



# AMRO Annual Consultation Report

## Malaysia – 2026

ASEAN+3 Macroeconomic Research Office (AMRO)

May 2026

## Acknowledgments

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1. This Annual Consultation Report on Malaysia has been prepared in accordance with the functions of AMRO to monitor and assess the macroeconomic status and financial soundness of its members; identify relevant risks and vulnerabilities; report these to member authorities; and if requested, assist them in mitigating these risks through the timely formulation of policy recommendations. This is being done in accordance with Article 3 (a) and (b) of the AMRO Agreement.
2. This Report is drafted on the basis of the Annual Consultation Visit of AMRO to Malaysia from 26 January-6 February 2026 (Article 5 (b) of the AMRO Agreement). The AMRO Mission team was led by Mr. Kian Heng Peh, Group Head and Lead Economist. Members included Dr. Wee Chian Koh, Senior Economist (Country desk); Dr. Jade Vichyanond, Senior Economist; Ms. Bo Ra Lee, Senior Economist; Mr. Dek Joe Sum, Economist; Mr. Yin Fai Ho, Associate Economist; and Ms. Vatchanaphone Bouakhampachan, Associate. AMRO Director Mr. Yasuto Watanabe and Chief Economist Dr. Dong He participated in key policy meetings with the authorities. This AMRO Annual Consultation Report on Malaysia for 2026 was peer-reviewed by an economist group from AMRO's country surveillance, financial surveillance and fiscal teams; endorsed by Mr. Jiangyan Yu, Deputy Group Head and Senior Economist, Policy and Review Group; and approved by Dr. Dong He, AMRO Chief Economist.
3. The analysis in this Report is based on information available up to 31 March 2026.
4. By making any designation of or reference to a particular territory or geographical area, or by using the term "member" or "country" in this Report, AMRO does not intend to make any judgments as to the legal or other status of any territory or area.
5. On behalf of AMRO, the Mission team wishes to thank the Malaysian authorities for their comments on this Report, as well as their excellent meeting arrangements and hospitality during our visit.

**Disclaimer:** The findings, interpretations and conclusion expressed in this Report represent the views of the staff of ASEAN+3 Macroeconomic Research Office (AMRO) and are not necessarily those of its members. Neither AMRO nor its members shall be held responsible for any consequence from the use of the information contained herein.

## Table of Contents

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<b>Acknowledgments</b> .....	<b>1</b>
<b>Executive Summary</b> .....	<b>3</b>
<b>A. Recent Developments and Outlook</b> .....	<b>4</b>
A.1 Real Sector .....	4
A.2 External Sector .....	8
A.3 Monetary Conditions and Financial Sector.....	9
A.4 Fiscal Sector .....	12
<b>B. Risks, Vulnerabilities and Challenges</b> .....	<b>14</b>
B.1 Short term risks .....	14
B.2 Medium to long term risks .....	15
<b>C. Policy Discussions and Recommendations</b> .....	<b>17</b>
C.1 Preserving Macroeconomic and Financial Resilience .....	17
C.2 Building Domestic Capabilities while Strategically Navigating Geoeconomic Fracturing ....	23
Box A. Malaysia’s Ongoing FX Liberalization Efforts.....	28
Box B. Digital Finance Innovation and Financial Inclusion in Malaysia .....	30
<b>Appendices</b> .....	<b>33</b>
Appendix 1. Selected Figures for Major Economic Indicators .....	33
Appendix 2. Selected Economic Indicators for Malaysia .....	38
Appendix 3. Balance of Payments .....	39
Appendix 4. Federal Government Budget .....	40
Appendix 5. Debt Sustainability Analysis.....	41
Appendix 6. Climate Clipboard—Risks, Responses, and Opportunities .....	44
<b>Annexes: Selected Issues</b> .....	<b>46</b>
1. Data Center Boom in Malaysia: Recent Developments and Challenges .....	46
2. From Resource-rich to Future-ready: Sarawak’s Investment and Green Industrial Growth .	51

## Executive Summary

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- **Growth outlook:** The Malaysian economy remains resilient despite a challenging external environment marked by rising trade protectionism and geopolitical tensions. Led by robust domestic demand and strong electronics exports, growth is expected to stay firm, moderating in 2026 before stabilizing near its potential in 2027. Risks to this outlook are tilted to the downside, reflecting external uncertainties such as heightened geopolitical conflict, renewed trade tensions, and a cooling of the artificial intelligence boom.
- **Strengths and weaknesses:** Malaysia's resilience is a testament to its sound macroeconomic policies, underpinned by robust inflows of foreign direct investment, contained inflation, and stable financial conditions. However, structural issues persist, including wage stagnation, limited innovation, skill and talent gaps, a narrow revenue base, elevated public and household debt, and institutional challenges.
- **Investment upcycle:** Malaysia is undergoing an investment upcycle that presents a timely and pivotal opportunity to accelerate structural upgrading and lift growth potential. To catalyze durable transformation, policy priorities should focus on preserving macroeconomic and financial resilience, deepening domestic capabilities, and strategic positioning amid geoeconomic fracturing.
- **Monetary policy:** The monetary policy stance should remain supportive to sustain domestic credit and growth. At the same time, Bank Negara Malaysia (BNM) needs to continue to carefully monitor inflationary pressures and financial stability risks.
- **Foreign exchange (FX) and financial sector policy:** BNM is encouraged to strengthen foreign reserves buffers and maintain ample system liquidity to bolster resilience against potential credit and FX market shocks. Periodic assessment of macroprudential safeguards is essential to preserve financial stability, while continued development of the digital finance ecosystem can support more efficient and inclusive financial intermediation.
- **Fiscal policy:** The government should continue to pursue fiscal consolidation to reduce public debt and build durable fiscal space. This includes revisiting the RON95 fuel subsidy design to free up more resources for productivity-enhancing development spending and targeted social assistance, while broadening the tax base and eventually reintroducing goods and services tax (GST). Improving tax administration and compliance, alongside advancing governance reforms, will further enhance fiscal efficiency and public sector accountability.
- **Structural policy:** Malaysia should navigate strategic competition between the United States and China by pursuing pragmatic economic diplomacy and diversifying markets and technology sources to bolster resilience to external shocks. Deeper integration with ASEAN+3 economies can anchor Malaysia more firmly in regional value chains. The semiconductor and rare earth sectors can provide strategic leverage and facilitate integration into emerging industries. Capitalizing on the current investment upcycle to upgrade industrial capabilities, human capital, and productivity can help place Malaysia on a sustainable path toward high-income status.

## Background

*After a decade of overlapping shocks, Malaysia is entering a pivotal phase where geoeconomic fragmentation and supply-chain realignments create a strategic opportunity to catalyze the current investment upcycle into durable, productivity-led growth. Heightened geopolitical tensions and US–China strategic competition are reshaping global production networks, and Malaysia—benefiting from restored political stability, clearer policy frameworks, and deep global value chain integration—has emerged as a trusted manufacturing and investment destination, particularly in semiconductors, AI, and digital infrastructure. This attractiveness is reinforced by sound macroeconomic management, ongoing fiscal consolidation, a resilient banking system, and a diversified export base, all of which complement government strategies—including the MADANI Economy Framework, the New Industrial Master Plan 2030, and the National Energy Transition Roadmap. The current investment momentum offers a strategic opportunity for industrial upgrading, productivity improvement, and sustained wage growth. Its durability, however, will depend on deepening domestic linkages, strengthening human capital, easing infrastructure and energy constraints, and fostering technology diffusion.*

**The 2026 Annual Consultation Report therefore focuses on sustaining investment amid geoeconomic fracturing.**

## A. Recent Developments and Outlook

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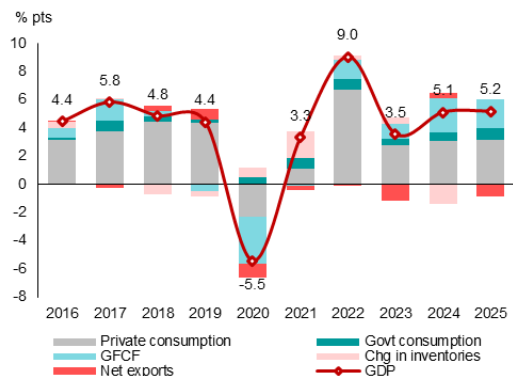
### A.1 Real Sector

**1. Malaysia’s economy has been resilient despite heightened trade frictions, underpinned by domestic demand and the global technology upcycle.** The economy grew 5.2 percent in 2025, slightly above the 5.1 percent growth in 2024, and significantly better than initially feared following the imposition of “Liberation Day” tariffs (Figure 1). Economic activity has been sustained primarily by firm domestic demand, with private consumption supported by favorable labor market conditions and policy measures that helped buffer households from cost-of-living pressures (Figure 2). Investment has remained strong, reflecting ongoing public infrastructure spending and steady implementation of earlier commitments of foreign direct investment (FDI)—particularly in manufacturing and digital-related services—even amid global uncertainty and tariff-related headwinds. On the external front, robust demand for electrical and electronics (E&E) products and tourism-related services has helped offset the drag from softer non-E&E exports.

**2. Looking ahead, growth is expected to remain firm, though it may moderate in 2026 amid external headwinds.** Growth is projected to ease to 4.6 percent in 2026, reflecting the full-year impact of higher tariffs and lingering global trade uncertainties that temper export growth and business sentiment, before improving to 4.7 percent in 2027—around the estimated potential growth rate. The ongoing upswing in global tech demand should continue to bolster Malaysia’s E&E exports, although persistent weakness across some non-E&E segments—which is increasingly structural than cyclical—would weigh on

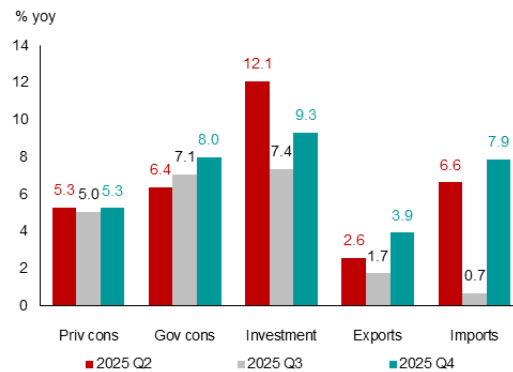
overall export performance.<sup>1</sup> While US tariffs have lowered to 10 percent following a US Supreme Court ruling on the use of the International Emergency Economic Powers Act (IEEPA), duties remain above levels prevailing at the start of 2025 and policy uncertainty continues to weigh on the external outlook.<sup>2</sup>

**Figure 1. Contribution to Real GDP Growth**



Source: Department of Statistics Malaysia (DOSM); AMRO staff calculations

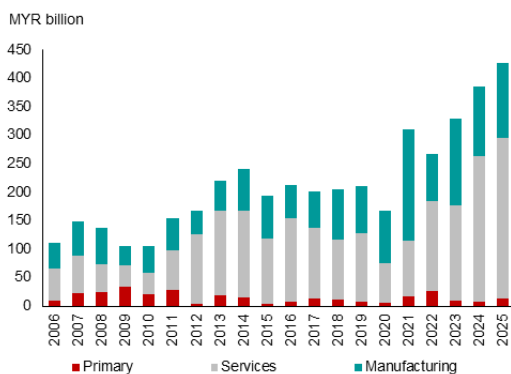
**Figure 2. GDP Growth by Demand Component**



Source: DOSM

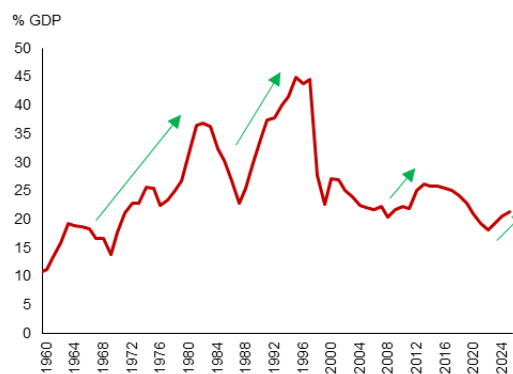
**3. Domestic demand is expected to remain the main anchor of growth.** Household spending should stay firm, supported by policy measures including further civil service salary revisions and cash transfers. Higher tourism spending amid the Visit Malaysia 2026 campaign will boost related service activities. Investment is expected to remain robust in view of the strong pipeline of investment approvals over the past few years (Figure 3). Unlike previous episodes, the current investment upcycle is likely to be more durable as it is anchored by structural forces, most notably global supply chain reconfiguration and geopolitical risk diversification (Figure 4). Investments are concentrated in capital-intensive, long-horizon projects such as semiconductor back-end manufacturing and data centers, which are perhaps less susceptible to an abrupt reversal than earlier cycles dominated by property development or resource extraction.

**Figure 3. Approved Investments**



Source: DOSM; Malaysia Investment Development Authority (MIDA)

**Figure 4. Investment Share of GDP**



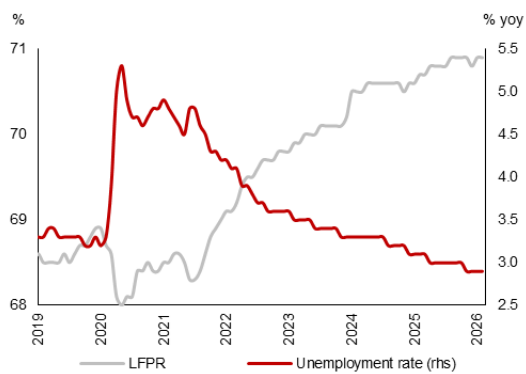
Source: DOSM; AMRO staff estimates

<sup>1</sup> The weak non-E&E exports reflect temporary production issues (e.g., LNG facility maintenance in Bintulu, Sarawak) as well as structural factors such as competitive pressures from global overcapacity in certain sectors, declining oil and gas reserves, and a transition away from primary commodity exports toward higher-value manufactured goods.

<sup>2</sup> Prior to the Supreme Court ruling, bilateral negotiations under the US–Malaysia Agreement on Reciprocal Trade (ART) had reduced the proposed US reciprocal tariff on Malaysia to 19 percent from 25 percent, alongside exemptions on 1,711 tariff lines. Following the ruling, the US administration introduced a temporary 10 percent tariff under alternative statutory authority and indicated a potential increase to up to 15 percent.

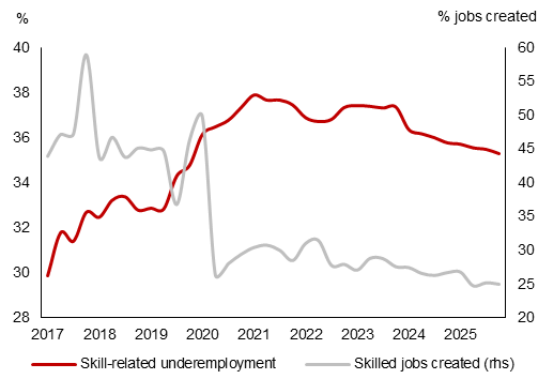
**4. Labor market conditions have continued to improve, but wage growth lags productivity gains and skill-related underemployment remains elevated.** The unemployment rate has fallen to 2.9 percent, below pre-pandemic levels, while the labor force participation rate has reached a record high of 70.9 percent (Figure 5). However, employment growth has been largely driven by own-account workers, suggesting that most new jobs are not the high-productivity, high-wage positions needed to sustain income growth. Growth in real wages per worker in the manufacturing sector has remained negative despite government measures such as a minimum wage increase and progressive wage policy. In addition, manufacturing wage growth has lagged productivity growth. These issues are less acute in the services sector where labor conditions are tighter. Meanwhile, despite some improvement, the skill-related underemployment rate remains high at 35.3 percent as of Q4 2025, indicating persistent mismatches between demand for skilled labor and available local talent (Figure 6).<sup>3</sup>

**Figure 5. Unemployment Rate and Labor Force Participation Rate (LFPR)**



Source: DOSM

**Figure 6. Skill-related Underemployment and Skilled Jobs Created**



Source: DOSM; AMRO staff calculations

**5. Inflation has been unusually subdued by historical standards, reflecting contained cost pressures and supportive policy measures.** Headline inflation in 2025 averaged just 1.4 percent, well below the long-term average of 2.2 percent (Figure 7).<sup>4</sup> This reflects a combination of factors: further moderation in global commodity prices, global goods disinflation, lagged pass-through from a stronger Malaysian ringgit, contained domestic wage pressures, and cost absorption by firms amid tariff and trade-related risks. In addition, the impact of subsidy rationalization and broadening of the sales tax and service tax (SST) has been limited. The new electricity tariff structure, effective July 1, has resulted in lower bills for most domestic users, while subsidized RON95 fuel prices have been lowered to MYR1.99 per liter from MYR2.05 for all Malaysian citizens starting September 30 (Figure 8).<sup>5</sup> Meanwhile, the expanded SST exempts essential goods while targeting discretionary and luxury items and selected services. Core inflation has also been moderate, averaging 2.0 percent, although it has inched higher since June, pointing to mild but manageable demand pressures. Inflation pervasiveness fell to 39 percent in December, below the historical average of 47 percent.<sup>6</sup>

<sup>3</sup> The skill-related underemployment rate refers to the share of tertiary-educated persons working in semi-skilled or low-skilled occupations. It increased during the pandemic, from 34.8 percent in Q4 2019 to a peak of 37.9 percent in Q1 2021, and has improved since 2024.

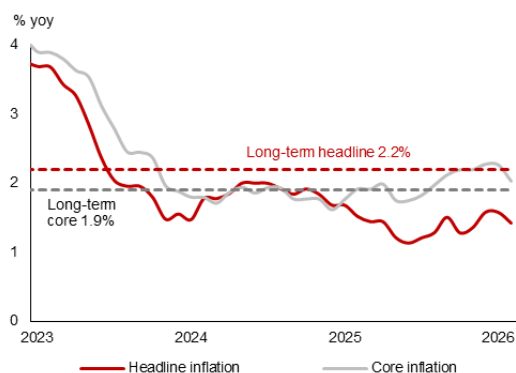
<sup>4</sup> Long-term average refers to 2001-2019 when inflation was more moderate and stable compared with earlier decades (3.4 percent in 1960-2000).

<sup>5</sup> Non-citizens can no longer enjoy subsidized RON95 prices and must pay market prices (around MYR2.60 per liter as of late 2025), while foreign-registered vehicles can buy only the more expensive RON97 fuel. This retargeting aims to reduce subsidy leakage to foreigners and non-eligible groups.

<sup>6</sup> Inflation pervasiveness captures the share of items in the CPI basket whose prices are rising.

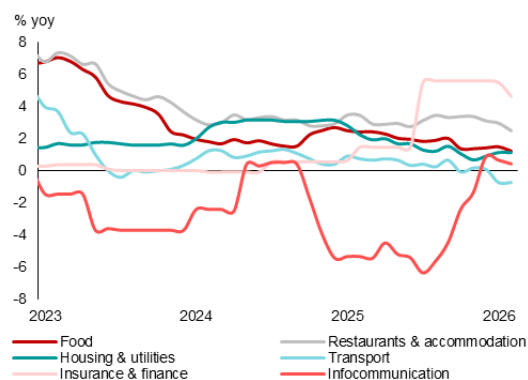
**6. Amid benign inflation and a steady growth outlook, the Overnight Policy Rate (OPR) has been kept unchanged after a pre-emptive 25 basis points (bps) cut in July 2025.** That has been the only adjustment since May 2023 to safeguard growth against rising global uncertainties, particularly US tariffs and geopolitical tensions. BNM subsequently maintained the rate in September and November given the improved growth outlook and reduced tariff uncertainty, especially following the signing of the Agreement on Reciprocal Trade (ART) with the US and the extension of the US-China trade truce in October 2025. At the current OPR level of 2.75 percent, BNM assessed the monetary policy stance to be appropriately supportive of the economy.

**Figure 7. Headline and Core Inflation**



Source: DOSM; AMRO staff calculations

**Figure 8. Inflation by Selected Category**



Source: DOSM; AMRO staff calculations

**7. Looking ahead, inflation is projected to remain moderate, with a gradual uptick as policy normalization progresses.** While underlying price pressures are subdued and inflation expectations remain well anchored, developments in the Middle East conflict are expected to keep global energy prices elevated. Under the baseline assumption of continued fuel subsidies, the direct pass-through to domestic inflation should remain contained, allowing both headline and core inflation to stay within a moderate range. At the same time, higher oil and gas prices are expected to strengthen Malaysia’s external position, supporting ringgit appreciation or stability, which would help to moderate imported inflation. On the other hand, the lagged effects of the July policy rate cut, fading global goods disinflation, modest wage growth, and less favorable base effects could lead to a mild pickup over the course of the year. Overall, headline inflation is forecast to average 2.0 percent in 2026-2027, indicating a transition from unusually low inflation toward a more normalized level.

**Authorities’ Views**

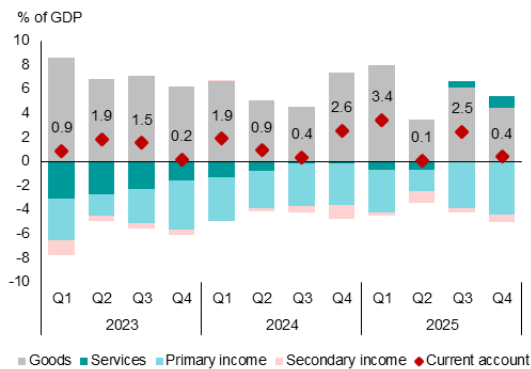
**8. The authorities broadly agree with AMRO staff’s assessment of the growth and inflation outlook.** The authorities expect the strong growth momentum to continue in 2026, with a forecast of between 4.0 and 5.0 percent, supported by resilient domestic demand and continued strength in E&E exports and higher tourist spending. The output gap is expected to remain positive in 2026, in line with AMRO staff’s estimates. Headline inflation is expected to remain moderate amid contained cost pressures, averaging between 1.5 and 2.5 percent, with the upper end of the forecast incorporating potential upsides from the ongoing conflict in the Middle East.

## A.2 External Sector

**9. Re-exports have risen sharply, reflecting Malaysia’s growing role in regional supply chains.** Headline export growth has been primarily driven by re-exports, which have increased more than 30 percent year-on-year since April 2025, reaching around 22 percent of total exports, up from 17 percent before the pandemic.<sup>7</sup> Imports of intermediate goods have also increased markedly since the pandemic. This shift is concentrated in E&E products, machinery components, and other intermediate inputs that are often assembled, rerouted, or transshipped through Malaysia before reaching their final destinations. Growth in exports, including re-exports, has been mainly driven by shipments to Taiwan Province of China, the EU, Mexico, Singapore, and Vietnam.

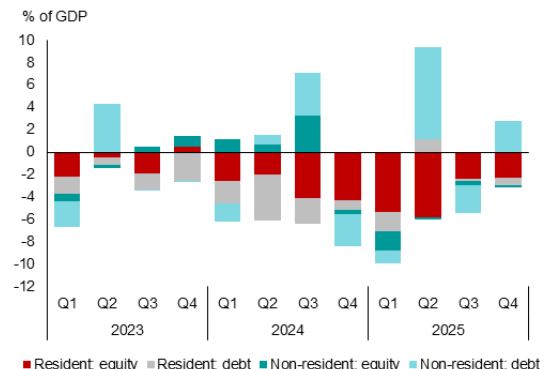
**10. The external position remains resilient despite rising global trade tensions, underpinned by robust exports and sustained FDI inflows.** The current account surplus increased to 1.6 percent of GDP in 2025, up from 1.4 percent in 2024 (Figure 9). Despite headwinds from heightened global trade tensions, E&E shipments have supported exports, buoyed by the upturn in the global semiconductor cycle and strong demand in AI-related investment. Meanwhile, the services trade deficit has continued to narrow—reflecting robust inbound tourism and rising manufacturing services income—turning to a surplus in Q3 2025 for the first time in 14 years. Meanwhile, FDI has remained strong, driven largely by investment in the information and communication sector, particularly data centers and cloud computing. Net portfolio flows remained in deficit as residents continued investing in foreign equities, despite higher non-resident purchases of domestic debt securities (Figure 10).

**Figure 9. Current Account Balance**



Source: BNM; DOSM; AMRO staff calculations

**Figure 10. Portfolio Investment**



Source: BNM; DOSM; AMRO staff calculations

**11. Foreign reserves remain adequate and serve as an important buffer against external shocks.** BNM’s gross international reserves (GIR) increased to USD128.3 billion as of end-February 2026, up from USD116.2 billion at end-2024 and the highest since 2014 (Figure 11).<sup>8</sup> At this level, the GIR is sufficient to finance 4.7 months of imports of goods and services, and is 0.9 times total short-term external debt. At the same time, BNM’s net short foreign exchange (FX) position declined to USD21.2 billion, significantly lower than its peak of USD29.2 billion at end-2024. Risks arising from short-term external obligations are mitigated by the favorable debt profile, with a significant share comprising interbank

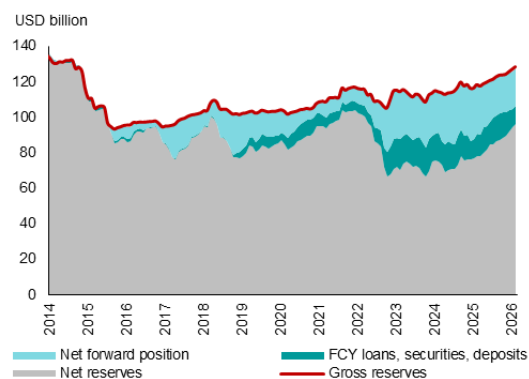
<sup>7</sup> While rising re-exports reflect deeper integration into supply chains, their domestic value-added and employment multipliers are likely lower than those of domestic exports, which could partially explain the limited manufacturing wage growth despite strong export performance.

<sup>8</sup> The increase in reserves reflects net FX inflows and exchange rate valuation.

borrowings and trade credit arrangements by corporates.<sup>9</sup> In addition, BNM’s FX reserves account for less than a quarter of Malaysia’s external assets. Banks and corporates have accumulated sizable non-reserve assets, with the liquid portion sufficient to cover roughly twice their short-term external obligations.

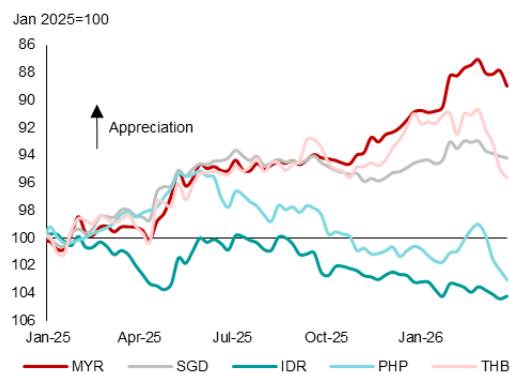
**12. Supportive global financial conditions and strong domestic fundamentals contributed to a significant appreciation of the ringgit in 2025.** The ringgit strengthened by 10.1 percent against the US dollar in 2025, accelerating from the 2.7 percent gain in 2024 (Figure 12). Although the currency experienced some weakness early in the year amid heightened global uncertainties, it rebounded sharply from April onwards, driven by broad US dollar depreciation, narrowing interest rate differentials with the US, and reduced uncertainty surrounding tariff developments. In terms of the nominal effective exchange rate (NEER), the ringgit appreciated by 5.4 percent in 2025, the largest gain among regional currencies. The relative strength of the currency reflected investors’ confidence in Malaysia’s economic outlook, progress on fiscal reforms, and continued policy measures to support ringgit stability.

**Figure 11. BNM’s International Reserves Position**



Source: BNM; AMRO staff calculations

**Figure 12. ASEAN-5 Currencies vs. US Dollar**



Source: BNM; Haver Analytics; national authorities; AMRO staff calculations

### Authorities’ Views

**13. BNM maintains that Malaysia’s trade competitiveness remains resilient, even amid the stronger ringgit.** According to BNM, exports tend to be more sensitive to external demand conditions than currency movements. While some segments may see modest effects, services such as tourism remain largely unaffected, with initiatives such as Visit Malaysia Year 2026 expected to boost activity. Corporate exporters, dealing mainly in US dollars, mitigate currency risks through hedging, and the country’s export performance continues to benefit from robust production capacity and deep integration into global supply chains. Additionally, the stronger ringgit has reduced the cost of imported goods.

### A.3 Monetary Conditions and Financial Sector

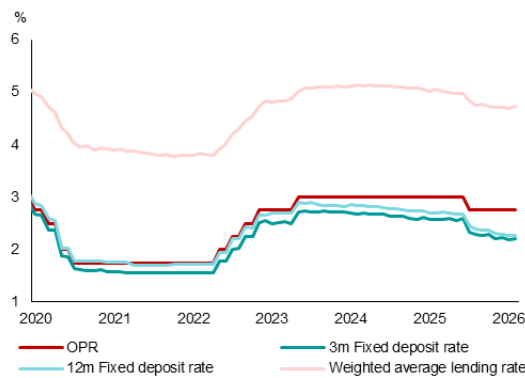
**14. Domestic financing conditions have become more conducive, reflecting the effects of monetary policy easing and BNM’s efforts to ensure sufficient liquidity in**

<sup>9</sup> Most short-term external debt is held by banking institutions and corporates, reflecting Malaysia’s increasing global integration. More than half of banks’ short-term external debt is in interbank borrowings, of which a portion is within the same banking group, which reduces rollover risk. For corporates, more than two-thirds of short-term external debt comprises trade credits tied to export earnings, which serve as a natural hedge against FX shocks.

**the financial system.** Fixed deposit rates and weighted average lending rates declined by 34-44 bps and 34 bps respectively in 2025, reflecting effective pass-through of the 25 bps policy rate cut in July (Figure 13). Benchmark government bond yields also fell by 31-48 bps amid expectations of monetary policy easing and strong foreign inflows. Although large issuances pushed credit spreads for high-quality issuers slightly higher, spreads remained tight relative to historical averages, reflecting healthy demand for private debt securities.<sup>10</sup> Meanwhile, interbank funding conditions eased following a 100 bps reduction in the statutory reserve requirement (SRR) rate in May 2025. The spread between the three-month KLIBOR and OPR narrowed from a peak of 73 bps at the start of 2025 to a low of 46 bps in August, before rising modestly to 53 bps in December, reflecting seasonal year-end deposit competition. The uptick, however, was less pronounced than in previous years, indicating more subdued deposit competition in 2025.<sup>11</sup>

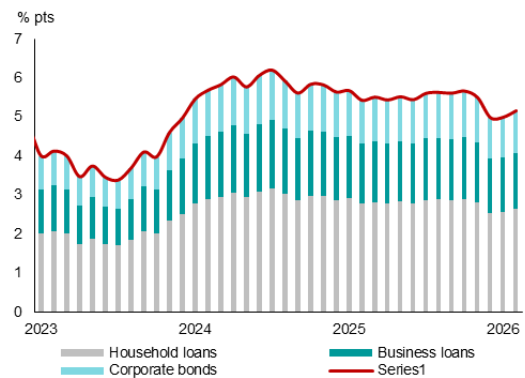
**15. Credit intermediation remains robust amid favorable financing conditions and steady economic expansion.** Credit to the private non-financial sector increased by an average of 5.5 percent in 2025, broadly similar to the pace in 2024 (Figure 14). Corporate bond financing expanded significantly, reflecting larger issuances amid robust investment activity and historically narrow credit spreads. Business loan growth moderated, mainly following slower loan growth in working capital loans among non-SMEs. Notwithstanding, business loan growth for investment-related purposes remained above pre-pandemic levels, reflecting robust private investment activities. Meanwhile, household loan growth remained broadly sustained, supported by favorable labor market conditions and lower borrowing costs.

**Figure 13. Key Policy and Bank Interest Rates**



Source: BNM

**Figure 14. Credit to Private Non-financial Sector**



Source: BNM; AMRO staff calculations

**16. The banking system maintains ample buffers and asset quality has improved, supporting sound bank profitability.** Capital and liquidity buffers far exceed regulatory requirements, with the capital adequacy, common equity tier 1 (CET1), and liquidity coverage ratios (LCR) registering 17.8 percent, 14.2 percent, and 154.8 percent, respectively, as of end-2025 (Figure 15). The overall non-performing loan (NPL) ratio declined from 1.44 percent at end-2024 to 1.37 percent at end-2025, reflecting broad-based improvement in asset quality across corporate, MSME, and household segments. Bank profitability has continued to improve, supported by higher net interest income amid robust

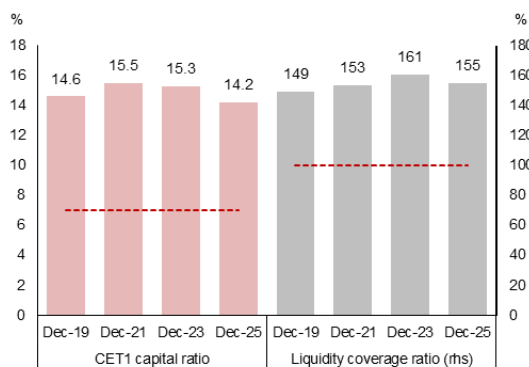
<sup>10</sup> The 10-year credit spread of AAA-rated issuers averaged 30 bps in 2025 compared with 63 bps during 2015-2023.

<sup>11</sup> The three-month KLIBOR-OPR spread in December averaged 81 bps during 2022-2024.

loan growth, with return on assets rising from 1.3 percent at end-2024 to 1.5 percent in September 2025.

**17. The business sector has been broadly resilient despite headwinds from external trade uncertainties and rising cost pressures.** Corporate debt-to-GDP ratio increased to 104.3 percent in Q3 2025 from 101.3 percent at end-2024. Repayment capacity among listed non-financial companies broadly improved, with the share of firms-at-risk declining to 22.1 percent in Q3 2025 from 25.8 percent at end-2024, supported by resilient domestic demand and robust export performance.<sup>12</sup> However, pockets of vulnerabilities persist among SMEs, which face repayment challenges amid rising operating costs and tighter competition. Ongoing cost management strategies adopted by SMEs have helped mitigate some repayment stress, with the share of total SME loans requiring repayment assistance declining to 4.1 percent in June 2025 from 4.4 percent at end-2024.

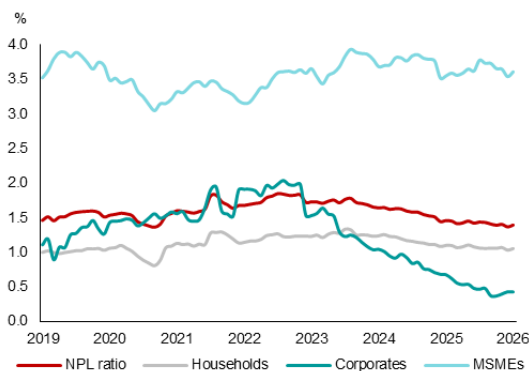
**Figure 15. Financial Soundness Indicators**



Source: BNM

Note: The red-dashed lines represent regulatory minimum ratios. For CET1 the minimum is 7.0 percent (inclusive of the 2.5 percent capital conservation buffer), while for LCR the minimum is 100 percent.

**Figure 16. Non-performing Loans (NPLs)**



Source: BNM; AMRO staff calculations

**18. While households' overall financial position remains sound, the authorities are taking steps to mitigate potential risks arising from unregulated non-bank credit providers.** Despite an uptick in the household debt-to-GDP ratio—from 84.2 percent in December 2024 to 84.8 percent in June 2025—households' financial position remains sound, with financial assets exceeding twice the level of household debt. Credit quality continues to be solid, registering a low household NPL ratio of 1.0 percent as of end-2025, reflecting declines in residential property NPLs across all value segments (Figure 16). However, some pockets of vulnerability are emerging, particularly in the expansion of unregulated buy-now-pay-later (BNPL) schemes.<sup>13</sup> Although BNPL debt accounts for only about 0.2 percent of total household debt, the share of overdue BNPL debt increased to 3.2 percent of total outstanding BNPL debt in June 2025, from 2.9 percent in December 2024. A new Consumer Credit Commission will be established to regulate and supervise previously unregulated non-bank credit providers and credit service providers, including BNPL operators.<sup>14</sup>

<sup>12</sup> Firms-at-risk refer to firms with an interest coverage ratio (ICR) below 2.

<sup>13</sup> BNPL transactions rose sharply from MYR3.6 billion at end-2023 to MYR9.3 billion at end-June 2025, and correspondingly, total outstanding BNPL debt increased from MYR1.1 billion to MYR3.8 billion over the same period.

<sup>14</sup> The Consumer Credit Act 2025 introduces a licensing and registration framework for non-bank credit providers and credit service providers, and extends regulatory oversight to a broad range of consumer credit activities, including emerging products such as buy-now-pay-later

**19. The housing market has shown signs of moderation.** The volume of unsold completed residential units rose 16.8 percent between Q4 2024 and Q4 2025, while house price growth slowed to 1.5 percent over the same period.<sup>15</sup> Most of these unsold completed units were condominiums, apartments, and serviced apartments, with some downward price adjustments observed including in Kuala Lumpur. However, house prices have continued to increase in Johor and Penang as strong industrial investment lifted housing demand. Meanwhile, occupancy rates for commercial properties including shopping complexes and office buildings have remained stable at 79 percent and 72 percent, respectively.

### **Authorities' Views**

**20. BNM notes that, although SMEs face sector-specific headwinds—particularly from tariffs and rising operational costs—overall asset quality remains stable.** The most affected SMEs are in export-oriented manufacturing sectors, including medical consumables, solar-related activities, consumer electronics, and mining and quarrying. These pressures, together with tighter cash buffers, contributed to more cautious borrowing and softer credit growth. SME loan impairment ratios, at 3.5–3.7 percent, remain higher than for non-SMEs but are broadly stable.

**21. BNM assesses residential property conditions to be broadly stable, with the modest increase in unsold units concentrated in high-rise developments.** Housing demand continues to be supported by favorable labor market conditions and targeted government measures for first-time buyers. Downside risks to household balance sheets are assessed as contained, supported by adequate equity buffers, a predominantly owner-occupier borrower base, and the recourse nature of housing loans. In the commercial real estate sector, activity is steady, with vacancy rates stabilizing and developers adopting cautious, phased launch strategies, suggesting no major risks to financial stability.

### **A.4 Fiscal Sector**

**22. The fiscal stance in 2025 is assessed to be broadly neutral.**<sup>16</sup> While tax revenue increased by 3.2 percent due to new tax revenue mobilization measures particularly the expansion of SST, total revenue as a share of GDP fell by 0.2 percentage point of GDP to 16.6 percent of GDP, reflecting reduced reliance on petroleum-related receipts amid weaker global crude oil prices. Nonetheless, this revenue shortfall was offset by net savings from spending reprioritization, resulting in a smaller overall deficit (Figure 17). Fuel subsidy retargeting, supported by currency appreciation and lower-than-budgeted oil prices, generated savings that more than offset higher operating expenditure from civil service wage hikes, pension outlays, and rising interest payments. Moreover, under-execution of development expenditure further eased the overall expenditure envelope.

**23. The 2026 Budget envisages continued fiscal consolidation, although the recent spike in global oil prices could influence the budget plan.** The planned consolidation is anchored on a projected decline in expenditure as a share of GDP,

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(BNPL) schemes. The Act was passed on July 21, 2025, and approved by the Dewan Negara on September 4, 2025, marking a key legislative milestone toward implementation. The Act is anticipated to take effect in Q1 2026.

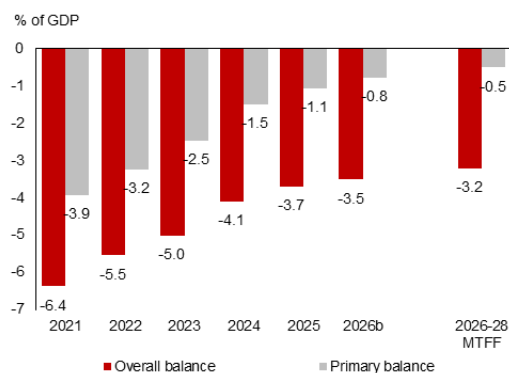
<sup>15</sup> Residential properties include serviced apartments and small office home offices (SOHOs).

<sup>16</sup> The fiscal stance is assessed using the fiscal impulse, measured as the change in the cyclically adjusted primary balance as a share of GDP. For 2025, the fiscal impulse is estimated at -0.4 percent of GDP, which is considered broadly neutral under AMRO's classification (within the -0.5 to +0.5 range).

supported by the full-year implementation of fuel subsidy retargeting and moderation in development expenditure, while revenue gains are expected from the full-year impact of the SST expansion and improved tax compliance following the rollout of e-invoicing.<sup>17</sup> However, oil prices have exceeded the assumptions underpinning the budget, implying higher-than-anticipated subsidy outlays under the current fuel subsidy mechanism. The increase in subsidy expenditure is expected to be partly offset by stronger petroleum-related revenues, resulting in a limited net adverse fiscal impact, but the extent of the offset depends in part on the contribution from PETRONAS dividends. Meeting the deficit target will therefore depend on the magnitude and duration of oil price movements as well as the pace of fuel subsidy reforms.

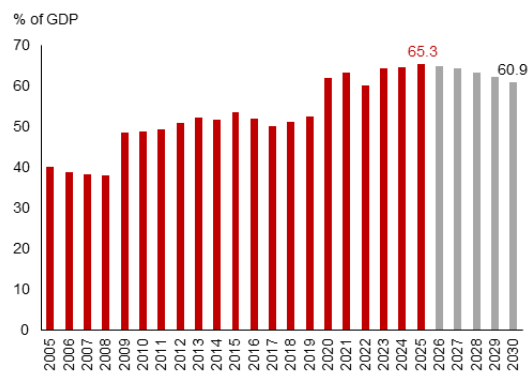
**24. Public debt as a share of GDP is expected to rise in 2025 and stay elevated in 2026, before declining gradually over the medium term.** Despite a lower primary deficit in 2025, the pace of fiscal consolidation was insufficient to prevent public debt from growing faster than nominal GDP, as subdued nominal GDP growth outweighed the reduction in the primary deficit. As a result, the public debt-to-GDP ratio rose from 64.6 percent in 2024 to 65.3 percent in 2025 (Figure 18). Interest payments remain high and increased to 16.0 percent of total revenue in 2025, exceeding the government’s self-imposed administrative benchmark of 15 percent. Public debt as a share of GDP is projected to decline gradually to 63.3 percent in 2028 with continued fiscal consolidation.

Figure 17. Overall and Primary Fiscal Balance



Source: DOSM; MOF; AMRO staff calculations

Figure 18. Federal Government Debt



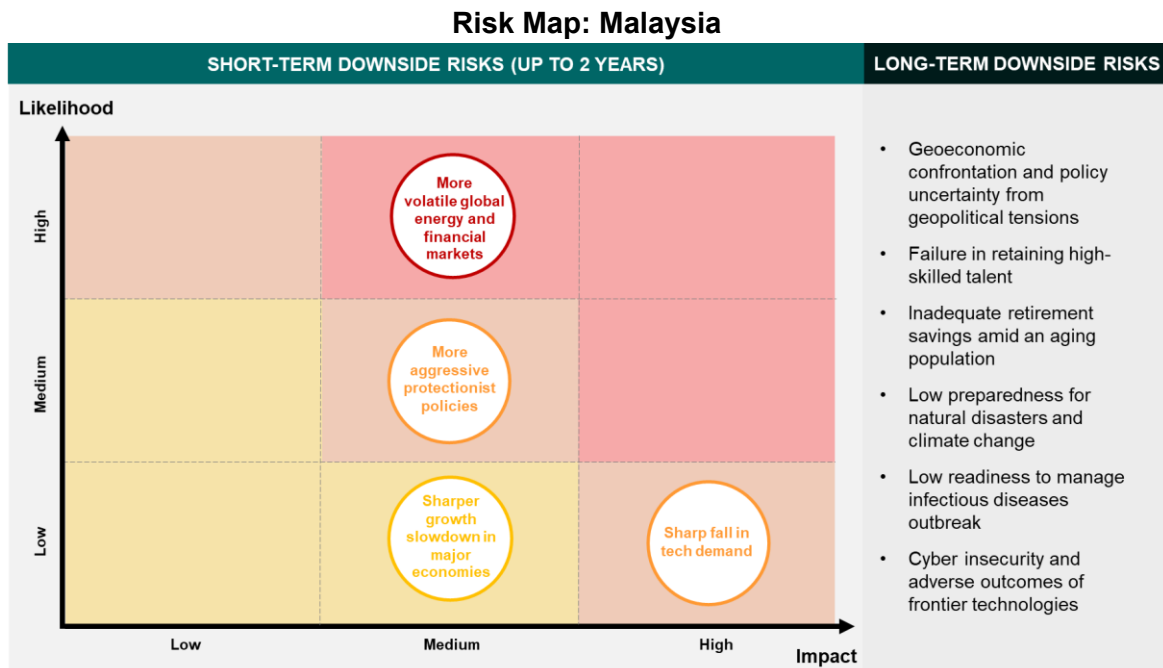
Source: DOSM; MOF; AMRO staff estimates  
Note: 2026-2030 are AMRO staff estimates

**Authorities’ Views**

**25. The Ministry of Finance (MOF) notes that development spending (DE) moderation is typical during a transition between national development plans.** According to the MOF, the final year of an outgoing plan and the first year of the subsequent plan often experience lower DE. The MOF expects DE to normalize as Malaysia enters the new Five-Year Plan period.

<sup>17</sup> The e-invoicing system is being rolled out progressively. Implementation began in August 2024 for large companies with an annual turnover of more than MYR100 million, and expanded in stages in 2025 to cover mid-sized firms. By January 2026, the system will apply to most businesses, exempting only micro enterprises with a turnover below MYR1 million.

## B. Risks, Vulnerabilities and Challenges



Source: AMRO staff

### B.1 Short term risks

**26. Risks to Malaysia's growth outlook are tilted to the downside, reflecting external uncertainties.** A further escalation of the conflict in the Middle East—particularly disruptions to energy flows through the Strait of Hormuz—could significantly raise global oil and gas prices, fuel inflation, and increase fiscal pressures through higher subsidy outlays. As a net importer of crude oil, Malaysia also faces risks of domestic supply disruptions if global energy infrastructure is damaged, which could affect refining and downstream activities. Knock-on effects on financial markets may also weigh on investor and consumer sentiment. Other key risks include renewed trade frictions—through higher tariffs or tighter technology controls—that could disrupt export-oriented manufacturing, dampen external demand for E&E products, and delay investment decisions by multinational companies (MNCs) embedded in global value chains. A faster-than-expected cooling of global AI investments could slow electronics demand and delay data center-related investments. Financial market volatility poses additional risks, as abrupt shifts in global risk appetite, higher-for-longer interest rates in advanced economies, or sharp US dollar movements could trigger capital flow reversals and tighten financial conditions. Domestically, delays in project implementation could moderate near-term growth momentum. Meanwhile, upside risks include a stronger upswing in the global tech cycle, faster realization of approved FDI projects and larger spillovers from the ongoing investment upcycle, and more robust tourism activity. Additionally, higher global oil prices could incentivize increased investment in the energy sector.

**27. A key downside risk is the potential broadening of US tariffs on semiconductors.** The US has recently imposed 25 percent tariff on a narrow set of AI semiconductors following a nine-month investigation under Section 232 of the Trade Expansion Act of 1962. The direct impact on Malaysia is expected to be limited since these

high-end chips are not manufactured locally. In addition, around two-thirds of Malaysia's semiconductor exports to the US are from American companies operating in the country. Based on current indications, firms that are investing or have committed to invest in the US will be exempted from tariffs—in which case American chip firms should qualify for exemptions.<sup>18</sup> That said, if semiconductor tariffs were broadened to include semiconductor manufacturing equipment and downstream electronics products—as in the case of steel and aluminum tariffs expanding to derivative products—the potential adverse impact could be significant.

**28. Risks to the inflation outlook are skewed to the upside, owing to a mix of external and domestic factors.** Spikes in global commodity prices—driven by weather-related factors and geopolitical tensions, including the Middle East conflict—remain a key upside risk, particularly through higher-for-longer energy and food prices. Supply chain disruptions stemming from trade frictions, logistical bottlenecks, or climate events could further increase input costs for manufacturers and food producers. On the downside, weaker global growth could dampen commodity prices, while a stronger ringgit would help ease imported cost pressures.

## B.2 Medium to long term risks

**29. Global economic fracturing could fundamentally reshape economies and markets, posing challenges to cross-border financial flows, technology transfers, and supply chain security.** Escalating strategic competition between the US and China may pressure countries and firms to take sides, eroding strategic flexibility and undermining plurilateral cooperation. These pressures risk distorting trade and investment decisions, potentially dampening FDI flows, and reducing global efficiency as production networks are reshaped by geopolitical considerations rather than comparative advantage. Malaysia can reap the benefits of trade and investment diversion if it can strategically maneuver major power competition. Malaysia's strategic positioning as an open and reliable investment destination amid geopolitical tensions has already enabled the country to attract FDIs from the US, Europe, and China into strategic sectors such as semiconductors, telecommunications, and renewable energy in recent years. However, these gains are by no means guaranteed given intensifying competition, with India, Mexico, and Vietnam emerging as equally attractive alternatives.

**30. Increased outflows of skilled talent could constrain the implementation of Malaysia's strategic development objectives.** National frameworks such as the New Industrial Master Plan (NIMP) 2030, National Semiconductor Strategy (NSS), and National Energy Transition Roadmap (NETR) provide a clear vision for industrial upgrading, innovation, and the production of more sophisticated products. However, successful realization of these ambitions depends critically on attracting and retaining skilled talent. Increased talent outflows, exacerbated by limited creation of high-skilled jobs, could hinder industrial upgrading, weaken innovation capacity, and diminish the country's competitiveness in attracting high-tech FDIs.

**31. The rapid development of data centers poses concerns regarding the availability of natural resources.** As of December 2025, load utilization from data centers

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<sup>18</sup> US chip firms operating in Malaysia include Intel, AMD, Broadcom, Intel, Micron, NXP, Onsemi, and Texas Instruments.

more than doubled to 850MW from 405MW the previous year, according to Tenaga Nasional Berhad, the primary electricity provider in Peninsular Malaysia. The rapidly rising demand for electricity poses challenges to the Klang Valley, which has experienced occasional but isolated power outages in recent years, as well as Johor, where around 30 percent of data center applications during June-October 2024 were rejected, largely due to operators failing to demonstrate sustainable practices in resource utilization.<sup>19</sup> According to industry estimates, every 100MW of data center capacity requires around 4.2 million liters of water per day, equivalent to usage by 10,000 persons, a level that can strain the infrastructure in many areas in Malaysia experiencing a boom in data center investment.

**32. The data center industry may provide limited potential for job creation and low domestic value added, although the industry could be a significant source of service exports for Malaysia in the longer term.** While job opportunities exist across various domains associated with data centers, long-term employment creation is limited, with the majority occurring during pre-operations stages. Despite recent announcements by large MNCs claiming substantial job creation from data center investments in Malaysia, most of these facilities generate limited numbers of permanent jobs on-site, although indirect jobs are also created through partnerships with vendors supplying services such as maintenance, repairs, and upgrades. In addition, Malaysia may capture only a limited share of domestic value added from data center investments due to low localization rates. Most of the equipment used in Malaysian data centers is imported, with foreign manufacturers supplying equipment for almost every aspect of data center infrastructure, from power and cooling to networking, computing, and security components. Over the longer term, however, the data center industry could emerge as a significant driver of ICT service exports, particularly through cross-border provision of cloud computing, data hosting, and processing services. At the same time, leasing and utilities expenditures would accrue to domestic entities as local value added, strengthening the linkages with the domestic economy.

**33. Other long-term risks persist, including inadequate retirement savings, climate change, natural disasters, infectious disease outbreaks, and cybersecurity threats.** Most Malaysians lack adequate savings for retirement, notwithstanding recent policy measures to increase retirement savings, such as enhanced voluntary contribution schemes and account restructuring to allocate more funds to long-term savings. As of August 2025, only 23.9 percent of EPF contributors had met their age-aligned basic savings target. Floods in Malaysia have occurred more frequently in the past two decades, inflicting substantial economic damage and loss of life. According to the United Nations Office for Disaster Risk Reduction (UNDRR), sea levels could rise 0.25 to 0.5 meters by the end of the century in Peninsular Malaysia and potentially exceed 1.06 meters in Sabah, which would completely inundate villages in low-lying areas. Malaysia's tropical climate also heightens vulnerability to vector-borne diseases. The risk of another pandemic cannot be downplayed—the United Nations Development Programme (UNDP) predicted the likelihood of a recurrence of another pandemic like COVID-19 within the next 25 years at about 50 percent. In addition, cybersecurity threats pose significant risks to financial stability and broader economic activity, reflecting growing reliance on digital infrastructure and the potential for systemic disruptions.

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<sup>19</sup> <https://www.straitstimes.com/asia/se-asia/johor-rejects-nearly-30-per-cent-of-data-centre-applications-to-protect-local-resources>

## C. Policy Discussions and Recommendations

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### C.1 Preserving Macroeconomic and Financial Resilience

*As trade, financial flows, and technology diffusion become more exposed to geopolitical shocks, credible and well-coordinated macroeconomic policies provide a critical anchor to investor confidence. Supporting growth while maintaining price stability through data-dependent monetary policy, safeguarding external buffers through exchange rate flexibility and adequate FX reserves, and ensuring a sound and well-capitalized financial system will help absorb external shocks. Meanwhile, a robust fiscal framework that balances near-term support with medium-term consolidation is needed to preserve policy space amid elevated public debt.*

#### **Monetary Policy**

**34. Against a backdrop of moderate inflation and resilient growth, the current monetary policy stance remains appropriate.** AMRO staff assessment indicates that the positive output gap in 2025 would narrow in 2026, suggesting that demand-driven inflationary pressures will remain contained even as the economy continues to operate slightly above potential. Estimates of the neutral real interest rate suggest that the current monetary policy stance is broadly neutral. Consistent with this, AMRO's augmented Taylor Rule model also suggests that the current OPR level of 2.75 percent is appropriate, based on staff's growth and inflation projections as well as assumptions on the Fed rate.<sup>20</sup> Overall, the current stance remains consistent with an economy that is operating near potential and well-anchored inflation expectations, while maintaining room to maneuver.

**35. There is space for monetary policy easing should downside risks materialize.** Among the various risks to growth, external demand shocks remain the most salient, such as sharper-than-expected slowdowns in major trading partners. If economic activity slows while inflation remains subdued, BNM has scope to lower the OPR to support growth. BNM should continue to be vigilant and take a data-dependent approach in monetary policy calibration, including closely monitoring household balance sheets. Although the still-elevated household debt is not an immediate concern, given borrowers' strong repayment capacity and a stable median debt-to-service ratio, further rate cuts could encourage leverage and amplify financial vulnerabilities. In this regard, BNM is assessing the impact of the July 2025 rate cut, particularly on private consumption and new loan applications.

**36. At the same time, BNM should stay attentive to upside risks to inflation stemming from external shocks.** In particular, a further escalation of the Middle East conflict could lead to renewed volatility in global energy and commodity prices, which may transmit into domestic inflation through higher fuel, food, and production costs.<sup>21</sup> Should such pressures prove persistent and risk de-anchoring inflation expectations, monetary policy may need to be recalibrated accordingly to safeguard price stability. As such, BNM should continue to closely monitor developments in global commodity markets and their potential spillovers to the domestic inflation outlook.

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<sup>20</sup> The implied policy rate path assumes one cut to the Fed Funds target rate to 3.25-3.50 percent by end-2026.

<sup>21</sup> For instance, higher global gas prices could feed into higher electricity tariffs, though the passthrough is limited by Malaysia's domestic two-tier gas pricing structure, under which tier 1 subject to a price ceiling while tier 2 can be adjusted flexibly. More than 90 percent of gas users fall under tier 1 and hence the inflationary impact is expected to be contained.

### **Authorities' Views**

**37. BNM notes that while global commodity prices may be subject to greater volatility from the ongoing conflict in the Middle East, the impact on domestic inflation is expected to be contained.** BNM highlights that the Malaysian economy is facing external challenges from a position of strength, and it will continue to monitor ongoing developments and assess the balance of risks surrounding the outlook for domestic growth and inflation.

### **FX and Financial Sector Policy**

**38. BNM is encouraged to continue strengthening its foreign reserves buffer and advancing its gradual FX liberalization path as market conditions remain favorable.** Positive external developments in 2025 have supported the unwinding of short forward positions and improved Malaysia's net foreign reserves. Reserve adequacy remains sound, with "decentralized reserves" providing an additional layer of resilience. That said, periods of sustained inflows present an opportune window for BNM to accumulate reserves in a measured manner, balancing the carrying costs against the need to ensure sufficient capacity to smooth future exchange rate volatility. Favorable market conditions also support the continuation of BNM's FX policy liberalization. The full rollout of the Qualified Resident Investor (QRI) program reflects ongoing calibrations in FX policy settings to meet the evolving needs of market participants (Box A). These market-friendly reforms are important for deepening the onshore FX market, enhancing corporate operational and risk-management flexibility, and better facilitating underlying economic activity. While significant progress has been made, scope remains for further liberalization.<sup>22</sup> AMRO staff encourages BNM to maintain its gradual and calibrated approach—aligning FX policy easing with market readiness while maintaining the necessary prudential safeguards to preserve external and financial stability.

**39. To complement efforts on progressive FX liberalization, it is critical to ensure Malaysia's financial system remains resilient and well prepared for future uncertainties.** BNM has made notable progress in recent years, including the planned transition from KLIBOR to the more robust, transaction-based MYOR/MYOR-i benchmarks, as well as efforts to broaden the investor base and deepen domestic markets through the development of Islamic finance, repo markets, and sukuk infrastructure.<sup>23</sup> Going forward, continued enhancements to regulatory frameworks and market development in emerging areas such as digital assets and tokenized financial services will be key to future-proofing Malaysia's financial market architecture while safeguarding financial stability. Active engagement with market participants will remain essential to address implementation challenges, smooth the adoption of new initiatives, and reinforce confidence as Malaysia advances its financial liberalization agenda.

**40. While corporate-sector risks remain broadly contained, it is important to prepare potentially vulnerable firms for increasingly challenging external conditions and persistently elevated cost pressures.** Close monitoring remains warranted for vulnerable firms, especially SMEs, which typically have weaker balance sheets and limited buffers to manage rising input costs. In this regard, BNM has expanded supervisory

<sup>22</sup> BNM has gradually liberalized its FX policy over the past decade, including easing FX conversion rules for exporters, expanding FX hedging flexibility, and providing greater access for multilateral development banks (MDBs) and qualified non-resident development finance institutions (DFIs) to its domestic market.

<sup>23</sup> BNM published a transition roadmap from KLIBOR to MYOR/MYOR-i in 2025, with the aim of ceasing KLIBOR by 1st January 2029.

engagement to include more direct outreach to SMEs to enable timely assessment of credit risks and emerging stress. Looking ahead, efforts to streamline and modernize business processes, including through greater digitalization, should be supported to reduce operating costs. At the same time, viable firms can be encouraged to diversify into new markets through partnerships, expanding income streams and strengthening resilience to shocks.

**41. While the financial system is sound, continued vigilance through periodic reassessment of macroprudential settings would help ensure household credit risks remain contained, particularly given elevated household debt-to-GDP.** This is especially relevant for more highly leveraged and vulnerable households. In this context, continued monitoring of loan-to-value (LTV) regulations and debt-service ratio (DSR) practices could support early identification of emerging risks and reinforce prudent lending standards. AMRO staff commends the authorities for finalizing the Consumer Credit Bill, which closes regulatory gaps by bringing previously unregulated non-bank lenders under supervision, including BNPL providers. At the same time, continuous assessment of nonbank financial institutions (NBFIs) contagion channels is encouraged, given their systemic importance and the potential for rapid shock transmission in volatile environments.

**42. AMRO staff commends the authorities' ongoing efforts to advance the digital finance ecosystem to promote financial inclusion, and encourages timely and appropriate development of related regulatory frameworks.** Under BNM's Financial Sector Blueprint 2022-2026, the progressive commencement of five digital banks and the introduction of the Digital Insurer and Takaful Operator (DITO) framework have significantly expanded access to financial services for traditionally excluded segments (Box B). In parallel, the Securities Commission has broadened access to market-based financing under the Capital Market Masterplan 3 and 4 (CMP3 and CMP4) by introducing more sophisticated structures, such as equity crowdfunding (ECF) and peer-to-peer (P2P) financing, to address the funding needs of MSMEs that lack access to traditional capital markets.<sup>24</sup> These initiatives have also fostered a robust Islamic digital financial services ecosystem, which has not only strengthened Malaysia's position as a global Islamic fintech hub but also contributed to enhancing Shariah-compliant financial inclusion. Going forward, as digital financial services expand, proactive oversight remains essential. Strengthening cybersecurity investment and digital literacy programs is crucial to protect vulnerable groups while ensuring that digitalization leads to sustainable financial inclusion for all.

### ***Authorities' Views***

**43. BNM notes that NBFIs have become increasingly significant within the financial system, though contagion risks are assessed as limited at this juncture.** The NBFIs sector, which accounts for 43 percent of total financial system assets, is closely monitored for potential contagion risks, although its deep linkages with the banking system are currently assessed as manageable. Major entities, such as pension funds and government-linked investment companies, provide a stabilizing investor base for domestic markets. In addition, the upcoming Consumer Credit Commission will further secure this perimeter by regulating non-bank credit providers such as BNPL services.

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<sup>24</sup> Equity crowdfunding: A framework that allows early-stage, SMEs to raise capital from a large number of investors through an online platform in exchange for equity shares. Peer-to-peer financing: A digital platform-based financing method that matches individual or institutional lenders directly with businesses, primarily MSMEs, that are seeking debt financing through investment notes or Islamic investment notes.

**44. BNM says that developments in stablecoins and digital money are being assessed within a framework that emphasizes monetary stability, with the ringgit as the nominal anchor.** Domestic interest in ringgit stablecoins remains limited, supported by efficient retail payment infrastructure. A selective, use-case-driven approach is being pursued, prioritizing ringgit-based solutions and regulated issuers, alongside monitoring of crypto-asset flows and coordination with securities regulators. Asset tokenization is emerging as a targeted innovation, with initial applications in tokenized deposits, capital market settlement, supply-chain finance, and programmable disbursements. Wholesale central bank digital currency (CBDC) remains the envisaged ultimate settlement anchor.

### ***Fiscal Policy***

**45. The government has reaffirmed its commitment toward continued fiscal consolidation over the medium term.** The fiscal deficit has narrowed every year since 2022, reflecting the government's commitment to prudent spending management and revenue mobilization. Under the Medium-Term Fiscal Framework (MTFF) 2026–2028, the deficit is targeted to average 3.2 percent of GDP, while the newly tabled 13th Malaysia Plan (RMK-13) sets a deficit target of 3.0 percent of GDP and a reduction of public debt to 60 percent of GDP by 2030.

**46. Public debt is expected to trend downward over the medium term.** Under current policies, AMRO staff projects that public debt as a share of GDP would decline over the medium term, supported by a narrowing of the primary deficit. Nevertheless, public debt would remain above the statutory 60 percent ceiling by end-2030, exceeding the debt target under the Public Finance and Fiscal Responsibility Act (PFFRA). This underscores the need to carefully assess whether the pace of fiscal consolidation is sufficient to durably restore compliance with the debt ceiling.

**47. The government has taken important steps in enhancing revenue collection.<sup>25</sup>** In the second half of 2025, revisions to the SST were implemented, including higher sales tax rates on selected discretionary and premium goods and the expansion of the service tax to five additional categories with differentiated rates.<sup>26</sup> Although these measures were introduced with a modest delay relative to the original timeline, they lifted tax revenue compared with both the initial budget and 2024 outturns. Despite these gains, the SST retains structural limitations. As a single-stage indirect tax, the SST generates cascading effects along production chains, has a narrow base, contains ambiguities in the classification of taxable goods and services, and imposes compliance and administrative burdens, especially on firms operating across multiple tax rates. Moreover, revenue gains from the SST revisions are expected to fully materialize only in 2026 and plateau thereafter, below the potential that could be achieved under a broad-based consumption tax at a similar rate.

**48. Progress continued on fuel subsidy rationalization, although design choices moderated net fiscal savings.** Fuel subsidy retargeting advanced with the introduction of

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<sup>25</sup> Revenue measures that have been implemented since 2022 include the Tax Identification Number (TIN), prosperity tax of 33 percent for companies earning more than MYR100 million, excise duties on pre-mixed products and e-cigarettes/vape products, capital gains tax on unlisted shares, sales tax on low-value goods, and an increased service tax rate.

<sup>26</sup> Under the revised sales tax, essential goods such as basic food items, medicines, and construction and agricultural inputs remain zero-rated, while selected discretionary goods were subjected to a 5 percent rate and premium or luxury items to 10 percent. The service tax was expanded to five additional categories: leasing and rental, construction, financial services, private healthcare and education with differentiated rates ranging from 6 to 8 percent.

BUDI95, a more targeted subsidy scheme for RON95 petrol. Lower-than-budgeted global oil prices and currency appreciation in 2025 provided fiscal space that enabled a less ambitious reform design. The subsidized retail price was set below the previous subsidized level—which was already among the lowest in the region—while the monthly consumption quota was set above average household usage and eligibility was extended to all Malaysians rather than income-targeted as originally planned.<sup>27</sup> Part of the potential savings was also used to finance a one-off universal cash voucher and an expansion of targeted social assistance, resulting in net outlays slightly above the budgeted level. Nevertheless, the largely effective rollout of RON95 retargeting reduced leakages, faced limited public resistance, and contributed to lower subsidy and social assistance spending compared with 2024.

**49. AMRO staff recommends the government to continue with its planned fiscal consolidation while preserving flexibility for targeted support should macroeconomic conditions worsen.** Public debt remains elevated than pre-pandemic levels and is projected to stay above the statutory debt ceiling through 2030, underscoring the need for a larger primary adjustment. Meanwhile, spillovers from the ongoing Middle East conflict may weigh on growth. Accordingly, staff recommends adhering to the consolidation path set out in Budget 2026, while remaining prepared to deploy targeted measures, such as additional cash transfers, to support vulnerable households if needed.

**50. Fiscal consolidation should prioritize refining the RON95 subsidy framework to reduce exposure to oil price shocks.** The government's commitment to reduce reliance on Petronas dividends is a welcome step toward making revenue less sensitive to oil price fluctuations, although the recent oil price spike could complicate implementation while maintaining fiscal target. Expenditure will remain exposed through higher fuel subsidy outlays under the existing BUDI95 mechanism, which limits automatic pass-through from global oil price changes. While further tightening will take time and face implementation constraints, introducing a subsidy ceiling combined with greater price flexibility would provide an important backstop to contain fiscal risks during oil price spikes. Further refinements that are operationally feasible should be prioritized, such as phasing out eligibility for higher-income households and recalibrating the monthly consumption quota to be in line with the average of target households, particularly in response to rising global oil prices due to the conflict in the Middle East.<sup>28</sup>

**51. Additional savings from the refinement of fuel subsidy mechanism should be used to preserve high-impact public spending.** Fiscal consolidation can be made more growth-friendly by rechanneling part of these savings toward development expenditure (DE).<sup>29</sup> Reallocation to DE should prioritize high impact areas such as education, where spending has fallen below its historical average; healthcare, to improve service standards amid population aging; and productivity-enhancing infrastructure to narrow infrastructure gaps. In addition, part of the savings can fund targeted support for vulnerable households

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<sup>27</sup> The scheme provides all Malaysian adults, irrespective of income, with a monthly quota of 300 liters, which is well above estimated average household petrol consumption of around 120 liters based on administrative and survey indicators.

<sup>28</sup> AMRO staff estimates that excluding the top 20 percent income group (T20) from the BUDI95 program could generate additional savings of about 0.5 percentage point of GDP. Based on the government's estimates, T20 enjoys 53 percent of fuel subsidies.

<sup>29</sup> DE declined from 4.6 percent of GDP in 2023 to 4.0 percent in 2025, with cumulative spending over 2021-2025 reaching MYR382.9 billion, below the MYR417.6 billion target set in RMK-12. This pattern is expected to continue in 2026, with the DE budget to decline further to 3.8 percent of GDP, the lowest since 2020.

affected by rising cost of living amid oil price volatility, while keeping the overall deficit on track.

**52. Ongoing tax administration reforms should continue, notably the phased rollout of e-invoicing, coupled with measures to reduce outstanding tax refunds.** The phased rollout of e-invoicing is welcome and has delivered encouraging early results, with the number of registered income taxpayers rising by more than 10 percent. Meanwhile, outstanding tax refunds increased from around 1.0 percent of GDP in 2020 to 1.7 percent in 2024, largely reflecting tax exemptions given during the COVID-19 pandemic. The government has addressed the outstanding tax refunds by doubling the yearly allocation for tax refunds in 2025, and has pledged to settle outstanding refunds for returns filed in 2023 by the first quarter of 2026, giving priority to refunds for SMEs. Strengthening service standards for tax refund processing and improved coordination between risk-based audit verification and public cash management would be essential to lock in gains from tax administration reforms and improve the overall business environment. Over time, these improvements would strengthen tax authorities' credibility, paving the way for more ambitious tax policy reforms.

**53. AMRO staff welcomes the government's focus on governance reforms.** The enactment of the Government Procurement Act (GPA) and the Public Service Efficiency Commitment (ILTIZAM) Act in 2025 is a positive step that could generate medium-term efficiency gains. The GPA can improve value for money in public procurement by reducing cost overruns, project delays, and governance risks, while the ILTIZAM Act provides a framework to improve regulatory processes, raise public service standards and enhance performance accountability. The government is encouraged to expedite implementation, as effective execution of public sector reforms would not only strengthen spending efficiency but also build public support for broader structural reforms. Ongoing plans to introduce new legislations to govern state-owned enterprises and subsidiaries of statutory bodies, and to establish an ombudsman body to improve public sector governance, transparency, and accountability, are welcomed.<sup>30</sup>

**54. Over the medium term, AMRO staff recommends anchoring consolidation through stronger and more sustainable revenue mobilization.** Recent gains from tax mobilization and compliance are welcome, but they are expected to taper off from 2027. Malaysia's revenue base remains structurally low relative to peers and insufficient to keep up with rising spending pressures, especially with population aging and a predominantly tax-financed health system. There is scope to broaden the tax base and enhance revenue buoyancy, primarily via the rationalization of tax expenditures and further reform of consumption tax. Reintroducing a broad-based goods and services tax (GST), once conditions permit and accompanied by adequate compensatory measures for vulnerable households, would provide a more sustainable and growth-friendly revenue source. Stronger revenue mobilization would reduce reliance on volatile non-tax revenues, create durable fiscal space, and support debt reduction while preserving priority for development and social spending.

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<sup>30</sup> The government has announced plans to introduce the SOE Bill and the Ombudsman Bill in 2026. The former aims to improve the corporate governance of state-owned enterprises (SOEs) and subsidiaries of statutory bodies, while the latter will establish a Malaysian Ombudsman body as a central agency to manage and resolve public complaints, with a broader mandate covering public sector misconduct, whistleblower protection, and freedom of information.

### **Authorities' Views**

**55. The MOF agrees that fiscal consolidation should continue as planned, and emphasizes the need for a balanced approach.** According to the MOF, the current consolidation plan strikes a balance between maintaining fiscal discipline and supporting economic resilience amid heightened trade uncertainty. The MOF also highlights progress in revenue mobilization and structural fiscal reforms, including the transition of the civil service pension system toward a defined-contribution framework for new entrants to help contain long-term fiscal liabilities.

**56. The MOF agrees that further subsidy rationalization remains a priority, but emphasizes that reforms should be designed to minimize cost-of-living pressures.** The MOF notes that the BUDI95 petrol subsidy rationalization represents a first step toward a more targeted fuel subsidy regime and indicates openness to greater pricing flexibility for RON95, with further reforms to be pursued in a calibrated manner. The MOF also expresses confidence that adequate tools are in place to implement further targeting, including administrative mechanisms to better identify eligible recipients. Looking ahead, the MOF indicates that other blanket subsidies, such as sugar, cooking oil, and rice, will be gradually retargeted while maintaining protection for vulnerable households.

**57. On revenue, the MOF views the SST regime as a sustainable source of fiscal revenue.** The MOF notes that, since 2024, SST collections have exceeded nominal levels recorded under the 2015-2018 GST regime. Following the rate increase in 2024, as well as further base expansion and rate adjustments in 2025, SST collections have recorded double-digit growth annually. The MOF expects the gains from these SST measures to be sustained over the medium term.

**58. There are no immediate plans to replace the SST, with the focus instead on strengthening tax administration and revenue mobilization.** In particular, the ongoing rollout of e-invoicing is expected to enhance compliance, with more than 200,000 firms participating in e-invoicing since its implementation in August 2024, and over a billion e-invoices issued. The MOF emphasizes that leveraging the information generated through e-invoicing will be central to improving revenue performance.

### **C.2 Building Domestic Capabilities while Strategically Navigating Geoeconomic Fracturing**

*Malaysia has emerged as a key beneficiary of global chain reconfiguration, reflected in the current investment upcycle. Policies to sustain investment beyond trade diversion and geopolitical hedging—including industrial upgrading, skills development, and stronger SME integration—would support a virtuous cycle of income growth, consumption, and investment as well as enhance economic resilience to future shocks. Meanwhile, a calibrated approach to geopolitical engagement—anchored in neutrality, rules-based openness, and diversification of trade, investment, and technology partners—can help mitigate exposure to decoupling risks.*

### **Structural Policy**

**59. The current investment upcycle in Malaysia reflects a confluence of global realignments and domestic reforms, creating a strategic opportunity to move up global value chains.** Malaysia is undergoing an investment upcycle—the fourth in its

modern history—but this cycle differs fundamentally in its structural drivers and composition.<sup>31</sup> While earlier cycles were driven largely by export-led manufacturing and physical infrastructure, the current wave is anchored by long-term structural forces. Heightened geopolitical tensions have prompted MNCs to diversify production away from single-country concentration, while the global AI boom has increased demand for reliable and cost-competitive locations. Malaysia has emerged as a natural beneficiary, supported by a deep electronics ecosystem, trade openness, and initiatives such as the Johor-Singapore Special Economic Zone, which enhances cross-border production integration, access to capital and talent, and scale efficiencies. Restored political stability following significant turbulence during 2018-2022, coupled with national frameworks such as NIMP 2030, NSS, and NETR, has further improved policy clarity.<sup>32</sup> These factors have catalyzed a surge in investment with higher technological content that—if harnessed effectively—offers a critical window of opportunity to accelerate industrial upgrading, productivity growth, and income convergence.

**60. The primary purpose of sustaining the current investment upcycle is to lift Malaysia’s medium- to long-term growth potential.** This window provides an opportunity to raise productivity through capital deepening, technology diffusion, and skills upgrading, while accelerating movement into higher value-added segments of global value chains, particularly in E&E, semiconductors, and digital-enabled activities. This, in turn, raises demand for skilled labor, supports the creation of better-quality jobs, and strengthens wage growth through higher labor productivity rather than labor expansion alone. By embedding advanced manufacturing and digital capabilities more deeply across sectors, the upcycle can shift the economy onto a higher potential growth trajectory with more durable gains in employment and incomes.

**61. Sustaining the ongoing investment upcycle will require policies that deepen domestic linkages, address emerging constraints, and anchor investor confidence beyond cyclical or geopolitical factors.** While recent investment has been driven by trade diversion and renewed interest in Malaysia’s role in regional supply chains, durability will hinge on improving investment quality rather than scale alone. Policies should focus on strengthening human capital by attracting and retaining high-skilled talent and aligning education and training with industry needs. Targeted supplier development programs, such as matching grants for technology upgrading and quality certification, can help SMEs meet standards of MNCs and integrate into higher tiers of global value chains. Improving access to finance, including through credit guarantees, blended finance, and venture capital, would enable SMEs to undertake productivity-enhancing investments. Addressing infrastructure bottlenecks—especially in power grid capacity and water availability—will be critical to accommodate energy-intensive and technology-driven investments. In this regard, AMRO staff commends the authorities’ coordinated efforts to develop the data center industry in a sustainable manner (Selected Issue 1).<sup>33</sup> Sarawak’s abundant and low-carbon energy

<sup>31</sup> Malaysia has experienced four structural investment upcycles: 1968–1980, laying the industrial foundation through import substitution and early manufacturing; 1987–1997, marked by an export-led industrial take-off driven by E&E and FDI; 2010–2014, characterized by domestic and infrastructure expansion led by GLCs; and 2021–present, defined by a high-tech investment wave encompassing AI, semiconductors, and renewable energy.

<sup>32</sup> These masterplans and blueprints are anchored in the MADANI Economic Framework, which is Malaysia’s overarching policy narrative introduced by the Anwar government in 2023 to guide medium-term economic reforms. The core pillars focus on raising economic complexity, accelerating investment, energy transition and sustainability, income growth and inclusiveness, and governance and fiscal reform.

<sup>33</sup> In November 2024, the Data Center Planning Guidelines were issued to standardize site selection, planning permission, and operational control for construction. To attract investment by companies with sustainability requirements or priorities, the Guidelines for Sustainable

resources can also help alleviate energy constraints for large-scale and green investments (Selected Issue 2).<sup>34</sup> A predictable and transparent regulatory environment, including clear guidelines on data governance, environmental standards, and investment incentives, would reduce policy uncertainty and support long-term planning.

**62. Building domestic capabilities in strategic industries—particularly semiconductors and rare earth elements (REE)—would help Malaysia move up global value chains.** As global supply chains fragment under intensifying geopolitical tensions, countries that can offer both production capacity and strategic relevance are better positioned to attract durable, high-quality investment. Malaysia’s established role in semiconductor assembly, testing, packaging (ATP) and, increasingly, design-related activities positions it as a critical and trusted node in global supply chains, while the country’s vast REE deposits can reduce global concentration risks and support downstream manufacturing in electronics, electric vehicles, and clean energy technologies. Developing these sectors will enhance secure access to critical materials and bolster higher value-added semiconductor production.

**63. Strengthening the semiconductor ecosystem will require building on recent initiatives while closing gaps in advanced capabilities, talent, and innovation.** The government has earmarked at least MYR 25 billion in targeted fiscal support to operationalize the NSS, including tax incentives, capital grants, and funding for human capital development.<sup>35</sup> Since the NSS launch in May 2024, Malaysia has made some progress in moving beyond its traditional strengths in ATP by establishing chip design parks in Selangor and entering into strategic collaborations, most notably to access advanced semiconductor design blueprints and develop domestic capabilities in intellectual property and innovation.<sup>36</sup> With increasing demand for heterogeneous integration and chiplet-based architectures due to physical limitations of traditional chipmaking,<sup>37</sup> policies should prioritize scaling up advanced packaging capabilities, including by investing in specialized talent and fostering closer research and development (R&D) collaboration among MNCs, local suppliers, and research institutions.

**64. Policies to overcome regulatory, environmental, and technological constraints are essential for developing the REE sector.** Malaysia’s REE deposits—estimated to be worth over USD200 billion—are primarily found in the east coast states of Terengganu, Kelantan, and Pahang. The government aims to move beyond raw material exports toward high-value downstream processing.<sup>38</sup> However, further progress is constrained by environmental concerns, regulatory uncertainty, and gaps in processing technology and skilled manpower. Extraction carries environmental costs, particularly deforestation and pollution risks. Coordination between federal and state authorities is

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Development of Data Centers, issued in December 2024, outline parameters that measure efficiency. More recently in July 2025, the Data Center Framework was announced as an overarching set of guidelines for strategic coordination, regulatory approval, and sustainability for all new projects and expansion of existing ones.

<sup>34</sup> Sarawak has secured in-principle approval to supply electricity to Peninsular Malaysia, but technical surveys involving Indonesia need to be conducted before feasibility studies can begin since the transmission corridor would cross Indonesian land or waters.

<sup>35</sup> National Semiconductor Strategy: [https://www.miti.gov.my/miti/resources/NSS\\_141024.pdf](https://www.miti.gov.my/miti/resources/NSS_141024.pdf)

<sup>36</sup> Malaysia has signed a USD250 million deal with Arm Holdings, a UK-based chip architecture firm, to enable local chip design firms to produce their own semiconductors in the next five to ten years as demand for AI and data centers grow.

<sup>37</sup> As physical and economic limits constrain further miniaturization of traditional monolithic chips, the industry is increasingly shifting toward heterogeneous integration and chiplet-based architectures, which allow different components to be manufactured separately and combined through advanced packaging to improve performance, cost efficiency, and flexibility.

<sup>38</sup> Malaysia is home to the largest heavy rare earth processing plant outside China. The plant is operated by the Australian firm Lynas, which is partnering with Korean manufacturer JS Link to produce up to 3,000 tonnes of super magnets annually.

critical as states control mining rights, while the federal government has oversight over exploration and technical aspects. In addition, Malaysia lacks the advanced technology required to separate and refine REE into usable components, with such specialized capabilities dominated by China. Policies should therefore focus on establishing a coordinated framework for exploration, strict environmental safeguards, and entering into strategic partnerships with firms that can facilitate technology transfer.

**65. A more durable investment cycle can also strengthen Malaysia's resilience and shock-absorbing capacity by improving the economy's structure and policy space.** How can sustained investment reduce vulnerability to external shocks? First, when investment is anchored in higher value-added activities and supported by strong local supplier networks, production becomes less dependent on a narrow set of foreign inputs or markets. Second, raising productivity and income levels enhances macroeconomic buffers by strengthening consumption resilience during downturns while improved firm profitability reduces the need for large layoffs or investment pullbacks. This dampens second-round effects on the banking system and public finances, reinforcing overall financial stability. Third, broadening the investment base across sectors and technologies reduces concentration risk to sector-specific shocks. Finally, higher trend growth, stronger fiscal revenues, and a more resilient external position improve the government's and central bank's ability to deploy countercyclical policies during economic slowdowns without undermining macroeconomic stability.

**66. Malaysia must strategically position itself to manage risks and opportunities arising from US-China strategic competition.** Intensifying strategic competition between the world's two largest economies, particularly in trade, technology, and national security-linked sectors, creates both challenges and opportunities for Malaysia given its deep economic ties with both nations. Malaysia's longstanding non-aligned foreign policy stance, high trade openness, and established manufacturing ecosystem together position it well to benefit from trade and investment diversion. On the other hand, export controls, technology restrictions, and heightened scrutiny over rules of origin and transshipment practices increase compliance costs and policy complexity. To navigate these tensions, policy priorities should focus on preserving an inclusive, rules-based, and open trading and investment environment. Enhancing regulatory credibility and transparency as well as upgrading customs and enforcement capabilities will help mitigate reputational and sanction risks.

**67. Although the US and China are critical demand markets, Malaysia's broader regional linkages are also important.** Malaysia has strong incentives to maintain geopolitical neutrality amid US-China tensions as both economies together account for more than one-quarter of total Malaysian exports. However, ASEAN+3 excluding China collectively account for a larger share of exports, at almost 60 percent. A diversified external engagement strategy therefore functions as an economic hedging strategy to preserve market access and reduce exposure to trade retaliation or technology restrictions, while keeping Malaysia attractive as a supply chain node for firms serving multiple end markets.

**68. Diversifying external partnerships while building domestic capabilities in strategic sectors will enhance Malaysia's resilience amid rising geopolitical fragmentation.** Semiconductors and REE have become focal points of industrial policy,

elevating their strategic importance beyond purely commercial considerations to matters of supply chain security and technological sovereignty. Strengthening domestic capabilities in these sectors would reduce reliance on any single technology ecosystem. Furthermore, to reduce vulnerability to geopolitical tensions and demand fluctuations, Malaysia should actively diversify trade, technology, and financial partners beyond the two major powers through deepened ASEAN+3 integration and other bilateral and regional trade and investment agreements. For instance, greater use of frameworks such as the Regional Comprehensive Economic Partnership (RCEP) and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), or new free trade agreements can diversify export markets toward East Asia, South Asia, the Middle East, and Europe, reducing exposure to demand or policy shocks from any single economy. Technology partnerships with Japan, Korea, Taiwan Province of China, and the EU—especially in advanced packaging, chip design, materials engineering, and green technologies—can facilitate technology transfer and reduce dependence on a narrow set of suppliers.

**69. Deeper integration with ASEAN+3 requires a shift from trade-centric policies toward coordinated production, capability-building, and institutional alignment to anchor Malaysia more firmly in regional value chains.** Policy priorities should focus on facilitating cross-border investment and task-level specialization through harmonized standards, mutual recognition of skills and certifications, and cumulation-friendly rules of origin that allow firms to fragment production efficiently across the ASEAN+3 region. Strengthening physical and digital connectivity—ports, logistics, customs digitalization, and data infrastructure—will be essential to reduce trade costs and support production networks. At the same time, Malaysia should leverage ASEAN+3 partnerships for technology transfer and upgrading by promoting joint R&D platforms and co-investment vehicles that link multinational anchor firms with domestic SMEs. Financial integration, including expanded use of local-currency financing, regional bond markets, and development finance institutions, can help mobilize long-term capital while reducing exposure to volatile external funding.

### ***Authorities' Views***

**70. The authorities remain committed to addressing long-term structural challenges and supporting industrial upgrading in line with NIMP2030, NETR, and other national strategies.** Key priorities include addressing talent and skills shortages, particularly in the E&E sector; enhancing collaboration between industry, government, and academia; and increasing investment in R&D and innovation. Complementary measures focus on raising productivity and wages, strengthening social protection, advancing climate and green growth policies, refining investment incentives, and developing workforce readiness through digital skills and progressive wage reforms, all aimed at fostering a more competitive, resilient, and inclusive economy.

**71. The Malaysian government advocates a non-aligned and pragmatic foreign policy amid intensifying US–China strategic competition.** The government emphasizes that it seeks to maintain constructive relations with the United States and China concurrently, drawing on ASEAN's tradition of neutrality to support open trade, diplomacy, and economic cooperation.

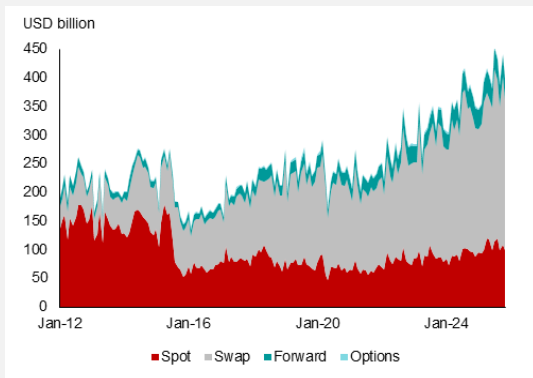
**Box A. Malaysia's Ongoing FX Liberalization Efforts<sup>39</sup>**

**BNM announced a full rollout of the qualified resident investor (QRI) program in June 2025, following the success of the pilot program introduced in April 2024.** Under the QRI framework, qualified and enrolled resident corporates may undertake future direct investment abroad without prior approval from BNM, up to the amount of eligible foreign currency funds (FCY) that have been repatriated and converted onshore.<sup>40</sup> The program is designed to encourage sustained two-way capital flows into the domestic market by providing flexibility for resident corporates that have accumulated significant foreign currency income from overseas investments, partly due to regulatory limits on outward direct investment.<sup>41</sup>

**This new flexibility promotes the recycling of foreign income within Malaysia's financial system.** By facilitating the repatriation and conversion of overseas earnings into the Malaysian ringgit, the initiative deepens onshore liquidity while preserving resident corporates' flexibility to redeploy capital for future overseas direct investments. The program has gained good traction among larger resident corporates, which are typically more constrained by outward investment limits.

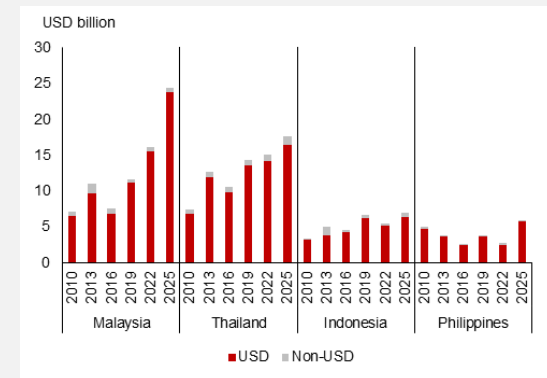
**The QRI program forms part of Malaysia's broader efforts to progressively liberalize its foreign exchange policy framework.** Other initiatives include easing FX conversion requirements for exporters, expanding FX hedging flexibility for resident and non-resident market participants, and widening access for multilateral development banks (MDBs) and qualified non-resident development finance institutions (DFIs) to participate in Malaysia's domestic market. Collectively, these reforms aim to deepen and broaden participation in onshore financial markets while strengthening financial resilience among market participants through improved cash flow management and risk management flexibility. These initiatives reflect BNM's calibrated and sequenced approach toward FX policy liberalization, where adjustments are introduced gradually based on market feedback and evolving economic conditions. Onshore FX trading volumes have more than doubled since 2016, accompanied by increased usage of derivatives such as FX swaps, reflecting deeper onshore liquidity and more active risk management practices by market participants (Figure A1).

**Figure A1. Malaysia's Onshore Monthly FX Turnover by Instrument**



Source: BNM

**Figure A2. Over-the-Counter FX Turnover by Economy and Currency Pair**



Source: Bank for International Settlements; AMRO staff calculations  
Note: The figure uses the daily average of reported turnover in April.

**The benefits of FX policy liberalization can be amplified through regional coordination and collaboration.** Like Malaysia, regional peers have pursued FX policy reforms over time, although regulatory approaches have varied across economies, reflecting differences in the level of financial market development and policy priorities. While these reforms have broadly contributed to deeper onshore markets across the ASEAN-4 economies, more than 90 percent of FX turnover still involves the US dollar on one side of the transaction, underscoring its dominant role as a vehicle currency in the

<sup>39</sup> Prepared by Yin Fai Ho, Associate Economist.

<sup>40</sup> Under the QRI program, resident corporates are required to submit a one-off registration with BNM for approval. Enrolled participants must repatriate and convert eligible foreign currency funds within a specified window, which determines the amount eligible for future reconversion for outward direct investment.

<sup>41</sup> Resident corporates with domestic ringgit borrowing are subject to a MYR50 million annual limit on foreign currency investments, with amounts beyond the threshold subject to prior approval from BNM.

region. (Figure A2). Reducing reliance on the US dollar and promoting the direct use of local currencies in cross-border transactions can lower transaction costs and currency risks for businesses, while supporting intraregional trade and investment (AMRO 2023). However, divergences in regulatory frameworks and operational standards across jurisdictions may constrain broader adoption of local currency settlement (BNM 2024). To this end, BNM has worked closely with the central banks of Indonesia and Thailand to enhance the scope of the Local Currency Transaction Framework (LCTF), with the aim of harmonizing regulatory guidelines and facilitating wider direct settlement in local currencies for cross-border transactions.<sup>42</sup>

**The emergence of digital forms of money, including stablecoins and tokenized deposits, presents new considerations for Malaysia's FX policy framework.** While these innovations may generate efficiency gains by reducing cross-border settlement costs and improving transaction speed, they could also challenge the effectiveness of existing FX policy rules by altering the channels and transparency of cross-border flows, potentially complicating the monitoring and enforcement of FX policy regulations (He et al. 2022). To better navigate the developments in this emerging space while promoting financial innovation, BNM has stepped up efforts through the establishment of the Digital Asset Innovation Hub (DAIH) and the issuance of a discussion paper on asset tokenization.<sup>43</sup> Although still at a nascent stage, these initiatives provide a platform for BNM to evaluate the operational and regulatory implications of digital assets, helping to inform future refinements to the FX policy framework.

**Moving forward, continued recalibration of FX policy in line with evolving needs of the economy can further strengthen the efficiency and resilience of Malaysia's financial markets.** Greater FX policy flexibility improves capital allocation efficiency and supports investment flows, while promoting the wider use of hedging instruments and local currency settlement to manage currency risks more effectively. Although a deeper domestic market enhances shock-absorption capacity and supports orderly market conditions, greater financial openness may increase sensitivity to global financial conditions and volatile capital flows, potentially amplifying balance sheet pressures. It is therefore essential that FX liberalization proceeds in a gradual and well-sequenced manner, underpinned by strong prudential safeguards and robust macro-financial frameworks. At the same time, regulatory frameworks in emerging areas such as digital assets should continue to be strengthened to ensure FX policy effectiveness is preserved as the financial system modernizes.

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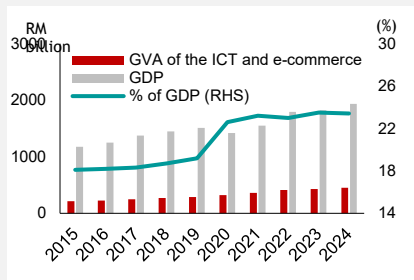
<sup>42</sup> Under the LCTF, businesses and individuals may transact and convert directly in participating local currencies for trade and investment purposes, and access local currency financial products through Appointed Cross-Currency Dealers (ACCDs). The ACCD network has been progressively expanded to broaden customer access and enhance local currency liquidity.

<sup>43</sup> The DAIH is a structured experimentation platform to promote responsible financial innovation in the digital asset space. It provides a controlled environment for testing selected digital asset use cases, including ringgit stablecoins and tokenized deposits, while assessing their operational, legal, regulatory, and financial stability implications.

**Box B. Digital Finance Innovation and Financial Inclusion in Malaysia<sup>44</sup>**

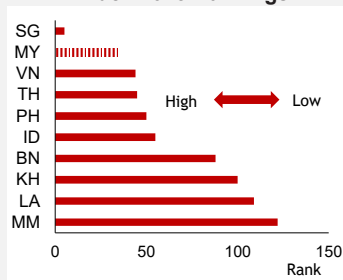
Malaysia has positioned the digital economy as a central pillar of its national growth strategy. The gross value added of the information and communication technology (ICT) and e-commerce sectors reached MYR451.3 billion in 2024, equivalent to 23.4 percent of GDP (Figure B1). The government has promoted digital transformation through the Malaysia Digital Economy Blueprint (MyDIGITAL) launched in 2021, complemented by BNM’s Financial Sector Blueprint 2022–2026 and the Securities Commission’s Capital Market Masterplan 3 and 4 (SC CMP3 and CMP4), with a focus on fintech ecosystem development and financial inclusion. As a result, Malaysia ranks among the leading digital economies in ASEAN – placing 34th globally in the Global Innovation Index (GII) and 38th in the Network Readiness Index (NRI), second in ASEAN on both measures behind only Singapore (Figures B2, B3).<sup>45</sup>

**Figure B1. ICT Contribution to Economy**



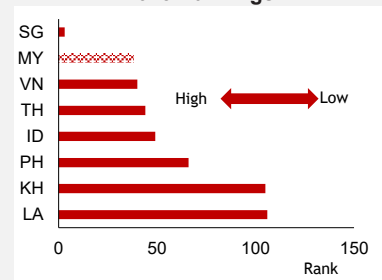
Source: Department of Statistics Malaysia; AMRO staff calculations

**Figure B2. Global Innovation Index 2025 Rankings**



Source: Global Innovation Index Database by The World Intellectual Property Organization  
Note: SG = Singapore, MY = Malaysia, VN = Vietnam, TH = Thailand, PH = Philippines, ID = Indonesia, BN = Brunei, KH = Cambodia, LA = Lao PDR, MM = Myanmar

**Figure B3. Network Readiness Index 2025 Rankings**



Source: Network Readiness Index 2025 by Portulans Institute  
Note: SG = Singapore, MY = Malaysia, TH = Thailand, VN = Vietnam, ID = Indonesia, PH = Philippines, LA = Lao PDR, KH = Cambodia

**The launch of digital banks targeted at underserved segments has enhanced financial inclusion through innovative service delivery.** Under BNM’s licensing framework, digital bank applicants are required to focus on underserved and unserved customers, including low-income households (B40), micro, small, and medium enterprises (MSMEs), and gig workers. Following this policy direction, five digital banks had all begun operations by August 2025, starting from September 2023. These banks offer fully digital account opening and simplified credit products, which have gained traction among younger users and financially underserved populations (Table B1). Notably, about 60 percent of digital bank customers come from segments that previously had limited access to traditional banking services, underscoring the role of digital banking in advancing financial inclusion. In parallel, BNM introduced the Digital Insurer and Takaful Operator (DITO) framework in July 2024 to facilitate the entry of players that can deliver strong and meaningful value propositions of inclusion, competition, and efficiency for Malaysian financial consumers.

**Table B1. Overview of Malaysia’s Five Digital Banks**

Bank	License	Commence Date	Major Shareholders	Targeted Clients
GXBank	Conventional	Sep 2023	Grab Holdings, Kuok Group	B40 & Gig economy workers
Boost Bank	Conventional	Jan 2024	Axiata Group, RHB Banking Group	MSMEs, SMEs
AEON Bank	Islamic	May 2024	AEON Financial Service, AEON Credit Service	Muslim (and non-Muslim), SMEs
KAF Digital Bank	Islamic	Aug 2025	KAF Investment Bank	Muslim (and non-Muslim)
Ryt Bank	Conventional	Aug 2025	YTL Corporation, Sea Group	Retail users (AI-driven banking)

Source: Official websites of respective banks

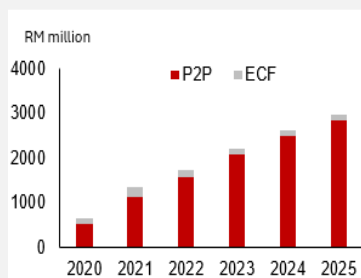
<sup>44</sup> Prepared by Bora Lee, Senior Economist.

<sup>45</sup> Global Innovation Index (GII): An international index that tracks technological breakthroughs, new business models, social initiatives, and systemic transformations, highlighting how innovation reshapes economies and societies.  
Network Readiness Index (NRI): An index that measures a country’s capacity to leverage ICT through four pillars—Technology, People, Governance, and Impact—each derived from normalized and weighted indicators.

**Online capital-raising platforms promoted by the SC have played a significant role in easing financing constraints faced by MSMEs.** Equity crowdfunding (ECF) and peer-to-peer (P2P) financing have emerged as alternative funding channels for startups and MSMEs with limited access to bank lending. In line with CMP3, CMP4 and the Five-Year Roadmap for MSME and MTC Capital Market Access, these platforms have evolved toward refined investment structures. In 2025 alone, funds raised through ECF and P2P platforms grew by 14 percent to MYR3.0 billion, bringing cumulative funds raised to over MYR11.5 billion and benefiting more than 20,000 enterprises (Figure B4). The implementation of secondary ECF trading through the pitchIN Secondary Trading Market (PSTX) system has revitalized the platform, while the active participation of institutional investors and government matching funds such as MyCIF has helped professionalize the market.<sup>46</sup> In addition, from January 2025, P2P financing was also enabled under the government procurement financing scheme, improving MSMEs’ access to working capital.

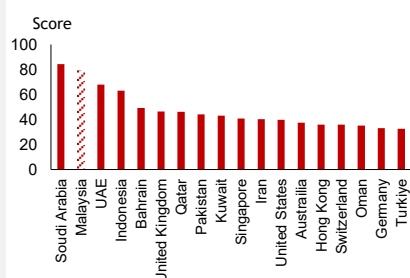
**As a global Islamic finance hub, Malaysia has integrated fintech into Islamic finance while expanding financial inclusion.** Malaysia ranks first on the Islamic Finance Development Index (IFDI) and second – behind Saudi Arabia – on the Global Islamic Fintech Index, reflecting the strength of its digital Shariah-compliant financial ecosystem (Figure B5).<sup>47</sup> In terms of transaction volumes, Malaysia is among the top three Islamic fintech markets globally (Figure B6). Regulatory support for Shariah-compliant digital finance is reflected in the licensing of AEON Bank and KAF Digital Bank as Islamic digital banks. Malaysia also hosts Islamic fintech firms operating across digital payments, ECF, P2P financing, and initial exchange offerings (IEOs).<sup>48</sup> In 2024, Islamic financing accounted for around 30 percent of total ECF and P2P funding, providing an additional channel for startups and MSMEs to access Shariah-compliant capital. In parallel, IEO platforms such as Kapital DX have enabled asset tokenization, allowing smaller investors to participate in large-scale projects. Going forward, the DITO framework is expected to support the development of micro-insurance and micro-takaful solutions, strengthening risk protection for low-income groups.

**Figure B4. Funds Raised on ECF and P2P Platform**



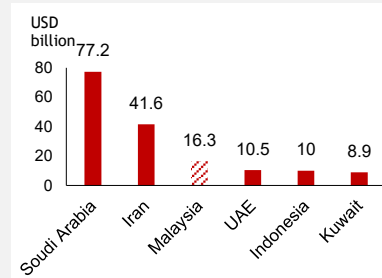
Source: SC

**Figure B5. Top 20 Countries by GIFT Index Scores**



Source: Global Islamic FinTech Report 2025/26 by DinarStandard

**Figure B6. Top 6 Islamic Fintech Market Size**



Source : Global Islamic FinTech Report 2025/26

**The expansion of e-wallets and electronic payments has transformed financial access and consumer payment behavior.** Government initiatives such as eTunai Rakyat helped catalyze early adoption, while the standardization of QR payments under DuitNow QR enabled interoperability between bank applications and e-wallets, supporting digital payment adoption among micro and small merchants.<sup>49</sup> The number of QR-enabled merchants grew from around 300,000 in 2019 to more than 2.6 million in 2024. The Retail Digitalization Initiative (ReDI), which provides targeted support to rural micro-merchants, has been particularly effective – onboarding 22,368 participants by May 2025. This exceeded

<sup>46</sup> PSTX is a secondary trading market operated by pitchIN that allows existing investors to trade shares of ECF companies.

<sup>47</sup> IFDI is a composite index developed by Refinitiv and the Islamic Corporation for the Development of the Private Sector (ICD), measuring the overall development of Islamic finance across countries. It is calculated based on five weighted components—quantitative data on Islamic finance institutions and activities (quantitative development), financial performance, governance, sustainability, awareness and knowledge. and covers 140 countries as of 2025.

The Global Islamic Fintech Index is constructed based on 19 indicators across five categories—talent, regulation, infrastructure, Islamic fintech market & ecosystem, and capital—with the Islamic fintech category assigned the highest weight to reflect a country’s conduciveness to Islamic fintech development. The index provides an overall ranking of 64 countries. Malaysia had ranked first consecutively from the introduction of the index in 2021 through 2023.

<sup>48</sup> IEOs are SC-regulated platforms that facilitate the issuance and offering of digital tokens within a strictly governed environment.

<sup>49</sup> The eTunai Rakyat program was a government initiative launched in January 2020 to promote cashless payments and digital adoption among Malaysians. Each eligible citizen received RM30 in participating e-wallets (such as Touch ‘n Go eWallet, GrabPay, and Boost), co-implemented by the MOF and BNM through PayNet’s DuitNow ecosystem. A subsequent initiative, ePemula, introduced in 2022, provided MYR150 in e-wallet credit to eligible youths to further accelerate digital payment adoption and support the post-pandemic recovery of the retail sector.

the RMK-12 target of 15,000 and significantly narrowed regional gaps in financial inclusion.<sup>50</sup> In addition, buy-now-pay-later (BNPL) services such as Atome, Grab PayLater, and Shopee PayLater have expanded rapidly, particularly among younger consumers. Owing to the convenience of making small installment purchases without a credit card, BNPL adoption has grown strongly among populations with limited access to traditional banking services. The market has recorded annual growth exceeding 50 percent, with active users reaching 6.5 million as of the first half of 2025, making up 27 percent of the adult population.

**Going forward, Malaysia’s transition to the next stage of digital finance and financial inclusion will hinge on addressing three key challenges: fintech profitability pressures, escalating cybersecurity and fraud risks, and gaps in regulatory and consumer protection frameworks.**

- First, profitability pressures persist among fintech firms. Business models targeting low-income and micro customers generate low revenue per customer while requiring significant upfront investment in technology and infrastructure. Without sufficient scale, sustained losses may undermine business viability. Targeted tax incentives or public co-investment could help defray early-stage risks.
- Second, cybersecurity and financial fraud risks have intensified. Between Q1 2023 and Q2 2025, reported cyber incidents increased by 57.5 percent, while fraud-related cases rose by 104.9 percent. Elderly individuals and rural residents with lower digital literacy are particularly vulnerable, heightening the risk of renewed financial exclusion. Strengthening cybersecurity investment, digital financial education, and consumer protection mechanisms will be critical.
- Third, regulatory gaps persist in areas such as BNPL and crypto-asset activities, which initially fell outside traditional regulatory perimeters. The passage of the Consumer Credit Act (CCA) in 2025 – which brings non-bank credit providers under a formal supervisory framework - is a key step in addressing these gaps. Robust monitoring that safeguards consumers while preserving space for innovation remains an ongoing priority.

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<sup>50</sup> ReDI is a joint effort by KPDN, BNM, and PayNet to promote digital payment adoption among rural micro-retailers in Malaysia, aiming to reduce cash dependency and enhance financial inclusion.

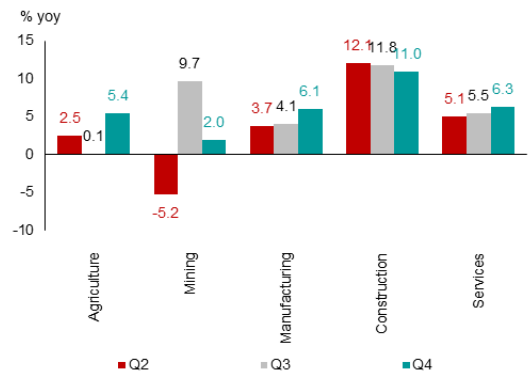
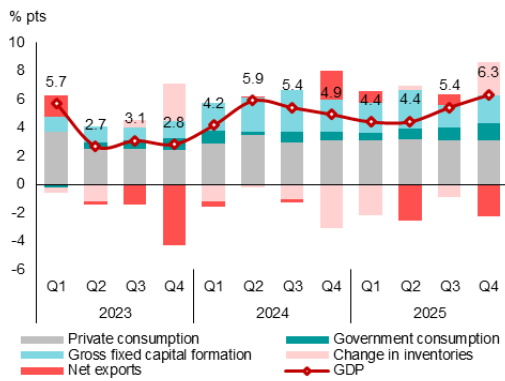
## Appendices

### Appendix 1. Selected Figures for Major Economic Indicators

**Figure 1.1. Real Sector**

Growth accelerated to 6.3 percent in Q4 2025, following a 5.3 percent expansion in Q3.

All major economic sectors saw broad-based growth in Q4.

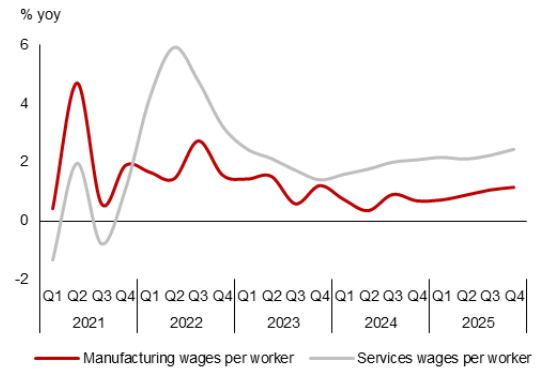
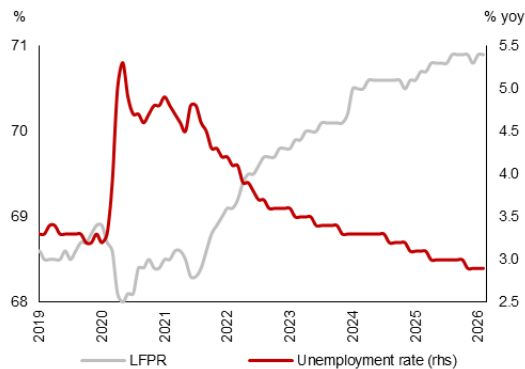


Source: Department of Statistics Malaysia (DOSM); AMRO staff calculations

Source: DOSM; AMRO staff calculations

Labor market conditions continued to improve, with the unemployment rate falling below pre-pandemic levels while labor force participation reached a record high.

Nominal wage growth per worker in manufacturing remained subdued, but has picked up for services where labor markets are tighter.

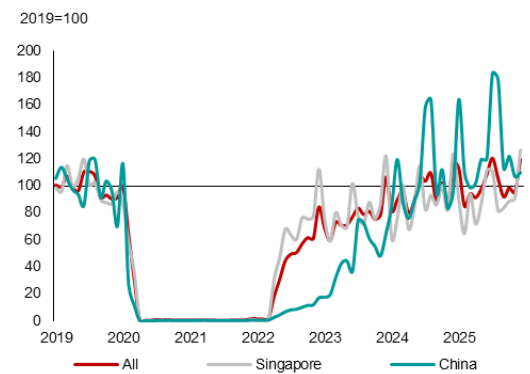
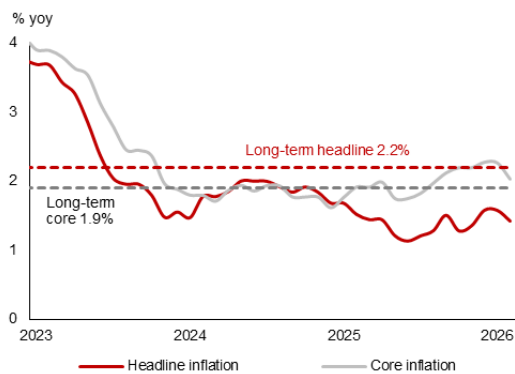


Source: DOSM

Source: DOSM; AMRO staff calculations

Inflation remains contained despite subsidy rationalization and expansion of sales and service tax.

Inbound tourism has surpassed pre-pandemic levels, buoyed by the return of Chinese tourists.

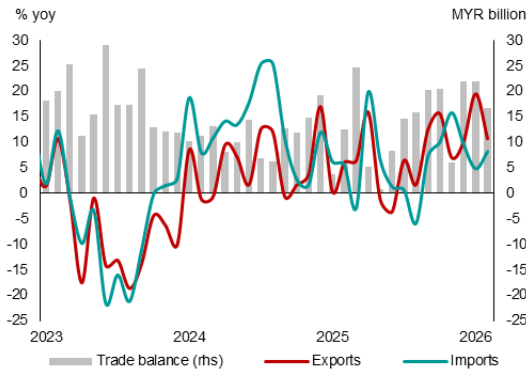


Source: DOSM; AMRO staff calculations

Source: Tourism Malaysia; AMRO staff calculations

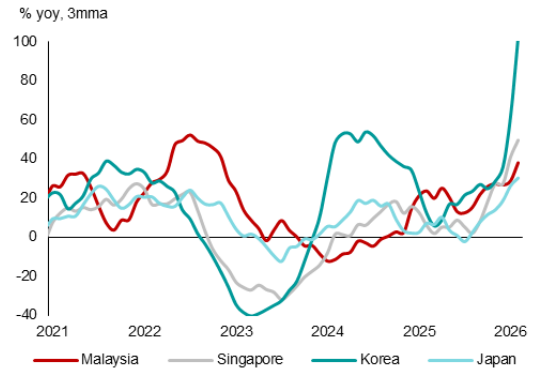
**Figure 1.2. External Sector**

Exports have accelerated since Q4 2025, reflecting a temporary easing of tariff uncertainty following Malaysia's trade deal with the US and a US-China trade truce.



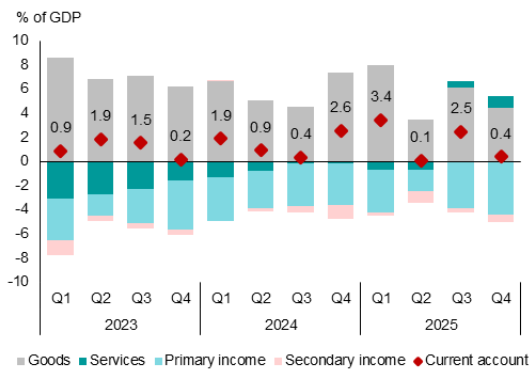
Source: DOSM; AMRO staff calculations

Semiconductor exports have picked up since early 2025 amid the global AI boom.



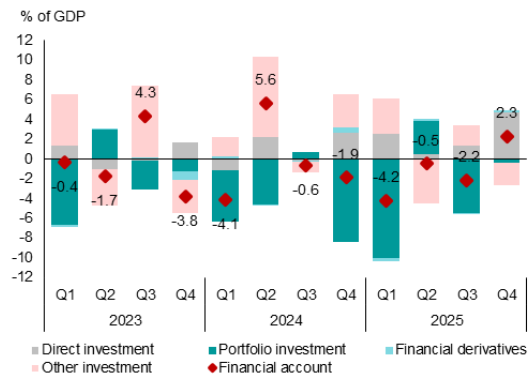
Source: DOSM; Haver Analytics; AMRO staff calculations

The current account surplus improved in 2025 thanks to a turnaround in the services account to record a surplus.



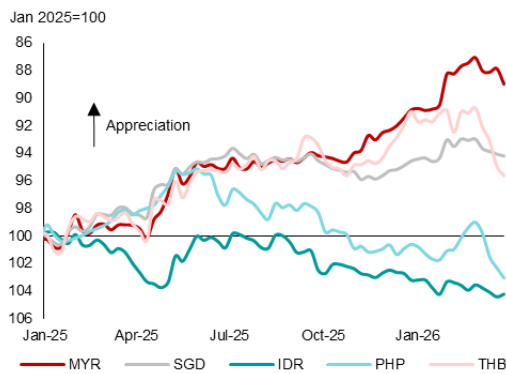
Source: BNM; DOSM; AMRO staff calculations

The financial account recorded net inflows in Q4 2025 as direct investment inflows more than offset portfolio and other investment outflows.



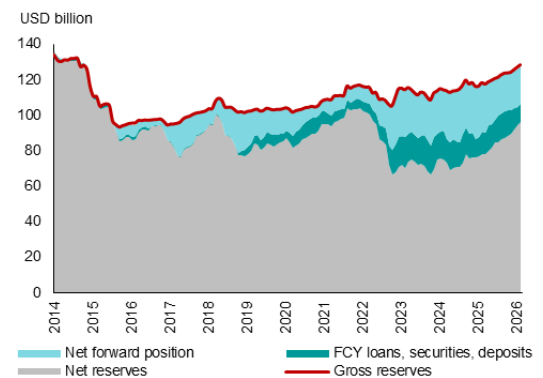
Source: BNM; DOSM; AMRO staff calculations

The ringgit has strengthened markedly against the US dollar, reflecting in part US dollar weakness and narrowing interest rate differentials with the US.



Source: BNM; DOSM; AMRO staff calculations

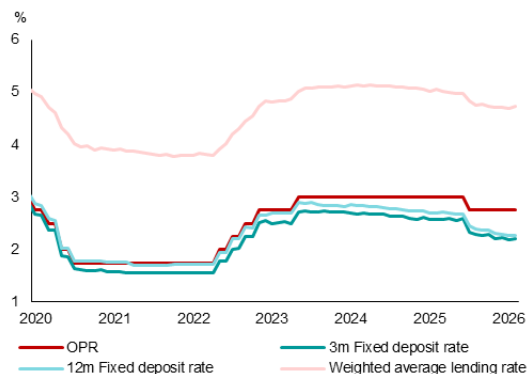
BNM's international reserves have continued to increase and remain adequate to cover short-term external debt.



Source: BNM; AMRO staff calculations

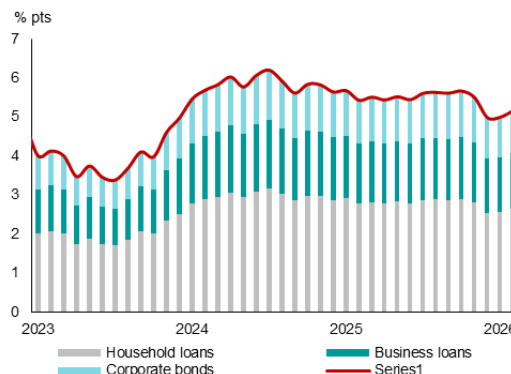
**Figure 1.3. Financial Sector**

Policy rate changes have been quickly transmitted to deposit and lending rates.



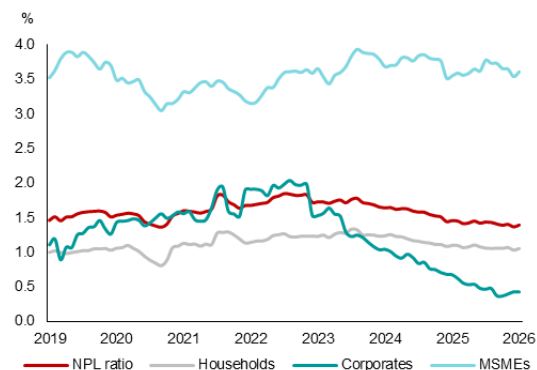
Source: BNM

Credit growth remains robust at more than 5 percent to support demand.



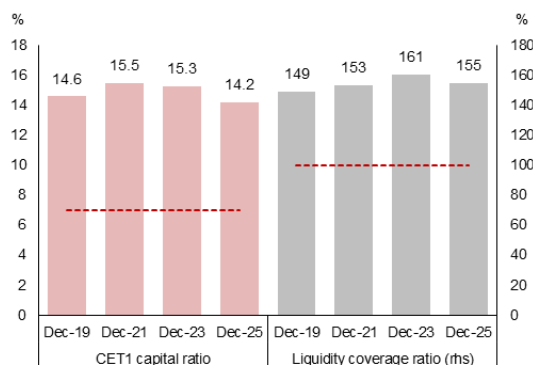
Source: BNM; AMRO staff calculations

Loan impairments among corporates have declined but remain elevated, though stable, in MSMEs.



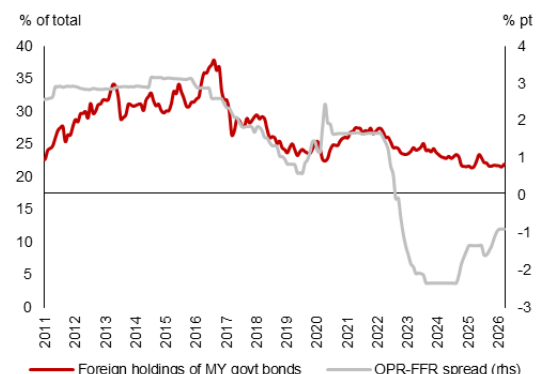
Source: BNM; AMRO staff calculations

The banking system has sufficient capital and liquidity buffers to withstand higher credit and interest rate risks.



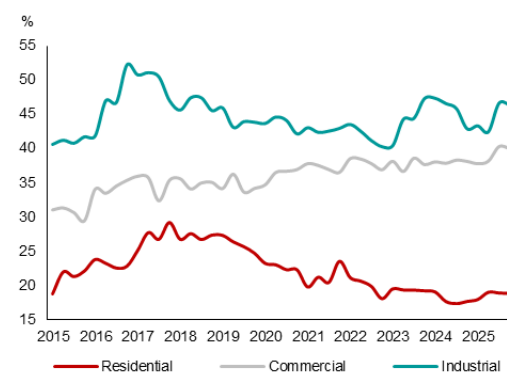
Source: BNM  
Note: The red-dashed lines refer to regulatory minimum ratios. For CET1 the minimum is 7.0 percent (inclusive of the 2.5 percent capital conservation buffer), while for LCR the minimum is 100 percent.

Non-resident holdings of domestic government bonds declined amid a sharp narrowing of interest rate spreads in 2023-2024, but stabilized in 2025.



Source: BNM; Federal Reserve Bank of St. Louis; AMRO staff calculations

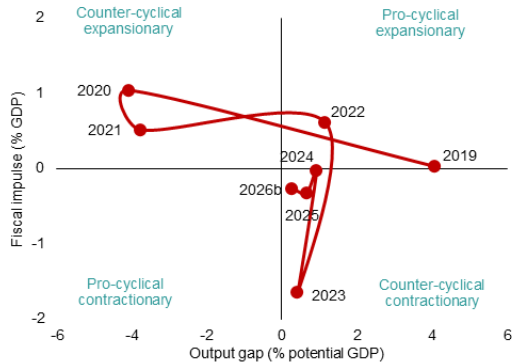
Overhang has trended lower for residential properties over the past few years, but remains elevated for commercial and industrial properties.



Source: National Property Information Centre; AMRO staff estimates  
Note: Overhang refers to units that are completed but remain unsold for more than nine months after launch.

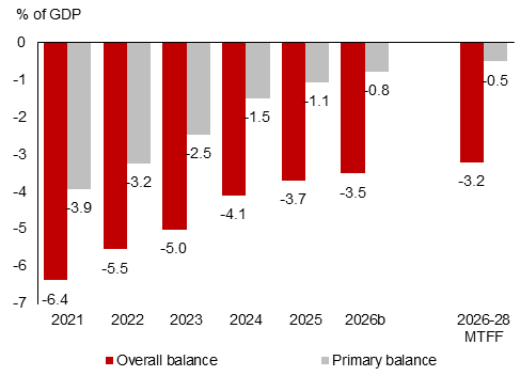
**Figure 1.4. Fiscal Sector**

The fiscal stance is assessed to be broadly neutral in 2025 and 2026.



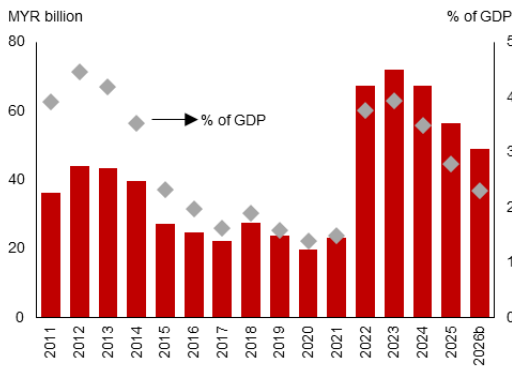
Source: DOSM; MOF; AMRO staff calculations  
Note: 2026b is the government's budget estimate for 2026

Fiscal consolidation is expected to gain momentum in the medium term, with the fiscal deficit targeted to average 3.2 percent of GDP in 2026-2028.



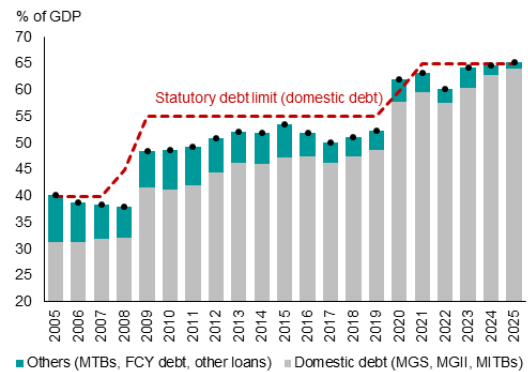
Source: DOSM; MOF; AMRO staff calculations

Fiscal spending on subsidies has declined following several subsidy rationalization measures, including for diesel and RON95 petrol.



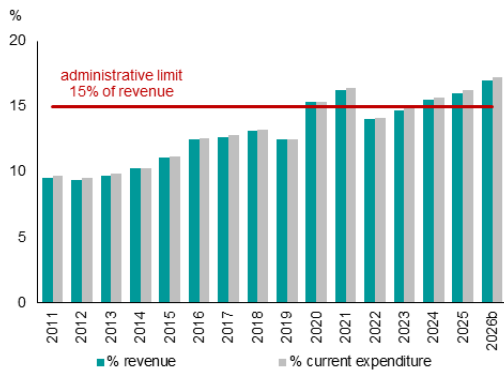
Source: DOSM; MOF; AMRO staff calculations

Statutory debt remains below the debt ceiling, and is expected to gradually decline with fiscal consolidation.



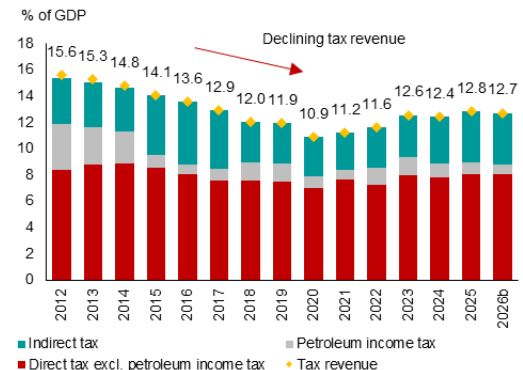
Source: MOF; AMRO staff calculations

Fiscal buffers need to be rebuilt to reduce interest payments, which are projected to breach the administrative limit in 2025 and 2026.



Source: DOSM; MOF; AMRO staff calculations

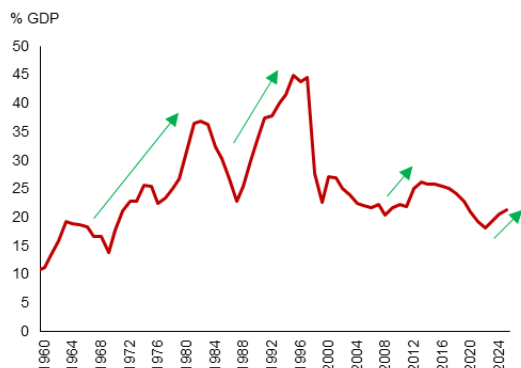
The revenue base needs to be broadened to arrest the trend decline in the tax ratio.



Source: DOSM; MOF; AMRO staff calculations

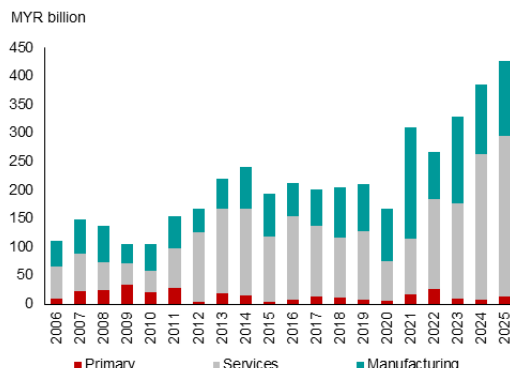
**Figure 1.5. Investment Upcycle**

Malaysia is on the cusp of its fourth investment upcycle, driven by the global AI boom and supply chain diversification.



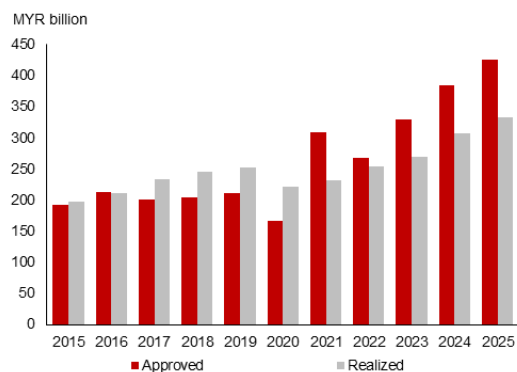
Source: CEIC; DOSM; AMRO staff calculations

Investment approvals have surged since 2021, and have been concentrated in services more recently, reflecting increased demand for data centers.



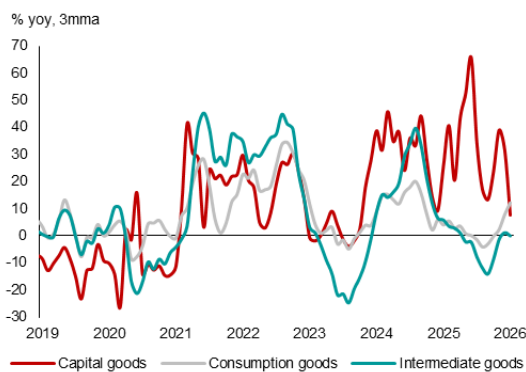
Source: CEIC; Malaysian Investment Development Authority (MIDA); AMRO staff calculations

Higher investment approvals have translated into higher realized private investment.



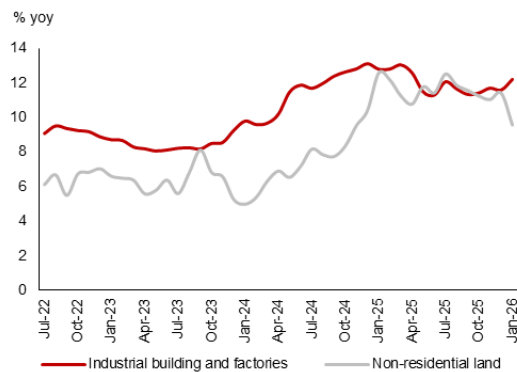
Source: CEIC; DOSM; MIDA; AMRO staff calculations

The rising momentum in investment realization can be seen from the surge in imports of capital goods, especially machinery and transport equipment



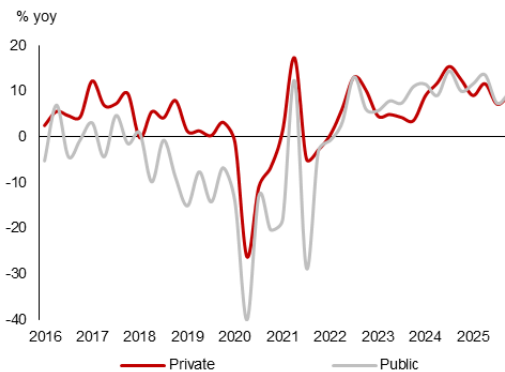
Source: CEIC; DOSM; AMRO staff calculations

Banking loan growth for industrial buildings, factories, and land has accelerated, suggesting increased financing for land acquisition and construction.



Source: BNM; CEIC; AMRO staff calculations

In addition to private investment, public investment growth has averaged more than 10 percent since 2024 to implement multi-year infrastructure projects.



Source: CEIC; DOSM; AMRO staff calculations

## Appendix 2. Selected Economic Indicators for Malaysia

	2021	2022	2023	2024	2025	Projections	
						2026	2027
<b>Real sector and prices</b>	(in percent change, unless specified)						
Real GDP	3.3	9.0	3.5	5.1	5.2	4.6	4.7
Private consumption	1.8	11.4	4.6	5.1	5.2	5.4	5.3
Government consumption	5.8	5.6	3.4	4.7	6.6	4.5	3.5
Gross fixed capital formation	-0.7	6.8	5.4	12.0	9.6	8.6	5.9
Exports of goods and services	18.5	14.5	-7.9	8.3	3.1	2.5	3.1
Imports of goods and services	21.2	16.0	-6.8	8.2	4.6	4.5	3.7
<b>Labor market</b>	(in percent, annual average)						
Unemployment rate	4.6	3.9	3.4	3.3	3.0	3.0	3.0
<b>Prices</b>	(in percent change, unless specified)						
Consumer price inflation (period average)	2.5	3.3	2.5	1.8	1.4	2.0	2.0
Core inflation (period average)	0.7	3.0	3.0	1.8	2.0	1.9	2.0
GDP deflator	5.7	6.3	-1.8	0.8	-0.4	1.6	1.6
<b>External sector</b>	(in billions of U.S. dollars, unless specified)						
Current account balance	14.5	13.0	4.4	6.1	7.4	9.3	10.4
(in percent of GDP)	3.9	3.2	1.1	1.4	1.6	1.7	1.8
Goods balance	42.9	42.6	28.7	25.0	25.9	26.3	26.6
Exports	242.8	281.1	231.9	248.2	271.6	284.4	296.4
Imports	199.9	238.6	203.2	223.1	245.7	258.1	269.8
Services balance	-15.8	-13.2	-9.6	-2.6	0.3	2.2	3.3
Receipts	21.3	32.1	42.8	53.1	63.5	69.7	73.2
Payments	37.1	45.4	52.4	55.6	63.2	67.6	69.9
Primary income, net	-10.2	-12.9	-12.2	-14.4	-16.2	-16.7	-17.2
Secondary income, net	-2.3	-3.4	-2.5	-2.0	-2.5	-2.4	-2.4
Financial account balance	3.9	1.9	-1.6	-1.1	-5.0	-2.6	-0.8
Direct investment, net	7.5	2.9	1.9	3.9	10.7	11.5	13.6
Direct investment assets	-12.8	-12.2	-7.8	-13.9	-7.4	-13.3	-11.8
Direct investment liabilities	20.3	15.0	9.7	17.8	18.1	24.8	25.3
Portfolio investment, net	4.5	-11.4	-8.0	-18.4	-14.4	-14.5	-14.8
Portfolio investment assets	-8.6	-6.9	-10.3	-23.5	-20.2	-20.8	-21.4
Portfolio investment liabilities	13.2	-4.5	2.2	5.1	5.8	5.9	6.1
Other investment, net	-7.6	11.0	5.4	12.8	-1.4	0.4	0.5
Overall balance	11.0	12.1	-4.5	3.4	2.0	5.9	8.1
Official reserves asset (end-period)	116.9	114.6	113.5	116.2	125.5	131.5	139.6
(in months of goods & services imports)	5.9	4.8	5.4	4.9	4.7	4.8	4.9
Total external debt (in percent of GDP)	69.8	63.8	69.3	69.9	69.5	69.3	69.0
Short-term external debt (percent of total)	37.4	42.1	42.8	42.6	42.4	42.3	42.1
Short-term external debt (ratio to international reserves)	1.2	1.0	1.0	0.9	0.9	0.8	0.8
<b>Fiscal sector (National Government)</b>	(in percent of GDP)						
Government revenue	15.1	16.4	17.3	16.8	16.6	16.4	15.9
Government expenditure	21.5	22.0	22.3	21.0	20.3	19.9	19.1
Fiscal balance	-6.4	-5.5	-5.0	-4.1	-3.7	-3.5	-3.3
Primary balance	-3.9	-3.2	-2.5	-1.5	-1.1	-0.8	-0.6
Government debt	63.3	60.2	64.3	64.6	65.3	64.9	64.3
<b>Monetary sector</b>	(in percent change, end-period unless specified)						
Broad money	6.4	4.3	6.0	3.6	4.1	4.6	4.1
Private sector credit	4.2	4.7	4.8	5.2	5.4	5.3	5.4
Loans	4.2	4.7	5.0	5.7	5.0	5.4	5.2
Securities	4.2	4.6	4.2	3.4	6.9	5.2	6.0
<b>Memorandum items:</b>							
Exchange rate (MYR per USD, average)	4.14	4.40	4.56	4.58	4.28	-	-
Exchange rate (MYR per USD, eop)	4.18	4.41	4.59	4.47	4.06	-	-
Nominal GDP (in billions of ringgit)	1,548.7	1,794.9	1,824.0	1,932.3	2,023.1	2,149.3	2,287.3
Nominal GDP (in billions of U.S. dollar)	373.8	407.8	399.9	422.2	472.2	549.0	589.1
GDP per capita (in U.S. dollar)	11,474.1	12,472.6	11,973.9	12,397.0	13,696.0	15,734.5	16,689.6
Brent crude oil price (U.S. dollar per barrel)	70.4	99.8	82.6	80.7	68.0	85.0	72.0

Source: National authorities; AMRO staff estimates and projections

### Appendix 3. Balance of Payments

	2019	2020	2021	2022	2023	2024	2025
	(in billions of ringgit, unless specified)						
<b>Current account balance (I)</b>	52.9	59.1	60.2	57.2	20.0	27.7	31.8
<b>Goods balance</b>	124.7	137.5	177.6	187.3	130.9	114.5	110.9
Exports, f.o.b.	817.3	780.5	1,005.8	1,237.2	1,057.7	1,135.7	1,163.6
Imports, f.o.b.	692.5	643.0	828.2	1,050.0	926.8	1,021.2	1,052.7
Services balance	-10.9	-47.2	-65.7	-58.2	-44.0	-11.7	1.2
Receipts	170.2	93.0	88.1	141.4	195.0	242.9	272.1
Payments	181.1	140.1	153.7	199.6	239.0	254.5	270.9
Primary income, net	-39.5	-28.5	-42.2	-56.9	-55.7	-66.1	-69.5
Secondary income, net	-21.4	-2.7	-9.6	-14.9	-11.2	-9.0	-10.8
<b>Capital account (II)</b>	0.4	-0.4	-0.5	-0.5	-0.3	0.0	0.0
<b>Financial account (III) (+ indicates net inflows)</b>	-38.0	-77.4	16.2	8.5	-7.1	-4.9	-21.4
Direct investment, net	6.6	3.1	31.1	12.6	8.5	17.7	46.0
Direct investment assets	-31.2	-13.8	-53.2	-53.6	-35.6	-63.8	-31.6
Direct investment liabilities	37.7	16.9	84.3	66.2	44.0	81.4	77.6
Portfolio investment, net	-32.4	-49.6	18.8	-50.1	-36.5	-84.1	-61.7
Portfolio investment assets	-46.9	-60.7	-35.8	-30.5	-46.8	-107.3	-86.4
Portfolio investment liabilities	14.5	11.1	54.6	-19.7	10.3	23.2	24.6
Financial derivatives, net	-0.5	0.4	-2.3	-2.2	-3.9	2.8	0.2
Other investment, net	-11.7	-31.3	-31.4	48.3	24.8	58.7	-5.9
<b>Net errors and omission (IV)</b>	-6.8	-0.6	-30.3	-11.9	-33.1	-7.0	-2.0
<b>Overall balance (= I + II + III + IV)</b>	8.4	-19.3	45.7	53.4	-20.5	15.7	8.4
<b>Change in Reserve Assets</b>	18.8	-40.5	-33.4	-12.1	0.4	-13.3	-5.2
<b>Memorandum items:</b>							
Current account balance (in percent of GDP)	3.5	4.2	3.9	3.2	1.1	1.4	1.6
Official reserve assets (in billions of U.S. dollar)	103.6	107.6	116.9	114.7	113.5	116.2	125.5
In months of goods & services imports	5.8	6.5	6.3	5.0	5.3	5.0	4.6
Changes in official reserve assets (in billions of U.S. dollar)	2.2	4.0	9.3	-2.2	-1.2	2.7	9.3
Exchange rate (MYR per USD, average)	4.14	4.20	4.15	4.40	4.57	4.57	4.28
Nominal GDP (in billions of U.S. dollar)	365.2	337.5	373.8	407.8	399.9	422.2	472.2

Source: BNM; DOSM; AMRO staff calculations

## Appendix 4. Federal Government Budget

	2019	2020	2021	2022	2023	2024	2025
<b>Federal government</b>	(in billions of ringgit, unless specified)						
<b>Revenue (I)</b>	264.4	225.1	233.8	294.4	315.0	324.6	336.1
Tax revenue	180.6	154.4	173.7	208.8	229.2	240.2	259.8
Direct	134.7	112.5	130.1	153.5	171.3	171.7	180.6
Direct: Income	123.2	101.8	118.4	139.3	155.6	154.4	161.4
Companies	63.8	50.1	79.8	82.1	91.7	92.8	97.8
Petroleum	20.8	12.8	11.6	23.4	26.1	20.5	18.1
Individuals	38.7	39.0	27.1	33.8	37.8	41.1	45.6
Direct: Others	11.5	10.7	11.7	14.1	15.7	17.3	19.1
Stamp duty	6.2	5.5	6.3	8.0	9.6	10.0	11.2
Others	5.3	5.2	5.3	6.1	6.2	7.3	7.9
Indirect	45.8	41.9	43.6	55.3	57.8	68.5	79.3
Export duties	1.1	0.7	2.1	2.6	2.0	2.1	1.8
Import duties	2.7	2.3	2.6	3.2	3.0	3.1	3.1
Excise duties	10.5	9.9	10.2	12.6	13.1	13.4	12.8
Goods and services tax (GST)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sales tax	15.4	14.8	13.6	16.3	18.4	21.5	25.6
Service tax	12.3	12.0	12.0	15.1	17.1	23.2	30.3
Others	3.8	2.2	3.0	5.6	4.2	5.2	5.7
Non-tax revenue	79.8	62.0	51.1	79.6	79.0	70.1	66.9
Petroleum royalty	5.8	4.2	3.7	6.0	6.8	6.7	5.5
Investment interest and returns	60.1	46.1	35.0	58.2	55.8	45.8	44.0
PETRONAS dividend	54.0	34.0	25.0	50.0	40.0	32.0	32.0
Non-revenue receipts	4.0	8.6	8.9	6.0	6.7	14.3	9.3
<b>Expenditure (II = III + V - VI + VII)</b>	315.9	312.7	332.5	393.8	406.4	403.8	411.4
Current expenditure (III)	263.3	224.6	231.5	292.7	311.3	321.5	330.8
Emoluments	80.5	83.0	85.9	87.8	91.9	95.9	101.5
Retirement charges	25.9	27.5	29.1	31.4	34.1	35.9	39.1
Debt service charges (IV)	32.9	34.5	38.1	41.3	46.3	50.5	53.7
Domestic	32.2	33.8	37.3	40.6	45.6	49.8	53.1
External	0.7	0.7	0.8	0.7	0.7	0.7	0.6
Supplies and services	31.5	29.3	24.9	34.7	35.9	37.7	42.2
Subsidies	23.9	19.8	23.0	67.4	71.9	67.4	56.4
Asset acquisition	0.8	0.6	0.6	0.8	1.0	1.2	1.3
Others	67.8	29.8	29.9	29.4	30.2	33.0	36.7
Development expenditure (V)	54.2	51.4	64.3	71.6	96.1	84.0	81.9
Defence and security	5.6	5.8	7.5	8.2	11.4	11.6	11.9
Economic services	31.3	28.7	31.3	39.1	57.2	43.4	38.8
Social services	14.5	13.8	22.6	21.1	24.2	25.6	27.6
General administration	2.8	3.0	2.9	3.1	3.2	3.4	3.7
Loan recovery (VI)	1.6	1.3	1.0	1.4	1.0	1.7	1.3
COVID-19 Fund (VII)		38.0	37.7	31.0			
<b>Current balance (I - III)</b>	1.1	0.5	2.2	1.7	3.7	3.1	5.3
In percent of GDP	0.1	0.0	0.1	0.1	0.2	0.2	0.3
<b>Overall balance (I - II)</b>	-51.5	-87.6	-98.7	-99.5	-91.4	-79.2	-75.3
In percent of GDP	-3.4	-6.2	-6.4	-5.5	-5.0	-4.1	-3.7
<b>Primary balance (I - II + IV)</b>	-18.6	-53.1	-60.7	-58.2	-45.1	-28.7	-21.6
In percent of GDP	-1.2	-3.7	-3.9	-3.2	-2.5	-1.5	-1.1
<b>Memorandum item:</b>							
Oil and gas-related revenue (in percent of total revenue)	31.7	24.9	18.4	28.0	24.1	19.6	18.3
Brent crude oil price (U.S. dollar per barrel)	64.0	42.3	70.4	99.8	82.6	80.7	69.0
Nominal GDP (in billions of ringgit)	1,512.7	1,418.5	1,548.7	1,794.9	1,824.0	1,932.3	2,023.1

Source: DOSM; MOF; AMRO staff calculations

Appendix 5. Debt Sustainability Analysis<sup>51</sup>

Malaysia’s public debt-to-GDP ratio rose in 2025 but is projected to decline over the medium-term, alongside gross financing needs (GFN) (Table 5.1). In 2025, one-off negative GDP deflator growth lifted the public debt ratio from 64.6 to 65.3 percent of GDP despite a contraction of 0.4 percentage point in the primary deficit. Over the medium term, public debt and GFNs are projected to decline to 60.9 and 7.2 percent of GDP by 2030, driven by stable growth and the authorities’ commitment to medium-term fiscal consolidation with a smaller primary deficit (Figure 5.1).

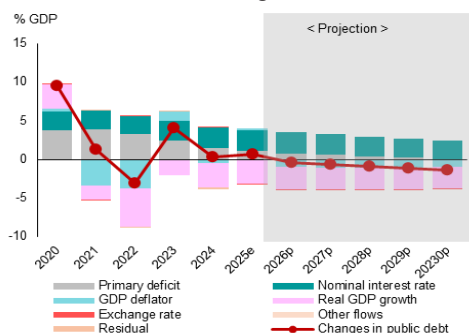
AMRO Debt Sustainability Analysis (DSA) indicates a moderate risk to public debt sustainability. Both the public debt-to-GDP ratio and GFNs as a share of GDP have remained below their respective thresholds over the past five years and are projected to stay below these thresholds under the baseline and all stress-test scenarios, except for the contingent liabilities scenario (Figure 5.2).<sup>52</sup> The materialization of Malaysia’s sizable government contingent liabilities, amounting to 16.7 percent of GDP in 2025, could pose significant challenges to public debt sustainability and heighten fiscal risks. While public debt is projected to remain below the 70 percent threshold, it is expected to stay above the FRA debt target of 60 percent by 2030.<sup>53</sup> Market perceptions of sovereign risk remain favorable, as reflected in the low bond yield spread. The debt profile remains broadly sound, with low shares of foreign currency-denominated and short-term debt, which helps mitigate vulnerabilities associated with higher external holdings (Figure 5.3).

Table 5.1. Macroeconomic and Fiscal Indicators

	2020	2021	2022	2023	2024	2025	2026p	2027p	2028p	2029p	2030p
<b>Macroeconomic indicators (Percent)</b>											
Real GDP growth	-5.5	3.3	9.0	3.5	5.1	5.2	4.6	4.7	4.7	4.7	4.7
GDP deflator	-0.8	5.7	6.3	-1.8	0.8	-0.4	1.6	1.6	1.6	1.6	1.6
Effective interest rate	4.3	4.3	4.2	4.3	4.3	4.2	4.2	4.2	4.2	4.1	4.1
<b>Fiscal indicators (Percent of GDP)</b>											
Revenue	15.9	15.1	16.4	17.3	16.8	16.6	16.4	15.9	15.7	15.6	15.5
Expenditure	22.0	21.5	21.9	22.3	20.9	20.3	19.9	19.1	18.7	18.3	17.9
Fiscal balance	-6.2	-6.4	-5.5	-5.0	-4.1	-3.7	-3.5	-3.3	-2.9	-2.7	-2.4
Primary balance	-3.7	-3.9	-3.2	-2.5	-1.5	-1.1	-0.8	-0.6	-0.4	-0.2	0.0
Public debt	62.0	63.3	60.1	64.3	64.6	65.3	64.9	64.3	63.3	62.2	60.9
Gross Financing Needs	11.6	11.6	9.7	9.8	9.0	8.8	8.5	8.3	7.8	7.5	7.2

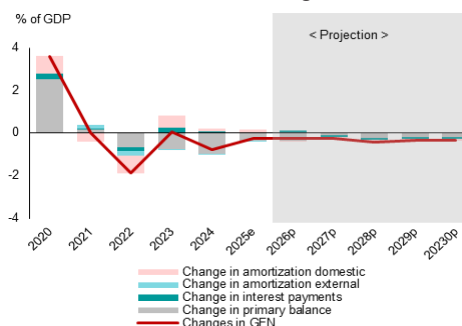
Figure 5.1. Public Debt and GFN Dynamics

Contribution to Changes in Public Debt



Source: AMRO staff projections; BNM; MOF

Contribution to Changes in GFN



Source: AMRO staff projections; BNM; MOF

<sup>51</sup> Prepared by Dek Joe Sum, Economist.

<sup>52</sup> According to the IMF-WB DSA for Market Access Countries (MAC) (2013), the public debt and GFN threshold for emerging markets are 70 percent and 15 percent of GDP, respectively.

<sup>53</sup> Malaysia’s Public Finance and Fiscal Responsibility Act (PFFRA) require public debt as a share of GDP to remain below 60 percent over a medium term of three to five years, due by 2028.

Figure 5.2. Macro-Fiscal Stress Test

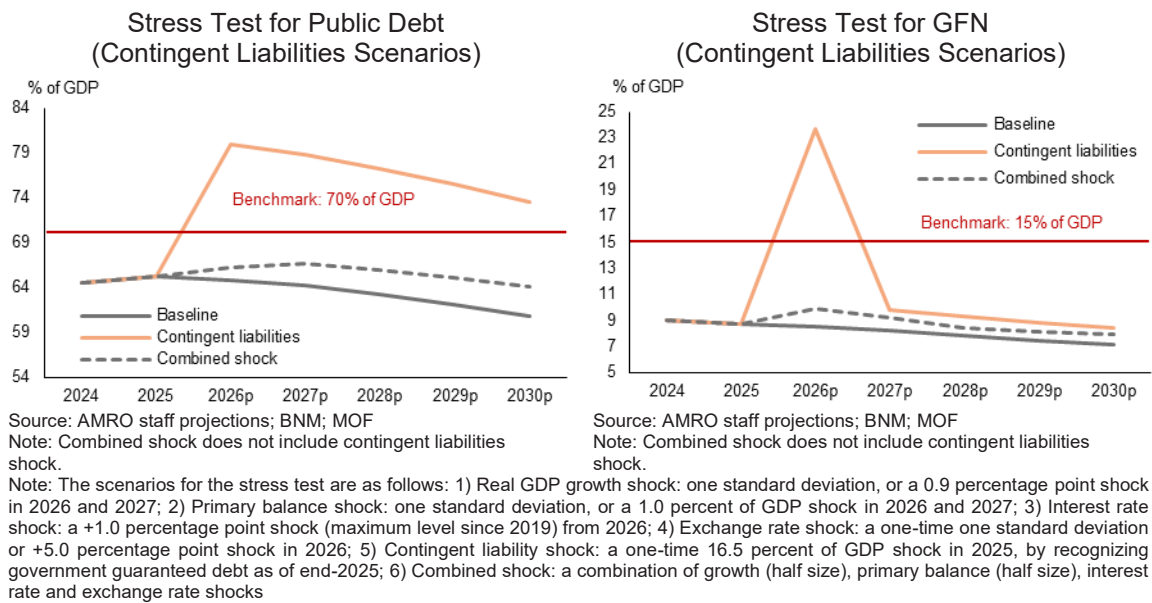
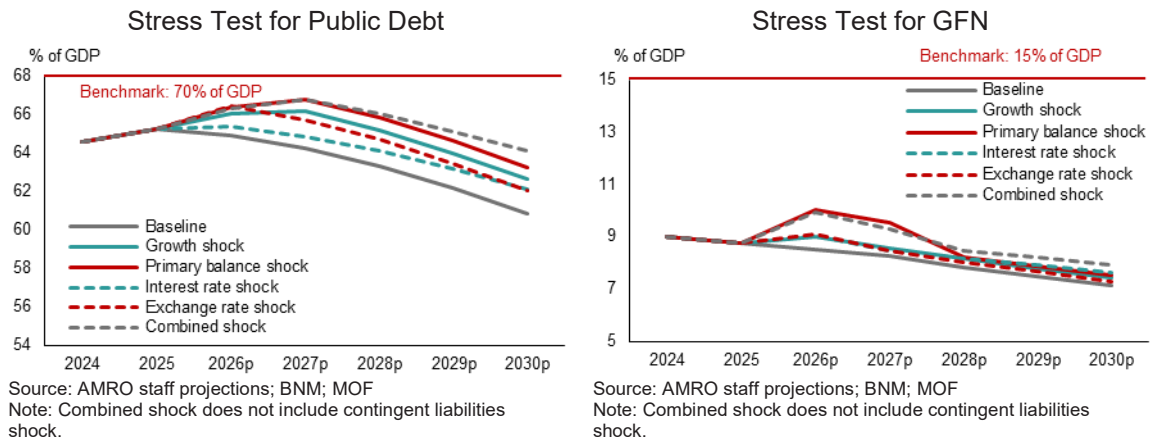
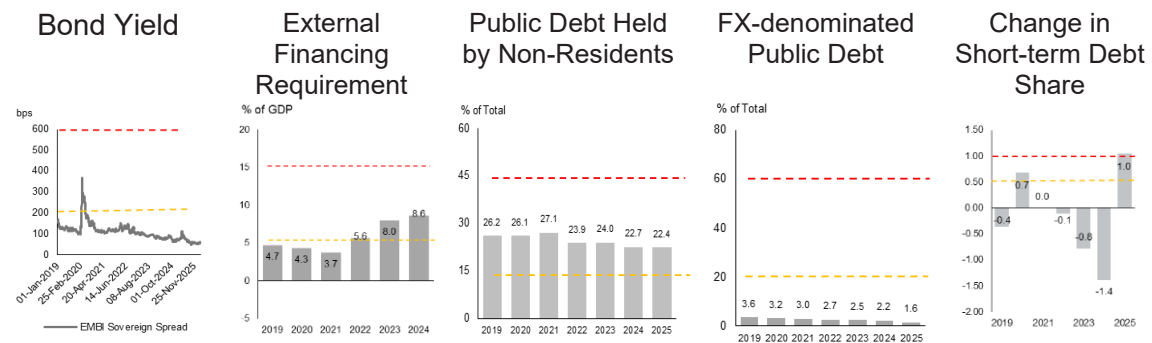


Figure 5.3. Debt Profile Vulnerabilities



**Figure 5.4. Heatmap of Public Debt Sustainability**

		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Public Debt												
Gross Financing Needs												
Debt Profile	Market Perception of Risk											
	External Financing Requirement											
	Public Debt held by Non-Residents											
	FCY Public Debt											
	Change in Short-Term Debt Share											

Note: 1) For Public Debt and Gross Financing Needs, the cell is highlighted in green if the benchmark is not exceeded under any shocks or the baseline, yellow if it is exceeded under any specific shock but not the baseline, and red if it is exceeded under the baseline; 2) For Debt Profile, the cell is highlighted in green if the country value is less than the lower early warning benchmark, red if it exceeds the upper early warning benchmark, and yellow if it is between the lower and upper early warning benchmarks.

## Appendix 6. Climate Clipboard—Risks, Responses, and Opportunities<sup>54</sup>

<b>A. Physical risks</b>																																			
<b>Exposure/ Sources of risk</b>	<b>Potential macro-financial impacts</b>																																		
<ul style="list-style-type: none"> <li>Floods (acute, chronic)</li> <li>Droughts (acute)</li> <li>Tropical cyclones (acute)</li> </ul>	<ul style="list-style-type: none"> <li>Estimated losses amounting to 0.3-0.4 percent of GDP due to flooding, via damage to public assets and infrastructure, residential properties, vehicles, manufacturing and business premises, and agriculture</li> <li>Lower palm oil yields due to droughts, resulting in a weaker external position (palm oil net exports accounted for more than 40 percent of goods trade surplus in 2025)</li> <li>Higher subsidies and social assistance to mitigate economic losses, thereby holding back fiscal consolidation and rebuilding of fiscal buffers</li> </ul>																																		
<b>B. Transition risks</b>																																			
<b>Sources of risk</b>	<b>Potential macro-financial impacts</b>																																		
<ul style="list-style-type: none"> <li>Removal of blanket energy subsidies</li> <li>Establishment of domestic carbon pricing instruments</li> <li>Phasing out of coal-fired power plants to shift to cleaner energy sources</li> <li>Imposition of carbon border tax by advanced economies</li> </ul>	<ul style="list-style-type: none"> <li>Increased inflation from subsidy rationalization, with transport accounting for 11.3 percent of the consumer price index</li> <li>Reduction in fiscal revenue from lower fossil fuel-related exports (petroleum revenue accounts for more than 20 percent of total fiscal revenue)</li> <li>Weakened external position owing to loss in competitiveness of fossil fuel exporters (oil and gas net exports account for 12 percent of goods trade surplus)</li> <li>Lower growth prospects owing to increased inflation and weaker exports</li> <li>Potential weakness in financial system soundness owing to heightened credit risks from weaker growth and increased incidence of stranded assets</li> </ul>																																		
<b>C. Adaptation response framework and strategies</b>																																			
<b>Adaptation framework</b>	<b>Key initiatives/strategies</b>	<b>Estimated financing need and sources</b>																																	
<ul style="list-style-type: none"> <li>National Adaptation Plan (MyNAP) (scheduled for completion in 2026)</li> <li>MyNAP is meant to provide a national framework for adaptation action in 2026-2035, guiding sectoral responses, identifying financing needs, and strengthening institutional arrangements.</li> </ul>	<ul style="list-style-type: none"> <li><b>Climate change adaptation</b> focuses managing water resources and security, coastal resources, agriculture and food supply, urban and infrastructure resilience, public health, forestry, biodiversity, and key adaptation cross-sectoral areas</li> </ul> <p>Latest initiatives:</p> <ul style="list-style-type: none"> <li>National Disaster Risk Reduction Policy 2030</li> <li>MYR15 billion Flood Mitigation Plan until 2030</li> <li>Ecological Fiscal Transfer to state governments for biodiversity conservation increased to MYR250 million in 2025, up from MYR 200 million in 2024</li> </ul>	<ul style="list-style-type: none"> <li>USD2.155 billion between 2020 and 2059 under a scenario of very high greenhouse gas (GHG) emissions (ESCAP)</li> </ul>																																	
		<table border="1"> <thead> <tr> <th>Domestic</th> <th>External</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> <li>Annual budgets</li> </ul> </td> <td> <ul style="list-style-type: none"> <li>Global Environment Facility</li> <li>MOF is engaging with UN Green Climate Fund for funding support</li> </ul> </td> </tr> </tbody> </table>	Domestic	External	<ul style="list-style-type: none"> <li>Annual budgets</li> </ul>	<ul style="list-style-type: none"> <li>Global Environment Facility</li> <li>MOF is engaging with UN Green Climate Fund for funding support</li> </ul>																													
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<b>Nationally Determined Contribution (NDC)</b>	<b>National framework/strategies</b>	<b>Estimated financing and sources</b>																																	
<ul style="list-style-type: none"> <li>Economy-wide absolute emission reduction of 15-30 million tonnes of carbon dioxide equivalent (MtCO<sub>2</sub>eq) by 2035 from the peak level. (NDC 3.0)</li> <li>The above target encompasses an unconditional reduction of up to 20 MtCO<sub>2</sub>eq, with a further 10 MtCO<sub>2</sub>eq reduction conditional upon provision of climate finance, technology transfer, and capacity-building support from international sources.</li> <li>The above target also covers five sectors (energy, industrial processes and product use, waste, agriculture, LULUCF) and all seven types of GHG including carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbon (PFCs), sulfur hexafluoride (SF<sub>6</sub>) and nitrogen trifluoride (NF<sub>3</sub>)</li> </ul>	<ul style="list-style-type: none"> <li>NDC Roadmap (NDC 3.0) <ul style="list-style-type: none"> <li>NDC 3.0 sets out pathway to NDC target by 2035</li> </ul> </li> <li>National Policy on Climate Change 2.0 (NCCP 2.0) <ul style="list-style-type: none"> <li>NCCP 2.0 sets overarching framework for Malaysia's low-carbon transition, aligning with Paris Agreement while guiding climate regulation, carbon pricing, and coordinated mitigation and adaptation strategies across sectors.</li> </ul> </li> <li>Long-term Low Emission Development Strategies (LT-LEDS), submitted in 2024 <ul style="list-style-type: none"> <li>LT-LEDS outlines strategies and actions that will mitigate GHGs, particularly for main economic sectors, and be the basis to reach net-zero as early as 2050 (Economic Outlook 2023, published in Oct 2022)</li> </ul> </li> </ul> <p><b>Sources of GHG Emissions in Gg CO<sub>2</sub> eq</b></p> <table border="1"> <thead> <tr> <th>Sector</th> <th>2019</th> <th>% of total</th> </tr> </thead> <tbody> <tr> <td>Energy</td> <td>259,326.11</td> <td>78.5</td> </tr> <tr> <td>  Main activity electricity and heat production</td> <td>109,768.85</td> <td>33.2</td> </tr> <tr> <td>  Transport</td> <td>64,973.10</td> <td>20.0</td> </tr> <tr> <td>  Manufacturing and construction</td> <td>33,578.18</td> <td>10.2</td> </tr> <tr> <td>  Industrial Processes and Product Use (IPPU)</td> <td>32,853.80</td> <td>9.9</td> </tr> <tr> <td>  Agriculture, Forestry and Other Land Use (AFOLU) – Agriculture</td> <td>9,921.71</td> <td>3.0</td> </tr> <tr> <td>  Waste</td> <td>28,256.59</td> <td>8.6</td> </tr> <tr> <td><b>Total</b></td> <td><b>330,358.21</b></td> <td><b>100.0</b></td> </tr> <tr> <td>AFOLU – Land Use, Land Use Change and Forestry (LULUCF)</td> <td>-214,714.54</td> <td>-65.0</td> </tr> <tr> <td><b>Total (including LULUCF)</b></td> <td><b>115,643.68</b></td> <td><b>35.0</b></td> </tr> </tbody> </table> <p>Source: Malaysia Fourth Biennial Update Report (Dec 2022)</p> <p><b>Key sectoral strategies and initiatives</b></p> <ul style="list-style-type: none"> <li>National Energy Policy 2022-2040 (Sep 2022) <ul style="list-style-type: none"> <li>Aims to move towards a cleaner energy mix by encouraging development, commercialization, and adoption of green technologies</li> </ul> </li> </ul>	Sector	2019	% of total	Energy	259,326.11	78.5	Main activity electricity and heat production	109,768.85	33.2	Transport	64,973.10	20.0	Manufacturing and construction	33,578.18	10.2	Industrial Processes and Product Use (IPPU)	32,853.80	9.9	Agriculture, Forestry and Other Land Use (AFOLU) – Agriculture	9,921.71	3.0	Waste	28,256.59	8.6	<b>Total</b>	<b>330,358.21</b>	<b>100.0</b>	AFOLU – Land Use, Land Use Change and Forestry (LULUCF)	-214,714.54	-65.0	<b>Total (including LULUCF)</b>	<b>115,643.68</b>	<b>35.0</b>	<ul style="list-style-type: none"> <li>USD 3 billion (1 percent of GDP) of yearly investment to achieve net zero by 2050 (BCG, WWF)</li> <li>Low Carbon Nation Aspiration 2040 indicates total investments of MYR9.2 billion per year, of which MYR4.3 billion will be borne by the government</li> <li>Expanding renewable energy capacity requires USD375 billion-USD415 billion of investment through 2050 (IRENA)</li> </ul>
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<p><b>Long-term commitment</b></p> <ul style="list-style-type: none"> <li>Achieve net-zero emissions by 2050, at the earliest</li> </ul>																																			

<sup>54</sup> Prepared by Yin Fai Ho, Associate Economist.

	<ul style="list-style-type: none"> <li>➢ Under the national energy policy, <a href="#">Low Carbon Nation Aspiration 2040</a> targets higher level of urban public transport modal share and electric vehicle penetration (38 percent by 2040 from &lt;1 percent in 2018), increased share of alternative low carbon fuels in heavy vehicles and marine transport, and enhanced energy efficiency in industrial, commercial, and residential sectors</li> <li>➢ Aspiration 2040 also entails greater renewable energy (RE) penetration, from 7.6 gigawatts (GW) in installed RE capacity in 2018 to 18.4 GW by 2040, implying an increase in RE share from <b>25 percent in 2022</b> (8.7GW) to <b>40 percent (18.0GW) in 2035</b></li> <li>• National Energy Transition Roadmap (NETR) (<a href="#">Aug 2023</a>)             <ul style="list-style-type: none"> <li>➢ Aims to guide and accelerate shift from traditional fossil fuel-based market to high-value green economy</li> <li>➢ Outlines 10 flagship projects covering six energy transition levers: energy efficiency (EE); RE; hydrogen; bioenergy; green mobility; and carbon capture, utilization and storage (CCUS)</li> <li>➢ Expected to reduce GHG emissions of energy sector by 32 percent compared with 2019 baseline, lift GDP value to MYR220 billion, and generate 310,000 jobs by 2050</li> </ul> </li> </ul>	
<b>E. Enabling regulations for climate resilience</b>		
<b>E.1. Legal framework</b>	<b>E.3. Carbon pricing frameworks</b>	<b>E.4. Sustainable finance frameworks</b>
<ul style="list-style-type: none"> <li>• Legal framework serves as foundation for Climate Change Bill (expected to be tabled in 2026)</li> <li>• <a href="#">13th Malaysia Plan, 2026-2030</a> (July 2025) aims to strengthen climate change and environmental management, and reinforce disaster resilience while ensuring continued environmental preservation.</li> </ul>	<ul style="list-style-type: none"> <li>• Carbon tax (set to be introduced in 2026)             <ul style="list-style-type: none"> <li>➢ Starting with iron, steel and energy sectors</li> </ul> </li> <li>• National Carbon Market Policy (DPKK) (upcoming)             <ul style="list-style-type: none"> <li>➢ Provides overarching framework for carbon market trading</li> </ul> </li> <li>• Bursa Carbon Exchange (BCX), launched in December 2022, to grow Malaysia's voluntary carbon market (VCM) ecosystem             <ul style="list-style-type: none"> <li>➢ Inaugural auction on March 16, 2023 of nature-based and technology-based carbon credits from Cambodia and China, respectively, saw 14 successful bidders from local companies</li> <li>➢ Key initiatives in 2024 and 2025 included expanding environmental product offerings, piloting Malaysia's first domestic technology-based carbon credit auctions, and introducing measures to enhance market accessibility and participation in VCM</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Sustainable and Responsible Investment Sukuk Framework (<a href="#">Aug 2014</a>)             <ul style="list-style-type: none"> <li>➢ Aims to facilitate creation of ecosystem that promotes sustainable and responsible investing (SRI), while leveraging Malaysia's developed sukuk market; SRI sukuk have a broader reach and are accessible to both conventional and non-Islamic investors</li> </ul> </li> <li>• Sustainable and Responsible Investment-linked (SRI-linked) Sukuk Framework (<a href="#">Jun 2022</a>)</li> <li>• ASEAN Green Bond Standards (<a href="#">Nov 2017</a>); ASEAN Sustainability Bond Standards (<a href="#">Oct 2018</a>); ASEAN Social Bond Standards (<a href="#">Oct 2018</a>); ASEAN Sustainability-linked Bond Standards (<a href="#">Oct 2022</a>)             <ul style="list-style-type: none"> <li>➢ USD19.6 billion of outstanding green, social, sustainable, and sustainability-linked bonds as of end-2025, with local-currency issuance accounting for 91 percent of total (<a href="#">AsianBondsOnline</a>)</li> <li>➢ No transition bond framework, with its development contingent on release of global transition bond principles by International Capital Market Association (ICMA)</li> </ul> </li> </ul>
<b>E.2. GHG accounting framework</b>		
<ul style="list-style-type: none"> <li>• National GHG accounting framework (to be determined)             <ul style="list-style-type: none"> <li>➢ Framework provides <a href="#">consistent approach</a> to assess GHG emissions across entities and sectors, and at national level</li> <li>➢ Development of <a href="#">country-specific GHG emission factors</a> for key sectors is being considered, to provide a basis for a nationwide GHG accounting framework</li> </ul> </li> <li>• Measurement of emissions at country level follows guidelines by Intergovernmental Panel on Climate Change (IPCC), but <a href="#">accounting frameworks</a> vary at entity level</li> </ul>		
<b>E.5. Financial system</b>		
<b>Initiatives</b>	<b>Guidelines</b>	<b>Status</b>
1. Taxonomy	<ul style="list-style-type: none"> <li>• Financial institutions (FIs): Climate Change and Principle-based Taxonomy (CCPT) (<a href="#">Apr 2021</a>)</li> <li>• Capital market: Principles-Based Sustainable and Responsible Investment Taxonomy for the Malaysian Capital Market (<a href="#">Dec 2022</a>)</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Submission of half-yearly reports</a> by FIs to BNM since July 2022             <ul style="list-style-type: none"> <li>➢ Taxonomy for capital market is aligned with CCPT but is voluntary. Instead, disclosure of climate-related financial information would be mandatory.</li> </ul> </li> </ul>
2. Risk management assessments	<ul style="list-style-type: none"> <li>• Sustainable and Transition Finance Guidance (<a href="#">Nov 2025</a>)</li> <li>• Climate Risk Management and Scenario Analysis (<a href="#">Nov 2022</a>)</li> <li>• 2024 Climate Risk Stress Testing Exercise: Discussion Paper (<a href="#">Jun 2022</a>)</li> </ul>	<ul style="list-style-type: none"> <li>• Industry-wide climate risk stress testing (CRST) exercise mandated for insurers in 2024</li> </ul>
3. Climate-related financial disclosures	<ul style="list-style-type: none"> <li>• National Sustainability Reporting Framework (NSRF) (<a href="#">Sep 2024</a>)</li> <li>• Task Force on Climate-related Financial Disclosures (TCFD) Application Guide for Malaysian Financial Institutions (<a href="#">Jun 2022</a>)</li> <li>• Simplified ESG Disclosure Guide (<a href="#">Oct 2023</a>)</li> </ul>	<ul style="list-style-type: none"> <li>• NSRF will be implemented in phases between 2025-2030, targeting full adoption of IFRS S1 and S2 standards and mandatory Scope 3 GHG emission disclosures for applicable entities targeted by 2030</li> <li>• Mandatory disclosure based on TCFD recommendations to commence in 2024</li> </ul>
4. Data availability	<ul style="list-style-type: none"> <li>• Published Climate Data Catalogue (<a href="#">Dec 2022</a>) as a starting reference to address climate and environmental data needs of financial sector</li> </ul>	<ul style="list-style-type: none"> <li>• BNM is working with relevant parties to improve FI access to data that has been identified in the Data Catalogue</li> </ul>
5. Capacity building	<ul style="list-style-type: none"> <li>• Joint Committee on Climate Change (JC3) is leading various initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• Ongoing pilot projects, such as greening SME value chains</li> <li>• Established SME Focus Group to increase awareness and help SMEs better manage transition to low carbon</li> </ul>
<b>F. Potential opportunities in transition to low carbon</b>		
<ul style="list-style-type: none"> <li>• Carbon <a href="#">capture and storage</a></li> </ul>	<ul style="list-style-type: none"> <li>• Manufacturing of <a href="#">electric vehicles (EVs) and parts</a></li> </ul>	<ul style="list-style-type: none"> <li>• Investments in <a href="#">RE industry value chain</a></li> </ul>

Source: National authorities; media reports; AMRO staff

## Annexes: Selected Issues

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### 1. Data Center Boom in Malaysia: Recent Developments and Challenges<sup>55</sup>

*The rapid growth in global demand for computing power and data storage has led to a boom in data center constructions, with Malaysia emerging as a major beneficiary in the ASEAN+3 region due to a host of physical and geographic advantages. As a result, data center capacity in Malaysia is set to grow robustly in the near term, particularly in Klang Valley and Johor as the main hubs. Despite positive spillovers to economic growth and employment, several challenges lie ahead, such as natural resource constraints, limited domestic value added, and questionable impact on long-term employment.*

**1. The global surge in demand for computing power and data storage underpins the rapid construction of data centers in many countries.** A key driver is the global AI boom, particularly the proliferation of large language models (LLMs), which are highly compute-intensive across both their primary operational phases. The demands on computing infrastructure are substantial during the training stage—the foundational phase where models learn patterns from vast datasets to build general knowledge—and the inference stage—the deployment phase where already-trained models use learned parameters to generate responses to user prompts. For example, a ChatGPT search requires four to 10 times computing power used in a basic Google search. Meanwhile, increasingly widespread usage of cloud services is driving up demand for data storage, which necessitates substantial investment in data centers.

**2. Malaysia’s natural resource endowments provide a strong foundation for data center operations.** Data centers use large quantities of electricity to run servers continuously, and vast amounts of water to cool the servers. In light of these demands on natural resources, Malaysia is well placed as a strategic site for data centers. Its average electricity tariff is the lowest among the ASEAN-5 economies and compares favorably against rates prevailing in advanced countries (Figure A1.1).<sup>56</sup> Moreover, Malaysia’s power reserve margin is projected to be 28-36 percent over 2024-2030, a comfortable buffer relative to the International Energy Agency’s recommended threshold of 20-35 percent. Water availability reinforces this advantage further—Malaysia ranks among the lowest in water stress compared with regional peers, underpinned by abundant rainfall, plentiful surface water sources, and well-developed dams and reservoirs.

**3. A unique set of geographic attributes further strengthens Malaysia’s appeal as a data center destination.** Situated outside the Pacific Ring of Fire, the country is largely insulated from seismic activity and natural disasters that can disrupt data center operations elsewhere. Moreover, Malaysia’s proximity to Singapore, which has a dense network of undersea cables and landing sites, results in low network latency (i.e. fast data transfer across networks) and limited costs of connecting to existing cable infrastructure. The proximity to Singapore’s workforce has also enhanced the benefits of locating data centers in Malaysia, particular in the state of Johor, which directly borders Singapore as data centers sometimes need to engage off-site employees for urgent support. Singapore’s talent pool is widely viewed as a valuable complement to Johor’s data centers, especially in light of the creation of the Johor-Singapore Special Economic Zone (JS-SEZ).<sup>57</sup>

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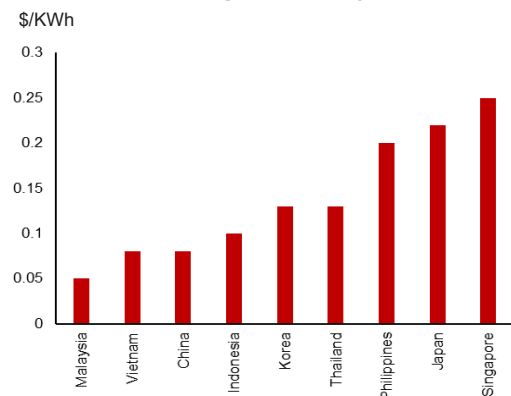
<sup>55</sup> Prepared by Jade Vichyanond, Senior Economist.

<sup>56</sup> However, with the July 2025 electricity tariff revision, data centers may see their electricity bills rise by 10-14 percent, which could narrow this advantage.

<sup>57</sup> Signed in January 2025, the JS-SEZ was created to enhance the value proposition of Johor and Singapore as a high-value investment destination by improving connectivity between the two regions and strengthening the business ecosystem within the economic zone.

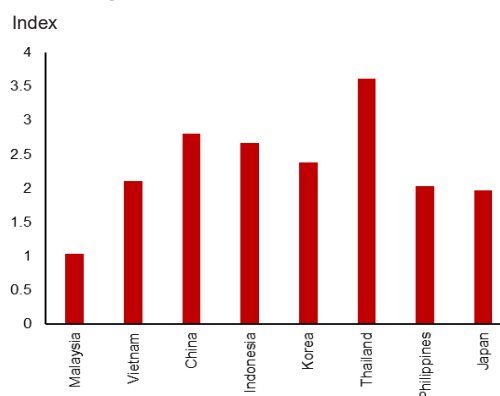
Furthermore, Singapore’s ban on new large-scale data center construction during 2019-2022 helped boost data center investment in the neighboring state of Johor in Malaysia.<sup>58</sup> Lastly, the US-China tech decoupling and broader geopolitical considerations around data sovereignty have added to Malaysia’s appeal as a neutral destination for data center investment from both sides.

Figure A1.1. Average Electricity Tariffs (2024)



Source: World Population Review; AMRO staff calculations

Figure A1.2. Water Stress (2023)



Source: World Population Review; AMRO staff calculations

**4. As a result, data center capacity in Malaysia is projected to rise from 0.86-1GW as of end-2025 to 3-4GW by 2029, with Klang Valley and Johor as the main hubs.** Geographically, almost 70 percent of the country’s data centers are located in Klang Valley, the area around the capital city with a long history of data centers thanks to the development of Cyberjaya as a digital hub in the 1990s (Table A1.1). However, data centers in Klang Valley are mostly small-scale (less than 10MW), accounting for around 20 percent of Malaysia’s capacity in 2024. Johor, by contrast, has emerged as a major data center location in recent years due to the aforementioned benefits of proximity to Singapore’s—Johor’s data center capacity expanded from almost zero in 2020 to around 80 percent of the country’s total operational capacity in 2024. More than half of Johor’s data centers are large-scale (>100MW), driven by demand from international data center operators that provide cloud and AI-intensive services.

Table A1.1. Data Center Locations and Capacity (2024)

Region / State	Existing Supply		Future Supply	
	No. of Data Centers	Estimated Capacity (MW)	No. of Data Centers	Estimated Capacity (MW)
Johor	12	396.9	28	898.7
Klang Valley	37	107	28	378.5
Penang	3	0.4	-	-
Sarawak	2	0.6	2	17.8
Negeri Sembilan	0	-	2	16
Kedah	0	-	1	2
Total	54	504.9	61	1313

Source: Knight Frank; AMRO staff compilation

**5. Some of the government’s key financial incentives for data center investment are provided through Digital Ecosystem Acceleration (DESAC) scheme and Malaysia Digital (MD).** Under the DESAC scheme, new companies carrying out business activities

<sup>58</sup> Since 2022, Singapore has been approving new data center investment as long as sustainability requirements are satisfied. This new scheme may be economically feasible for certain retail operators, less so for hyperscalers, thus not posing as a major challenge to Johor’s efforts to attract hyperscalers.

as a digital infrastructure provider can choose to receive either an investment tax allowance of 60 or 100 percent for capital expenditure or a special tax rate of 10 or 15 percent on statutory income. Existing companies get an investment tax allowance of 30 or 60 percent for capital expenditure. In all these cases, the actual percentage granted depends on the conditions satisfied.<sup>59</sup> As for the MD initiative, various types of incentives are available to qualifying companies on a case-by-case basis, ranging from income tax exemption and investment tax allowance to exemption from import duties and foreign knowledge worker quotas and passes.

**6. Malaysia has also distinguished itself through a relatively systematic and comprehensive regulatory framework for data center development.** In November 2024, the government approved Data Centre Planning Guidelines to standardize site selection, planning permission, and operational control for data center construction.<sup>60</sup> To attract investment by companies with sustainability requirements or priorities, the authorities further issued Guidelines for Sustainable Development of Data Centers in December 2024 to outline efficiency parameters, some of which are related to requirements for tax incentive eligibility under the DESAC scheme.<sup>61</sup> To facilitate sustainability-oriented investment, the Corporate Renewable Energy Supply Scheme was put in place in September 2024 to allow companies to purchase renewable energy directly from independent power producers. Most recently, the Data Centre Framework was announced in July 2025 as an overarching set of guidelines for strategic coordination, regulatory approval, and sustainability of all new projects and expansion of existing ones. As a result, Malaysia's data center development framework is considered more systematic and sustainable than most other regional economies that are also trying to attract data center investment. In Indonesia, Thailand, and Vietnam, data center investment frameworks and regulations are more fragmented, and sustainability mandates are relatively limited.<sup>62</sup> Lastly, greater investor confidence in Malaysia's legal enforcement compared to other regional countries, especially with regard to data privacy, has cemented the country's appeal as a major data center hub.

## Challenges

**7. Some of the key challenges for data center development in Malaysia concern the availability of natural resources.** As of December 2024, applications for data center power supply had exceeded 11,000MW, equivalent to around 40 percent of Peninsular Malaysia's capacity of 27,000MW. Despite the country's continued efforts to ramp up electricity generation—6-8GW of gas-powered capacity is expected to be added by 2030 amid the phasing out of coal—fast-rising demand for electricity may still outstrip these measures. Klang Valley has already experienced occasional but isolated power outages in recent years, while in Johor, around 30 percent of data center applications submitted during June-October 2024 were rejected, largely due to operators not demonstrating sustainable practices in resource utilization. Water availability presents an equally pressing constraint. Cooling high-performance servers—through methods such as evaporative cooling and cooling towers—is highly water-intensive: every 100MW of data center capacity requires around 4.2 million liters of water per day, equivalent to usage by 10,000 persons. This

<sup>59</sup> These conditions pertain to paid-up capital, capital expenditure, full-time local employees, local vendor development programs, and adoption of Industry 4.0 and green technology.

<sup>60</sup> For example, the guidelines, which mainly target data center developments exceeding 1MW in capacity, have specific zoning requirements, limiting construction to commercial and industrial areas and requiring mandatory buffer zones near residential areas to minimize noise disturbance.

<sup>61</sup> These include power usage effectiveness (PUE), carbon usage effectiveness (CUE), and water usage effectiveness (WUE).

<sup>62</sup> For example, unlike Malaysia or Singapore, Indonesia does not have a "single-window" investment approval system, forcing potential investors to navigate a complex array of bureaucratic processes. Moreover, delays in securing tax exemptions discourage investors from choosing Indonesia as a destination for data center investment.

demand can strain local water infrastructure in areas already experiencing rapid growth in data center construction.

**8. Domestic value added from Malaysia’s data center industry stems is relatively limited during the investment stage.** Most of the equipment used in Malaysian data centers is imported, with foreign manufacturers producing equipment for almost every aspect of data center infrastructure, from power and cooling (e.g., uninterruptible power supplies, generators) to networking (e.g., routers, switches), storage (e.g., storage area networks, network attached storage), computing (e.g., servers, server racks), and security (e.g., access control systems, biometric scanners). For example, despite the country’s established metal fabrication industry, Malaysia still imports large numbers of integrated server racks for data center investment, although it is worth noting that some of the demand for integrated server racks is met by foreign manufacturers based in Malaysia, supporting demand for local assembly labor.<sup>63</sup> At any rate, it is estimated that only around 30 percent of value added from capital expenditure is captured domestically, mostly from construction-related activity, which benefits, for example, producers of cement, steel, and glass.

**9. However, domestic value added is significantly higher during the operational stage of data centers.** The share of domestic value added in data centers’ operating expenses is estimated at around 70 percent, involving mainly leasing and utilities expenses, most of which accrue to domestic entities as local income. At the same time, data centers can generate ICT services exports through cross-border provision of cloud computing, data hosting, and processing services. Given that electricity costs are a major component of domestic value added of data centers’ operating expenses, it is vital that Malaysia be equipped to meet the projected electricity demand of data centers in the pipeline with a view to ensuring sustained growth of ICT services exports going forward. International experience—most notably in Ireland and Singapore—shows that deepening domestic linkages through encouraging local participation in higher value-added segments, such as software development and enterprise services, can further enhance the contribution of data centers to export earnings and overall economic value added.

**10. While most data centers employ limited numbers of permanent staff on-site, they also create indirect jobs that benefit the local economy.** Typically, the life cycle of an average data center consists of strategic planning, design, construction, commissioning, and operations, all of which cover a wide range of job domains, such as business support, operations engineering, and network and connectivity (Table A1.2). The lion’s share of jobs created by data centers takes place at the pre-operational stages; once operations begin, most data centers on average create only 30-50 permanent jobs. That said, during the operations stage, a variety of indirect jobs are also created, generally through partnerships with external vendors that supply periodic services such as maintenance, repairs, and upgrades.

**11. Even when full-time employees are needed for data center operations, it is sometimes challenging to meet such demand, particularly for skilled labor.** Skilled labor shortage has been plaguing Malaysia’s semiconductor industry for years due to insufficient numbers of engineering graduates with applicable knowledge in areas such as integrated circuit (IC) design, device physics, fabrication, and process engineering. A

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<sup>63</sup> Smaller data centers that mainly provide co-location services generally use simple server racks, most of which are produced by Malaysian companies. However, hyperscalers rely more on integrated server racks, which are more complex (i.e. containing IT equipment and power management and cooling systems) and for the most part imported or produced by foreign companies with manufacturing capacity in Malaysia (i.e., Wiyynn and Supermicro).

similar lack of skilled graduates is also faced by the budding data center industry, which requires specific skill sets related to IT infrastructure, hardware management, and environmental controls. The shortage is exacerbated by brain drain, particularly to Singapore, home to around 60 percent of the 1.8 million Malaysians working overseas. As such, continued government efforts to address the labor shortage by equipping students with industry-relevant skills—such as the AWS Skills to Jobs Tech Alliance, a joint initiative by AWS and Malaysia Digital Economy Corporation (MDEC), and the Data Centre Technician Program, a training program developed by the Johor Talent Development Council to enhance technicians’ workforce readiness—will be crucial in safeguarding the future of the country’s data center industry.

**Table A1.2. Data Center Job Domains**

Job domain	Strategy	Design	Construction	Commissioning	Operations
Business Support	◆	◆		◆	◆
Strategy	◆	◆			
Design		◆	◆	◆	
Construction			◆	◆	
Operations Engineering	◆	◆		◆	◆
IT Hardware		◆			◆
Network and Connectivity	◆	◆		◆	◆
Controls and Monitoring	◆	◆		◆	◆
Operations					◆

Source: Uptime Institute; AMRO staff compilation

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## 2. From Resource-rich to Future-ready: Sarawak's Investment and Green Industrial Growth<sup>64</sup>

*Sarawak is undertaking a broad-based investment drive to transition from a hydrocarbon-dependent economy to a diversified, green, and high-value manufacturing hub, supporting Malaysia's broader industrial upgrading. Strategic initiatives focus on hydrogen; carbon capture, utilization, and storage; petrochemicals; semiconductors; data centers; and transport infrastructure. Integrated industrial clusters such as Samalaju in Bintulu, alongside expansions of seaports, airports and road networks, enhance connectivity and export capacity. Abundant low-carbon hydropower and domestic gas supply provide a competitive energy base for energy-intensive industries. Free tertiary education aims to build the skilled workforce required for a high-value economy. Collectively, these measures aim to attract high-quality investment, reduce reliance on hydrocarbons, and position Sarawak for sustainable, future-ready growth. These efforts carry national significance—Sarawak's energy endowments, industrial clusters and regional connectivity position the state as a key enabler of Malaysia's net-zero transition, high-income ambitions, and ASEAN energy integration agenda.*

**1. Sarawak is one of Malaysia's most resource-endowed states, accounting for the bulk of the country's liquefied natural gas (LNG) exports and a significant share of hydrocarbon production.** Mining, particularly in oil and gas, makes up a significant share of Sarawak's GDP (Figure A2.1).<sup>65</sup> Hydrocarbon-related revenues, including state sales tax on petroleum products, constitute a major source of fiscal income.<sup>66</sup> In recent years, state budgets have exceeded MYR15 billion annually, with development expenditure accounting for 65–70 percent of total spending—an unusually high ratio by subnational standards. At the same time, reliance on commodity-linked revenues exposes the state's fiscal position to oil and gas price volatility and long-term global decarbonization trends, while the capital-intensive hydrocarbon sector has limited direct employment creation and relatively weak spillovers to other industries, underscoring the need for structural diversification.

**2. Sarawak is undertaking a broad-based investment push to transition from commodity dependence toward diversified, green, and higher value-added growth.** Strategic frameworks—including the Post-COVID Development Strategy (PCDS) 2030, Sustainability Blueprint, Hydrogen Economy Roadmap, Gas Roadmap, Digital Economy Blueprint, and Semiconductor Roadmap—collectively prioritize infrastructure modernization, energy transition, and high-value manufacturing to achieve high-income status by 2030. Through alternative financing mechanisms supported by petroleum sales tax revenues and dividends from state-linked corporations, the government has committed at least MYR21.8 billion to 1,586 infrastructure projects, of which more than 70 percent have been completed.<sup>67</sup> These projects span roads, water supply, rural electrification, power generation, and digital connectivity. Construction activity has consequently outpaced the national average in recent years, reflecting strong project implementation and elevated development spending (Figure A2.2).

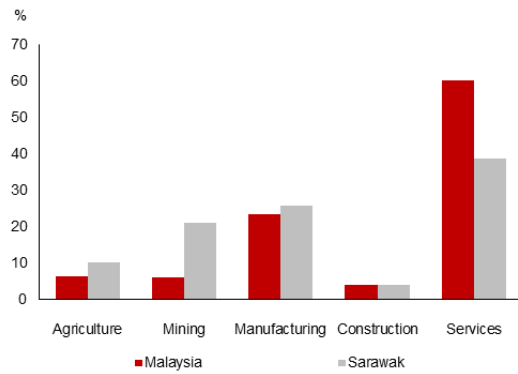
<sup>64</sup> Prepared by Wee Chian Koh, Senior Economist.

<sup>65</sup> Sarawak contributes about 90 percent of Malaysia's LNG exports and holds roughly 60 percent of Malaysia's total gas reserves. The major LNG complex in Bintulu has an annual capacity of nearly 30 million tonnes, and Malaysia shipped about 28 million tonnes of LNG in 2024, making it the world's fifth-largest exporter.

<sup>66</sup> As of late 2025, Sarawak had collected MYR28.5 billion from the 5 percent sales tax on petroleum products since it was implemented in 2019, contributing about one-third to total state revenue.

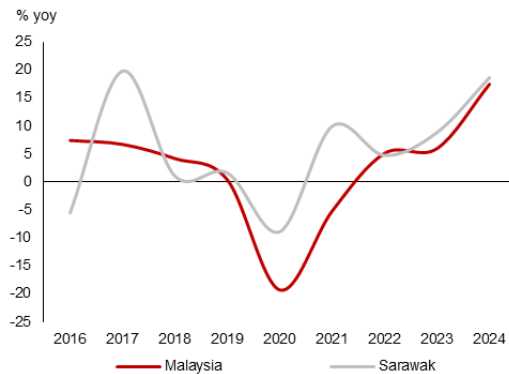
<sup>67</sup> Sarawak's Alternative Financing (AF) model is a state-level infrastructure financing mechanism to fast-track critical infrastructure without being constrained by annual cash budgets. The state appoints government-linked companies (GLCs) or special-purpose vehicles (SPVs) to undertake and pre-finance infrastructure projects. These entities raise financing (typically via bank loans or capital markets), implement the projects, and are repaid by the state government over time. This approach became more prominent after Sarawak's revenue position strengthened following the introduction of the 5 percent state sales tax on petroleum in 2019, which expanded fiscal capacity.

Figure A2.1. Share of GDP by Economic Sector



Source: Department of Statistics Malaysia (DOSM); AMRO staff calculations

Figure A2.2. Growth Rate of Construction Sector



Source: DOSM; AMRO staff calculations

**3. Sarawak is strategically expanding state control over the oil and gas value chain to support domestic industrial development.** The state has pursued greater control over upstream, midstream, and domestic gas activities through its state-owned entity, Petroleum Sarawak Berhad (PETROS). Under Sarawak Gas Roadmap 2030, PETROS aims to increase domestic gas allocation from around 6 percent to nearly 30 percent, catalyzing MYR150–200 billion in broader gas-based investments to strengthen energy security, anchor new manufacturing clusters, and support higher value-added industrial activities, while preserving fiscal revenues from LNG exports. This expanded role has occasionally generated tensions with Petronas—Malaysia’s national oil company—over revenue sharing and operational control, though coordination continues on technical standards, pipeline infrastructure, and investment planning.

**4. Sarawak is leveraging its renewable energy surplus to develop hydrogen as a new pillar of export diversification.** With more than 3,400 MW of installed hydropower capacity, primarily supplied by Sarawak Energy Berhad (SEB), the state has a low-carbon electricity base that supports competitive green hydrogen production.<sup>68</sup> Flagship projects such as H2biscus and H2ornbill, coordinated by PETROS with Japanese and Korean partners, target combined production of 200,000–250,000 tonnes per year of hydrogen or ammonia derivatives by the late 2020s for export to Northeast Asia.<sup>69</sup> Planned investments span electrolyzers, ammonia synthesis plants, storage and export terminals, port upgrades, and domestic refueling infrastructure.

**5. The Kuching Urban Transportation System (KUTS) is a MYR6 billion hydrogen-powered autonomous rapid transit (ART) project that serves as both urban mobility infrastructure and a demonstration platform for Sarawak’s hydrogen ambitions.** Implemented by Sarawak Metro under the Sarawak Economic Development Corporation (SEDC) and overseen by the state government, the system combines hydrogen fuel cell-powered vehicles with dedicated refueling infrastructure and a centralized operations and traffic management center. The network integrates park-and-ride facilities, feeder bus services, and multimodal links. Construction is phased between 2025 and 2028. Beyond its transport function, KUTS creates early domestic hydrogen demand and signals policy commitment to investors in the hydrogen value chain.

<sup>68</sup> Sarawak currently possesses three hydroelectric dams—Batang Ai, Bakun, and Murum—collectively capable of generating 3,450 MW of electricity. The Baleh dam, scheduled for commissioning in 2028, will add an additional capacity of 1,300 MW.

<sup>69</sup> The H2ornbill project is being carried out with Japanese partner Sumitomo/Eneos, while the H2biscus project involves Korean partners Samsung Engineering, POSCO, and Lotte Chemical.

**6. Sarawak is also positioning itself as a regional renewable energy exporter through cross-border electricity interconnections.** The state has exported hydropower to West Kalimantan since 2016 and has plans to supply Brunei through existing grid links. More recently, Sarawak has advanced proposals to export up to 1GW of renewable electricity to Singapore under cross-border power trade arrangements, leveraging ASEAN Power Grid initiatives. These arrangements monetize surplus generation capacity, diversify energy revenue beyond hydrocarbons, and reinforce Sarawak's role as a regional low-carbon electricity supplier.

**7. Sarawak is advancing carbon capture, utilization, and storage (CCUS) to decarbonize its hydrocarbon base while preserving the long-term competitiveness of its energy exports.** The state is assessing depleted reservoirs and saline aquifers offshore, drawing on decades of oil and gas development experience, with geological formations estimated to provide up to 3 trillion cubic meters of potential CO<sub>2</sub> storage capacity. The Kasawari CCS project, led by Petronas in partnership with state entities, targets to capture up to 3.3 million tonnes of CO<sub>2</sub> annually, making it one of the largest offshore CCS initiatives in the region. If deployed at scale, CCUS could extend the productive life of gas reserves, sustain the carbon competitiveness of LNG and petrochemical exports, and position Sarawak as a regional carbon storage provider.

**8. Samalaju Industrial Park and the Bintulu petrochemical complex constitute Sarawak's flagship energy-intensive industrial hub, integrating upstream feedstock, power, and port infrastructure to drive high-value manufacturing and export competitiveness.** Samalaju Industrial Park has attracted cumulative approved investments exceeding MYR50 billion across ferroalloys, aluminum smelting, and specialty chemicals, supported by reliable hydropower from SEB and domestic gas aggregated by PETROS. The Bintulu petrochemical complex complements the Samalaju cluster with methanol production and planned ammonia and derivative facilities. Proximity to feedstock, abundant low-cost hydropower, and deepwater port facilities enhances export competitiveness. The cluster model also enables economies of scale, technology sharing, and the integration of low-carbon initiatives, including potential CCUS applications.

**9. Sarawak is targeting semiconductor and data center investments to integrate into high-tech and AI-driven value chains.** The state is positioning itself as a regional hub for semiconductor design and back-end activities, capitalizing on Malaysia's established electrical and electronics ecosystem and reliable hydropower supply. The government has capitalized Sarawak Microelectronics Design Semiconductor with MYR50 million to attract design and fabrication partners. Industrial sites in Samalaju and Kuching High Tech Park are being marketed for hyperscale data center investments, benefiting from low-carbon, stable baseload electricity, competitive tariffs, and proximity to ASEAN markets. However, digital connectivity remains a structural constraint. Compared with established regional hubs, Sarawak currently relies on limited submarine cable landings and international bandwidth routes, which may affect latency and redundancy for large-scale data center operations.

**10. Port, air, and road transport development are central to Sarawak's strategy to become a regional logistics and export hub for Borneo and beyond.** Bintulu Port, Malaysia's main LNG export terminal, is being upgraded to accommodate increased petrochemical, LNG, and future hydrogen derivative exports. A proposed deep-sea port at Tanjong Embang would support industrial clusters such as Samalaju with new container and bulk cargo facilities. Hinterland connectivity is being strengthened through the Pan-

Borneo Highway and feeder roads, while feasibility studies have advanced for a Trans-Borneo Railway, envisioned to connect major urban and industrial nodes. Air transport infrastructure is likewise being enhanced through expansions at Kuching International Airport and proposals for a new airport in Kota Samarahan to support passenger, cargo, and high-value goods movement.

**11. Sarawak has introduced a landmark Free Tertiary Education Scheme (FTES) to expand access to higher education and support human capital development.**

Scheduled for implementation in 2026, the scheme covers full tuition fees for eligible Sarawakian students, with a focus on science, technology, engineering, and other fields aligned with the state's development priorities.<sup>70</sup> FTES is expected to benefit approximately 10,000 students and is backed by a budget allocation of up to MYR600 million for 2026. To further support students from lower-income households (per capita income below MYR1,500/month), the scheme provides an additional annual living stipend of MYR15,000. The FTES represents a significant commitment to reducing financial barriers for students and strengthening the talent pipeline for Sarawak's economic transformation.

**12. The Sarawak Sovereign Wealth Future Fund (SSWFF), seeded with MYR8 billion from the State Consolidated Fund, is designed to transform resource revenues into strategic long-term investments, supporting economic diversification and fiscal sustainability.**

Annual appropriations of MYR400–600 million are planned to gradually grow the fund's corpus, which is legally required to remain untouched for at least 20 years except under exceptional circumstances. Governed by a Board of Guardians comprising investment and finance professionals, capital deployment commenced in 2025 across equities, fixed income, infrastructure, and strategic stakes aligned with Sarawak's economic transformation goals. By leveraging public capital to attract private and foreign investment, the SSWFF strengthens Sarawak's ability to implement long-term, strategic projects without over-reliance on annual budget allocations or debt.

**13. Sarawak's state-led investments are not only transforming the local economy but also advancing Malaysia's national growth and strategic objectives.**

The state's hydrogen and hydropower projects contribute to Malaysia's low-carbon energy ambitions and support the country's decarbonization commitments under the National Energy Transition Roadmap. Attracting semiconductor and data center investments will enhance digital infrastructure and AI readiness, aligning with the Digital Economy Blueprint and 13<sup>th</sup> Malaysia Plan (RMK-13). Industrial clusters such as Samalaju in Bintulu complement Malaysia's high-tech E&E hubs by leveraging abundant clean energy to anchor energy-intensive industries, thereby broadening and strengthening the national manufacturing ecosystem. Upgrades in transport and logistics infrastructure strengthen Malaysia's connectivity and facilitate integration into regional and global value chains. By linking state-led initiatives to national strategies, Sarawak amplifies the impact of its investment push, supporting Malaysia's competitiveness and industrial upgrading.

**14. Sarawak's ambitious, resource-financed, and state-led investment model carries significant macroeconomic policy implications** that require careful calibration to ensure that the state's development strategy delivers durable growth without amplifying fiscal or financial vulnerabilities. Key considerations include:

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<sup>70</sup> The scheme covers 64 undergraduate degree programs at four state-owned institutions: Swinburne University of Technology Sarawak, Curtin University Malaysia, University Technology Sarawak, and i-CATS University College.

- **Revenue volatility and fiscal resilience.** Reliance on hydrocarbon-linked revenues exposes development spending to commodity price swings, highlighting the need for prudent stabilization mechanisms and conservative revenue assumptions. At the same time, medium-term debt anchors and adequate liquidity buffers are essential to preserve fiscal sustainability amid large capital outlays.
- **Monitoring contingent liabilities.** Large-scale infrastructure, hydrogen, and industrial projects undertaken by state-owned entities, such as PETROS, Sarawak Metro, and SEB, require systematic reporting of debt, guarantees, and quasi-fiscal risks within a consolidated public sector balance sheet.
- **Operationalization of the sovereign wealth framework.** The SSWFF should adopt transparent deposit and withdrawal rules, clear asset allocation mandates, and strong governance standards to smooth fiscal cycles and safeguard intergenerational equity.
- **Hydrogen and CCUS development risks.** Commercial viability depends on global demand, technology costs, competition from other hydrogen-exporting regions such as Australia and the Middle East, carbon pricing developments, regulatory clarity on long-term storage liability, and sustained demand for carbon management services. Monitoring these risks is critical to avoid fiscal or operational strain.
- **External competitiveness and diversification.** Concentration in energy-intensive exports exposes the economy to global decarbonization trends and carbon border adjustment mechanisms, emphasizing the need to diversify toward higher-value manufacturing, technology, and services.
- **Human capital-productivity alignment.** Achieving sustained returns on capital investment requires workforce upgrading, institutional strengthening, and meaningful private sector participation to prevent diminishing marginal returns.
- **Federal–state coordination.** Clear regulatory alignment on gas pricing, CCUS liability, carbon markets, and trade policy is essential to reduce uncertainty and catalyze private co-investment. Early and structured federal-state coordination would strengthen the overall investment proposition.

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