AMRO Country Report
ACR/22-07

AMRO Annual Consultation Report

Malaysia - 2022

ASEAN+3 Macroeconomic Research Office (AMRO)

August 2022

Acknowledgements

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 (ACV) of AMRO to Malaysia, which was conducted virtually from January to February 2022 (Article 5 (b) of the AMRO Agreement). The AMRO ACV team was headed by Dr Sumio Ishikawa, Group Head and Lead Economist. The ACV members were Ms Diana del Rosario, Country Economist for Malaysia; Mr Ming Han (Justin) Lim, Economist and First Back-up Economist for Malaysia; Dr Nguyen Thi Kim Cuc, Senior Economist and Second Back-up Economist for Malaysia; Dr Andriansyah, Fiscal Specialist; and Ms Yang Chunyu, Associate Economist. AMRO Director Mr Toshinori Doi and Chief Economist Dr Hoe Ee Khor participated in key policy meetings with the authorities. The AMRO Annual Consultation Report on Malaysia for 2022 was peer-reviewed by Dr Jae Young Lee, Group Head and Lead Economist, and Ms Catharine Tjing Yiing Kho, Economist; reviewed on its format by Ms Vanne Khut, Economist; and approved by Dr Hoe Ee Khor, AMRO Chief Economist.

3. The analysis in this Report is based on information available up to June 10, 2022.

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 ACV team wishes to thank the Malaysian authorities for their comments on this Report, as well as their excellent meeting arrangements.

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Executive Summary

The Malaysian economy is expected to grow strongly in 2022, having regained momentum after the Delta strain of COVID-19 infections disrupted recovery in Q3 2021. Despite the ongoing Omicron wave, the high vaccination rate, continuing nationwide inoculation program, and adequate healthcare capacity should enable a faster rebound this year amid the progressive reopening of the economy. Accordingly, policies should be recalibrated to support a robust and sustainable recovery.

1. Malaysia's economic recovery has regained momentum after being disrupted by the Delta wave of COVID-19 infections in Q3 2021. Growth picked up in Q4 2021 and Q1 2022 as domestic demand and production rebounded with the easing of mobility restrictions. Going forward, the high vaccination rate, continuing nationwide inoculation program, and adequate healthcare capacity should allow Malaysia to avoid stringent movement curbs in dealing with the ongoing Omicron wave and future outbreaks of COVID-19 infections, unless the new variants are more virulent. Consequently, domestic demand is expected to rebound strongly, which together with buoyant external demand, should drive GDP growth higher from 3.1 percent in 2021 to 6.0 percent in 2022. That said, the recovery will likely remain incomplete and uneven as some sectors such as international travel and tourism are expected to recover only slowly in 2022.

2. While headline inflation has been contained despite upward pressures, the authorities have decided to start normalizing monetary policy as the recovery is underway. Higher food prices have primarily pushed headline and core inflation higher since September 2021. Administrative measures to stabilize food and fuel prices are expected to contain headline inflation at 3.0 percent in 2022 after the 2.5 percent seen in 2021. Core inflation has likewise turned around to approach the headline. While inflationary pressures have been relatively moderate, the firming recovery in domestic demand prompted Bank Negara Malaysia (BNM) to raise the policy rate by 25 basis points in May from a record low of 1.75 percent.

3. The external position has been bolstered by robust trade surpluses and foreign investment inflows. Recovery in exports broadened across manufactured goods and commodities in 2021 through early 2022, boosting the current account surplus despite larger deficits in the services and primary income accounts. At the same time, strong foreign direct and portfolio investments drove the financial account into surplus in 2021 and Q1 2022. With an additional boost of USD5 billion in special drawing rights allocated by the International Monetary Fund (IMF), Bank Negara Malaysia's (BNM) international reserves rose by USD9.3 billion to USD116.9 billion at the end of 2021. The reserves position eased to USD112.8 billion at end-May 2022, but is still more than sufficient to cover short-term external debt.

4. The banking system remains sound and is well positioned to withstand credit and liquidity risks. Loan growth held up at more than 4 percent at the end of 2021 through the first four months of 2022, supported by low interest rates as well as initiatives to stimulate domestic demand and support small and medium enterprises (SMEs). AMRO welcomes the unwinding of targeted loan repayment assistance (TRA) schemes in 2022. Loan impairments have remained low at about 1.6 percent, only marginally higher from the pre-pandemic period, but could increase as the TRA schemes are unwound in 2022.

5. The weaker-than-expected recovery in 2021 prompted an expansionary fiscal stance in the same year and a more gradual pace of fiscal consolidation in 2022 through the medium term to support the economy. The fiscal deficit rose to 6.4 percent of GDP in 2021, above the initial government target of 5.4 percent, as four additional economic packages were rolled out to counter the impact of the tightened movement restrictions. The 2022 budget will keep the fiscal deficit elevated at about 6 percent of GDP, while further consolidation in the following years

will take a more gradual pace, in order to support the recovery and Malaysia's long-term development. To support the fiscal stance, the statutory debt ceiling was raised to 65 percent of GDP in October 2021, but the authorities have committed to improve fiscal discipline and governance over the medium term with the introduction of the Fiscal Responsibility Act.

7. The emergence of more virulent vaccine-resistant COVID-19 variants remains a major threat to economic recovery. More severe and contagious infections, despite being a tail risk, could put the healthcare system under strain and lead to a return of more stringent mobility restrictions. Domestic demand and production could be severely constrained as a result, depressing business returns and employment. Such an event increases the risk of financial distress and puts fiscal sustainability into question.

8. The war in Ukraine and an aggressive tightening of U.S. and E.U. monetary policy have exposed Malaysia to the risks of higher inflation and a global economic slowdown. As it is, the surge in the costs of global logistics and price of commodities such as oil and gas, grains, and fertilizers have pushed Malaysia's food inflation to a four-year high of 4.2 percent in March 2022. Heightened inflationary pressures could persist amid recurring COVID-19 disruptions and a drawn-out war in Ukraine. Elevated inflationary pressures risk becoming entrenched in the economy, in turn undermining the rebound in domestic demand. Meanwhile, aggressive monetary policy tightening in the U.S and E.U. alongside the ongoing Russia-Ukraine conflict could trigger a slump in global demand, including for Malaysia's exports. At the same time, aggressive rate hikes by the U.S. Federal Reserve present financing challenges to the Malaysian economy as bond yields rise in tandem with the U.S. bond yields.

9. Beyond 2022, the high government debt and climate change-related disruptions could hold back Malaysia's long-term economic development. The increase in the government debt service burden, which adds to the already sizable committed operating expenses, and the narrowed tax base, limit the fiscal space available to counter future adverse shocks. Extreme and more frequent weather disturbances owing to global warming, and policy initiatives aimed at reducing greenhouse gas (GHG) emissions, such as the European Union's Carbon Border Adjustment Mechanism, risk leaving Malaysia with significant economic losses.

10. While supportive fiscal policy remains critical to narrow the lingering disparity across sectors, a faster pace of fiscal consolidation over the medium term is warranted to ensure fiscal sustainability. Fiscal support for vulnerable groups, the proactive procurement and administration of COVID-19 vaccines and antiviral treatments, as well as the strengthening of the country's healthcare system, should continue. Likewise, tax reforms, especially with regard to indirect taxes, are necessary to boost government revenue, and can be implemented starting in 2023 once the economic recovery is firmly established.

11. The policy rate has scope to increase further as the output gap narrows and inflation continues to rise. As the economy bounces back, it would be prudent to reduce the degree of monetary policy accommodation to prevent elevated cost-push pressures from seeping into the broader economy. A higher policy rate would also provide more monetary policy space to respond to future adverse shocks, while mitigating the risk of financial imbalances due to the current low interest rate environment.

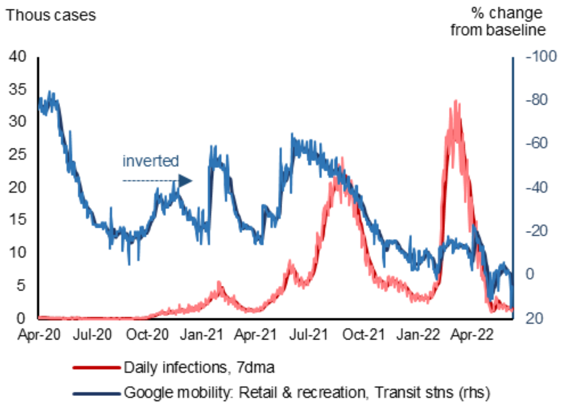
12. Proactive initiatives to facilitate foreign direct investments and mitigate the impact of climate change are highly commendable, and should be pursued to propel the economy to a progressively more sustainable path. It would be critical to ensure the timely realization of investment commitments while strengthening workforce upskilling programs and the domestic financing ecosystem. At the same time, stepping up disaster preparedness and speeding up the implementation of policies that incentivize the shift to low-carbon activities would place Malaysia on a strong footing to deal with the risks surrounding climate change.

A. Recent Developments and Outlook

A.1 Real Sector Developments and Outlook

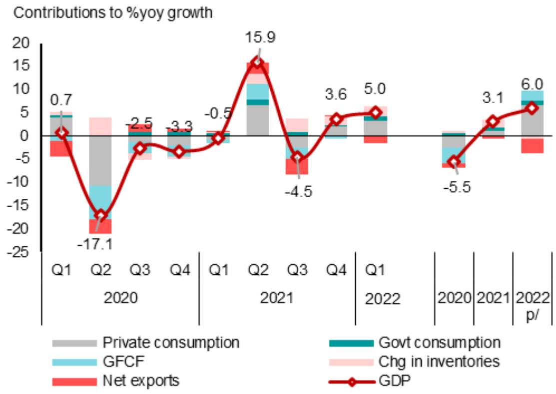
1. **The Malaysian economy has regained momentum since Q4 2021 after COVID-19 disrupted the recovery during much of 2021.** The resurgence of COVID-19 infections from the beginning of 2021 through the peak in August with the Delta wave (Figure 1), dampened last year's GDP growth to 3.1 percent, below the pre-pandemic average of 4.9 percent in 2016-2019. That said, growth regained momentum in Q4 2021 as mobility restrictions were eased, which led to a rebound in domestic demand and production despite massive floods hitting the country in December (Figure 2). Going into 2022, the high vaccination rate, continuing nationwide inoculation program, and adequate healthcare capacity should allow Malaysia to avoid stringent movement curbs in dealing with the ongoing Omicron wave and future outbreaks of COVID-19 infections, provided the new variants are not more virulent. As such, domestic demand is expected to rebound strongly, which together with buoyant external demand, should drive GDP growth higher in 2022. Flood-related rebuilding efforts are also likely to boost capital investment in 2022, while fiscal policy support in terms of cash aid and other forms of relief should mitigate the impact of the floods on consumer sentiment.

Figure 1. Daily COVID-19 Cases and Mobility Indicator for Retail and Recreation



Source: Google; Ministry of Health, Malaysia.
Note: Data obtained up to June 8, 2022.

Figure 2. Contributions to Real GDP Growth, Expenditure Approach



Source: Department of Statistics Malaysia (DOSM); AMRO estimates

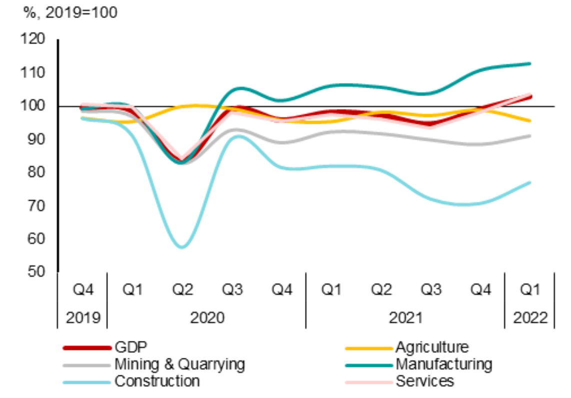
2. **However, the recovery will remain incomplete and uneven in 2022.** The service sector is likely to continue to lag behind manufacturing, which quickly recovered after the nationwide lockdown in March-May 2020 and surpassed its 2019 output in Q3 2020 (Figure 3). For example, near-term recovery in international travel and tourism would remain constrained by the lingering health-related restrictions in key source countries such as China, notwithstanding the boost to the sector from the progressive reopening of Malaysia's international borders from April 1.[1] Likewise, output in the agriculture, construction, and logistics sectors has been constrained by the decline in foreign worker supply, which may only be reversed marginally in 2022 as the authorities push for automation. Meanwhile, domestic labor market conditions have improved, driven by employment gains in high- and semi-skilled labor, as domestic economic activities resume (Figure 4). However, the unemployment rate, especially among

[1] Tourist arrivals from China accounted for 10 percent of Malaysia's total arrivals and 13 percent of total tourism receipts, according to the 2016-2019 average. Separately, after the reopening of the country's international borders on April 1, Malaysian authorities removed the pre-flight departure and on-arrival COVID-19 test requirements for fully vaccinated inbound travelers starting on May 1.

the youth, as well as time- and skill-related underemployment rates remain elevated relative to pre-pandemic levels (Figure 5).

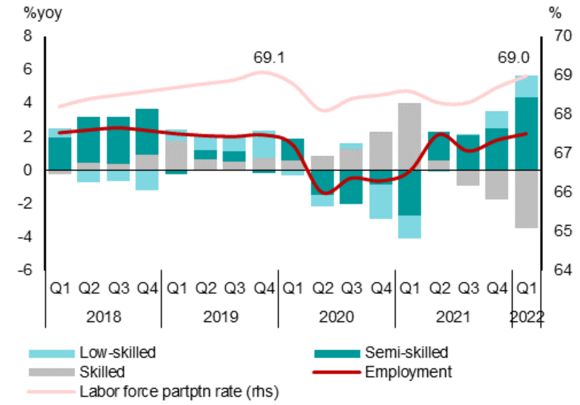
3. **Headline inflation has been contained despite upward pressures; nevertheless, the authorities have decided to start normalizing monetary policy as the recovery is underway.** Higher food prices have pushed headline and core inflation higher since September 2021 (Figure 6). Food prices in Malaysia have gained pace as global and domestic supply bottlenecks are driving up the costs of energy, transport, and farm inputs such as feed and fertilizer. Meanwhile, the direct pass-through of the surge in crude oil prices on domestic transport is muted by the subsidy scheme on fuel prices. In this regard, the administrative pricing schemes on fuel and key food items are expected to contain headline inflation at 3.0 percent in 2022 after the 2.5 percent seen in 2021. Core inflation has likewise turned around to approach headline inflation, largely on increases in the price of discretionary food items. While inflationary pressures have been relatively moderate, the firming recovery in domestic demand prompted Bank Negara Malaysia (BNM) to lift the policy rate by 25 basis points in May after staying at a record low of 1.75 percent since July 2020.

Figure 3. Seasonally-adjusted Real GDP Components, Industry Approach



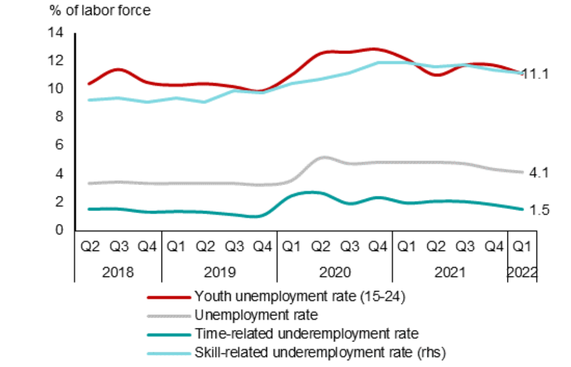
Source: DOSM.

Figure 4. Employment by Skill Type and Labor Force Participation Rate



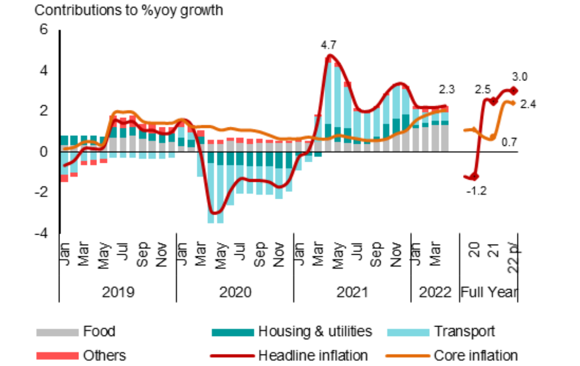
Source: DOSM.

Figure 5. Unemployment and Underemployment Rates



Source: DOSM.

Figure 6. Headline and Core Inflation



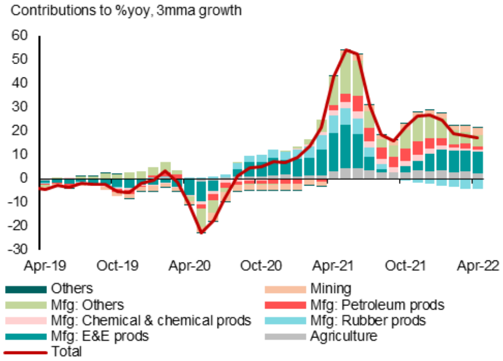
Source: DOSM and AMRO estimates.

A.2 External Sector and the Balance of Payments

4. **Robust trade surpluses and foreign investment inflows have strengthened Malaysia's external position.** Despite limits on operating capacity and some production facility shutdowns during the wave of COVID-19 infections in Q3 2021, recovery in exports broadened across manufactured goods and commodities in 2021 through early 2022 led by

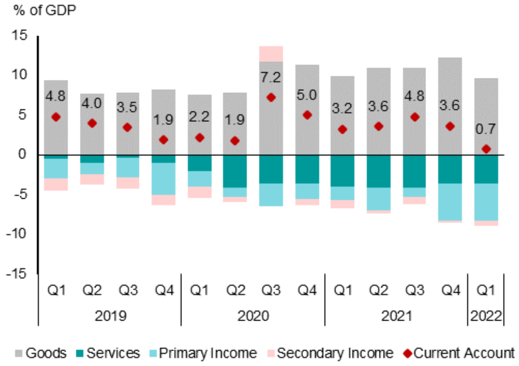
strong semiconductor demand and higher commodity prices (Figure 7). As such, merchandise trade continued to support the current account surplus as the deficit in services and primary income widened (Figure 8). Meanwhile, strong foreign direct investment and portfolio investment drove the financial account into surplus in 2021 and Q1 2022 (Figure 9). Amid these developments and boosted by the IMF's USD5 billion allocation in special drawing rights, international reserves of BNM rose by USD9.3 billion to USD116.9 billion at end-2021 before easing to USD112.8 billion at end-May 2022 (Figure 10). The gross reserves position is more than sufficient to cover short-term external debt, although reserves adequacy is low relative to emerging market (EM) peers.[2] Notwithstanding the stronger external position, the nominal effective exchange rate (NEER) weakened by 0.9 percent in 2021 as domestic factors, namely the surge in COVID-19 infections and unexpected changes in, weighed on the ringgit in addition to a rally in the U.S. dollar. In the first four months of 2022, Malaysia's NEER gained by close to 1 percent amid the larger depreciation of the Japanese yen and the euro.

Figure 7. Contribution to Export Growth



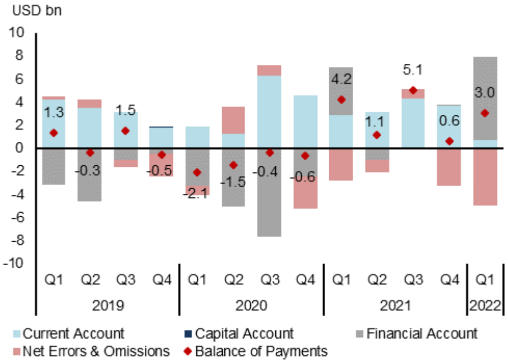
Source: BNM, DOSM.
Note: Merchandise exports in U.S. dollar terms. E&E stands for electrical and electronics.

Figure 8. Current Account Balance



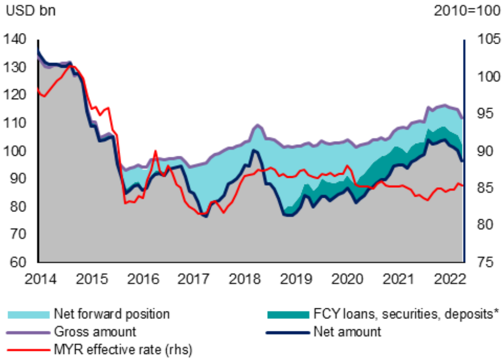
Source: BNM, DOSM.

Figure 9. Balance of Payments



Source: BNM, DOSM.

Figure 10. BNM's International Reserves Position and MYR Effective Exchange Rate



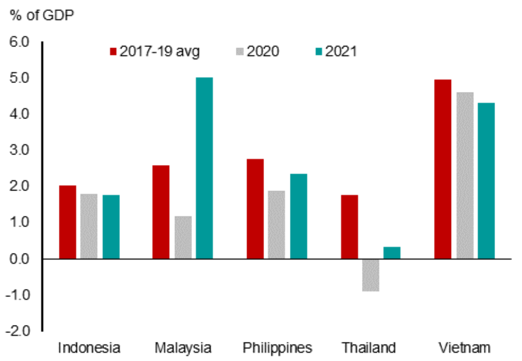
Source: Bank for International Settlements (BIS), BNM.
Note: *Includes a small proportion that refers to contingent liabilities.

5. **Malaysia stood out among its ASEAN peers in attracting new foreign direct investment (FDI)[3] in 2021.** Malaysia's FDI rose beyond pre-pandemic levels to 5.0 percent of GDP in 2021, putting the country ahead of its ASEAN peers (Figure 11). In absolute terms, FDI grew 2.6 times to MYR77.4 billion (USD18.7 billion) in 2021 from the average in 2018-2020. At the same time, FDI commitments expanded by 175 percent from the 2018-2020 average to reach MYR208.6 billion (USD50.3 billion) in 2021, equivalent to 13.5 percent of

[2] See Box B. BNM's International Reserves as a Fraction of Malaysia's External Assets in AMRO's 2020 Annual Consultation Report on Malaysia.
[3] FDI figures quoted in the paragraph are based on asset/liability principle as per BPM6.

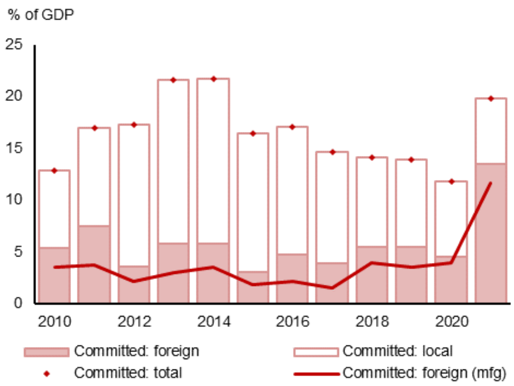
GDP and pointing to continued strength in FDI performance over the medium term (Figure 12). The manufacturing sector accounted for 68 percent of last year's FDI and 86 percent of committed FDI, in part reflecting an expansion of production capacity in the electrical and electronics industry amid strong external demand. Foreign investor interest in Malaysia was also supported by the authorities' initiatives to enhance business facilitation services and introduce new investment incentives during the pandemic.[4] In 2021, the U.S., Europe, and Singapore accounted for nearly 70 percent of total FDI flows to Malaysia, while the Netherlands, Singapore, and Austria were the top three sources of committed FDI in manufacturing.

Figure 11. FDI of Selected ASEAN Economies



Source: National authorities.

Figure 12. Approved Investments

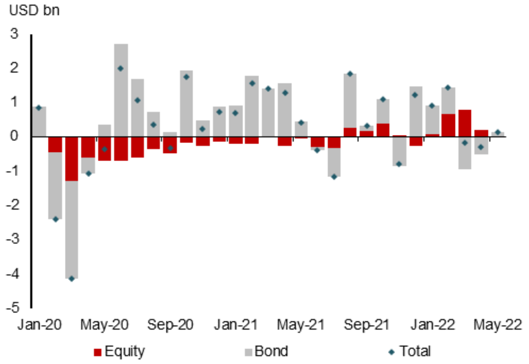


Source: DOSM, Malaysia Investment Development Authority (MIDA).

6. **Buoyant foreign investment inflows helped domestic financial markets weather the volatility in 2021 and the first semester of 2022.** The domestic bond market continued to receive strong foreign investor interest in 2021, likely facilitated by increased flexibility in BNM's onshore dynamic hedging program (see Annex 1. Malaysia's Dynamic Hedging Program and Recent Developments in the FX Market). Non-resident net purchases of local currency bonds reached a 10-year high of USD8.2 billion in 2021 from USD4.5 billion in 2020 (Figure 13). Nonresident inflows were also sustained in the first two months of 2022, but reversed in March and April amid higher inflation in the U.S. and expectations of aggressive monetary policy tightening by the Federal Reserve. Against this backdrop, Malaysia's sovereign bond yields tracked the spike in the U.S. Treasury (UST) yields (Figure 14). Meanwhile, foreign investor interest in the local equity market was more muted and intermittent in 2021, although it gained momentum in February-April 2022. The weak performance of the equity market between end-2020 and 2022 to date was in line with most regional bourses (Figure 15), and was largely mitigated by the steady purchases of local retail investors throughout 2021 and of foreign institutional investors in January-April 2022 (Figure 16).

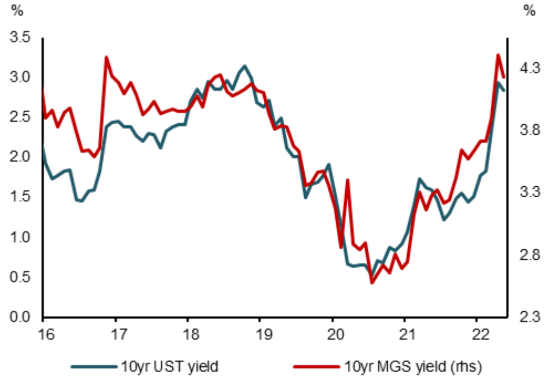
[4] The Project Acceleration and Coordination Unit (PACU) was established under the Malaysian Investment Development Authority (MIDA) in June 2020 to speed up the implementation of investment projects in Malaysia during the pandemic. In October 2020, the One Stop Centre (OSC), also under the MIDA, was likewise set up to expedite business travelers' entry to Malaysia. In addition, a tax rate of zero percent for up to 15 years has been made available to companies in manufacturing and services that relocate their operations to Malaysia between July 2020 and end-2022.

Figure 13. Nonresident Net Purchases in Local Financial Markets



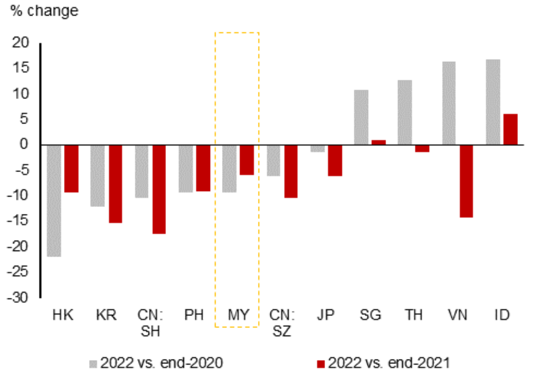
Source: BNM, Bursa Malaysia.

Figure 14. 10-year Malaysia and U.S. Sovereign Bond Yields



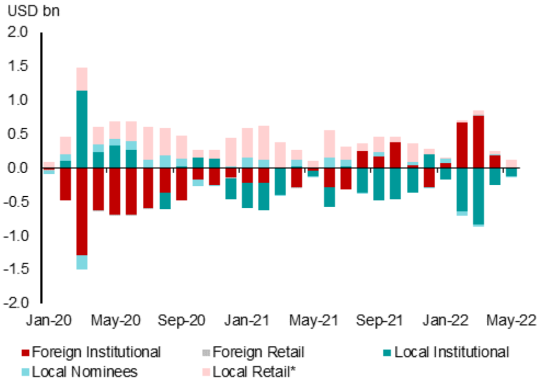
Source: Bloomberg Finance LP.

Figure 15. Equity Market Returns of Major ASEAN+3 Economies



Source: Bloomberg Finance LP.
Note: CN: SH and CN: SZ refer to the stock exchange composite indices of Shanghai and Shenzhen, respectively. Data obtained up to June 10, 2022.

Figure 16. Domestic Equity Market Transaction by Investor Type



Source: BNM, Bursa Malaysia.
Note: *Includes a small proportion of local proprietary day traders.

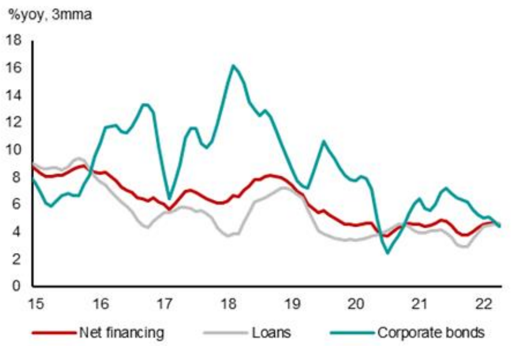
A.3 Monetary Conditions and Financial Sector

7. **Domestic financing remained buoyant in 2021 through early 2022.** Despite the movement restrictions and the increase in bond yields, outstanding corporate bonds continued to expand, by 4-5 percent at end-2021 through April 2022 (Figure 17). Bank lending also held up, ending 2021 with a growth of 4.4 percent and further rising slightly in the first four months of 2022. Since the pandemic started in 2020, loan growth has been propped up by a sharp drop in monetary policy rates in tandem with initiatives to support small and medium enterprises (SMEs) through BNM's low-cost financing facilities and government's credit guarantees, as well as incentives to encourage the purchase of residential property and passenger cars (Figure 18). Loan repayment assistance to households and SMEs, especially a blanket moratorium in April-September 2020 and its reintroduction in July-December 2021 on an opt-in basis, may have also buoyed loan growth during the crisis by deferring debt service repayments. Loan impairments have remained low at about 1.6 percent, only marginally higher than before the pandemic, but could increase – especially for the SMEs (see Box A2. Recent Developments in the Corporate Sector in Annex 2) – given the gradual phasing out of repayment assistance from the beginning of 2022.

8. **The banking system has ample buffers and is strongly positioned to withstand credit and liquidity risks.** Malaysian banks' capital adequacy ratios are well above regulatory thresholds, and the banking system's common equity tier 1 (CET1) ratio also exceeds a

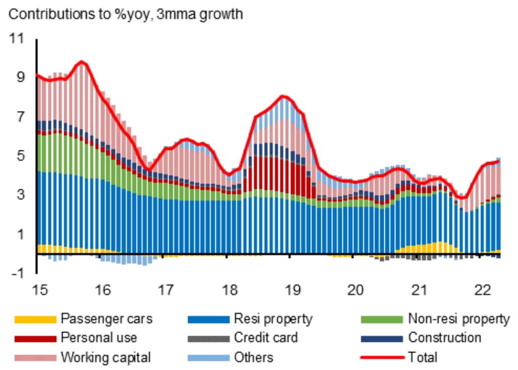
perceived investor threshold of 13 percent for EM banks (Table 1).[5] In addition, the banks have been pre-emptively building up impairment provisions since the beginning of the pandemic, raising provisions to more than 110 percent of impaired loans as at April 2022 from 83 percent at the end of 2019 while remaining profitable. Given these considerations, AMRO estimates that the banking system would be able to withstand loan impairments rising to 7.2 percent – a tail risk – before the CET1 ratio falls below the perceived investor threshold (see Annex 2. Banking System Soundness in the Context of Ebbing of Regulatory Forbearance). Similarly, liquidity risks are mitigated by the banking system's liquidity coverage ratio of more than 150 percent and net stable funding ratio of over 100 percent.

Figure 17. Outstanding Corporate Bond Issues and Loans



Source: BNM.
Note: Net financing is the sum of outstanding loans and corporate bonds.

Figure 18. Banking System Loans



Source: BNM.

Table 1. Selected Financial Soundness Indicators

End of period, in percent		2019	2020				2021				2022
		Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Apr
Capital adequacy	Total Capital to Risk-Weighted Assets	18.6	18.0	18.4	18.5	18.9	18.1	18.6	18.3	19.2	17.8
	Common Equity Tier 1 Capital to Risk-Weighted Assets	14.6	14.0	14.6	14.7	15.2	14.4	14.9	14.5	15.5	14.2
	Impairment Provisions to Impaired Loans	83.0	86.2	97.1	110.6	108.9	111.6	112.5	120.9	125.1	113.4
	Impairment Provisions to Outstanding Loans	1.3	1.4	1.4	1.5	1.7	1.8	1.8	1.9	1.9	1.8
Asset quality	Impaired Loans to Outstanding Loans	1.5	1.6	1.4	1.4	1.6	1.6	1.6	1.6	1.5	1.6
Profitability	Return on Assets, annualized	1.4	1.2	1.0	1.1	1.0	0.9	1.1	1.1	1.1	1.2*
	Return on Equity, annualized	12.2	10.1	8.8	9.1	8.4	8.3	9.7	9.4	9.5	11.1*
	Interest Margin to Gross Income	57.8	57.9	54.6	57.0	58.1	60.4	60.5	60.5	61.5	-
Liquidity	Liquidity Coverage Ratio	149.1	141.4	149.2	151.5	148.2	145.1	149.1	154.4	153.4	156.7
	Loan-to-Fund Ratio	83.2	83.2	82.0	81.9	82.5	81.9	81.6	80.7	81.2	81.7
	Loan-to-Deposit Ratio	88.8	88.9	87.3	87.2	87.5	86.9	86.5	85.5	85.7	86.1

Source: BNM, IMF.
Note: *Refers to data for end-March 2022.

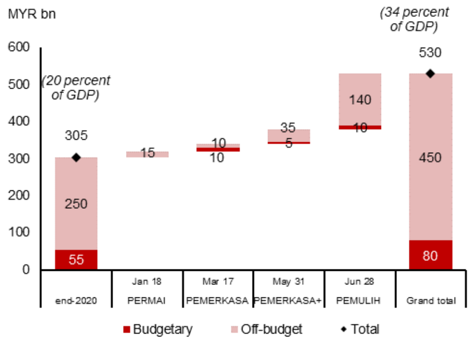
A.4 Fiscal Sector

9. **The weaker-than-expected recovery in 2021 has prompted the authorities to be more proactive in supporting the economy through the medium term.** On top of the stimulus measures in 2020, four additional packages amounting to MYR225 billion were rolled out in H1 2021, equivalent to 14.6 percent of GDP in the same year (Figure 19). The bulk of these measures were non-fiscal, such as the loan moratorium, pre-retirement withdrawals from the Employees Provident Fund (EPF), credit guarantees, and BNM's soft loans to SMEs. Direct fiscal support, subsumed under the COVID-19 Fund, consists largely of cash aid to

[5] Regulatory thresholds refer to the Basel III regulatory requirement of 10.5 percent for the capital adequacy ratio and 7 percent for the CET1 ratio, both thresholds being inclusive of the 2.5 percent capital conservation buffer. While the regulatory thresholds apply to all banking institutions, investors tend to impose higher capital requirements on EM banks compared with banks in developed markets, and on smaller EM banks as opposed to their larger counterparts. For instance, according to AMRO's discussions with market analysts, a minimum CET1 ratio of 13 percent is said to apply to big EM banks with foreign operations, while a lower threshold of 12 percent applies to smaller EM banks.

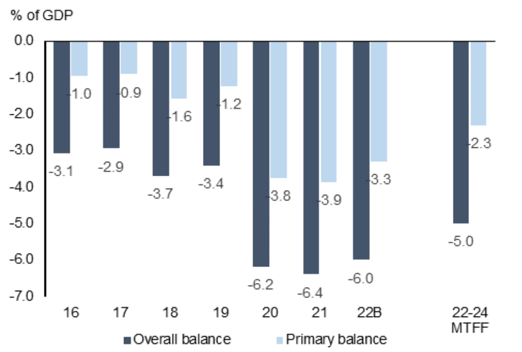
households and wage subsidies to SMEs, and amounted to MYR25 billion, or 1.6 percent of GDP. As a result, the fiscal deficit increased to 6.4 percent of GDP in 2021, beyond the initial government target of 5.4 percent (Figure 20). The fiscal stimulus entailed greater domestic borrowing, while increased dividends from government-linked institutions augmented the revenue. Separately, MYR6 billion was earmarked from the National Trust Fund to finance the nationwide COVID-19 vaccination program.[6] The 2022 budget will continue to keep the fiscal deficit elevated at about 6 percent of GDP, while further consolidation in the following years will take a more gradual pace, in order to support the recovery and Malaysia's medium-term development plan, known as the 12th Malaysia Plan, 2021-2025 (12MP).[7] In 2022, development expenditure will be ramped up to improve public infrastructure, including digital connectivity and healthcare facilities, and to upskill or reskill the workforce (Figure 21). A fourth round of pre-retirement withdrawals from the EPF was made available in April 2022 as additional support for cash-strapped households.

Figure 19. Pandemic-Related Economic Packages



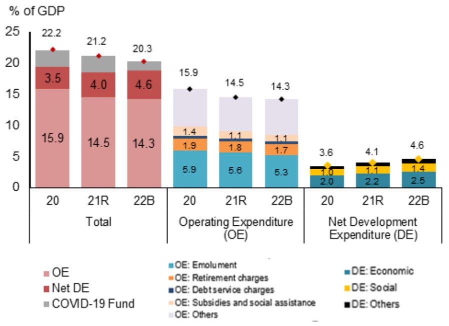
Source: MOF.

Figure 20. Overall and Primary Fiscal Balance



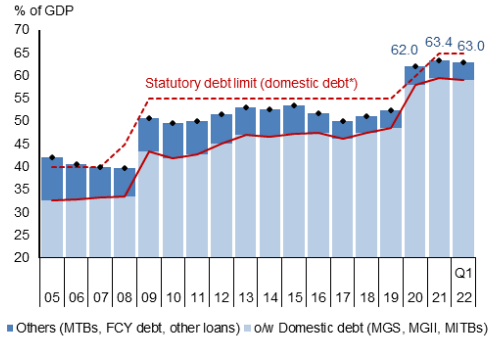
Source: DOSM, MOF.
Note: 2021 primary balance refers to MOF's revised estimate; 22B figures are based on MOF estimates under Budget 2022.

Figure 21. Federal Government Expenditure



Source: MOF.
Note: 21R and 22B refer to the revised 2021 and budgeted 2022 amounts, respectively, under Budget 2022.

Figure 22. Federal and Statutory Debt



Source: DOSM, MOF.
Note: *See footnote 8.

10. **To support the fiscal stance, the statutory debt ceiling has been raised to 65 percent of GDP, but the authorities have committed to improve fiscal discipline and governance**

[6] The National Trust Fund (NTF) was established in 1988 as one of Malaysia's sovereign wealth funds, with the objective of setting aside revenue from the country's non-renewable natural resources for future generations. The NTF had an outstanding balance of MYR19.5 billion at the end of 2020, of which MYR10.4 billion comprised contributions primarily from PETRONAS, while MYR9.1 billion was generated from investment returns. The government has expressed that it only intends to utilize the accumulated profits, or return on investment, from the NTF and not the accumulated contribution.
[7] The fiscal deficit trajectory under the government's Medium-term Fiscal Framework (MTFF) has been adjusted from an average of 4.5 percent of GDP in 2021-2023 to 5 percent in 2022-2024.

over the medium term.[8] The new ceiling, which started in October 2021, follows an earlier adjustment to 60 percent in August 2020 from 55 percent prior to the pandemic (Figure 22). AMRO projects the actual statutory debt to stabilize at 60 percent of GDP at end-2022, and thus the authorities should continue to have some space to respond to economic headwinds and mitigate the impact of natural disasters before hitting the current debt ceiling (see Figure 1.5. Debt Sustainability Analysis). Going forward, the introduction of the Fiscal Responsibility Act in 2022 will formalize a debt ceiling that sets out escape clauses during unexpected events or crises as part of the fiscal rule. At the same time, the Medium-term Fiscal Framework (MTFF) sets out the authorities' intended fiscal consolidation path in the next two years, which they hope to achieve by improving revenue capacity and spending efficiency.

Authorities' Views

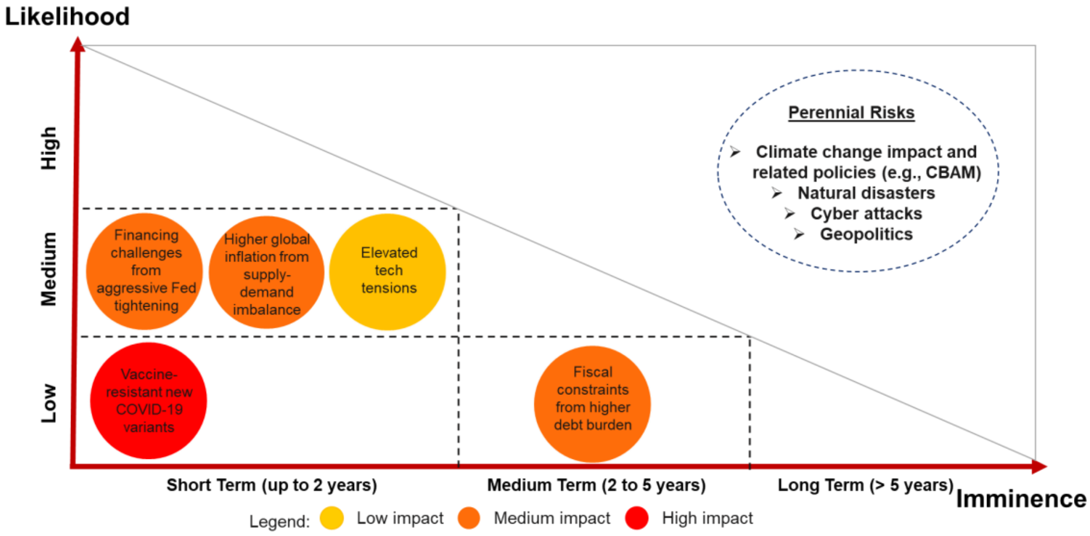
11. **The adjustments to the debt ceiling during the pandemic were carefully deliberated in response to economic developments and policy priorities.** In 2020, the Malaysian government had expected that the crisis would recede and that growth would return to its pre-pandemic trajectory by 2021. However, the emergence of new variants and the spike in COVID-19 cases in 2021 caused the government to borrow more in order to finance the COVID-19 Fund and provide essential help to the vulnerable groups. Furthermore, the government decided to increase the debt ceiling to 65 percent of GDP in consideration of the financing requirement for the 12MP. While the debt ceiling is temporarily set at 65 percent of GDP, the Ministry of Finance (MOF) is targeting to bring down the debt level to below 60 percent by 2025. Achieving such target will require a faster pace of fiscal consolidation through drastic measures to significantly improve revenue collection and optimize expenditure post-crisis.

[8] The statutory debt refers to specific components of the federal government debt. These are the Malaysian Government Securities (MGS), Malaysian Government Investment Issues (MGII), and Malaysian Islamic Treasury Bills (MITB). The statutory debt excludes Malaysian Treasury Bills (MTBs) and offshore borrowings, which are bound by a separate limit of MYR10 billion and MYR35 billion, respectively. The statutory debt comprises about 94 percent of the gross federal government debt.

B. Risks, Vulnerabilities and Challenges

B.1 Near-term Risks to the Outlook

Figure 23. Malaysia's Risk Map



Source: AMRO

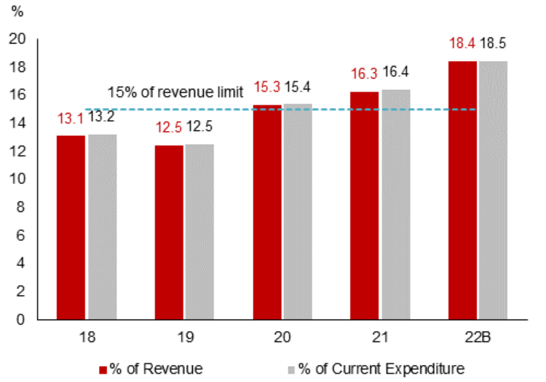
12. **As the pandemic drags on, new vaccine-resistant COVID-19 variants could emerge and disrupt the recovery.** While the likelihood is low, variants that undermine the efficacy of existing COVID-19 vaccines could lead to virulent infections and cause significant strain on the healthcare system. Lockdown measures may have to be reimposed, thereby once again depressing economic activity and widening the disparity across sectors. Travel and tourism activities would again be suppressed while labor-intensive industries, such as construction and agriculture, would be severely constrained as the return of foreign workers is further delayed. Households and businesses would also be subjected to another negative shock to incomes, placing them at greater risk of financial distress. The need for expanded macrofinancial support, such as cash aid/handouts, preretirement withdrawals, and loan repayment assistance, could also undermine fiscal sustainability and financial system soundness. At the same time, prolonged policy support can create moral hazards, undermining private-sector efficiency, and make it more challenging to unwind.

13. **As a highly open economy, Malaysia is exposed to the risks of high inflation, due to prolonged supply-demand imbalances, and a global economic slowdown that may arise from the war in Ukraine and an aggressive tightening of U.S. and E.U. monetary policy.** Global inflation has spiked as the strong global recovery, fueled by substantial stimulus measures in the U.S. and Europe, coincides with supply disruptions induced by the pandemic and more recently, the war between Russia and Ukraine, two of the world's major suppliers of energy and food commodities. The resulting surge in the costs of global logistics and prices of commodities such as energy, fertilizers, grains and other agricultural produce, have pushed Malaysia's food inflation to a four-year high of 4.2 percent in April 2022. Heightened inflationary pressures could persist amid recurring COVID-19 disruptions and a drawn-out war in Ukraine, and could potentially undermine the rebound in domestic demand. Meanwhile, aggressive monetary policy tightening in the U.S and E.U. alongside the ongoing Russia-Ukraine conflict could trigger a slump in global demand, including for Malaysia's

exports. On the other hand, the current account balance would benefit from the surge in energy and palm oil prices.

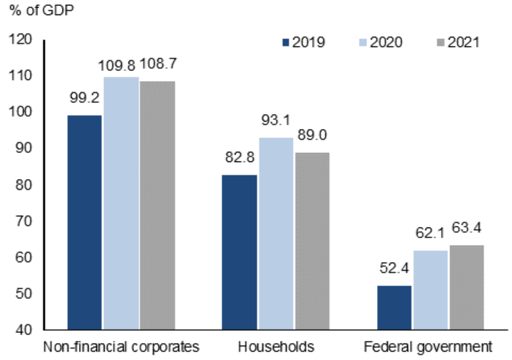
14. **Aggressive policy tightening by the Federal Reserve presents financing challenges to the Malaysian economy.** Tighter financial conditions arising from an aggressive pace of policy normalization in the U.S. could lead to large capital outflows from emerging markets including Malaysia. Such developments can test the financing of the fiscal deficit, which remains large in 2022 (see Annex 3. An Examination of Malaysia's Deficit Financing). Already, bond yields have come under pressure, even as domestic financial institutions, including the EPF, are able to tap on their sizable assets and members' contributions to absorb the large government bond issuance expected in 2022. Borrowing costs could rise further if BNM speeds up the pace of rate hikes in tandem with the Fed tightening, thereby increasing the debt servicing burden of the government and the private sector (Figures 24 and 25). The higher debt burden of the private sector risks holding back the expansion in domestic demand as households and firms prioritize debt servicing over consumption and investment.

Figure 24. Federal Government Debt Burden



Source: MOF.
Note: 22B refers to the government projections under Budget 2022. The 15 percent limit on the debt service charge in percent of revenue is an administrative guideline by the government.

Figure 25. Debt-to-GDP Ratios by Sector



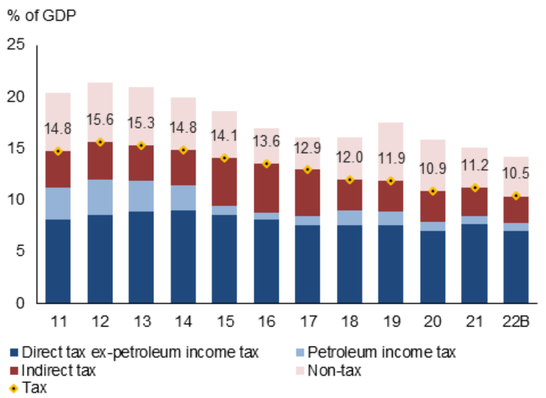
Source: BNM, DOSM, MOF.

B.2 Medium-term Challenges and Vulnerabilities

15. **Beyond 2022, the high government debt burden, together with the narrowed tax base and large committed operating expenses, limits the space for discretionary spending.** The expansionary fiscal policies in 2020 and 2021 have led to higher federal government debt, to 63.4 percent of GDP at end-2021 from 52.4 percent at end-2019. AMRO estimates that the pace of fiscal consolidation under the MTFF and 12MP, which will bring the fiscal deficit down to 3.5 percent of GDP by 2025 from 6.4 percent in 2021, will keep the debt ratio elevated at 61.8 percent by end-2025, not far off from current levels (see Figure 1.5. Debt Sustainability Analysis). Already, the MOF expects the debt burden and committed spending for emoluments and pension charges to account for nearly half of total expenditure in 2022 (Figure 21). At the same time, tax revenue, which has declined relative to GDP, has not been able to keep up with economic growth over the past decade (Figure 26). Consequently, the large proportion of committed spending and the narrowed tax base could limit the fiscal space available to boost investments for long-term economic growth or mitigate the impact of severe negative shocks in the future.

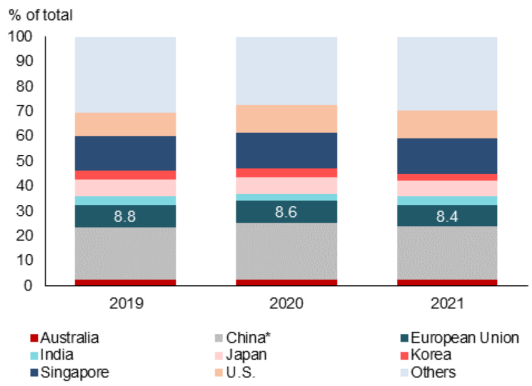
16. **Malaysia faces severe economic losses from the effects of climate change.** Surface temperatures in Malaysia have increased steadily in line with global trends, putting the country, like many others, at risk of more frequent extreme weather events. In mid-December 2021, for example, the country was hit by a "once-in-a-century" deluge of rain that caused severe flooding in Klang Valley, around the capital city, and multiple states. The floods, which recurred in early 2022, were estimated by the Department of Statistics Malaysia (DOSM) to have cost MYR6.1 billion, equivalent to about 0.4 percent of GDP, in damages to personal, commercial and public property. Aside from its vulnerability to extreme weather conditions, Malaysia's international trade also faces headwinds from policies advanced by developed economies to address climate change. One such policy is the Carbon Border Adjustment Mechanism (CBAM) of the European Union, which seeks to impose a fee on greenhouse gas (GHG) emissions involved in the production of goods that the E.U. imports.[9] If Malaysia does not implement mitigating policy measures, the adoption of the CBAM from 2023 could undermine the country's exports to the E.U., which make up nearly 10 percent of its total exports or at least USD21 billion in annual revenue (Figure 27). Domestic value-added in the E.U.'s final demand also amounts to 10 percent of Malaysia's total value-added embodied in foreign final demand.

Figure 26. Federal Government Revenue



Source: MOF.
Note: 22B refers to the government projections under Budget 2022.

Figure 27. Malaysia's Export Markets



Source: DOSM.
Note: *China includes Hong Kong, China.

[9] The CBAM will initially apply to selected goods, namely iron and steel, cement, fertilizers, aluminium and electricity generation, all of which the E.U. considers to be at high risk of carbon leakage. It will cover only direct emissions during the production process. Importers will begin paying a fee on the associated GHG emissions in 2026, after a transitional phase starting in 2023 when importers are expected to report embedded GHG emissions in goods imported every quarter. While the affected goods account for only 0.2 percent of Malaysia's exports to the E.U., the scope of the CBAM can be expanded to include indirect emissions and a broader set of goods and services.

C. Policy Discussions and Recommendations

C.1 Balancing Near-term Fiscal Support and Medium-term Sustainability

17. **Fiscal policy support remains critical in the near term to broaden and reinforce the recovery, as a sudden withdrawal could jeopardize growth and financial stability.** AMRO welcomes the continued but more targeted fiscal support in the 2022 budget, such as the cash handouts and wage subsidies to vulnerable households and SMEs, and the greater allocation to development expenditure. Given the uncertainties arising from new COVID-19 variants of concern, sufficient allocation should also continue for the healthcare sector in order to proactively procure and administer vaccines and antiviral treatments, and to strengthen the healthcare system. AMRO supports the authorities' efforts to balance the funding of the stimulus measures via a mix of domestic borrowing and use of government and government-linked assets, such as the National Trust Fund, to limit the increase in the fiscal deficit.

18. **Over the medium term, a faster pace of fiscal consolidation is warranted to safeguard fiscal sustainability.** As it is, the larger gross financing needs stemming from the wider fiscal deficit in 2021 had entailed larger issuances of shorter-tenor (5 years and less) bonds and greater use of private placement for the issuance of medium- to long-term bonds, while generating relatively subdued investor demand for some of the bonds issued (see Annex 3 for further discussion). Challenges in financing the deficit could continue in 2022 as the deficit remains elevated while global financial conditions may tighten. That said, these challenges are mitigated by the large pool of domestic institutional investors, the deep and liquid domestic debt market as well as the government's effective engagement with investors. In 2022, the EPF is likely to continue to play an important role in absorbing net debt issuances to make up for a potentially lower participation by the banks as loan growth picks up alongside the economic recovery. Nonetheless, these early signs of financing strains underscore the need to quicken fiscal consolidation beyond that envisioned under the 2022-2024 MTFF as the recovery firms up.

19. **A medium-term revenue strategy, mainly through tax reforms, is necessary to speed up fiscal consolidation.** More progressive tax reforms are needed to increase the tax base and minimize tax leakages. Revenue-enhancing measures in the 2022 budget, such as an industry-wide windfall profit tax, stamp duty for the trading of listed shares, and expansion of the scope of digital economy tax, can be followed through with a broadening of the sales and services tax (SST) as the recovery firms up, perhaps in 2023 (see Box A. Revenue Enhancement Measures under Budget 2022). AMRO welcomes the introduction of the Tax Identification Number in 2022 to increase awareness among taxpayers and potentially broaden the tax base. In the medium term, the authorities may consider replacing the SST with the GST, widen the scope of the capital gains tax beyond property, reintroduce estate and inheritance tax, and introduce a carbon tax while maintaining efforts to enhance tax administration. These measures could raise revenue by nearly 3 percent of GDP.[10]

20. **Ongoing institutional reforms are crucial to safeguard fiscal discipline.** AMRO welcomes the plan to legislate the Fiscal Responsibility Act, which will provide a framework for the sound management of public finances. An ongoing public expenditure review, including the rationalization of fiscal incentives and subsidies as well as reform of the pension system,

[10] See Annex 1 of AMRO's 2020 Annual Consultation Report on Malaysia.

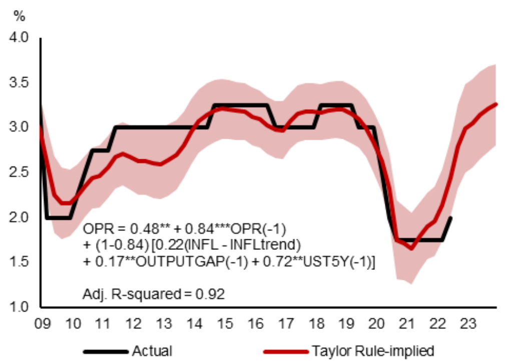
is likewise critical to improve spending efficiency and overcome the increase in committed spending. Budget expenditure should be re-prioritized in favor of greater allocation to development expenditure, in a continuation of efforts made under the 2021 and 2022 budgets.

21. **A clear plan to align fiscal incentives with global tax reforms and the national investment strategy would be a welcome development.** Malaysia's review of existing fiscal incentives is welcome, to streamline the management of the wide array of investment incentive programs.[11] From a governance perspective, the existing incentive framework is consistent with national and sectoral development plans, and backed by sound regulations and good coordination among government bodies. That said, there is scope to reduce profit-based incentives, such as tax holidays, and instead rely more on cost-based incentives such as more generous allowance for R&D and capital spending, and strengthen non-tax considerations, such as the training and availability of skilled workers. AMRO welcomes the plan to publish a tax expenditure report and update the promoted list of tax incentives in the Promotion of Investment Act 1986. A comprehensive cost-benefit framework, which compares the cost of tax revenue forgone with the direct and indirect benefits of FDI, can improve the management of fiscal incentives.

C.2 Maintaining Market Confidence Amid Heightened Volatility

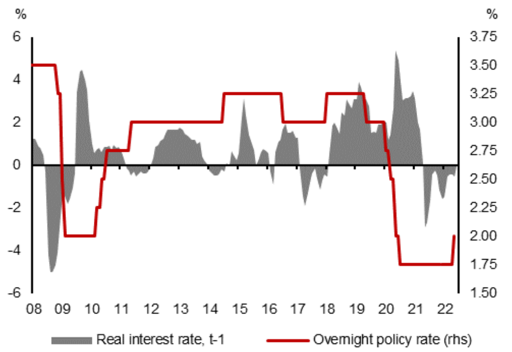
22. **The degree of monetary policy accommodation can be adjusted further as the output gap narrows and inflation continues to rise** (Figure 28)**.** The policy rate, which was raised to 2.00 percent in May 2022, has room to increase further while remaining accommodative under a projected headline inflation of 3.0 percent. This is because the policy rate would remain negative in real terms under a gradual pace of rate increases (Figure 29). As the recovery firms up and the output gap narrows, it would be prudent to reduce the degree of monetary policy accommodation—in tandem with the continuation of administrative measures to manage cost-push pressures—to prevent inflationary pressures from getting entrenched. Normalizing the policy rate in the near term also provides the space to respond to future adverse shocks while mitigating the risk of financial imbalances due to a prolonged low interest rate environment.

Figure 28. Overnight Policy Rate, Actual and Taylor Rule-implied



Source: BNM, DOSM, AMRO estimates.
Note: The range refers to +/-1 standard deviation. INFLtrend refers to the deviation of headline inflation from its linear trend.

Figure 29. Policy Rate and Real Interest Rate



Source: BNM, DOSM.
Note: Real interest rate is the difference between the policy rate and inflation, both in the same period.

[11] There are 127 fiscal incentives, comprising 17 grants, 23 soft loans, 66 tax incentives and 21 others, managed by 10 ministries and 24 government agencies.

23. **Ongoing initiatives to foster investor confidence are crucial given the cautious sentiment of global investors due to heightened political and economic uncertainty.** While BNM's reserves adequacy metrics meet minimum international standards, they are low relative to EM peers. A continued build-up of the reserves position while keeping the ringgit exchange rate flexible will enhance investor confidence on the adequacy of buffers against external shocks. BNM, as the banker and adviser to the government on the management of the public debt[12], should also continue its close engagements with market participants to ensure that sovereign bond issuances are in line with market demand in terms of the tenor and issue size. Initiatives to improve bond market liquidity, such as by gradually consolidating issuances to focus on a few benchmark bonds, can potentially mitigate nonresident outflows should risk sentiment turn adverse. At the same time, BNM should stand ready to provide liquidity through open market operations, including outright purchases of government securities, to maintain the orderly functioning of markets. With holdings amounting to only 1.3 percent of outstanding government securities as of end-February 2022, BNM has room to buy more government securities before hitting the prudential 10 percent limits in the primary and secondary bond markets.[13]

24. **The authorities are encouraged to communicate their FX liberalization and financial market deepening plans.** In 2021, BNM removed the export conversion rule as part of a broader effort to strengthen competitiveness and attract FDI to Malaysia, and in view of the more robust domestic FX market. The move also aligned with the authorities' objective to progressively liberalize FX policy while safeguarding Malaysia's external and financial stability. Going forward, continued improvements in Malaysia's external position and the deepening of the onshore markets would allow BNM more room to further ease FX rules. As for the onshore FX market, AMRO commends the authorities for their active engagement with market participants to better understand investors' needs and explore opportunities to further deepen the domestic market. More broadly, the authorities are encouraged to communicate the principles behind their long-term FX liberalization plans as well as their plans to develop the onshore financial markets, which would provide more clarity to market participants.

C.3 Safeguarding Financial Stability

25. **AMRO welcomes the gradual unwinding of the targeted loan repayment assistance (TRA) schemes in 2022 as the economy recovers.** It was timely to terminate the comprehensive, opt-in loan moratorium at the end of 2021 and shift to a more targeted URUS program[14] as business and labor market conditions had started to improve following the broader relaxation of movement restrictions. The TRA schemes had been progressively instituted since October 2020 as the lockdown measures were withdrawn, but eligibility criteria was broadened in July-December 2021 as mobility restrictions were tightened once again. The expiry of this broadened moratorium in December 2021 provides banks with greater opportunity to engage with borrowers who would be applying for loan repayment relief, in turn allowing banks to better assess borrowers' debt servicing capacity. While loan impairments could rise as in 2022, AMRO appreciates the proactive efforts taken by the banks to build up

[12] **See** https://www.bnm.gov.my/introduction.
[13] BNM can buy up to 10 percent of the issue size during auctions of government securities, and up to 10 percent of the outstanding issued amount in the secondary market. The purchases of government securities, namely the MGS and MGII, are meant to provide market liquidity and build inventory for BNM's repo transactions.
[14] See Annex 2 for a discussion on URUS.

their loan-loss provisions in 2020 and 2021. Given persisting uncertainties over the economic environment, BNM is advised to urge financial institutions to remain vigilant in their monitoring and assessment of credit risks.

C.4 Initiatives for a Robust and Resilient Post-pandemic Economy

26. **Proactive initiatives to promote and facilitate FDI are highly commendable, and should be sustained to ensure investment commitments are realized.** AMRO staff commends the authorities' strategic push to capitalize on the global movement to make supply chains more resilient, especially in the electrical and electronics industry, by stepping up business facilitation services and offering investment relocation incentives during the pandemic (see footnote 4). Strategically, investment approvals are anchored in Malaysia's National Investment Aspirations with emphasis on investments that create high-value and skilled local employment. It would be critical to continue to enhance the ease of doing business in order to ensure the timely realization of the investment commitments. Workforce upskilling programs and initiatives to deepen the financing ecosystem, such as equity financing for SMEs, would likewise enable the economy to benefit better from the strong FDI flows.

27. **Malaysia's comprehensive policies to achieve carbon neutrality by 2050 are very encouraging, and place the economy on a progressive and resilient path over the medium to long term.** AMRO strongly supports Malaysia's commitment to contribute to the global initiative to mitigate global warming and its attendant climate risks (see Box B. Malaysia's Climate Change Initiatives). The rapid implementation of policies that incentivize low-carbon domestic activities would place Malaysia on a strong footing to deal with the transition risks, such as those arising from the CBAM. Early adoption of related initiatives, such as a planned domestic emissions trading scheme and a requirement for financial institutions to integrate climate change risks in their business decisions, could increase Malaysia's attractiveness to foreign investors, thereby potentially generating more funding for the country's low-carbon transition plans. In the near term, strengthening disaster preparedness by weather-proofing buildings and infrastructure, would be critical to mitigate the economic and social costs of more severe and frequent weather events.

Authorities' Views

28. **The authorities generally agree with AMRO's assessment, but wish to highlight their targeted and proportionate approach in dealing with the pandemic.** Malaysia's pandemic policy response is not only aimed at cushioning the impact of the pandemic, but also to address the resulting disparities in income. The authorities aim to be agile and nimble in their response in the current environment where developments can unfold quickly and unpredictably. At the same time, they are mindful of the climate-related transition risks, and stress the importance of getting the domestic industries ready for the adoption of the E.U.'s CBAM by 2023.

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Box A. Revenue Enhancement Measures under Budget 2022[15]

Malaysia Budget 2022 introduces several revenue enhancement measures, either directly or indirectly. Direct measures, such as introducing new taxes or raising tax rates, are adopted to generate additional revenue to fund spending needs. Indirect measures are meant to align with international best practice, improve tax compliance, and make the tax system fairer. To accommodate the implementation of these measures, the Finance Act 2021 was enacted on December 31, 2021 to amend several articles in related acts, such as the Income Tax Act 1967, the Real Property Gains Tax Act 1976, the Stamp Act 1949, and the Finance Act 2018.

A special windfall tax is rolled out as a one-off measure in 2022. Also known as a prosperity tax, it applies to companies other than SMEs that earn above-average profits during the year of assessment 2022 (YA 2022) only. That said, a company with taxable income of more than MYR100 million will be taxed at 33 percent, while the first MYR100 million will be taxed at the standard corporate income tax rate of 24 percent. It is expected that 113 companies, primarily banks and plantation companies, will be subject to this windfall tax.[16]

The windfall levy threshold for palm oil plantations is adjusted. The government is raising the CPO price thresholds from MYR2,500 to MYR3,000 per ton for Peninsular Malaysia, and from MYR3,000 to MYR3,500 for Sabah and Sarawak. At the same time, the levy rate is also standardized to 3 percent across Malaysia. Previously, a 3 percent rate was applicable only in Peninsular Malaysia, while Sabah and Sarawak enjoyed a lower rate of 1.5 percent.

An exemption for residents' foreign-sourced income is withdrawn. Starting from 1 January 2022, foreign-sourced income received by residents in Malaysia will be subject to income tax. This measure is adopted as an effort to remove Malaysia from the E.U.'s gray list of non-cooperative jurisdictions for tax purposes, and also because the foreign-sourced income exemption is considered harmful.[17] However, the government has agreed to maintain the exemptions for two types of income, namely dividend income received by companies and limited liability partnerships, and all income received by individuals, until December 31, 2026.[18]

The taxation of stock transactions on Bursa Malaysia is revised. Stamp duty on contract notes is raised from 0.10 percent to 0.15 percent or equivalent to MYR1.50 for every MYR1,000. While the initial plan was to abolish the stamp duty cap, the government finally raised the cap from MYR200 to MYR1,000 for each related contract note, effective until December 31, 2026, in order to accommodate input from market players. This measure aligns with international development, such as in Hong Kong, where a similar levy was increased from 0.1 percent to 0.13 percent.

Coverage of the sugar tax is expanded to improve the nation's health. The government is expanding the coverage of excise duty on sugar-sweetened beverage products to include premixed chocolate or cocoa, malt, coffee, and tea. The sugar tax is applicable at MYR0.40 per liter for beverages with a total sugar content of 5 grams per 100 ml. Initially, the government also wanted to impose a new sin tax through the collection of excise duty on all vape and electronic cigarette products, but then postponed it to accommodate complaints from consumers and the industry.

The sales and services tax (SST) base is expanded by including imported low-value goods sold through online and delivery services. Imported goods with a value below MYR500 sold online and delivered to Malaysia via air courier will be subject to sales tax of 10 percent from January 1, 2023. In addition, from July 1, 2022, a services tax of 6 percent will also apply to delivery services – except for food, beverage, and logistics – provided by delivery service providers, including e-commerce platforms. These measures aim to make the tax system fairer, especially between locally

[15] This box is prepared by Andriansyah, Fiscal Specialist.
[16] See https://www.theedgemarkets.com/article/these-companies-may-be-subjected-oneoff-33-windfall-tax.
[17] To be excluded from the gray list, the government is required to amend or abolish the harmful foreign-sourced income exemption regime by 31 December 2022. See https://www.consilium.europa.eu/media/52208/st12519-en21.pdf.
[18] Foreign-sourced income received in YA 2022 will be exempted from the prosperity tax.

manufactured and imported goods, as well as to level the playing field between offline and online retailers.

A Special Voluntary Disclosure Program (SVDP) for indirect taxes is introduced to increase tax compliance.[19] Under the SVDP, taxpayers are encouraged to disclose their underpaid and unreported indirect tax liabilities. The participants of SVDP will be incentivized by being granted a penalty remission of 100 percent if they pay the outstanding liabilities in the first phase (January 1, 2022 to June 30, 2022) and a penalty remission of 50 percent if they pay up in the second phase (July 1, 2022 to September 30, 2022).[20] In some instances, taxpayers may also get a tax remission for their outstanding liabilities, of 30 percent in the first phase and 15 percent in the second phase.

A Tax Identification Number (TIN) has been assigned for all companies and individuals starting from January 1, 2022. The assignment of a TIN to every Malaysian above 18 years old and every corporate will increase the number of registered taxpayers in the short term.[21] In the medium to long term, the adoption of the TIN can expand the income tax base and increase the compliance rate. The full adoption of the TIN may take time due to a need to integrate data with the National Registration Department and to share information among government agencies. Different identification numbers also have to be harmonized and integrated into one single identification number. In addition, the authorities are seeking to increase the compliance rate by requiring companies participating in government procurements to obtain tax clearance in the form of a Tax Compliance Certificate issued by the Inland Revenue Board Malaysia.

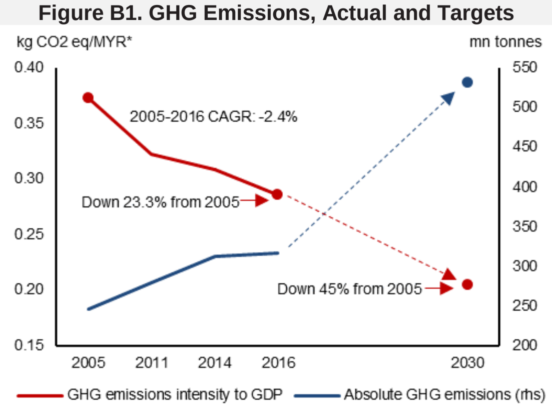
[19] A similar program but for direct taxes was previously carried out from November 2018 to September 2019.
[20] The SVDP is applicable to outstanding tax liabilities on or before October 31, 2021 covering, among others, import and export duties, excise duty, sales and services tax, and windfall profit levy. However, taxpayers cannot participate in the SVDP when they are being audited or investigated by the Royal Malaysian Customs Department.
[21] The number of registered individual taxpayers as of 2019 was 25.6 percent of the total population (See Organisation for Economic Co-operation and Development. *Tax Administration 2021: Comparative Information on OECD and other Advanced and Emerging Economies*). The share of informal-sector employment in the labor market as of 2019 was 8.3 percent. (See *Department of Statistics Malaysia. Informal Sector work Force Survey Report 2019*).

Box B. Malaysia's Climate Change Initiatives[22]

Malaysia is stepping up its 2030 commitment to the Paris Agreement. In August 2021, Malaysia updated its National Determined Contribution (NDC) as part of its obligation as signatory to the Paris Agreement.[23] Under this updated NDC, Malaysia is committing to reduce its economy-wide greenhouse gas (GHG) emissions intensity to GDP by 45 percent from the 2005 level by 2030. The updated 2030 target is fully unconditional or irrespective of foreign assistance. This is a major step-up from Malaysia's first NDC in 2015, where 35 percent was unconditional and another 10 percent was conditional upon receipt of foreign assistance in the form of climate finance, technology transfer and capacity building.

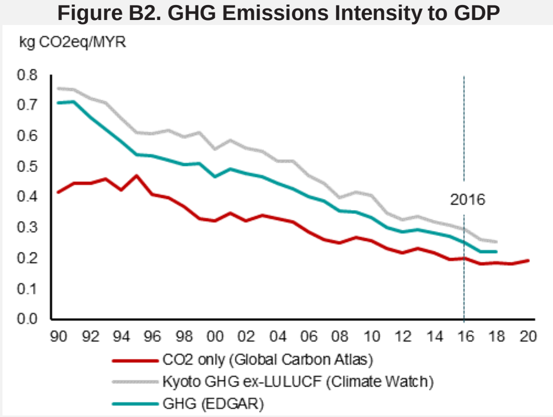
The country is on track to meet the updated 2030 target. Malaysia recorded a 23.3 percent reduction in its GHG emissions intensity to GDP by end-2016 relative to 2005. And if the future pace of reduction were to follow the average annual rate of 2.4 percent between 2005 and 2016, the country would be on track to cut GDP emissions intensity by 45 percent as targeted by 2030 (Figure B1).[24] More up-to-date GHG emissions statistics from various international bodies, although they vary from authorities' statistics in their GHG accounting, indicate a faster rate of annual decline in GDP emissions intensity through 2018 or 2020, by an average of 4-5 percent (Figure B2). However, meeting the 2030 target does not mean an absolute reduction in GHG emissions. In fact, Malaysia's absolute GHG emissions rose by nearly 30 percent between 2005 and 2016 as the economy grew, and emissions are set to increase further by almost 70 percent from 2016 notwithstanding the achievement of the 2030 target (Figure B1).

Figure B1. GHG Emissions, Actual and Targets



Source: Malaysia Ministry of Environment and Water (Malaysia Third Biennial Update Report to the UNFCCC 2020).
Note: *GHG emissions intensity to GDP is expressed as a one kilogram equivalent of carbon dioxide emissions (kg CO_2 eq) per unit of Malaysia's nominal GDP in MYR. Emissions exclude Land Use, Land Use Change and Forestry (LULUCF) and refer to human-induced emissions for four sectors: energy; industrial processes and product use; agriculture, forestry and other land use; and waste. Absolute GHG emissions in 2030 are estimated by growing nominal GDP in 2021 by the 2010-2019 average of 7.3 percent.

Figure B2. GHG Emissions Intensity to GDP



Source: Global Carbon Atlas, Climate Watch, and EDGAR via Haver Analytics.
Note: CO2 refers to carbon dioxide. Kyoto GHG refers to the 7 GHG under the Kyoto Protocol. LULUCF stands for Land Use, Land Use Change and Forestry. EDGAR stands for Emission Database for Global Atmosphere Research. GHG (EDGAR) comprise fossil CO_2, methane nitrous oxide, and fluorinated gases.

Against this backdrop, Malaysia is taking ambitious action to become carbon-neutral by as early as 2050. This pledge, which was announced by the Prime Minister in September 2021 with the tabling of the 12th Malaysia Plan in parliament, is far more ambitious than Malaysia's 2030 target. It entails the absolute reduction of carbon dioxide emissions – the most common GHG – and to compensate for emissions that cannot be eliminated with the purchase of carbon offsets/credits, such as those from reforestation activities. Among the major ASEAN economies, Malaysia's long-term decarbonization commitment puts the country at par with Thailand, which is aiming to be carbon-neutral by 2050. Carbon neutrality is an important milestone in the path towards net-zero

[22] This box is prepared by Diana del Rosario, Senior Economist.
[23] The Paris Agreement is a legally binding treaty adopted in 2015 by 196 states that are parties to the UN Framework Convention on Climate Change (UNFCCC). It sets out a global framework to limit global warming to well below 2°C above preindustrial levels, and preferably to within 1.5°C to significantly reduce the risks and impacts of climate change. Signatories to the Paris Agreement are required to submit their NDCs every five years to the UNFCCC secretariat. Successive NDCs are expected to feature more ambitious targets than the preceding ones.
[24] See the Malaysia Third Biennial Update Report to the UNFCCC (2020).

emissions, when the amount of GHG emitted into the atmosphere is balanced by its removal on a global scale. In this regard, Indonesia is aiming to achieve net-zero emissions by 2060 or sooner, while Singapore hopes to reach net-zero emissions "as soon as viable" in the second half of the century.

Concerted efforts are underway to fulfil the country's decarbonization commitments and contribute to the global initiative to mitigate climate change. To achieve carbon neutrality, the current administration's strategy is to (1) halt the construction of new coal-fired power plants and (2) introduce carbon pricing instruments. The strategy is aligned with the decarbonization initiatives under the 12th Malaysia Plan (12MP).[25] One example is the increase in the share of renewable energy in the power generation mix, from about 23 percent in 2020 to 31 percent by 2025 and 40 percent by 2035, as reliance on coal is reduced.[26] Another is the scaling up of green financing and investments to create an enabling environment for green growth. The 12MP also considers the introduction of carbon pricing instruments, such as a carbon tax and emissions trading scheme, as an area to be explored. Moreover, a low-carbon economy roadmap, to be finalized by end-2022, would lay out the mitigation action plans for the main GHG-emitting sectors.

Initiatives under Budget 2022 and by financial regulators further support Malaysia's aspiration to become a low-carbon and climate-resilient economy.

- The tabling of Budget 2022 in October 2021 revealed plans to launch a Voluntary Carbon Market (VCM) that is set to be launched by end-2022. The VCM will provide a voluntary platform for green asset owners, such as state governments that manage tropical forests, and entities aiming to lower their GHG emissions to trade carbon credits.[27] It will thus be led by the private sector. The VCM is set to be the precursor to a Domestic Emissions Trading Scheme (DETS), which can take longer to implement given legislative requirements such as in the setting of emissions caps for domestic entities.

- Budget 2022 has provisions to encourage low-carbon practices. This year's government budget offers incentives to support the development of the local electric vehicle industry and funding for the conservation of nature and biodiversity. In 2022, the government will also be issuing a ringgit-denominated Sustainability Sukuk, following the successful issuance of a U.S. dollar-denominated equivalent in April 2021, to finance eligible social or environmental friendly projects. In addition, BNM has launched the Low Carbon Transition Facility to provide a relatively lower cost of financing for SMEs that intend to transition to low carbon and sustainable operations.

- At the same time, financial regulators have been laying out the foundations to strengthen the role of the financial sector in addressing climate risk. The Policy Document on **Climate Risk Management and Scenario Analysis**, which sets out the expectations on financial institutions to integrate climate-related risks in their governance framework, risk management, and scenario analysis, is targeted to be finalized and published in Q3 2022. BNM also issued the **Climate Change and Principle-based Taxonomy** (CCPT) in April 2021 to serve as a framework for financial institutions to assess economic activities based on their impact on climate and the broader environment. Accordingly, the CCPT intends to encourage financial flows to activities that support climate objectives. At the same time, BNM and Securities Commission are collaborating with financial industry players and experts under the Joint Committee on Climate Change (JC3) to build climate resilience within the industry. Among the priorities of JC3 in 2022 are to contribute to the work on climate risk management and scenario analysis, develop a Climate Disclosure Guide for Malaysian businesses, and continue on the development of a climate-related data catalogue to support the critical data needs of the financial sector.[28]

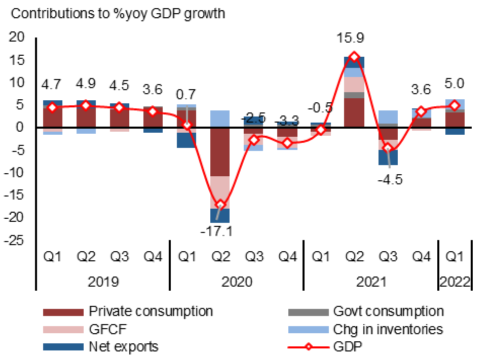
[25] See the Twelfth Malaysia Plan 2021-2025.
[26] See the Report on Peninsular Malaysia Generation Development Plan 2020 (2021-2039).
[27] A number of Malaysian entities have expressed their aspirations to step up decarbonization efforts in line with the 'Race to Zero' campaign of the UN. Among the leading examples are EPF, PETRONAS, and Kuala Lumpur City Hall.
[28] Kindly refer to the following link for updates on the work of JC3: https://www.bnm.gov.my/-/jc3-7th-meeting.

Appendices

Appendix 1. Selected Figures for Major Economic Indicators

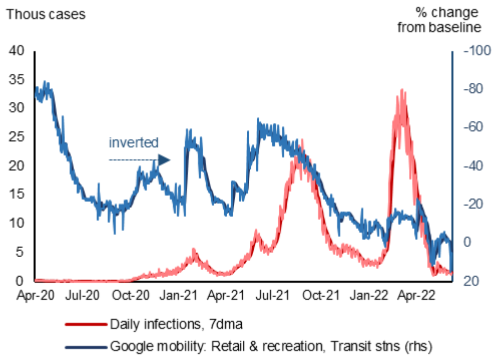
Figure 1.1. Real Sector

Domestic demand led the growth rebound in Q4 2021 and Q1 2022 as mobility restrictions were lifted.



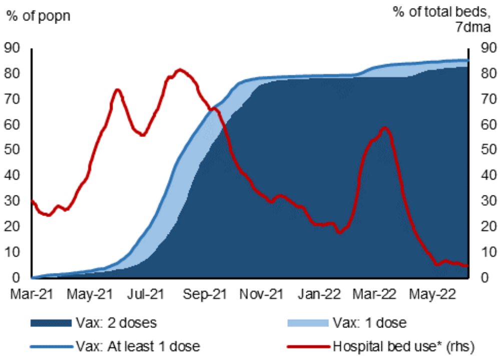
Source: Department of Statistics Malaysia (DOSM).

Retail and recreation activities have improved despite the spike in COVID-19 cases in Q1 2022.



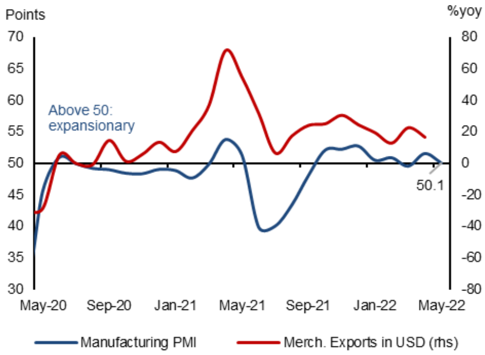
Source: Malaysia's Ministry of Health (MOH), Google.
Note: Data obtained up to June 8, 2022.

The economy has continued to reopen, thanks to its high vaccination rate and adequate hospital beds.



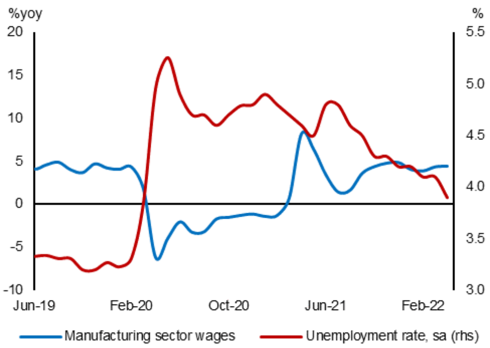
Source: MOH.
Notes: Data obtained up to June 8, 2022. *Hospital beds allocated for COVID-19 cases.

Manufacturing activity has held up since Q4 2021, and has been reinforcing the strong exports growth.



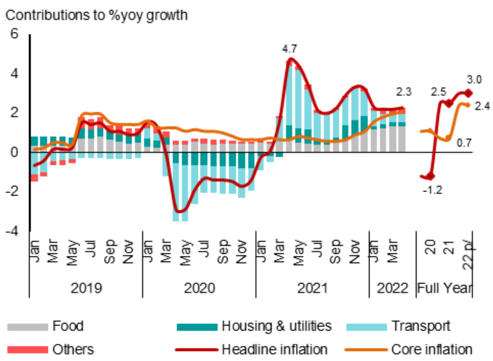
Source: DOSM, S&P Global.

The labor market has improved with the rebound in domestic demand and easing of output constraints.



Source: DOSM.

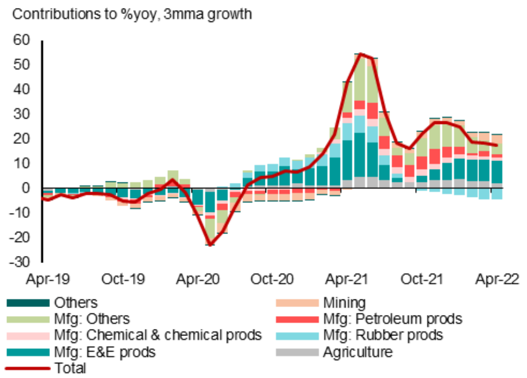
Despite upside pressures primarily from food prices, inflation is likely to remain contained in 2022.



Source: DOSM, AMRO estimates.

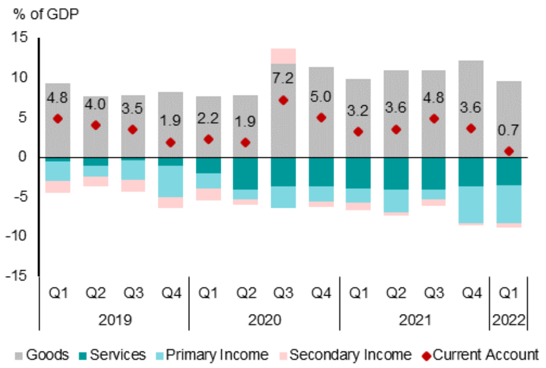
Figure 1.2. External Sector

Exports growth has strengthened since H1 2021, driven by manufactured goods and commodities.



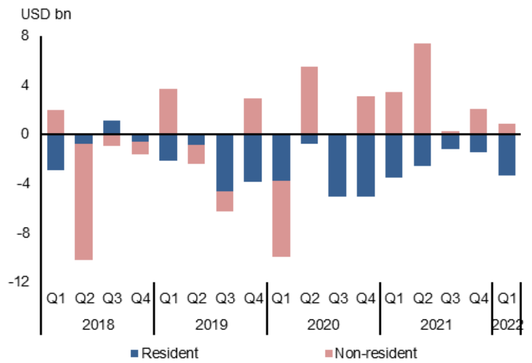
Source: BNM, DOSM.

Goods trade has supported the current account surplus as the deficit in other components widened.



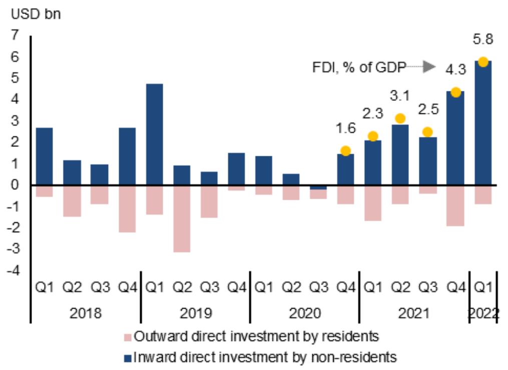
Source: BNM, DOSM.

Non-resident portfolio inflows strengthened in 2021, while the amount of resident outflows eased.



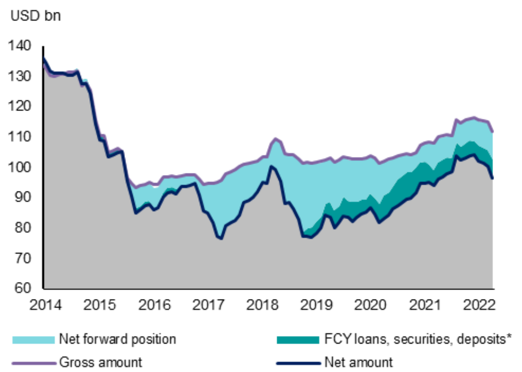
Source: BNM.

FDI likewise expanded in 2021 and Q1 2022, outpacing residents' overseas investment.



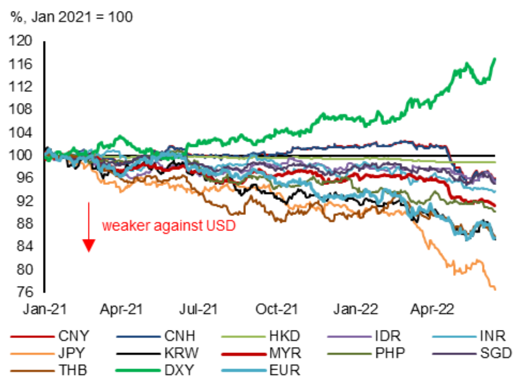
Source: BNM, DOSM.
Note: Direct investment figures are based on directional principle.

BNM's international reserves, on both gross and net basis, continued to grow in 2021 through early 2022.



Source: BNM

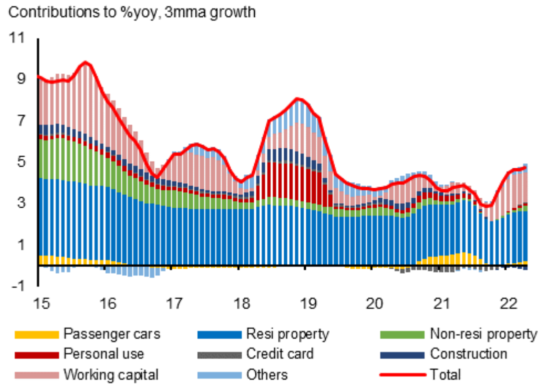
The strong USD and recent weakness in the CNY are weighing on regional currencies, including the MYR.



Source: Bloomberg Finance LP.
Note: Data obtained up to June 10, 2022. Local currencies presented are against the U.S. dollar.

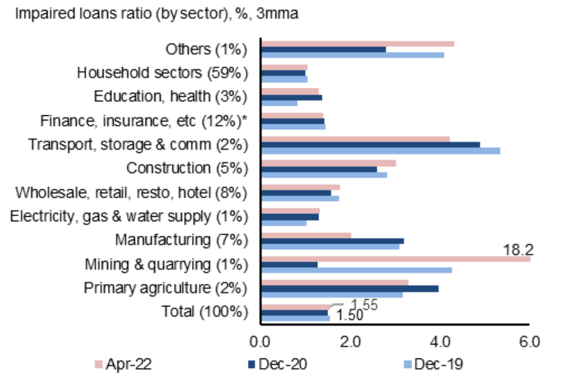
Figure 1.3. Financial Sector

Credit growth has remained buoyant, driven by housing, passenger car, and working capital loans.



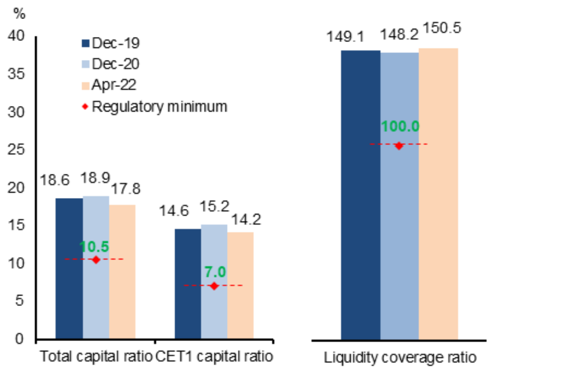
Source: BNM.

Loan repayment assistance schemes have kept loan impairments low and fairly steady for most sectors.



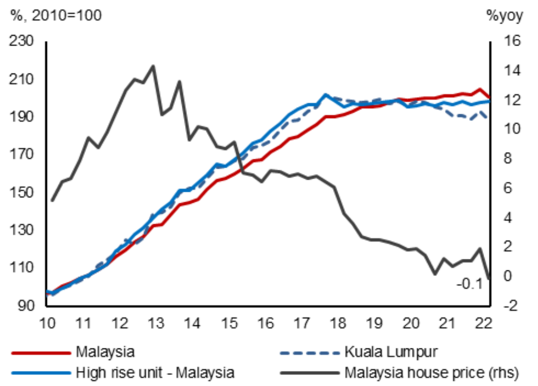
Source: BNM.
Notes: *Includes real estate sector. Figures in parentheses refer to the share of loans outstanding in 2021.

Ample buffers protect banks from liquidity and credit risks as the pandemic lingers.



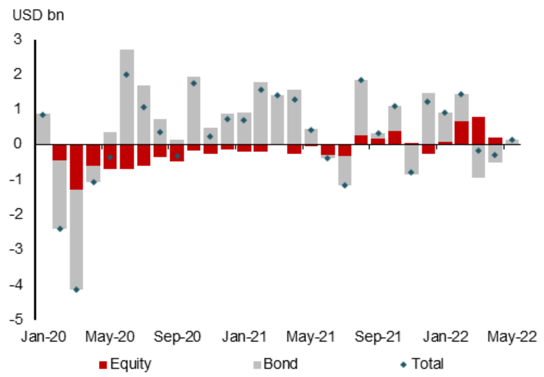
Source: BNM.
Note: Regulatory minima for the capital buffers include 2.5 percent capital conservation buffer.

House prices fell moderately in Q1 2022, particularly in Kuala Lumpur.



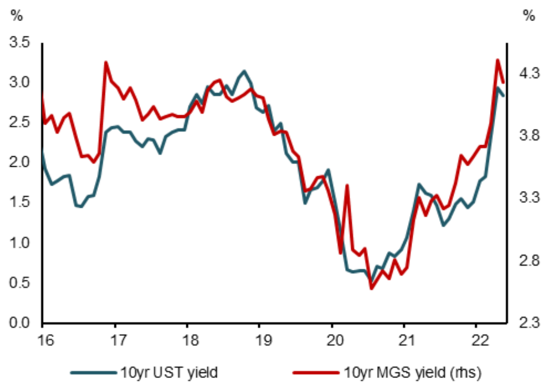
Source: Valuation and Property Services Department, MOF.

The bond market attracted large foreign inflows in 2020-2021, while equity flows were more muted.



Source: BNM, Bursa Malaysia.

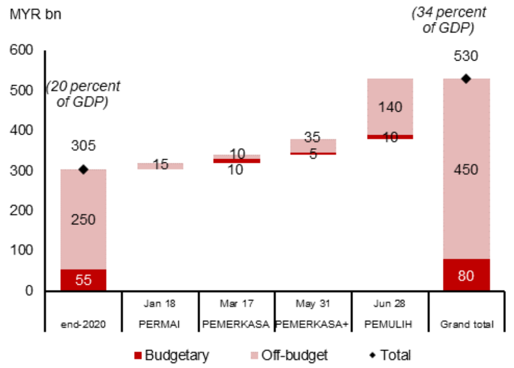
Despite strong foreign investor purchases in 2021 and early 2022, bond yields rose as UST yields increased.



Source: Bloomberg Finance LP.
Note: MGS = Malaysian Government Securities; UST = U.S. Treasury Securities.

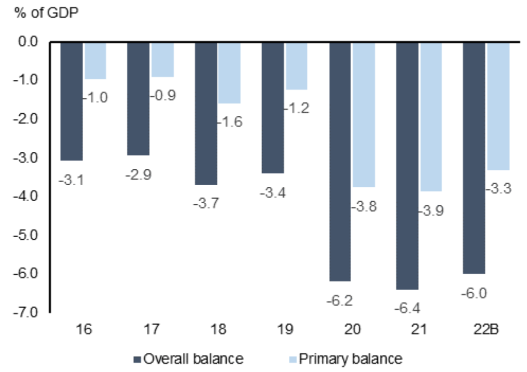
Figure 1.4. Fiscal Sector

Four additional economic packages were rolled out in 2021 in response to the tightened movement curbs.



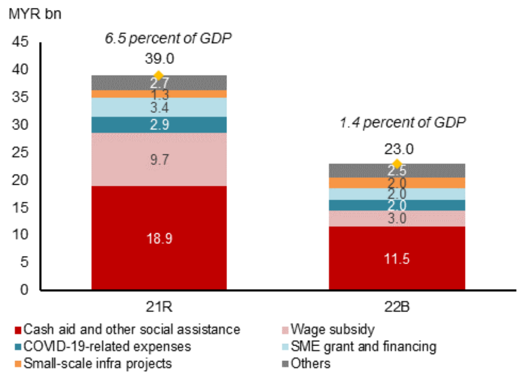
Source: MOF, AMRO staff estimates.

As a result, the fiscal balance widened in 2021 and would stay elevated in 2022.



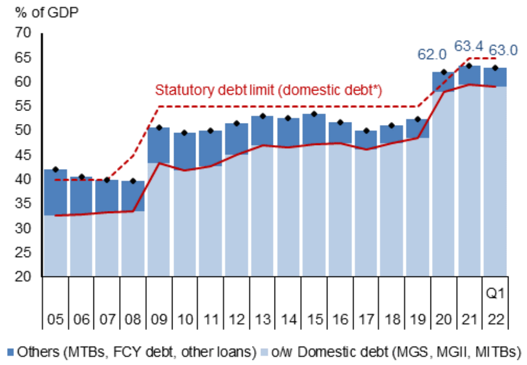
Source: DOSM, MOF.
Note: 22B refers to the government's projections under Budget 2022.

Pandemic-related fiscal support will continue in 2022, primarily in the form of cash aid and wage subsidies.



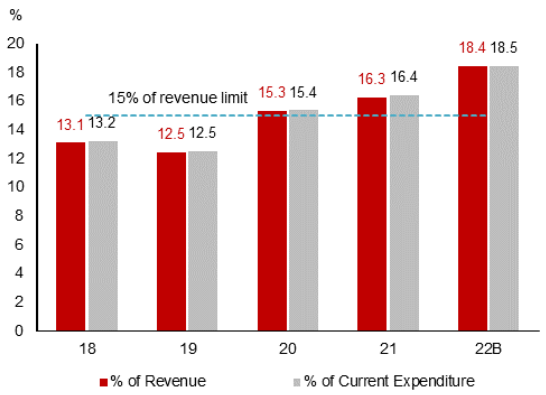
Source: MOF.

The higher debt ceiling provides some space for more fiscal support should downside risks materialize.



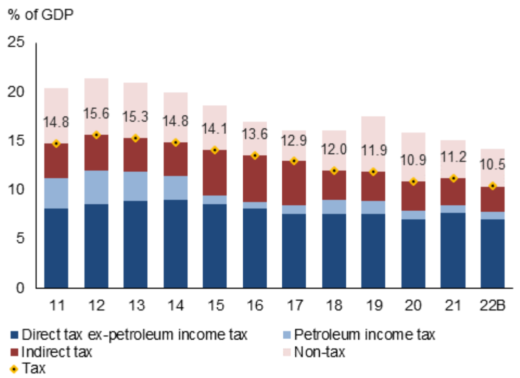
Source: DOSM, MOF.
Note: *Domestic debt refers to particular components of the federal government debt, namely: Malaysian Government Securities (MGS), Malaysian Government Investment Issues (MGII), and Malaysia Islamic Treasury Bills (MITB).

But more broadly, fiscal buffers need to be rebuilt to lower the share of interest payments on the revenue.



Source: MOF.
Note: 22B refers to the government's projections under Budget 2022. The 15 percent limit on the debt service charge in percent of revenue is an administrative guideline by the government.

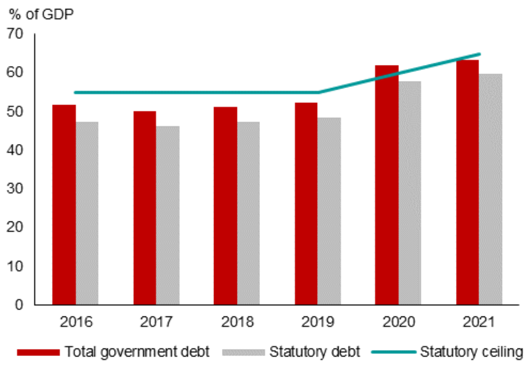
Fiscal consolidation can be primarily achieved via tax reforms, to reverse the trend decline in the tax ratio.



Source: DOSM, MOF.
Note: 22B refers to the government's projections under Budget 2022.

Figure 1.5. Debt Sustainability Analysis

Malaysia's federal government debt ratio and ceiling rose during the pandemic in 2020-21.



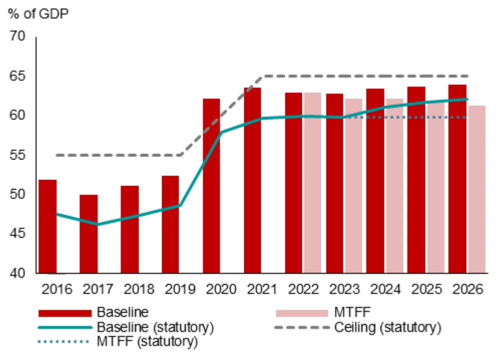
Source: DOSM, MOF.
Note: Statutory debt refers to the sum of MGII (Malaysian Government Investment Issue), MGS (Malaysian Government Securities), and MITB (Malaysian Islamic Treasury Bills).

Medium-term debt projections are derived under the baseline and MTFF scenarios.

	2021	2022	2023	2024	2025	2026
Real GDP growth (%)	3.1	6.0	5.0	4.8	4.8	4.8
Baseline Scenario						
Revenue	14.5	14.3	13.9	13.8	13.9	13.8
Tax	10.7	10.5	10.8	10.9	11.1	11.2
Expenditure	21.0	20.1	18.9	18.5	18.4	18.3
COVID-19 Fund	2.6	1.4				
Fiscal Balance	*-6.5*	*-5.9*	*-5.0*	*-4.7*	*-4.5*	*-4.5*
MTTF Scenario						
Revenue	14.5	14.3	13.9	13.8	13.9	13.8
Tax	10.7	10.5	10.8	12.4	12.6	12.7
Expenditure	21.1	20.1	18.4	17.9	17.6	17.3
COVID-19 Fund	2.6	1.4				
Fiscal Balance	*-6.5*	*-5.9*	*-4.5*	*-4.1*	*-3.7*	*-3.5*

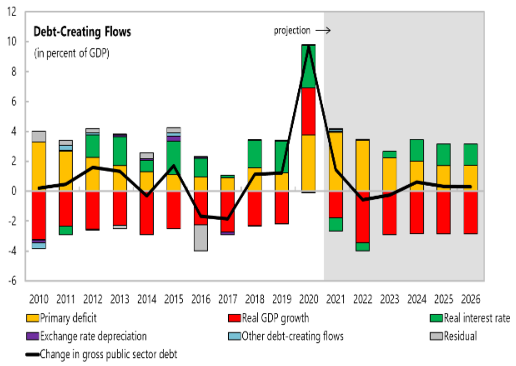
Source: DOSM, MOF, AMRO staff projections.
Note: Baseline scenario assumes no fiscal reforms will be implemented during the forecast horizon (2022-2026). MTFF scenario assumes that expenditure will follow the 2022-2024 Medium Term Fiscal Framework (MTFF) projections.

Under both scenarios, the government debt will stay close to current levels through 2026.



Source: DOSM, MOF, AMRO staff calculations..
Note: Debt ratios and ceilings for 2023-2026 are projections by AMRO staff.

The debt will be pushed up by the primary deficit and real interest rate, despite buoyant GDP growth.



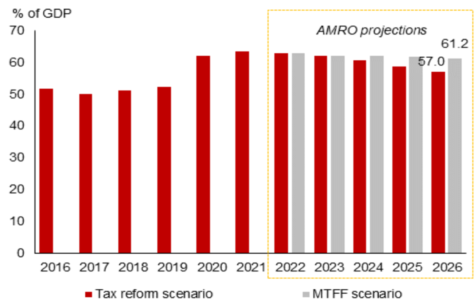
Source: AMRO staff calculations.
Note: This debt-creating flow refers to the baseline scenario.

Tax reforms, led by a reintroduction of the GST, can lead to a faster reduction in fiscal deficit...

Measure	Estimated Revenue Impact (percent of GDP)
1. Faster broadening of SST, or re-introduction of the GST	≤ 1.5
2. Introducing a carbon tax	0.5 – 0..75
3. Adjusting high-income bracket of PIT	0.05 – 0.2
4. Review excise taxes and customs measures	0.05 – 0.2
5. Broadening of the capital gains tax	0.03 – 0.3
TOTAL	**≤ 2.95**

Source: AMRO staff estimates.
Note: SST stands for sales and services tax. GST stands for goods and services tax.

...and the government debt ratios relative to the MTFF scenario.



Source: DOSM, MOF, AMRO staff projections.
Note: The tax reform scenario assumes that expenditure will follow the 2022-24 MTFF projections, and the 6 percent GST rate will be reintroduced from 2024 onward.

Appendix 2. Selected Economic Indicators for Malaysia

	2018	2019	2020	2021	Projections 2022	Projections 2023
Real sector and prices	(in percent change, unless specified)					
Real GDP	4.8	4.4	-5.5	3.1	6.0	5.0
Private consumption	8.0	7.7	-4.2	1.9	11.4	9.0
Government consumption	3.4	1.5	5.0	5.3	6.1	0.0
Gross capital formation	-1.6	-3.8	-12.2	7.5	7.5	8.2
Gross fixed capital formation	1.4	-2.1	-14.4	-0.9	10.6	8.5
Exports of goods and services	1.9	-1.0	-8.6	15.4	11.4	14.7
Imports of goods and services	1.5	-2.4	-7.9	17.7	17.4	18.6
Labor market	(percent, annual average)					
Unemployment rate	3.3	3.3	4.5	4.6	4.0	3.7
Prices	(in percent change, unless specified)					
Consumer price inflation (period average)	1.0	0.7	-1.2	2.5	3.0	2.2
Core inflation (period average)	1.0	1.1	1.1	0.7	2.4	2.0
GDP deflator	0.6	0.1	-0.8	5.7	6.3	4.7
External sector	(in billions of U.S. dollars, unless specified)					
Current account balance	8.0	12.8	14.1	14.2	14.3	13.8
(in percent of GDP)	2.2	3.5	4.2	3.8	3.6	3.2
Trade balance	28.4	30.1	32.7	41.2	43.0	39.9
Exports	205.5	197.3	185.7	235.8	268.8	298.4
Imports	177.1	167.2	153.0	194.7	225.8	258.5
Services balance	-4.3	-2.6	-11.2	-14.7	-13.6	-9.8
Receipts	40.2	41.1	22.1	20.9	27.0	35.6
Payments	44.5	43.7	33.3	35.6	40.6	45.4
Primary income, net	-11.2	-9.5	-6.8	-10.0	-12.8	-13.4
Secondary income, net	-4.9	-5.2	-0.6	-2.3	-2.3	-2.9
Financial account balance	2.8	-9.2	-18.4	3.1	-4.0	-2.2
Direct investment, net	2.5	1.6	0.7	6.8	4.8	5.9
Direct investment assets	-5.8	-7.5	-3.3	-11.8	-10.1	-11.6
Direct investment liabilities	8.3	9.3	4.0	18.4	14.9	17.5
Portfolio investment, net	-12.2	-7.8	-11.7	4.5	-10.0	-7.0
Portfolio investment assets	-3.0	-11.3	-14.4	-8.6	-9.4	-9.1
Portfolio investment liabilities	-9.3	3.5	2.6	13.2	-0.6	2.1
Other investment, net	12.3	-2.8	-7.5	-7.7	1.3	-1.1
Overall balance	1.9	2.0	-4.6	11.0	2.4	5.3
Official reserves asset (end-period)	101.4	103.6	107.6	116.9	119.2	124.6
(in months of goods & services imports)	5.5	5.9	6.9	6.1	5.4	4.9
Total external debt (percent of GDP)	63.8	62.6	67.6	70.0	66.0	64.0
Short-term external debt (percent of total)	43.9	41.1	38.3	37.5	36.0	35.0
Short-term external debt (ratio to international reserves)	1.0	1.1	1.2	1.2	1.3	1.3
Fiscal sector (National Government)	(in percent of GDP)					
Government revenue	16.1	17.5	15.9	15.1	14.3	13.9
Government expenditure	19.8	21.0	22.2	21.5	20.2	18.9
Fiscal balance	-3.7	-3.4	-6.2	-6.4	-5.9	-5.0
Primary balance	-1.6	-1.2	-3.7	-3.9	-3.3	-2.1
Government debt	51.2	52.4	62.0	63.4	65.3	66.0
Government guaranteed debt	18.4	18.2	20.8	20.1	20.0	20.0
Monetary sector	(in percent change, end-period unless specified)					
Broad money	9.1	3.5	4.0	6.4	5.6	5.5
Private sector claims	8.4	4.4	3.5	3.8	4.9	5.5
Loans	7.1	4.2	3.2	4.5	5.2	5.4
Securities	18.5	5.7	6.0	-0.8	3.0	6.3
Memorandum items:						
Exchange rate (MYR per USD, average)	4.04	4.14	4.20	4.14	-	-
Exchange rate (MYR per USD, eop)	4.14	4.09	4.01	4.18	-	-
Nominal GDP (in billions of ringgit)	1,447.8	1,512.7	1,418.0	1,545.4	1,741.8	1,914.7
Nominal GDP (in billions of U.S. dollar)	358.4	365.2	337.3	373.0	402.8	437.7
GDP per capita (in U.S. dollar)	11,077.5	11,213.1	10,309.0	11,425.3	12,300.7	13,333.9
Brent crude oil price (U.S. dollar per barrel)	71.5	64.2	43.2	70.8	-	-

Source: National authorities, AMRO estimates and projections

Appendix 3. Balance of Payments

	2015	2016	2017	2018	2019	2020	2021
	(in billions of ringgit, unless specified)						
Current account balance (I)	35.2	29.9	38.3	32.3	52.9	59.1	58.7
Trade balance	109.2	102.0	117.1	114.6	124.7	137.5	170.6
Exports, f.o.b.	681.3	686.9	801.4	830.1	817.3	780.5	977.0
Imports, f.o.b.	572.1	584.8	684.3	715.5	692.5	643.0	806.5
Services balance	-20.6	-18.9	-22.9	-17.5	-10.9	-47.2	-60.7
Receipts	136.1	147.6	159.4	162.4	170.2	93.0	86.7
Payments	156.7	166.5	182.2	179.9	181.1	140.1	147.5
Primary income, net	-32.1	-34.6	-38.7	-45.1	-39.5	-28.5	-41.5
Secondary income, net	-21.3	-18.6	-17.3	-19.7	-21.4	-2.7	-9.6
Capital account (II)	-1.1	0.1	0.0	-0.1	0.4	-0.4	-0.6
Financial account (III) (+ indicates net inflows)	-55.4	-0.2	-4.7	11.4	-38.0	-77.4	13.0
Direct investment, net	-1.8	13.8	16.2	10.1	6.6	3.1	28.4
Overseas direct investment	-39.7	-42.2	-24.2	-23.4	-31.2	-13.8	-48.9
Foreign direct investment	37.9	56.0	40.4	33.5	37.7	16.9	77.4
Portfolio investment, net	-26.1	-14.2	-15.4	-49.4	-32.4	-49.6	18.7
Portfolio investment assets	-9.1	-15.0	-19.4	-12.0	-46.9	-60.7	-35.8
Portfolio investment liabilities	-17.0	0.8	4.1	-37.4	14.5	11.1	54.6
Financial derivatives, net	-0.7	-0.8	-0.2	1.0	-0.5	0.4	-2.2
Other investment, net	-26.8	1.0	-5.3	49.7	-11.7	-31.3	-31.9
Net errors and omission (IV)	-32.2	-23.9	-17.1	-35.9	-6.8	-0.5	-25.4
Overall balance (= I + II +III + IV)	-53.6	5.9	16.4	7.8	8.4	-19.3	45.7
Change in Reserve Assets	53.6	-5.9	-16.4	-7.8	-8.4	19.3	-45.7
Memorandum items:							
Current account balance (in percent of GDP)	3.0	2.4	2.8	2.2	3.5	4.1	5.1
Official reserve assets (in billions of U.S. dollar)	95.3	94.5	102.4	101.4	103.6	107.6	116.9
In months of goods & services imports	6.1	6.3	6.1	5.5	5.9	6.9	6.1
Changes in official reserve assets (in billions of U.S. dollar)	-20.6	-0.8	7.9	-1.0	2.2	4.0	9.3
Exchange rate (MYR per USD, average)	3.91	4.15	4.30	4.04	4.14	4.20	4.14
Nominal GDP (in billions of U.S. dollar)	301.4	301.3	319.1	358.4	365.2	337.3	373.0

Source: BNM, DOSM, AMRO calculations.

Appendix 4. Federal Government Budget

	2015	2016	2017	2018	2019	2020	2021
Federal government	(in billions of ringgit, unless specified)						
Revenue (I)	219.1	212.4	220.4	232.9	264.4	225.1	233.8
Tax revenue	165.4	169.3	177.7	174.1	180.6	154.4	173.7
Direct	111.8	109.6	116.0	130.0	134.7	112.5	130.1
Direct: Income	101.6	99.6	105.2	119.2	123.2	101.8	118.4
Companies	63.7	63.6	64.5	66.5	63.8	50.1	79.8
Petroleum	11.6	8.4	11.8	20.1	20.8	12.8	11.6
Individuals	26.3	27.6	28.9	32.6	38.7	39.0	27.1
Direct: Others	10.2	10.0	10.9	10.9	11.5	10.7	11.7
Stamp duty	6.0	5.7	5.7	5.9	6.2	5.5	6.3
Others	4.2	4.3	5.2	4.9	5.3	5.2	5.3
Indirect	53.7	59.7	61.6	44.0	45.8	41.9	43.6
Export duties	1.0	1.0	1.4	1.7	1.1	0.7	2.1
Import duties	2.7	2.9	2.8	2.9	2.7	2.3	2.6
Excise duties	11.9	11.7	10.1	10.8	10.5	9.9	10.2
Goods and services Tax (GST)	27.0	41.2	44.3	20.2	-	-	-
Sales tax	5.2	0.1	0.0	4.0	15.4	14.8	13.6
Service xax	3.0	0.1	0.0	1.5	12.3	12.0	12.0
Others	2.7	2.7	3.0	2.9	3.8	2.2	3.0
Non-tax revenue	51.5	40.0	39.5	51.1	79.8	62.0	51.1
Petroleum royalty	5.1	3.7	4.4	5.2	5.8	4.2	3.7
Investment interest and returns	32.8	21.4	21.6	31.9	60.1	46.1	35.0
PETRONAS dividend	26.0	16.0	16.0	26.0	54.0	34.0	25.0
Non-revenue receipts	2.2	3.1	3.2	7.7	4.0	8.6	8.9
Expenditure (II = III + V - VI + VII)	256.3	250.8	260.7	286.3	315.9	312.7	332.5
Current expenditure (III)	217.0	210.2	217.7	231.0	263.3	224.6	231.5
Emoluments	70.1	73.1	77.0	80.0	80.5	83.0	85.9
Retirement charges	18.9	21.0	22.8	25.2	25.9	27.5	29.1
Debt service charges (IV)	24.3	26.5	27.9	30.5	32.9	34.5	38.1
Domestic	23.7	25.7	27.2	29.9	32.2	33.8	37.3
External	0.6	0.7	0.7	0.7	0.7	0.7	0.8
Supplies and services	36.4	30.1	34.7	35.3	31.5	29.3	24.9
Subsidies	27.3	24.7	22.4	27.5	23.9	19.8	23.0
Asset acquisition	1.7	0.7	0.5	0.4	0.8	0.6	0.6
Others	38.4	34.1	32.4	32.0	67.8	29.9	29.9
Development expenditure (V)	40.8	42.0	44.9	56.1	54.2	51.4	64.3
Defence and security	4.8	4.8	5.3	4.9	5.6	5.8	7.5
Economic services	23.3	25.1	24.2	36.1	31.3	28.7	31.3
Social services	11.2	10.4	12.4	12.9	14.5	13.8	22.6
General administration	1.6	1.6	2.9	2.2	2.8	3.0	2.9
Loan recovery (VI)	1.5	1.3	1.9	0.8	1.6	1.3	1.0
COVID-19 Fund (VII)						38.0	37.7
Current balance (I - III)	2.1	2.2	2.7	1.9	1.1	0.5	2.2
In percent of GDP	*0.2*	*0.2*	*0.2*	*0.1*	*0.1*	*0.0*	*0.1*
Overall balance (I - II)	-37.2	-38.4	-40.3	-53.4	-51.5	-87.6	-98.8
In percent of GDP	*-3.2*	*-3.1*	*-2.9*	*-3.7*	*-3.4*	*-6.2*	*-6.4*
Primary balance (I - II + IV)	-12.9	-11.9	-12.5	-22.8	-18.6	-53.1	-60.7
In percent of GDP	*-1.1*	*-1.0*	*-0.9*	*-1.6*	*-1.2*	*-3.7*	*-3.9*
Memorandum item:							
Oil and gas-related revenue (in percent of total revenue)	21.5	14.6	15.7	23.4	31.7	24.9	19.2*
Brent crude oil price (U.S. dollar per barrel)	0.0	0.0	54.8	71.5	64.2	43.2	70.8
Nominal GDP	1,176.9	1,249.7	1,372.3	1,447.8	1,512.7	1,418.0	1,545.4

Source: DOSM, MOF, AMRO calculations.
Note: *Refers to MOF estimate under the revised 2021 budget.

Appendix 5. Data Adequacy for Surveillance Purposes: a Preliminary Assessment

Key Indicators for Surveillance	Data Availability[i]	Reporting Frequency/ Timeliness[ii]	Data Quality[iii]	Consistency[iv]	Others, if any[v]
National Accounts	• Available	• Quarterly GDP data is available six weeks after the reference period	-	-	-
Balance of Payments (BOP) and External Position	• Available	• Quarterly BOP data is available six weeks after the reference period	-	-	• Net errors and omissions can be sizable and make data analysis and interpretation difficult
State Budget and Government/ External Debt	• Available • Data for the consolidated public sector includes data only for 29 of the main non-financial public enterprises	• Quarterly federal government budget data is available two months after the reference period • Top-line budget data for the consolidated public sector is available on a yearly basis in October, 10 months after the reference period • Data on government debt and external debt is available on a quarterly basis, two to three months after the reference period		-	• Government guarantees that require fiscal support have been identified, but their corresponding annual budget expenses are not explicitly identified
Money Supply and Credit Growth	• Available	• Money supply and credit growth data is available on a monthly basis, one month after the reference period	-	-	-
Financial Sector soundness indicators	• Available • Lack of data availability on household disposable income	• Banking sector soundness indicators are available on a monthly basis, two months after the reference period • Official household debt-to-GDP data is released on a half-yearly basis in the BNM Financial Stability Review, with a time lag of three months	-	-	-
State-owned enterprises (SOE) statistics	• Available if publicly listed on the stock exchange, otherwise limited	-	-	-	-
Others, if relevant	-	-	-	-	-

Source: AMRO compilation. This preliminary assessment will form the "Supplementary Data Adequacy Assessment" in the EPRD Matrix.

Notes:
(i) Data availability refers to whether the official data is available for public access by any means.
(ii) Reporting frequency refers to the periodicity of the available published data. Timeliness refers to how up-to-date the published data is relative to the publication date.
(iii) Data quality refers to the accuracy and reliability of the available data given the data methodology.
(iv) Consistency refers to both internal consistency within the data series and horizontal consistency with other data series.
(v) Other criteria might also apply. Examples include, but are not limited to, potential areas of improvement for data adequacy.

Annexes: Selected Issues

1. Malaysia's Dynamic Hedging Program and Recent Developments in the FX Market[29]

Malaysia introduced a dynamic hedging program in 2016 to allow nonresident investors with underlying ringgit assets to hedge their ringgit exposure in the onshore foreign exchange (FX) market. This is part of a policy package to enhance the depth and resilience of domestic financial markets against external headwinds. The current selected issue discusses how the dynamic hedging program has evolved and become increasingly appreciated by investors for its greater flexibility and accessibility. We also look at two related topics, about the recent shift in Malaysia's international investment assets toward increased overseas portfolio investment by domestic institutional investors, and ongoing efforts to liberalize foreign exchange policy rules, both of which have contributed to improved liquidity and efficient price discovery in the onshore FX hedging market.

Onshore dynamic hedging: developments and impacts

1. **The launch of a dynamic hedging program in December 2016 is an integral part of Malaysia's policy agenda to strike the optimum balance between market accessibility and financial stability.** The development of Malaysian financial markets after the 1997-1998 Asian Financial Crisis was marked by a significant increase in the size of the local currency bond market, and the presence of foreign investors in the market.[30] To hedge against risks related to the ringgit exchange rate, foreign investors participated in the offshore Non-Deliverable Forward (NDF) market, in part due to limited depth to the onshore FX market and the non-availability of the ringgit outside Malaysia.[31] As NDF exchange rates tend to be subject to significant currency depreciation under market stress (Schmittmann and Chua, 2020), their spillovers to the onshore market exacerbate spikes in exchange rate volatility and hedging costs, and amplify capital flow reversals (BIS, 2019). To mitigate the NDF influence on the onshore market, BNM has taken a series of policy measures since the mid-2010s.[32] Notably, the central bank strengthened the enforcement of an existing ban on local banks' involvement in NDF-related transactions. This was followed by the introduction of a dynamic hedging program in December 2016 that allowed nonresident institutional investors with ringgit-denominated underlying assets to hedge their ringgit exposure by entering into forward contracts in the onshore FX market without the need to show documentation, which helped

[29] This selected issue is prepared by Nguyen Thi Kim Cuc, Senior Economist. The author wishes to express her gratitude to Ms Catharine Kho, Economist, for sharing her valuable insights on Malaysia's onshore FX market developments during the forming stage of this selected issue.

[30] Malaysia's domestic bond market, including government and corporate bonds. grew from MYR254 billion as of end-2000 to MYR475 billion by end-2007, and further to MYR1,736 billion at end-2021. As a percentage of GDP, total domestic bonds outstanding stood at 125.3 percent in 2021, of which 68.5 percent were government bonds and the remaining 56.8 percent were corporate bonds. In comparison, total domestic bonds outstanding in Korea made up 141 percent of GDP, in China 100.7 percent, Thailand 73.1 percent, the Philippines 49.1 percent, and Indonesia 31 percent. Foreign holdings of ringgit-denominated government bonds increased steadily from 11.4 percent in 2008 to peak at 32.2 percent in 2016, then moderated but remained elevated at 25.8 percent as of end-2021 (Source: Asian Development Bank AsianBondsOnline Database, accessed on March 21, 2022).

[31] NDFs are FX forward contracts that do not require physical delivery of the underlying currencies. The transactions are typically settled in the U.S. dollar on a net basis, that is, the payment is equivalent to the difference between the spot rate at the maturity date and the contracted forward rate. NDFs trade over the counter, rather than on exchanges, in major financial centres outside the jurisdiction of the authorities of the corresponding currencies, which are usually emerging market currencies with capital controls, hence the term "non-deliverable" (Lipscomb, 2005; Schmittmann and Chua, 2020). Not all transactions in the offshore NDF are for hedging purposes, though, and those without underlying investment could have been conducted for speculative purposes. For a snapshot of restrictions on FX transactions in Malaysia relative to regional peers prior to the Global Financial Crisis, please see Annex A in Tsuyuguchi and Wooldridge (2008).

[32] For example, BNM has prohibited banks since 2015 from quoting fixing orders to nonresident financial institutions which do not have underlying trade commitments. It also introduced a new ringgit fixing mechanism in mid-2016 to enhance transparency and credibility. Last but not least, banks were strongly reminded in 2016 of their know-your-customer obligations and to make sure that they did not facilitate speculative activities.

reduce the compliance cost for participating investors.[33] Other measures that were introduced at the same time as the program included an export conversion rule which required exporters to convert 75 percent of their export proceeds into ringgit.[34]

2. **Since its launch, the onshore dynamic hedging program has been made more flexible and accessible.** The program has provided market access for institutional investors to actively manage the ringgit/FX exposures of their invested assets. Notably, it lets nonresident institutional investors enter into forward contracts to sell ringgit up to 100 percent of their invested ringgit-denominated underlying assets in the onshore FX market. While having underlying assets is the key eligibility criterion for undertaking dynamic hedging,[35] concrete provisions are in place to make the program more flexible:

- Investors are allowed to undertake dynamic hedging without the need to show documentary evidence, provided they have completed a one-time registration with BNM; and
- Nonresident investors are allowed to buy ringgit forward up to 25 percent of their invested ringgit-denominated underlying assets, and to go above this 25 percent threshold upon BNM's approval on a case-by-case basis.[36]

To accommodate nonresident investors without a physical presence in Asia, BNM permits dynamic hedging to be carried out outside local trading hours via an appointed overseas bank office (AOO). More recently, trust banks and global custodians have also been allowed to undertake dynamic hedging on behalf of their clients, namely nonresident institutional investors with invested ringgit-denominated underlying assets (Table A1.1).

3. **The number of participants and size of eligible assets under the dynamic hedging program have increased steadily.** As of 2021, a total of 137 investors were taking part in the program, up from 84 in 2018. Likewise, eligible assets registered under the program doubled from USD30.4 billion, equivalent to about 13 percent of gross portfolio investment flows by both residents and nonresidents in 2018, to USD56.9 billion, or 19 percent of gross portfolio investment flows in 2021. The expansion of the program has been mainly driven by increased participation from nonresident investors, who accounted for about 81 percent of the total number of participants and 77 percent of total eligible assets.[37] Meanwhile, most resident institutional investors have long established a relationship with local banks and have seen less merit in joining the dynamic hedging program, so it is encouraging that more domestic investors have joined the program recently (Table A1.2).

4. **The expanding dynamic hedging program has boosted liquidity in the onshore FX market.** Daily turnover in the onshore FX market rose from about USD8 billion on average in 2016 to nearly USD12 billion in 2019, and stayed elevated at USD11 billion in 2021. This has been mainly driven by a significant increase in the daily FX swap and forward. Notably, daily FX forward turnover averaged above USD1 billion in 2021, up from USD0.5 billion in 2016, largely attributable to the program (Table A1.3). At the same time, the offshore NDF fell

[33] Unwinding the forward contracts is also permitted under the dynamic hedging program. For more information, refer to BNM's Note on the Dynamic Hedging Program for Institutional Investors, available at this link.
[34] For details of this policy package, see BNM's Supplementary Notice No. 1 on Foreign Exchange Administration (FEA) Rules – Measures to Promote the Development of Malaysian Financial Market issued on December 2, 2016, available at the following link.
[35] This requirement distinguishes the dynamic hedging program from the offshore NDF, which does not need underlying assets.
[36] This provision has provided foreign investors with additional ringgit liquidity and hence the flexibility to increase their holding of ringgit-denominated assets in the future.
[37] The eligible assets of nonresidents accounted for about 27 percent of ringgit portfolio assets held by nonresidents in 2021, up from 13.5 percent in 2018.

sharply in its daily volume as some liquidity has been diverted to the onshore FX market, indicating a diminished price discovery role of the offshore NDF market for the ringgit relative to the onshore market (AMRO, 2020).

5. **Ringgit exchange rate volatility and hedging costs have moderated, underpinned by improved FX liquidity.** Indeed, the bid-ask spread for the ringgit spot rate and its volatility, calculated as the annualized deviation of the daily change in the spot rate from its long-term average, have declined significantly since 2017 (Figure A1.1). While these volatility indicators had spiked during recent episodes of extreme global stress, such as the onset of the COVID-19 pandemic in early 2020, they remained well below levels seen during the Taper tantrum period in 2013 and the Fed's monetary policy normalization during 2015-2016. Likewise, the ringgit hedging cost, measured as the annualized forward rate-implied interest rate, has decreased steadily in the onshore FX market since 2017 as improved liquidity supports a more efficient price discovery (Figure A1.2). The lower ringgit hedging cost has sustained the attractive yield valuation of ringgit-denominated government bonds over U.S. treasuries (Figure A1.3) and inflows to the government bond market since 2019 (Figure A1.4).

Table A1.1. Dynamic Hedging Program: Key Policy Enhancements

Date	BNM Document	Key Developments
December 2016	Supplementary Notice No. 1 on Foreign Exchange Administration (FEA) Rules – Measures to Promote the Development of Malaysian Financial Market	• Set up a framework allowing nonresident institutional investors to enter into forward contracts to sell ringgit up to 25 percent of their invested ringgit-denominated assets without documentary evidence through a licensed onshore bank or its appointed overseas office, for the purpose of managing their ringgit exposure. • A similar framework applies to resident institutional investors with foreign currency-denominated assets.
May 2017	Supplementary Notice No. 2 on FEA Rules and Amendment to the Definitions of the Notices on FEA Rules – Measures to Promote Development of Malaysian Financial Market	• The "dynamic hedging" framework for institutional investors was coined to allow (i) nonresident investors to enter into forward contracts to sell forward ringgit (or buy foreign currency forward) up to 100 percent of their invested underlying ringgit-denominated assets, and (ii) resident investors to enter into forward contract to buy ringgit forward (or sell foreign currency forward) up to 100 percent of their invested underlying foreign currency-denominated assets. • Nonresident investors are also permitted to enter into forward contracts to buy additional ringgit up to 25 percent of their invested underlying ringgit-denominated assets. • Investors can undertake forward transactions under the dynamic hedging program without the need to show documentation, provided they have completed a one-off registration with BNM. • Forward transactions under the dynamic hedging program can be conducted with a licensed onshore bank during local market trading hours or via its AOO during or outside local market trading hours.
April 2019	Frequently Asked Questions on Dynamic Hedging Program for Institutional Investors	• Registered nonresident institutional investors who wish to have additional ringgit liquidity beyond the existing 25 percent threshold may apply to BNM. Approval is granted on a case-by-case basis. • Trust banks and global custodians may be allowed to undertake dynamic hedging on behalf of their clients on a gross basis with a licensed onshore bank or its AOO upon BNM's approval.

Source: BNM; AMRO compilation.

Table A1.2. Dynamic Hedging Program: Participating Investors and Eligible Assets

	2018	2019	2020	2021
Number of registered investors	**84**	**105**	**121**	**137**
of which:				
Resident investors	17	19	20	26
Non-resident investors	67	86	101	111
Eligible assets, USD bn	**30.4**	**37.5**	**45.6**	**56.9**
of which:				
Held by resident investors	11.0	11.9	12.7	13.1
Held by nonresident investors	19.4	25.6	32.9	43.8
Annual FX turnover under the dynamic hedging program, USD bn	**29.2**	**34.7**	**61.7**	**81.4**

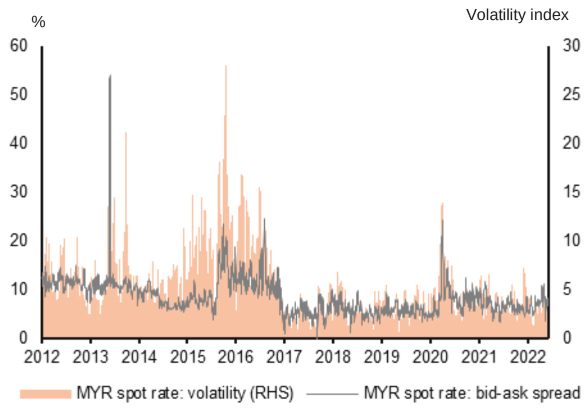
Source: BNM; Bond Info Hub; AMRO compilation.

Table A1.3. Daily FX Turnover: Onshore versus Offshore NDF

USD bn	2015	2016	2017	2018	2019	2020	2021
Onshore FX market							
Spot	4.8	3.3	3.9	4.1	3.6	3.3	3.1
Swap	3.8	4.0	4.8	5.9	7.2	7.1	6.6
Forward	0.4	0.5	0.7	0.9	0.9	0.9	1.1
o/w under the dynamic hedging program	-	-	0.1	0.1	0.1	0.2	0.3
Options	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total	9.1	7.9	9.5	11.1	11.8	11.5	11.0
Offshore NDF	2.3	2.7	0.5	0.8	1.1	1.0	1.3

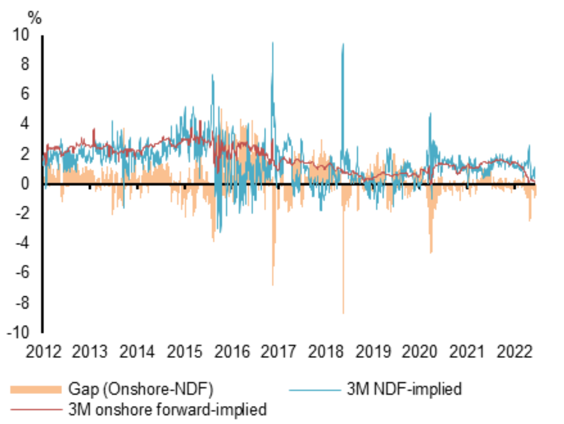
Source: BNM; CEIC; Bond Info Hub; Bloomberg; AMRO calculations
Note: The daily onshore FX turnover data was calculated by AMRO using the monthly and annual FX turnover figures reported by BNM via CEIC and the Bond Info Hub. The daily offshore NDF turnover data came from Bloomberg statistics dated June 10-15 in each year between 2015 and 2021.

Figure A1.1. MYR Spot Rate Volatility Index and Bid-Ask Spread



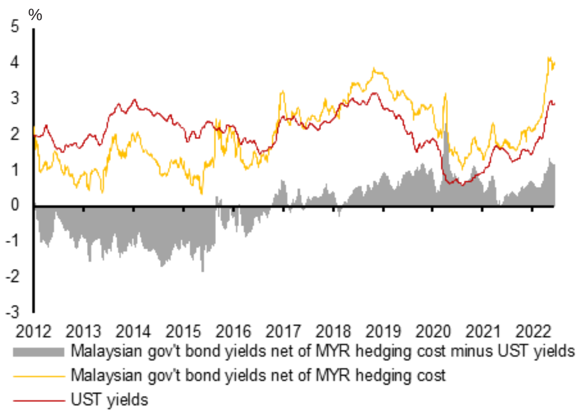
Source: Bloomberg; AMRO calculations.
Note: Daily data obtained up to June 10, 2022.

Figure A1.2. MYR Hedging Costs: Onshore versus Offshore NDF



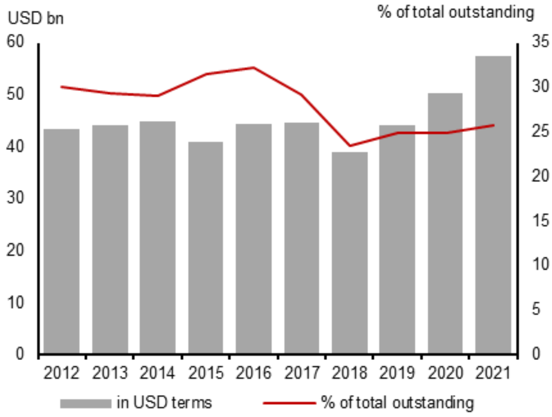
Source: Bloomberg; AMRO calculations.
Note: Daily data obtained up to June 10, 2022.

Figure A1.3. Malaysian Government Bond Yields versus U.S. Treasuries



Source: Bloomberg; AMRO calculations.
Note: Daily data obtained up to June 10, 2022. The MYR hedging cost is measured as the annualized 3-month onshore forward exchange rate – implied interest rates.

Figure A1.4. Foreign Holdings of LCY Government Debt Securities



Source: BNM; CEIC; AMRO calculations.

Beyond the dynamic hedging program

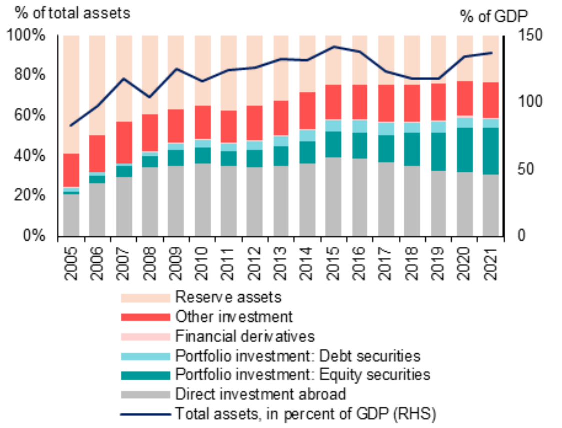
6. **Malaysian institutional investors have increased their overseas portfolio investment and hedging demand, bolstering onshore FX liquidity.** Figure A1.5 exhibits a shift in Malaysia's international investment assets from predominantly official reserve assets to foreign assets held by domestic institutions other than the central bank, initially in the form of direct investment abroad, and more recently, in terms of overseas portfolio investment. Driven by the need to diversify their investment portfolios and search for higher yields, Malaysian pension funds and asset managers have stepped up investing overseas, mostly in equities, but also in debt securities assets (Figure A1.6).[38] This has raised the FX hedging demand by those domestic institutions, considering the large gap between their foreign currency assets and liabilities (Figure A1.7). In line with regional peers, Malaysian pension funds tend to hedge between 50 and 100 percent of their fixed income investment, and around 25 percent of their equity investment, while asset managers may have adopted a lower hedge ratio (Figure A1.8; McGuire et al, 2021). In so doing, domestic institutional investors sell forward positions in foreign exchange to the local banking system, which in turn sell these positions to their clients, including nonresident institutional investors with future FX demand. This has fostered liquidity and efficient price discovery in the onshore FX market, on top of the increased participation of nonresident investors via the dynamic hedging program.

7. **Ongoing liberalization of foreign exchange policy rules has also contributed to a deeper and more liquid onshore FX hedging market.** One example is the removal of the export conversion rule in early 2021. As mentioned in paragraph 1 of this selected issue, the export conversion rule took effect at the same time as the dynamic hedging program in 2016. Under this rule, exporters were allowed to retain up to 25 percent of foreign currency proceeds from their goods exports or six months value of foreign currency obligations, and were hence required to convert the remaining amount into ringgit. The measure led to a rebound in the daily spot FX turnover and increased participation of residents in the onshore market after 2016. Then in early 2021, the export conversion rule was removed, giving exporters greater flexibility in managing their FX earnings. These exporters reportedly diverted part of their

[38] A similar trend has been observed in other emerging markets in the region, including Korea and Thailand, and to a much lesser extent Indonesia (BIS, 2021).

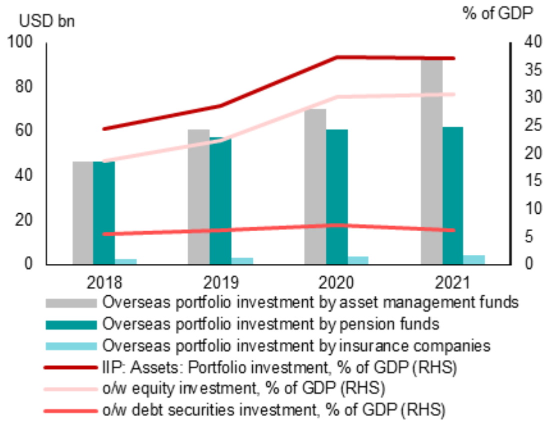
export proceeds from the spot market to the forward market to manage exchange rate risks, contributing to an increase in the daily FX forward transaction volume in 2021.

Figure A1.5. Malaysia's International Investment Assets by Type



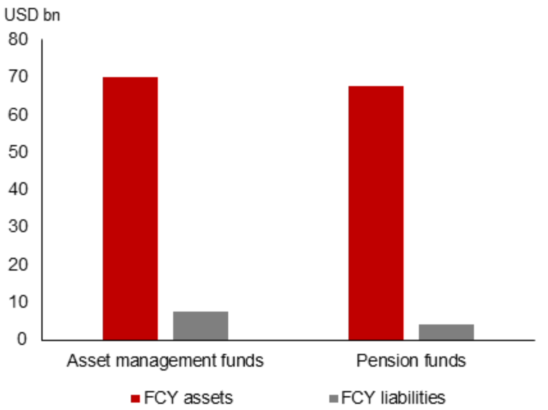
Source: BNM; CEIC; AMRO calculations.

Figure A1.6. Overseas Portfolio Investment by Malaysian Institutional Investors



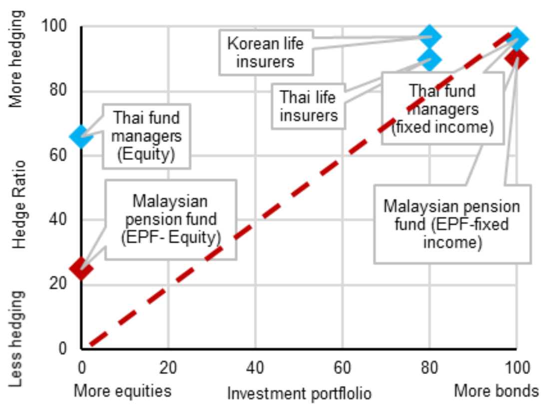
Source: BNM; CEIC; annual financial reports of major pension funds in Malaysia; AMRO calculations.
Note: Data on pension funds refers to the EPF only.

Figure A1.7. Malaysian Institutional Investors' FCY Assets versus Liabilities in 2020



Source: Securities Commission Malaysia; annual financial reports of major pension funds in Malaysia; AMRO calculations.
Note: Data on pension funds refers to the EPF only.

Figure A1.8. FX Hedge Ratio and Investment Portfolio: Selected ASEAN+3 Investors



Source: BIS (2021); annual financial reports of major pension funds and asset managers in Malaysia; AMRO calculations.

References

ASEAN+3 Macroeconomic Research Office (AMRO). 2017. *Annual Consultation Report on Malaysia 2017*. Unpublished.

ASEAN+3 Macroeconomic Research Office (AMRO). 2021. "Box C on Taking Stock of Malaysia's Onshore Financial Markets." In *Annual Consultation Report on Malaysia 2020*, 28-29, AMRO, Singapore. https://www.amro-asia.org/wp-content/uploads/2021/05/Malaysia-ACR_2020.pdf

Bank Negara Malaysia. 2016-2021. *Various Supplementary Notices on Foreign Exchange Administration (FEA) Rules.* BNM, Kuala Lumpur. https://www.bnm.gov.my/notices-announcements/-/tag/notices-2021

Bank for International Settlements (BIS). 2020. "How Has Financial Market Development Affected Monetary Policy and Financial Stability in EMEs: The Malaysian Experience." In *Financial Market Development, Monetary Policy and Financial Stability in Emerging Market Economies.* BIS Working Paper No. 113. Bank for International Settlements, Basel, December. https://www.bis.org/publ/bppdf/bispap113.pdf

Lipscomb, Laura. 2005. "An Overview of Non-Deliverable Foreign Exchange Forward Markets." Federal Reserve Bank of New York, New York, May.

McGuire, Patric, Shim, Illhyock, Shin, Hyun Song, and Sushko, Vladyslav. 2021. "Outward Portfolio Investment and Dollar Funding in Emerging Asia." BIS Quarterly Review, Bank for International Settlements, Basel, December 2021. https://www.bis.org/publ/qtrpdf/r_qt2112d.pdf

Schmittmann, Jochen M. and Chua, Han Teng. 2020. "Offshore Currency Markets: Non-Deliverable Forwards (NDFs) in Asia." IMF Working Paper No. WP/20/179, International Monetary Fund, Washington DC, September 2020. https://www.elibrary.imf.org/view/journals/001/2020/179/article-A001-en.xml

Tsuyuguchi, Yosuke, and Woolridge, Philip. 2008. "The Evolution of Trading Activity in Asian Foreign Exchange Markets." BIS Working Paper No. 252, Bank for International Settlements, Basel, May. https://www.bis.org/publ/work252.pdf

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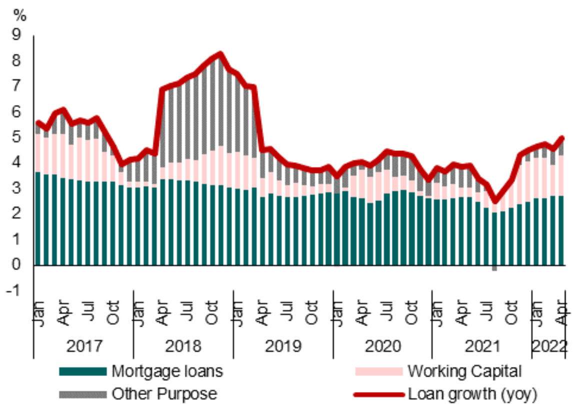
2. Banking System Soundness in the Context of Ebbing Regulatory Forbearance[39]

The COVID-19 pandemic has affected the Malaysian banking sector. Regulatory forbearance, introduced in April 2020, has provided loan repayment assistance to borrowers who were adversely affected by the pandemic. However, the repayment assistance has masked the quality of loans as regulators do not require banks to downgrade their loans to NPLs. With the economic recovery gaining traction, the regulatory forbearance will gradually be phased out in 2022; the loan quality is no longer masked, which may increase the NPL ratio. Preemptive loan-loss provisions implemented by banks will mitigate the impact of a deterioration in their loan quality, and our reverse stress-testing exercise shows that banks would be able to withstand an NPL ratio of 7.2 percent, a tail risk, before the CET1 ratio falls below our perceived investor threshold of 13 percent into stressed territory.

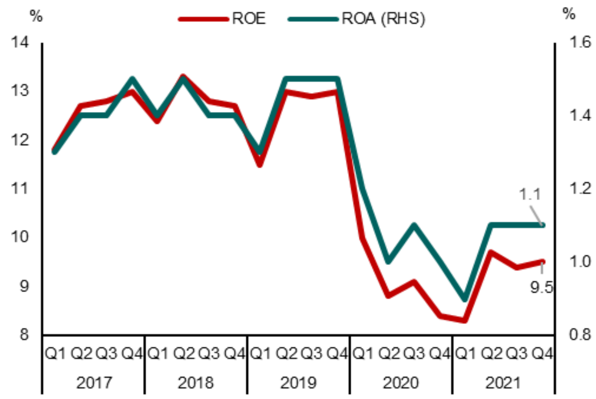
1. **The banking system saw robust credit growth for most of 2021, although banks' profitability was still below pre-pandemic levels.** Supported by BNM's low policy rate, financing facilities and debt repayment program, credit growth of the banking system was sustained in the first five months of 2021 at 3.7-3.9 percent, slightly improved from 3.4 percent in 2020. Despite a slowdown in Q3 2021 reflecting the severe Delta outbreak and accompanying strict containment measures, credit growth regained momentum in Q4 and increased to 5.0 percent in April 2022, driven by mortgage and working capital loans (Figure A2.1). Against this backdrop, the profitability of banks improved in 2021, reaching a Return on Equity (ROE) of 9.5 percent and a Return on Assets (ROA) of 1.1 percent in Q4 2021, though still falling short of the pre-pandemic levels (Figure A2.2).

Figure A2.1. Loan Growth and Contribution by Purpose



Source: BNM, AMRO calculations.

Figure A2.2. Banks' Profitability



Source: BNM.

2. **Meanwhile, the government's loan repayment assistance programs have helped borrowers to recover from the pandemic.** The authorities initially provided a six-month blanket moratorium from April to September 2020, then followed this up with targeted repayment assistance (TRA) from October 2020 on an opt-in basis, aimed at households, micro businesses and SMEs who were still affected severely by the pandemic. In July 2021, the opt-in repayment assistance programs were widened to include all individuals and SMEs affected by the lockdown in order to give timely support to the household sector amid the severe Delta outbreak (Table A2.1). As of November 2021, there were 36 percent of household loans and 36.8 percent of SME loans under the TRA, almost double the June 2021

[39] This selected issue is prepared by Yang Chunyu, Associate Economist.

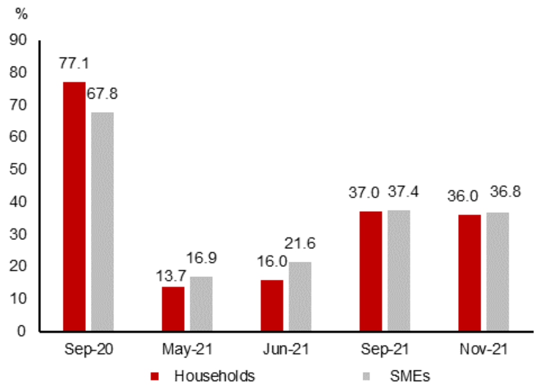
coverage (Figure A2.3). Starting from 2022, the TRA is being phased out and assistance is available only to eligible B50 borrowers[40] through the Financial Management and Resilience Program (URUS)[41] (Table A2.1).

Table A2.1. Comparison of Loan Assistance Programs

Program	Application period	How to get		Coverage			Type of assistance
		Automatic	Opt-in	Individuals	Micro - business	SMEs	
Blanket moratorium	Apr 20 - Sep 20 *	√		√	√	√	6-month moratorium
Targeted repayment assistance	Oct 20 - Jun 21		√	Only affected individuals **	√	affected SMEs	6-month moratorium or reduced installment
	Jul 21 - Dec 21		√	√	√	affected SMEs	6-month moratorium or reduced installment
Financial Management & Resilience Programme (URUS)	Nov 21 - Mar 22		√	Only eligible B50 borrowers ***			3-month interest waiver and/or reduced instalments up to 2 years

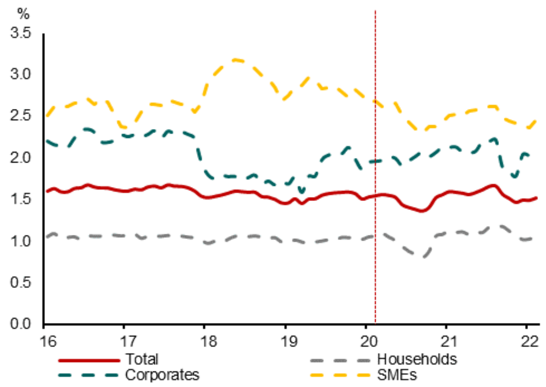
Source: BNM, AMRO compilation.
Note: * The blanket moratorium is automatically granted without any application, so Apr-Sep 20 refers to the effective period of this program.
** Individuals who have lost their jobs for three months can apply for or request an extension of the moratorium, and those whose salaries have been affected can apply for a reduction in loan installments for at least six months.
*** Eligibility B50 borrowers applies to B50 borrowers who have either lost their jobs or are experiencing an income loss of at least 50%.

Figure A2.3. Loans under Assistance Programs to Outstanding Loans



Source: BNM.
Note: Some private sector analysts put the percentage of loans under assistance programs at 8 percent as of April 2022.

Figure A2.4. Banking System NPL Ratios by Borrower



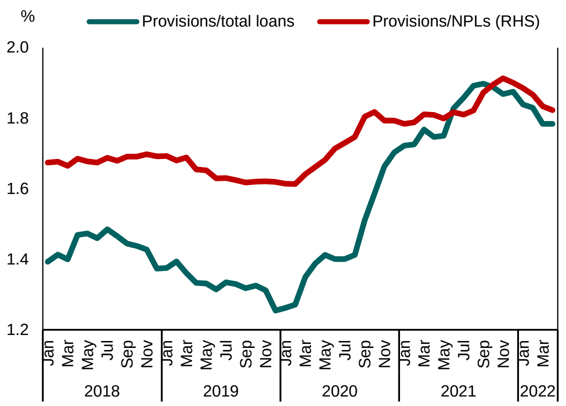
Source: BNM, AMRO calculations.

3. **The repayment assistance in its various forms has kept the NPL ratio more or less unchanged, except that of SMEs.** With the repayment assistance in place, banks do not need to downgrade their affected loans to NPLs. As a result, the loan quality has been masked, and the overall NPL ratio did not increase from its pre-pandemic level (Figure A2.4). On the contrary, the NPL ratio for SMEs declined to 2.5 percent in February 2022 from 2.8 percent in 2019. However, this decline is likely driven by banks' regular write-offs, and some SMEs might also have improved their financial performance in 2021.

[40] B50 borrowers are individual borrowers whose household income is within the bottom 50 percent of the income group, or who earn a gross household income of below MYR5,880 per month.
[41] The URUS is a holistic assistance package to help vulnerable borrowers who are affected by COVID-19 and continue to experience cash flow difficulties. It offers repayment assistance and development support, including personalized financial plans, financial education programs and avenues to supplement incomes and obtain other development support.

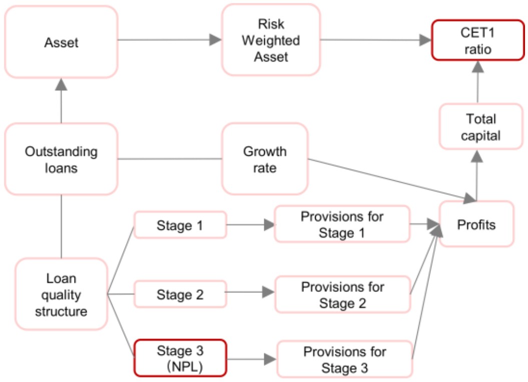
4. **That said, banks have been monitoring their loan quality and building up provisions in preparation for the likely increase in the impairment ratio.** Although Malaysia's regulatory forbearance spares banks from downgrading loans to NPLs (also known as stage 3 loans), some banks have downgraded their loans to stage 2 under the IFRS9 framework. For example, stage 2 loans among SMEs increased notably after movement restrictions began, making up 16.8 percent of total SME loans in November 2021 from 14.6 percent in June. This reflects efforts by banks to prepare for possible deterioration in loan quality. Banks were also setting aside provisions to prepare for a possible increase in the NPL ratio once the TRA is withdrawn. In April 2022, loan-loss provisions covered 1.8 percent of total loans and 113.4 percent of NPLs, rising substantially from 1.3 percent and 83 percent in 2019 respectively, though declining slightly from the end of 2021 as the TRA expired (Figure A2.5).

Figure A2.5. Trend of Loan-loss Provisions



Source: BNM, AMRO calculations.

Figure A2.6. Mechanism of Reverse Stress Test



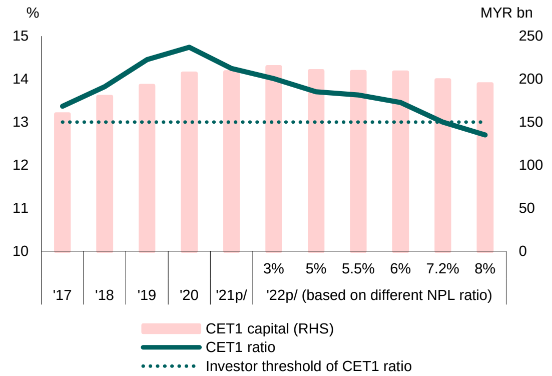
Source: AMRO illustration.

5. **A gradual phasing out of the repayment assistance may result in the NPL ratio rising in 2022.** Although eligible B50 borrowers can apply for the URUS from November 2021 to March 2022, private sector bank analysts project the take-up rate will be less than 5 percent, given the much stricter application criteria compared with the TRA. Furthermore, most loans will no longer be under TRA in 2022, while banks may need a few quarters to examine payment records to downgrade loans to NPLs. Therefore, the NPL ratio may gradually increase from the middle of 2022.

6. **Our reverse stress test shows that the banking system will be able to withstand an NPL ratio of 7.2 percent before the CET1 ratio falls to a position of distress.** The reverse stress test is a useful tool to estimate the NPL ratio that will enable banks to maintain the capital asset ratio above a certain distress threshold. The higher the estimated NPL ratio is compared to the actual or projected NPL ratio, the less likely that the bank would lose its sound financial position (Figure A2.6). In choosing the CET1 ratio's distress threshold, we use a perceived investor threshold of 13 percent[42] instead of the regulatory threshold of 7 percent. Some banks set their CET1 ratios above 13 percent, and one bank increased its equity via private placement when its CET1 ratio fell below 13 percent. Our results yield an NPL ratio of 7.2 percent when banks' CET1 ratio fall below the perceived investor threshold (Figure A2.7).

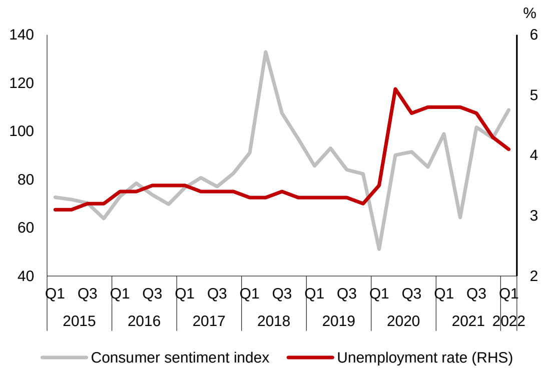
[42] According to AMRO's discussions with market analysts, a minimum CET1 ratio of 13 percent is said to apply to the big EM banks with foreign operations, while a lower threshold of 12 percent applies to the smaller EM banks. When testing domestic commercial banks as a whole, we adopt the stricter threshold of 13 percent to make our results more prudent.

Figure A2.7. Stress Test Results



Source: BankFocus, AMRO calculations and projection.
Note: Our sample includes all eight domestic commercial banks, accounting for 83% of banking system assets.

Figure A2.8. Consumer Sentiment Index and Unemployment Rate



Source: Malaysian Institute of Economic Research, Malaysia Department of Statistics.
Note: For the consumer sentiment index, the 100-point is the optimism threshold.

7. **However, an NPL ratio of 7.2 percent can be seen as a tail risk, and the CET1 ratio in 2022 across banks is expected to be higher than our perceived investor threshold.**

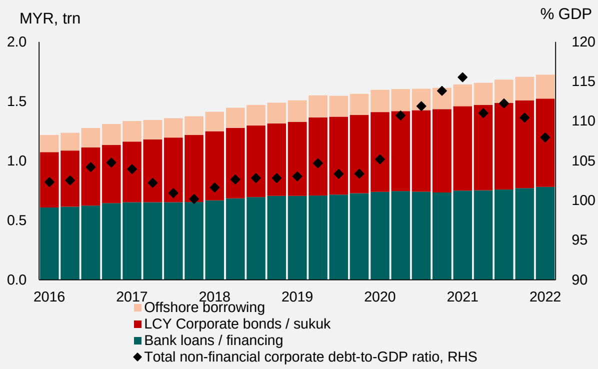
- In the corporate sector, the NPL ratio is unlikely to spike significantly, since key indicators point to a decline in financial vulnerabilities arising from corporates' indebtedness. In the SME sector, the challenging operating environment has not prevented loan repayments in 2021 from mostly recovering to their pre-pandemic levels, except for microenterprises. SMEs can also benefit from the improved performances of large corporates and a rebound in business confidence (see Box A2: Recent Developments in the Corporate Sector).

- In the household sector, the rising consumer sentiment index and declining unemployment rate suggest household conditions are improving (Figure A2.8). The consumer sentiment index was at its highest level since Q3 2018, registering 108.9 in Q1 2022. Meanwhile the unemployment rate, after a surge in Q2 2020 to 5.1 percent, has seen a recovery, falling to 4.1 percent in Q1 2022. In addition, the low rate of URUS applications implies overall conditions in the household sector are resilient.

Box A2. Recent Developments in the Corporate Sector[43]

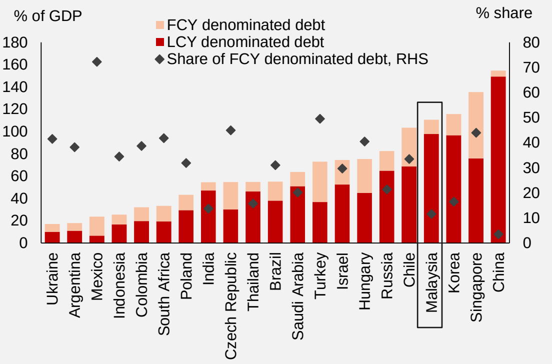
Corporate borrowings[44] increased slightly in 2021 and early 2022, reflecting the improving economic conditions. In line with the faster economic recovery in 2021, net financing to corporates from the banking system and corporate bond market rose by 5.0 and 5.8 percent, respectively in Q1 2022 and 2021 from 3.2 percent in 2020. Borrowings from banks were sustained in 2021, in part due to ample liquidity in the banking system. The low-interest rate environment also allowed corporates to continue to tap the bond market to meet their financing needs. Despite the increased borrowings, however, the estimated corporate debt-to-GDP ratio fell to 108.0 percent in Q1 2022 from 113.9 percent in end-2020 due to the modest economic recovery during this period (Figure BA2.1). Although offshore borrowing by corporates picked up in the second half of 2021, Malaysian corporates' reliance on external funding, which makes up 12.8 percent of total outstanding corporate debt, is among the lowest compared to regional and emerging economy peers (Figure BA2.2).

Figure BA2.1. Corporate Debt and Funding Sources



Source: BNM, AMRO staff estimates.
Note: Corporate debt is defined as the sum of the offshoring borrowings of the non-bank private sector, net outstanding corporate bonds and sukuk, and total outstanding banking system loans excluding loans to households.

Figure BA2. Cross-country Comparison of Corporate Debt-to-GDP ratio, 2021



Source: Institute of International Finance.

Key indicators point to a decline in financial vulnerabilities despite an increase in corporates' indebtedness in 2021. The cash buffers of corporates have increased further because of the continued fiscal and financial support from the government to shore up their liquidity positions, a reduction in investment outlays reflecting the cautious business sentiment during the pandemic, and a recovery in earnings (Figure BA2.3). Gross leverage, especially of the large corporates, declined further as the recovery in their earnings outpaced the increased borrowing (Figure BA2.4). In addition, the lower borrowing costs during the pandemic and stronger recovery in earnings for medium and large corporates contributed to their improving debt-servicing capacity in 2021, as denoted by their rising interest coverage ratio (Figure BA2.5). The proportion of firms with a negative interest coverage ratio, which is attributable to negative earnings, also fell.

Figure BA2.3. Median Cash-to-Short term Debt Ratio

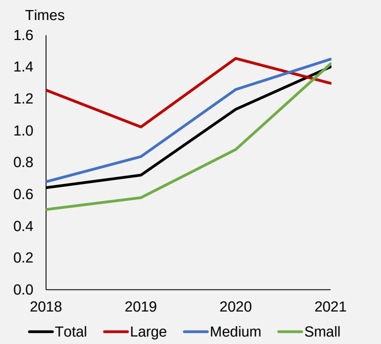


Figure BA2.4. Median Debt-to-Equity Ratio

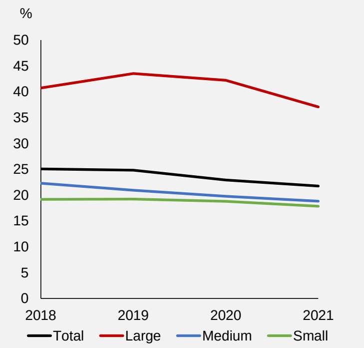
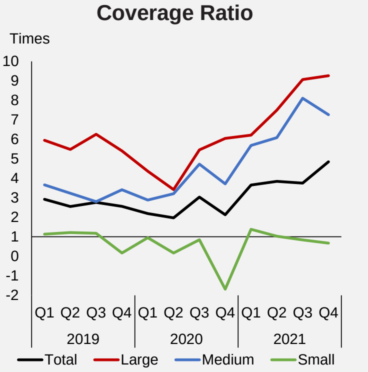


Figure BA2.5. Median Interest Coverage Ratio

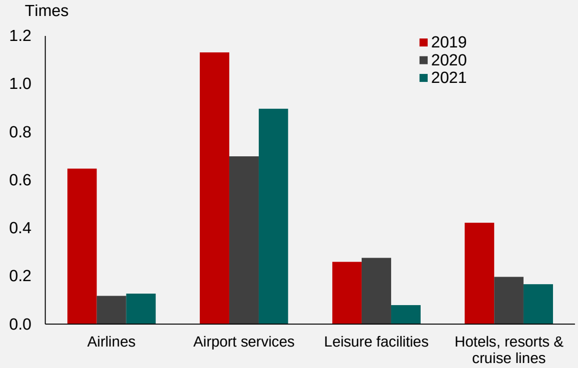


Source: Bloomberg Finance LP.

[43] This box is pprepared by Justin Lim Ming Han, Economist.
[44] The corporate sector includes non-financial corporates and SMEs.

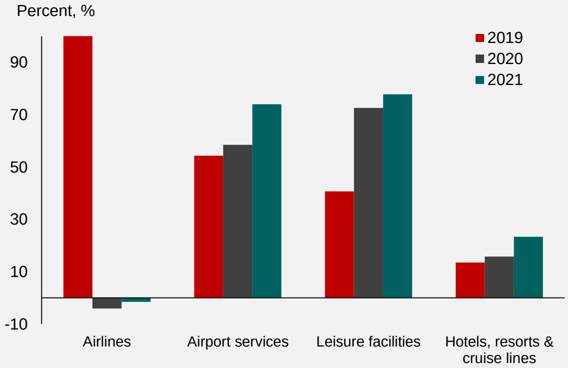
However, challenges remain for adversely affected firms. Compared to large corporates, small and medium-listed firms continue to maintain a larger precautionary cash buffer due to the uncertain operating environment. The re-imposition of stricter containment measures in Q3 2021 has resulted in a decline in the earnings of small firms (Figure BA2.5). At the sectoral level, although the financial performance of firms operating in sectors such as airport services, leisure, hotels and restaurants has improved, these firms are still weaker compared to pre-pandemic situation. In addition, their cash-to-short-term debt ratio fell in 2021 (Figure BA2.6) while leverage increased (Figure BA2.7), and the financial distress of airlines remain significant given their negative equity position.

Figure BA2.6. Median Cash-to-Short Term Debt Ratio for Selected Sectors



Source: Bloomberg Finance LP.

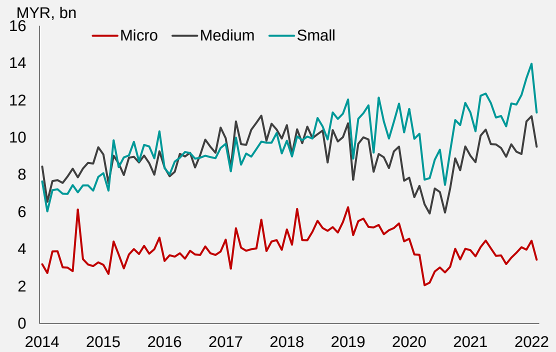
Figure BA2.7. Median Debt-to-Equity Ratio for Selected Sectors



Source: Bloomberg Finance LP.

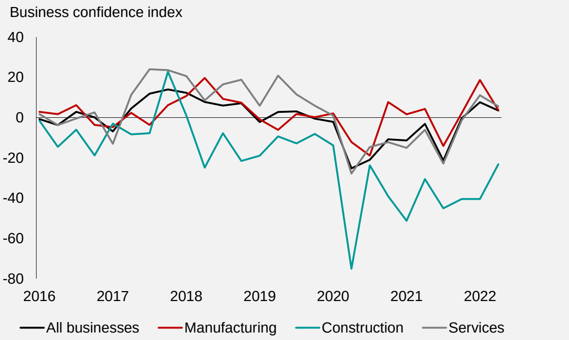
The financial conditions of SMEs have improved, although challenges remain for some segments. Similar to past experiences, survey findings[45] indicate that SMEs experienced a proportionally larger decline in sales and faced greater liquidity constraints compared to larger corporates (World Bank, 2021) during the re-implementation of the Movement Controls Order in Q2 2021. Nevertheless, most SMEs were able to meet their loan repayment obligations in 2021 – which have mostly improved and returned to their pre-pandemic levels (Figure BA2.8) – in part due to the continued economic recovery and financial support from the targeted relief assistance scheme. Looking ahead, a rebound in business confidence across most sectors in early-2022 indicates a further normalization of business activities, which bodes well for SMEs' financial prospects (Figure BA2.9). Furthermore, SMEs would also benefit from the stronger capital spending by corporates as a result of the improving business sentiment. That said, SMEs in the construction, wholesale, retail, restaurant and hotel sectors may face greater financial difficulties if the pandemic situation deteriorates significantly amidst rising business cost and interest rates, and as policy support is phased out as planned in 2022 given the ongoing economic recovery.

Figure BA2.8. SME Loan Repayment



Source: BNM.

Figure BA2.9. Business Confidence Indicator



Source: Business Tendency Statistics, Department of Statistics Malaysia.

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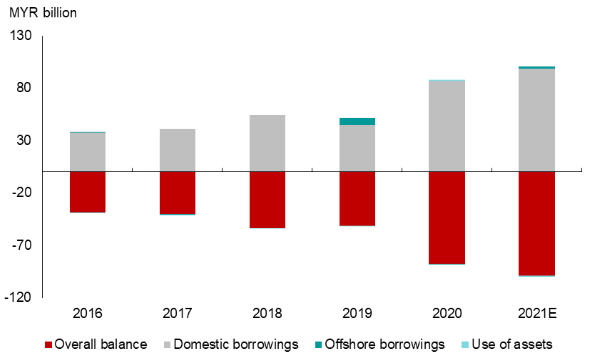
[45] World Bank (2021). Impacts of COVID-19 on firms in Malaysia, Results from the 3rd Round of COVID-19 Business Pulse Survey COVID-19, Business Pulse Surveys Round, July 2021

3. An Examination of Malaysia's Deficit Financing[46]

The pandemic has substantially affected Malaysia's fiscal deficit in the past two years. The government has financed its deficits primarily through local currency borrowing with the support of a sizable and well-diversified domestic financial sector. Other government-linked funds have also played an essential role in financing the fiscal deficits. This selected issue reviews how fiscal deficits are financed in Malaysia and discusses possible challenges ahead in fiscal deficit financing.

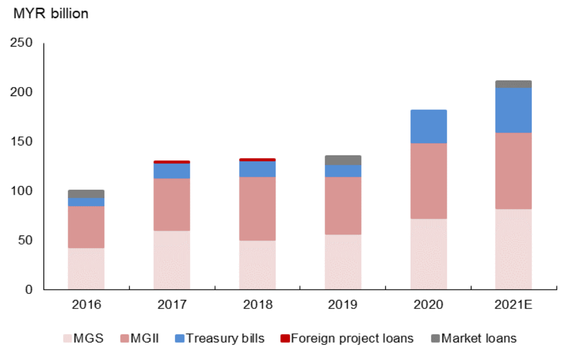
1. **The sources of financing for the federal government's budget deficit are domestic and offshore borrowings.** Domestic borrowings, defined by ringgit-denominated debt, are the predominant financing source, accounting for 98 percent of gross borrowing in 2016-2020 (Figure A2.1). It is carried out through the issuance of Malaysian Government Securities (MGS), Malaysian Government Investment Issues (MGIIs), Malaysian Treasury Bills (MTBs), and Malaysian Islamic Treasury Bills (MITBs) (Figure A2.2).[47] Offshore borrowings, on the other hand, consist of market and project loans.

Figure A2.1. Sources of Budget Deficit Financing



Source: MOF.
Note: 2021 data is based on the MOF's estimate. A positive (negative) value of the use of assets means a drawdown (accumulation) of the asset.

Figure A2.2. Government Gross Borrowing



Source: MOF.
Note: 2021 data is based on the MOF's estimate.

Domestic and foreign borrowings

2. **The sizable and well-diversified domestic financial sector plays a significant role in absorbing government bonds.** Malaysia's domestic institutional investors have sizable assets compared to their regional peers (Figure A2.3), enabling their active participation in the government bond market (Figure A2.4).

- The two biggest domestic pension funds – the Employees Provident Fund (EPF) and the Retirement Fund known as *Kumpulan Wang Persaraan* (KWAP)[48] – held close to 33 percent of MGS and MGII in 2018-2019, prior to the pandemic. In 2020 and 2021,

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[46] This selected issued is prepared by Andriansyah, Fiscal Specialist, with contributions from Diana del Rosario, Senior Economist.
[47] As part of the MGII, the government issued *Sukuk Prihatin* in 2020 with a low coupon rate of 2 percent. The proceeds were channeled to the COVID-19 Fund. This sukuk also had a charity feature wherein the holders could choose to forgo their principal amount from the sukuk issuance in part or in full and channel the money to any government trust account.
[48] The EPF, domestically called *Kumpulan Wang Simpanan Pekerja* (KWSP), is a national pension fund, while KWAP is a public-service pension fund. Malaysia's pension system is ranked higher than most countries; for instance, Mercer Consulting (2021) ranked it in the top three in Asia in 2021, after Singapore and Hong Kong. EPF is one of the world's largest pension funds, with investment assets amounting MYR988.6 billion (USD227.3 billion) as at September 2021.

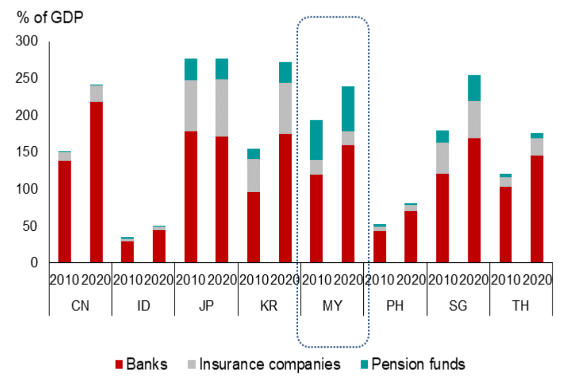
the pension funds pared down their holdings to 28 percent, led by the EPF which saw its net contributions fall due to pandemic-related policies.[49]

- Banks, which were awash with liquidity during the pandemic following adjustments to the statutory reserve requirement and the decline in the loan-to-deposit ratio (Pande 2021), stepped in to fill the gap left by the pension funds. As a result, banks raised their government bond holdings to 31 percent in 2020-2021 from 28 percent in 2018-2019.

- Insurance companies, development financial institutions such as development banks, SME banks and export-import banks, and non-bank financial institutions such as asset management companies and pawnbrokers are other organizations that make up the diversified domestic investor base which enables the government to fund its pandemic-related expenditures. Together, they account for about 7 percent of the government bond holdings.

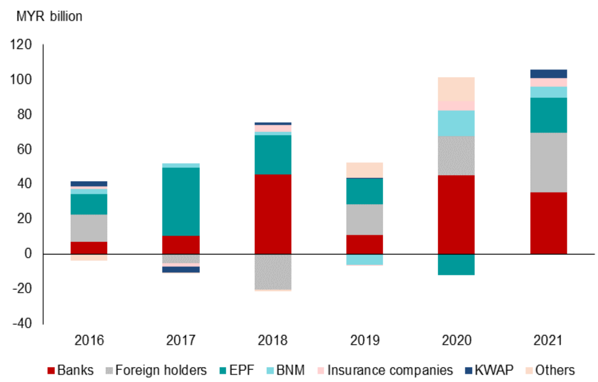
- BNM held 2.6 percent of the outstanding government bonds at the end of 2021, marginally higher than the 1 percent in 2018-2019. The central bank is allowed to buy government securities for its repo (repurchase agreement) operations.

Figure A2.3. Long-term Institutional Investors by Asset Size



Source: World Bank Global Financial Development Database.
Note: The assets of insurance companies and pension funds are as of 2019.

Figure A2.4. Investors Who Bought Government Bonds

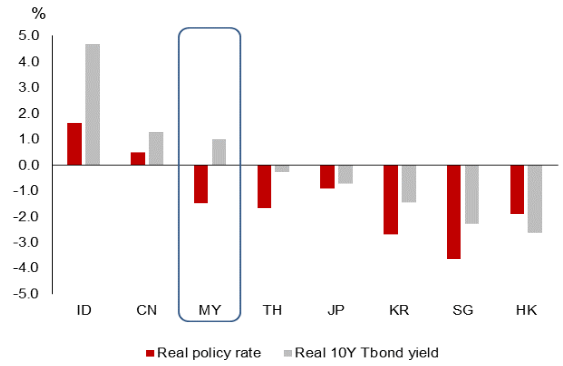


Source: BNM; AMRO calculations.
Note: Net increase in the holdings of government debt is as of the end of the year. “Others” includes development financial institutions, non-bank financial institutions, statutory bodies, nominees and trustee companies, cooperatives, and unclassified items.

3. **The government bond market attracts considerable foreign investor participation.** Foreign investors hold a significant proportion of local currency government bonds, representing a quarter in 2020-2021 compared to 23 percent prior to the pandemic (2018-2019). Malaysian government bonds are attractive due to its high yield; for example, the 10-year government bond offered a higher yield, after adjusting for inflation, than its Asian peers in 2021 (Figure A2.5). However, the tightening of U.S. monetary policy may prompt foreign investors to rebalance their portfolios in favor of developed markets in a flight to quality.

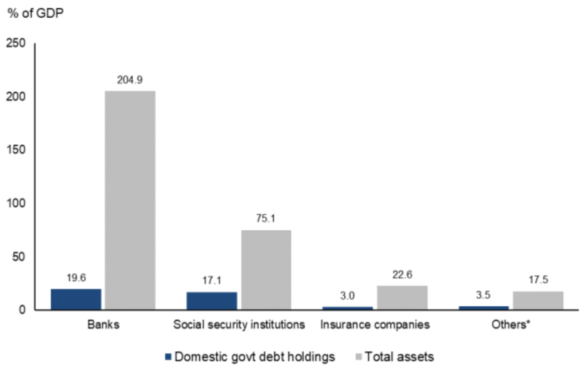
[49] During the pandemic, the EPF employee contribution rate was reduced from 11 percent in December 2020 to 9 percent between January and December 2021. The reduction has been extended until June 2022, after which it will return to 11 percent in July. Members can, however, opt out of this extension and are also allowed by the EPF to withdraw their funds through one special scheme in 2020 (i-Lestari), two in in 2021 (i-Sinar and i-Citra), and the most recent scheme in 2022.

Figure A2.5. Real Policy Rate and 10Y Government Bond Yield in Selected ASEAN+3 Economies, 2021



Source: CEIC; AMRO calculations.
Note: Data as of 2021. Real interest rate/yield is calculated as inflation-adjusted observed interest rate/yield.

Figure A2.6. Domestic Institutional Investors – Asset Size and Holdings of Government Debt



Source: BNM; DOSM; EPF and KWAP annual reports.
Note: Debt holdings data as of 2021. Banking institutions, insurance companies, and other (fund management) assets as of 2021. Social security institutions comprise the EPF and KWAP. EPF assets as of end-2020; KWAP assets as of end-2018. "Others" refers to fund management (fixed income and unit trust funds).

4. **Offshore borrowings are carried out mainly in the form of sovereign global sukuks.** Malaysia was the second largest international sukuk issuer from 2001 to 2020, with a global share of 25.8 percent, just after the United Arab Emirates, which took up 27 percent (IIFM, 2021). In 2021, the Malaysian government issued a dual-tranche sukuk of USD1.3 billion. The 10-year tenor is the world's first U.S. dollar sovereign Sustainability Sukuk with a value of USD800 million. At the same time, a USD500 million sukuk was issued for a 30-year tenor. The government also issued a 10-year Samurai bond amounting to JPY200 billion in 2019. Meanwhile, project loans under bilateral and multilateral arrangements were to finance existing programs and projects for universities, sewerage plants, and water transfer infrastructure.

Transfers from government linked institutions

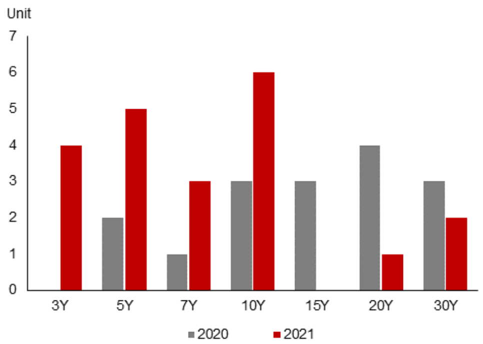
5. **To minimize borrowing, the government draws on the financial resources of government-linked institutions as a source of funds.** The financial resources are used for funding both on-budget and off-budget spending. On-budget funding comprises interest revenue and return on investment – that is, dividends from the sovereign wealth fund Khazanah Nasional, the national oil and gas company PETRONAS, and BNM. For instance, the expected dividends from these three government-linked institutions in 2022 are MYR1 billion, MYR25 billion, and MYR5 billion, respectively. In 2022, the government also received a special payment from KWAP to partly finance costs incurred in providing retirement benefits to government employees. Meanwhile, the off-budget funding taps into the returns of government assets, such as the National Trust Fund, or Kumpulan Wang Amanah Negara (KWAN), another sovereign wealth fund. The government has allocated MYR6 billion from KWAN to finance the nationwide COVID-19 vaccination program.

Near-term Deficit Financing Outlook

6. **The high gross financing needs arising from an elevated fiscal deficit of about 5 percent of GDP in 2022-2025 create some challenges to the government.** First, the large amount of sovereign bond issuances could push yields higher, thereby increasing the debt servicing burden of the government. As it is, committed expenditure already accounts for

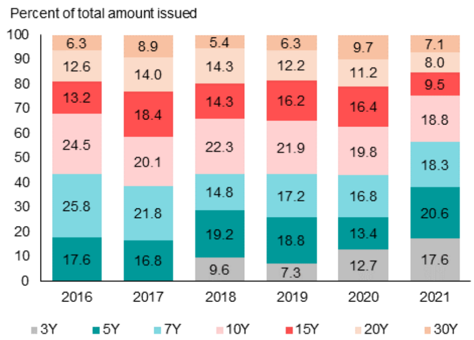
nearly 50 percent of the annual budget (see paragraph 15). Second, large government bond issuances could crowd out private sector investment and result in a tightening in domestic liquidity, as private investors, such as savings institutions and insurance companies, flock to high-yielding and also highly-rated government bonds. Third, financing challenges could arise especially as global financial conditions tighten. Higher UST yields could prompt foreign capital outflows and weaken foreign investors' appetite for Malaysian government bonds, as was the case in March 2022. Last year also saw below-average bid-to-cover ratios, which indicate moderate demand for sovereign bonds of lower than 10-year tenors that were issued in greater amounts compared to previous years (Figures A2.7 and A2.8).

Figure A2.7. Number of Government Bonds with Below-average Bid-to-Cover Ratios



Source: BNM; AMRO calculations.
Note: Average refers to the 2020-2021 average of 2.1.

Figure A2.8. Local Currency Government Bond Issuance by Tenor



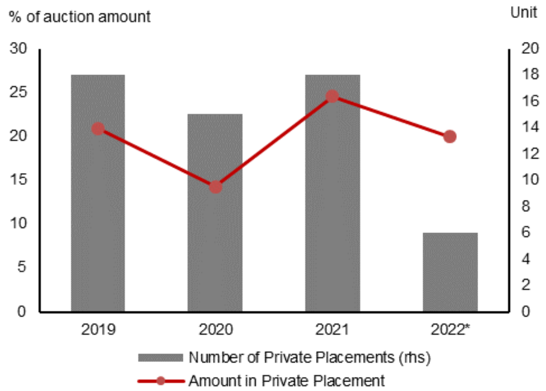
Source: BNM.

7. **That said, domestic financial institutions have large assets and annual inflows which will be sufficient to finance budget deficits.** In 2022 in particular, the domestic financial market has enough capacity to absorb government bond issuances. The EPF is expected to step up its purchases of government bonds this year, as its net contributions could improve with the recovery of the labor market and the hike in the employees' statutory contribution rate back to 11 percent as before the pandemic. [50] In this regard, the EPF could fill the space left by the banks, which may become less active in the bond market as the economy recovers. That is, as mobility restrictions are relaxed, consumers could start drawing on their excess savings with the banks that were accumulated during the pandemic. At the same time, banks would be extending more loans as public and private sector investments pick up. These developments would increase banks' loan-to-deposit ratio and would leave banks with a more modest amount of excess liquidity to invest in the bond market. That said, banks would still have room to increase their holdings of government bonds, which have accounted for only less than 10 percent of commercial banks' assets (Figure A2.6). Meanwhile, other domestic institutional investors, such as insurance companies, are also expected to add to their government bond holdings, especially long-term bonds, as their assets grow. Additionally, attractive yields may draw foreign investors to the local bond market.[51]

[50] The EPF is also encouraging voluntary contributions from self-employed and gig workers, which could add to a further improvement in net contributions.
[51] Improvements in Malaysia's terms of trade from the rally in commodity prices amid the Russia-Ukraine conflict may also attract foreign investors to buy more Malaysian bonds. This could already be seen in the first two months of 2022, when the country recorded a foreign net purchase of local currency bonds after a nine-year high of USD8.2 billion in 2021.

8. **At the same, the government should be able to manage the challenges that come with the large supply of new bonds in the market.** For instance, the increase in the use of private placements in 2021 (Figure A2.9) pared down the increase in the amount of auctioned bonds and mitigated the pressure on bond yields. Meanwhile, the use of private placements was favorable to the pension funds, which are the key sources of demand for long-term bonds among domestic investors, as it guaranteed them an avenue to replenish their maturing inventory of sovereign bonds according to their preferred amounts and maturities.[52] And while the increase in the issuance of shorter-tenor bonds (Figure A2.8) raises refinancing risk, this risk can be managed by restructuring the debt maturity profile through the use of switch auctions. For example, an MGS switch auction was conducted last year, which involved the government buying back a predetermined MGS of shorter tenor and replacing it with longer-tenor bonds. Switch auctions were also done to cater to investors' demand in managing their investment portfolios.

Figure A2.9. Private Placements



Source: BNM; AMRO calculations.
Note: *2022 data is based on the actual auctions as of June 9, 2022.

References

International Islamic Financial Market (IIFM). 2021. *Sukuk Report 2021: A Comprehensive Study of the Global Sukuk Market, 10th Edition*. IIFM, Manama, July 2021. https://www.iifm.net/frontend/general-documents/bcd691cfb4233fb37d78355021010392163525158 0.pdf.

Mercer Consulting. 2022. Mercer CFA Institute Global Pension Index 2019. www.mercer.com/globalpensionindex.

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52 Bond yields awarded through private placements are equivalent to the weighted average of the auction yields.

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