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ASEAN +3 MACROECONOMIC RESEARCH OFFICE

Policy Perspectives Paper (PP/24-01)

ASEAN+3 Fiscal Policy Report 2024: Transitioning to Fiscal Normality

April 2024

The factual information covers data for the period up to March 29, 2024.

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ASEAN+3 Fiscal Policy Report 2024

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Executive Summary

The fiscal positions of ASEAN+3 economies generally improved in 2023, buoyed by continued economic recovery. In FY2023, fiscal deficit narrowed in more than half of the region's economies, six of which exhibited continuous improvement of fiscal positions since FY2021. The recovery of domestic demand and employment amid high inflation environment generally boosted revenue collection, while the stabilization of oil prices moderated resource-based revenue in commodity-exporting countries. On the expenditure side, member economies continued to phase out the pandemic-related and Ukraine-crisis induced supportive measures, while accelerating capital spending to promote growth and support national development. However, the fiscal deficit remained still higher than pre-pandemic levels due to both yet-to-recover revenue and elevated spending needs.

ASEAN+3 member authorities aim to improve their fiscal positions in FY2024, by maintaining a contractionary or neutral fiscal stance. Stronger economic growth will drive robust revenue growth, supported by the progress in digitalizing tax administration and payments. The implementation of global minimum tax in selected member economies is also expected to contribute to an increase in corporate income tax revenue. After gradual normalization in the past few years, expenditure is planned to pick up, with a focus on supporting sustainable and inclusive growth. The fiscal stance of most member economies is assessed to be contractionary or neutral in FY2024, which is deemed broadly appropriate, given the positive swing in output gap.

The government debt is forecast to continue to rise, albeit at a slower pace, and gross financing needs are expected to remain elevated. In FY2023, the debt-to-GDP ratio climbed further in most economies, but the pace of increase slowed down. While improving economic performance and high inflation contributed to lowering debt as a percentage of GDP, elevated primary deficits and higher interest burden kept the debt ratio increasing in most economies. The debt ratio is forecasted to rise further in FY2024 in half of the member economies where the budgeted primary balance is worse than the debt-stabilizing primary balance. The gross financing needs are projected to remain high over the medium term, despite the reductions in fiscal deficits, owing to increased principal payments of maturing debts across various tenors.

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[2] The authors would like to thank AMRO country teams, for their inputs and comments; and Kouqing Li and Hoe Ee Khor for their invaluable advice and guidance. All remaining mistakes are the responsibility of the authors.

ASEAN+3 member authorities should strike the right balance between restoring fiscal buffers and carrying out an active fiscal policy. Substantially narrower fiscal space and lingering uncertainties warrant the policy focus on restoring fiscal buffers. A positive economic outlook in the near term presents an opportunity as well as a strong rationale for fiscal policy to transition from its extended crisis mode to its fundamental role in supporting sustainable and inclusive growth. However, elevated uncertainty in the near term calls for flexible and agile fiscal policy responses during the transition. In the longer-term perspective, fiscal policy should play a crucial role in addressing structural challenges, particularly population aging and climate change.

The fiscal consolidation plan should be solidified with clear targets and paths, supported by strong commitments. Fiscal rules will help anchor the fiscal targets of a consolidation plan consistent with long-term sustainability goals, and strengthen the fiscal framework for a more credible and predictable fiscal management. Additionally, enhancing the medium-term fiscal framework will help underpin specific paths of fiscal aggregates over the medium term to achieve consolidation targets consistent with fiscal rules. Also, strengthening the role of the medium-term fiscal framework and its linkage to the annual budget can lead the fiscal resource reallocation during the fiscal consolidation process to be better aligned with the strategic direction of national development plan. In pursuing fiscal consolidation measures, it is crucial to focus on not only reducing fiscal deficits but also achieving favorable debt dynamics conditions, particularly in terms of interest rate and growth rate differentials.

The focus of fiscal policy should transition from crisis mode response to its fundamental role. Extensive and repeated ad-hoc fiscal support measures should be phased out in tandem with strengthening economic recovery and subsiding inflationary pressure. At the same time, fiscal policy should resume its fundamental role in promoting economic stability, growth potential, and income redistribution. Supporting economic transformation will help strengthen growth momentum and enhance economic resilience, while raising growth potential will, in turn, contribute to favorable debt dynamics and augment the overall debt-carrying capacity. Fortifying economic resilience will also reduce the size of the fiscal buffer that needs to be restored by fiscal consolidation, by reducing the impact of economic shocks on the economy. Strengthening the social protection system can improve income distribution and also reduce the need for ad-hoc support, strengthening automatic stabilizers.

The proactive role of fiscal policy is required to address structural challenges. Amid rapid population aging, member authorities should strengthen the policy efforts for productive demographic transition and to prepare for adequate and sustainable support system for the elderly. The introduction or expansion of social protection and healthcare programs, which are difficult to reverse, should be carefully assessed for their medium- and long-term fiscal implications, and adequate financing sources need to be secured to maintain the support system without jeopardizing overall fiscal sustainability. Climate change adaptation requires public investments to minimize the impact of climate-related natural disasters, while climate change mitigation involves government policies to prevent or reduce the emission of greenhouse gases in achieving Nationally Determined Contributions commitments.

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Abbreviations

AE	advanced economy
ASEAN	Association of South-East Asian Nations
ASEAN+3	ASEAN plus China; Hong Kong, China; Japan; Korea
ASEAN-5	Indonesia, Malaysia, the Philippines, Singapore, Thailand
BCLMV	Brunei Darussalam, Cambodia, Lao PDR, Myanmar and Vietnam
CLMV	Cambodia, Lao PDR, Myanmar and Vietnam
CIT	corporate income tax
COFOG	classification of the functions of government
COVID-19	coronavirus disease 2019
EME	emerging market economy
EU	European Union
FY	fiscal year
FCY	foreign currency
GDP	gross domestic product
GFN	gross financing needs
GFCF	gross fixed capital formation
GFS	government finance statistics
GHG	greenhouse gases
GMT	global minimum tax
GST	goods and services tax
HIC	high income country
ICT	information and communications technology
IIR	Income Inclusion Rule
IMF	International Monetary Fund
LCY	local currency
LIDC	low income developing country
LMIC	lower middle income country
MNE	multinational enterprise
MSME	micro, small and medium enterprise
MTFF	medium-term fiscal framework
NDC	nationally determined contributions
ODA	official development assistance
OECD	Organisation for Economic Co-operation and Development
OECD/G20	Organisation for Economic Co-operation and Development and Group of Twenty
PFM	public financial management
PIT	personal income tax
Plus-3	China; Hong Kong, China; Japan; Korea
PPI	private participation in infrastructure
PPP	public private partnership

QDMTT	qualified domestic minimum top-up tax
SME	small and medium enterprise
SOE	state-owned enterprise
SST	sales service tax
UMIC	upper middle income country
UPE	ultimate parent entity
UTPR	Undertaxed Profits Rule
VAT	value-added tax

BN	Brunei Darussalam
KH	Cambodia
CN	China
HK	Hong Kong, China
ID	Indonesia
JP	Japan
KR	Korea
LA	Lao People’s Democratic Republic
MM	Myanmar
MY	Malaysia
PH	the Philippines\
SG	Singapore
TH	Thailand
US	United States
VN	Vietnam

BND	Brunei dollar
KHR	Cambodian riel
CNY	Chinese yuan
EUR	Euro
HKD	Hong Kong dollar
IDR	Indonesian rupiah
JPY	Japanese yen
KRW	Korean won
LAK	Lao kip
MMK	Myanmar kyat
MYR	Malaysian ringgit
PHP	Philippine peso
SGD	Singapore dollar
THB	Thai baht
USD	US dollar
VND	Vietnamese dong

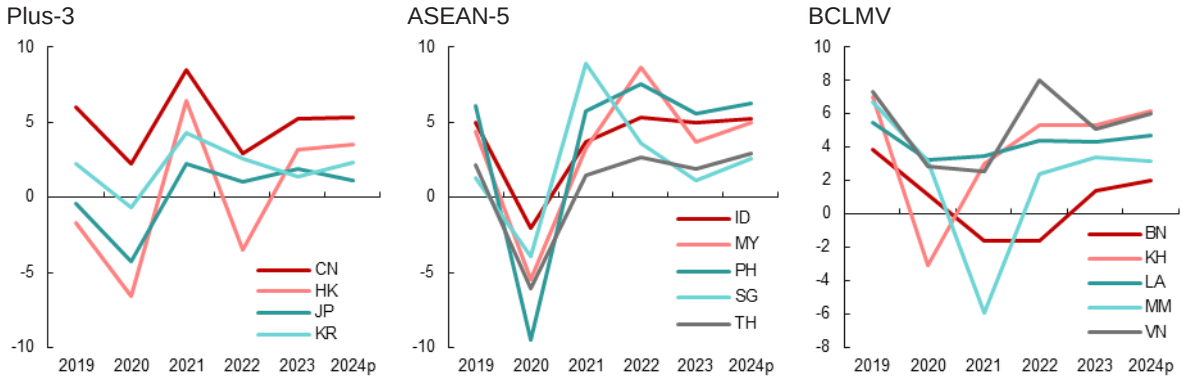
I. Introduction

1. **The fiscal positions of ASEAN+3 economies generally improved in 2023, buoyed by continued economic recovery.** Member economies registered stronger growth driven by robust domestic demand, with the reopening of China and Hong Kong providing additional growth impetus. Inflation continued to moderate from its peak in 2022 but remained elevated due to demand-side pressure and adverse weather conditions associated with El Niño. Robust economic growth, coupled with elevated inflation, led to improved fiscal balances in over half of the member economies, benefiting from stronger-than-expected revenue performance. Additionally, the withdrawal of pandemic-related spending alongside economic recovery also contributed to narrowing fiscal deficits. While government debt-to-GDP ratios continued to rise, the pace of increase slowed in most member economies, and the debt ratio even declined in some economies.

2. **Member economies are expected to grow at a faster pace with moderating inflation in the near term** (Figure 1). Domestic demand will remain resilient, underpinned by recovering investment and robust consumer spending. Export recovery, especially in semiconductors, and the full resumption of tourism will provide an additional lift to growth. ASEAN+3 is expected to grow at a slightly faster pace of 4.5 percent in 2024 compared to 4.3 percent in 2023. Inflation in ASEAN+3 is forecast to continue its downward trend, primarily driven by decreasing global commodity prices. However, the near-term prospects for ASEAN+3 remain subject to various risks, including sudden spikes in global commodity prices stemming from geopolitical conflicts and weather shocks; slower economic growth in China; potential repercussions from the US presidential election campaign; and the possibility of sharp growth slowdown in major advanced economies outside the region.

3. **With the economy trending back on track, fiscal policy should prioritize rebuilding buffers and transitioning towards its fundamental roles.** Despite some signs of stabilization, the deteriorated fiscal positions during the COVID-19 pandemic and lingering large short-term uncertainties, necessitate restoring fiscal buffers as a top priority. At the same time, the current positive economic outlook offers fiscal authorities an opportunity to refocus on core objectives, shifting from an extended crisis mode to fostering sustainable and inclusive growth. Promoting growth and reinforcing social protection will, in turn, contribute to enhancing fiscal sustainability. Furthermore, addressing structural challenges, in particular population aging and climate change, demands an active role of fiscal policy.

Figure 1. ASEAN+3 Economic Growth Outlook: AMRO Forecasts (Percent)



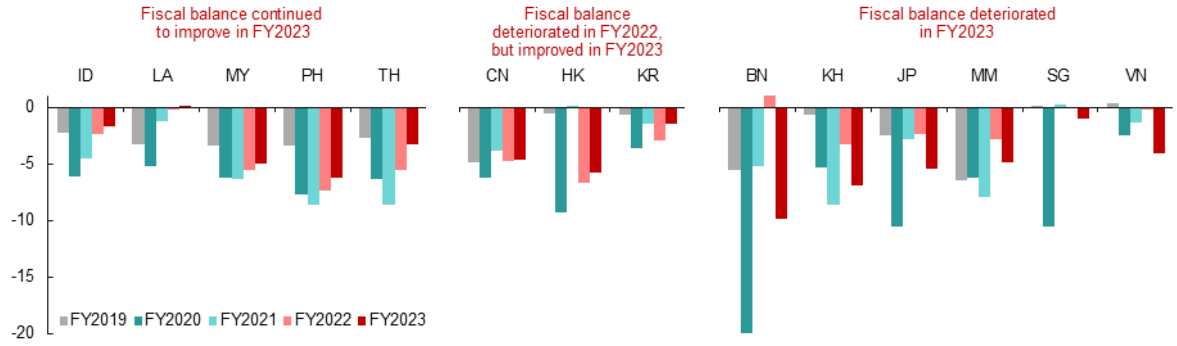
Source: AMRO (2024a)

II. Recent Fiscal Developments and Outlook

A. Fiscal Balance

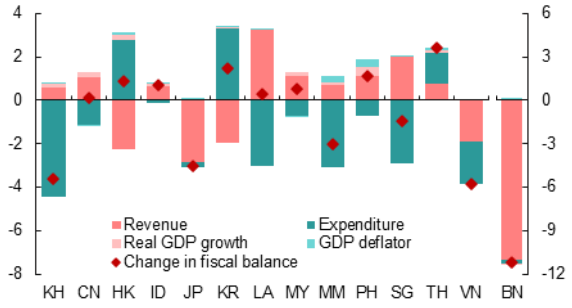
4. **The fiscal balance has improved but the deficits are generally still larger than pre-pandemic levels** (Figure 2). In FY2023, the fiscal deficit continued to narrow in Indonesia, Lao PDR, Malaysia, the Philippines, and Thailand. The improvement of fiscal balance resumed in China and Hong Kong following economic reopening, and in Korea with the withdrawal of temporary income support measures. While robust revenue growth, supported by strong economic performance and high inflation, drove the improvement of fiscal balance in many member economies, spending cuts also made a significant contribution to reducing the fiscal deficit in Hong Kong, Korea, and Thailand. Meanwhile, the fall in revenue in Brunei, Japan, and Vietnam, and the expansion of spending in Cambodia, Myanmar, and Vietnam widened the fiscal deficits in these economies (Figure 3). Most member economies either broadly met or overachieved their budgeted fiscal balance targets in FY2023, mainly due to stronger-than-expected revenue collection, except for Hong Kong, Japan, and Korea (Figure 4). Since the onset of the pandemic, the fiscal deficits of member economies have declined following a sharp increase in FY2020, but have not been fully returned to the pre-pandemic levels in many member economies.

Figure 2. ASEAN+3: Fiscal Balance, FY2019-2023 (Percent of GDP)



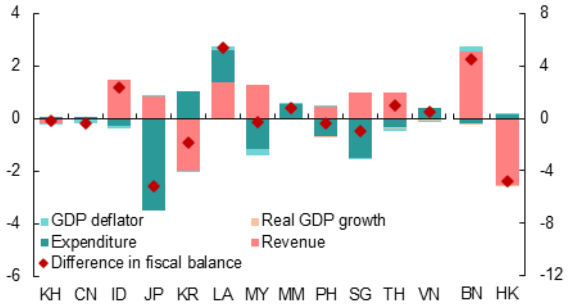
Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates
Note: See the notes in Appendix I for the coverage of fiscal balance in ASEAN+3 member economies.

Figure 3. ASEAN+3: Contribution to Change in Fiscal Balance, FY2023
(Percent of GDP)



Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates
Note: 1) A positive (negative) change in the fiscal balance implies the fiscal balance in FY2023 improved (deteriorated) over the fiscal balance in FY2022. A positive contribution of revenue implies the revenue in FY2023 was better than the revenue in FY2022, while a positive contribution of expenditure implies the expenditure in FY2023 was lower than the expenditure in FY2022; 2) See Appendix IV for the decomposition methodology.

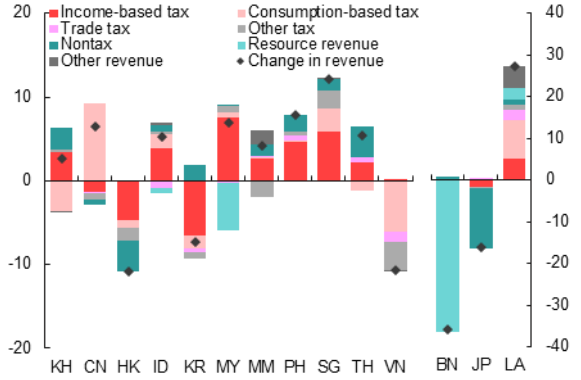
Figure 4. ASEAN+3: Contribution to Difference between Budget and Outturn, FY2023
(Percent of GDP)



Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates
Note: 1) A positive (negative) difference in the fiscal balance implies the actual fiscal balance improved (deteriorated) over the budgeted balance. A positive contribution of revenue implies the actual revenue collection was better than the budgeted revenue, while a positive contribution of expenditure implies the actual expenditure was lower than the budgeted expenditure; 2) See Appendix IV for the decomposition methodology.

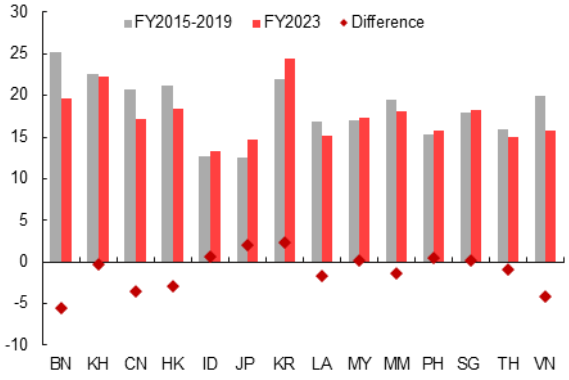
5. **Revenue performance in FY2023 was mixed, reflecting differences in economic structure and policy responses.** In general, the recovery in domestic demand and employment contributed to an increase in income-based taxes, and high inflation boosted consumption-based taxes. However, oil prices, stabilized from the peak in 2022, moderated resource-based revenue in Brunei, Indonesia, and Malaysia, and the semiconductor downcycle dampened corporate income tax collection in Korea. Economic slowdown and value-added tax (VAT) rate reduction to support economic growth reduced tax revenue in Vietnam. Additionally, lower carry-over revenue in Japan resulted in a decline in non-tax revenue (Figure 5). Overall, revenue growth in FY2023 was slower than nominal GDP growth, causing revenue as a percentage of GDP to drop and remain below pre-pandemic levels (Figure 6).

Figure 5. ASEAN+3: Contribution to Change in Revenue, FY2023 (Percent, Percentage points)



Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates
Note: 1) Income-based tax includes corporate income tax (CIT), personal income tax (PIT), and capital gains tax; 2) Consumption-based tax includes value-added tax (VAT), excise tax, and taxes on goods and services; 3) Trade tax includes customs duties, and export and import taxes; 4). Resource revenue refers to oil and gas revenue in Brunei; income tax from oil and gas, nontax revenue from oil, gas and mining in Indonesia; royalties from mining and hydropower sector in Lao PDR; and income tax from petroleum, export duties from crude oil, petroleum royalties, and Petronas dividend in Malaysia.

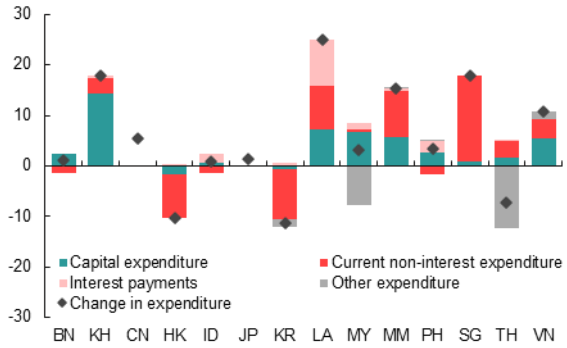
Figure 6. ASEAN+3: Revenue in FY2015-2019 and FY2023 (Percent of GDP)



Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates
Note: The difference is computed as the revenue to GDP ratio in FY2023 minus the average of revenue to GDP ratios in FY2015-2019.

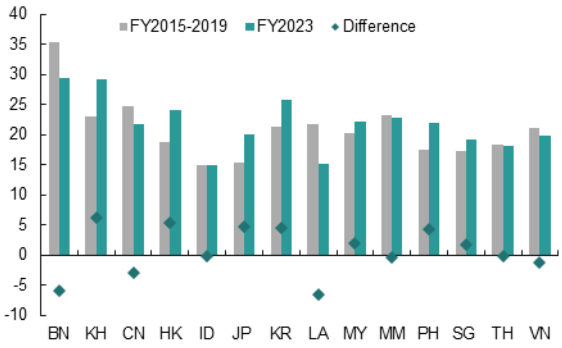
6. **Expenditure in FY2023 was rebalanced toward capital investment.** Special pandemic-related facilities, such as the COVID-19 fund in Malaysia and emergency loans in Thailand, were phased out. Korea also ended its series of temporary income support for small merchants. Current expenditure, excluding interest payments, declined in many member economies, reflecting the phasing out of fiscal stimulus and prolonged supportive measures (Box A). Interest payments in Lao PDR increased partly because of the LCY depreciation which inflated the nominal value of interest payments on FCY-denominated debt. On the other hand, more ASEAN+3 members resumed and accelerated capital spending to promote growth and support national development, especially in Cambodia (Figure 7). Despite the ongoing normalization of fiscal support measures, expenditure as a percentage of GDP remained higher than pre-pandemic levels, reflecting the growing spending needs to support national development and strengthen social welfare (Figure 8).

Figure 7. ASEAN+3: Contribution to Change in Expenditure, FY2023 (Percent, Percentage points)



Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates
Note: 1) Economic classification of expenditure is unavailable for China and Japan; 2) Other expenditure includes the COVID-19 fund in Malaysia, emergency loans in Thailand, and net-lending in other economies.

Figure 8. ASEAN+3: Expenditure in FY2015-2019 and FY2023 (Percent of GDP)



Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates
Note: The difference is computed as the expenditure to GDP ratio in FY2023 minus the average of expenditure to GDP ratios in FY2015-2019.

Box A. Normalization of Fiscal Stimuli and Support Measures[3]

In response to the COVID-19 pandemic, ASEAN+3 member economies swiftly deployed large scale fiscal stimulus packages to support affected households and businesses. Although the size and composition of specific policy measures were different across countries, various support measures were provided in 2020-2022, encompassing both budgetary and off-budget measures (Table A.1). According to the IMF (2021), the global average size of fiscal support measures announced during the peak of the pandemic in 2020-2021 was 10.2 percent of GDP for budgetary measures and 6.2 percent of GDP for non-budgetary measures. After the prolonged economic struggle during the pandemic crisis, plans to normalize fiscal policy along with the gradual transition to endemicity and economic recovery, were setback by the spillover effects of the outbreak of the Russia-Ukraine conflict – which led to surging inflation caused by both demand and supply factors.

Amid rising inflationary pressure, most ASEAN+3 governments opted to (re-) introduce or extend some fiscal support measures to shield vulnerable households from food and energy price pressures (Table A.2). Starting in early 2022, more member economies phased out blanket cash payouts, shifting them to targeted price subsidies for vulnerable individuals and businesses, and discontinued temporary tax deferrals. Cash and semi-cash transfers for food subsidies provided to lower-income households became the most common measures in 2023, followed by targeted energy subsidies, such as electricity tariff discounts (Thailand), fuel support to underprivileged people (Indonesia), and subsidies to energy companies (Indonesia, Japan, and Thailand). In addition, revenue measures were tightened from broad-based tax relief to tax reductions on food and energy, such as excise tax cuts on fuel (Korea, Lao PDR, Thailand, and Vietnam), as well as reduced import tariffs on energy and food (China for energy, Korea for both, and the Philippines for food). These measures have contributed to a decline in inflation and facilitated a gradual fiscal tightening in ASEAN+3 economies.

Although some temporary support measures were extended in 2023, most member economies have started fiscal policy normalization since 2022. Brunei started withdrawing COVID-19 related support measures in 2021, and, with the reopening of its borders in mid-2022, fully phased out the remaining allowance for health workers, financial support measures, and the COVID-19 relief fund. This allows Brunei to shift its budgetary focus to scaling up public investment and return to its fiscal consolidation plan which had been delayed by the pandemic. Cambodia slowly rolled back tax exemptions for tourism business activities in 2022 and mostly phased out by end-2023 the fiscal interventions introduced during the pandemic. However, the fiscal deficit in Cambodia remained elevated in 2023 due to extended targeted social support to those affected by the higher

[3] Prepared by Ravisara Hataiseree and Abigail.

cost of living. China also ended some temporary tax and fee cuts related to pandemic control and the reduced VAT rate for small-sized taxpayers in 2023. Similarly, Hong Kong discontinued consumption vouchers, which were given to all residents over three consecutive years between 2021-2023, although allowances and tax relief for vulnerable and low-income groups remain available.

Indonesia's fiscal balance steadily improved as macroeconomic policy support tapered off, particular with the expiration of the National Economic Recovery Program in 2023 and the implementation of tax reform measures under the Harmonized Tax Law passed in 2021. Japan implemented a universal one-time cash payment of JPY 100,000 as part of its COVID-19 economic relief package. Subsequently, the policy was adjusted to focus on low-income households, aiming to alleviate the effects of inflation. After a series of supplementary budgets between 2020-2022, the Korean government committed to tightening its fiscal policy in 2023 by ending various pandemic-related temporary programs and not using supplementary budget. Due to its limited fiscal space, Lao PDR provided relatively small fiscal stimulus and support, which included short-term cash allowances to the unemployed, and tax exemptions for low-income earners and microenterprises, and reductions in electricity prices. Most of these measures expired in 2021, except for the VAT rate reduction from 10 percent to 7 percent, which remained effective in 2022-2023.

Malaysia also started scaling back subsidies for electricity and phasing out diesel subsidies in 2023 and increased the sales and service tax (SST) rate from 6 percent to 8 percent in March 2024. Instead, savings and additional resources will be directed to cash handouts aimed at low-income households to alleviate their financial burden. In the Philippines, most temporary fiscal support, such as wage subsidies and assistance to formal and informal sector workers, have been gradually withdrawn since 2022. Similarly, Singapore has unwound COVID-19 relief measures, including cash payouts to all Singaporeans and wage and rental subsidies for hard-hit sectors, but provides cash payouts and utilities rebates to offset hikes in the goods and services tax (GST), which rose from 7 percent to 8 percent in 2023 and to 9 percent in 2024. After a few extensions, Thailand fully phased out its co-payment subsidy and travel subsidy schemes to support the tourism sector in 2022 and 2023, respectively. However, the Thai government is continuing its PIT rebates to boost public consumption in 2024, and has also extended the reduction of VAT rate from 10 percent to 7 percent until September 2024. Vietnam wound down short-term pandemic relief such as cash transfers and temporary tax deferrals in 2020 and 2021, respectively. However, due to continued economic slowdown from weak external demand, the government reintroduced tax deferral in the second half of 2023, and extended the VAT rate cut (from 10 percent to 8 percent introduced in early 2022) from July 2023 to June 2024, after a brief rate reversal in early 2023.

Table A.1. Selected ASEAN+3: Fiscal Stimuli Rolled Out During the Pandemic

	CN	ID	JP	KR	MY	PH	SG	TH	VN
On-Budget Measures									
Spending Measures									
Additional spending and forgone revenue in health sector	O	O	O	O	O	O	O	O	O
Cash payout to all citizen		O	O				O		
Cash payout to lower-income individuals	O	O		O	O	O	O	O	O
Support for businesses and workers (wage and employment subsidies)	O	O	O	O	O	O	O		O
Revenue Measures									
Reduced utility bills					O			O	O
Reduced social security fund contributions				O				O	O
Tax deduction/ Tax exemption/ Tax relief	O	O	O	O	O	O	O	O	O
Deferred revenue or social security premiums/ Expedited tax refunds	O	O	O	O	O		O	O	O
Off-Budget Measures and Contingent Liabilities									
Soft loans/ Guarantees on loans	O	O	O	O	O	O	O	O	O
Capital injection to SOEs		O							
Equity injection to support loan programs for SMEs						O			

Source: AMRO (2022); IMF (2021); National authorities; and AMRO staff compilation

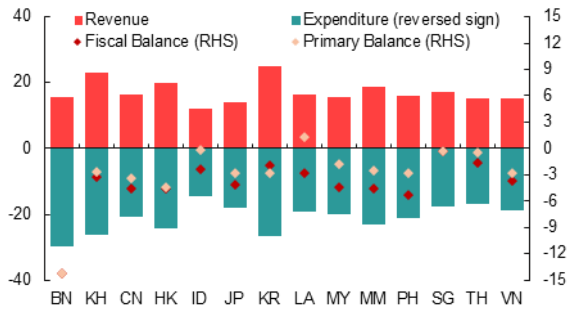
Table A.2. ASEAN+3: Fiscal Policies Rolled Out During the Pandemic and High Inflation

	Fiscal Measures during COVID-19 (As of May 2022)			Energy and Food Price Policy (As of February 2024)		
	Spending Measures	Revenue Measures	Off-Budget Measures	Spending Measures	Revenue Measures	Off-Budget Measures
BN	O	O				
KH	O	O	O	O		
CN	O	O	O	O	O	
HK	O	O	O	O		
ID	O	O	O	O		
JP	O	O	O	O		O
KR	O	O	O	O	O	
LA	O	O	O		O	
MY	O	O	O	O		
MM	O	O	O			
PH	O	O	O	O	O	
SG	O	O	O	O		
TH	O	O	O	O	O	
VN	O	O	O		O	

Source: AMRO (2022); National authorities; and AMRO staff compilation
Note: Under Energy and Food Price Policy, 'Spending Measures' include but are not limited to cash transfers (food price subsidies to vulnerable groups), semi-cash (vouchers/ lower electricity price), price subsidies to energy companies, price subsidies to food companies; 'Revenue Measures' include excise tax cut and import tariffs reduction on food and fuels; 'Off-Budget Measures' include credit guarantees for SMEs.

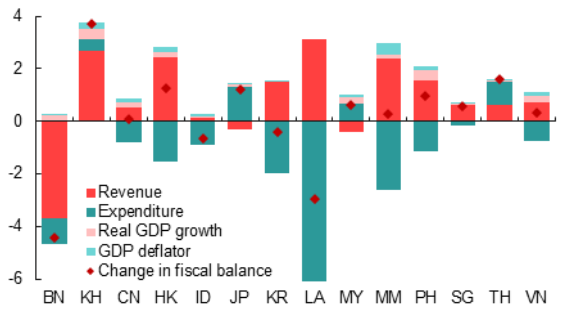
7. **ASEAN+3 member authorities aim to improve their fiscal positions in FY2024**. According to the FY2024 budgets, the fiscal deficit is expected to decline in most member economies (Figures 9 and 10). Stronger economic growth will drive robust revenue growth, and the progress in digitalizing tax administration and payments is expected to bolster revenue collection. The implementation of global minimum tax (GMT) in selected member economies is also predicted to increase their corporate income tax (CIT) revenue in the short-term, although the longer-term impacts are still uncertain (Box B). After gradual normalization in the past few years, expenditure is also planned to grow at a pace similar to or slower than revenue growth in most economies, while country-specific factors will substantially increase current expenditure in some cases. In Korea, mandatory transfers to local governments and education, which declined in FY2023 due to a contraction of tax revenue, will pick up in FY2024. Lao PDR plans a large increase in government spending, driven mainly by the resumption of public investment and delayed increase of public sector wages. Conversely, in Japan, expenditure is expected to fall, mainly due to the withdrawal of the protracted pandemic-related spending and inflation mitigation measures.

Figure 9. ASEAN+3: Budgeted Fiscal Balance, FY2024
(Percent of GDP)



Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates

Figure 10. ASEAN+3: Contribution to Change in Fiscal Balance, FY2024
(Percent of GDP)



Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates

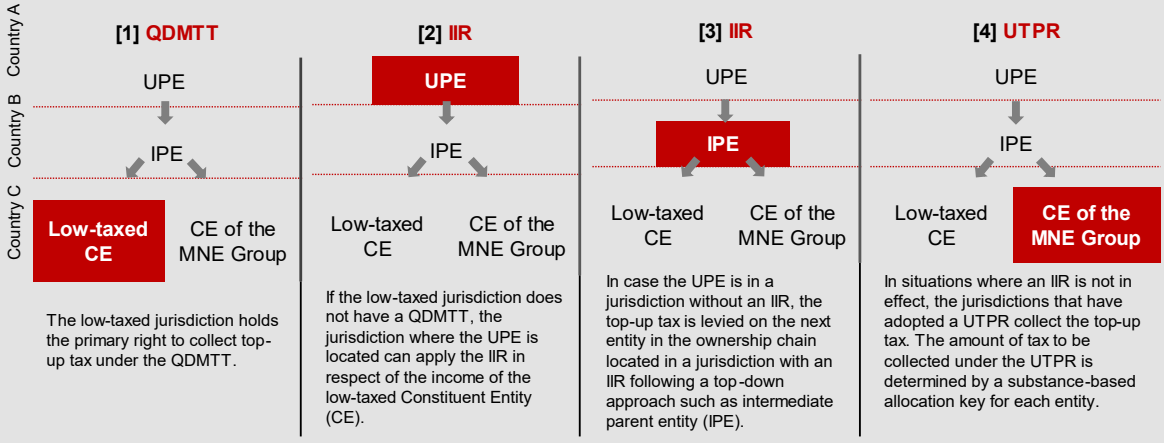
Box B. Implementation of Global Minimum Tax In ASEAN+3 Economies[4] [5]

From 2016 to the end of 2023, a total of 145 economies committed to implementing an unprecedented global tax agreement aimed at ensuring large multinational enterprises (MNEs) pay a minimum effective corporate income tax of 15 percent. This Global Minimum Tax (GMT) policy, which is also known as Pillar Two, was proposed by the Organisation for Economic Co-operation and Development (OECD) and the Group of 20 (G20). The primary objectives of the GMT policy are to prevent a race to the bottom by prohibiting jurisdictions from offering the very low effective tax rates to attract investment and to prevent MNEs with annual global revenue above EUR750 million (in-scope MNEs) from evading taxes by locating in tax havens.

Becoming effective in 2024, the GMT initiative imposes a top-up tax on profits taxed at less than the minimum 15 percent in all jurisdictions where MNEs operate. Pillar Two's top-up tax is collected under three types of provisions: the Qualified Domestic Minimum Top-Up Tax (QDMTT), the Income Inclusion Rule (IIR), and the Undertaxed Profits Rule (UTPR). The QDMTT and IIR are scheduled to come into effect in 2024, while the implementation of the UTPR is expected to begin in 2025. As a result of the top-up tax collection and decreased profit shifting, the OECD estimated that the GMT policy could yield an additional USD 200 billion in annual global tax revenue and reduce the number of MNEs with globally low-taxed profits by approximately 70 percent, as GMT applies across most countries.

As of end 2023, 10 out of 14 members in ASEAN+3 have embraced Pillar Two and are set to implement the GMT policy through top-up tax mechanisms from 2024 onwards (Figure B.1 and Table B.1). The OECD's overarching advice for the GMT-agreed economies is to consider introducing the QDMTT, a domestic top-up tax on income generated within the jurisdiction's territory, to protect their local tax base. If the low-tax jurisdiction does not have a QDMTT, the top-up tax will be distributed to overseas jurisdictions using an IIR and an UTPR. The IIR requires the parent entity, or Ultimate Parent Entity (UPE), to pay a top-up tax on its low-taxed subsidiary's income. The UPE jurisdiction is encouraged to apply the IIR; otherwise, the right to collect the top-up tax flows down the ownership chain to the next parent company (intermediate parent entity or IPE) with the IIR. In cases where an IIR is not in effect, the UTPR divides residual taxing rights on the low-taxed income between the jurisdictions implementing the UTPR based on the share of tangible assets and employees.

Figure B.1. Agreed Rule Order of Pillar Two's Top-up Tax Principles



Source: AMRO illustration; adapted from OECD (2023)
Note: A Constituent Entity (CE) refers to an entity or a permanent establishment within a MNE group subject to GMT policy. A low-taxed CE is a CE situated in a jurisdiction where the MNE group is subject to an effective corporate income tax rate below 15 percent, and the CE itself is subject to an effective tax rate below 15 percent.

[4] Prepared by Ravisara Hataiseree.
[5] The box is an excerpt from Hataiseree (2024). The box has been updated with data available as of March 2024.

Table B.1. Selected ASEAN+3: Implementation Progress of the Two-Pillar Solution

	IIR	UTPR	QDMTT	Status
China	Awaiting details	Awaiting details	Awaiting details	Commentary
Hong Kong	January 2025	January 2025	January 2025	Official plan
Indonesia	Timing uncertain	Timing uncertain	Timing uncertain	Formal indication
Japan	1 April 2024	Timing uncertain	Timing uncertain	Legislation enacted
Korea	January 2024	January 2025	Uncertain	Legislation enacted
Malaysia	January 2025	Timing uncertain	January 2025	Legislation enacted
Philippines	Awaiting details	Awaiting details	Awaiting details	Commentary
Singapore	January 2025	Timing uncertain	January 2025	Official plan
Thailand	January 2025	2025	2025	Official plan
Vietnam	January 2024	No	January 2024	Resolution adopted

Source: KPMG (2024); Hadnum (2023); AMRO staff compilation
Note: 1) 'Official plan' means Program for implementation with dates; 'Formal indication' means the government has issued a written document stating an intent to implement; 'Commentary' refers to a review of domestic tax law from a Pillar Two perspective; 2) The dates in the table represent anticipated implementation dates.

Among ASEAN+3 jurisdictions, Korea and Japan are the first two to have enacted legislation for the full implementation of Pillar Two in 2024. Korea amended its existing Law for the Coordination of International Tax Affairs (LCITA) to include IIR and UTPR, with the effective dates set for 2024 and 2025, respectively. Japan enacted the Bill for the Partial Revision of the Income Tax Act to implement IIR, coming into effect from April 2024. Following suit, Vietnam passed a resolution to implement QDMTT and IIR with effect from 2024. Subsequent to the 2024 Budget announcement, the Malaysian government published the Finance Bill, which incorporates the legislative provisions of Pillar Two into all revenue acts in Malaysia. The bill aims to implement IIR and QDMTT from January 2025. Serving as the regional headquarters for several large MNEs, Hong Kong is preparing its domestic tax systems for the collection of QDMTT, IIR, and UTPR, targeting to start in 2025. Singapore has also announced that it will implement IIR and QDMTT from businesses' financial years starting on or after 1 January 2025, and will consider UTPR at a later stage. Thailand has likewise committed to adopting top-up tax rules beginning in 2025. Meanwhile, China and Indonesia have agreed on the GMT policy, but the top-up taxes effective date has not yet been announced.

A delay or failure to comply with the GMT could result in foregone tax revenues and relocation of investment to other markets. While delaying the imposition of the top-up taxes may result in lost tax revenues to jurisdictions that enforce Pillar Two, the top-up taxes should not be treated as a substitute for in-depth tax reform. With GMT solution, in-scope MNEs paying an effective corporate tax rate below 15 percent will see certain tax incentives no longer effective. Additionally, MNEs' location choice will become less dependent on tax gains and more relying on the non-tax factors such as macroeconomic stability, availability of skilled labor at competitive costs, and robust rule of law. As a result, the GMT policy offers a unique opportunity for compliant jurisdictions to reform tax incentives to be more targeted to attract genuine investment and discourage incentives that allow MNEs to benefit from profit shifting. As targeted tax incentives generally demand a larger tax administration capacity, ASEAN+3 members can leverage their well-developed or fast-developing digital infrastructure to modernize tax administration, simplify processes, and strengthen revenue collection. In aligning with GMT policy amid resource constraints, the revision of tax incentives and administration should strike a balance between ensuring the right to tax and minimizing adverse effects on competitiveness, administrative capacity, and the ability to attract investments.

8. **The FY2024 budgets focus on supporting sustainable and inclusive growth while ensuring macroeconomic stability** (Table 1). Most member economies aim to promote growth through shoring up infrastructure investment and fostering technology development. Depending on the country-specific pre-conditions and strategies, infrastructure

investment is expected to focus on transportation, energy or information and communications technology (ICT). While some economies directly support industries of high growth potential, such as semiconductors, artificial intelligence (AI), and green technology, others highlight regulatory and institutional reforms to attract investment inflows and improve the business environment. Enhancing social protection and health systems is also a common theme of FY2024 budget programs to address the economic difficulties of the vulnerable, especially those affected by delayed and uneven recovery. At the same time, many authorities continue to implement fiscal reforms to restore fiscal buffers.

Table 1. Selected ASEAN+3: Highlights of FY2024 Budget

	Key Objectives	Budget Priorities
Brunei Darussalam	• Investing in digitalization and public infrastructure	• Improving public welfare and productivity • Cultivating a sustainable and diversified economy • Developing dynamic and visionary human capital
Cambodia	• Supporting macroeconomic goals • Maintaining fiscal sustainability • Putting “people” as priority • Improving efficiency of budget allocation	Supporting strategic development plan (Pentagon strategy): • Building human capital • Diversifying the economy and enhancing competitiveness • Developing the private sector and employment opportunities • Promoting resilience, sustainability and inclusive development • Strengthening digital economy and society.
China	• Constructing a modernized industrial system and achieving technological self-reliance. • Supporting the construction of a unified national market • Strengthening social protection system and promoting rural revitalization and urbanization • Enhancing ecological civilization.	• Optimizing industrial structures and increasing the support for enterprise innovation. • Promoting stable growth in consumption and leading the expansion of effective investment • Promoting the upgrading of medical and health service capacity and improving the multi-level social security system • Reducing pollution and increasing efforts to protect the ecological environment.
Hong Kong, China	• Bolstering the confidence of businesses and individuals • Accelerating high-quality development • Achieving targets from fiscal consolidation plan	• Attracting enterprises, capital and talent • Assisting SMEs and strengthening tourism sector • Promoting green financing and digital economy • Focusing on (operating) expenditure cut, with some revenue increases to achieve fiscal balance gradually and maintain fiscal reserves
Indonesia	• Accelerating inclusive and sustainable economic transformation • Strengthening quality of human capital, accelerating development of physical capital, and encouraging high value-added economic activities • Spending better to build up fiscal buffer and optimizing non-debt financing options	• Ensuring inflation control • Boosting investment inflow • Improving quality of education, healthcare, and social security systems • Developing infrastructure in energy, food, connectivity, and ICT sectors • Enhancing implementation of bureaucratic reforms and regulation simplification • Supporting development of green economy
Japan	• Achieving wage increases to form a virtuous economic cycle • Responding to structural changes and social issues • Responding to Noto peninsula earthquake • Enhancing expenditure efficiency	• Supporting wage increases that keep up with inflation • Supporting childcare and improving quality of education • Promoting digital transformation in public services and administration • Promoting green transformation investment toward carbon neutrality • Strengthening diplomacy and defense • Supporting people affected by Noto peninsula earthquake

	Key Objectives	Budget Priorities
Korea	• Ensuring stability in people's lives • Supporting vulnerable groups • Securing future growth engines	• Shoring up welfare for vulnerable groups • Promoting economic revitalization and future-oriented investment • Creating high-quality jobs through enhanced economic vitality • Supporting essential roles and functions of the nation, such as defense and public safety
Malaysia	• Implementing good governance for service agility • Restructuring the economy to boost growth • Raising people's standard of living	• Committing to fiscal and institutional reform • Prioritizing investment in high-growth high-value areas, empowering MSMEs, and improving competitiveness • Providing basic facilities and protecting the welfare through social protection programs
Philippines	• Ensuring a future-proof and sustainable economy that is resilient to shocks and adaptable to change	Supporting socio-economic agenda: • Ensuring food security • Reducing transportation and logistics costs • Reducing energy costs • Improving health • Addressing learning losses • Strengthening social protection • Ensuring sound fiscal management • Enhancing bureaucratic efficiency
Singapore	• Tackling immediate challenges, such as inflation, decline in real income, and slow economic growth • Pursuing better growth and jobs • Creating more paths towards equality and social mobility	• Enhancing cost-of-living support • Extending reskilling program to boost the workers productivity and innovation • Supporting local enterprises and anchoring quality investments • Providing more assurance for families and seniors, especially those in the lower-income groups
Thailand	• Promoting economic expansion • Enhancing competitiveness to support stability and sustainability • Encouraging the growth of targeted and high-tech industries • Strengthening local government capacity in providing public services to reduce inequality and to improve revenue collection and spending effectiveness	Carrying out missions that align with the National Strategy: • Raising income in the agricultural sector • Developing labor skills and competency • Ensuring access to universal healthcare scheme, and quality and standard education • Supporting SMEs development • Promoting green economy • Encouraging the use of digital technology
Vietnam	• Promoting economic growth • Maintaining macro-stability • Controlling inflation and ensuring major balances	• Speeding up nationally important connectivity projects • Improving investment and business environment • Enhancing budget discipline especially on revenue collection, tax refund, and tightened recurrent expenditure

Source: National authorities' websites; AMRO staff compilation.

B. Fiscal Stance

9. **Most member economies plan to maintain a contractionary or neutral fiscal stance in FY2024** (Table 2). The fiscal impulse, measured by the change in structural primary balance, reveals that the fiscal stance shifts from expansionary in FY2023 to contractionary in FY2024 in Cambodia, Japan, and Myanmar, and from expansionary to neutral in Singapore and Vietnam. Hong Kong, the Philippines, and Thailand continue fiscal tightening, while China maintains a neutral stance. The change in primary expenditure as a percentage of GDP generally confirms continued fiscal consolidation in spending (Figure 11). On the other hand,

the fiscal stance shifts from contractionary to neutral in Indonesia, Korea and Malaysia, and from contractionary to expansionary in Lao PDR.[6]

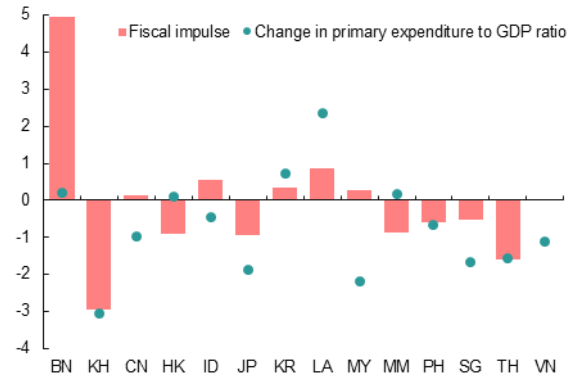
10. **Considering the macroeconomic conditions, the FY2024 fiscal stance is assessed to be broadly appropriate** (Figure 12). As the output gap is estimated to narrow or turn positive in most member economies, tightening fiscal policy will help improve the fiscal position and stabilize the economy, particularly in economies facing a significantly higher debt burden and prolonged inflationary pressure. The fiscal stance in Cambodia, Hong Kong, Myanmar, and Thailand remains contractionary under a still negative output gap, reflecting the anticipated revenue improvement and expenditure cuts.

Table 2. ASEAN+3: Fiscal Stance, FY2023-2024

		FY2024		
		Expansionary	Neutral	Contractionary
FY2023	Expansionary	BN	SG, VN	KH, JP, MM
	Neutral		CN	
	Contractionary	LA	ID, KR, MY	HK, PH, TH

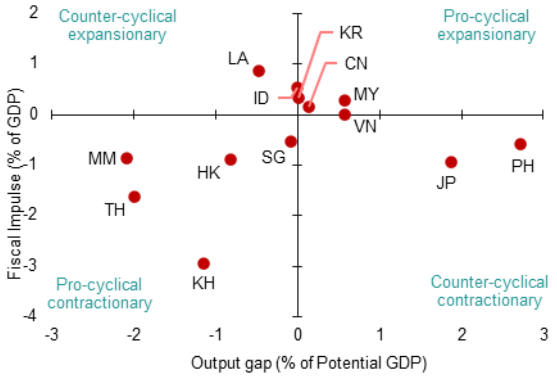
Source: AMRO staff assessment
Note: Fiscal stance assessment is based on the fiscal impulse, measured by the changes in the budgeted primary balance in FY2024 compared to the actual or estimated primary balance in FY2023. The fiscal stance of Brunei is assessed by the change in primary expenditure as its revenue is heavily dependent on oil and gas prices.

Figure 11. ASEAN+3: Fiscal Impulse and Change in Primary Expenditure, FY2024
(Percent of GDP)



Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates
Note: 1) Fiscal impulse is based on the change in the structural primary balance as a percentage of GDP, estimated by AMRO. A negative fiscal impulse implies a contractionary fiscal stance; 2) The change in primary expenditure is defined as the yearly difference in the ratio of primary expenditure (excluding interest payments) to GDP. A negative change implies primary expenditure grows slower than nominal GDP.

Figure 12. Selected ASEAN+3: Fiscal Impulse and Output Gap, FY2024
(Percent of GDP)



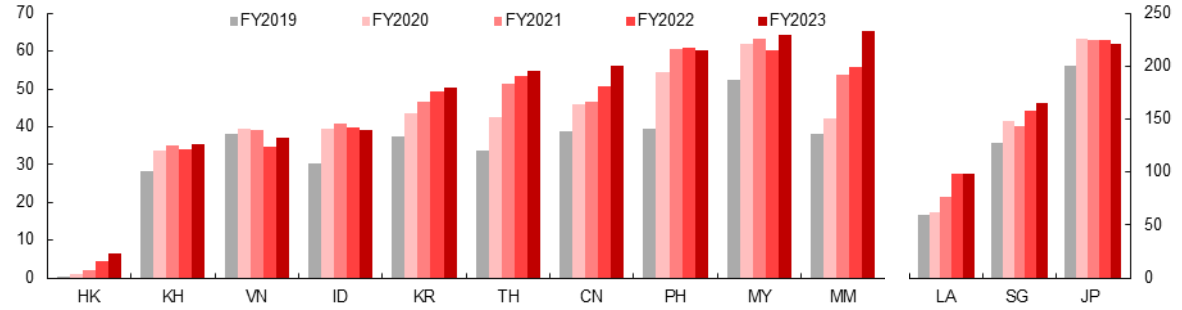
Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates
Note: Output gap is computed based on the potential GDP estimated by AMRO using Hodrick-Prescott filter.

[6] In Malaysia, despite a continued reduction of fiscal deficit, the fiscal stance is assessed to be neutral in FY2024 because the government's repayment of bonds issued by 1MDB (MYR14 billion) in FY2023 was excluded as a one-off factor.

C. Government Debt and Gross Financing Needs

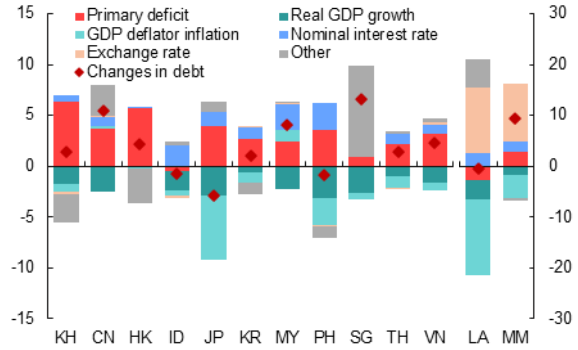
11. **The government debt-to-GDP ratio continued to rise in FY2023, but the pace of increase slowed down** (Figure 13). The debt ratio rose substantially during the pandemic but started to decline in several member economies. While improving economic performance continued to help reduce the debt ratio, high inflation also contributed to lowering debt as a percentage of GDP in many economies, particularly in Japan, Lao PDR, Myanmar, and the Philippines.[7] However, elevated primary deficits and higher nominal interest rates fully offset the contribution of growth and inflation, and kept the debt ratio increasing in most economies. Significant currency depreciation further inflated the nominal value of outstanding debt in Lao PDR and Myanmar (Figure 14). The debt ratio is forecasted to rise further in FY2024 in half of the member economies where the budgeted primary balance falls below the debt-stabilizing primary balance (Figure 15).

Figure 13. Selected ASEAN+3: Gross Government Debt, FY2019-2023 (Percent of GDP)



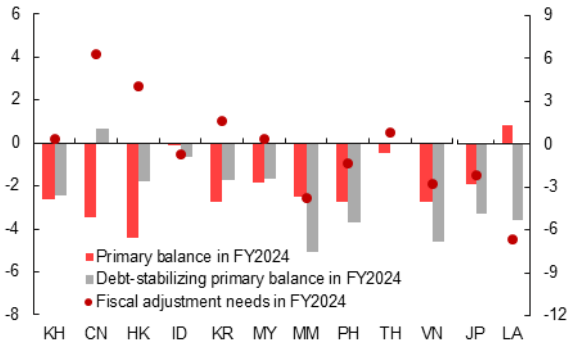
Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates
Note: Brunei is not shown as it has virtually zero government debt.

Figure 14. Selected ASEAN+3: Contribution to Change in Debt-to-GDP Ratio, FY2023
(Percent of GDP)



Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates
Note: 1) Brunei is not shown as it has virtually zero government debt; 2) See Appendix IV for the decomposition methodology.

Figure 15. Selected ASEAN+3: Debt-stabilizing Primary Balance and Fiscal Adjustment Needs
(Percent of GDP)

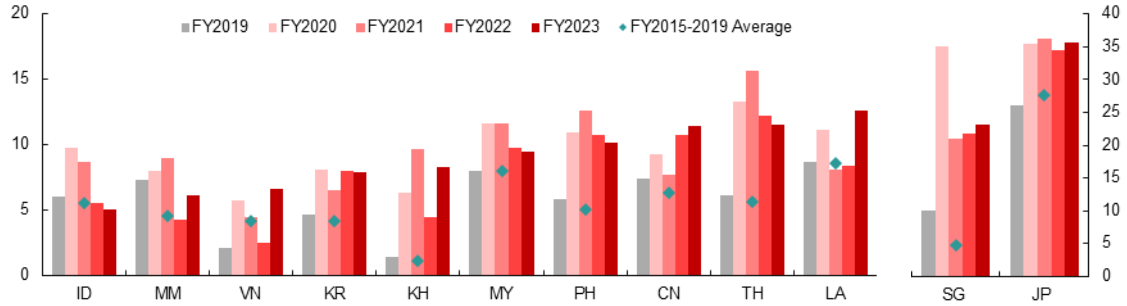


Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates
Note: The debt-stabilizing primary balance in FY2024 is the primary balance needed to maintain the debt ratio at the end of FY2023 level. Fiscal adjustment needs in FY2024 are defined as the difference between the budgeted primary balance in FY2024 and the debt-stabilizing primary balance in FY2024. Positive values indicate how much the primary balance should be improved additionally compared to the budgeted primary balance in FY2024 to stabilize the debt ratio, while negative values imply how much the primary balance can deteriorate further without increasing the debt ratio.

[7] Although the GDP deflator inflation rate in Japan was not as high as other economies, its contribution to the fall in debt ratio was relatively larger due to a high existing debt ratio. See Appendix IV for the decomposition equation.

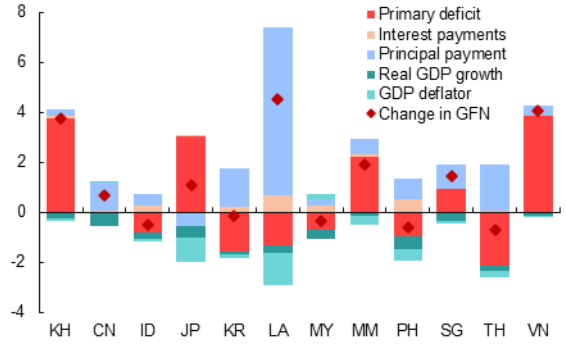
12. **Gross financing needs (GFNs) remained elevated following a surge during the pandemic**. In FY2023, the GFN-to-GDP ratio declined in half of the member economies and increased in the other half (Figure 16). Although fiscal consolidation contributed to lowering deficit financing needs in many economies, GFNs remained high, partly due to the maturing of debt issued massively during the pandemic (Figure 17).[8] Looking ahead, increased principal payments of maturing debts across various tenors are anticipated to keep GFNs elevated over the medium term in some economies (Figure 18). In addition, the interest burden is also expected to increase steadily, given the rise in sovereign bond yields amid higher amortization needs (Figures 19 and 20). While the immediate impact may be limited by diversified maturity structures and fixed coupon rates, higher bond yields will eventually translate into a higher interest burden over time.

Figure 16. Selected ASEAN+3: Gross Financing Needs, FY2019-2023 (Percent of GDP)



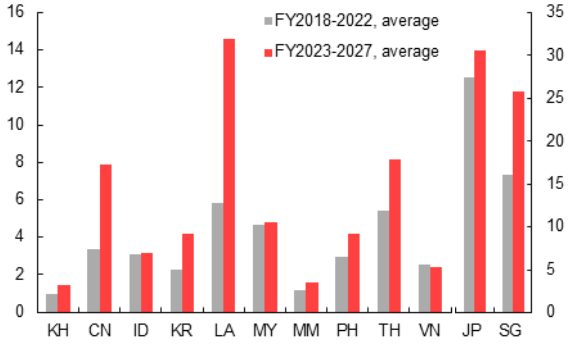
Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates
Note: 1) Debt service in Lao PDR is based on its original amount, including debt restructuring under negotiation; 2) Amortization in the Philippines includes the redemption by the bond sinking fund; 3) Amortization in Singapore 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 17. Selected ASEAN+3: Contribution to Change in GFN-to-GDP Ratio, FY2023
(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 Appendix IV for the decomposition methodology.

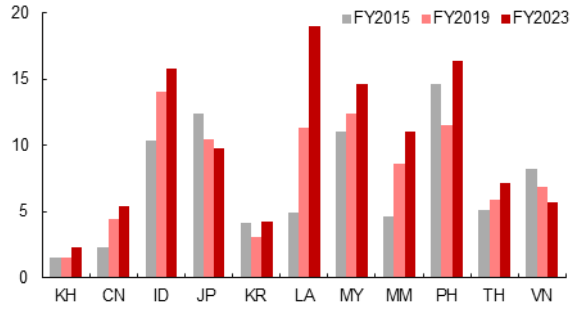
Figure 18. Selected ASEAN+3: Amortization Needs, FY2018-2027
(Percent of GDP)



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 projection, assuming the same average maturity of government debt outstanding as of 2023.

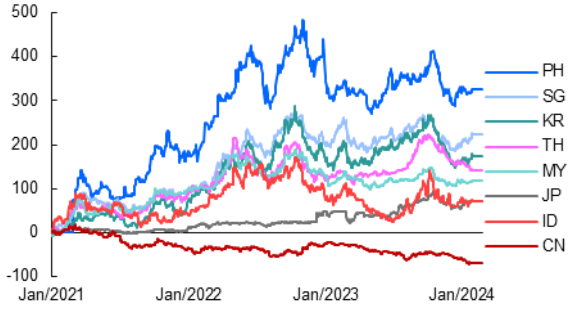
[8] In Lao PDR, the GFN shows the original principal payment obligation to be repaid in FY2023. However, actual payment was smaller as the government has been negotiating with external creditors on debt restructuring and repaid around 60 percent out of the total obligation in FY2023.

Figure 19. Selected ASEAN+3: Interest Payments, FY2019-2023
(Percent of Revenue)



Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates
Note: Interest payments in Lao PDR are based on its original amount, including debt restructuring under negotiation.

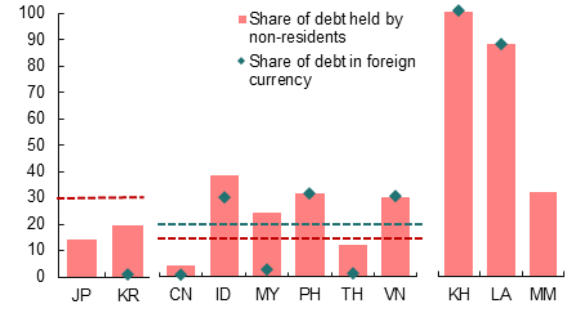
Figure 20. Selected ASEAN+3: 10-year Government Bond Yields
(Basis points, 1 January 2021 = 0)



Source: National authorities via CEIC and Haver Analytics; AMRO staff calculation

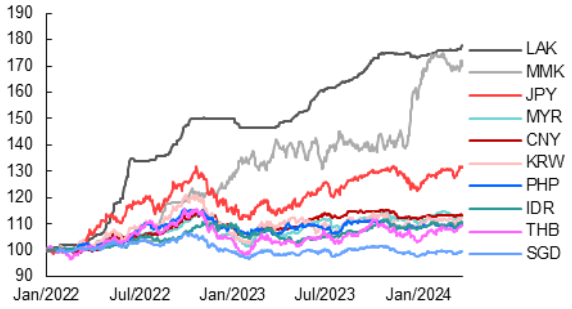
13. **The debt profile of member economies generally appeared sound, but with pockets of vulnerabilities.** While the share of government debt held by nonresidents and denominated in FCY in some emerging market economies (EMEs) exceeded early-warning thresholds suggested by the IMF,[9] substantial portions of external debt stock in these economies came from past official borrowings (Figure 21).[10] The external debts of Cambodia and Lao PDR were also primarily based on concessional terms. Nevertheless, countries with a significant share of FCY-denominated debt are subject to a higher risk of rising nominal values of debt outstanding and debt service burdens in the event of currency depreciation, as evidenced during the pandemic (Figure 22).[11] Although the share of short-term debt, in terms of original maturity, remained low in general, increased reliance on private creditors for external borrowing indicates higher potential risks related to rollover and exchange rate fluctuations amid volatile global financial market conditions.

Figure 21. Selected ASEAN+3: Share of Debt Held by Nonresidents and in FCY
(Percent of total debt)



Source: National authorities via CEIC and Haver Analytics; AMRO staff estimates
Note: Red dotted lines indicate the lower early warning threshold for public debt held by nonresidents, suggested by the IMF; Green dotted line indicates the lower early warning threshold for public debt in foreign currency.

Figure 22. Selected ASEAN+3: Exchange Rates against USD
(Index, 1 January 2022 = 100)



Source: BIS and National authorities via CEIC and Haver Analytics; AMRO staff calculation
Note: USD/MMK represents the bank customer market rate.

[9] According to IMF (2013), lower/upper early warning thresholds for the share of public debt held by nonresidents are 15/45 percent for EMEs and 30/45 percent for AEs. Lower/upper early warning thresholds for the share of public debt in FCY are 20/60 percent for EMEs.
[10] As of end-2022, the share of official creditors in external debt outstanding was 100 percent in Cambodia, 10.5 percent in China, 24.2 percent in Indonesia, 83.9 percent in Lao PDR, 83.2 percent in Myanmar, 56.0 percent in the Philippines, 14.0 percent in Thailand, and 89.5 percent in Vietnam.
[11] For example, currency depreciation in Lao PDR increased the debt-to-GDP ratio by 54.0 percent of GDP from FY2019 to FY2023.

III. Policy Discussion

A. Key Factors for Consideration

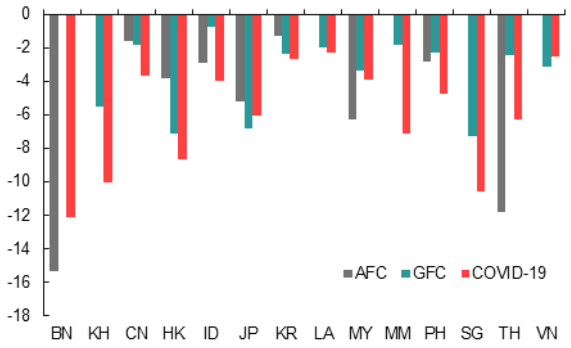
14. **Fiscal space narrowed substantially after an extended period of active fiscal policy interventions**. The recent economic crisis triggered by the COVID-19 pandemic necessitated large-scale fiscal stimuli, and the inflation spike resulting from the Russia-Ukraine conflict, extended support measures thereafter. Although such fiscal measures provided necessary support, they also required sizeable public resources and most economies ended up with higher government debt and narrower fiscal space compared to the pre-pandemic period (Table 3). Given the recurring large-scale economic crises, along with more frequent and severe natural disasters amid ongoing climate change, it becomes increasingly important to maintain adequate fiscal buffers to address economic shocks without endangering fiscal sustainability (Figure 23). In addition, delays in fiscal consolidation despite the narrower fiscal space may raise concerns about debt sustainability and the fiscal policy capacity to absorb additional negative shocks, which may lead to credit downgrade by the markets. This situation could keep the debt service burden higher, and limit fiscal spending for other priorities, potentially causing liquidity problems.

Table 3. ASEAN+3: Fiscal Space, FY2019 and FY2023

		FY2023		
		Ample	Moderate	Limited
FY2019	Ample	BN, HK, SG	KH, KR, TH	
	Moderate		CN, ID, MY, PH, VN	MM
	Limited			JP, LA

Source: AMRO staff assessment
Note: 1) Fiscal space assessment is based on Poonpatpibul et al. (2020); 2) The cells shades in red indicate downgrading of the fiscal space assessment categories in FY2023 compared to FY2019

Figure 23. ASEAN+3: Changes in Fiscal Balance During Crises (percent of GDP)

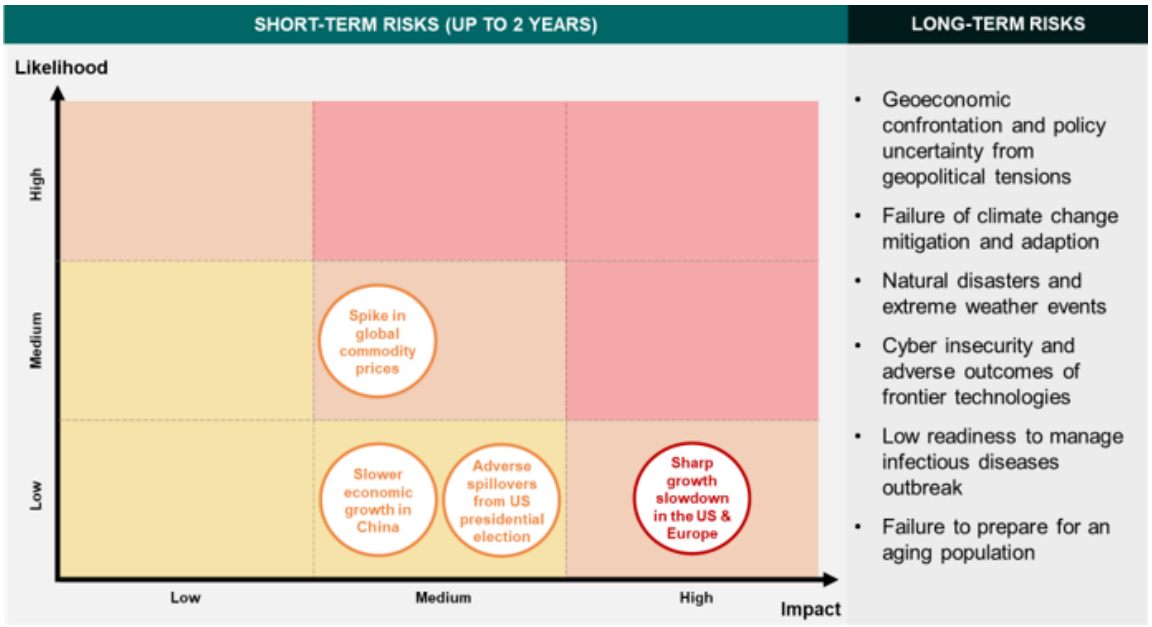


Source: IMF
Note: The changes in fiscal balance were computed as the minimum of fiscal balances in the three years following the onset of each crisis minus the fiscal balance of the year before each crisis.

15. **With stronger growth and moderating inflation anticipated in the near term for ASEAN+3 economies, the focus of fiscal policy should shift.** Member economies are expected to grow at a faster pace, driven by resilient domestic demand and export recovery, particularly in the semiconductor and tourism sectors.[12] As a result, the output gap has already turned positive and is projected to widen further in most member economies. Inflation is forecast to continue moderating, primarily due to the stabilization of global commodity prices. Improvements in economic activities and the current positive economic outlook present an opportunity as well as a rationale for fiscal policy to normalize its role to achieve sustainable and inclusive growth. However, lingering uncertainties may impede fiscal normalization efforts. The near-term prospects for ASEAN+3 could be affected by various risks (Figure 24), and the realization of any risk would prompt fiscal response, holding back the progress of ongoing fiscal normalization and consolidation.

[12] See AMRO (2024a) for the detailed discussion on the economic outlook.

Figure 24. Regional Risk Map, April 2024



Source: AMRO (2024a).
Note: The Regional Risk Map captures risks and challenges that could derail the region's macro-stability. These are in relation to (i) growth and inflation outlook; (ii) financial stability concerns, and (iii) other key long-term challenges. The risks and challenges are divided into two categories; (1) short-term risks (conjunctural risks of up to two years, in which the risks represent scenarios that could materially alter the baseline path); and (2) long-term risks (more persistent or secular trends and/or challenges, including perennial risks).

16. **Macroeconomic conditions and their interaction with fiscal policy may disrupt fiscal consolidation plans**. The evolution of the debt-to-GDP ratio is affected not only by fiscal outcomes but also by macroeconomic conditions, particularly through the snowball effects of existing debt. In particular, the increasing interest rate and growth rate differentials amid recent policy rate hikes will keep it challenging to reduce the debt ratio swiftly by fiscal consolidation alone. While policy efforts to boost growth rates and lower financing costs will help reduce the debt ratio over the medium term, macroeconomic developments are also influenced by fiscal consolidation. Generally, fiscal consolidation is regarded as having contractionary effects on aggregate demand and output, lowering economic growth.[13] However, some studies suggest the theoretical possibility and empirical evidence of the expansionary effects of fiscal consolidation.[14] While the expansionary effects of fiscal consolidation are inconclusive, credible fiscal consolidation would at least mitigate its contractionary impact and establish a foundation for stable and sustainable growth over the medium term.

17. **Addressing long-term structural challenges will require substantial fiscal resources in the future.** More than half of the member economies are projected to become aged or post-aged societies in the next 10 to 20 years, and many of them have yet to develop adequate systems to facilitate the smoothing of lifetime income streams, address old-age poverty, and provide proper health and long-term care services. Policy measures to strengthen

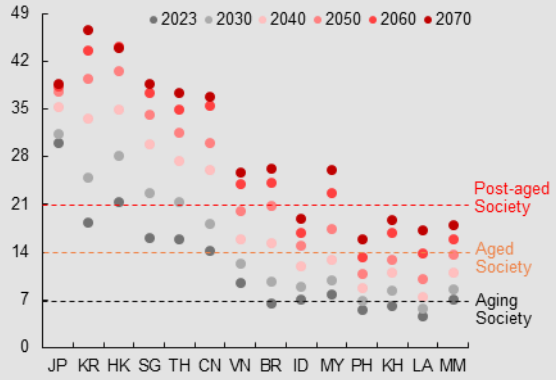
[13] Fatas and Summers (2018) find evidence of self-defeating fiscal consolidations whereby fiscal consolidations likely resulted in a higher debt-to-GDP ratio through their long-term negative impact on output. See Balasundharam et al. (2023) and references therein for empirical findings on the adverse effects of fiscal consolidation on economic growth.
[14] According to rational expectation theory, the contractionary effects of reduced fiscal deficit would be more than offset through the wealth effect on consumption, as suggested by the Ricardian equivalence, and through favorable market sentiment stimulating investments, especially if a credible commitment to fiscal adjustment could induce private sector confidence. Recent works find that expenditure-based consolidations could be expansionary under certain circumstances, such as in economies that are highly open to trade or start consolidation with high debt levels and increase interest rate risk premiums (Ilzetzki, Mendoza, and Végh, 2013; Nie, 2020).

and maintain such systems will require substantial fiscal resources (Box C). In several member economies, including Korea, the Philippines, and Thailand, the financial sustainability of pension systems is increasingly concerning. Meanwhile, climate change is no longer a distant threat, especially in the economies vulnerable to frequent and extreme natural disasters. As the frequency and severity of natural disasters increase with climate change,[15] the need for public investments and interventions has been growing to prevent and mitigate the impacts of natural disasters on the economy and the people's livelihoods, and also for fiscal policy to play its part in achieving the national commitments to global initiatives.

Box C. Estimating Additional Fiscal Needs for Social Protection and Health[16]

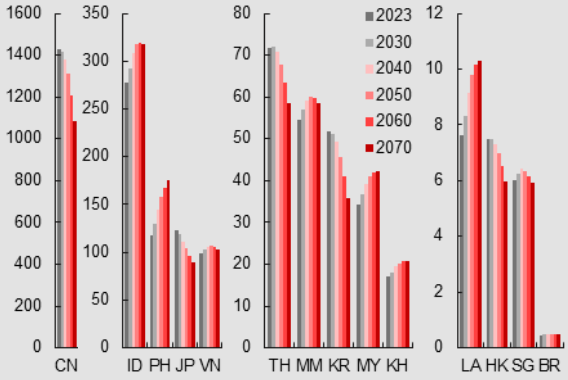
ASEAN+3 member economies are expected to experience significant demographic shifts over the coming decades. Most member economies have been undergoing demographic changes, characterized by both changes in population growth and shifts in age structure. In particular, China, Hong Kong, Japan, Korea, Singapore, Thailand, and Vietnam are expected to see population declines as population aging progresses (Figures C.1 and C.2). While demographic changes have significant implications for fiscal positions through growth, revenue, and expenditure, this box specifically examines the additional fiscal spending needs associated with demographic changes.[17]

Figure C.1. ASEAN+3: Old-age Ratio (percent)



Source: UN via Haver Analytics
Note: Old-age population refers to people aged 65 and above. An economy is classified as an aging society if the share of the old-age population in the total population is above 7 percent, an aged society if the share is above 14 percent, and a post-aged (or super-aged) society if the share is above 21 percent.

Figure C.2. ASEAN+3: Population (million)



Source: UN via Haver Analytics

[15] See Dabla-Norris et al. (2021), CRED (2022)
[16] Prepared by Byunghoon Nam.
[17] Demographic changes, including population growth and age structure, affect potential growth. According to the production function approach or growth accounting, slower (or negative) population growth and population aging negatively affect potential growth due to the decline in the working-age population, and relatively lower labor force participation and less working hours of the old-age cohorts. The negative consequences of population aging on growth can also manifest through lower labor productivity as well as lower savings, resulting in lower investments (AMRO, 2024b). Given that most existing long-term growth projections for member economies, which this box adopted, have already integrated the effects of demographic changes on labor input, this box does not make a separate projection for potential growth. Fiscal revenue is also affected by demographic changes, as individual income and consumption patterns change over the life cycle, with typically lower income and consumption levels after retirement. Considering that the impact of population aging on revenues unfolds through changes in potential output, the revenue as a percentage of GDP is sometimes assumed to remain stable (IMF, 2016). Adopting the same assumption, this box focuses on estimating the impact of demographic changes on fiscal spending as a percentage of GDP.

Demographic changes have notable effects on social protection and health expenditure, classified by the functions of government (COFOG). Average health expenditure tends to be relatively high for young children, remain low and stable during working age, and then increase sharply in older age (OECD, 2013), suggesting that health expenditure per capita will increase over time as the share of the old-age population increases.[18] In particular, the "death-related costs" hypothesis elucidates the rapid surge in the medical expenses of individuals close to death, when their mortality rates are obviously high.[19] Old-age pension and long-term care, encompassed within social protection expenditure, are directly related to demographic changes as they primarily target the elderly population.[20] Consequently, the increase in the elderly population is expected to augment these expenditures.

The drivers of social protection and health expenditure increases are both demographic and non-demographic. As discussed previously, there is a positive relationship between these expenditures and population aging, as confirmed by Figures C.3 and C.4, which show that per capita social protection and health expenditures increase with the old-age ratio in both advanced economies (AEs) and emerging market economies (EMEs). The key non-demographic driver is income. Social and health care are considered normal goods, meaning that individuals generally demand more services as their incomes increase.[21] Figures C.5 and C.6 illustrate a clear positive relationship between per capita social protection and health spending and GDP per capita. While demographic and income factors affect demand for social and health care, technological advances and medical progress affect the supply of care services. Also, country-specific policies and institutions influence the level of health and social protection expenditure in a given economy.

Figure C.3. Social Protection Expenditure (log) **and Old-age Ratio** (percent)

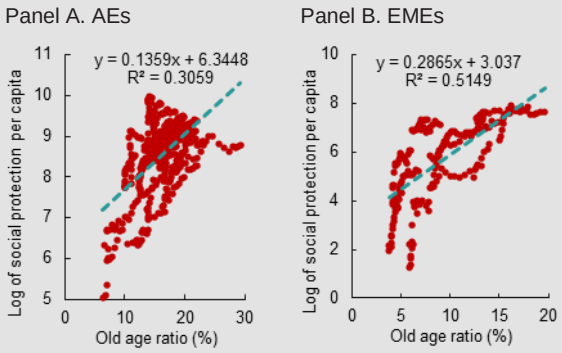
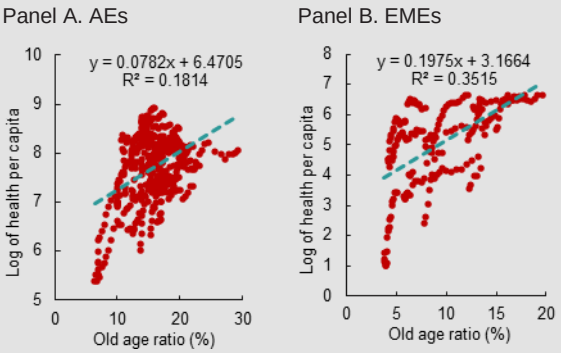


Figure C.4. Health Expenditure (log) **and Old-age Ratio** (percent)



Source: IMF, OECD, UN via Haver Analytics; AMRO staff estimates
Note: 1) Figures show data from 2000 to 2019; 2) Sample economies are grouped in accordance with IMF WEO classification. In addition to the selected ASEAN+3 economies, Australia, Austria, Belgium, Brazil, Canada, Chile, the Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Israel, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Russia, Spain, South Africa, Sweden, Switzerland, Turkey, the United Kingdom, and the US are included in the analyses; 3) Per capita variables are first converted to USD and then transformed to log scale.

[18] According to COFOG, health expenditure includes the provision of (i) pharmaceutical and medical products; (ii) therapeutic appliances and equipment; (iii) outpatient and hospital services; and (iv) public health services (administration, inspection, disease detection and prevention, etc.)

[19] On the other hand, the healthy aging hypothesis posits that enhanced health care systems and extended life expectancy may shift the average health expenditure curve against age groups to the right, implying longevity gains, progressively postponing increases in age-related spending. However, this effect is not considered here to capture pure demographic impacts, implicitly assuming health status of each age group is unchanged.

[20] According to COFOG, social protection expenditure includes the provision of benefits to (i) persons with sickness/injury, disability (i.e., sick leave payments, disability care allowances); (ii) persons in old age (i.e., old-age pensions or lump-sum payments, long-term care services); (iii) households with dependent children; and (iv) unemployed persons. The coverage of social protection expenditure is much larger than the scope of expenditure related to population aging. The effects of the increasing old population on social protection expenditure could be partly offset by the effects of the declining young population and households with dependents, in countries with declining fertility rates. However, due to the lack of detailed standardized data on old-age pension and long-term care expenditure for member economies, this box estimates the impact of demographic changes on social protection as a whole.

[21] Empirical estimates of the elasticity of health spending with respect to income range widely hover around 1 (OECD (2013) and references therein).

Figure C.5. Social Protection Expenditure (log) **and GDP per capita** (log)

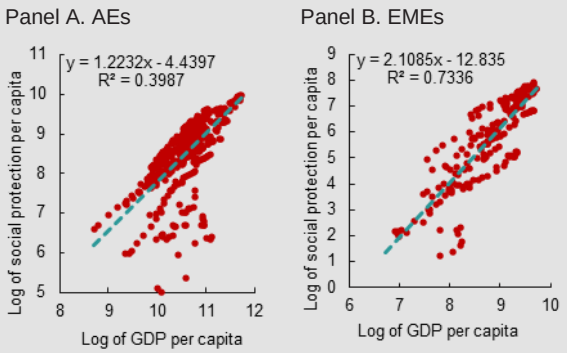
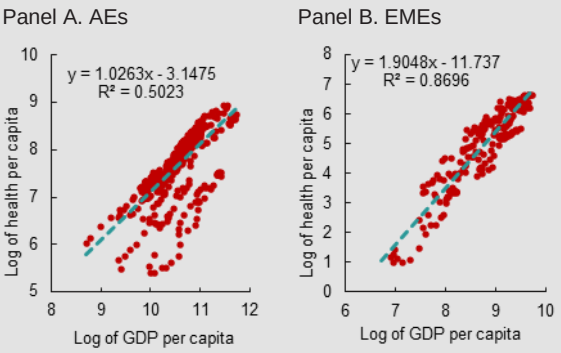


Figure C.6. Health Expenditure (log) **and GDP per capita** (log)



Source: IMF, OECD, UN via Haver Analytics; AMRO staff estimates
Note: 1) Figures show data from 2000 to 2019; 2) Sample economies are grouped in accordance with IMF WEO classification. In addition to the selected ASEAN+3 economies, Australia, Austria, Belgium, Brazil, Canada, Chile, the Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Israel, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Russia, Spain, South Africa, Sweden, Switzerland, Turkey, the United Kingdom, and the US are included in the analyses; 3) Per capita variables are first converted to USD and then transformed to log scale.

A panel regression was employed to project the long-term social protection and health expenditure of selected member economies.

Data. Macroeconomic indicators and government expenditure classified by COFOG (social protection and health expenditures) for 25 AEs and 12 EMEs, including 9 member economies, from 2000 to 2019 are collected from the IMF and OECD. Notably, the sample period excludes the years after 2020 to rule out the impact of pandemic-related programs, which are considered temporary. Population and age structure projections are based on the UN database. For the long-term projections for member economies, real GDP growth projections until 2028 are compiled from the IMF (2023), while those after 2029 are from OECD (2024) and Shared Socioeconomic Pathways (SSP) Database (2018). GDP deflators and exchange rates are assumed to be stable over the long term.

Methodology. After projecting per capita social protection and health expenditures using panel regression, total social protection and health expenditures as a percentage of GDP are computed by using population and nominal GDP projections.[22]

- Step 1. Panel regression models are employed to project per capita social protection and health expenditures. Specifically, per capita social protection and health expenditures are regressed on the old-age ratio and GDP per capita with country fixed effects (Equations C.1 and C.2). Two separate regression models for AEs and EMEs for each expenditure are estimated to reflect different average relationships between variables, as depicted in Figures C.3–C.6.[23] Meanwhile, country fixed effects, along with constant terms, capture other country-specific factors, such as policy choices and institutional differences, in addition to population and income.[24]

  Equation C.1. $lse_{it} = \beta_0 + \beta_1 oar_{it} + \beta_2 lgdp_{it} + \alpha_i + u_{it}$

  Equation C.2. $lhe_{it} = \beta_0 + \beta_1 oar_{it} + \beta_2 lgdp_{it} + \alpha_i + u_{it}$

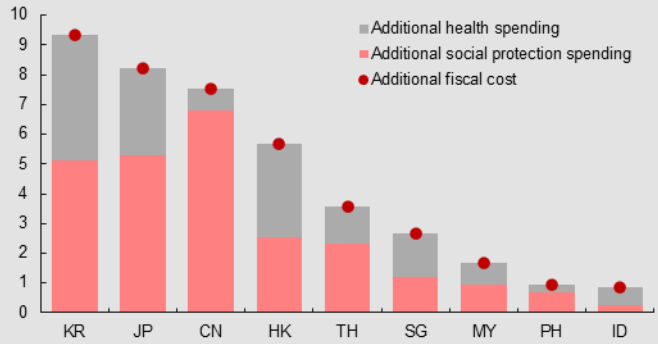
[22] This methodology differs from approaches used in EC (2024) and OECD (2013), which project social and health expenditures by accounting methods based on average health expenditure by age group and their projections. While the methodology employed in this analysis does not incorporate granular information about the age profile of related expenditures due to data limitation, the estimation results are similar qualitatively.
[23] For example, the slopes observed are generally steeper in EMEs than in AEs. This distinction arises because social protection and health systems in AEs are already established, resulting in a relatively smaller effect of increased old-age ratios on related spending. In contrast, given that EMEs are often in the process of developing and expanding their social protection and health systems, the effect of higher old-age ratios on spending tends to accelerate. Similarly, the income elasticity of social protection and health spending is smaller in AEs than in EMEs since the increase in demand for these services, characterized as normal goods (not luxury goods), decelerates beyond a certain income level.
[24] The country fixed effects reflect the fact that social protection and health expenditure differs across countries with similar population structures and income levels due to policy choices and institutional differences. Meanwhile, the use of the same coefficients for each group of economies implicitly assumes the convergence of social and health spending within each group.

where lse_{it} is the log of social protection spending per capita of country i at year t; lhe_{it} is the log of health spending per capita of country i at year t; oar_{it} is the old-age ratio of country i at year t; $lgdp_{it}$ is the log of GDP per capita of country i at year t; β_0, β_1, β_2 are time-invariant and country-invariant parameters; α_i is the time-invariant country effect; and u_{it} is the error term.

- Step 2. Using the estimated parameters, per capita social protection and health expenditures are projected by the old-age ratio and GDP per capita projections for each year.
- Step 3. Total social protection and health expenditures are projected by multiplying per capita expenditures by population for each year.
- Step 4. Social protection and health expenditures as a percentage of GDP are computed by dividing the total expenditures by nominal GDP for each year.
- Step 5. Additional fiscal costs from social protection and health expenditures are computed by comparing these expenditures as a share of GDP each year with those in 2019.

Additional fiscal costs from aging-related expenditures are projected to be substantial in rapidly aging economies. According to the projection results, additional fiscal costs from social protection and health expenditures in 2050 compared to 2019 range from 9.3 percent of GDP in Korea to 0.9 percent of GDP in Indonesia (Figure C.7). Economies facing rapid population aging, such as Korea, Japan, China, and Hong Kong, are expected to experience significant spending pressure from social protection and health services. In contrast, countries with relatively young populations, such as Indonesia, Malaysia, and the Philippines, will face additional fiscal costs in 2050 of only 1–2 percent of GDP.

Figure C.7. Selected ASEAN+3: Additional Fiscal Costs from Social Protection and Health Expenditures in 2050
(percent of GDP)



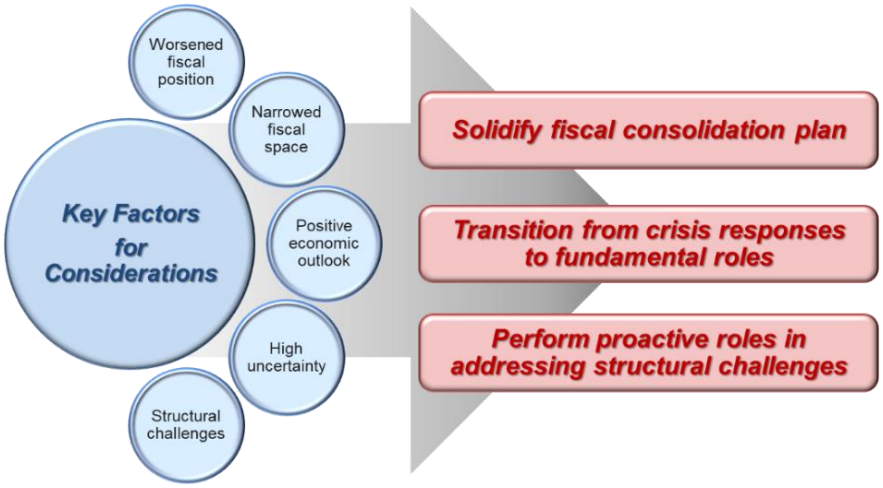
Source: AMRO staff estimates
Note: Additional fiscal costs in 2050 are computed by subtracting social protection and health expenditures in percent of GDP in 2019 from those in 2050.

The projection results underscore the importance of implementing policy measures to effectively manage aging-related public expenditures. While these results are based on status quo assumptions regarding social protection and health systems, policies as well as health status of the population, it should be noted that these factors may evolve over time, potentially altering the trajectory of aging-related expenditures. Nonetheless, this analysis highlights a pressing need for fiscal and structural reforms aimed at ensuring fiscal sustainability while providing adequate social protection and health services.

B. Fiscal Policy Discussion

18. **ASEAN+3 member authorities should strike the right balance between restoring fiscal buffers and carrying out an active fiscal policy** (Figure 25). Substantially narrower fiscal space and lingering uncertainties warrant the policy focus on restoring fiscal buffers, while carefully planning its pace and modality by considering country-specific macroeconomic and fiscal situations. Fiscal aggregates should be anchored and guided by a medium-term fiscal consolidation plan which describes the transition of fiscal policy focus from its extended crisis mode to its fundamental role in promoting growth and improving income distribution, especially with due consideration to the scarring effects of the pandemic and the uneven recovery thereafter. However, elevated uncertainty in the near term calls for flexible and agile fiscal policy responses during the transition. In the longer-term perspective, fiscal policy should play a crucial role in addressing structural challenges, particularly population aging and climate change.

Figure 25. Fiscal Policy Considerations and Recommendations



Source: AMRO staff illustration

Solidifying fiscal consolidation plan

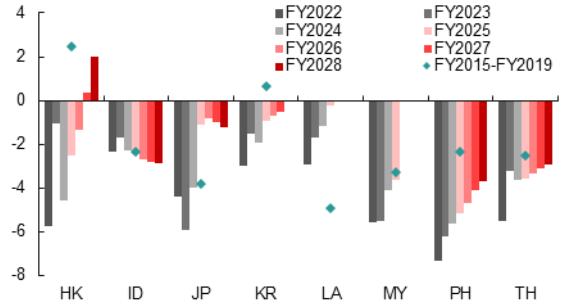
19. **Establishing clear fiscal consolidation targets and paths with strong commitment is essential for a credible medium-term fiscal consolidation plan.** Fiscal rules will help anchor the fiscal targets of a consolidation plan so that they are consistent with long-term sustainability goals, and strengthen the fiscal framework for a more credible and predictable fiscal management (Box D).[25] Additionally, enhancing the medium-term fiscal framework (MTFF) will help underpin specific paths of fiscal aggregates over the medium term to achieve consolidation targets consistent with fiscal rules. Also, strengthening the role of the MTFF and its linkage to the annual budget can help ensure that the fiscal resource reallocation during the fiscal consolidation process is better aligned with the strategic directions of national development plan.

20. **The fiscal consolidation plan should present a blueprint for stabilizing the debt-to-GDP ratio**. Member economies with an MTFF envision fiscal consolidation to stabilize or gradually reduce the debt-to-GDP ratio over the medium term (Figures 26 and 27). In some economies, however, the debt ratio is projected to continue rising albeit at a moderate pace. If the debt ratio increase over the medium term is economically or politically unavoidable, the authorities should transparently communicate the fiscal prospects and develop credible plans

[25] See Caselli et al. (2018).

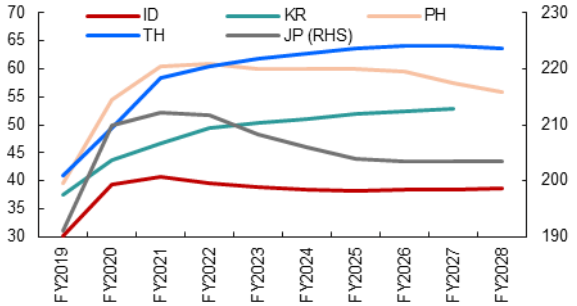
to stabilize or reduce the debt ratio in the longer-term perspective. More importantly, fiscal projections and policy measures specified in the medium-term plan should be realistic and feasible. In the event that unforeseen factors lead to deviations from fiscal targets, a revised fiscal plan with a clear strategy for additional fiscal adjustments should be presented to maintain the credibility of the fiscal consolidation plan.

Figure 26. Selected ASEAN+3: Authorities' Medium-term Fiscal Balance Projection
(Percent of GDP)



Source: National authorities; AMRO staff estimates.
Note: Fiscal balance projections are as announced by authorities.

Figure 27. Selected ASEAN+3: Authorities' Medium-term Government Debt Projection
(Percent of GDP)



Source: National authorities; AMRO staff estimates.
Note: Debt ratio projections are as announced by authorities.

21. **Strengthening the fiscal management framework and institutional arrangements will help mitigate political influence on fiscal consolidation**. Existing studies report higher spending during election years is followed by, at best, partial retrenchment in the post-election years, and that electorally vulnerable governments tend to strategically avoid fiscal consolidations.[26] The recent elections of several member economies also confirmed the prevalent election pledges involving large fiscal resource needs. Given the general unpopularity of fiscal consolidation under rising political polarization, political preferences may interfere with and derail effective implementation of a medium-term fiscal consolidation plan. With the series of upcoming elections in this region, fiscal authorities should also focus on strengthening the fiscal management framework and institutional arrangements that could mitigate the political influence. In particular, reinstating or introducing fiscal rules based on key principles – enforceability, flexibility, and simplicity – will help strengthen fiscal discipline, and enhance the credibility of a medium-term fiscal consolidation plan. [27]

22. **Policy measures for fiscal consolidation should focus on not only reducing fiscal deficits but also achieving favorable debt dynamics conditions**.

- Reducing fiscal deficits involves a combination of revenue-enhancing measures and spending cuts. Member economies could benefit from the progress in public-sector digitalization that will help strengthen tax collection and improve the efficiency of disbursement and financing. The implementation of a GMT could also provide an opportunity to increase tax revenue in countries that have provided generous tax incentives to MNEs. Additionally, the authorities may consider introducing new taxes or adjusting tax rates, depending on their policy priorities and economic structure. Downsizing fiscal expenditure after an extended period of fiscal stimulus could be challenging. However, a comprehensive review of spending programs followed by restructuring, reprioritization, and reallocation of resources should help accommodate growing spending needs for sustainable and inclusive growth.

- Meanwhile, the authorities should also work towards creating macroeconomic conditions for favorable debt dynamics, especially in terms of interest rate and growth

[26] See Ebeke (2017), Nguyen and Tran (2023) and World Bank (2023).
[27] See Eyraud et al. (2018).

rate differentials, and exchange rates. Reallocating restructured resources to growth-promoting programs will contribute to mitigating the short-term effects of fiscal contraction by boosting the growth rate. While monetary policy maintains a stable real interest rate, debt management should focus on keeping financing and refinancing costs adequate and balanced with risks. Economies eligible for concessional loans should continue to leverage these loans, taking advantage of their favorable terms and conditions. For economies with a high share of FCY debt, managing the debt profile to reduce foreign exchange risk and maintaining a stable exchange rate, are particularly important for an effective implementation of fiscal consolidation plan.

23. **Strengthening public debt management framework should accompany fiscal consolidation efforts.** Especially in the economies with vulnerable debt profiles and structurally complicated debt issues, including intergovernmental fiscal relationships, fiscal authorities' fiscal consolidation efforts alone may not ensure fiscal sustainability and the authorities may face difficulties and risks in meeting financing needs and servicing the debt obligation even with a lower fiscal deficit and debt-to-GDP ratio. The authorities in these economies should strengthen the framework and capacity of public debt management. Improving the institutional arrangements, such as the legal framework clearly defining the authority to borrow and manage government and government-guaranteed debt, and enhancing the transparency standards, will help prevent unauthorized borrowing, arrears, and uncontrollable increase in debt. Risks associated with debt profiles, such as rollover, exchange rate, and liquidity risks, should be closely monitored and evaluated, with the debt portfolio restructured if necessary.[28]

Box D. Fiscal Rules at a Glance in ASEAN+3 Economies[29]

Fiscal rules are designed to constrain policymakers' actions and promote good policies, but there is no one-size-fits-all design. Fiscal rules usually take the form of numerical constraints (floors or ceilings) on fiscal variables and are generally viewed as a useful tool to avoid deviations from good policies and correct deficit bias, as well as commit policymakers to long-term fiscal sustainability. In particular, an effective fiscal rule can help build up fiscal space by containing excessive deficits and preserving fiscal discipline, which will support the government's capacity to implement economic stabilization, growth friendly and inclusive policies. There is no one-size-fits-all model, but existing literature report that well-designed fiscal rules, often underpinned by implementable operational rules, should carefully consider trade-offs between flexibility, simplicity and enforceability, which are difficult to achieve simultaneously (Debrun and Jonung, 2019; Eyraud et al., 2018).

A growing number of economies in ASEAN+3 are adopting fiscal rules. Fiscal rules across ASEAN+3 economies vary considerably in terms of their existence, legal foundations, design, monitoring and enforcement mechanisms. To date, there are three economies (Brunei, China and Myanmar) do not have explicit numerical fiscal rules. It is worth noting that the Korean government proposed additional fiscal rules in 2022, comprising budget balance rule and implicit debt rule, but the framework will only take effect from 2025 after a transition of three years. Meanwhile, Malaysia is the latest to have instituted fiscal rules in 2023 by consolidating its previously fragmented and ad-hoc fiscal rules into a unified legislation.

[28] In Lao PDR, arrears related to local governments' public infrastructure projects raised the government debt-to-GDP ratio substantially, while the details of recent negotiations with creditors on debt rescheduling have not been disclosed to the public. See the discussion in the Annual Consultation Report on Lao PDR 2023. In China, the local government financing vehicles (LGFVs), set up by local governments to fund infrastructure investment due to the restrictions to borrow prior to 2014, is estimated to have an off-budget debt size of 48.1 percent of GDP as of end-2023, according to staff estimates based on Wind database.
[29] Prepared by Dek Joe Sum and Abigail.

Table D.1. Types and Legal Foundation of Fiscal Rules in Selected ASEAN+3

	Types and legal foundation of fiscal rules, 2024			
	Budget balance (deficit/surplus)	*Debt*	*Expenditure*	*Revenue*
Cambodia		P		
Hong Kong	C			
Indonesia	L	L	C	
Japan	L			
Korea	(L)	(L)	L	
Malaysia	L	L	L	
Philippines	P	P		
Singapore	C		C	
Thailand		L	L	
Vietnam	P	P	P	P
ASEAN+3 Total	7	6	6	1

Source: IMF Fiscal Rules Dataset, AMRO staff compilation
Note: 1) This table considers only rules that set numerical targets on aggregates which capture a large share of public finances and at a minimum cover the central government level. Fiscal rules for subnational governments are not included here. The table focuses on de jure arrangements and not to what degree those arrangements have been followed in practice; 2) C: Constitution, L: Primary legislation/secondary legislation, P: Medium-term (fiscal) plan/political commitment; 3) For Korea, the legislation for budget balance and debt is pending at the National Assembly.

For economies with fiscal rules, the legal basis on which these rules are defined is diverse and can take various forms. Table D.1 shows that the most common legal foundation for fiscal rules is the enactment of legislation, which applies to Indonesia, Japan and Malaysia. Hong Kong and Singapore have their fiscal rules enshrined in the constitution, providing a much stronger legal status than ordinary legislation and would more firmly bind the government against financial mismanagement. Fiscal rules can also be based on political commitment or an official medium-term plan, such as those in the Philippines and Vietnam. Although the legal basis is a good proxy for the level of enforcement, legally binding fiscal rules without actual (or political) commitment could lead to more problems in public financial management (PFM), such as creative accounting.

As in other regions, debt rule is the most common fiscal rule in ASEAN+3. Table D.1 shows that six economies have adopted debt rule, four of which (Indonesia, Malaysia, Thailand, and Vietnam) are anchored in legislations while the remaining take the form of a medium-term plan or political commitment. The design of debt rule is relatively simple and usually in the form of an explicit ceiling on debt to GDP ratio. Sometimes, multiple numerical restrictions are employed on different debt or related statistics. All except Indonesia and the Philippines impose an additional ceiling on publicly guaranteed debt. Cambodia, Thailand and Vietnam go one step further to implement limits on debt services and sources of debt. While debt rule is most direct in curbing excessive debt accumulation through an explicit limit, it does not provide clear operational guidance to short- and medium-term fiscal management in line with the debt limit. In addition, the debt ratio can be affected by developments outside the direct control of fiscal authorities, such as changes in the interest rate, exchange rate, and economic performance.

Budget balance rule is another common fiscal rule, complementing debt rule by providing operational guidance. Budget balance rule constrains the fiscal balance that directly influences the debt ratio, by controlling the primary inflows into the debt stock. Contrary to debt ratio, the fiscal balance is largely under the immediate control of policymakers, so it can serve as an operational rule in line with debt rule. Budget balance rule can be applied to different fiscal balances – overall balance, structural balance, cyclically adjusted balance, balance "over the cycle" or current balance, where each criterion has varying degrees of simplicity and enforceability. Singapore stands out in the sense that its Constitution requires balancing the budget over a cycle - the government's term of office. None of the ASEAN+3 members have adopted rules on structural or cyclically adjusted balances, which are known as the second-generation fiscal rules. Being more robust to economic fluctuations, rules based on structural or cyclically adjusted balances have gained traction in other regions, particularly among EU member economies.[30]

[30] A second generation of fiscal rules has emerged in the aftermath of the GFC, reflecting efforts to enhance flexibility and enforceability, but at the expense of simplicity. See Eyraud et.al (2018) for more discussion.

Expenditure rules which typically place numerical restrictions on the level or growth rate of spending are not common, and revenue rules are least common in the region. While most expenditure rules are introduced to complement other rules targeting fiscal sustainability, restrictions on certain spendings are used in this region to secure sufficient expenditure allocations for specific policy priorities. Malaysia, Thailand and Vietnam set a spending floor on public investment to prevent undesirable cuts when public revenue underperforms, as public investment can be an easy target for spending cuts.[31] Indonesian sets a minimum share of government spending on education, and Korea specified the shares of internal revenue earmarked for local governments and education. In Singapore, the Constitution requires the government to not spend more than half of the expected long-term real returns from the net assets invested by its investment entities. Revenue rules are the least common, and revenue floors and ceilings of revenue rules cannot generally account for the operation of automatic stabilization during a downturn or an upturn. Vietnam is the only economy in ASEAN+3 that adopted a revenue rule with a floor on the state budget revenue of 16 percent of GDP, of which revenues from taxes, fees and charges must be at least 14 percent of GDP.

Well-designed numerical constraints and supportive PFM systems are essential for a successful implementation of fiscal rules. Good fiscal rules should have various desirable features in the design that often conflict with one another (Eyraud et al., 2018). However, trade-offs could be mitigated by introducing additional elements in fiscal rule design and through supportive fiscal institutions. For example, escape clauses could provide critical improvement in the fiscal rule's flexibility and resilience, without overly compromising the simplicity of rule implementation. Additionally, establishing a fiscal council could reduce complexity in implementing fiscal rules with escape clauses. Similarly, institutionalizing an automatic correction mechanism could improve the enforcement of fiscal rules, which should be supported by a sound PFM system, enabling credible decision-making based on reliable data and reporting system.

The flexibility provision is more widely adopted than the enforcement and monitoring provisions. Table D.2 shows that among those economies with fiscal rules, Hong Kong, Indonesia and Japan do not have explicit escape clauses for fiscal rules. The importance of escape clauses was epitomized during the pandemic, when governments suspended fiscal rules to allow for large-scale economic stimulus packages without being constrained by the fiscal rules. Indonesia and Malaysia, which did not have escape clauses then, resorted to declaring a national emergency to circumvent the compliance of fiscal rules anchored in legislation. Malaysia has since incorporated escape clauses in its newly passed Public Finance and Fiscal Responsibility Act 2023. Similar escape clause provisions can be found in Singapore, Thailand, and Vietnam's fiscal rules. On the other hand, the monitoring and enforcement mechanisms are less common in the region. Currently, Korea is the only one with a fiscal council, known as the National Assembly Budget Office (NABO), serving as a statutory independent body to keep the government in check and monitor national finances.

Table D.2. Mechanisms for Flexibility and Enforcement of Fiscal Rules in Selected ASEAN+3

	Escape Clauses	*Fiscal Council*	*Automatic correction mechanism*
Korea	(✓)	✓	(✓)
Malaysia	✓		✓
Singapore	✓		
Thailand	✓		✓
Vietnam	✓		

Source: IMF Fiscal Rule Dataset, AMRO staff compilation
Note: 1) ✓ At least one fiscal rule meets the criteria; 2) For Korea, the legislation is pending at the National Assembly.

Malaysia and Thailand are the only two economies with an automatic correction process for ex-post fiscal adjustments in the event of a breach of numerical rules. In Malaysia, the Minister of Finance has to table a fiscal adjustment plan to the Parliament, comprising remedial measures and expected period of time to revert to fiscal objectives and quantified values. Thailand resorts to different ways to manage the deviations, depending on which rule is breached. For expenditure rule noncompliance, remedial measures must be reported to the National Assembly at the introduction of the appropriations bill. For debt noncompliance, the Minister of Finance is required to report to the Cabinet the methods as well as the timeline for returning to the prescribed limit.

[31] On the contrary, although not constituted as a fiscal rule, the Ministry of Planning and Investment of Lao PDR sets a ceiling on the capital expenditure of ministries and local governments to avoid accumulation of future arrears.

Transitioning from crisis mode responses to fundamental roles

24. **The member authorities should phase out crisis mode fiscal measures**. Extensive and repeated use of ad-hoc fiscal support measures should be phased out in tandem with strengthening economic recovery. Energy subsidies and income support aimed at mitigating the impact of high inflation triggered by the Ukraine crisis should also be withdrawn as global commodity prices stabilize and inflationary pressure subsides. Given the high uncertainties that may affect the prospects of economic recovery and inflation, this fiscal normalization process should be managed flexibly within the framework of the medium-term consolidation plan, allowing for more agile fiscal policy adjustments in terms of pace and modality if necessary.

25. **At the same time, fiscal policy should return to its fundamental role in promoting economic stability, growth potential, and income redistribution.** This transition requires a resolute policy decision supported by a well-planned strategic reallocation of resources, including those secured through the restructuring of crisis-response measures. Fiscal policy should focus on supporting economic transformation to regain growth momentum and enhance economic resilience reflecting country-specific economic structures and development strategies. Resuming or scaling up infrastructure investment, especially in countries with weak infrastructure, can make a significant contribution to national development (Box E). Additionally, more sophisticated fiscal programs could be designed to support job training and matching, and to encourage technological innovation, including digitalization. Strengthening the social protection system can improve income distribution and reduce the need for ad-hoc emergency support, bolstering the role of fiscal policy in stabilizing the economy through automatic stabilizers and improving growth potential with a healthier and more productive labor force.

26. **Refocusing on the fundamental role of fiscal policy will, in turn, reduce the size of fiscal consolidation needs and enhance fiscal sustainability**. Enhancing growth potential will contribute to favorable debt dynamics and augment the overall debt-carrying capacity. It will also help fortify economic resilience, which can reduce the size of the required fiscal buffer that the fiscal consolidation should restore, by reducing the likelihood and/or magnitude of the impact of economic shocks on the economy. In addition, policy efforts to strengthen automatic stabilizers and improve policy effectiveness will contribute to fiscal consolidation by reducing the required policy buffer size, so as to enhance overall fiscal sustainability.

Box E. Policy Considerations for Effective and Efficient Infrastructure Investment [32]

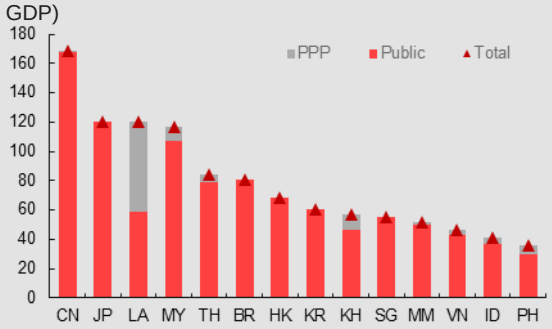
Infrastructure is important for promoting economic growth and reducing poverty. In the near-term, infrastructure investments can stimulate aggregate demand and crowd in private investments, thereby contributing to robust economic growth. According to economic development theory, the accumulated infrastructure stock is vital for facilitating production and enhancing productivity growth. In particular, for emerging economies and low-income developing countries with a large infrastructure gap, infrastructure investments are critical to upgrading their growth potential for sustainable development and poverty reduction (ADB, 2017).

[32] Prepared by Byunghoon Nam.

Overview of Infrastructure in ASEAN+3 Economies

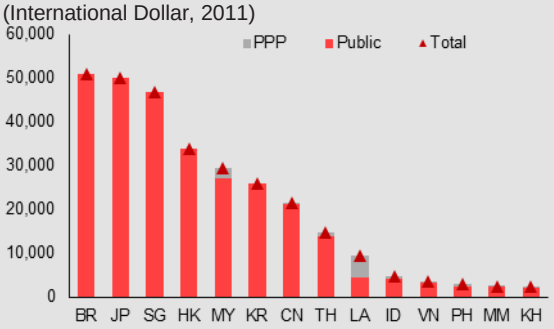
There are significant disparities in infrastructure stock among ASEAN+3 member economies. As of 2019, CLMV countries, along with Indonesia and the Philippines, exhibited considerably lower infrastructure stock per capita compared to other member economies (Figures E.1 and E.2), implying a substantial infrastructure gap in these countries.[33] [34] However, capital expenditure in these countries has been relatively higher than in other member economies over the past decade, which continued during and after the pandemic (Figure E.3). Moreover, public-private partnership (PPP) in infrastructure investments has been active in China, Indonesia, Malaysia, the Philippines, Thailand, Vietnam, and Lao PDR, although it shrank in some countries during the pandemic (Figure E.4).

Figure E.1. ASEAN+3: Infrastructure Stock (percent of GDP)



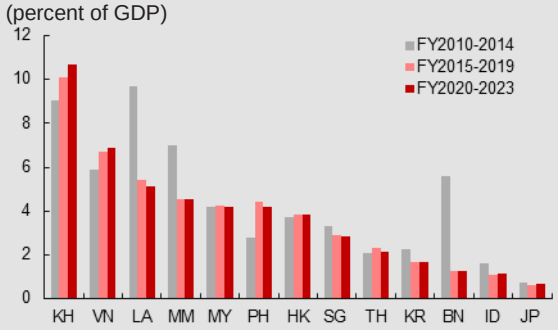
Source: IMF Investment and Capital Stock Database (ICSD); AMRO staff estimates
Note: Figure shows the infrastructure stock as of 2019.

Figure E.2. ASEAN+3: Infrastructure Stock Per Capita (International Dollar, 2011)



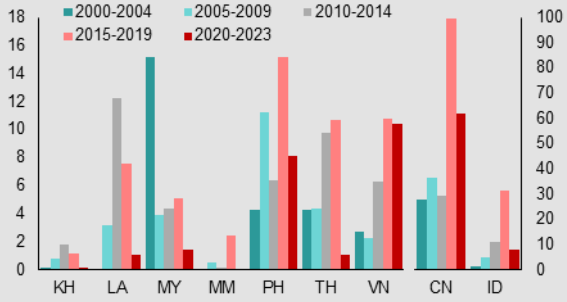
Source: IMF Investment and Capital Stock Database (ICSD); AMRO staff estimates
Note: Figure shows the infrastructure stock per capita as of 2019

Figure E.3. Selected ASEAN+3: Capital Expenditure (percent of GDP)



Source: National authorities via Haver Analytics and CEIC; IMF Government Finance Statistics (GFS) database
Note: 1) Figure shows the average capital expenditure as a percentage of GDP in each period; 2) For Japan, net acquisition of nonfinancial assets of general government from the IMF GFS is used; 3) Data is not available for China.

Figure E.4. Selected ASEAN+3: PPP Investment Commitment (USD billion)



Source: World Bank Private Participation in Infrastructure (PPI) database
Note: 1) Figure shows the sum of PPP investment commitments at contract signature or financial closure in each period; 2) 2023 investment commitments are up to H1.

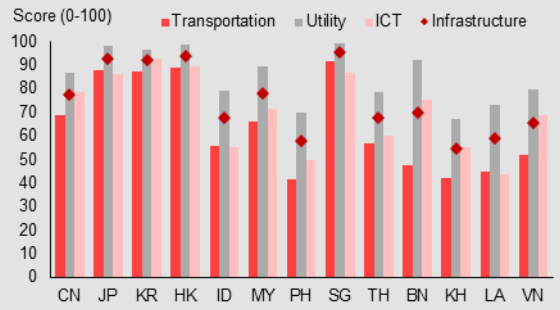
Both infrastructure investment and its efficiency are important for infrastructure quality. The infrastructure quality, assessed by the Global Competitiveness Index of the World Economic Forum, broadly aligns with the level of infrastructure stock. As of 2019, significant gaps were observed in infrastructure quality related to transportation (such as roads, railways, airports, and shipping ports) and ICT infrastructure (including mobile phone and internet access), while the disparities in utility

[33] Since the infrastructure investment and cumulated infrastructure stock data are not readily available for most countries, the public and public-private-partnership (PPP) investment and capital stock data are used as proxies. The public capital investments are measured by the gross fixed capital formation (GFCF) of the general government. The public-private partnership (PPP) investments in emerging economies and low-income developing countries are based on the World Bank Private Participation in Infrastructure (PPI) database. Since the WB PPI database provides the total value of PPP investment commitments at contract signature or financial closure, annual PPP investments are estimated by spreading the value of PPP project commitments over five years. See Nam (2023) for the methodology.

[34] Different economic structures and fiscal policy environments may strongly influence the level of public and PPP infrastructure in relation to GDP. For example, the growth in Lao PDR has been driven by many large-scale hydropower projects. In Korea and Indonesia, SOEs have actively participated in providing the infrastructure. The participation of the private sector has also been increasing in the advanced countries.

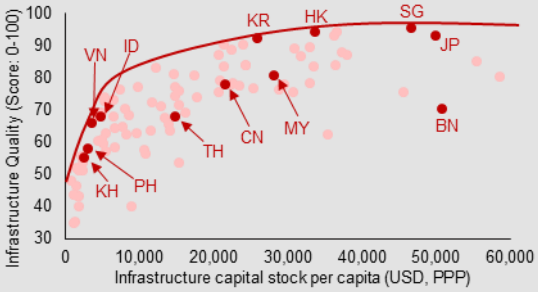
infrastructure (such as electricity and water access) were relatively smaller (Figure E.5). Notably, the infrastructure quality depends not only on the amount of infrastructure investment, but also on its efficiency. Plotting infrastructure quality against infrastructure capital stock per capita demonstrates the efficiency gaps of infrastructure investment (Figure E.6). The efficiency gap can be conceptualized by the vertical distance from the quality frontiers at each level of infrastructure capital per capita. For example, there are relatively large efficiency gaps in countries like Brunei, Malaysia, China, and Thailand, suggesting much room to improve the efficiency of infrastructure investment.[35]

Figure E.5. Selected ASEAN+3: Infrastructure Quality
(Score: 0 - 100)



Source: World Economic Forum (WEF) Global Competitiveness Index (GCI) 2019

Figure E.6. Infrastructure Stock Per Capita and Infrastructure Quality
(International Dollar, 2011; Score, 0 - 100)



Source: IMF ICSD; WEF GCI 2019; AMRO staff estimates
Note: The figure shows the infrastructure quality and infrastructure stock per capita for 96 countries, comprising advanced economies, emerging market economies, and low-income developing countries across all continents.

Various factors influence the efficiency and quality of infrastructure investment. The Global Infrastructure Hub provides a framework to assess the infrastructure quality through eight drivers: governance, regulatory framework, permits, planning, procurement, activity, financial market, and funding capacity. 41 individual metrics for eight drivers are selected regarding their linkages to efficient and effective infrastructure development (Table E.1).[36] By comparing the strength of each driver with the average of countries in the same or higher income groups, areas of weakness where authorities should focus their efforts can be identified (Figure E.7). For example, the Philippines shows strength in planning and regulatory frameworks but weakness in permits, attributed to issues such as low-quality land administration, lengthy property registration processes, and high costs and delays in starting a business. Meanwhile, Myanmar faces weaknesses in planning, stemming from a lack of published infrastructure plans/projects and insufficient economic analysis of projects.

Table E.1. Drivers of Infrastructure Quality

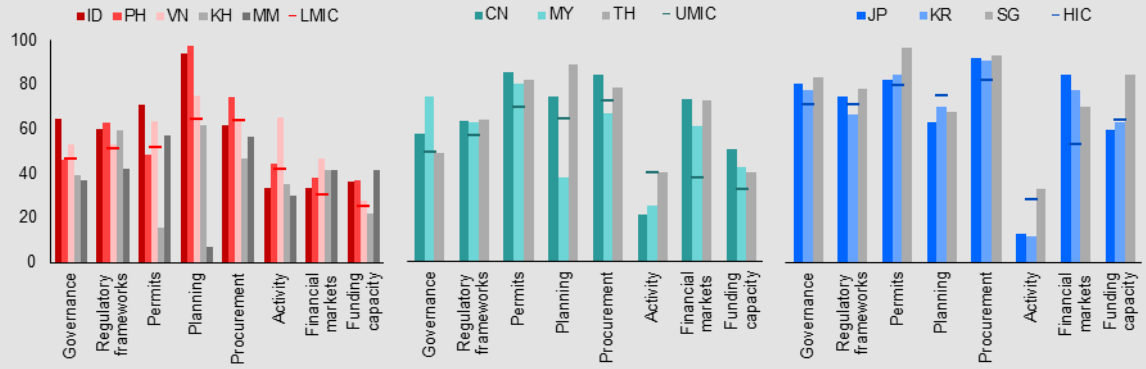
	Definition	Metric
Governance	Governance, institutions (including rule of law, corruption prevention), and legal environment required to support infrastructure investment	Recovery rate, Rule of law, Post-completion reviews, Shareholder governance, Political stability and absence of violence score, Infrastructure or PPP agency
Regulatory Framework	The extent to which regulation, openness to investment, and competition frameworks support infrastructure delivery	Regulatory quality, Strength of insolvency framework, Prevalence of foreign ownership, Product market regulatory score and network sectors, Effect of taxation on incentives to invest, Investment promotion agency
Permits	The efficiency of planning and licencing procedures for the issuance of permits and acquisitions of land required for development	Cost to start a business, Quality of land administration, Time required to start a business, Registering property, Dealing with construction permits

[35] See IMF (2015) for the methodology to estimate public investment efficiency. It should be noted that the infrastructure quality in this box is proxied by the scores based on the World Economic Forum' survey, thus may be subject to individual perception biases. However, similar results could be drawn for different infrastructure quality indicators according to IMF (2015).
[36] See Deloitte (2020) for the detailed methodology.

Planning	A government's ability to plan, coordinate, and select infrastructure projects	Preparation of PPPs, Published infrastructure plan, Published project pipeline, Economic analysis assessment, Market sounding and/or assessment, Environmental impact analysis
Procurement	The extent to which procurement processes and bid management frameworks are standardized, transparent, and non-onerous to bidders	Published infrastructure procurement guidelines, Transparency in public procurement, Procurement of PPPs, PPP contract management, Average procurement duration
Activity	The extent and nature of recent infrastructure investment activity and extent of private sector involvement over the last five years, relative to the size of the economy	Infrastructure investment, Value of closed PPP infrastructure deals, Private infrastructure investment, Value of close infrastructure deals with foreign equity sponsorship
Financial Market	Strength and capability of local financial markets	Financial depth, Domestic credit to private sector, Stocks traded, Financing through local equity market, Financial stability
Funding capacity	Stability and sustainability of the government's fiscal management	Summary credit rating, GDP per capita, Long term GDP growth trend, Gross government debt

Source: Global Infrastructure Hub

Figure E.7. Selected ASEAN+3: Strength of Infrastructure Drivers (Score: 0 – 100)



Source: Global Infrastructure Hub
Note: LMIC, UMIC, and HIC denote the average scores of lower-middle income countries, upper-middle income countries, and high income countries, respectively.

Policy Considerations

Strategic prioritization of infrastructure projects is crucial to maximize outcomes given limited resources. Investment priorities should be well aligned with the national development strategy and plan, with special focus on the identified weak infrastructure to ensure coherence and effectiveness. Complementing with other development initiatives, such as special economic zones and industry clusters, can foster synergies and amplifies impact. Tailoring infrastructure investments to suit the diverse industrial landscapes and infrastructure needs across different provinces will help enhance effectiveness. Furthermore, strategic investments in projects with high potential for promoting economic growth, generating spillover effects, and creating network impacts can significantly contribute to national development goals.

To better utilize available funding sources for infrastructure development, a good role-sharing framework between the public and private sectors is needed. The characteristics of specific projects and services are the main criteria to determine whether they are to be financed by the government investment or PPP.[37] For example, the PPPs are well-suited for large-scale transportation

[37] The rationale behind the provision of infrastructure by the government is based on the concept of public goods (nonrivalry, non-excludability) and market failures (externality, natural monopoly). Private participation in infrastructure development has been growing as the externality and monopolistic power of infrastructure or public services are properly addressed by institutions (e.g., tolling and charging fees), technological competition (e.g., mobile, renewable energy), and regulatory frameworks.

projects where upfront costs can be recouped through user tolls/fees or government payments over the life of the contract. In general, well-designed PPP contracts offer advantages over direct public investment in leveraging private financial resources and expertise, promoting efficiency, and enhancing service quality. However, certain infrastructure projects, such as basic transportation networks like farm-to-market roads, may be more appropriately funded and managed by the government through tax revenue or official development assistance (ODA) which is a significant financing source for low income developing countries (LIDCs). Similarly, while the private sector can handle specific services like mobile communication and renewable energy generation, overall telecommunication and electricity distribution systems should remain under government oversight to ensure universal access and fair pricing.

PPP projects should be well managed under a solid legal and policy framework to realize the intended benefits while mitigating the risk of creating contingent liabilities. First, the PPP projects should undergo rigorous feasibility studies adhering to the same standards applied to public investment projects. That is, PPPs should not be used to bypass budgetary scrutiny, and projects lacking in quality or priority should not be considered for PPP arrangements. Second, the government should balance risk-sharing between public and private parties to provide the right incentives while safeguarding against contingent liabilities of the government. For example, PPP contract designs that offer minimum income guarantees based on overly optimistic revenue projections may lead to unexpected fiscal burdens and should be avoided. Third, PPP projects should be subject to a well-established legal and policy framework that clearly articulates the appraisal, approval, monitoring, review, and resolution processes.

Enhancing investment efficiency is critical for public infrastructure spending to improve infrastructure quality while maintaining debt sustainability. Inefficiencies in the investment process, such as poor project selection, implementation, and monitoring, can result in only a fraction of public investment translating into productive infrastructure, thus limiting the long-term output gains. In addition, inefficient infrastructure investments may cause adverse impact on debt sustainability compared to efficient ones. While increasing public infrastructure spending may initially raise government debt, it has the potential to lower it over the medium to long term if it successfully stimulates aggregate demand through the fiscal multiplier effect and improves overall economic productivity. Additionally, increased infrastructure investment may attract private investment, given the complementary nature of infrastructures such as transportation, utilities, and ICT. This, in turn, can lead to higher economic growth, generating more fiscal revenue and contributing to debt reduction. Empirical studies find larger multipliers in advanced economies than in emerging and developing countries, mainly due to investment quality and institutional efficiency.[38] The simulation results in Nam (2023) show that, in economies with higher fiscal multipliers, an increase in infrastructure spending may temporarily elevate the debt-to-GDP ratio but ultimately lower the ratio over time with higher growth.

Factors limiting the infrastructure quality and efficiency should be addressed. Compared to upper-middle income countries, low-middle income countries generally have weakness in permits and procurement, primarily stemming from weak land registration and administration capacities, as well as lengthy and non-transparent procurement procedures. Further enhancing infrastructure development comparable to high income countries requires policy efforts to advance governance and regulatory frameworks while deepening financial market for better funding availability for infrastructure investments. Collaborating with international organizations can leverage their expertise and resources, helping countries identify and address key obstacles to improving the effectiveness and efficiency of infrastructure investment.[39]

[38] See IMF (2014) and ADB (2017) among others.
[39] For example, the IMF's Public Investment Management Assessment (PIMA), the World Bank's Diagnostic Framework for Assessing Public Investment Management (DF-PIM), and the OECD's effective public investment toolkit can support the countries in identifying the areas of weakness and formulating policy measures to address them.

Performing the proactive roles in addressing structural challenges

27. **Amid rapid population aging, member authorities should strengthen the policy efforts for productive demographic transition and to prepare for adequate and sustainable support system for the elderly**. The pension system needs to be designed to offer adequate income flows for the elderly, but if the financial sustainability of the pension system is in question, the authorities should undertake necessary reform measures preemptively to avoid sharper and more painful adjustments later on.[40] Similarly, introducing or expanding social protection and healthcare programs, which are difficult to reverse, should be carefully assessed for their medium- and long-term fiscal implications, and adequate financing sources need to be accounted for to maintain the support system without jeopardizing overall fiscal sustainability. At the same time, the delivery system should be strengthened to ensure the effectiveness and efficiency of intended policy measures. Meanwhile, age-inclusive labor policies to support elderly workers' labor market participation, such as extending the retirement age, more life-long learning systems, and leveraging technology for more age-friendly jobs, will help mitigate shocks of aging population to labor supply and growth potential.[41] In addition to policies for longer working lives of the healthy elderly, other complementary policies should be strengthened to support those unfit to work, such as financial policies providing tools to convert illiquid assets into liquid income flows (e.g., reverse mortgages), and social welfare policies to protect the most vulnerable who are in the highest need.

28. **Addressing climate change requires the leading role of fiscal policy**. Climate change adaptation requires public investments to minimize the impact of climate-related natural disasters, while climate change mitigation involves government policies to prevent or reduce the emission of greenhouse gases (GHG) in achieving Nationally Determined Contributions (NDC) commitments. Given that the low carbon transition requires substantial investments in carbon-neutral projects, fiscal policy could serve as a catalyst to build social consensus and garner participation from the private sector through direct investment and incentive provision, which should be properly planned and managed within the sound fiscal management framework.

[40] See AMRO Annual Consultation Report on Korea 2024: Annex 4 for the simulation results on the effects of the delayed pension reforms.
[41] See AMRO (2024a)

Appendix I. Key Fiscal Indicators

(Percent of GDP)

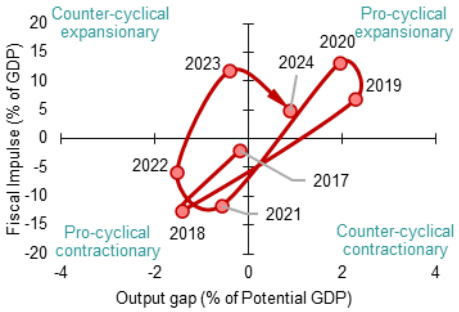
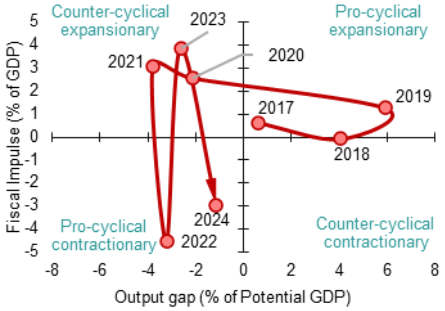
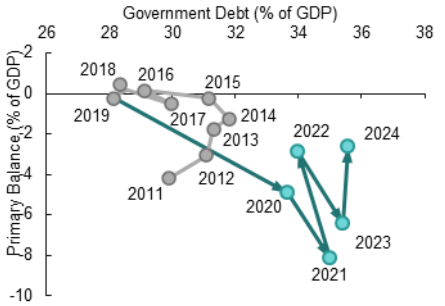
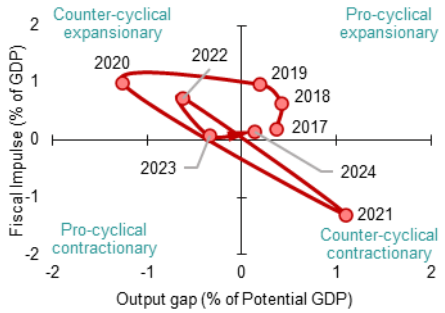
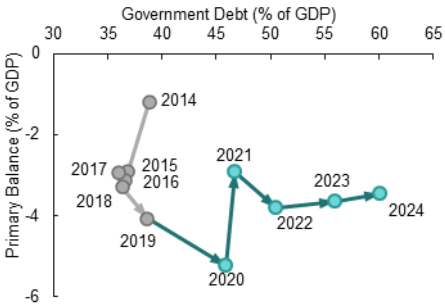
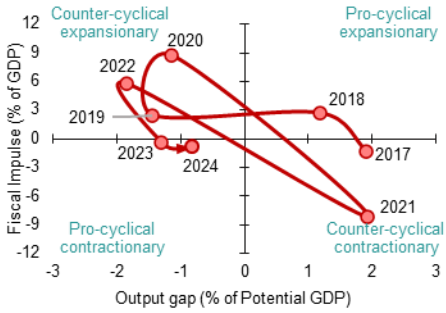
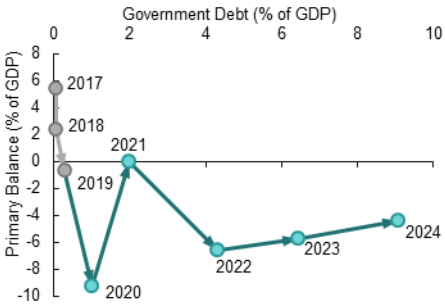
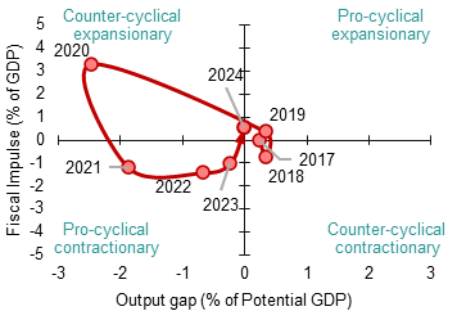
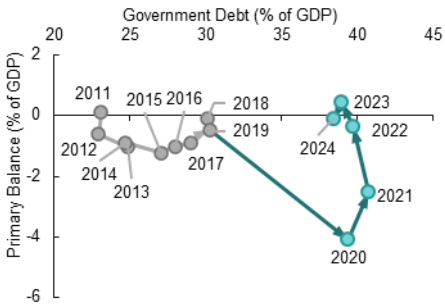
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Brunei Darussalam							
Revenue	32.7	26.4	12.6	24.3	27.4	19.7	15.6
Expenditure	32.5	31.9	32.6	29.4	26.1	29.5	29.9
Fiscal balance	0.2	-5.6	-20.0	-5.2	1.3	-9.8	-14.3
Government debt	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross financing needs	-0.2	5.6	20.0	5.2	-1.3	9.8	14.3
Cambodia							
Revenue	23.8	26.2	23.4	21.5	23.5	22.3	23.1
Expenditure	23.8	26.9	28.8	30.1	26.8	29.3	26.3
Fiscal balance	0.0	-0.6	-5.3	-8.6	-3.3	-6.9	-3.2
Government debt	28.4	28.1	33.7	35.0	34.0	35.4	35.6
Gross financing needs	0.7	1.5	6.4	9.6	4.5	8.3	4.6
China							
Revenue	19.9	19.3	18.0	17.6	16.9	17.2	16.4
Expenditure	24.0	24.2	24.2	21.4	21.6	21.8	20.9
Fiscal balance	-4.1	-4.9	-6.2	-3.8	-4.7	-4.6	-4.5
Government debt	36.4	38.6	45.9	46.8	50.6	56.0	60.1
Gross financing needs	6.5	7.4	9.2	7.7	10.7	11.4	11.4
Hong Kong, China							
Revenue	21.0	21.1	20.7	24.4	21.9	18.4	19.8
Expenditure	18.6	21.7	29.9	24.3	28.5	24.2	24.3
Fiscal balance	2.4	-0.6	-9.2	0.0	-6.6	-5.8	-4.5
Government debt	0.1	0.3	1.0	2.0	4.3	6.5	9.1
Gross financing needs	-2.4	0.6	9.2	0.0	6.6	5.8	4.5
Indonesia							
Revenue	13.1	12.4	10.7	11.8	13.5	13.3	12.3
Expenditure	14.9	14.6	16.8	16.4	15.8	14.9	14.6
Fiscal balance	-1.8	-2.2	-6.1	-4.6	-2.4	-1.7	-2.3
Government debt	30.1	30.2	39.4	40.7	39.7	39.0	38.4
Gross financing needs	5.6	6.0	9.8	8.7	5.5	5.1	6.1
Japan							
Revenue	12.8	13.0	14.1	20.2	18.2	14.7	14.0
Expenditure	15.1	15.6	24.7	23.0	20.6	20.0	18.2
Fiscal balance	-2.3	-2.5	-10.6	-2.8	-2.4	-5.4	-4.2
Government debt	198.2	200.2	225.7	224.2	224.3	221.4	219.3
Gross financing needs	25.7	26.2	35.4	36.2	34.4	35.6	33.0
Korea							
Revenue	23.1	23.1	23.0	25.8	27.2	24.3	24.8
Expenditure	21.4	23.7	26.7	27.3	30.2	25.8	26.7
Fiscal balance	1.6	-0.6	-3.7	-1.5	-3.0	-1.5	-1.9
Government debt	35.8	37.6	43.6	46.7	49.4	50.4	51.4
Gross financing needs	3.1	4.7	8.1	6.5	8.0	7.8	7.6
Lao PDR							
Revenue	15.7	15.6	12.7	14.7	14.8	15.2	16.3
Expenditure	20.3	18.8	17.9	16.0	15.0	15.1	19.2
Fiscal balance	-4.6	-3.2	-5.2	-1.3	-0.2	0.1	-2.9
Government debt	56.8	59.1	62.4	76.9	99.0	98.6	90.2
Gross financing needs	9.6	8.7	11.2	8.1	8.2	12.7	12.9

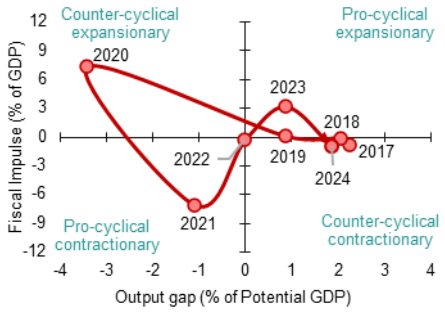
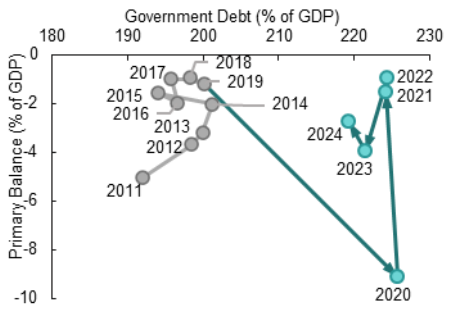
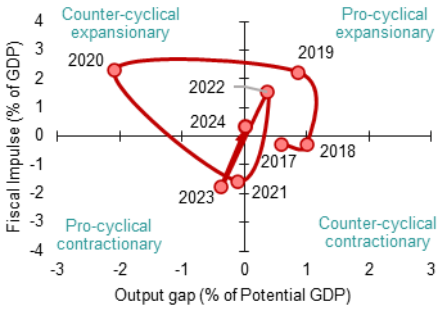
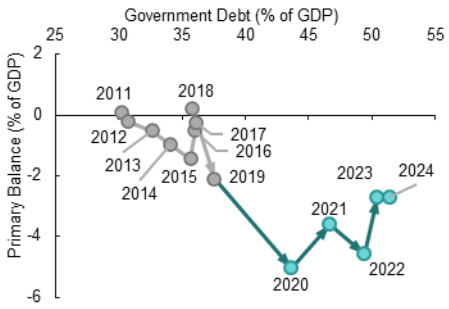
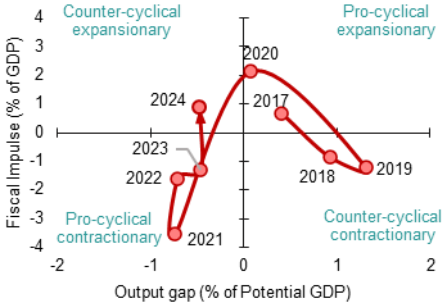
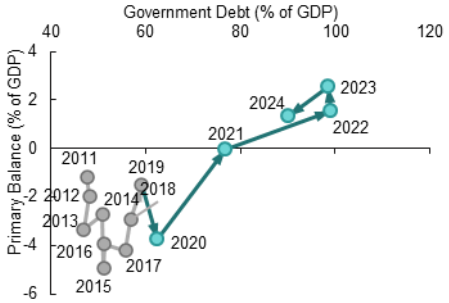
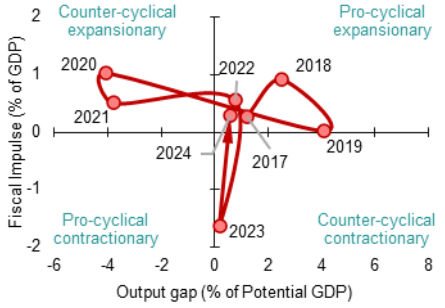
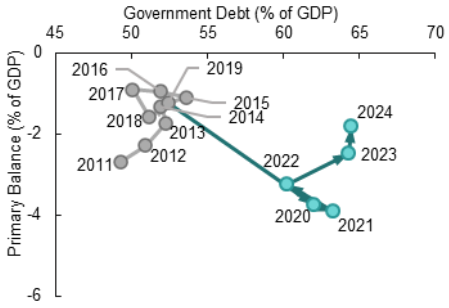
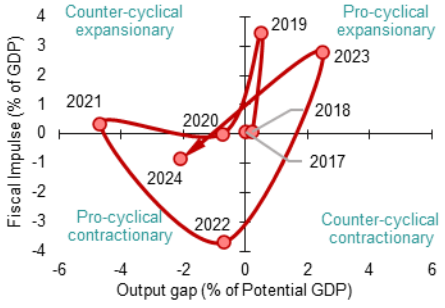
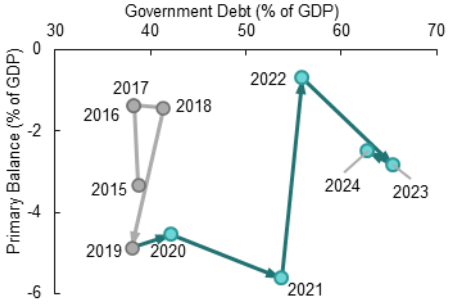
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Malaysia							
Revenue	16.1	17.5	15.9	15.1	16.4	17.3	15.8
Expenditure	19.8	20.9	22.0	21.5	22.0	22.3	20.2
Fiscal balance	-3.7	-3.4	-6.2	-6.4	-5.6	-5.0	-4.4
Government debt	51.2	52.4	62.0	63.3	60.3	64.3	64.5
Gross financing needs	8.1	8.0	11.6	11.6	9.8	9.4	8.6
Myanmar							
Revenue	18.6	18.7	20.5	14.7	19.6	18.1	18.6
Expenditure	21.6	24.9	26.8	22.7	22.4	22.9	23.2
Fiscal balance	-2.9	-6.5	-6.2	-7.6	-3.0	-4.8	-4.6
Government debt	37.7	38.7	42.2	53.8	55.9	65.4	62.8
Gross financing needs	3.7	7.4	8.0	9.0	4.3	6.2	5.5
Philippines							
Revenue	15.6	16.1	15.9	15.5	16.1	15.7	16.0
Expenditure	18.7	19.5	23.5	24.1	23.4	22.0	21.3
Fiscal balance	-3.1	-3.4	-7.6	-8.6	-7.3	-6.2	-5.3
Government debt	39.9	39.6	54.6	60.4	60.9	60.2	59.2
Gross financing needs	5.1	5.9	10.9	12.6	10.7	10.1	10.0
Singapore							
Revenue	17.6	17.8	17.4	16.8	16.6	18.2	17.1
Expenditure	16.9	17.6	27.9	16.6	16.6	19.2	17.5
Fiscal balance	0.7	0.2	-10.5	0.2	-0.1	-1.0	-0.4
Government debt	109.4	127.8	148.1	142.9	158.1	164.7	152.4
Gross financing needs	3.9	10.0	35.0	21.1	21.7	23.1	28.2
Thailand							
Revenue	15.7	15.3	15.0	14.8	14.8	15.0	15.1
Expenditure	17.9	17.8	21.1	23.9	20.4	18.2	16.7
Fiscal balance	-2.2	-2.5	-6.0	-9.0	-5.6	-3.2	-1.6
Government debt	33.7	33.7	42.4	51.3	53.5	54.9	55.3
Gross financing needs	5.5	6.1	13.2	15.6	12.2	11.5	10.7
Vietnam							
Revenue	20.4	20.2	18.7	18.8	19.1	15.9	15.2
Expenditure	20.5	19.8	21.3	20.1	19.3	19.9	18.9
Fiscal balance	-0.1	0.3	-2.5	-1.4	-0.2	-4.1	-3.7
Government debt	40.2	38.2	39.6	39.3	34.7	37.0	35.2
Gross financing needs	2.2	2.2	5.7	4.5	2.5	6.6	6.3

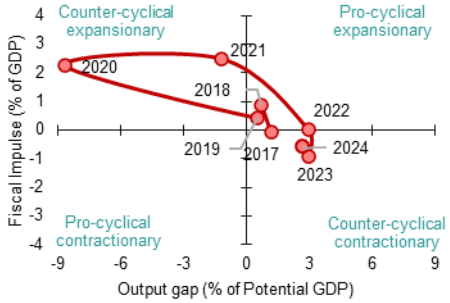
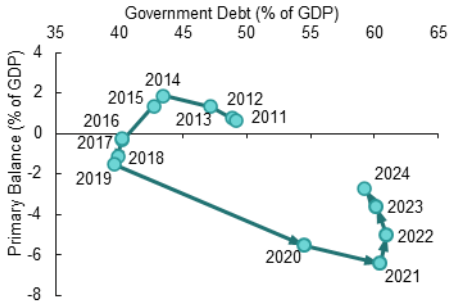
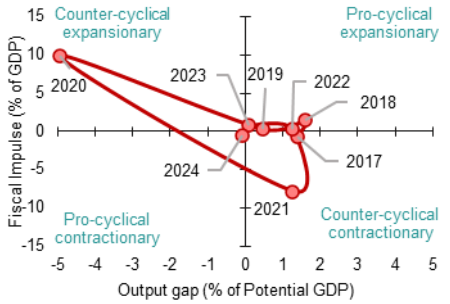
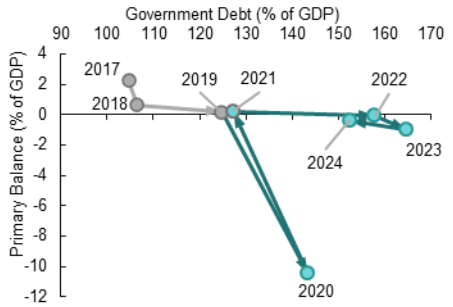
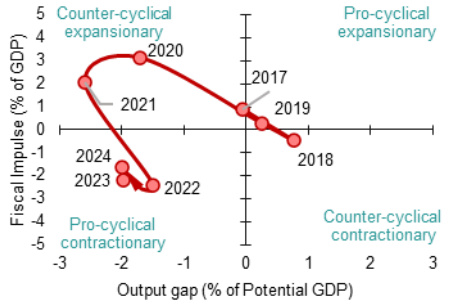
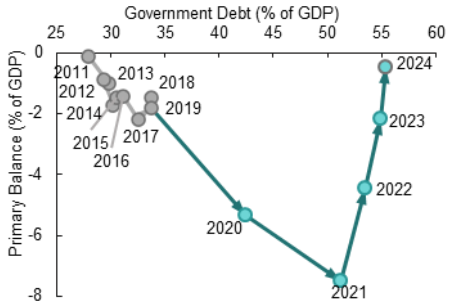
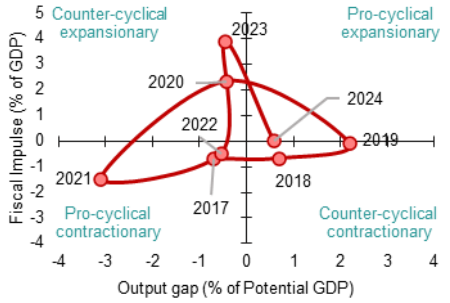
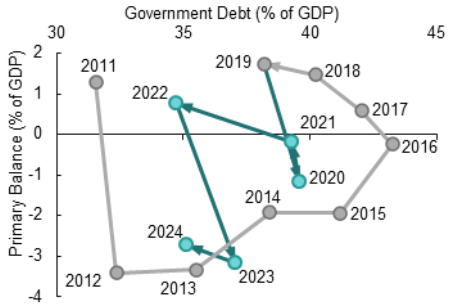
Source: National authorities via CEIC and Haver Analytics; AMRO staff estimate

Note: 1) Fiscal indicators for FY2023 are based on AMRO staff estimates, except for Thailand; 2) Revenue, expenditure, and fiscal balance for FY2024 are based on the authorities' budgets, scaled by nominal GDP projected by AMRO staff. Government debt and gross financing needs for FY2024 are AMRO staff projections; 3) Fiscal indicators closely follow the authorities' published data except for the followings: a) Japan: Revenue excludes proceeds from public bonds. Expenditure excludes principal payments; b) Lao PDR: Gross financing needs include debt services under negotiation; c) Myanmar: Revenue excludes borrowing and expenditure excludes principal repayments; c) Philippines: Gross financing needs include the redemption by the bond sinking fund; d) Singapore: Fiscal balance is based on the overall budget surplus/deficit, excluding capitalization and depreciation of nationally significant infrastructure from the overall fiscal position. Gross financing needs include the redemption of publicly held Singapore government securities and Treasury bills; e) Thailand: Expenditure includes off-budget emergency loans; 4) For fiscal year and coverage, please see Appendix III.

Appendix II. Fiscal Stance and Fiscal Position

	Fiscal Impulse and Output Gap (Percent of GDP; Percent of potential GDP)	Government Debt and Primary Balance (Percent of GDP)
Brunei Darussalam		N/A
Cambodia		
China		
Hong Kong, China		
Indonesia		

	Fiscal Impulse and Output Gap (Percent of GDP; Percent of potential GDP)	Government Debt and Primary Balance (Percent of GDP)
Japan		
Korea		
Lao PDR		
Malaysia		
Myanmar		

	Fiscal Impulse and Output Gap (Percent of GDP; Percent of potential GDP)	Government Debt and Primary Balance (Percent of GDP)
Philippines		
Singapore		
Thailand		
Vietnam		

Source: National authorities via CEIC and Haver Analytics; AMRO staff estimate

Note: 1) Fiscal impulse is based on the change in the structural primary balance in a percentage of GDP, estimated by AMRO. A negative fiscal impulse implies a contractionary fiscal stance; 2) Output gap is computed based on the potential GDP estimated by the one-sided Hodrick-Prescott filter; 3) Government debt for Brunei is not shown as it has virtually zero government debt; 4) Indicators for FY2023 are based on AMRO staff estimates except for Thailand; 5) Fiscal impulse and primary balance for FY2024 is based on the authorities' budgets, scaled by nominal GDP projected by AMRO staff. Government debt for FY2024 is AMRO staff projections; 6) The fiscal impulse of Brunei is for the consistency and completeness in presentation. Its fiscal stance assessment in AMRO's analysis relies more on the change in primary expenditure, as its revenue is heavily dependent on oil and gas prices, and the fiscal impulse, adjusting only the business cycle, is likely to mislead the fiscal stance assessment. 7) For fiscal year and coverage, please see appendix III.

Appendix III. Fiscal Year, Coverage, Classification

	Fiscal Year	Coverage	
		Budget	Government Debt
Brunei Darussalam	April-March	Central government	Central government
Cambodia	January-December	Central government + Local government	Central government + Local government
China	January-December	Central government + Local government	Central government + Local government
Hong Kong, China	April-March	Central government	Central government
Indonesia	January-December	Central government	Central government
Japan	April-March	Central government	Central government
Korea	January-December	Central government + Social security funds	Central government + Local government
Lao PDR	January-December	Central government	Central government
Malaysia	January-December	Central government	Central government
Myanmar	(~FY2017) April-March (FY2018-2021) October-September (FY2022~) April-March	Central government	Central government
Philippines	January-December	Central government	Central government
Singapore	April-March	Central government	Central government
Thailand	October-September	Central government	Central government
Vietnam	January-December	Central government + Local government	Central government + Local government

Source: National authorities; AMRO staff compilation

Appendix IV. Decomposition Methodologies

Change in fiscal balance in FY t compared to fiscal balance in FY t-1 (Figure 3)

$$fb_t - fb_{t-1} = \underbrace{\Delta r_t}_{\substack{\text{contribution of}\\ \text{revenue change}}} \underbrace{-\Delta e_t}_{\substack{\text{contribution of}\\ \text{expenditure change}}} \underbrace{-\frac{fb_{t-1}}{(1+g_t)(1+\pi_t)}g_t}_{\substack{\text{contribution of}\\ \text{real GDP growth}}} \underbrace{-\frac{(1+g_t)fb_{t-1}}{(1+g_t)(1+\pi_t)}\pi_t}_{\substack{\text{contribution of}\\ \text{GDP deflator inflation}}}$$

where $\Delta r_t = \frac{R_t - R_{t-1}}{P_t Y_t}$, $\Delta e_t = \frac{E_t - E_{t-1}}{P_t Y_t}$, and fb=fiscal balance as a percentage of GDP, R=revenue, E=expenditure, P=GDP deflator, Y=real GDP, g=real GDP growth, π=GDP deflator inflation.

Difference between actual fiscal balance and budgeted fiscal balance (Figure 4)

$$fb_t^a - fb_t^b = \underbrace{\Delta r_t^{ab}}_{\substack{\text{contribution of}\\ \text{revenue difference}}} \underbrace{-\Delta e_t^{ab}}_{\substack{\text{contribution of}\\ \text{expenditure difference}}}$$

$$\underbrace{-\frac{fb_t^b}{(1+g_t^a)(1+\pi_t^a)}(g_t^a - g_t^b)}_{\substack{\text{contribution of}\\ \text{real GDP growth difference}}} \underbrace{-\frac{fb_t^b}{(1+g_t)(1+\pi_t)}[\pi_t^a(1+g_t^a) - \pi_t^b(1+g_t^b)]}_{\substack{\text{contribution of}\\ \text{GDP deflator inflation difference}}}$$

where $\Delta r_t^{ab} = \frac{R_t^a - R_t^b}{P_t Y_t}$, $\Delta e_t^{ab} = \frac{E_t^a - E_t^b}{P_t Y_t}$, and fb^a=actual fiscal balance as a percentage of GDP, fb^b=budgeted fiscal balance as a percentage of GDP, R=revenue, E=expenditure, P=GDP deflator, Y=real GDP, g=real GDP growth, π=GDP deflator inflation.

Change in government debt-to-GDP ratio (Figure 16)

$$d_t - d_{t-1} = \underbrace{\left[\frac{i_t^w}{(1+g_t)(1+\pi_t)}\right]d_{t-1}}_{\substack{\text{contribution of}\\ \text{nominal interest rate}}} \underbrace{-\left[\frac{\pi_t(1+g_t)}{(1+g_t)(1+\pi_t)}\right]d_{t-1}}_{\substack{\text{contribution of}\\ \text{GDP deflator inflation}}} \underbrace{-\left[\frac{g_t}{(1+g_t)(1+\pi_t)}\right]d_{t-1}}_{\substack{\text{contribution of}\\ \text{real GDP growth}}}$$

$$\underbrace{+\left[\frac{\varepsilon_t \alpha_{t-1}(1+i_t^f)}{(1+g_t)(1+\pi_t)}\right]d_{t-1}}_{\substack{\text{contribution of}\\ \text{exchange rate}}} \underbrace{-pb_t}_{\substack{\text{contribution of}\\ \text{primary deficit}}} \underbrace{+o_t}_{\substack{\text{contribution of}\\ \text{other flows}}}$$

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

Change in GFN-to-GDP ratio (Figure 19)

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

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.

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