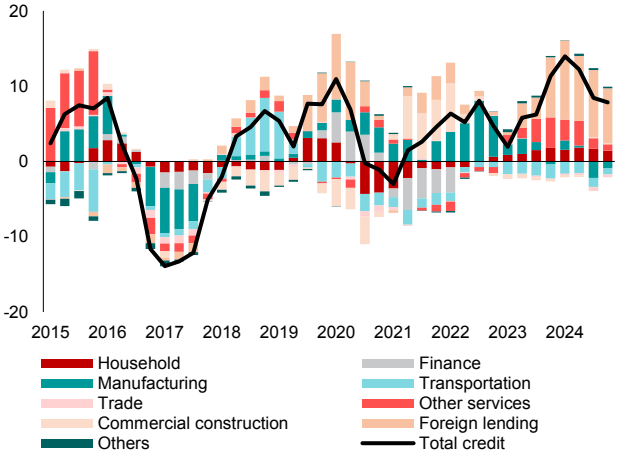
Balance of Payments
(Percent of GDP)



Source: Department of Economic Planning and Statistics; AMRO staff calculations.
Note: "e" denotes AMRO staff estimates. Brunei's BOP follows BPM6. The financial account sign is reversed for charting purposes.

Credit growth remains robust, led by stronger household demand and offshore bank lending.

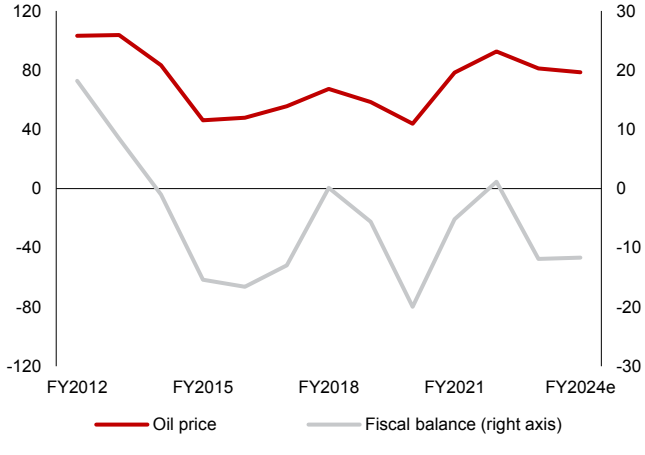
Contributions to Banking Sector Credit Growth
(Percentage points, year-on-year)



Source: Brunei Darussalam Central Bank; AMRO staff calculations.
Note: ICT = information and communication technology.

The fiscal deficit widened in FY2023 due to weaker O&G revenue.

Fiscal Balance, and Oil and Gas Prices
(USD/barrel; percent of GDP)



Source: Ministry of Finance and Economy; AMRO staff estimations.
Note: Brunei's fiscal data are in fiscal year (FY) starting from April to March. "e" denotes AMRO staff projections.

Brunei Darussalam: Selected Economic Indicators

Indicator	2021	2022	2023	2024e
Real sector	(in annual percentage change)			
Real GDP	–1.6	–1.6	1.4	4.2
Private consumption	21.9	8.3	11.1	5.9
Government consumption	2.6	6.9	–2.4	0.7
Gross fixed capital formation	–13.9	–1.8	0.2	–2.4
Imports of goods and services	29.5	9.5	–7.8	0.2
Exports of goods and services	8.8	6.9	–2.2	4.0
External sector[1]	(in percent of GDP, unless otherwise specified)			
Current account balance	11.2	19.6	12.9	13.8
Trade balance	14.2	25.8	16.5	16.5
Capital and financial account balance	–0.9	14.3	12.2	12.3
Direct investment	–1.5	1.8	0.3	0.7
Portfolio investment	–1.7	2.7	–1.8	1.0
Other investment	2.3	9.8	13.7	10.5
Errors and omissions	–4.2	–4.8	–5.3	0.0
Overall balance	7.8	0.5	–4.6	1.5
International reserves (in USD billion, end of period)[2]	5.0	5.0	4.5	4.7
Fiscal sector[3]	(in percent of GDP)			
Revenue and grants	24.3	27.7	17.4	17.7
Expenditure	29.4	26.6	29.2	29.4
Fiscal balance	–5.2	1.1	–11.9	–11.7
Monetary and financial sectors	(in annual percentage change)			
Broad money	2.7	1.3	2.7	3.6
Domestic credit[4]	–19.6	–15.6	51.7	4.7
Private sector credit	2.7	6.0	3.9	3.0
Memorandum items:				
Nominal GDP (in BND billion, calendar year)	18.8	23.0	20.3	20.7
Nominal GDP (in BND billion, fiscal year)	19.7	22.9	20.3	20.8
Headline inflation (in percent y-o-y, period average)	1.7	3.7	0.4	–0.4
Exchange rate (in BND/USD, period average)	1.34	1.38	1.34	1.34

Source: National authorities via CEIC/ Haver Analytics; AMRO staff estimates.
Note: y-o-y = year-on-year. Numbers in red denote AMRO staff estimates.
1/ Brunei's balance of payments follows BPM6. A negative (positive) financial account balance indicates net inflow (outflow).
2/ Gross international reserves include gold.
3/ Refers to fiscal year, which is from April to March.
4/ Refers to domestic claims from Depository Corporations Survey.

Cambodia

Cambodia's economy continued to expand moderately in 2024 at a faster pace than in the previous year. GDP growth was recorded at 6.0 percent in 2024, from 5.0 percent in 2023, but the recovery remained uneven. The garment sector rebounded strongly, serving as a major growth driver. Garment exports in 2024 increased by 23.5 percent compared to 2023, supported by strong demand from the United States (US) and the European Union (EU). The agriculture sector also grew steadily, continuing to benefit from multilateral free trade agreements and investments in agri-food processing. However, the services sector underperformed, largely because the tourism recovery was slow, with Angkor Wat ticket sales reaching only 51.7 percent of pre-pandemic levels. The real estate sector remained weak.

Consumer price inflation fell sharply in 2024, averaging below 1 percent, from 2.1 percent in 2023. Headline consumer price inflation plummeted at the beginning of the year and hovered at around 0–1 percent from January to September, driven by lower energy and subdued food prices, before moving up to 2 percent in November 2024. Core inflation grew modestly, averaging 0.9 percent, partly reflecting lingering weak domestic demand.

The current account balance is estimated to turn into a moderate deficit for 2024, driven by a widened trade deficit compared to the previous year. Goods imports rose 17.6 percent in 2024, outpacing exports growth of 13.6 percent. As a result, the trade deficit based on customs data doubled to 4.4 percent of GDP from the previous year, with the second and fourth quarters contributing the most. However, the primary income deficit is expected to narrow, while the net service surplus is anticipated to remain stable. Meanwhile, FDI inflows remained resilient at 8.7 percent of GDP in the first three quarters. International reserves stood at USD 22.5 billion in 2024, covering 9.4 months of imports.

The riel appreciated slightly against the US dollar in 2024 on average at KHR 4,071 per USD. It generally follows a seasonal pattern, depreciating until June—mostly during the dry season—and appreciating afterward during the rainy season.

The real estate sector remained weak with oversupply and subdued demand. New residential projects were limited in 2024, with only four condominium projects and eight *Borey* (gated community) developments launched. Moreover, housing demand remained sluggish, with a 5 percent year-on-year decline in mortgage loans in 2024, along with a continued decline in the residential property price index since September 2023.

Credit growth slowed to 3.2 percent by December 2024, while asset quality worsened with rising nonperforming loans ratios. Weaker-than-expected economic growth has prompted banks to adopt a more cautious and stringent lending approach. Meanwhile, credit demand has weakened due to a slowdown in the services sector, especially in real estate. Asset quality has been declining, with rising nonperforming loan ratios at 7.3 percent in December 2024. Bank profitability significantly declined, with a return on assets at 0.2 percent in the second quarter of 2024, well below regional peers. Nevertheless, the banking sector remains robust with a capital adequacy ratio exceeding 20 percent and liquidity coverage ratio surpassing 160 percent.

The fiscal deficit has narrowed in 2024, primarily due to a sizable spending cut, despite weak revenue collection. While non-tax revenue collection remained stable, tax revenue grew modestly by 2.1 percent compared to 2023, reaching only 86.9 percent of the target set in the budget law and falling short of expectations. This reflected a combination of weak domestic demand and the government's generous tax incentives introduced in 2023. In this regard, budget rationalization has been made to cut certain expenditures. As a result, the fiscal deficit has improved to 3.6 percent of GDP in 2024 from 5.3 percent in 2023. Public debt fell to 26.1 percent of GDP in 2024 from 26.6 percent in 2023, mainly driven by narrower primary deficit and robust economic growth.

Cambodia's growth outlook is vulnerable to a sharper-than-expected slowdown in major economies and potential shifts in US and EU trade policies. Slower growth in China may weaken FDI inflows and hinder tourism recovery. Meanwhile, over half of Cambodia's goods exports go to the US and EU, exposing trade performance in these economies to a sharp slowdown and trade policy uncertainties, especially under the new US administration and the EU's resolutions, which highlight the need to assess Cambodia's eligibility for preferential trade tariffs under the "Everything but Arms" scheme.

Further deterioration in loan asset quality could weaken profitability and capital adequacy, particularly in smaller, weaker banks. In addition, the weak finances of some real estate developers, driven mostly by subdued demand, could further heighten credit risks in related sectors.

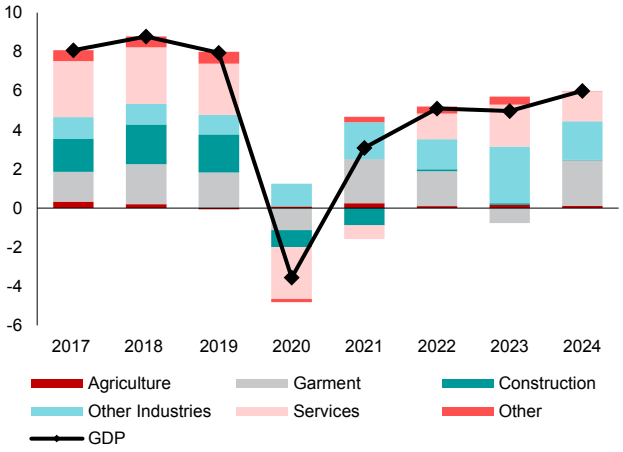
The author of this note is Chunyu Yang.

Cambodia: Selected Figures

The economy continued to expand moderately in 2024 on the back of a strong rebound in the garment sector.

Contributions to Real GDP Growth

(Percentage points, year-on-year)

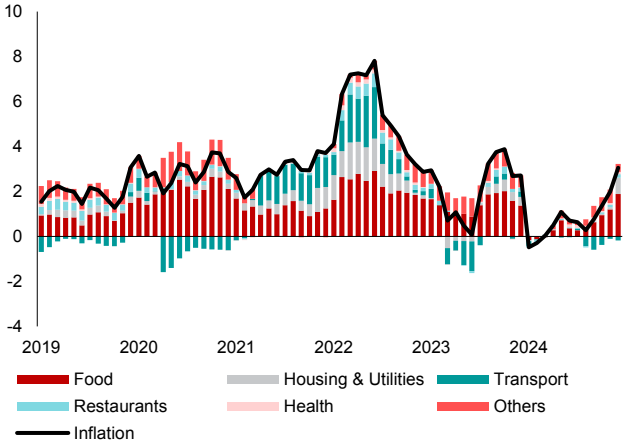


Source: National Institute of Statistics of Cambodia; AMRO staff estimates.
Note: The sectoral contributions for 2023 and 2024 GDP growth are based on AMRO staff estimates.

Consumer price inflation rapidly dropped at the beginning of 2024 before moving up.

Contributions to Headline Inflation

(Percentage points, year-on-year)

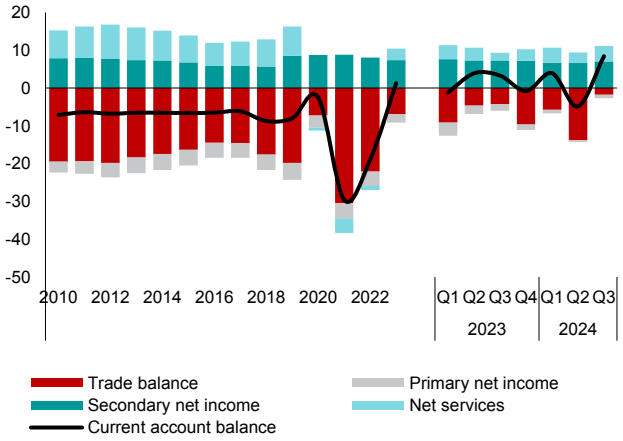


Source: National Bank of Cambodia; AMRO staff calculations.
Note: Food includes non-alcoholic beverages.

The current account registered a small deficit in the first half of 2024, down from a surplus in 2023.

Current Account Balance

(Percent of GDP)

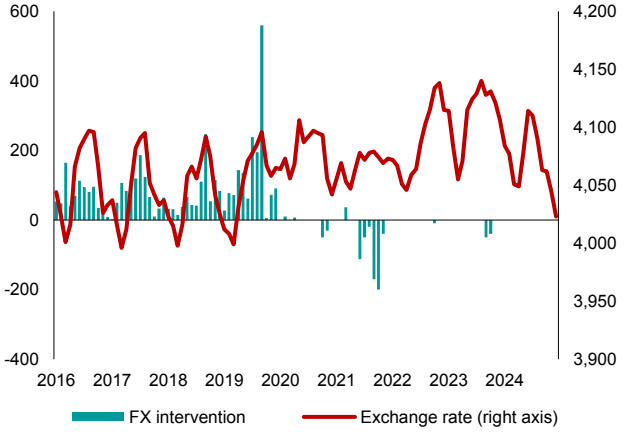


Source: National Bank of Cambodia; AMRO staff calculations.
Note: Nominal GDP figures in 2023 are based on AMRO staff estimations.

The riel slightly appreciated against the US dollar in 2024 on average at KHR 4,071 per USD.

Central Bank's FX Intervention and Exchange Rate

(Millions of US dollars; KHR/USD)

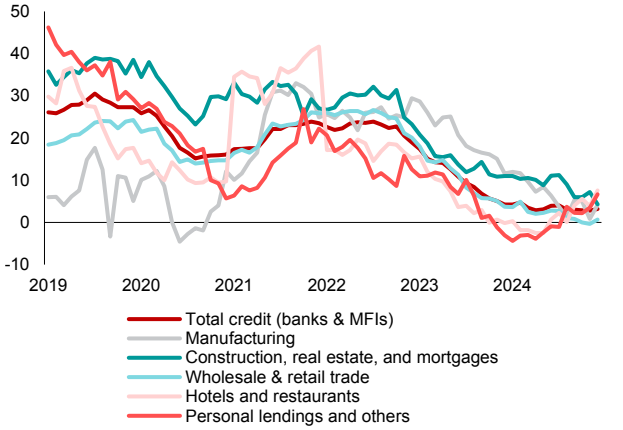


Source: National Bank of Cambodia; AMRO staff calculations.

Credit growth continued to slow down in most sectors due to banks' more cautious lending approach and weak credit demand.

Credit Growth by Sector

(Percentage points, year-on-year)

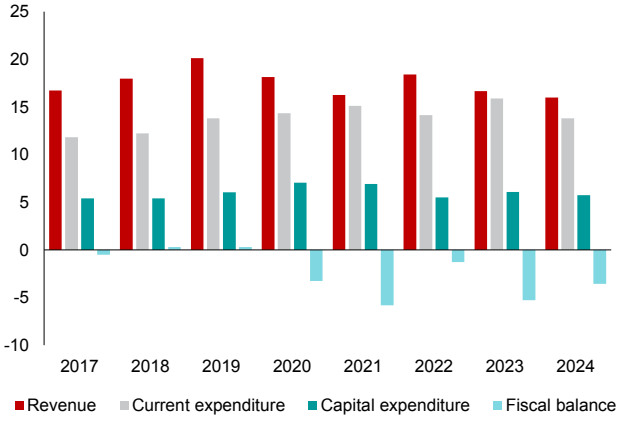


Source: National Bank of Cambodia; AMRO staff calculations.
Note: This chart refers to the credit distributed to the nonfinancial institutions by banks only.
MFI = microfinance institution.

The fiscal deficit has narrowed in 2024, primarily due to a sizable spending cut, despite weak revenue collection.

Fiscal Balance

(Percent of GDP)



Source: Ministry of Economy and Finance.

Cambodia: Selected Economic Indicators

Indicator	2021	2022	2023	2024e
Real sector	(in annual percentage change)			
Real GDP	3.1	5.1	5.0	6.0
Agriculture	1.5	0.6	1.1	0.8
Industry	8.4	8.4	5.3	10.2
Services	–1.8	3.6	6.0	4.2
External sector	(in percent of GDP, unless otherwise specified)			
Current account balance	–29.6	–19.0	1.3	–0.1
Trade balance	–30.5	–22.1	–7.1	–7.8
Capital and financial account balance	33.3	17.5	1.5	3.1
Direct investment	9.2	8.6	9.0	9.0
Portfolio investment	–0.1	–0.3	–0.8	–0.2
Other investment	23.7	8.8	–6.9	–6.2
Errors and omissions	–3.5	2.3	–2.7	–2.6
Overall balance	0.2	0.9	0.2	0.4
Gross external debt	54.5	55.5	56.8	57.6
International reserves (in USD billion, end of period)	20.3	17.8	20.0	22.5
Fiscal sector	(in percent of GDP)			
Revenue and grants	16.2	18.4	16.7	16.0
Expenditure	22.1	19.7	22.0	19.6
Fiscal balance	–5.8	–1.3	–5.3	–3.6
Government debt	25.6	25.0	26.6	26.1
Monetary and financial sectors	(in annual percentage change)			
Broad money	16.4	8.2	12.5	17.5
Domestic credit	32.5	19.2	4.1	2.2
Private sector credit	23.6	18.5	3.5	3.1
Memorandum items:				
Nominal GDP (in KHR billion)	150,793	164,059	174,027	187,447
Headline inflation (in percent y-o-y, period average)	2.9	5.3	2.1	0.8
Exchange rate (in KHR/USD, period average)	4,099	4,102	4,111	4,071

Source: National authorities; AMRO staff estimates.
Note: y-o-y = year-on-year. Numbers in red denote AMRO staff estimates.

China

China's gradual and still-uneven economic recovery extended from 2023 into 2024, with policy measures helping to keep official growth targets on track. After a firm start, growth slowed between March and September, before picking up markedly in the fourth quarter. This was the broad pattern across industrial production, fixed asset investment, and consumption. Export growth across destinations generally stayed firm. Imports were weaker overall; strong demand for high-tech products was counterbalanced by softer demand in other categories.

The policy response has been broad in scope yet targeted. Between September 2024 and January 2025, the authorities announced a wide range of measures—including fiscal, monetary, and real estate measures—to strengthen the recovery. Some of the measures started taking effect quickly, enabling GDP growth to reach 5.0 percent for 2024 and bringing some cautious optimism that the economic recovery would progress in 2025. The authorities also stepped up policy communication, conveying their strong intent to make policy adjustments through 2025 to boost growth and address both near-term and long-term challenges.

Inflation has been very low for the past two years, due to weak demand and strong competition. Intense competition among manufacturers of consumer products, bountiful agricultural harvests, and insufficient consumer demand have been key factors. CPI inflation was 0.2 percent in both 2023 and 2024, and –0.1 percent in the first two months of 2025.

China's external position is strong. The healthy current account surplus reflects its export competitiveness. In 2023, China's exports and imports contracted due to weak external and domestic demand. However, both rebounded in 2024 although the start of the 2025 was less firm—exports rose 7.1 percent in 2024 and 3.4 percent year-on-year in January–February 2025, while imports increased 2.3 percent in 2024 and contracted 7.3 percent y-o-y in January–February 2025. Two-way FDI flows remain sizeable. As of February 2025, China's foreign reserves remained stable at USD 3.2227 trillion.

The banking system is generally sound; the overall capital buffer is strong. Some banks with large exposure to the real estate sector and enterprises hit harder by the unevenness of the economic recovery may need sizeable capital injection and more careful credit risk management. So far, credit growth has been reasonably firm, with total social financing growth at 8.0 percent in 2024 and January 2025. Financial conditions have been accommodative. These are due to supportive monetary and credit policies.

Adjustments in the real estate sector are ongoing and the sector may bottom out around mid-2025. Property prices continued to fall in most of the 70 major cities, but housing transactions have begun to show signs of increasing. These trends are consistent with homebuyers remaining cautious, many property developers trying to clear inventories, and the sector being in a multiyear process of shifting to a markedly downsized and more sustainable steady state.

The authorities have adopted a proactive fiscal policy stance and introduced measures to defuse risks related to hidden local government debt. In 2024, the authorities extended fiscal support by boosting central government transfers and raising local government debt ceilings, leading to a larger consolidated deficit while keeping the overall fiscal stance neutral. However, on- and off-budget local government spending has decreased, partly because of fiscal strains from lower tax revenue collections and land financing, alongside tax and fee policy measures to support the economic recovery, while a package of central government-funded investment in natural disaster reconstruction and resilience was introduced in late-2023. In the fourth quarter of 2024, the authorities introduced an RMB 12 trillion (9.7 percent of GDP) package to defuse medium-term risks related to hidden local government debt.

China faces certain near-term risks and must address several long-term challenges to sustain its growth trajectory.

Externally, escalating geopolitical tensions and emerging protectionist measures threaten to slow global growth and deepen geoeconomic fragmentation. The imposition of new US tariffs on Chinese imports could dampen China's exports and weigh on China's growth. Sudden shifts in US policies could exacerbate uncertainties, dampen investment sentiment, and increase financial market volatility. A global economic slowdown or recession in major economies could weigh further on China's growth prospects.

Domestically, China faces cyclical and structural challenges, including potential setbacks in the real estate sector recovery, financial strains on local governments, and decline in asset quality of some small and medium-sized banks. Longer-term challenges—such as climate change, population aging, labor force shrinkage, the need to reduce debt, and geoeconomic fragmentation—could weigh on long-term growth potential.

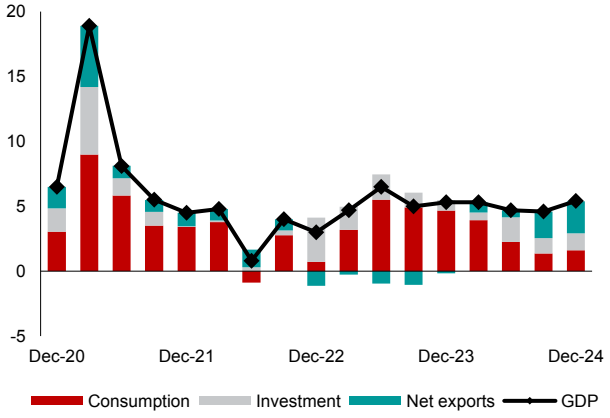
The author of this note is Suan Yong Foo.

China: Selected Figures

China's economic recovery continued to be uneven in 2024, with GDP growth at 4.8 percent in the first through third quarters of 2024.

Contributions to Real GDP Growth

(Percentage points, year-on-year)

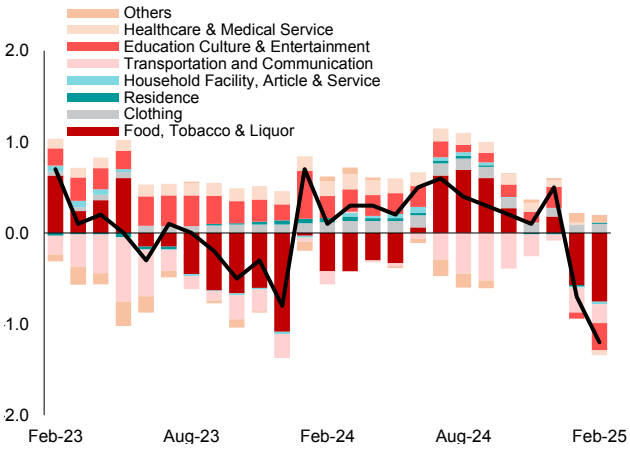


Source: China National Bureau of Statistics (NBS); Win.d.

CPI inflation was very low at 0.2 percent in both 2023 and 2024, and negative at –0.1 percent y-o-y.

Consumer Price Inflation

(Percentage points, year-on-year)

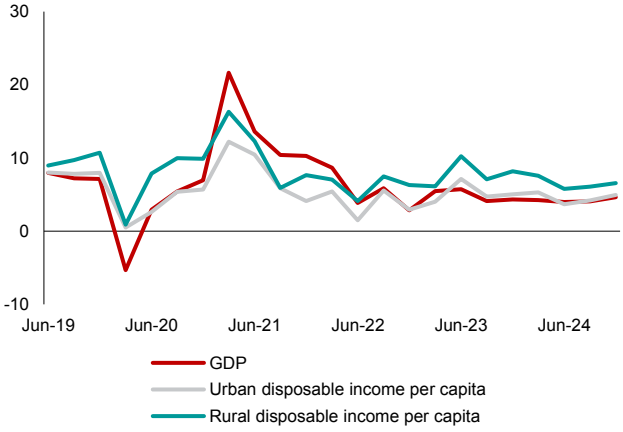


Source: China NBS; CEIC.
Note: CPI = consumer price index.

Income growth over the past few years has been modest compared to the pre-pandemic years.

Disposable Income Growth: Urban and Rural

(Percentage points, year-on-year)

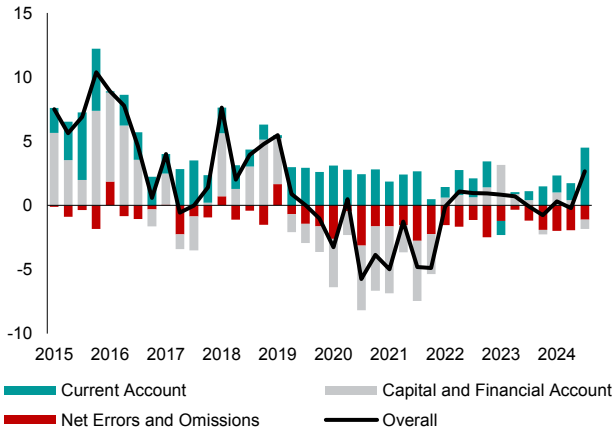


Source: China NBS; CEIC.

The overall BOP position has remained healthy, driven by a significant current account surplus.

Balance of Payments

(Percent of GDP)

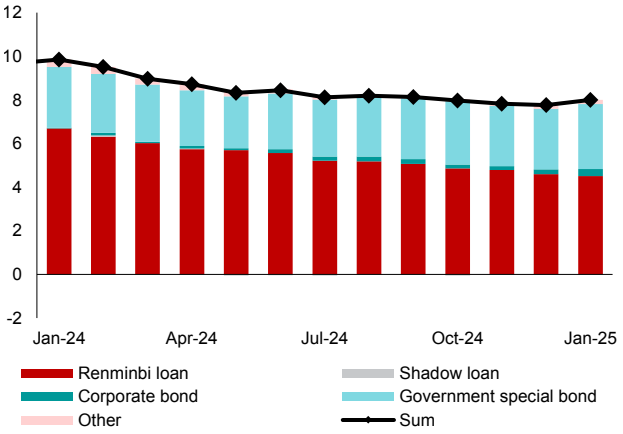


Source: China State Administration of Foreign Exchange (SAFE); CEIC.

Total social financing increased by 9.8 percent in 2023 and 8.0 percent in 2024, with banks receiving policy guidance.

Contributions to Banking Sector Credit Growth

(Percentage points, year-on-year)

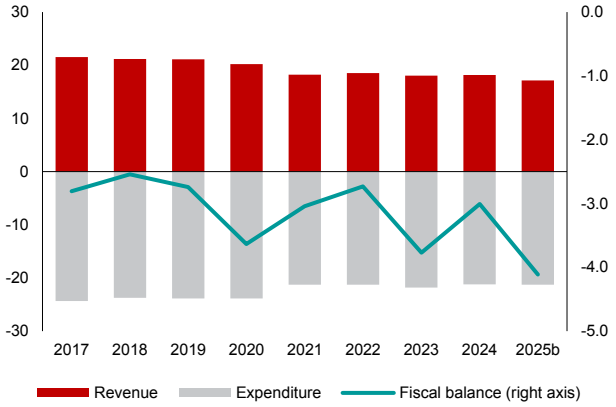


Source: People's Bank of China (PBC); Win.d.

Net issuance of local government bonds has been adjusted to support local economies and China's growth.

Fiscal Balance

(Percent of GDP)



Source: China Ministry of Finance (CMOF); Win.d.

China: Selected Economic Indicators

Indicator	2021	2022	2023	2024e
Real sector	(in annual percentage change)			
Real GDP	8.4	3.0	5.2	5.0
Private consumption	9.8	1.8	8.0	4.0
Gross fixed capital formation	2.6	5.1	1.8	5.0
Imports of goods and services	30.1	1.1	–0.3	2.3
Exports of goods and services	29.9	7.7	0.6	7.1
External sector	(in percent of GDP, unless otherwise specified)			
Current account balance	2.0	2.2	1.5	2.3
Trade balance	2.6	3.2	4.4	5.4
Capital and financial account balance	–0.6	1.7	–1.2	–1.7
Direct investment	0.9	0.2	–0.8	0.1
Portfolio investment	0.2	–1.6	–0.3	–0.3
Other investment	–1.4	0.3	0.0	–0.7
Errors and omissions	–0.8	–0.5	0.2	0.2
Gross external debt	15.5	14.1	13.4	14.0
Foreign exchange reserves (in USD billion, end of period)	3,250	3,128	3,278	3,202
Fiscal sector[1]	(in percent of GDP)			
Revenue and grants	18.2	18.5	18.1	18.2
Expenditure	21.2	21.2	21.8	21.2
Fiscal balance	–3.0	–2.7	–3.8	–3.0
Government debt	45.8	49.4	54.7	60.9
Monetary and financial sectors	(in annual percentage change)			
Broad money[2]	9.0	11.8	9.7	7.3
Total social financing	10.3	10.0	9.5	8.0
Memorandum items:				
Nominal GDP (in CNY trillion)	114.4	121.0	129.4	134.9
Headline inflation (in percent y-o-y, period average)	0.9	2.0	0.2	0.2
Policy rate (in percent per annum, end of period)	3.85	3.65	3.45	3.10
Exchange rate (in CNY/USD, period average)	6.45	6.74	7.07	7.19

Source: National authorities via CEIC and WIND; AMRO staff estimates.
Note: y-o-y = year-on-year. Numbers in red denote AMRO staff estimates.
1/ Includes only general government account and incorporates AMRO staff estimates.
2/ Refers to M2.

Hong Kong, China

Hong Kong's economy grew at a steady yet modest pace in 2024 as activities gradually returned to pre-pandemic levels. In the first half of the year, the economy expanded by 3.0 percent year-on-year, driven by net exports amid rising external demand and a recovery in electronics orders linked to the tech cycle. However, shifts in consumption, including increased cross-border shopping by Hong Kong residents, along with softening growth in goods exports, contributed to a slower growth of 2.2 percent year-on-year in the second half, highlighting a deceleration in recovery momentum. Gross fixed asset investment experienced a slowdown, contracting by 0.9 percent in the fourth quarter, as the real estate market-related investment remained sluggish.

The labor market continued to improve. Seasonally adjusted unemployment rate declined from its most recent peak of 5.5 percent in February–April 2022 to 3.1 percent in October–December 2024. Total employment rose significantly to 3.7 million in October–December 2024, though it remained 3.7 percent below levels observed in the pre-pandemic fourth quarter of 2019. This shortfall reflects the compounded effects of population aging and the pandemic.

Inflation remained moderate despite the ongoing economic recovery. Headline consumer price inflation stayed stable at 1.7 (year-on-year) percent for 2024. Inflation in the housing component edged up from 1.1 percent in the second quarter to 3.3 percent in the third quarter before slowing down to 0.9 percent in the fourth quarter. However, moderation in food inflation and declining prices of durable goods helped to contain overall consumer price inflation. Additionally, low food inflation in mainland China and the Hong Kong dollar's appreciation against the renminbi during the first half of 2024 also contributed to keeping inflation in check.

The overall external position remained strong. The value of Hong Kong's merchandise exports increased by 9.2 percent (year-on-year) in the year 2024. Supported by its buoyant services and primary income surpluses, Hong Kong maintained a large current account surplus in the first three quarters of 2024. Capital outflows have increased due to decreases in local interest rates and widening rate differentials between the Hong Kong dollar and US dollar. Foreign reserves were largely stable throughout 2024, fluctuating from USD 423 billion at the end of January to USD 422 billion at the end of December.

The FY2024 fiscal budget aims to bolster the economic recovery and foster sustainable, high-quality growth over the long term. While the government continues to support individuals and firms through tax relief, the amount has been scaled back as the overall economic condition improves. The package of relief measures reduced significantly from HKD 59.4 billion in FY2023 to HKD 11.5 billion in FY2024. Apart from the relief measures, the government has allocated funds to revitalize the tourism sector, enhance Hong Kong's innovation and technology ecosystem, and promote the development of the infrastructure.

The banking sector is sound, underpinned by ample capital and liquidity buffers. The aggregate capital adequacy ratio stood at 21.8 percent at the end of the third quarter of 2024, and the liquidity coverage ratio increased to 178.4 percent in the third quarter of 2024 from 166.0 percent in the first quarter of 2023, Despite an uptick of nonperforming loan ratio from 1.46 percent in the first quarter of 2023 to 1.99 percent in the third quarter of 2024, the overall asset quality of Hong Kong's banking sector remains healthy. That said, close attention should be paid to the quality of mainland China-related loans, as the nonperforming loan ratio for these loans has risen from 2.3 percent in the first quarter of 2023 to 2.8 percent in the third quarter of 2024.

Domestic financial and credit conditions tightened over the year. Total credit continued to contract by 2.8 percent (year-on-year) at the end of 2024, mainly driven by declines in credit for use outside Hong Kong and construction activity. The Hong Kong Interbank Offered Rates mirrored the downward trend of US interest rates. Despite signs of recovery in the third quarter of 2024, the property market remained under pressure, with various segments exhibiting downward price trends, including commercial real estate.

As the economic outlook gradually moderates, downside risks in the short term remain high. The risk of a protracted global trade downturn caused by aggressive protectionism remains a significant concern for the Hong Kong economy, given its heavy connections with the global economy. If the US and Europe were to go into recession, Hong Kong's economic growth would fall. A faltering economic recovery of mainland China would also weaken Hong Kong's economic recovery. Weaknesses in the property market, if prolonged, could weigh on the finances of households and firms. In the medium term, an escalation of US-China tensions, broader global geoeconomic fragmentation, and decreasing trend of labor participation ratio are major risks for Hong Kong's economy.

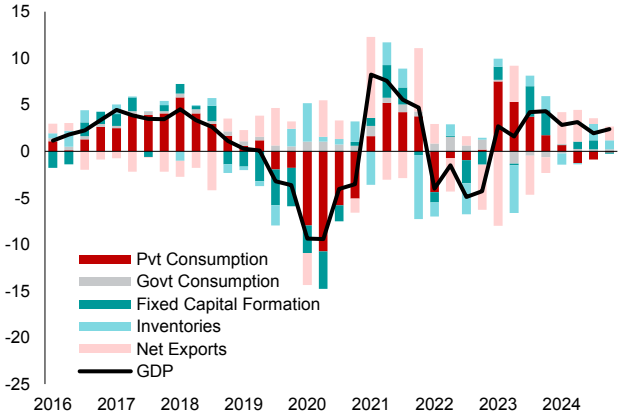
The author of this note is Fan Zhai.

Hong Kong, China: Selected Figures

Hong Kong's economy maintained a strong recovery in the first half of 2024, but growth slowed in the second half of 2024.

Gross Domestic Product

(Percentage points, year-on-year)

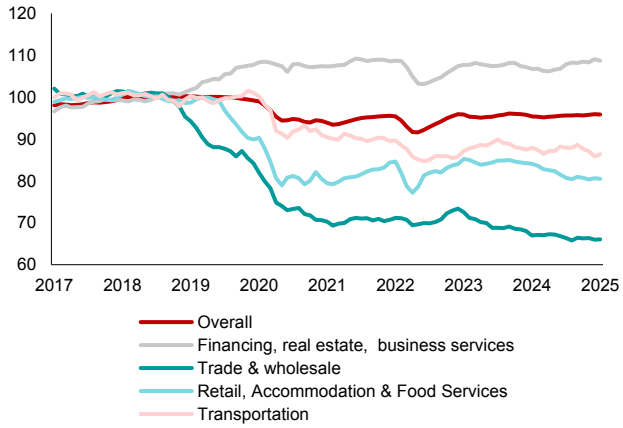


Source: Census and Statistics Department.

Overall employment improved in 2024, but the recovery remained uneven across sectors.

Employment by Sector

(2018 = 100, non-seasonally adjusted, 3-month moving average)

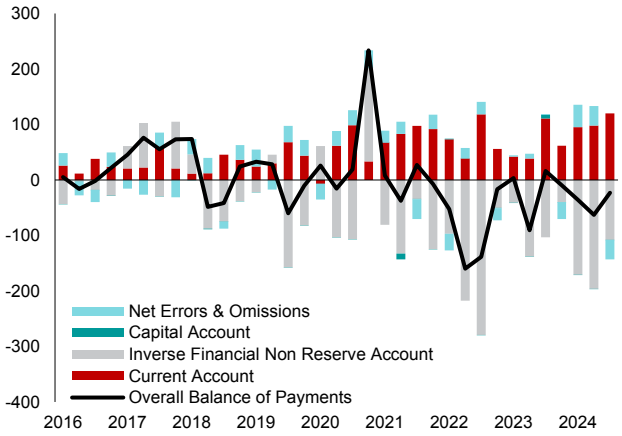


Source: Census and Statistics Department.

The external position was stable in 2024, supported by the current account balance.

Balance of Payments

(Billions of Hong Kong dollars)

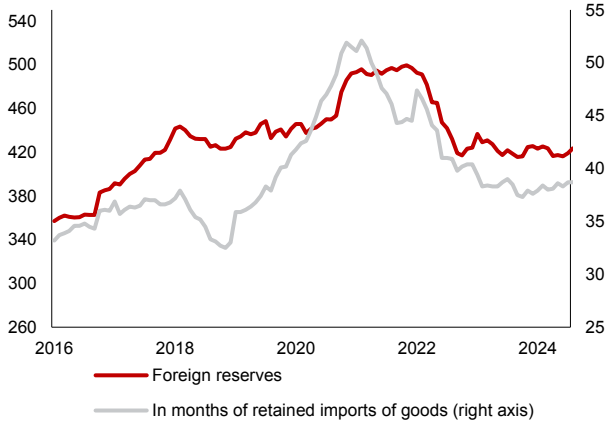


Sources: Census and Statistics Department.

Foreign exchange reserves remained ample, covering about 40 months of retained imports.

Foreign Reserves

(Billions of US dollars; months of import)

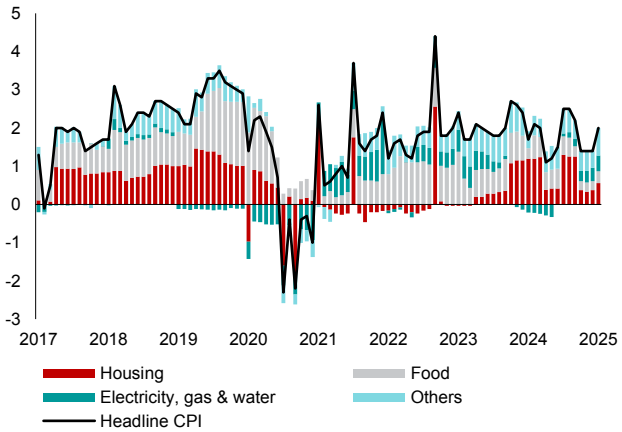


Source: Hong Kong Monetary Authority.

Inflation rose moderately on rising housing rentals.

CPI Inflation

(Percentage points, year-on-year)

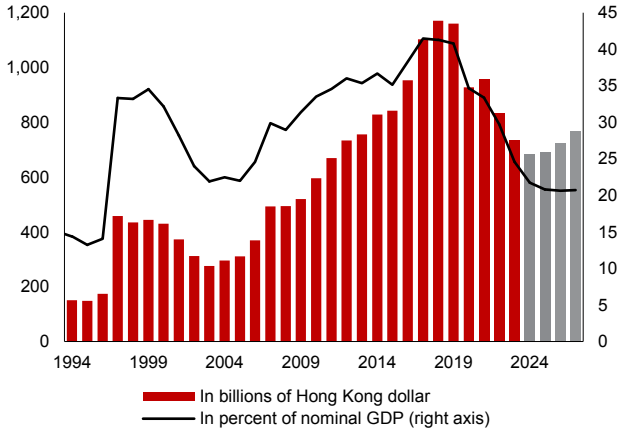


Source: Census and Statistics Department.
Note: CPI = consumer price index.

The government projected that fiscal reserves as a percentage of GDP would revert its declining trend in FY2026.

Fiscal Reserves Projections

(Billions of Hong Kong dollars; percent of GDP)



Source: Census and Statistics Department.
Note: Grey bars denote government projections in the 2024 Budget Speech.

Hong Kong, China: Selected Economic Indicators

Indicator	2021	2022	2023	2024e
Real sector	(in annual percentage change)			
Real GDP	6.5	–3.7	3.2	2.5
Private consumption	5.6	–2.2	6.8	–0.6
Government consumption	5.9	8.0	–3.9	0.9
Gross fixed capital formation	8.3	–7.4	11.4	2.4
Imports of goods and services	15.8	–12.2	–5.4	3.9
Exports of goods and services	17.0	–12.5	–6.6	5.3
External sector	(in percent of GDP, unless otherwise specified)			
Current account balance	11.8	10.2	8.5	10.7
Trade balance	5.6	4.1	0.6	2.8
Capital and financial account balance[1]	–13.3	–22.9	–10.6	–16.6
Direct investment	11.9	1.0	6.8	5.5
Portfolio investment	–21.6	–11.3	–15.2	–25.8
Other investment	–4.8	–17.6	–5.8	3.8
Errors and omissions	1.2	–0.4	–0.6	–0.6
Overall balance	–0.3	–13.1	–2.7	–6.5
Gross external debt	508.8	494.6	483.3	497.5
International reserves (in USD billion, end of period)	496.9	424.1	425.7	421.5
Fiscal sector[2]	(in percent of GDP)			
Revenue and grants	24.2	22.1	18.5	20.2
Expenditure	24.2	28.9	24.3	24.5
Fiscal balance	0.0	–6.7	–5.8	–4.5
Government debt	2.0	4.4	6.5	9.1
Monetary and financial sectors	(in annual percentage change)			
Broad money	4.3	1.6	4.0	7.3
Domestic credit	3.8	–3.0	–3.6	–2.8
Private sector credit	4.8	0.0	–1.1	–1.8
Memorandum items:				
Nominal GDP (in HKD trillion)	2.9	2.8	3.0	3.2
Headline inflation (in percent y-o-y, period average)	1.6	1.9	2.1	1.7
Policy rate (in percent per annum, period average)	0.50	2.13	5.45	5.52
Exchange rate (in HKD/USD, period average)	7.77	7.83	7.83	7.80

Source: National authorities via CEIC and Haver Analytics; IMF; BIS; AMRO staff estimates.
Note: y-o-y = year-on-year. Numbers in red denote AMRO staff estimates.
1/ Financial account balance refers to financial non-reserve assets.
2/ Refers to fiscal year which starts on 1 April and ends on 31 March.

Indonesia

The Indonesian economy remained solid amid ongoing challenges. Economic activity sustained 5.0 percent growth in 2024. Resilient household consumption, increased government spending, and strengthening investment supported domestic demand. The gradual export recovery was driven by rebounding manufactured goods exports to US, ASEAN and European markets. Commodity exports, meanwhile, remained weak on softer Chinese demand and lower domestic production of several commodities.

Inflation was under control. In 2024, headline inflation averaged 2.3 percent and moderated to 1.6 percent in December, close to the lower bound of the 2.5±1 percent target, underpinned by policy synergy between the government and Bank Indonesia (BI). The government has continued to provide energy subsidies, ramped up the stock of necessity goods, especially food, and strengthened interregional distribution to counter the El Niño weather impact. Core inflation has been anchored, reflecting the central bank's commitment to anchoring inflation expectations.

The external position was resilient. In 2024, sustained trade surpluses helped contain the current account deficit. Foreign direct and portfolio investment inflows supported the capital and financial account. That said, the fourth quarter of 2024 saw domestic market outflows and rupiah weakness amid heightened uncertainty after the US election. The outflows started since November 2024, adding pressure on the rupiah exchange rate. Gross international reserves rose to USD 155.7 billion by the end of the year, covering 6.7 months of imports. External debt was contained at 30.4 percent of GDP, with short-term external debt at remaining maturities at 19.5 percent of external debt, equivalent to 53.1 percent of gross international reserves in December 2024.

In 2024, BI strengthened its policy mix with a prudent interest rate policy and judicious foreign exchange interventions to support inflation control and rupiah exchange rate stability. The introduction of pro-market financing instruments, notably Bank Indonesia rupiah securities (SRBI), deepened the money market and attracted additional nonresident inflows in most of 2024. The BI Rate was lowered by 25 basis points to 5.75 percent in early 2025 to support economic growth in view of low inflation projections and manageable rupiah exchange rate movements.

To ensure sufficient liquidity in the banking system, BI strengthened incentives related to reserve requirements to encourage banks to lend to micro, small, and medium-sized enterprises and sectors that support growth and job creation. Other relaxed macroprudential policies, including the 100 percent loan-to-value for property loans and zero downpayment for car loans, were also extended. Bank credit sustained robust expansion to support investment and household consumption. Following the phase-out of COVID-19 related forbearance, banks remained well capitalized and reported stable nonperforming loan ratios.

The fiscal stance turned expansionary in 2024 to support the domestic economy. Revenue mobilization moderated in percent of GDP as revenue collected from natural resources declined with subdued commodity prices. Meanwhile, the government increased spending to support purchasing power, particularly for low-income households, and expedite the implementation of national strategic projects, notably the construction of Nusantara, the new capital city. Consequently, the fiscal deficit widened to 2.3 percent of GDP in 2024, compared to 1.6 percent in 2023.

Indonesia's near-term outlook is susceptible to external spillovers. Growth uncertainty in major trading partners, notably China but also in the US and European countries, could weigh on the recovery in Indonesia's exports and growth. It is especially severe considering the likelihood of aggressive protectionist policies and heightened US-China trade tensions with the incoming US administration.

Risks of capital flow volatility and higher borrowing costs remain. Domestic markets may see continued outflows amid policy uncertainty under the new US administration. Indonesian government bond yields rose about 50 basis point in 2024 and could rise further if global financial conditions tighten due to slower US rate cuts. Higher yields would lift the government's interest payment burden, reducing the budget for discretionary spending.

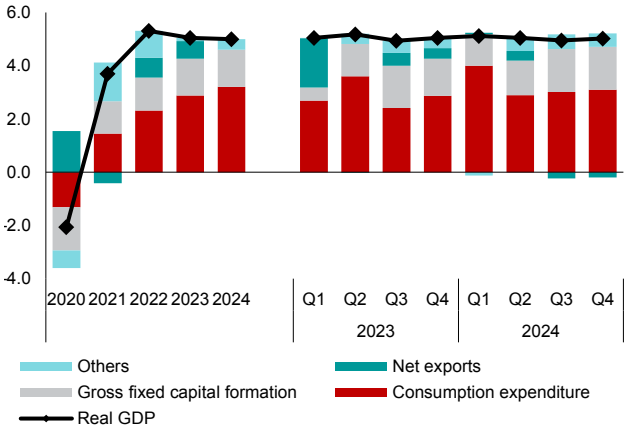
Indonesia faces challenges in achieving high-income status, an inclusive and sustainable growth. Economic growth has stabilized at 5 percent—solid but still below the 7 percent target to achieve high-income country status by 2045. Efforts in economic diversification and moving up the value chain, including developing a domestic electric vehicle ecosystem, face global trade headwinds and domestic challenges. Despite fiscal decentralization and industrialization efforts, regional income disparities remain significant because of gaps in infrastructure development and local government capacity. Failures of climate change mitigation and adaptation will hinder sustainable growth. Limited financing options, reflected in modest financial deepening and inclusion, add to these challenges.

The author of this note is Thi Kim Cuc Nguyen.

Indonesia: Selected Figures

Resilient consumption and investment sustained solid growth in 2024 as exports remained soft.

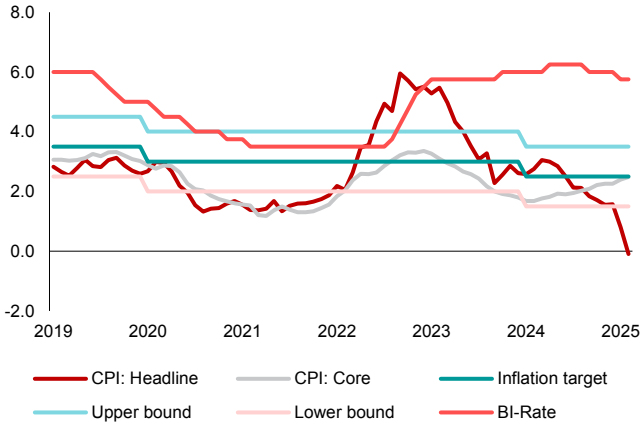
Contribution to Real GDP Growth
(Percentage points, year-on-year)



Source: Statistics Indonesia.

BI reduced policy rates in early 2025 to support the economy in views of low inflation projections and the rupiah exchange rate was consistent with fundamentals.

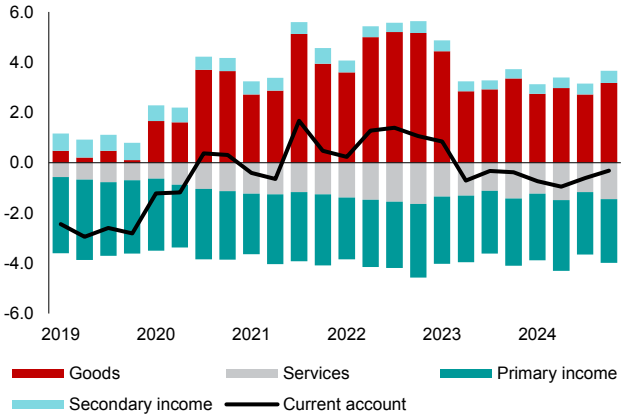
Bank Indonesia's Policy Rate and Inflation
(Percent)



Source: Statistics Indonesia, Bank Indonesia.
Note: CPI = consumer price index.

Continued trade surpluses supported the current account balance.

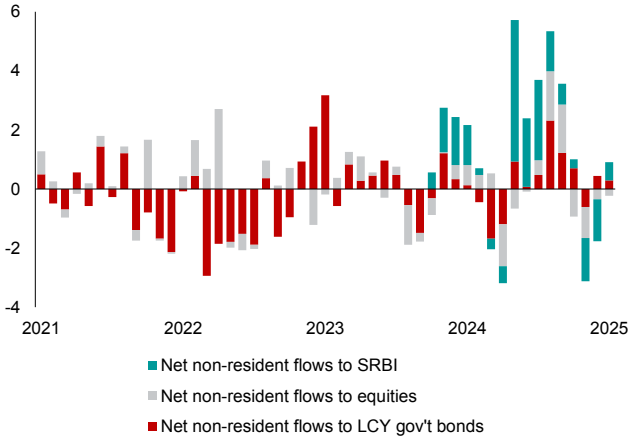
Current Account Balance
(Percent of GDP)



Source: Bank Indonesia.

Domestic markets witnessed capital inflows in most of 2024, which reversed in Q4 amid heightened global uncertainty post US elections.

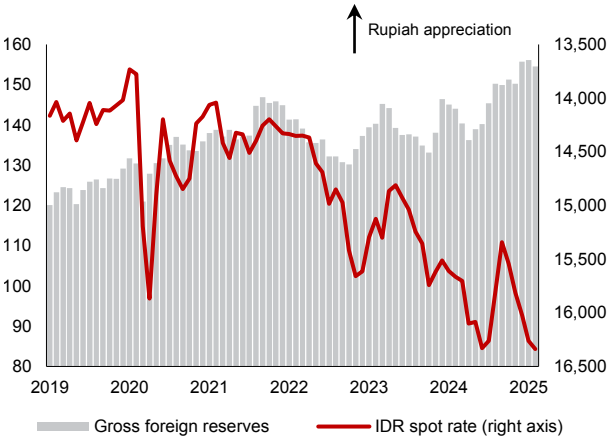
Net Capital Flows to SRBI, Government Bond and Equity Markets
(Billions of USD)



Source: Indonesia Stock Exchange, Ministry of Finance of Indonesia.

Reserve position, meanwhile, strengthened.

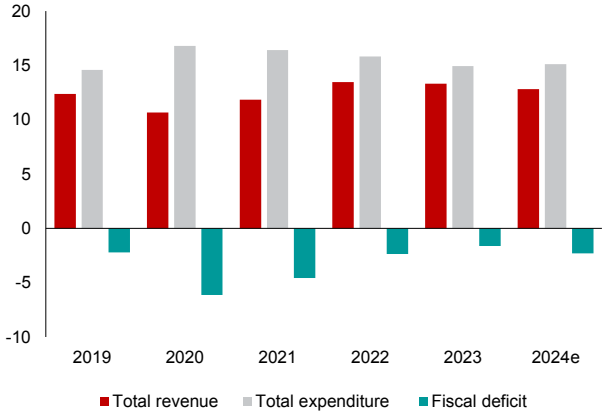
Gross Foreign Reserves and Rupiah Spot Rate
(Billions of US dollars; IDR/USD)



Source: Bank Indonesia.

Fiscal deficit widened on the back of lower revenue growth and increased spending to support the economy.

Budget Revenue, Expenditure, and Overall Balance
(Percent of GDP)



Source: Ministry of Finance of Indonesia; AMRO Staff Calculations.
Note: Data for 2024 are AMRO staff estimates based on the preliminary fiscal realization data announced by Ministry of Finance of Indonesia.

Indonesia: Selected Economic Indicators

Indicator	2021	2022	2023	2024
Real sector	(in annual percentage change)			
Real GDP	3.7	5.3	5.0	5.0
Private consumption	2.0	4.9	4.8	4.9
Government consumption	4.3	–4.5	3.0	6.6
Gross fixed capital formation	3.8	3.9	3.8	4.6
Imports of goods and services	24.9	15.0	–1.6	7.9
Exports of goods and services	18.0	16.2	1.3	6.5
External sector	(in percent of GDP, unless otherwise specified)			
Current account balance	0.3	1.0	–0.1	–0.6
Trade balance	2.5	3.2	2.1	1.8
Capital and financial account balance	1.1	–0.7	0.7	1.2
Direct investment	1.5	1.4	1.1	1.0
Portfolio investment	0.4	–0.9	0.2	0.6
Other investment	–0.9	–1.2	–0.5	–0.5
Overall balance	1.1	0.3	0.5	0.5
Gross external debt	34.9	30.1	29.8	30.4
International reserves (in USD billion, end of period)	144.9	137.2	146.4	155.7
Fiscal sector	(in percent of GDP)			
Revenue and grants	11.8	13.5	13.3	12.8
Expenditure	16.4	15.8	14.9	15.1
Fiscal balance	–4.6	–2.4	–1.6	–2.3
Government debt	40.7	39.7	39.2	39.8
Monetary and financial sectors	(in annual percentage change)			
Broad money	14.0	8.4	3.5	4.4
Private sector credit	6.7	9.9	10.7	8.5
Memorandum items:				
Nominal GDP (in IDR trillion)	16,971	19,588	20,892	22,139
Headline inflation (in percent y-o-y, period average)	1.6	4.2	3.7	2.3
Policy rate (in percent per annum, period average)	3.50	5.50	6.00	6.00
Exchange rate (in IDR/USD, period average)	14,308	14,850	15,237	15,781

Source: Bank Indonesia; Ministry of Finance of Indonesia; Statistics Indonesia; CEIC; AMRO staff estimates.
Note: y-o-y = year-on-year. Trade balance data refer to goods and services trade. Numbers in red denote AMRO staff estimates.

Japan

Japan's economic growth moderated following the post-pandemic rebound. After a 1.5 percent expansion in 2023, the economy grew by only 0.1 percent in 2024, reflecting the slow recovery in consumption, supply chain disruptions caused by the car safety certification issue, and a downward revision of first quarter construction data. In the first quarter of 2024, real GDP contracted by 2.2 percent (saar, quarter-on-quarter), as private consumption contracted for a fourth consecutive quarter and automobile production stalled. The economy rebounded over the subsequent three quarters, supported by consumption, as the wage hikes resulting from the *Shunto* (Spring) wage negotiations began to take effect.

Japan's consumer price inflation has remained above the 2 percent target of the Bank of Japan (BOJ) since April 2022. The elevated inflation in 2024 has been driven by higher food prices and rising wages. In December 2024, CPI (less fresh food) inflation accelerated to 3.0 percent from 2.7 percent in the previous month, reflecting the expiration of energy subsidies and elevated rice prices. Meanwhile, "core-core" CPI inflation, which excludes both fresh food and energy, remained stable at 2.4 percent after increasing in successive months since July.

Wage growth in Japan gained significant momentum in 2024, driven by historically high agreements from the *Shunto* wage negotiations and supported by a tight labor market. Nominal wages rose by 4.4 percent year-on-year in December 2024, accelerating from a 3.9 percent increase in the previous month. This helped keep real wages in positive territory, growing by 0.3 percent. Labor market conditions remained tight, with the unemployment rate at 2.5 percent in December 2024. This tightness is expected to persist as the economy continues to recover. Additionally, structural factors such as Japan's aging population and the limited room for further expansion of women and elderly workers in the workforce, given already high participation rates, are likely to sustain labor market tightness. These conditions are expected to support strong wage growth going forward.

Japan's current account surplus remained substantial at 4.8 percent of GDP in 2024, up from 3.8 percent in the same period of 2023. The larger surplus primarily reflects a narrower trade deficit and a higher primary income surplus. While automobile exports were negatively affected by factory closures related to safety certification issues, exports of semiconductors and semiconductor equipment surged reflecting the upswing in the tech cycle. The yen continued to depreciate against the US dollar by 7.3 percent in 2024, amid speculation over the wider-for-longer interest rate gap between the US and Japan due mainly to the delayed prospect of US rate cuts and the strength of the US economy.

The banking sector continued to be sound with stable credit growth. Bank lending expanded by over 3.3 percent in 2024. Resilient domestic demand has increased loan demand for both fixed investment and working capital, as banks have maintained an accommodative lending stance. The banking sector overall has maintained sufficient capital buffer, while the nonperforming loan ratio increased to 1.3 percent in March 2024 from 1.2 percent in September 2023. Profitability picked up in FY2023 partly because net losses on debt securities fell.

Strong tax revenue growth has played a key role in reducing the fiscal deficit from 3.5 percent of GDP in FY2022 to 1.9 percent of GDP in FY2023. The fiscal deficit is estimated to widen to 2.1 percent of GDP in FY2024 despite the gradual phase-out of some economic support packages. This increase reflects lower carryover revenue from the previous year, and higher spending from a supplementary budget amounting to JPY 13.9 trillion. While public debt has been declining steadily after a significant increase during the COVID-19 pandemic, it is estimated to remain high, at 239.3 percent of GDP in FY2024.

Japan's growth outlook is skewed to the downside, reflecting substantial uncertainties, particularly from external factors. Key risks include a pronounced economic slowdown in other major economies and a spike in global commodity prices triggered by escalating geopolitical tensions, which can lead to higher inflation and slower consumption. On the domestic front, a slowdown in wage growth could undermine the BOJ's efforts to achieve its 2 percent inflation target. Conversely, a significant overshoot of inflation above its target could force a sharp tightening of monetary policy, straining households and businesses. Higher interest rates would also challenge fiscal sustainability by driving up interest payments on the government's substantial debt.

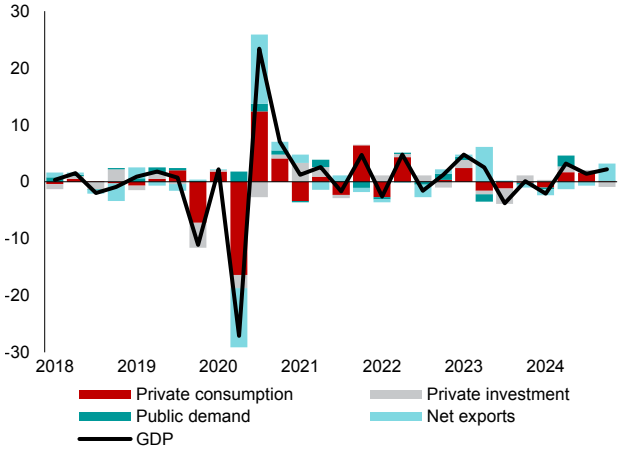
The author of this note is Paolo Hernando.

Japan: Selected Figures

Japanese economy contracted in the first quarter of 2024 but has since bounced back.

Gross Domestic Product

(Percent quarter-on-quarter, seasonally adjusted annualized rate)

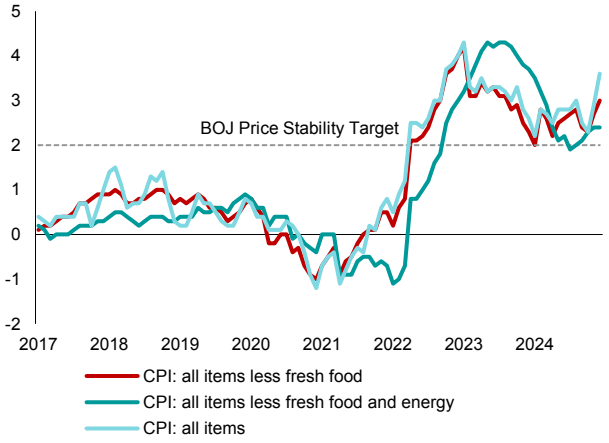


Source: Cabinet Office via Haver Analytics.

Although inflation moderated, it has exceeded the Bank of Japan's target since April 2022.

Consumer Price Inflation

(Percent, year-on-year)

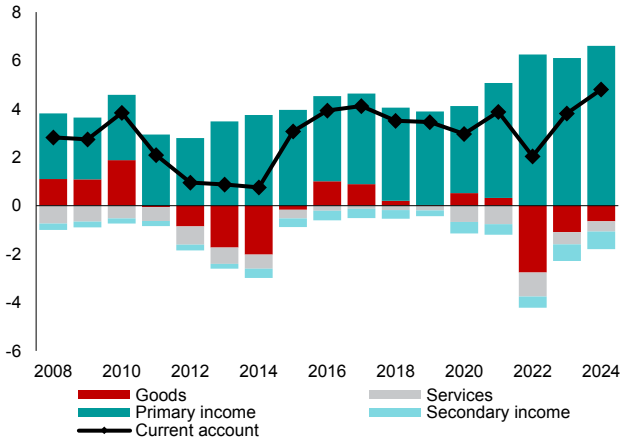


Source: Ministry of Internal Affairs and Communications via Haver Analytics.

The current account balance remained resilient in 2024 on the back of a large primary balance surplus and narrowing trade deficit.

Current Account Balance

(Trillions of yen)

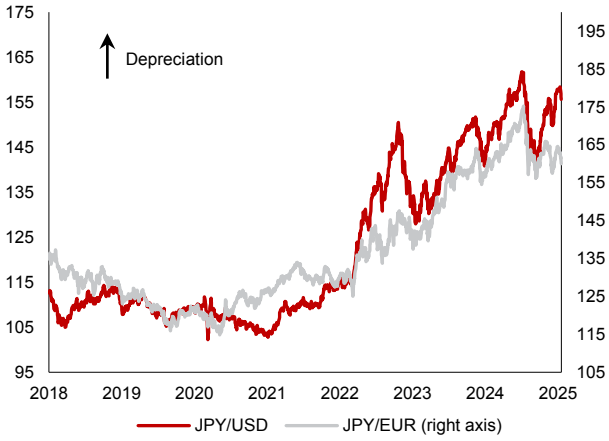


Source: Ministry of Finance via Haver Analytics.

The yen continued to depreciate against the US dollar, by 7.3 percent in 2024.

Exchange Rates

(JPY/USD; JPY/EUR)

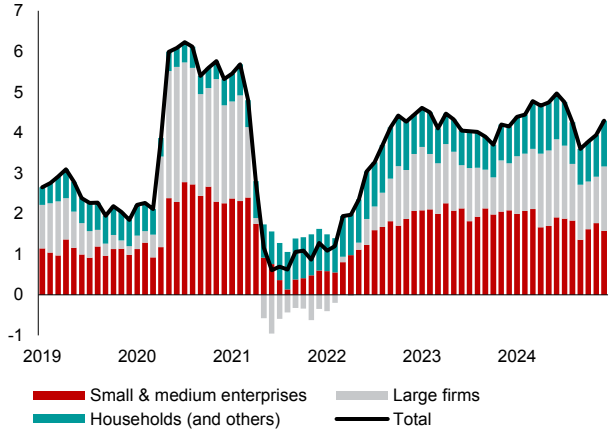


Source: Bank of Japan via Haver Analytics.

Loan growth has continued to expand in 2024 driven by resilient domestic demand.

Bank Lending Growth

(Percent, year-on-year)

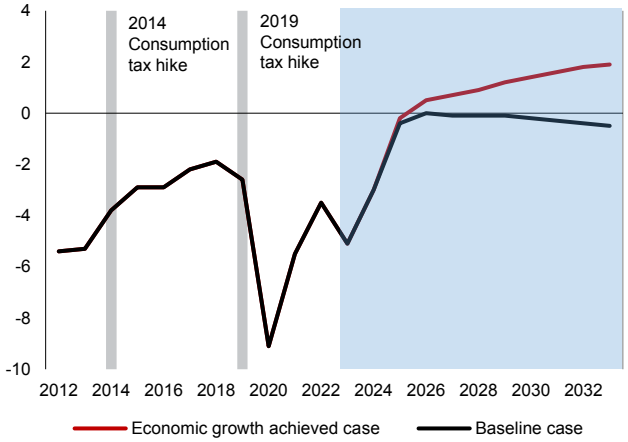


Source: Bank of Japan via Haver Analytics.

Japan now expects to miss its 2025 primary balance goal due to higher spending.

General Government Fiscal Balance

(Percent of GDP)



Source: Cabinet Office via Haver Analytics.

Japan: Selected Economic Indicators

Indicator	2021	2022	2023	2024e
Real sector	(in annual percentage change)			
Real GDP	2.7	0.9	1.5	0.1
Private consumption	0.7	2.1	0.8	–0.1
Government consumption	3.4	1.4	–0.3	0.9
Gross fixed capital formation	0.5	–0.6	1.5	0.3
Imports of goods and services	5.2	8.3	–1.5	1.3
Exports of goods and services	11.9	5.5	3.0	1.0
External sector	(in percent of GDP, unless otherwise specified)			
Current account balance	3.9	2.0	3.8	4.8
Trade balance	–0.4	–3.8	–1.6	–1.1
Capital account balance	–0.1	–0.0	–0.1	–0.0
Financial account balance	1.8	2.4	3.4	6.2
Direct investment	3.5	3.0	4.1	4.8
Portfolio investment	–4.0	–3.4	4.7	2.3
Financial derivatives	0.4	0.9	1.1	0.8
Other investment	1.9	1.9	–6.4	–1.7
Errors and omissions	–0.8	–0.9	0.4	–0.3
Overall balance	1.2	–1.3	0.7	–1.7
Gross external debt	95.8	103.9	107.7	99.7
International reserves (in USD billion, end of period)	1,406	1,228	1,295	1,231
Fiscal sector[1]	(in percent of GDP)			
Revenue and grants	37.7	38.7	37.9	36.7
Expenditure	43.6	42.3	39.7	38.9
Fiscal balance	–5.9	–3.5	–1.9	–2.1
Government debt	256.9	253.0	242.0	239.3
Monetary and financial sectors	(in annual percentage change)			
Broad money	5.5	3.8	2.5	3.0
Domestic credit	4.8	1.0	2.8	3.2
Private sector credit	7.0	0.3	3.7	3.9
Memorandum items:				
Nominal GDP (in JPY trillion)	553	561	592	609
Headline inflation (in percent y-o-y, period average)	–0.3	2.5	3.3	2.7
Core inflation, less fresh food (in percent y-o-y, period average)	–0.2	2.3	3.1	2.6
Policy rate (in percent per annum, end of period)	–0.1	–0.1	–0.1	0.25
Exchange rate (in JPY/USD, period average)	110	131	141	151

Source: Japanese authorities via CEIC and Haver Analytics; AMRO staff estimates.
Note: y-o-y = year-on-year. Numbers in red denote AMRO staff estimates.
1/ Refers to fiscal year, which starts on 1 April and ends on 31 March.

Korea

Growth improved in 2024 on the back of strong exports. The economy expanded by 2.0 percent in 2024, driven by exports benefiting from the upswing in the global semiconductor cycle. On the other hand, private consumption was relatively tepid due to the high price level and interest rates in recent years and construction remains weak amid real estate project finance distress. Looking ahead, domestic demand is expected to gradually improve as the export momentum moderates. Growth is expected to be around 1.6 percent in 2025.

Inflation has been on a downward trend. CPI declined to 1.9 percent year-on-year in December 2024 from 3.2 percent year-on-year in December 2023, largely due to deceleration in energy and food prices. Meanwhile, core inflation has been decreasing on the back of subdued growth in the costs of services.

The BOK (Bank of Korea) reduced the policy rate in October 2024 and again the following month. After keeping the Base Rate unchanged since early 2023, the BOK cut the rate twice by a total of 50 basis points amid steadily declining inflation and weak domestic demand. The rate reduction was also prompted by early signs of cooling house prices in Seoul and abatement in exchange rate pressure.

The external sector continues to be strong. The trade balance recorded surpluses in the first half of 2024, supported by strong semiconductor exports. Outward direct investment remained stable, while residents' investment in equities drove portfolio outflows. At USD 409.2 billion as of February 2025, foreign reserves remained ample, equivalent to 6.5 months of imports.

Credit quality continues to deteriorate, although the financial system remains sound. The debt service capacity of listed companies has improved, while the average interest coverage ratio of non-listed companies, especially SMEs, has decreased considerably. That said, CARs of banks and NBFIs are well above regulatory standards, and banks' liquidity buffers remain ample.

Comprehensive measures have been put in place to ensure orderly project finance resolution. The measures include enhanced standards for evaluating project viability, increased funding for viable projects, and stronger facilitation and funding by financial institutions for the restructuring and liquidation of nonviable projects. The second round of the evaluation showed that around 10.9 percent of project finance exposure was risky and could be subject to restructuring.

The fiscal position has deteriorated. Tax revenue has continued to decline in 2024, driven by lower corporate income tax. However, total revenue has risen owing to the increase in fund and nontax revenue. Fiscal spending has risen modestly, largely due to reduced mandatory transfers to local governments and education. The 2024 deficit, excluding social security funds, is estimated at 4.0 percent of GDP, higher than the budgeted and actual 3.6 percent in 2023.

Commodity price volatility remains a key inflation risk. To the extent that Middle East conflicts continue to flare up, they may push up energy prices and shipping prices. Meanwhile, extreme weather conditions can disrupt agricultural production and drive up food prices. Lastly, inflationary pressure remains subject to adjustments to domestic energy prices.

Unexpected slowdowns in major economies and changes in the US trade policy pose risks for Korea's exports. A sudden growth deceleration in the US, Europe, or China may dampen global demand and affect Korea's exports. The country's export prospects may also be eroded by new protectionist policies by the incoming US administration.

Interest burden and scarring effects of the pandemic continue to exert pressure on borrowers. The debt servicing capability of small and medium-sized enterprises, small merchants, self-employed business operators, and low-income households remains weak. Although bank credit quality has stabilized, nonbank deposit-taking institutions have been experiencing a steady rise in delinquency.

There are pockets of risk in savings banks. A sizable portion of troubled project finance loans is in non-metropolitan areas and financed by savings banks, whose financial buffers may be insufficient to absorb a surge in nonperforming loans.

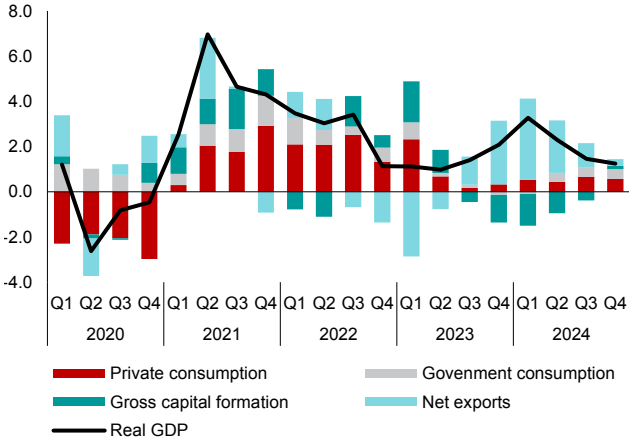
The author of this note is Jade Vichyanond.

Korea: Selected Figures

Output growth improved in 2024 thanks to strong export performance and, more recently, recovering domestic demand.

Gross Domestic Product

(Percent quarter-on-quarter, seasonally adjusted annualized rate)

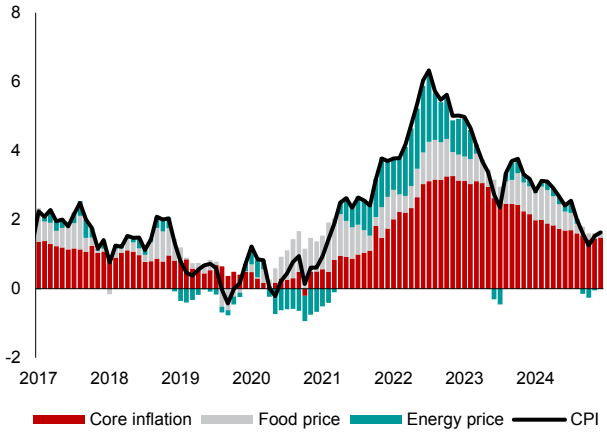


Source: Bank of Korea; Haver; AMRO staff calculations.

The CPI continued to decline, thanks to subsiding food and energy price pressure and muted core inflation.

Consumer Price Inflation

(Percent, year-on-year)

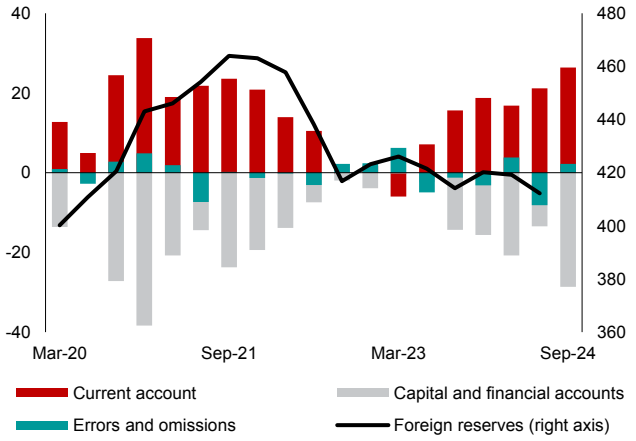


Source: Statistics Korea; Haver; AMRO staff calculations.
Note: CPI = consumer price index.

Strong current account surpluses have benefited from robust exports, while financial outflows have been driven by portfolio investment.

Balance of Payments and Foreign Reserves

(Billions of USD)

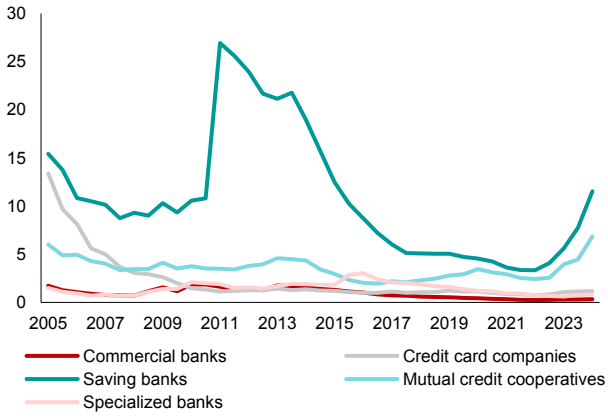


Source: Bank of Korea; Haver; AMRO staff calculations.

Savings banks and credit cooperatives have experienced worsening credit quality.

Substandard-and-below loan ratio

(Percent)

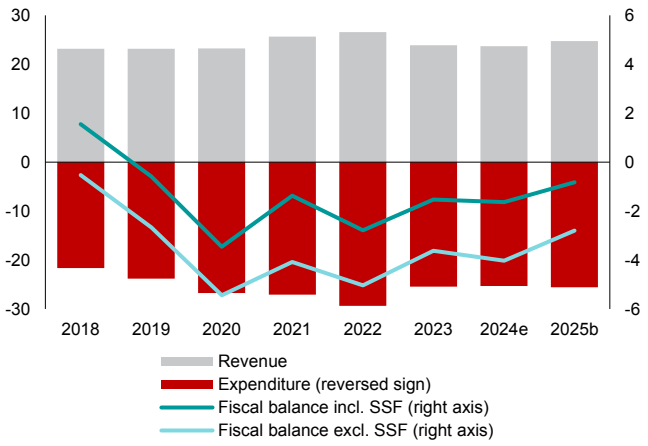


Source: FSS; CEIC; Haver; AMRO staff calculations.

The fiscal deficit, excluding social security funds (SSFs), is estimated to rise from 3.6 percent of GDP in 2023 to 4.0 percent in 2024.

Fiscal Balance

(Percent of GDP)

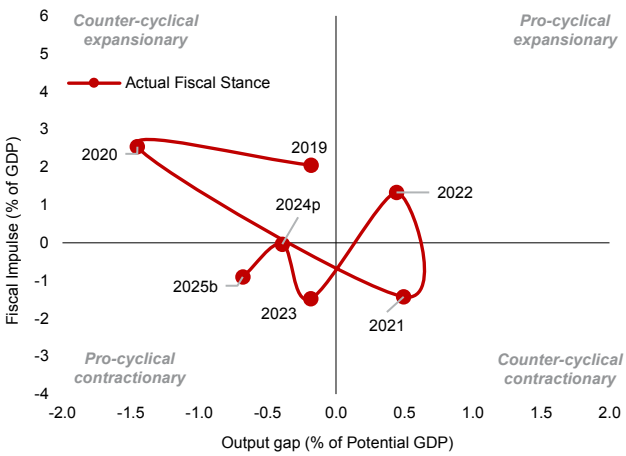


Source: Ministry of Economy and Finance; AMRO staff estimates.

The fiscal stance in 2024 was broadly neutral, while the 2025 budget suggests a contractionary stance.

Fiscal Impulse and Output Gap

(Percent of GDP; Percent of Potential GDP)



Source: Ministry of Economy and Finance; AMRO staff estimates.

Korea: Selected Economic Indicators

Indicator	2021	2022	2023	2024e
Real sector	(in annual percentage change)			
Real GDP	4.6	2.7	1.4	2.0
Private consumption	3.7	4.2	1.8	1.1
Government consumption	5.6	4.0	1.3	1.7
Gross fixed capital formation	4.3	–0.2	1.4	–0.6
Imports of goods and services	10.2	4.2	3.5	2.4
Exports of goods and services	10.8	3.9	3.6	6.9
External sector	(in percent of GDP, unless otherwise specified)			
Current account balance	4.4	1.4	1.9	5.3
Trade balance	3.9	0.9	1.9	5.9
Capital and financial account balance	3.3	3.1	2.0	5.8
Direct investment	2.4	2.4	1.1	2.0
Portfolio investment	1.1	1.5	0.4	3.0
Other investment	0.0	–1.1	0.6	–0.3
Errors and omissions	–0.3	0.0	–0.1	–0.2
Overall balance	0.8	–1.7	–0.2	–0.2
Gross external debt	32.5	37.4	36.6	35.5
International reserves (in USD billion, end of period)	463	423	420	416
Fiscal sector	(in percent of GDP)			
Revenue and grants	25.7	26.6	23.9	23.2
Expenditure	27.0	29.4	25.4	24.8
Fiscal balance (includes social security funds)	–1.4	–2.8	–1.5	–1.6
Government debt[1]	43.7	45.9	46.9	47.1
Monetary and financial sectors	(in annual percentage change)			
Broad money	12.9	4.0	3.9	4.3
Domestic credit	10.4	5.5	3.4	1.4
Private sector credit	10.6	6.3	2.1	1.3
Memorandum items:				
Nominal GDP (in KRW trillion)	2,080	2,162	2,236	2,549
Headline inflation (in percent y-o-y, period average)	2.5	5.1	3.6	2.3
Policy rate (in percent per annum, period average)	0.65	2.13	3.50	3.40
Exchange rate (in KRW/USD, period average)	1,144	1,291	1,305	1,364

Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates.
Note: y-o-y = year-on-year. Numbers in red denote AMRO staff estimates.
1/ Government debt refers to only debt securities and loans.

Lao People's Democratic Republic

Despite strong domestic and external headwinds, the Lao economy continued to grow at a moderate pace in 2024. Real GDP is likely to have expanded by 4.5 percent in 2024, from 4.2 percent in 2023. Growth was supported by a recovery in the electricity sector and improvement in tourism. Meanwhile, agriculture production was affected by Typhoon Yagi.

Inflation remained high at 23.1 percent in 2024, though it decreased from its peak of 31.2 percent in 2023. The continued tightening of monetary policy and the recent stabilization of the kip helped to ease inflationary pressures in the Lao economy. By the end of 2024, month-on-month inflation turned negative, averaging –1.2 percent in November and December.

Since July 2024, the kip strengthened by over 20 percent in the parallel market while its gap with the commercial bank exchange rate narrowed. As of mid-January 2025, the commercial bank kip rate was less than 6 percent weaker than at the end of 2023. The stabilization of the kip value has been supported by a series of measures by the Bank of Lao PDR (BOL), including the tightening of kip liquidity, the enforcement of repatriation and conversion requirements, and the launch of the Lao Forex Exchange (LFX) platform, a bank-supported foreign exchange trading system.

Nevertheless, the external position remains vulnerable. A small surplus was recorded in the overall balance of payments in the first three quarters of 2024, supported by a continued current account surplus and FDI inflows. However, persistent outflows related to external debt repayment obligations and residents' acquisition of overseas assets continue to exert pressure on the balance of payments. Gross international reserves increased to USD 1,893 million in November 2024, up from USD 1,677 million at the end of 2023, but are still below the threshold of three months' import coverage.

The BOL has stepped up measures to absorb kip liquidity. Since mid-2022, the BOL has tightened monetary policy through the issuance of higher-rate BOL bills, raising BOL policy rates and bank reserve requirement ratios. In 2024, the BOL issued seven-day, three-month, and six-month bills at fixed, high interest rates. Growth in the monetary base has slowed since mid-2023, contracting at an average pace of –3.3 percent between June to August 2024.

Bank-level data show large divergence among banks with pockets of financial vulnerabilities. Several banks reported higher capital adequacy ratios due to improved profits and increased capital contributions from shareholders. In contrast, the capital buffer of the largest state-owned bank declined and remained well below the minimum regulatory requirement. Official nonperforming loan ratios remain low, but could rise significantly upon the termination of regulatory forbearance. Banks' asset quality also remains vulnerable to the financial weakness in major electricity companies.

The fiscal balance turned into a deficit but remained low at 0.7 percent of GDP in 2024. The rise in public spending, driven mainly by higher interest payments and increased investments, has more than offset the boost in revenues from the hike in the value-added tax rate. In 2024, the government debt-to-GDP ratio is projected to fall to 90.1 percent of GDP, down from 103.4 percent in 2023, reflecting higher growth and slower depreciation of the kip.

Lao PDR's economic outlook is dampened by the slowdown in key trading partners, particularly China, under a potential escalation of US-China trade tensions. Extreme weather would also affect agriculture and electricity production, fueling inflationary pressures.

Renewed kip depreciation would exacerbate macrofinancial instability, driving up import prices and inflation. External debt burdens would also rise, pressing already strained government finances. An intensification of currency substitution would lead to further kip depreciation and higher dollarization, complicating monetary policy conduct.

Risks to public debt sustainability persist. The government's external debt service burden is worsening in the context of elevated foreign currency debt service. The government faces significant challenges in issuing offshore bonds, exacerbated by the recent downgrade of its sovereign credit rating in the Thai market. At the same time, public investment and expenditure arrears could accumulate again if fiscal discipline is not strictly enforced. The external financing gap could expand further on prolonged financial weakness of state-owned enterprises, in particular Electricité du Laos (EDL).

Lao PDR still faces significant structural challenges hindering its medium-term growth. While the Lao-China Railway is a positive development, infrastructure bottlenecks remain acute, restraining connectivity and trade efficiency. Outward labor migration poses another significant challenge as domestic labor shortages inhibit the ability of local industries to grow.

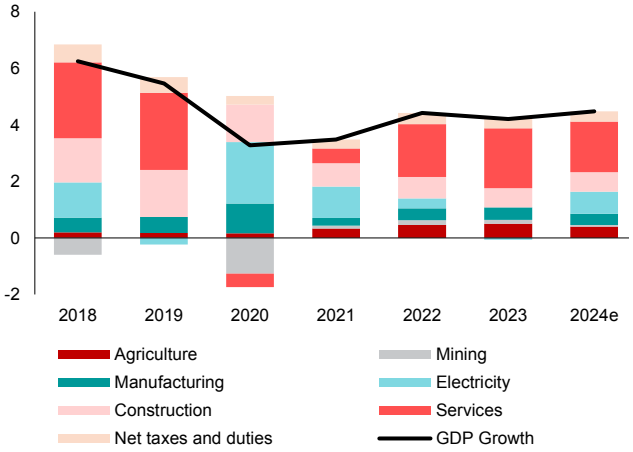
The author of this note is Poh Lynn Ng.

Lao PDR: Selected Figures

Growth in 2024 was supported by a recovery in the electricity sector and a robust expansion in services.

Real GDP Growth

(Percent, year-on-year)

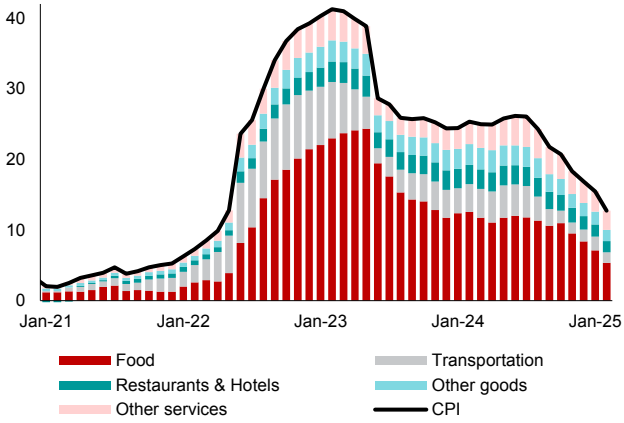


Sources: Lao Statistics Bureau; AMRO staff estimates.
Note: e denotes estimate.

Headline inflation slowed in 2024 but remained high at double-digit levels.

CPI Inflation

(Percent, year-on-year)

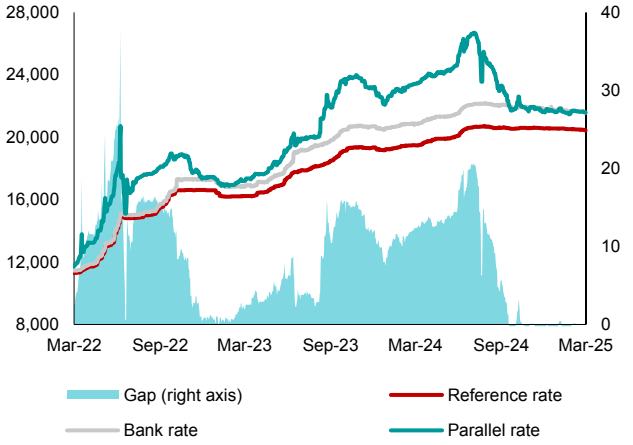


Source: Lao Statistics Bureau.
Note: CPI = Consumer Price Index

The kip has stabilized since mid-2024, while the bank and parallel rate gap has nearly closed.

Exchange Rate

(LAK/USD; percentage points)

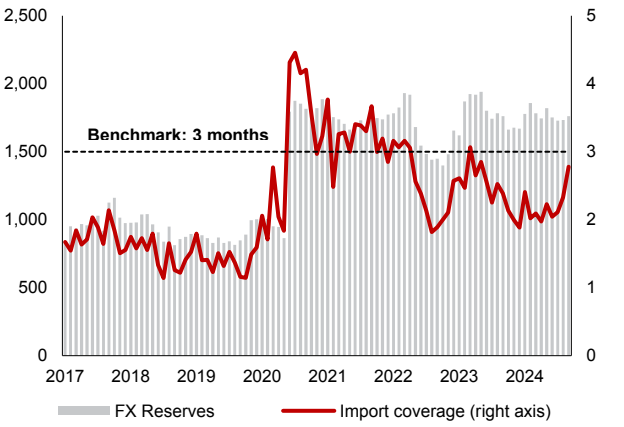


Source: Bank of Lao PDR
Note: The gap is the difference between the parallel rate and commercial bank rate.

Gross international reserves have increased but are still insufficient to cover three months of imports.

Gross International Reserves

(Millions of US dollars; months of imports)

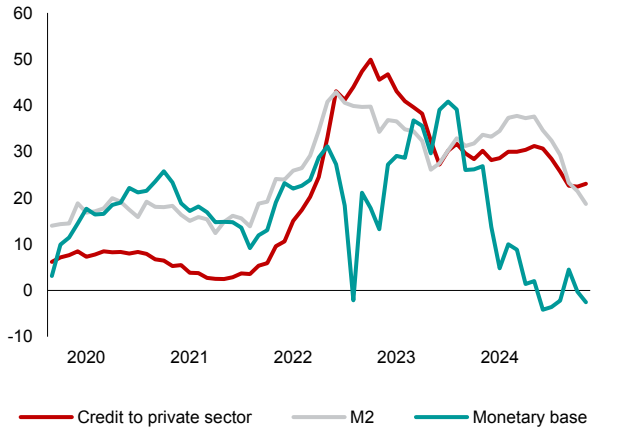


Sources: Bank of Lao PDR; AMRO staff estimates.
Note: FX = foreign exchange.

Growth in the monetary base moderated significantly in 2024, alongside slower growth in M2 (deposit) and credit.

Monetary and Credit Growth

(Percent, year-on-year)

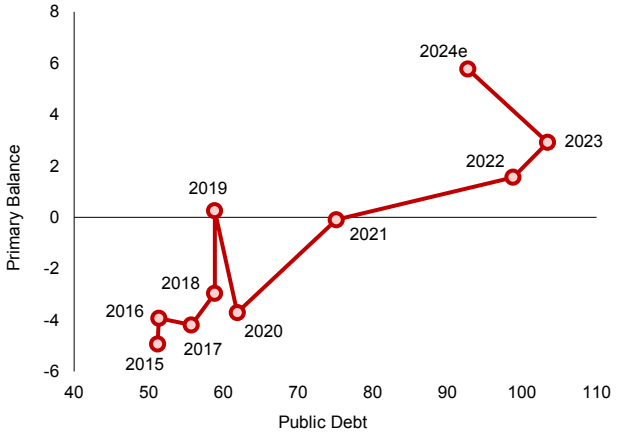


Source: Bank of Lao PDR.
Note: Data ends in September 2024.

The public debt-to-GDP ratio declined in 2024, while the primary balance narrowed but remained in a surplus.

Primary Balance and Public Debt

(Percent of GDP)



Source: Lao PDR Ministry of Finance; AMRO staff estimates.
Note: e denotes estimate.

Lao PDR: Selected Economic Indicators

Indicator	2021	2022	2023	2024e
Real sector	(in annual percentage change)			
Real GDP	3.5	4.4	4.2	4.5
Agriculture	2.4	3.4	3.7	3.0
Industry	6.1	4.4	3.1	5.0
Services	1.4	5.0	5.6	4.7
External sector	(in percent of GDP, unless otherwise specified)			
Current account balance	2.3	–3.0	2.9	0.6
Trade balance	7.5	6.3	5.1	4.9
Capital and financial account balance	–0.9	4.7	2.7	2.7
Direct investment	5.6	4.8	12.6	9.6
Portfolio investment	–1.6	0.5	–0.7	–2.1
Other investment	–4.9	–0.6	–9.1	–4.8
Errors and omissions	–1.9	–3.4	–4.2	–3.2
Overall balance	–0.4	–1.7	1.4	0.2
International reserves (in USD billion, end of period)	1,737	1,480	1,677	1,893
Fiscal sector	(in percent of GDP)			
Revenue and grants	14.7	14.8	17.4	20.0
Expenditure	16.0	15.0	16.6	17.6
Fiscal balance	–1.3	–0.2	0.7	2.4
Primary balance	–0.1	1.6	2.9	5.8
Government debt	75.1	98.8	103.4	92.8
Monetary and financial sectors	(in annual percentage change)			
Broad money	24.0	36.9	33.3	13.9
Domestic credit	23.5	36.5	23.4	24.7
Private sector credit	10.6	46.7	28.2	15.4
Memorandum items:				
Nominal GDP (in LAK billion)	184,982	215,609	265,475	316,750
Nominal GDP (in USD million)	18,984	15,061	14,191	14,694
Headline inflation (in percent y-o-y, period average)	3.8	23.0	31.2	23.1
Exchange rate (in LAK/USD, period average)	9,744	14,316	18,707	21,556

Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates.
Note: y-o-y = year-on-year. Numbers in red denote AMRO staff estimates.

Malaysia

The economy continued to show robust growth momentum, driven by resilient domestic demand and recovery in external demand. Malaysia's GDP growth accelerated to 5.1 percent in 2024 from 3.6 percent in 2023. Private consumption remains firm, benefiting from favorable labor market conditions and government cash assistance. As at December 2024, labor force participation reached a historical high of 70.6 percent and the unemployment rate has fallen to 3.1 percent, below pre-pandemic levels. Investment growth has been strong, reflecting progress of private sector and public infrastructure projects. Recent policies like the New Industrial Master Plan 2030, the National Energy Transition Roadmap, the National Semiconductor Strategy, and the Johor-Singapore Special Economic Zone, have also reinvigorated business and investor sentiment. On the external front, merchandise exports have recovered amid the global tech upcycle.

Inflation moderated and remained stable, suggesting limited spillover to broader prices from subsidy rationalization and new tax measures. Both headline and core inflation averaged 1.8 percent in 2024, down from 2.5 percent and 3.0 percent in 2023. Bank Negara Malaysia (BNM) has kept the overnight policy rate unchanged since May 2023, in view of contained inflationary pressures and stable economic conditions. Following the adjustment in electricity and water tariffs and a full float of diesel prices, the government has decided to implement a two-tiered pricing mechanism for the targeted RON95 fuel subsidy in mid-2025.

The external position improved after weakening in 2023 amid a challenging external environment. The current account recorded a surplus of 1.7 percent of GDP in 2024, slightly higher than 2023. A continued goods trade surplus, particularly exports of electrical and electronic products and commodities, supported the current account, as did a strong recovery in tourism. International tourist arrivals surpassed pre-pandemic levels, with a surge in Chinese tourists since early 2024. FDI improved to 3.7 percent of GDP in 2024, up from 2.0 percent in 2023, amid record high approved investments. The ringgit depreciated by only 0.3 percent against the US dollar in 2024, emerging as the top performer among regional currencies. The ringgit's strength was in part driven by the US Federal Reserve's shift toward a monetary easing stance and ongoing efforts by the government and BNM to encourage repatriation of foreign investment income and conversion to ringgit. BNM's international reserves increased to USD 116.2 billion at the end of 2024, up from USD 113.5 billion at the end of 2023, and is adequate to cover 5.0 months of imports and 1.0 time of short-term external debt.

The banking system has ample capital and liquidity buffers to facilitate continued credit growth. Both capital and liquidity buffers far exceeded regulatory requirements, with the total capital adequacy ratio, common equity Tier-1 capital ratio, and liquidity coverage ratio at 17.8, 14.3, and 161 percent as of end-2024. On asset quality, the share of nonperforming loans declined to 1.44 percent at the end of 2024, from 1.65 percent at the end of 2023. Despite the increase in lending rates from BNM's policy normalization, loan growth remained healthy at 5.6 percent in 2024.

Fiscal performance was better than official projections, while the 2025 Budget remains committed to fiscal consolidation. The fiscal deficit narrowed from 5.0 percent of GDP in 2023 to 4.1 percent in 2024, beating the target set by the Ministry of Finance. The 2025 Budget is the largest on record but represents a reduction as a share of GDP compared to 2024, primarily because of lower subsidy spending. The government plans to further narrow the fiscal deficit to 3.8 percent of GDP in 2025. The Public Finance and Fiscal Responsibility Act, enacted in October 2023, is a major institutional milestone, and the government intends to table the Government Procurement Act in parliament in 2025 to strengthen governance, accountability, and transparency.

Risks to the near-term growth outlook are skewed to the downside mainly due to external factors. These include weaker-than-expected growth in major economies and protectionist policies under the new US administration that may have wide-ranging impact on trade and investment. Meanwhile, risks to the inflation outlook are tilted to the upside. Supply-related disruptions, such as those arising from geopolitical conflicts and adverse weather conditions, and potential spillover from the planned RON95 fuel subsidy rationalization are key risks.

Medium to long-term challenges include global economic fracturing which could pose challenges to cross-border financial flows, technology transfers, and supply chain security; lack of skilled talent that could hinder industrial upgrading; inadequate retirement savings amid an aging population; and low preparedness for natural disasters and climate change.

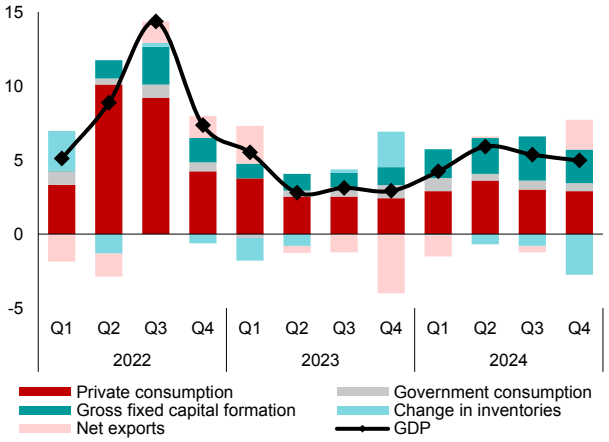
The author of this note is Wee Chian Koh.

Malaysia: Selected Figures

GDP growth improved to 5.1 percent in 2024, supported by resilient domestic demand and a recovery in external demand.

Contributions to Real GDP Growth

(Percentage points, year-on-year)



Source: Department of Statistics Malaysia.

Labor conditions continued to improve, with sustained wage growth and a declining unemployment rate.

Wages and Unemployment Rate

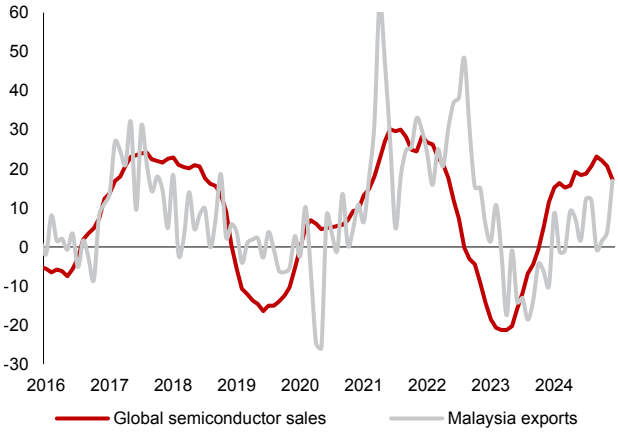
(Percent, year-on-year; percent)

Source: Department of Statistics Malaysia.

Merchandise exports continued to recover, broadly in line with the trend in the global technology cycle.

Global Semiconductor Sales and Malaysia's Exports

(Percent, year-on-year)

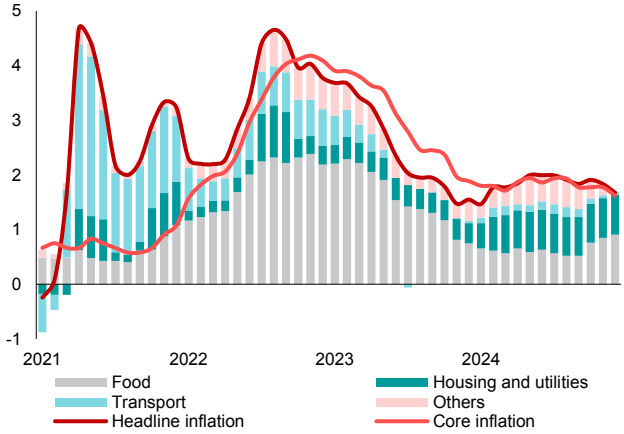


Source: Department of Statistics Malaysia; Semiconductor Industry Association.

Headline and core inflation were moderate and stable, suggesting limited spillover to broader prices from subsidy rationalization and new tax measures.

Contributions to Consumer Price Inflation

(Percentage points, year-on-year)

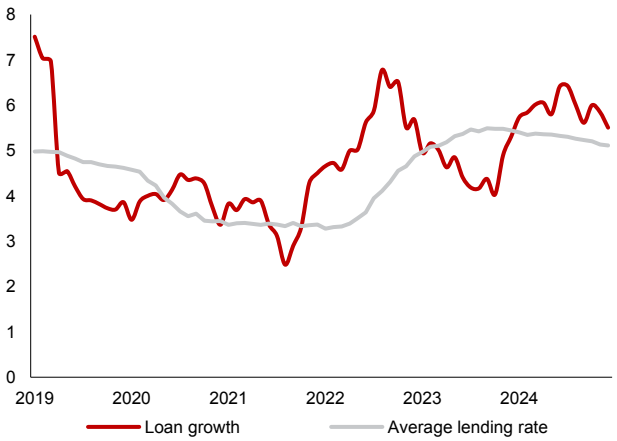


Source: Department of Statistics Malaysia.

Loan growth remained robust in 2024 despite an increase in the lending rate following monetary policy normalization.

Loan Growth and Lending Rate

(Percent, year-on-year; percent)

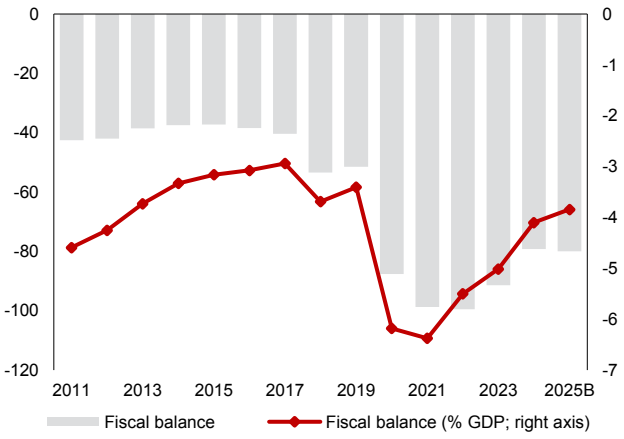


Source: Bank Negara Malaysia.

The fiscal deficit continued to narrow as the government remained committed to fiscal consolidation.

Fiscal Balance

(Billions of ringgit; percent of GDP)



Source: Department of Statistics Malaysia; Malaysia Ministry of Finance.
Note: 25B denotes estimates in Budget 2025.

Malaysia: Selected Economic Indicators

Indicator	2021	2022	2023	2024e
Real sector	(in annual percentage change)			
Real GDP	3.3	8.9	3.6	5.1
Private consumption	1.8	11.3	4.7	5.1
Government consumption	5.8	5.1	3.3	4.7
Gross fixed capital formation	–0.7	6.8	5.5	12.0
Imports of goods and services	18.5	14.5	–8.1	8.5
Exports of goods and services	21.2	16.0	–7.4	8.9
External sector	(in percent of GDP, unless otherwise specified)			
Current account balance	3.9	3.2	1.5	1.7
Trade balance	11.5	10.4	7.5	6.1
Capital and financial account balance	1.0	0.5	–0.9	–0.8
Direct investment	2.0	0.7	0.0	0.6
Portfolio investment	1.2	–2.8	–2.0	–4.4
Other investment	–2.0	2.7	1.4	2.9
Errors and omissions	–2.0	–0.7	–1.8	–0.1
Overall balance	2.9	3.0	–1.1	0.8
Gross external debt	69.8	63.9	68.2	69.7
International reserves (in USD billion, end of period)	116.9	114.7	113.5	116.2
Fiscal sector	(in percent of GDP)			
Revenue and grants	15.1	16.4	17.3	16.8
Expenditure	21.5	22.0	22.3	20.9
Fiscal balance	–6.4	–5.5	–5.0	–4.1
Government debt	63.3	60.2	64.3	64.6
Monetary and financial sectors	(in annual percentage change)			
Broad money	6.4	4.3	6.0	4.0
Private sector credit	4.2	4.7	4.8	5.2
Loans	4.2	4.7	5.0	5.6
Corporate bonds	4.2	4.6	4.2	3.4
Memorandum items:				
Nominal GDP (in MYR billion)	1548.7	1793.9	1822.9	1931.1
Headline inflation (in percent y-o-y, period average)	2.5	3.3	2.5	1.8
Policy rate (in percent per annum, period average)	1.8	2.8	3.0	3.0
Exchange rate (in MYR/USD, period average)	4.1	4.4	4.6	4.6

Source: National authorities; AMRO staff estimates.
Note: y-o-y = year-on-year. Numbers in red denote AMRO staff estimates.

Myanmar

Myanmar's economy continued to face significant challenges amid the ongoing geopolitical uncertainties. While the geopolitical environment saw periods of relative calm recently, underlying tensions have remained unresolved, weighing heavily on growth. The impact of Typhoon Yagi, which struck Myanmar in September 2024, compounded these challenges, causing significant damage to agricultural lands and worsening supply shortages. The manufacturing sector was hit by frequent power outages, material shortfalls, and labor challenges. Meanwhile, the tourism recovery remained modest.

Inflation experienced upward momentum due to rising transportation costs, expanded supply restrictions on imported goods, and the residual effects of the currency. The geopolitical uncertainties led to significant delays in bringing goods to market, leading to an increase in transportation and transaction costs, which in turn contributed to inflation. A shortage of essential supplies, such as fuel, is also intensifying price pressures. Administrative measures to curb imports have been broadened, with many items—including consumer products, raw materials, and intermediate goods—requiring import license. This has intensified supply challenges, contributing to high inflation that further erodes household incomes and exacerbates supply disruptions.

The volume of external trade has declined, reflecting ongoing challenges in maintaining stable trade relationships and logistical operations. Border trade activities have dropped sharply due to stringent custom clearance procedures which have slowed the movement of goods and increased transaction costs. The closure of key border crossings in China and Thailand in recent months has added to these issues, disrupting trade and affecting local businesses dependent on cross-border commerce. Likewise, inward foreign direct investment has been further constrained by the less friendly investment climate amid frequent regulatory changes and ongoing international sanctions. These challenges have exerted downward pressure on the external position. However, sizeable import compression from the broadening of import restrictions and sustained inward remittances from migrant workers abroad following the new incentive program and other regulations have helped to support the external position.

In the banking sector, the local currency liquidity conditions experienced some stress in the midyear but have since stabilized. Deposit withdrawals at some private banks have led to tighter local currency liquidity conditions. However, the liquidity situation has since stabilized, as the Central Bank of Myanmar (CBM) intervened by providing kyat liquidity through various channels, including credit lines, discount window, and repos. The CBM tightened monetary policy to curb inflation. In May 2024, the CBM increased the minimum reserve requirement ratio for MMK to 3.75 percent. Simultaneously, in May 2024, the interest rate on excess reserve was raised to 3.8, up from 3.6 percent. More recently, in September 2024, the policy rate increased to 9 percent, from 7 percent.

The fiscal deficit widened in FY23/24 from increased expenditure. While both tax and non-tax revenue collections in FY23/24 remained steady, in line with the economic recovery, expenditures increased mainly due to additional cash transfer for basic government salary. As a result, the fiscal deficit widened to 3.2 percent of GDP in FY23/24, from 3.0 percent in FY22/23.

Changes in inflation and local currency fluctuations could present challenges, including rising operational costs for businesses. These conditions may influence investment decisions, affect market confidence, and economic growth.

The external position and the foreign exchange liquidity conditions remain precarious. A persistent trade deficit, coupled with the discontinuation of official development financing, has placed downward pressure on reserves, constraining the ability of the economy to pay for critical imports. However, FDI flows, especially from China, and robust remittances are expected to mitigate the downward pressures.

Widespread labor movements, driven by ongoing political uncertainties, are posing challenges to doing business, already under strain from weakened investor confidence. The outflows of skilled Myanmar citizens abroad have raised concerns about the potential erosion of skilled labor supply in the country, while business disruptions have further dampened labor demand, exacerbating economic instability.

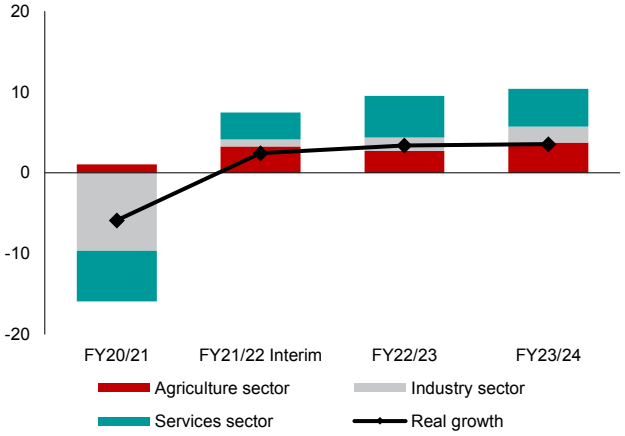
The author of this note is Tanyasorn Ekapirak.

Myanmar: Selected Figures

The economy continues to recover in FY22/23 and FY23/24, although at a modest pace.

Contributions to Real GDP Growth

(Percent points, year-on-year)

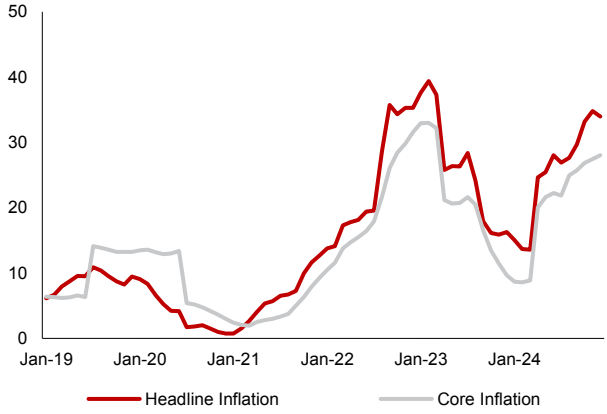


Source: Ministry of Planning and Finance; AMRO staff estimation.

Inflation saw renewed upward pressure, partly due to the effects of Typhoon Yagi.

Contributions to CPI Inflation

(Percentage points, year-on-year)

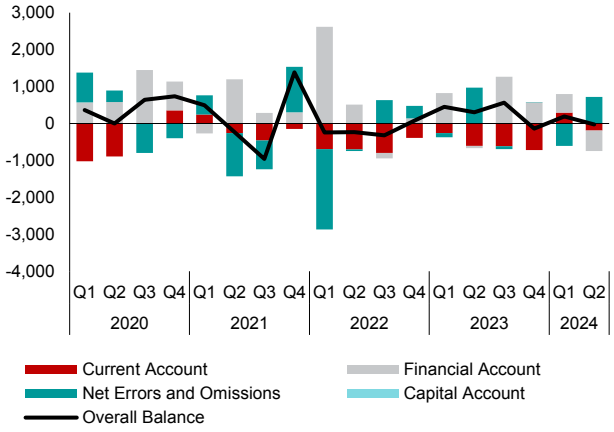


Source: Central Statistical Organization; AMRO staff calculations.

Overall balance of payments shifted to a small surplus in FY23/24, partly reflecting sustained remittances flows.

Balance of Payments

(Millions of US dollars)

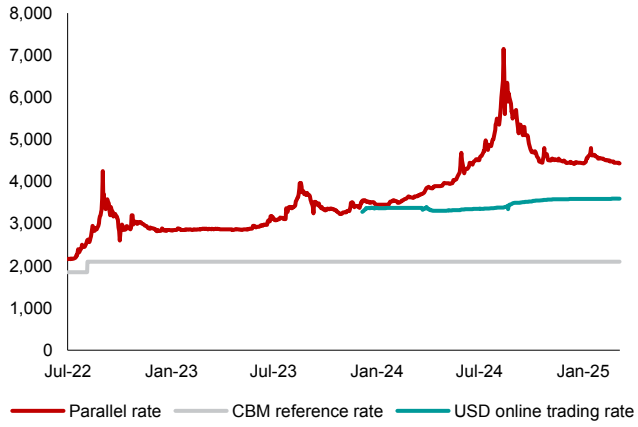


Source: Central Bank of Myanmar; AMRO staff compilation.

In recent months, the kyat exchange rate against the US dollar has stabilized at about 4,500 USD/MMK.

Exchange Rate

(MMK/USD)

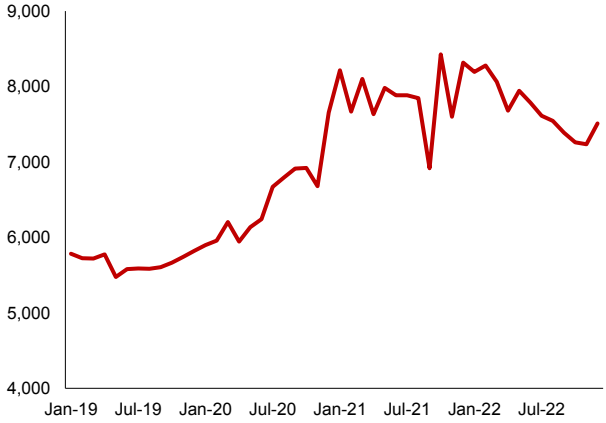


Source: Central Bank of Myanmar; AMRO staff compilation.

Foreign reserves continued to be under pressure amid significant uncertainties.

Gross International Reserves

(Billions of US dollars)

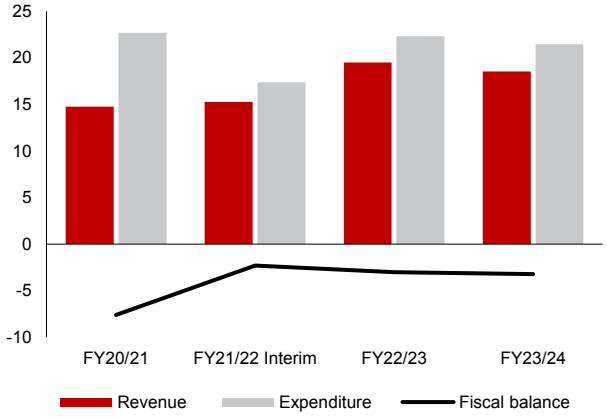


Source: Central Bank of Myanmar.

The fiscal deficit widened in FY23/24 on account of higher expenditures.

Fiscal Balance

(Percent of GDP)



Source: Ministry of Planning and Finance.

Myanmar: Selected Economic Indicators

Indicator	FY20/21	FY21/22	FY22/23	FY23/24
Real sector	(in annual percentage change)			
Real GDP	–5.9	2.4	3.4	3.5
External sector	(in percent of GDP, unless otherwise specified)			
Current account balance	–0.2	–2.0	–3.5	–2.1
Trade balance	–1.7	–1.8	–5.5	–3.9
Capital and financial account balance	2.7	7.0	1.8	3.9
Direct investment	1.5	5.4	2.5	2.9
Other investment	1.6	–1.0	–0.8	–0.4
Errors and omissions	–1.2	–4.6	1.7	–0.3
Overall balance	1.4	0.4	0.0	1.4
International reserves (in USD billion, end of period)	7,879	8,067	8,030	7,768
Fiscal sector	(in percent of GDP)			
Revenue and grants	14.7	15.3	19.5	18.5
Expenditure	22.7	17.4	22.3	21.5
Fiscal balance	–7.6	–2.3	–3.0	–3.2
Government debt	53.8	52.7	55.6	52.3
Monetary and financial sectors	(in annual percentage change)			
Broad money	11.4	3.8	8.6	15.9
Domestic credit	14.5	13.0	8.9	15.4
Private sector credit	1.5	–0.9	6.4	19.7
Memorandum items:				
Headline inflation (in percent y-o-y, period average)	3.6	13.2	24.4	27.5
Policy rate (in percent per annum, end of period)	7.00	7.00	7.00	7.00
Exchange rate (in MMK/USD, period average)	1,494	1,792	2,016	2,100

Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates.
Note: y-o-y = year-on-year. Numbers in red denote AMRO staff estimates.
1/ FY20/21 started on 1 October and ended 30 September; FY21/22 started on 1 October and ended on 31 March; FY22/23 and FY23/24 start on 1 April and end on 31 March.

The Philippines

The economy maintained its robust growth momentum in 2024, at a steady pace of 5.7 percent. The economic growth was mainly supported by a recovery in public consumption and construction investment, while household consumption, underpinned by a strong labor market and robust remittances, continued to expand. On the production side, growth was primarily driven by the construction and services sectors.

Headline inflation fell to 3.2 percent in 2024 from 6.0 percent in 2023, while core inflation decreased faster to 3.0 percent from 6.6 percent. A moderation of supply-push factors, particularly lower global commodity prices, combined with tight monetary policy and other non-monetary measures such as tariff cuts on food items, has driven down headline inflation. With inflation staying within the target range of 2 percent–4 percent, the Bangko Sentral ng Pilipinas (BSP) adjusted monetary policy toward a less restrictive stance by lowering the policy rate three times since August 2024, from 6.5 percent to 5.75 percent at the end of 2024, the first among the ASEAN-5.

The labor market continued to be strong, which helped support consumption in 2024. The unemployment rate fell to 3.1 percent in December, and employment surpassed pre-pandemic levels. However, the double-digit underemployment rate and the relatively low share of high-income positions reflect that the economy has yet to generate sufficient high-quality jobs.

On the external front, the BOP registered a surplus in 2024, while external debt remained at prudent levels. Specifically, the current account deficit widened, driven by lower net receipts in trade in services following the surge in travel imports and a higher deficit in trade in goods; net financial account inflows increased. However, the peso had depreciated by 4.4 percent against the US dollar in 2024, and the nominal effective exchange rate (NEER) fell by 2.8 percent. Meanwhile, gross international reserves rose from USD 103.8 billion at the end of 2023 to USD 106.3 billion at the end of 2024, mainly due to upward asset valuation, and net income from the central bank's investments abroad. The reserves are sufficient to cover 7.3 months of imports and 3.8 times of short-term external debt in residual maturity as of end-December 2024.

The banking system remained sound, while bank loans grew steadily in 2024. The banking system has ample liquidity, robust profitability, and high capital buffers. Despite high interest rates, overall loans continued to grow robustly by 10.6 percent in December, driven largely by lending to the household segment (24.3 percent), which was pronounced in unsecured segments such as credit card loans and salary-based general consumption loans. Meanwhile, the BSP also announced a reduction in the reserve requirement ratio in September 2024, which would lower intermediation costs and promote better pricing for financial services such as bank lending.

The fiscal position continued to improve in 2024. In 2024, fiscal expenditure rose by 11.0 percent year-on-year, while fiscal revenue grew by 15.6 percent. The increase in expenditure was mainly due to higher capital outlay, maintenance and other operating expenses, allotments to local government units, and interest payments, while the rise in revenue was driven largely by better-than-expected non-tax revenue collection. The fiscal deficit fell to 5.7 percent of GDP in 2024 from 6.2 percent in 2023. Meanwhile, the Development Budget Coordination Committee recalibrated the government's medium-term fiscal program in 2024, signaling a slower pace of consolidation to reflect a more realistic GDP growth target considering recent domestic and global developments. The government now plans to gradually reduce the fiscal deficit from 5.7 percent of GDP in 2024 to 3.7 percent in 2028, and to cut government debt from 60.7 percent of GDP in 2024 to 56.0 percent by 2028.

The growth prospects of the Philippines are relatively robust, but they could be subject to several risks. In the near term, higher inflation triggered by local food supply disruptions and utility price shocks could be a risk to the economy, as higher living costs would reduce households' ability to afford discretionary items and constrain household consumption. Meanwhile, the economy could be challenged by a sharp slowdown in major trading partners, through their impacts on merchandise and services trade, tourist arrivals, overseas remittances, and foreign investment inflows. Heightened geopolitical risks could increase the likelihood of global supply disruptions that cause another round of upward inflation pressures, as well as further global economic fragmentation.

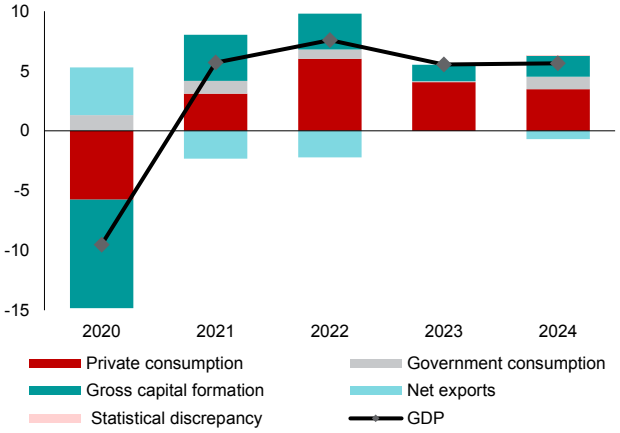
Over the long term, the country's potential growth could be constrained by scarring effects caused by the pandemic, such as a gradual labor force upgrade, modest gains in labor productivity due to job quality concerns, and a subdued recovery in private investment due to financial constraints on firms; limited physical infrastructure; and climate change vulnerabilities; prompting the government to intensify efforts to address the challenges.

The author of this note is Heung Chun (Andrew) Tsang.

The Philippines: Selected Figures

The momentum of economic growth was still robust.

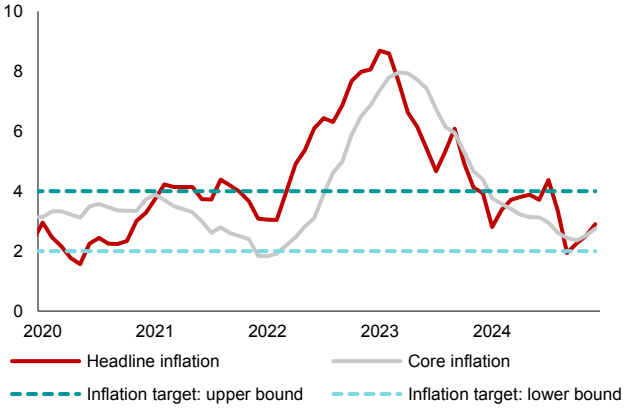
Contributions to Real GDP Growth
(Percentage points, year-on-year)



Sources: Philippine Statistics Authority; AMRO staff calculations.

Inflationary pressure eased, and inflation fell into the 2–4 percent target range.

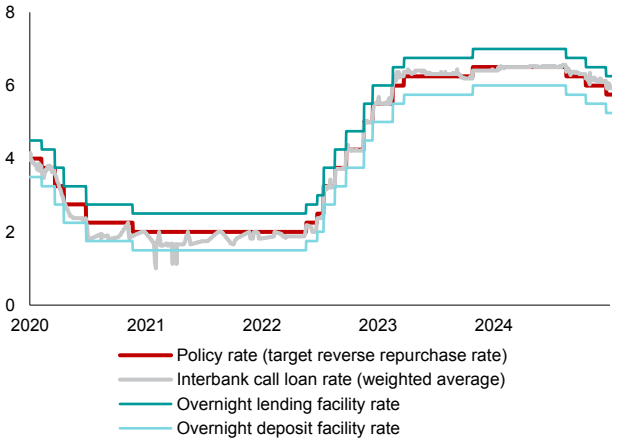
Headline CPI and Core CPI
(Percent, year-on-year)



Sources: Philippine Statistics Authority; Haver Analytics; AMRO staff calculations.
Note: CPI = consumer price index (base year = 2018).

The central bank started to cut the policy rate in August 2024.

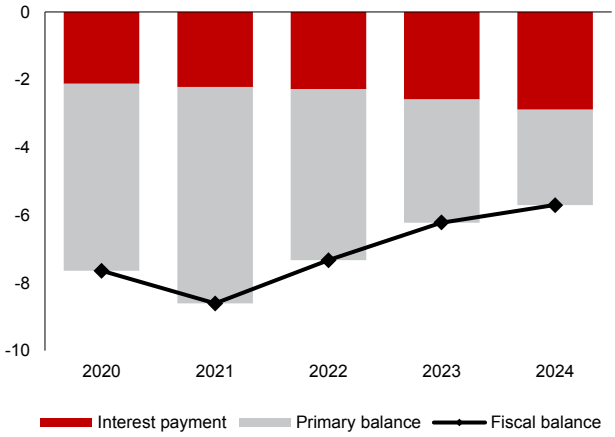
Monetary Policy and Market Rate
(Percent)



Source: Bangko Sentral ng Pilipinas.

The fiscal deficit continued to narrow with solid revenue performance.

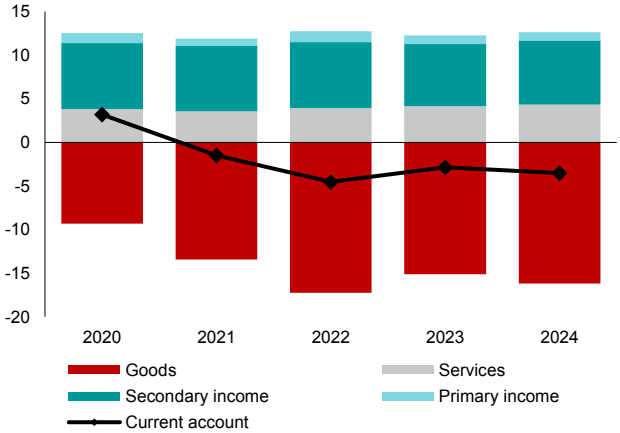
Fiscal Balance
(Percent of GDP)



Source: Bureau of the Treasury.

The current account deficit widened, driven by the pickup in imports.

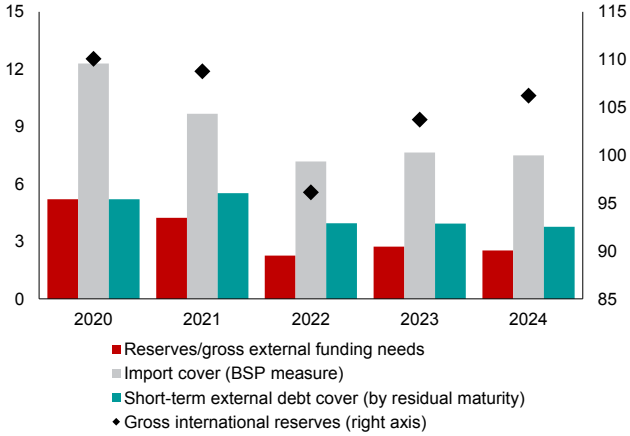
Current Account Balance
(Percent of GDP)



Source: Bangko Sentral ng Pilipinas.

International reserves remained sufficient for external funding needs.

International Reserve Adequacy
(Months/times; billions of US dollars)



Source: Bangko Sentral ng Pilipinas.
Note: Import cover refers to the number of months of average imports of goods and payment of services and primary income.

The Philippines: Selected Economic Indicators

Indicator	2021	2022	2023	2024e
Real sector	(in annual percentage change)			
Real GDP	5.7	7.6	5.5	5.7
Private consumption	4.2	8.3	5.6	4.8
Government consumption	7.2	5.1	0.6	7.2
Gross fixed capital formation	9.8	9.8	8.2	6.2
Imports of goods and services	12.8	14.0	1.0	4.3
Exports of goods and services	8.0	11.0	1.4	3.4
External sector[1]	(in percent of GDP, unless otherwise specified)			
Current account balance	–1.5	–4.5	–2.8	–3.8
Trade balance	–9.8	–13.3	–10.9	–11.7
Capital and financial account balance[1]	–1.6	–3.4	–3.1	–3.8
Direct investment	–2.5	–1.4	–1.2	–1.3
Portfolio investment	2.6	–0.4	0.8	–0.8
Other investment	–1.8	–1.6	–2.7	–1.7
Errors and omissions	0.2	–0.7	0.5	0.1
Overall balance[1]	0.3	–1.8	0.8	0.1
Gross external debt	27.0	27.5	28.7	29.8
International reserves (in USD billion, end of period)	108.8	96.1	103.8	106.3
Fiscal sector	(in percent of GDP)			
Revenue and grants	15.5	16.1	15.7	16.7
Expenditure	24.1	23.4	21.9	22.4
Fiscal balance	–8.6	–7.3	–6.2	–5.7
Government debt	60.4	60.9	60.1	60.7
Monetary and financial sectors	(in annual percentage change)			
Broad money[2]	8.0	8.0	7.4	7.6
Domestic credit	8.2	12.7	9.3	10.4
Private sector credit	3.8	11.1	9.1	12.2
Memorandum items:				
Nominal GDP (in PHP billion)	19,411	22,028	24,319	26,437
Headline inflation (in percent y-o-y, period average)	3.9	5.8	6.0	3.2
Policy rate (in percent per annum, end of period)	2.00	5.50	6.50	5.75
Exchange rate (in PHP/USD, period average)	49.3	54.5	55.6	57.3

Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates.
Note: y-o-y = year-on-year.
1/ The Philippines' balance of payments follows BPM6. A negative (positive) financial account balance indicates net inflow (outflow).
Overall balance = Current account balance - Capital and financial account balance + Errors and omissions.
2/ Refers to M4.

Singapore

Singapore's economic growth strengthened to 4.4 percent in 2024, up from 1.8 percent in 2023. The stronger-than-expected growth was driven by a robust recovery in gross fixed capital formation and consumption as the borrowing cost and cost-of-living pressures eased. The turnaround in non-oil domestic exports (NODX) during the second half of the year further bolstered growth, supported by the electronics cycle upturn and frontloading of shipments ahead of potential trade tariffs expected in 2025. Reflecting the rebound in NODX, the manufacturing sector showed a sharp improvement late in the year. Meanwhile, the services sector experienced robust growth throughout the year, underpinned by strong activities in the wholesale trade, as well as finance and business services.

Labor market tightness gradually dissipated in 2024. Hiring demand has softened, as evidenced by a moderation in employment growth from a peak of 6.9 percent year-on-year in the third quarter of 2022 to 1.2 percent in the fourth quarter of 2024, approaching the pre-pandemic average of about 0.7 percent (2015–2019). In addition, the ratio of job vacancies to unemployed persons declined to 1.6 in the fourth quarter of 2024 from the 25-year-high of 2.3 in 2022, though it remained above the pre-pandemic average of around 1.0. The seasonally adjusted overall unemployment rate stabilized at 1.9 percent in December 2024, close to the pre-pandemic average of 2.1 percent (2015–2019).

Inflation continued to moderate in 2024, amid easing global inflation, the appreciation of the Singapore dollar in terms of the nominal effective exchange rate, and government measures to mitigate cost-of-living pressures. Price moderation was observed across key categories, including goods, services, accommodation, and transport. CPI all-items inflation fell to 1.5 percent year-on-year in December 2024, while MAS core inflation eased to 1.7 percent in the same period. For the full year, CPI all-items inflation averaged 2.4 percent, compared to 4.8 percent in 2023, while core inflation averaged 2.8 percent, compared to 4.2 percent in the previous year.

On the financial conditions front, the nominal effective exchange rate of the Singapore dollar strengthened 0.5 percent year-on-year against a basket of trading partner currencies in 2024, as MAS maintained the appreciation slope of the exchange rate policy band throughout the year. However, on the bilateral basis, the Singapore dollar depreciated 2.8 percent against the US dollar, ending the year at 1.36 SGD per USD. Domestic interest rates moved in tandem with US interest rates, with the three-month Compounded SORA declining 60 basis points year-on-year to 3.1 percent at the end of 2024, while the 10-year government bond yield rose by 15 basis points to 2.9 percent.

In January 2025, with core inflation projected to ease below 2 percent in 2025 and economic growth moderating, MAS slightly reduced the slope of the policy band for the Singapore dollar's nominal effective exchange rate. The decision marked the first easing move since 2020.

Singapore's banking sector remained sound in 2024, underpinned by strong capital buffers, ample liquidity, and robust asset quality. The Total Capital Adequacy Ratio rose to 19 percent and the Tier-1 ratio of the banking system rose to 17 percent in the third quarter of 2024—well above regulatory requirements. Liquidity Coverage Ratios and Net Stable Funding Ratios of D-SIBs also remained above minimum requirements. Asset quality also improved, as the banking system's nonperforming loan ratio declined to 1.4 percent in the third quarter of 2024 from 1.7 percent in the fourth quarter of 2023.

The fiscal position for FY2024 is expected to record a slight surplus of 0.9 percent of GDP, compared to a deficit in FY2023. While top-ups to endowment and trust funds were lower than in FY2023, special transfers continued to support households, small businesses, and long-term economic resilience. Key measures included financial support packages for households and SMEs to ease the cost-of-living pressures and rising business costs, contributions to the Future Energy Fund for critical energy infrastructure, and allocations to the Financial Sector Development Fund to improve Singapore's competitiveness as a financial hub. Overall, AMRO estimated that the FY2024 budget maintained a broadly neutral fiscal stance.

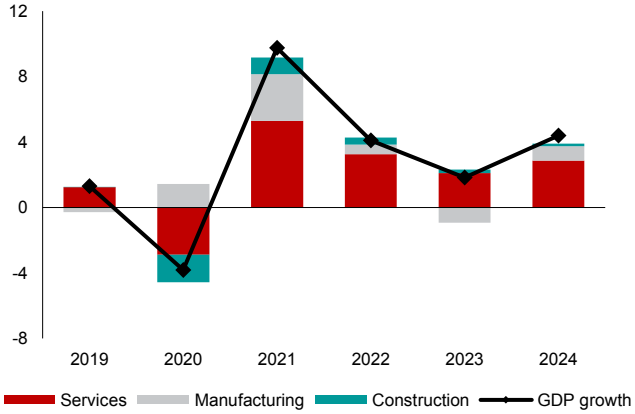
Looking ahead, Singapore's near-term economic outlook will be subject to external risks. First, a slower-than-expected recovery in major trading partners such as China could dampen export demand and reverse the global electronics cycle upturn. Second, protectionist trade policies abroad could disrupt trade and investment flows, posing significant challenges for small and highly open economies like Singapore. Lastly, over the longer term, Singapore will face challenges from an aging population. The demographic shift will have a sizable impact on fiscal burden through higher costs of healthcare and social protection. Addressing these challenges will be critical to ensuring fiscal sustainability and long-term economic resilience.

The author of this note is Pim-orn Wacharaprapapong.

Singapore: Selected Figures

Growth strengthened to 4.4 percent in 2024, led by services and manufacturing sectors.

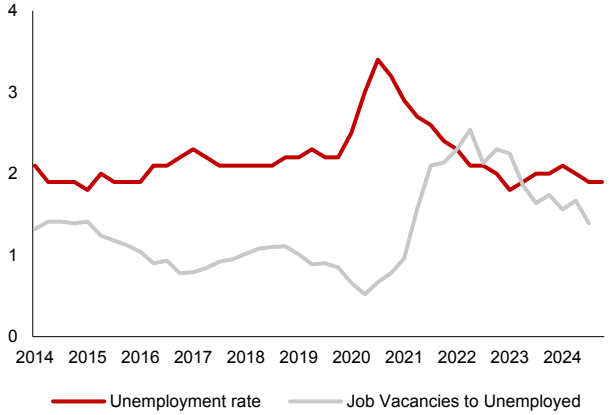
Contributions to Real GDP Growth
(Percentage points, year-on-year)



Source: Singapore Department of Statistics; CEIC; AMRO staff calculations.

Labor market conditions gradually normalized.

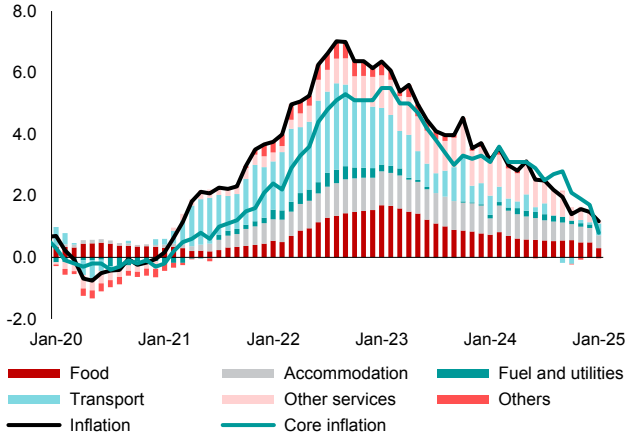
Unemployment rate and Job Vacancies to Unemployed Persons
(Percent, seasonally adjusted; ratio)



Source: Ministry of Manpower; Haver Analytics; AMRO staff calculations.

Headline and core inflation continued the easing trend.

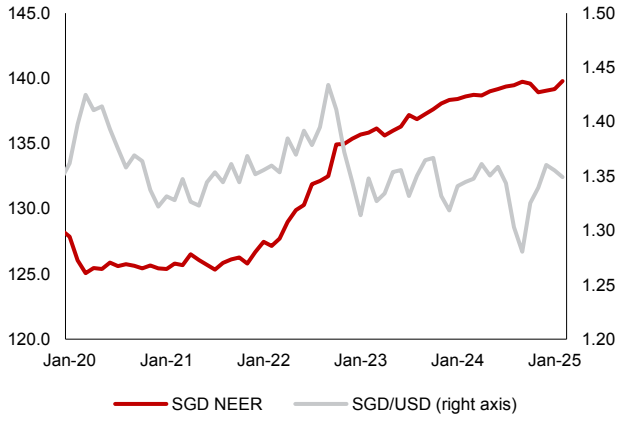
Headline and Core CPI
(Percentage points, year-on-year)



Source: Singapore Department of Statistics; MAS; CEIC; AMRO staff calculations.
Note: CPI = consumer price index.

SGD NEER strengthened in 2024. However, in January 2025 MAS slightly reduced the slope of the policy band.

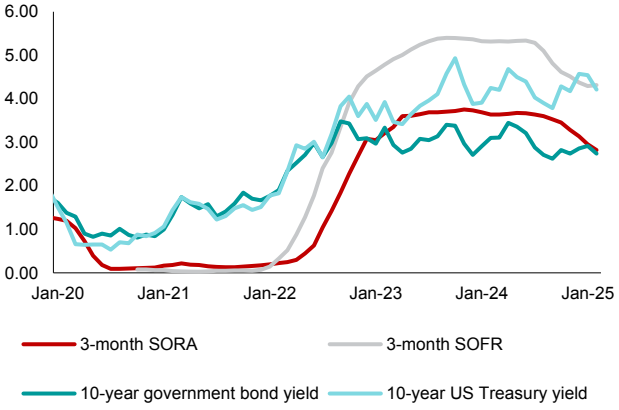
SGD NEER and SGD per USD
(Index; SGD/USD)



Source: MAS; Haver Analytics; AMRO staff calculations.
Note: NEER = Nominal Effective Exchange Rate

Domestic interest rates moved in tandem with US interest rates.

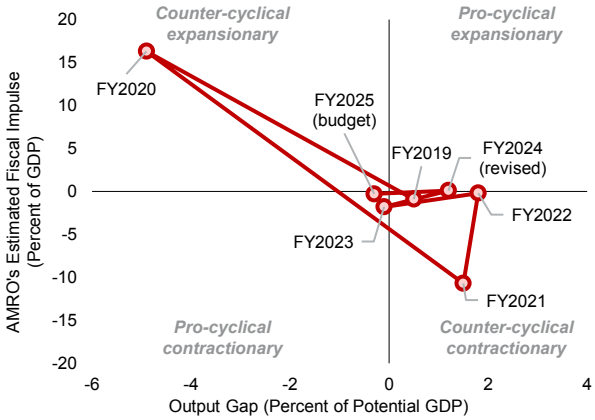
Singapore and US Interest rates
(Percentage points)



Source: MAS, Tullett Prebon Information; CME; Haver Analytics; AMRO staff calculations.
Note: SORA = Singapore Overnight Rate Average, SOFR = US Secured Overnight Financing Rate

The FY2024 budget maintains a broadly neutral fiscal stance, based on AMRO estimates.

Estimated Fiscal Impulse and Output Gap
(Percent of GDP)



Source: Ministry of Finance; CEIC; AMRO staff calculations.

Singapore: Selected Economic Indicators

Indicator	2021	2022	2023	2024e
Real sector	(in annual percentage change)			
Real GDP	9.8	4.1	1.8	4.4
Private consumption	7.2	9.7	4.9	4.8
Government consumption	3.9	–2.3	1.8	8.3
Gross fixed capital formation	23.2	4.7	–0.9	2.9
Imports of goods and services	8.9	5.8	5.3	6.6
Exports of goods and services	8.8	4.9	5.7	5.4
External sector	(in percent of GDP, unless otherwise specified)			
Current account balance	19.8	18.4	17.7	17.5
Trade balance	27.8	31.5	31.1	27.1
Capital and financial account balance	4.8	41.1	5.8	12.0
Direct investment	–16.6	–17.6	–18.5	–17.7
Portfolio investment	16.9	12.1	19.4	14.4
Other investment	5.1	46.1	5.2	15.0
Errors and omissions	0.1	0.3	0.2	–0.1
Overall balance	15.2	–22.4	12.1	5.4
International reserves (in USD billion, end of period)	418	289	351	371
Fiscal sector[1]	(in percent of GDP)			
Revenue and grants	13.4	13.0	15.0	15.8
Expenditure	15.4	14.9	15.3	15.3
Fiscal balance	0.3	0.2	–0.4	0.9
Government debt	142	154	173	178
Monetary and financial sectors	(in annual percentage change)			
Broad money	8.8	7.8	3.2	6.7
Resident non-bank loan growth	9.3	–0.3	–2.4	5.2
Memorandum items:				
Nominal GDP (in SGD billion)	587	702	679	731
Headline inflation (in percent y-o-y, period average)	2.3	6.1	4.8	2.4
Exchange rate (in SGD/USD, period average)	1.34	1.38	1.34	1.34

Source: National authorities via CEIC; and AMRO staff estimates.
Note: y-o-y = year-on-year. Numbers in red denote AMRO staff estimates.
1/ Refers to fiscal year, which starts on April 1 and ends on March 31.

Thailand

Thailand's growth strengthened in 2024. GDP expanded by 2.5 percent in 2024, up from 2.0 percent in 2023, driven by accelerated public spending and a recovery in goods exports, particularly in electronics. However, signs of private sector weakness emerged, as consumption growth moderated to 4.4 percent from over 7 percent in 2023, mainly due to slower durable goods spending. Private investment also contracted, notably in the automotive and construction sectors. The labor market remained stable, with the unemployment rate at 1.02 percent in the third quarter of 2024.

Inflation remained subdued in 2024 but edged toward the central bank's target range by end-year. Both headline and core inflation stayed low due to energy subsidies and adequate supply of essential items. In December 2024, headline consumer prices rose 1.23 percent year-on-year, reaching the central bank's target range for the first time since May 2023.

The external sector remained stable with signs of improvement in 2024. The current account surplus expanded, supported by continued recovery in tourism and rebound in goods exports. While the financial account recorded deficits for seven consecutive quarters through the third quarter of 2024, resilient FDI served as a stabilizing force. Foreign exchange reserves remained ample at USD 237.0 billion as of December 2024.

Overall financial conditions tightened somewhat, with unevenness across different segments. In 2024, loan growth remained subdued, with both business and consumer loan growth turning negative mid-year. However, the contraction eased slightly in the last quarter, driven mainly by large corporate loans, which rebounded to 3.4 percent growth year-on-year. However, SME loans continued to decline, contracting by 5.0 percent year-on-year in the fourth quarter following the phase-out of pandemic support measures. Asset quality has deteriorated slightly, particularly in housing, credit card, and auto loans, though banks maintain strong capital and liquidity buffers.

The fiscal deficit widened due to the digital wallet scheme, pushing public debt closer to the 70 percent ceiling. The deficit increased from 3.3 percent of GDP in FY2023 to 4.0 percent in FY2024, largely due to funding for the digital wallet program. This expansion is expected to drive public debt from 62.4 percent of GDP in FY2023 to 63.2 percent in FY2024, further constraining the authorities' policy space for countercyclical support during economic downturns.

The balance of risks to Thailand's growth is tilted to the downside. Short-term risks include export weakness—in part given rising US protectionism, possible delays in government disbursement, and softening private sector performance. In addition, the slowdown in private consumption and contraction in investment in 2024 are particularly concerning given the private sector's role as a key growth driver.

Elevated debt and slow recovery may create a self-reinforcing cycle that makes it challenging for the economy to grow out of high indebtedness. High household debt (89.0 percent of GDP in the third quarter of 2024) and slow income recovery among vulnerable groups lead to cautious bank lending, which further constrains credit access for SMEs and low-income households. This may push borrowers toward informal lenders and dampen consumption, hindering economic recovery and complicating deleveraging efforts.

Beyond the near term, Thailand faces multiple structural challenges that could impede long-term growth potential. Thailand's economic growth has declined over the past two decades due to sluggish investment, aging demographics, and labor market inefficiencies including a large informal sector. Looking ahead, additional headwinds include infrastructure and skill gaps amid increasing digitalization, the need to adapt export sectors to digital and decarbonization trends, and mounting challenges from climate risks and geoeconomic shifts.

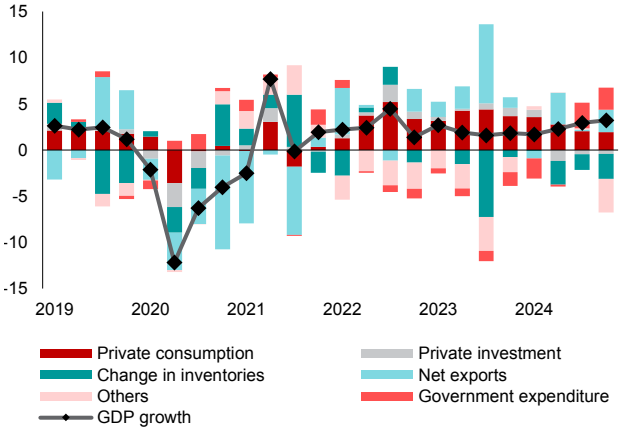
The author of this note is Haobin Wang.

Thailand: Selected Figures

2024 saw improved government expenditure and exports but weaker private sector performance.

Contributions to Real GDP Growth

(Percentage points, year-on-year)

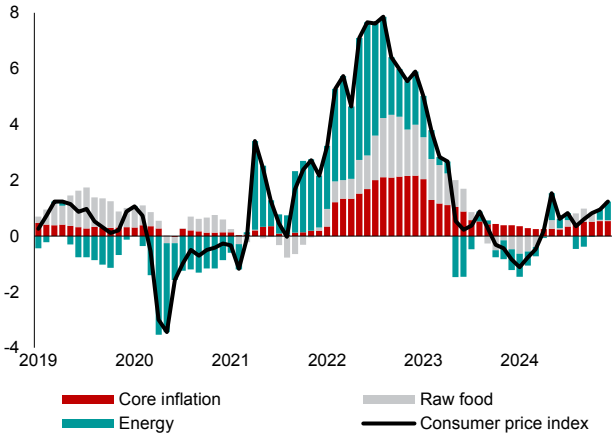


Source: Office of the National Economic and Social Development Council.

Latest headline inflation is within the central bank's target range of 1.0–3.0 percent.

Contribution to Consumer Price Inflation

(Percentage points, year-on-year)

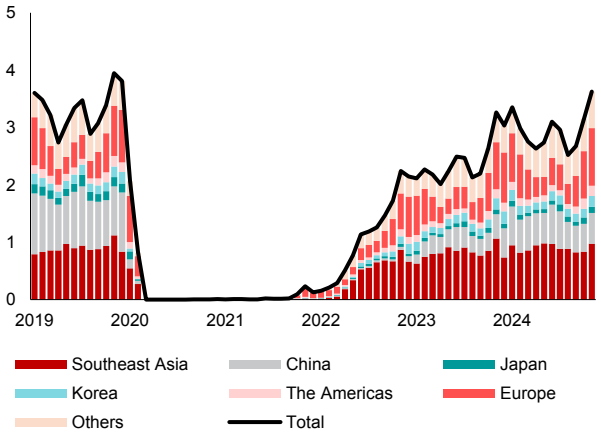


Source: National authorities via CEIC.

Tourism is slowly reaching pre-pandemic levels.

Contributions to Tourism Recovery

(Index, 2019 = 100)

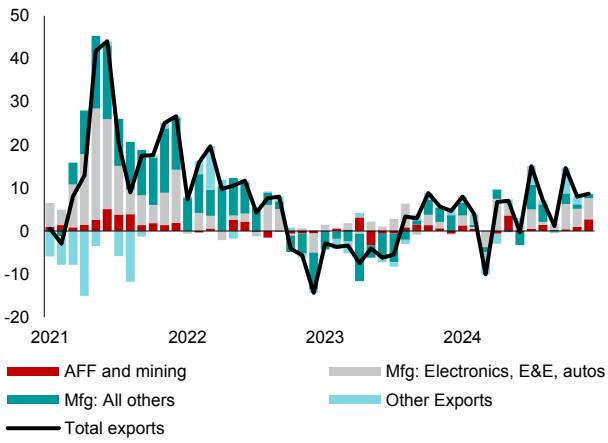


Source: National authorities via CEIC.

External demand for key exports, such as electronics and autos, has been picking up gradually.

Export Growth by Sector

(Percent, year-on-year)

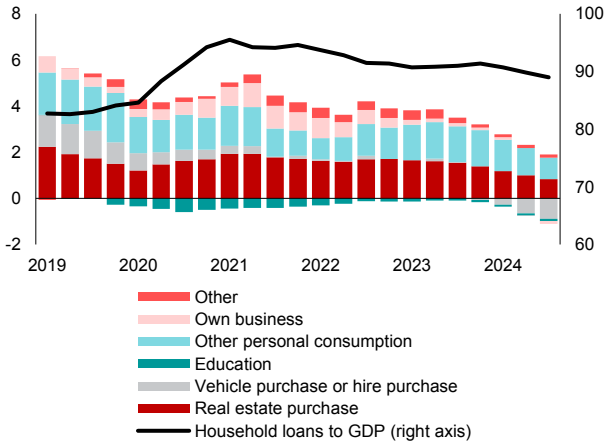


Source: CEIC; Bank of Thailand; and AMRO staff calculations.
Note: AFF = agriculture, fishery, and forestry; E&E = electrical machinery and equipment; Mfg = manufacturing.

Household debt remains high at 89.0 percent, with most growth driven by personal consumption.

Sectoral Loan Growth and Household Debt to GDP

(Percent, year-on-year; Percent of GDP)

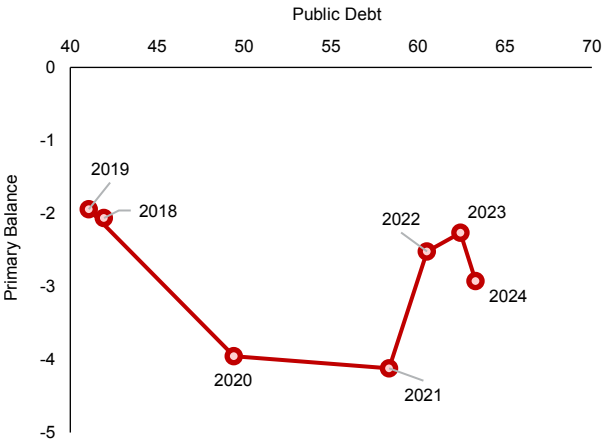


Source: Bank of Thailand.

The widening primary balance due to the digital wallet scheme has led to rising public debt.

Public Debt and Primary Balance

(Percent of GDP)



Source: Thai Ministry of Finance; AMRO staff projections.

Thailand: Selected Economic Indicators

Indicator	2021	2022	2023	2024e
Real sector	(in annual percentage change)			
Real GDP	1.6	2.6	2.0	2.5
Private consumption	1.0	6.2	6.9	4.4
Government consumption	3.7	0.1	–4.7	2.5
Gross fixed capital formation	3.1	2.2	1.2	0.0
Imports of goods and services	17.8	3.4	–2.5	6.3
Exports of goods and services	11.1	6.2	2.4	7.8
External sector	(in percent of GDP, unless otherwise specified)			
Current account balance	–2.0	–3.5	1.5	2.3
Trade balance	6.4	2.8	3.8	3.7
Capital and financial account balance	–1.4	1.4	–2.3	0.0
Direct investment	–0.8	0.8	–1.4	–0.8
Portfolio investment	–2.4	1.2	–2.7	–1.3
Other investment	2.0	–0.7	1.8	1.2
Errors and omissions	2.1	0.1	1.4	0.0
Overall balance	–1.4	–2.1	0.5	2.4
Gross external debt	38.9	40.6	38.1	35.3
International reserves (in USD billion, end of period)	246	217	225	237
Fiscal sector[1]	(in percent of GDP)			
Revenue and grants	14.8	14.8	15.0	15.2
Expenditure	20.0	18.4	18.3	19.3
Fiscal balance	–5.2	–3.6	–3.3	–4.0
Government debt	58.4	60.5	62.4	63.2
Monetary and financial sectors	(in annual percentage change)			
Broad money	4.8	3.9	1.9	3.4
Domestic credit[2]	9.4	4.3	4.1	1.9
Private sector credit	5.0	4.0	2.4	0.3
Memorandum items:				
Nominal GDP (in THB trillion)	16.2	17.4	17.9	18.6
Headline inflation (in percent y-o-y, period average)	1.2	6.1	1.2	0.4
Policy rate (in percent per annum, end of period)	0.50	1.25	2.50	2.25
Exchange rate (in THB/USD, period average)	32.0	35.1	34.8	35.3

Source: National authorities via CEIC; and AMRO staff estimates.
Note: y-o-y = year-on-year. Numbers in red denote AMRO staff estimates.

1/ The fiscal year (FY) runs from 1 October to 30 September. FY2024 is from 1 October 2023 to 30 September 2024.
2/ Domestic credit composes net claims from central government, local government, nonfinancial corporations and households.

Vietnam

In 2024, Vietnam's economy grew at a robust 7.1 percent, primarily driven by strong external demand. Exports surged as uncertainties surrounding US tariff policies led to the frontloading of shipments to the US. The construction sector benefited from resilient foreign direct investment, despite a tepid housing market. The services sector experienced strong growth, bolstered by a recovery in tourist arrivals. Meanwhile, household spending remained cautious, weighing down on business performance of micro, small, and medium-sized enterprises.

Inflation remains under control. Rising food and dining prices, fueled by the effects of El Niño, led to the acceleration of headline inflation in the first half of 2024. However, inflationary pressures were mitigated in the second half by a decline in global oil prices. Consumer price inflation averaged 3.6 percent for the year, comfortably below the government's 4.5 percent operating target ceiling. Core inflation remained stable, fluctuating between 2.6 percent to 2.8 percent throughout the year.

Vietnam's current account registered a surplus for the third consecutive year, bolstered by a strong export growth and increased service income. The financial account presented a mixed picture: FDI remained resilient, while portfolio investment and other investment experienced outflows, largely due to interest rate differentials between the US and Vietnam. The State Bank of Vietnam (SBV)'s foreign exchange interventions to support the dong, coupled with substantial unrecorded outflows, resulted in a balance of payments deficit. Consequently, international reserves declined to USD 85.2 billion as of September 2024.

To bolster economic recovery, the government maintained several supportive fiscal measures in 2024. These included: continuing the 2 percent reduction in value-added tax; further reducing land rent and environmental taxes on gasoline, grease, and oil; and reintroducing deferrals of taxes and land rent. Despite these tax reductions, robust economic growth significantly boosted government revenue collection. Consequently, the fiscal deficit is projected to narrow to 2.0 percent of GDP in 2024, down from 2.7 percent in 2023.[1]

SBV maintained accommodative financial conditions by keeping low operating interest rates—including the caps on short-term bank deposit and bank lending rates to priority sectors, increased the indicative credit growth target to 15 percent from 14–15 percent in 2023, and extended the loan moratorium program by another six months. State-owned commercial banks also reduced short-term deposit and lending rates to guide market rates. Central bank bills were used proactively to manage liquidity and the exchange rate in response to unpredictable global developments.

Vietnam's export outlook and incoming foreign direct investment could face headwinds due to uncertainty surrounding President Trump's trade policies. Additional downside risks may arise from weaker-than-expected demand from major export destinations, including the US, Europe, and China.

Credit risks in Vietnam's financial sector remained elevated. Robust economic growth could help prevent further deterioration in banks' asset quality. That said, while the new real estate laws approved in 2024 aim to address legal bottlenecks in the real estate sectors, delays in implementing related regulations could slow the housing market's recovery. A stagnation in the market recovery could make debt rollovers more challenging and further strain developers' liquidity. In response to these challenges, authorities introduced a credit program for social housing to foster sustainable market development.

Structural challenges are dampening Vietnam's growth potential. Insufficient physical infrastructure, the mismatch between workforce skills and industry needs and the underdevelopment of domestic MSMEs and supporting industries further hinders Vietnam's progress in moving up the global value chains. The country is also facing emerging challenges from increasing frequency and intensity of climate change-induced weather events, which have caused damage and disruptions to the country's economic activity. The shift to an aged society by 2036 could also pose substantial economic challenges and insufficient social protection. These challenges could be mitigated by the country's ongoing initiatives to enhance infrastructure, develop human capital, adapt to and mitigate climate change, and implement regulatory and social security reforms.

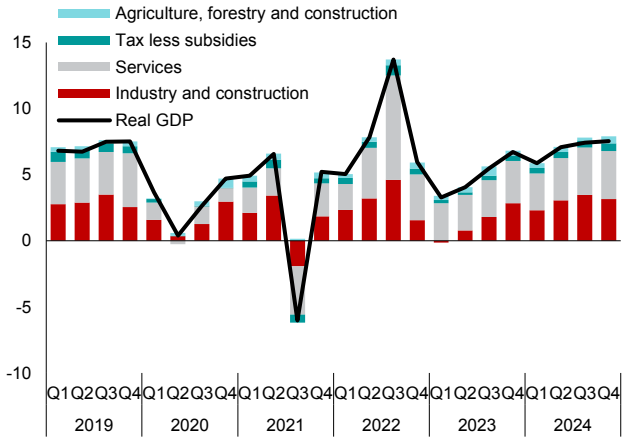
The author of this note is Wanwisa (May) Vorranikulkij.

1/ The fiscal balance figures for 2023 and 2024 are AMRO staff estimates that diverge from the government's estimations. This discrepancy arises because the government's estimates for 2023 and 2024 do not account for carry-over expenditures from previous years, while AMRO's estimates incorporate these carried-over expenditures. This approach aligns AMRO's estimations with the historical outturns of final budget performances.

Vietnam: Selected Figures

Strong external demand bolstered economic growth in 2024.

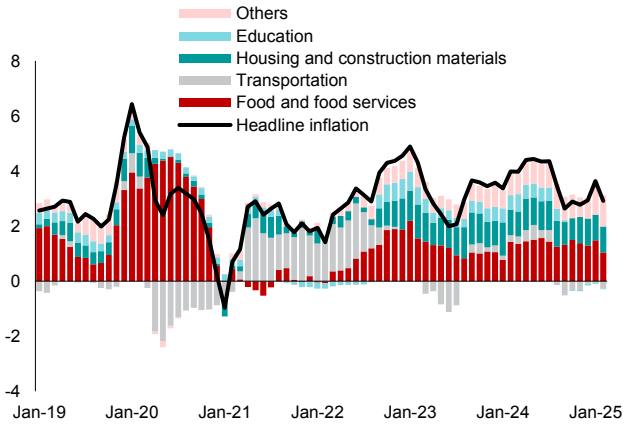
Contribution of GDP Growth
(Percentage points, year-on-year)



Source: General Statistics Office; Haver Analytics; AMRO staff calculations.

A decline in global oil prices and state-administered prices kept inflation under the government's ceiling.

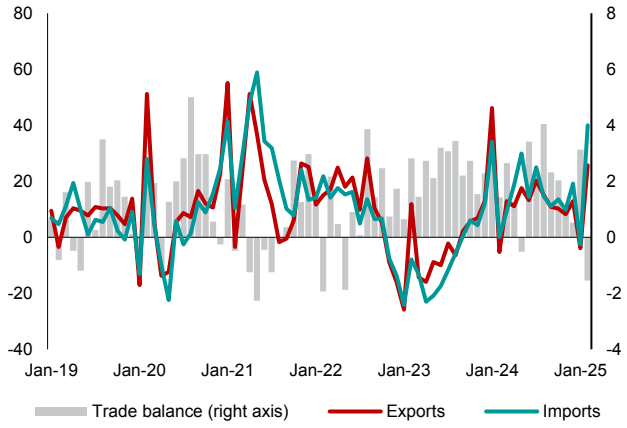
Inflation
(Percentage points, year-on-year)



Source: General Statistics Office; Haver Analytics; AMRO staff calculations.

The trade balance registered a surplus on the back of robust export performance.

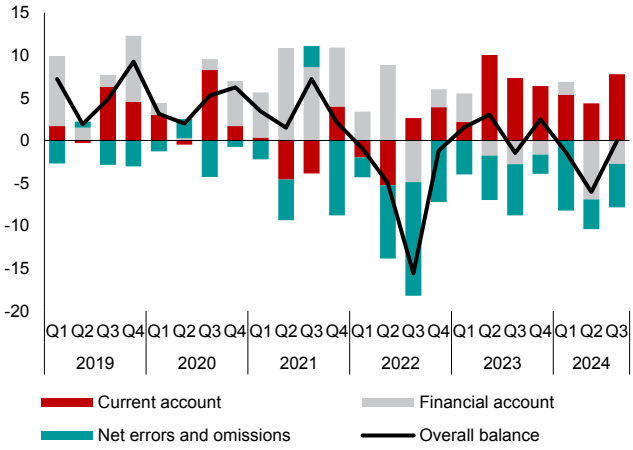
Trade Balance
(Percent, year-on year; millions of US dollars)



Source: General Statistics Office; Haver Analytics; AMRO staff calculations.

Despite capital outflows, the trade surplus and resilient foreign direct investment shored up the external balance.

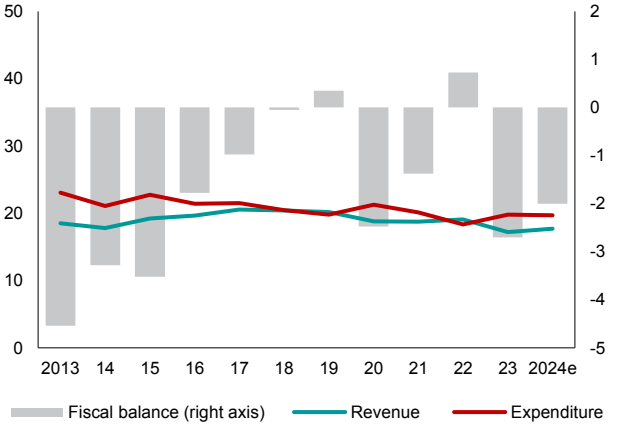
Balance of Payments
(Millions of US dollars)



Source: State Bank of Vietnam; Haver Analytics; AMRO staff calculations.

The government employed a neutral fiscal stance in 2024.

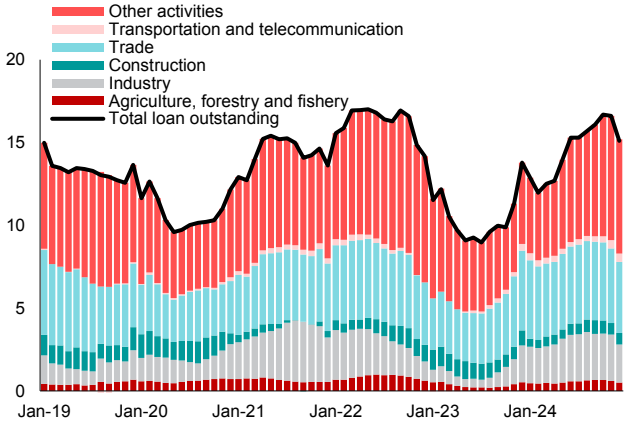
Fiscal Balance
(Percent of GDP)



Source: Ministry of Finance; Haver Analytics; AMRO staff estimations.
Note: The fiscal balance figures for 2023 and 2024 are AMRO staff estimates. They diverge from government estimations because the government's estimates for 2023 and 2024 do not account for carry-over expenditures from previous years. To maintain consistent data coverage, AMRO estimates for the fiscal balance in 2023 and 2024 incorporated these carried-over expenditures. This approach aligns with the historical outturns of final budget performances from 2013 to 2022, which included carry-over expenditures.

Credit growth accelerated in the second half of 2024, driven by household consumption loans.

Credit Growth
(Percentage points, year-on-year)



Source: State Bank of Vietnam; Haver Analytics; AMRO staff calculations.

Vietnam: Selected Economic Indicators

Indicator	2021	2022	2023	2024e
Real sector	(in annual percentage change)			
Real GDP	2.6	8.0	5.0	7.1
Agriculture, forestry, and fishing	2.9	3.4	3.8	3.3
Industry and construction	4.1	7.8	3.7	8.3
Services	1.2	10.0	6.8	7.4
Product tax excluding subsidy	8.8	8.5	8.4	8.1
External sector	(in percent of GDP, unless otherwise specified)			
Current account balance	–2.2	0.3	5.8	4.2
Trade balance	4.2	7.2	10.2	7.9
Capital and financial account balance	8.3	2.3	–0.7	–2.1
Direct investment	4.1	3.7	4.6	3.9
Portfolio investment	0.1	0.4	–0.3	–1.6
Other investment	4.1	–1.8	–5.0	–4.9
Errors and omissions	–2.3	–8.2	–3.9	–3.8
Overall balance	3.8	–5.5	1.3	–1.7
Gross external debt	37.6	35.7	36.1	34.0
International reserves (in USD billion, end of period)	110.0	87.2	92.8	84.5
Fiscal sector [1]	(in percent of GDP)			
Revenue and grants	18.8	18.9	17.0	17.7
Expenditure	20.1	18.2	19.7	19.7
Fiscal balance	–1.4	0.7	–2.7	–2.0
Government debt	39.3	34.3	33.8	34.5
Monetary and financial sectors[2]	(in annual percentage change)			
Broad money	10.7	6.2	12.5	8.1
Domestic credit	12.6	11.5	13.6	10.9
Private sector credit (in percent of GDP)	123.1	123.9	131.5	132.6
Memorandum items:				
Nominal GDP (in VND trillion)	8,487	9,549	10,222	11,512
Headline inflation (in percent y-o-y, period average)	1.8	3.2	3.3	3.6
Policy rate[3] (in percent per annum, end of period)	4.00	6.00	4.50	4.50
Exchange rate (in VND/USD, period average)	22,833	23,263	23,660	24,615

Source: National authorities via CEIC; and AMRO staff estimates.
Note: y-o-y = year-on-year. Numbers in red denote AMRO staff estimates.

1/ The fiscal balance figures for 2023 and 2024 are AMRO staff estimates that diverge from the government's estimations. This discrepancy arises because the government's estimates for 2023 and 2024 do not account for carry-over expenditures from previous years. To maintain consistency in data coverage, AMRO has produced its own estimates for the fiscal balance in 2023 and 2024, incorporating these carried-over expenditures. This approach aligns with the historical outturns of final budget performances from 2013 to 2022, which have consistently included carry-over expenditures.

2/ The figures for 2024 are as of November 2024.

3/ Due to the absence of an official policy rate, the State Bank of Vietnam's refinancing rate is used as an approximation.

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