



AMRO Annual Consultation Report

Thailand – 2023

ASEAN+3 Macroeconomic Research Office (AMRO)

November 2023

Acknowledgements

1. This Annual Consultation Report on Thailand 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 Thailand, which was conducted from 26 July to 11 August 2023 (Article 5 (b) of the AMRO Agreement). The AMRO ACV team was headed by Mr Allen Ng, Group Head and Principal Economist. The ACV members were Mr Justin Lim, Country Economist for Thailand; Ms Benyaporn Chantana, Back-up Economist; Ms Ravisara Hataiseree, Fiscal Specialist; Ms Marthe Memoracion Hinojales, Senior Economist; and Thanh Thuy Giang Dao, Associate. AMRO Director Dr Kouqing Li and Chief Economist Dr Hoe Ee Khor participated in key policy meetings with the authorities. The AMRO Annual Consultation Report on Thailand for 2023 was peer-reviewed by a group of economists from AMRO's Country Surveillance, Financial Surveillance and Fiscal Surveillance teams; endorsed by the Policy and Review Group; and approved by Chief Economist Dr Khor.
3. The analysis in this Report is based on data and information available up to 15 September 2023.
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 Thai authorities for their comments on this Report, as well as their excellent meeting arrangements during our visit.

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Executive Summary

- 1. Thailand's economy continues to recover and is expected to strengthen further.** GDP growth picked up to 2.2 percent in 1H 2023 and the output level has finally surpassed its pre-pandemic peak after growing by 1.4 percent in Q4 2022. The recovery was underpinned by resilient domestic demand and a rebound in tourist arrivals. Looking ahead, growth is expected to strengthen to 3.5 percent in 2023 and 3.9 percent in 2024. However, there are significant uncertainties stemming from both domestic and external factors that could affect the strength and trajectory of its recovery.
- 2. Inflation declined but is expected to remain within the 1-3 percent target range.** Headline inflation is projected to decrease to an average of 1.6 percent in 2023 from 6.1 percent in 2022, mainly due to a drop in oil and food prices. Looking ahead to 2024, inflation is expected to remain within the Bank of Thailand's (BOT) 1-3 percent target range, in line with the continued strengthening of the economic recovery and expectations of higher food prices. Nevertheless, the confluence of higher fiscal spending and a more severe El Niño can stoke inflationary pressures.
- 3. The external position remains resilient, given strong reserve buffers and a projected current account surplus.** Gross international reserves rose and are sufficient to cover 2.7 times of short-term external debt. Despite the weak export performance, the current account balance is forecasted to turnaround to record a small surplus in 2023 due to higher tourism receipts and lower oil and gas import prices.
- 4. The banking system remains sound and overall financing remained consistent with economic activities.** Banks' asset quality continues to be stable with low levels of non-performing loans and high levels of capital, liquidity and provisioning buffers. Total credit growth to the private sector moderated to 3.6 percent in April 2023 from 3.8 percent as of end-2022. The decline in lending reflects a normalization of bank lending activities, in line with the progressive rollback of measures which supported continued credit intermediation during the pandemic. Financial conditions remain accommodative as increases in deposit rates have been more gradual than lending rates.
- 5. The fiscal deficit is expected to narrow further in FY2023, aligning with a projected public debt-to-GDP ratio of slightly above 60 percent over the medium term.** Fiscal measures that were implemented during the pandemic have been fully discontinued. The overall fiscal deficit is estimated to narrow considerably from 5.9 percent of GDP in FY2022 to 3.3 percent in FY2023 due to revenue outturn exceeding budgetary projections. The public debt-to-GDP ratio is expected to remain stable at slightly above 60 percent in the medium term.
- 6. Key risks for Thailand are the weak growth of its main trading partners and higher-than-expected inflationary pressures.** Compared to last year, downside risk to growth has receded, although a weaker-than-expected recovery in China could hinder the recovery in tourism and the Thai economy. In addition, a possible recession in the United States and Europe could curtail demand for Thai manufacturing exports. Inflation could also be higher than expected in the event of a more severe El Niño, which would affect food production and prices, as well as the implementation new stimulus policies and wage increases by the newly elected government.
- 7. Over the longer term, Thailand faces multiple structural challenges that may impede long-term growth.** Deterioration of Thailand's potential growth can have consequential implications for macro-financial stability of the country. Its growth rate – constrained by a

large informal sector – has been declining in the last 20 years, while the society will become “super-aged” by the end of the decade. The infrastructure gap also remains large. On top of these challenges, the country will have to navigate ongoing geo-economic shifts in trade and investment, as well as address climate change risks.

8. Policies should prioritize economic recovery, rebuild policy space and revitalize long-term growth. Given the economic outlook and the underlying risks and vulnerabilities, the overarching policy priorities should aim at ensuring that the economic recovery is firmly entrenched, rebuilding policy space and addressing existing vulnerabilities, as well as prioritizing the revitalization of sustainable long-term growth.

9. The current tight monetary policy stance is appropriate, given the strengthening economic recovery and prevailing financial conditions. Looking ahead, monetary policy calibration should remain dependent on evolution of the economic outlook, given the uncertainties over the external environment and upside risks to inflation.

10. On financial stability, the continued phasing out of pandemic-related support is appropriate amid the ongoing recovery. The continued phaseout of financial support introduced during the pandemic is welcome, given the improving outlook. As some measures progressively expire, the authorities are encouraged to closely monitor financial institutions’ asset quality for early signs of credit deterioration, especially among weaker borrowers.

11. AMRO welcomes the BOT’s new prudential measures to address vulnerabilities arising from high household debt. These measures should be implemented in conjunction with efforts to minimize the risk of unintended consequences, especially in the migration of lending activities to the less regulated and the informal sector. A more comprehensive regulatory approach that encompasses all relevant segments of the financial system should also be explored to address these concerns more broadly.

12. A swifter pace in rebuilding fiscal policy space, with a focus on revenue enhancement, is encouraged. AMRO supports the contractionary fiscal policy stance in FY2023 and the fiscal consolidation plan in the medium term. However, given the diminished fiscal space, a quicker rebuilding of fiscal space will be prudent to prepare for future economic shocks, although this should be done cautiously and gradually given the downside risk to growth. The authorities could consider introducing more revenue enhancement measures and implement tax policy and administration reforms. Revenue mobilization efforts would also secure additional funding for long-term social protection and aging-related spending needs.

13. Focusing on growth-enhancing fiscal spending to strengthen Thailand’s longer-term growth prospects and address its structural challenges is warranted. Fiscal policy should prioritize growth-enhancing fiscal spending to raise the country’s growth potential. To close the infrastructure gap, a higher budgetary allocation to capital expenditures and stronger institutional capacity is needed.

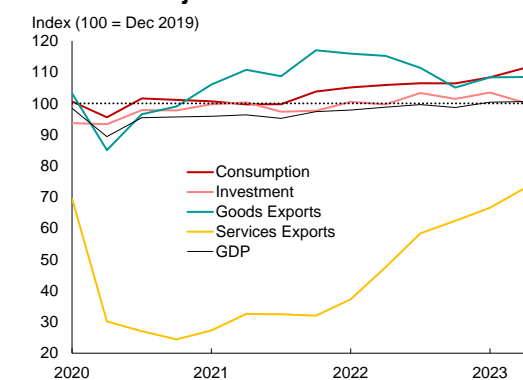
14. To enhance longer-term growth, prioritizing supply-side policies, encouraging balanced regional development, and improving labor productivity will be key. The pursuit of new free trade agreements will help Thailand buffer against geopolitical risks and maintain external competitiveness. In addition, sizable investment would be needed to address risks associated with climate change and to support sustainable economic growth.

A. Recent Developments and Outlook

A.1 Real Sector Developments and Outlook

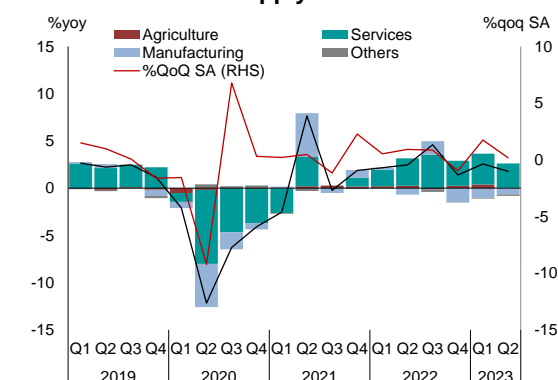
1. **Thailand’s economic recovery has picked up and is projected to strengthen further.** GDP growth picked up to 2.2 percent¹ in 1H 2023 and the output level has finally surpassed its pre-pandemic peak as of end-2019, after growing by 1.4 percent in Q4 2022 for an overall 2.6 percent in 2022 (Figure 1). The recovery was underpinned by resilient domestic demand – which returned to its pre-pandemic peak in early 2022 – and a rebound in tourist arrivals. The tourism rebound has in turn bolstered expansion in related services (Figure 2). Meanwhile, exports and manufacturing activities remain subdued given the weak external demand, particularly in electronics and chemicals, which has dampened private investment. Looking ahead, growth is expected to strengthen to 3.5 percent in 2023 and 3.9 percent in 2024, driven mainly by continued recovery in tourist arrivals and domestic demand, and supported by a rebound in construction activities and public-sector investment, resilient automotive production, and a gradual recovery in exports.

Figure 1. Real GDP Growth, Seasonally-Adjusted: Demand Side



Source: National Economic and Social Development Council

Figure 2. Contribution to Real GDP Growth: Supply Side

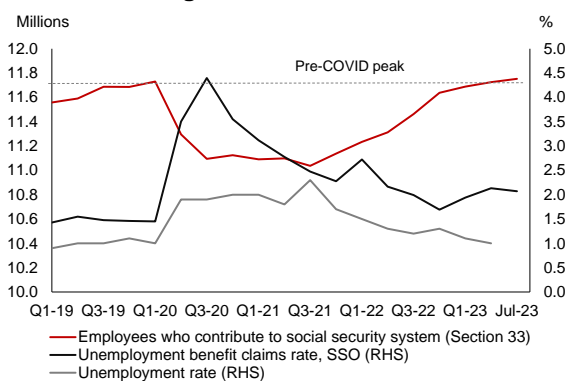


Source: National Economic and Social Development Council

2. **Labor market conditions continue to improve on the back of the ongoing recovery.** The unemployment rate edged down to 1.1 percent in Q2 2023 from the pandemic peak of 2.3 percent in 2021, in line with the economic recovery. The number of underemployed workers has also fallen to pre-pandemic levels. However, the pace of recovery has softened, as indicated by a slower increase in the number of employees who contribute to the social security system (Section 33), even though employment has returned to its pre-pandemic peak during the same period (Figure 3). Meanwhile, the rate of claims on unemployment insurance benefits increased from 1.6 percent in February 2023 to 2.1 percent in July 2023, but was still considerably below the peak of 4.4 percent in 2020. The number of migrant workers has returned to the pre-pandemic peak of about three million as of end-2022, though slight declines were seen in construction and agriculture. Wage growth across all segments moderated. Nevertheless, the labor market recovery is expected to remain on track given the strengthening outlook.

¹ All growth rates are year-on-year in this report unless indicated otherwise.

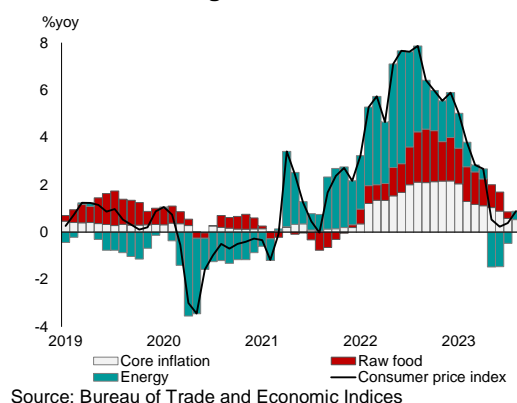
Figure 3. Labor Market



Source: National Statistics Office; Bank of Thailand; Ministry of Labor; AMRO staff calculations

Note: The claims for unemployment benefits rate refers to the percentage of the number of people claiming unemployment benefits divided by the number of people who contribute to the social security system (Section 33).

Figure 4. Inflation



Source: Bureau of Trade and Economic Indices

3. Inflation declined but is expected to remain within the 1-3 percent target range for 2023 and 2024. Headline inflation slowed significantly to 0.8 percent in August 2023 from an average of 6.1 percent in 2022, mainly due to the decline in oil and food prices, and incremental cuts² in diesel fuel prices (Figure 4). Core inflation fell steadily from an average of 2.5 percent in 2022 to 0.8 percent in August 2023 due to a moderation in prepared and cooked food prices while other major items such as housing, transportation, and medical and personal care services remained low and stable. Going forward, inflationary pressures are expected to remain firm, given the strengthening economic recovery and further cost pass-throughs to consumers. However, these pressures will likely be much less pronounced in 2023, given the decline in producer and fuel prices and a moderation in wage growth. For 2023, headline and core inflation are projected to average 1.6 percent and 1.5 percent, respectively. In 2024, headline and core inflation are forecast to increase slightly to 2.0 percent and 1.9 percent, respectively, given the continued economic recovery and expectations of higher food prices.

A.2 External Sector and Balance of Payments

4. The current account balance turned into a deficit in 1H 2023 but is expected to record a small positive this year as exports gradually pick up in the second half (Figure 5). The deficit in Thailand’s current account – at USD0.5 billion in 1H 2023 – was driven by a continued weakness in overall exports. Exports have contracted year on year for 10 consecutive months since October, weighed down by weak global demand, especially for electronics, electrical machinery and automobiles. However, signs of this contraction bottoming out in 2H 2023 have emerged, based on the high frequency purchasing managers’ index (PMI) indicator of new export orders, especially for semi-conductors, and improving demand conditions in major markets. Notably, the deficit in the services trade

² Diesel fuel prices per liter were lowered progressively to THB32 by May 2023 from THB35 at the start of the year.

account narrowed substantially in Q1 2023. Tourist arrivals in Thailand totaled 12.9 million in the first six months of 2023 and could reach about 29 million by year-end, more than double last year's total (Figure 6). Overall, the current account surplus is forecast at 0.6 percent of GDP in 2023.

Figure 5. Current Account

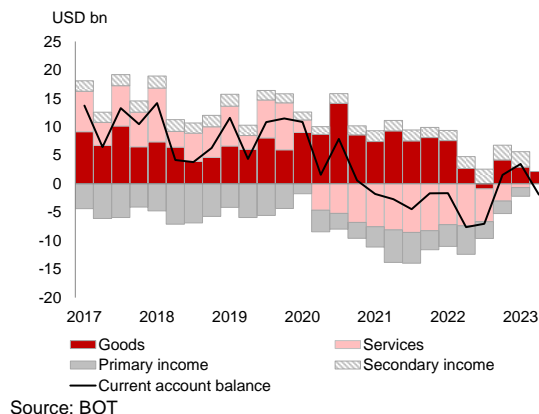


Figure 6. International Tourist Arrivals

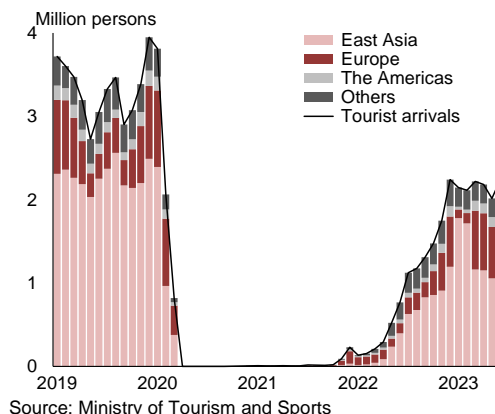


Figure 7. Financial Account

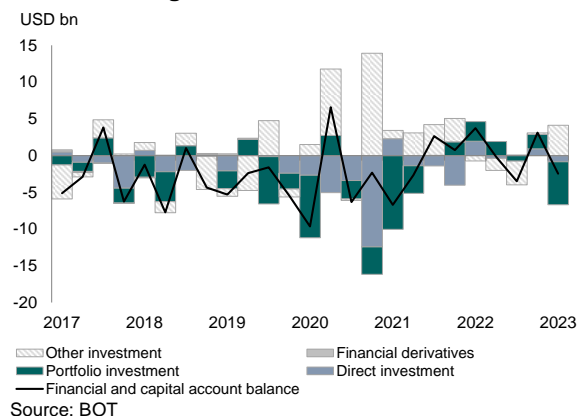
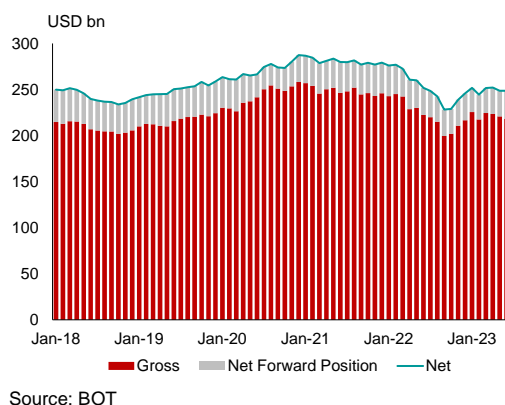


Figure 8. International Reserves



5. The financial account was in deficit in Q1 2023, after ending the previous year with a strong surplus. Market sentiment has weakened since February 2023 due to several factors: expectations of tighter US monetary policy, weaker-than-expected corporate earnings, and until recently, domestic political uncertainty following the general election in May (Figure 7). From January to August 2023, bond and equity markets recorded outflows of USD2.8 billion and USD3.9 billion, respectively. Net nonresident inflows are unlikely to resume substantially in the near term, given continued external and domestic uncertainties. Nonetheless, actual foreign direct investment (FDI) inflows are holding up robustly, while the number of new FDI applications expanded 33 percent year on year (yoy) in Q2 2023, especially from China, Japan and Singapore. Higher FDI inflows this year are anticipated to help keep a small surplus in the financial account amidst subdued portfolio investment inflows and a gradual resumption of outward investments by Thai residents.

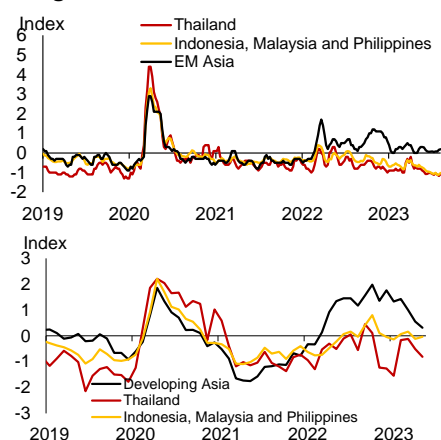
6. The external position remains resilient given strong reserve buffers. Gross international reserves had risen to USD216.9 billion by August 2023, after falling to a multiyear low of USD199.4 billion in September 2022 at the height of the Thai baht's

depreciation – which also happened to many other regional currencies (Figure 8). The reserves remain high, sufficient to cover 2.3 times of short-term external debt. Gross external debt stayed low at 38.1 percent of GDP as of Q2 2023, having decreased slightly from 40.0 percent in 2022. Outstanding external debt of the government stood at less than 12 percent of its total debt holdings.

A.3 Monetary Conditions and Financial Sector

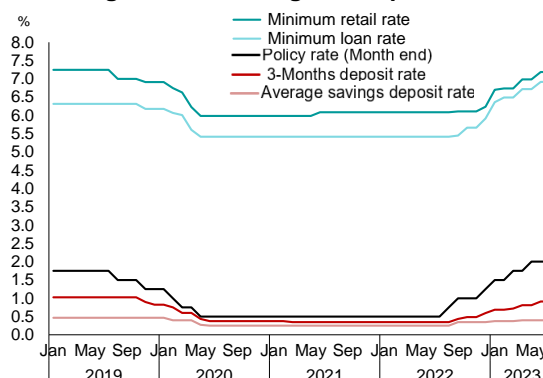
7. Financial conditions remained relatively accommodative. Following some tightening in the wake of distress among U.S. banks in April-May of 2023, Thailand’s financial conditions have eased and are more accommodative compared with its peers³ (Figure 9). The interbank market remains orderly, as reflected by smooth adjustments of the Bangkok Interbank Offered Rates (BIBOR) in response to changes in the BOT’s policy rate. Commercial banks’ lending rates rose, especially for corporates, where rates have surpassed pre-pandemic levels, although increases in the retail rate for consumers and small businesses were more gradual to mitigate the impact of increased debt burdens on vulnerable borrowers. Similarly, increases in savings and time deposit rates were more gradual, consistent with the ample liquidity in the banking system, and the rates are still below pre-pandemic levels (Figure 10).

Figure 9. Citi’s FCI and ARIC’s FSI



Source: ARIC; Citi
Note: The Citi FCI is a weighted sum of six financial variables - corporate spreads, money supply, equity values, mortgage rates, the trade-weighted dollar, and energy prices.

Figure 10. Lending and Deposit Rates



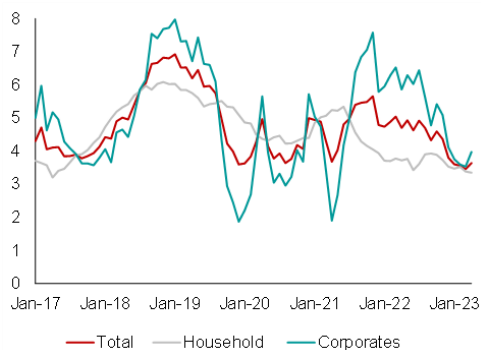
Source: BOT

8. Overall financing continues to be consistent with economic activities. Total credit growth to the private sector moderated slightly to 3.6 percent in April 2023 from 3.8 percent as of end-2022 (Figure 11). This partly reflects a normalization of bank lending activities, in line with a progressive rollback of measures to support continued credit intermediation during the pandemic. For businesses, total corporate bonds outstanding rose further, while bank loans outstanding fell due to debt repayments by large corporates and a shift in

³ For example, based on the Asia Regional Integration Center’s (ARIC) financial stress index (FSI), Thailand’s financial conditions are looser than that of developing Asia, including Malaysia, Indonesia and the Philippines. This is due to Thailand’s relatively low local government debt spread, equity market volatility, and lower beta (stress) in the banking sector.

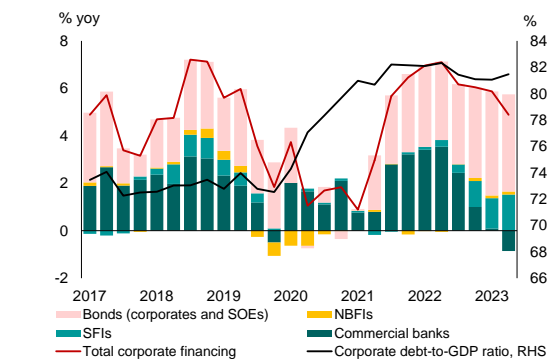
preference to raise financing through the bond market, as it allows them to lock in lower financing costs amid a rising interest rate environment (Figure 12). Lending to small and medium enterprises (SMEs) contracted further, in part due to repayments of a soft-loan facility provided during the COVID-19 pandemic. Meanwhile, non-bank financial institutions (NBFIs) have been supporting consumer borrowing, recording credit growth of 11.1 percent (yoy) in Q2 2023, while lending by specialized financial institutions (SFIs), cooperatives and commercial banks rose by 3.7 percent, 3.5 percent and 0.7 percent, respectively, over the same period.

Figure 11. Credit to Households and Corporates



Source: BOT

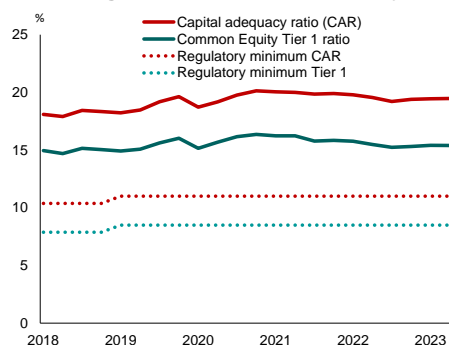
Figure 12. Net Financing to Corporates



Source: BOT

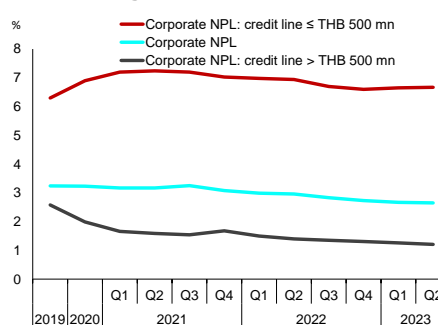
9. Banks have high levels of capital, liquidity and provisioning buffers. The system-wide capital adequacy ratio (CAR) and liquidity coverage ratio (LCR) have remained high and close to pre-pandemic levels, at 19.5 percent and 188.0 percent, respectively, as of Q2 2023 (Figure 13). Banks' asset quality has shown a slight improvement as the average ratio of non-performing loans (NPLs) continued to decline from the pandemic peak of 3.1 percent in Q3 2021 to 2.7 percent in Q2 2023 as a result of banks' continued debt restructuring and write-offs of both corporate and consumer loans. The NPL ratio of large corporates edged down further, while that of SMEs rose slightly, from 6.6 percent at end-2022 to 6.7 percent in Q2 2023 (Figure 14). As for consumer loans, the NPL ratio also increased slightly to 2.7 percent in Q1 2023 from 2.6 percent as of end-2022, mainly due to a rise in automobile and mortgage NPLs amid rising interest rates. However, banks have maintained high loan loss provisions, with the overall NPL Coverage Ratio rising further to 175.6 percent in Q2 2023 from 171.9 percent as of end-2022.

Figure 13. Capital Adequacy



Source: BOT

Figure 14. Total NPLs



Source: BOT

10. The BOT has gradually phased out pandemic-related policies, but still retains measures aimed at supporting post-pandemic recovery. Several measures ended as initially planned. In January 2023, the Financial Institutions Development Fund (FIDF) fee levied on banks was restored to its normal rate of 0.46 percent of each bank's deposit base, from 0.23 percent set during the pandemic. This change has led some banks to raise lending rates. An Asset Warehousing Scheme that was designed to aid businesses in restructuring debt using pledged collateral ended in April 2023. A temporary easing of the cap on the loan-to-value (LTV) ratio for mortgage lending also ended in December 2022 as planned, given signs of recovery in the property sector. Some other measures will remain in effect until December 2023, including the BOT's guidelines on providing long-term debt solutions to debtors affected by COVID-19, and special asset classification and provisioning requirements. However, the total amount of outstanding loans under assistance provided by banks, NBFIs and SFIs has been steadily declining.⁴ Nevertheless, a rehabilitation loan scheme which was initially set to end in April 2023 has been extended to April 2024. The extension aims to help viable SMEs enhance their businesses to remain competitive in the post-pandemic economy. In addition, the BOT has announced a series of policies, to take effect in 2024-2025, to curtail high household and informal-sector debt. The policies cover guidelines on responsible lending (including persistent debt), risk-based pricing, and a debt service ratio (DSR) framework.

A.4 Fiscal Sector

11. The fiscal deficit for FY2023⁵ is projected to narrow as off-budget COVID-19 spending is phased out and revenue outturn is higher than budgeted. The government expenditure is projected to decline from 18.4 percent of GDP in FY2022 to 17.9 percent of GDP in FY2023 on account of lower non-interest expenditure (Figure 15). Revenue collection in the FY2023 Budget was projected at 14.6 percent of GDP, slightly lower than the 14.9 percent in FY2022 (Figure 16). However, revenue outturn in FY2023 is expected to surpass budgetary projections⁶ due to higher collection from value-added tax, personal income tax, trade tax and nontax revenue⁷. The budget deficit⁸ is thus expected to decline to 3.3 percent of GDP in FY2023 from 3.5 percent in the previous year. Including off-budget COVID-19 spending that was fully utilized in FY2020-2022, the fiscal deficit is estimated to narrow considerably from 5.8 percent of GDP in FY2022 to 3.3 percent in FY2023. As such, the fiscal policy stance has shifted to being contractionary from FY2022 onwards.

⁴ As of Q1 2023, outstanding loans under assistance stood at THB3.37 trillion, a modest decline from THB3.38 trillion in Q4 2022. Out of this total, 56 percent were provided by banks and NBFIs, and 44 percent by SFIs.

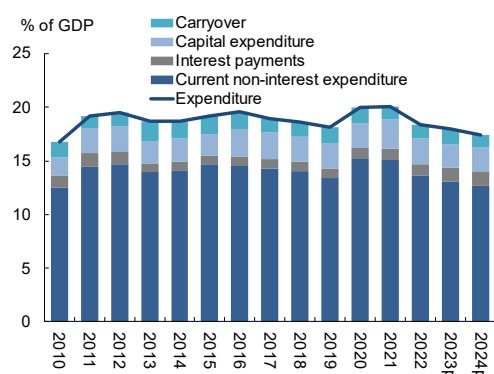
⁵ The fiscal year in Thailand begins in October of one calendar year and ends in September of the following year. For example, Thailand's 2023 fiscal year began in October 2022 and will end in September 2023.

⁶ Nominal revenue collection amounted to THB2.55 trillion in 2022 and is projected to rise to THB2.62 trillion in 2023. Estimated revenue for 2023 exceeds the THB2.49 trillion forecast in the budget.

⁷ Nontax revenue is collected mainly from other government agencies and state-owned enterprises (SOEs).

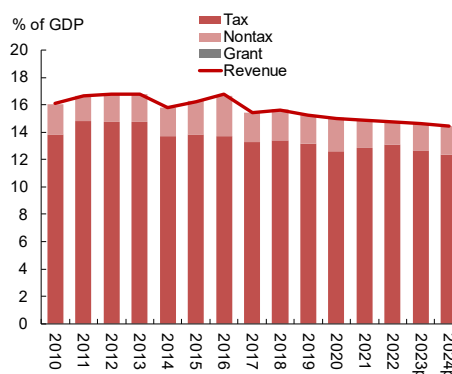
⁸ Using the fiscal cash balance and excluding extra-budgetary funds and the social security fund.

Figure 15. Budget Expenditure



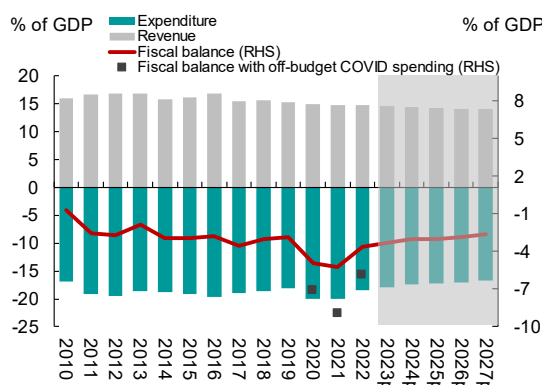
Source: Fiscal Policy Office; Bureau of Budget; AMRO' staff projection
Note: On a fiscal year basis.

Figure 16. Budget Revenue



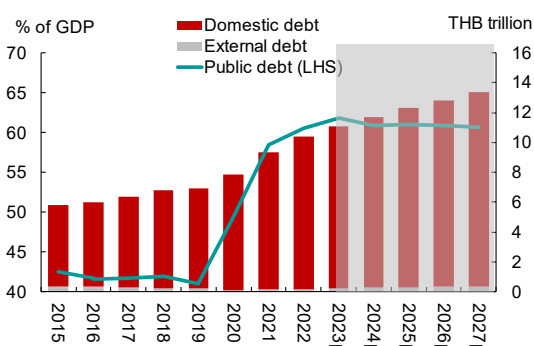
Source: Fiscal Policy Office; Bureau of Budget; AMRO' staff projection
Note: On a fiscal year basis.

Figure 17. Fiscal Position



Source: Fiscal Policy Office; Bureau of Budget; AMRO' staff projection
Note: On a fiscal year basis.

Figure 18. Public Debt-to-GDP Ratio



Source: Public Debt Management Office; AMRO' staff projection
Note: On a fiscal year basis.

12. The public debt-to-GDP ratio is expected to remain stable at around 60 percent in the medium term. The public debt-to-GDP ratio is projected to increase from 60.5 percent in FY2022 to 61.8 percent in FY2023 before declining gradually in the medium-term, primarily due to the economic recovery.⁹ As GDP growth strengthens to an average of 3.5 percent between FY2024 and FY2027, the debt ratio is projected to decline gradually to 60.7 percent by the end of FY2027 (Figure 18). Although the ratio remains below the 70 percent debt ceiling, it is much higher than the pre-pandemic levels of about 40 percent.¹⁰ In addition, the government's financing needs¹¹ doubled from an average of 7.0 percent of GDP in FY2016-2019 to 14.7 percent in FY2020-2022,¹² and are then projected to decline to 11.9 percent of GDP in FY2023, due mainly to the expected smaller primary deficit.¹³ As 98 percent of Thailand's debt is denominated in the local currency and 94 percent is in long-

⁹ The FY2023 increase in the public debt-to-GDP ratio is partly due to the government's approval of THB 81 billion in new borrowing for a state fuel subsidy fund.

¹⁰ In the five years prior to the pandemic (FY2015-2019), the public debt-to-GDP ratio averaged 41 percent.

¹¹ Gross financing needs refer to the sum of new borrowing requirement and maturing debt during the year.

¹² The substantial rise in government funding needs stems from off-budget COVID-19 spending, resulting in new borrowing of 2-4 percent of GDP between FY2020 and FY2023.

¹³ The primary balance is projected to reduce from an average of -3.5 percent of GDP in FY2020-FY2022 to -2.0 percent of GDP in FY2023.

term instruments,¹⁴ the debt dynamics are driven predominantly by growth, interest rates and the primary deficit, while the valuation effect of exchange rate changes is relatively small.

13. The new government’s planned stimulus measures will likely have material implications on the near-term outlook. Immediate policy priorities of the new government are focused on jumpstarting the Thai economy and raising real GDP growth to as high as 5 percent (Box A). The government highlighted that this would be achieved by deploying a digital wallet program, lowering the cost of living, extending a debt moratorium for farmers and increasing the minimum wage. Pending finalization of the details, the impact of these measures has not been incorporated in the baseline AMRO staff assessment in this report. Nevertheless, given the scale of the intended policy measure, they are expected to have a significant impact on the near-term outlook for both growth and inflation. In addition, if substantial new government debt issuances are required to fund these measures, there will be implications on medium-term fiscal sustainability.

Box A. Key Policy Measures of the New Government: Indicative Implications¹⁵

The Thai government announced several near-term and longer-term measures with the aim to revitalise the economy, but details of these measures are still pending. During the Parliament session on 11¹⁶ September 2023, the newly formed government announced a series of near-term measures to boost the Thai economy (Table A.1), notably a digital wallet scheme with a projected fiscal cost of THB560 billion (~3 percent of GDP). They also outlined their longer-term reform priorities, focusing on raising incomes, creating new opportunities, and improving living standards for its citizen (Table A.2). Although the specifics regarding implementation and financing for these plans are still under discussion, this box aims to provide a preliminary assessment on the impact of the key measure – the digital wallet scheme – on the economy and the fiscal implications that it entails.

Table A.1 Key Near-term Measures

No.	Measure
1	10,000-baht digital wallet scheme for eligible citizens (spent within 6 months)
2	3-year debt moratorium for farmers and SMEs
3	Lower electricity and fuel costs
4	Increase tourism receipt
5	Constitutional amendment to further promote democracy

Source: Parliamentary speech delivered on 11 September 2023.

Table A.2 Longer-term Measures

Policy Directions	Measure
Raise incomes	New FTAs, growth drivers and innovation in agriculture sectors
Create opportunities	Amend land ownership rights, reduce regulations, and accelerate digital government plan
Improve living standards	Make military conscription voluntary, promote equal rights, improve healthcare

Source: Parliamentary speech delivered on 11 September 2023

The impact of the planned stimulus measures on the economy, especially the cash handouts via digital wallets, remains highly uncertain. The digital wallet scheme plans to provide THB10,000 to all citizens aged 16 and above¹⁷. Its overall effectiveness in spurring growth will be dependent on the design of the scheme, and the extent to which the handouts will lead to an actual increase in

¹⁴ As of end-2022.

¹⁵ This box is prepared by Justin Lim, Economist and Ravisara Hataisaree, Economist. This box is drafted based on all available information up to 15 September 2023.

¹⁶ In addition, on 3 October 2023, Thai cabinet has approved Digital Wallet Policy Committee, which has critical responsibilities, including the formulation of policy schemes, project objectives, implementation plans, criteria and conditions, and identification of financing sources for the project. Furthermore, the committee is tasked with monitoring and evaluating the implementation of the project, ensuring its alignment with the outlined objectives. The Committee is chaired by Prime Minister and Finance Minister. Committee members include representatives from pertinent agencies, such as the Secretary-General of the National Economic and Social Development Council, Governor of the Bank of Thailand, and Director of the Budget Bureau. Additionally, Permanent Secretaries of the Ministry of Finance and Ministry of Commerce serving as committee and co-secretary.

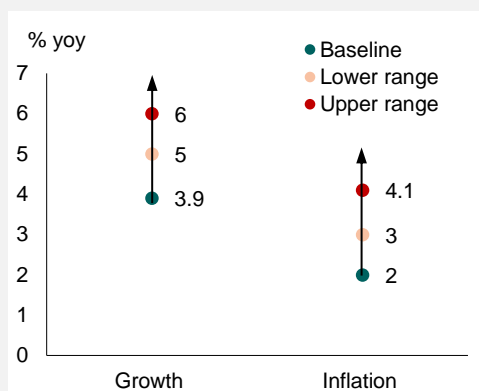
¹⁷ <https://www.bangkokpost.com/business/general/2634849>, <https://www.thaipbsworld.com/nescd-casts-doubts-over-domestic-consumption-rise-from-digital-wallet-scheme/>

consumer spending instead of being saved as a windfall income. Studies have shown that fiscal multipliers of cash transfers to households tend to be lower, ranging from 0.4 to 0.9,¹⁸ in comparison to other types of government spending. The manner in which the scheme is financed could also affect its impact on growth, especially if it involves the reallocation of fiscal spendings from other potentially higher multiplier items.

If the scheme is fully deficit financed, overall GDP growth may exceed 5.0 percent in 2024, coupled with a sharp increase in inflation to above the BOT’s target band (Figure A1). Assuming a fiscal multiplier ranging from 0.4 to 0.9, the 2024 growth rate could increase from the current baseline forecast of 3.9 percent to between 5 and 6 percent, driven by a surge in private consumption. Consumer price inflation could exceed BOT’s target range to reach as high as above 4 percent, which would be quite pronounced due to the limited time for utilizing the funds amid possible bottlenecks on the available eligible goods under this scheme.

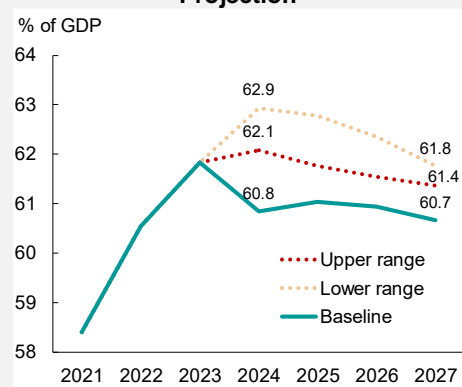
The fiscal deficit could increase to near 6 percent of GDP in FY2024 before moderating in subsequent years, delaying the pace of fiscal consolidation. If the scheme is fully financed via new government borrowing, the FY2024 budget deficit could increase to as high as 6.0 percent of GDP from 3.3 percent of GDP in FY2023. The public debt-to-GDP ratio could reach 62 – 63 percent in FY2024 before declining slightly thereafter to about 61 – 62 percent by FY2027. Under this scenario, the debt ratios would still be below the 70 percent ceiling, but there is upside risk to the projection, as the impact on growth may be weaker than expected.

Figure A.1: Impact on 2024 Growth and Inflation



Source: AMRO staff estimates

Figure A.2: Medium-term Public Debt-to-GDP Ratio Projection



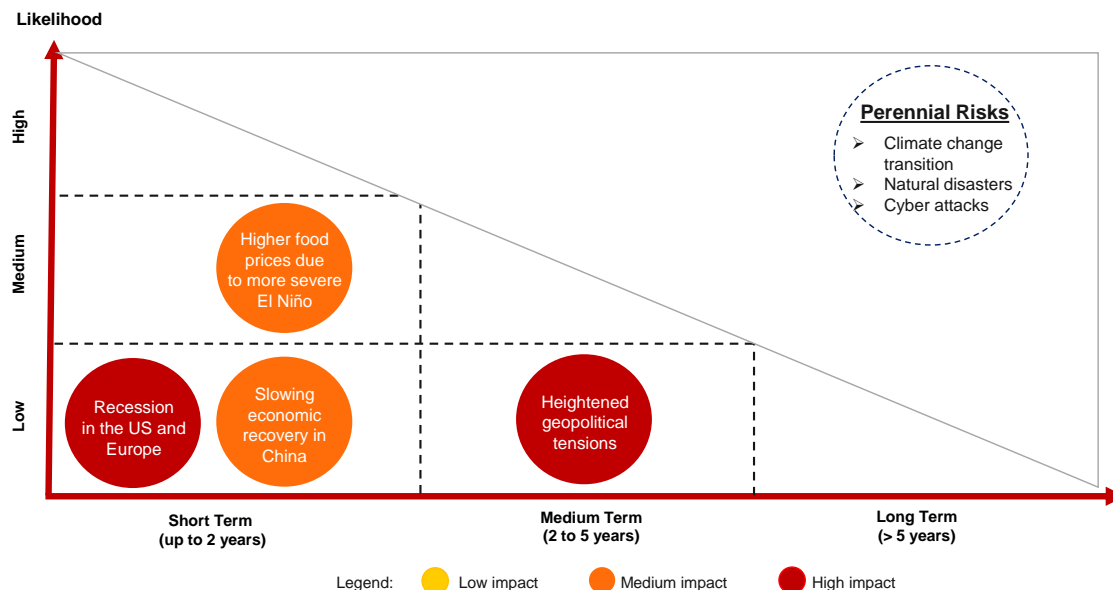
Source: AMRO staff estimates

Authorities are encouraged to remain committed to the ongoing consolidation plans and to restore policy space to deal with future shocks. The Thai authorities’ longstanding record of fiscal discipline has helped it cope with the multiple external and domestic challenges in the past decade. While the short-term new policies, aimed at boosting Thailand’s growth, could help support the economy if external risks to growth were to materialise, in the current baseline assumption of continued economic recovery, authorities are encouraged to continue adhering to their fiscal consolidation plans and prioritize growth-enhancing fiscal spending so as to raise Thailand’s growth potential sustainably in the medium term. In addition to fiscal and inflation risks, due consideration should also be given to the significant operational challenges associated with the new scheme. If implemented, the planned cash handouts can be made more targeted to support the lower income households and implemented synergistically with existing welfare and social protection schemes.

¹⁸ 2021 Parliamentary Budget Office’s (PBO) analytical report https://www.parliament.go.th/ewtadmin/ewt/parbudget/ewt_dl_link.php?nid=1071 and Bank of Thailand, Focused and Quick issue 106 <https://content.botc.or.th/mminfo/BOTCollection/BOTFAQ/FAQ106.pdf>

B. Risks, Vulnerabilities, and Challenges

Figure 19. Thailand Risk Map



Source: AMRO

B.1 Near-term Risks to the Macroeconomic Outlook

14. Downside risk to growth has receded somewhat from a year ago, although weak growth of Thailand’s key trading partners remains a key concern for its recovery (Figure 19). A slower recovery in China could hinder Thailand’s tourism recovery and the Thai economy more broadly. In addition, a recession in the U.S. and Europe, triggered by a further tightening of financial conditions and higher borrowing costs, could curtail demand for Thai manufacturing exports. Based on AMRO’s assessment, Thailand’s growth may fall below 1 percent in 2024 if the external environment deteriorates sharply, albeit a low likelihood event (Box B). From the domestic perspective, uncertainty has receded following the formation of the new government. Going forward, credibility and clarity regarding new policy measures would be important anchors of certainty in the face of external uncertainties and would help restore private-sector confidence.

Box B. Thai Economic Outlook – Alternative Scenarios¹⁹

Given the high degree of uncertainty surrounding Thailand’s near-term outlook, the current box considers several non-baseline scenarios. Although the Thai economy is improving due to a sustained rebound in tourist arrivals and resilient domestic demand, there is significant uncertainty stemming from domestic and external factors that could affect the trajectory of its recovery (Figure B1). AMRO staff conducted simulations of²⁰ various alternative scenarios and assessed their implications on the baseline forecast of GDP growth and inflation, including:

¹⁹ Prepared by Alex Liyang Tang, Economist, and Justin Lim, Economist, with contributions from Catharine Kho, Senior Economist.

²⁰ Some results were obtained based on simulations using the Oxford Economics’ Global Economic Model and the AMRO Global Macro-Financial Model (Tang 2022).

- **Possible recessions in the U.S. and Europe²¹.** A recession in the U.S. and Europe on the back of tight monetary policy and elevated inflation could dampen external demand on Thailand’s exports, especially for manufacturing and automotive goods. If the recession happened in 2024, it could reduce baseline growth and inflation for the Thai economy by as much as 2.7 percent and 0.3 percent, respectively.
- **Weaker-than-expected tourism recovery.** Tourist arrivals under the baseline scenario are assumed to recover to pre-pandemic levels by end-2024, and potentially as soon as mid-2024 in the upside scenario. Conversely, if the tourism recovery weakens – in particular, given the weaker-than-expected return of tourists from China – full recovery may be delayed until mid-2025. Under this scenario, 2024 growth and inflation would decline by 0.2 percent and 0.7 percent, respectively.

Figure B1. % Percentage Point Deviation from Baseline Projections under Alternative Scenarios



- **Additional minimum wage hike.** The baseline assumption does not factor in a minimum wage increase. Under an alternative scenario in which the minimum wage rises to THB400 per day in 2024 from THB337 currently, inflation in 2024 could go up by 0.5 to 0.8 ppt. This calculation is based on the sensitivity of past minimum wage increases to average monthly wage growth (Lathapipat, 2016).
- **More severe El Niño.** A more severe El Niño would disrupt Thai agricultural production, affecting both yields and prices. It²² could contribute 0.2 to 0.5 ppt to inflation in 2024 while severely affecting the output of crops that are most sensitive to water shortages, such as off-season rice, cassava and sugarcane.

To reiterate, these scenarios are not in the baseline forecast for Thailand. These assessments have been done to provide a more concrete idea of some of the less likely scenarios that could affect the country’s economic outlook. The current coalition government has announced an intention to introduce new measures to rejuvenate the economy. Key initiatives include one-off digital cash handouts of THB10,000 to eligible citizens, debt moratoriums and lower energy prices. Although AMRO’s baseline projection does not include these measures, pending finalized details, they are expected to raise Thailand’s growth above its potential temporarily and offset near-term external headwinds. However, the measures are also expected to stoke inflationary pressures.

²¹ This scenario assumes a mild recession in the U.S. and Europe in 2024, with growth contracting by 0.5 percent for both economies.
²² Based on Cashin et al. (2015) and Bloomberg Economics.

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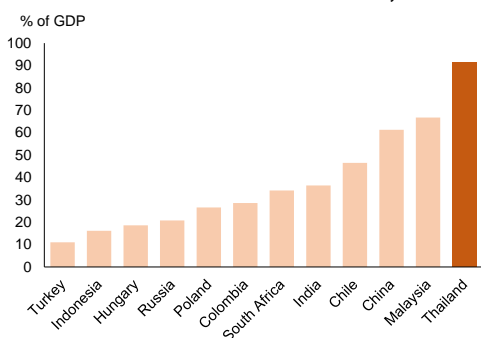
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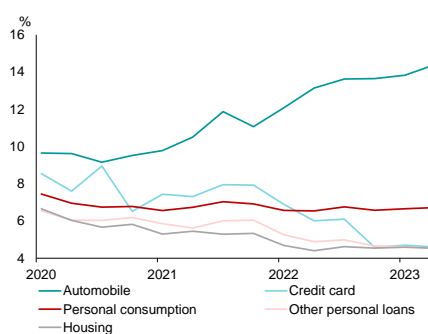
15. Inflationary pressures could be higher than expected due to El Niño and new government policies. In 2024, there are upside risks to headline and core inflation due to potentially more extreme El Niño conditions that could significantly reduce agricultural output globally and result in more protectionist measures, thereby leading to higher-than-expected food prices. In addition, potentially bigger fiscal spending and increases in minimum wage could also add to inflationary pressure. AMRO’s assessment found that if the higher food prices materialized along with possible stimulus policies by the new government, inflation in 2024 could temporarily exceed the upper bound of the BOT’s inflation target range.²³

Figure 20. Cross-country Comparison of Household Debt-to-GDP Ratio, 2022



Source: BIS; BOT

Figure 21. Consumer Loans Stage 2 Ratio, Q2 2023



Source: BOT

16. A downturn in the economy as a result of downside risks materializing would amplify the financial vulnerabilities of borrowers who are more leveraged and earn low, unstable income. Although the household debt-to-GDP ratio has continued to decline steadily, to 90.7 percent in Q1 2023 from its peak of 95.5 percent in early 2021, it remains high compared with peers and is a source of financial vulnerability within the Thai economy (Figure 20). Among the household groups, highly leveraged borrowers with low and unstable income are more susceptible to economic shocks. The most vulnerable include young adults

²³ Based on alternative scenarios to assess inflation risks, inflation could increase to 2.9 percent in 2024 due to the cumulative impact of stronger El Niño conditions, a higher minimum wage, and higher fiscal spending in the form of cash transfers granted by the new government.

who record the highest debt delinquency rate²⁴ (more than a quarter of young working-age adults have bad debt), as well as low-income earners, and farmers, whose debt service ratios are the highest at 34.7 percent and 31.6 percent, respectively. Furthermore, a continued increase in borrowing costs may weaken their debt-servicing capacity, particularly if growth were to falter and create a more difficult environment. Small businesses are also more vulnerable to an economic downturn, which would affect their debt-servicing capacity. For commercial banks, a deterioration in the asset quality of consumer loans, particularly automobile-related lending, can lead to higher NPLs (Figure 21). The asset quality of NBFIs, which are subject to less strict underwriting standards, may also worsen.

B.2 Longer-term Challenges and Vulnerabilities

17. In addition, the narrower fiscal space has reduced the authorities' capacity to support the economy in the event of new economic shocks. The government's debt-to-GDP ratio rose to 60.5 percent in FY2022 from 41.0 percent in FY2019, decreasing the policy space for authorities to take countercyclical measures to support the economy during a downturn²⁵. Based on AMRO's assessment,²⁶ Thailand's fiscal space is expected to improve given the baseline projection of continued economic recovery, but overall fiscal space has shrunk compared with the pre-pandemic period, driven in large part by bigger debt, higher interest rates, and contingent liabilities stemming from ongoing quasi-fiscal operations and off-budget subsidies.²⁷ In addition, social welfare spending in the medium to long term is on a rising trend, and if it is not accompanied by increases in revenue, the higher spending will narrow the fiscal space available to respond effectively to future shocks.²⁸

18. Long-term structural challenges could have consequential implications for macro-financial stability. Sustained improvements in public and household debt-to-GDP ratios in the medium to long term are premised on a sustained expansion of the economy. Further deterioration of Thailand's potential growth would put this at risk. The GDP growth rate slowed to an average of 3.6 percent in the 2010s from an average of 4.3 percent in the 2000s. This slowdown has been especially pronounced in previous growth centers of Thailand²⁹ (Box B). Based on AMRO's projection, Thailand's post-pandemic long-term growth is projected to be 3.0 - 3.2 percent, which is lower than the pre-pandemic period of about 3.5 percent. The country has experienced stalled industrialization and stagnation in productivity since 2010,³⁰ grappling with overlapping and longstanding structural issues such

²⁴ "Young working-age group" refers to people of 18-35 years old, as defined in the PIER Discussion Paper, "Household debt and delinquency over the life cycle," 2018.

²⁵ Further discussion on Thailand's experience, including vis-à-vis ASEAN+3 peers can be found in AMRO (2023). ASEAN+3 Fiscal Developments, Outlook, and Policy Considerations. Policy Perspectives Paper.

²⁶ Further discussion on this is in the Selected Issue: Assessment of Thailand's Fiscal Space of this report, page 39-45.

²⁷ In 2022, the authorities approved a quasi-fiscal budget totalling around THB210 billion, equivalent to 1.2 percent of GDP, with instructions for state-owned financial institutions to fund projects such as a farmers' income guarantee scheme.

²⁸ Expenditure on social programs, including old age allowances, civil service pensions, healthcare, and social protection, is projected to rise from 6 percent of GDP in 2023 to 8 percent in 2050.

²⁹ Real GDP per capita growth averaged 2.3 percent between 2009 and 2021 but recorded only 1.6 percent and 0.9 percent in Greater Bangkok and the eastern regions, respectively. The respective growth rates were 4.7 percent, 3.2 percent and 6.8 percent between 1981 and 2008.

³⁰ The share of manufacturing in value-added peaked in 2010 and has been trending downwards since. Total factor productivity growth is estimated to be 0.8 percent on average between 2010 and 2019, compared with 1.3 percent between 2000 and 2010 (APO Productivity Databook 2022).

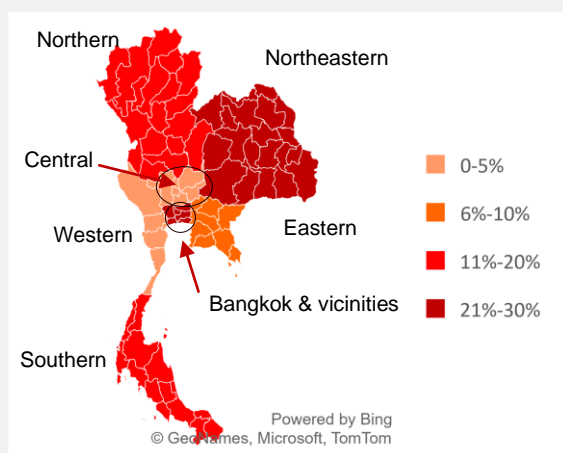
as a rapidly aging population, persistent infrastructure gap³¹ and a high degree of informality (Figure 22). Tackling these challenges will be complicated by the increasingly more fractured global environment, ongoing geopolitical tension and geo-economic fragmentation, and continuing risks from climate change.

Box C. Thailand’s Economic Development: Different Geographical Realities³²

For decades, Thailand has experienced rapid economic transformation, resulting in a substantial reduction in poverty levels and a diversification of its economy. Rapid economic growth since the 1980s had propelled Thailand into the ranks of upper-middle-income economies by 2011, recording the second highest GDP per capita among emerging nations of the Association of Southeast Asian Nations (ASEAN), excluding Singapore and Brunei. Under this economic transformation, it has made impressive progress in multiple dimensions of economic and social welfare of the population.

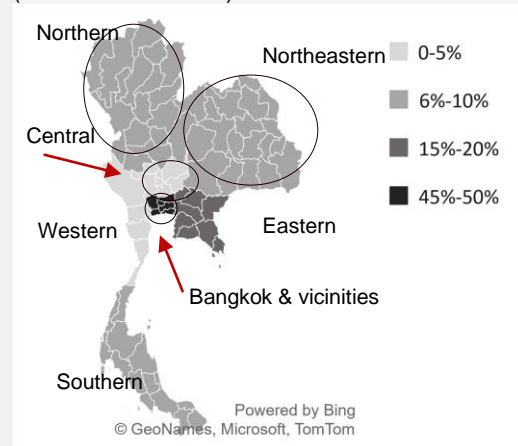
However, significant economic diversity exists across the geographical regions. While Bangkok and its vicinities account for less than 2 percent of the kingdom’s entire land area, they are home to nearly a quarter of the population and generate almost half of the national GDP. Conversely, the northeast covers about one-third of the total land area and accommodates 26 percent of the population. However, it is characterized by the lowest GDP per capita, and its economic output constitutes only 10 percent of national GDP (Figures C1, C2).

Figure C1: Substantial geographical diversity exists in Thailand...
(2021 share of population)



Source: NESDC, Thailand; AMRO staff calculations

Figure C2: ...with Greater Bangkok alone generating close to half of national GDP.
(2021 share of GDP)



Source: NESDC; AMRO staff calculations

Since the 1980s, Thailand’s economic landscape has undergone a significant transformation. The eastern region has experienced rapid growth, increasing its contribution to national GDP from 8 percent to 18 percent between 1981 and 2021. Notably, this growth surge did not come at the expense of Greater Bangkok’s but cut into the share of GDP of the northeastern and northern regions, which dropped to 10 percent and 8 percent in 2021 from 14 percent and 13 percent in 1981, respectively. These shifts in regional economic developments reflect the structural evolution of the overall Thai economy, in which the eastern region has become the main driver of

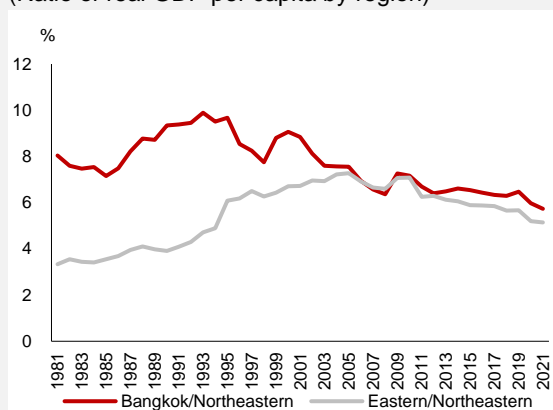
³¹ Despite current infrastructure investment plans, which include key projects in the Eastern Economic Corridor (EEC), Thailand’s infrastructure gap remains large, estimated at about 0.7 percent of GDP up till 2040 if the pace of infrastructure investment is not accelerated, as per the Global Infrastructure Hub’s estimation: <https://outlook.github.org/countries/Thailand>.

³² Prepared by Thanh Thuy Giang Dao, Associate.

the country's industrialization. By 2021, nearly one-third of Thailand's manufacturing GDP was originating in the eastern region, while only 7 percent came from the northeast. Conversely, about a quarter of agricultural GDP was derived from the northeast, while the eastern region contributed only 13 percent.

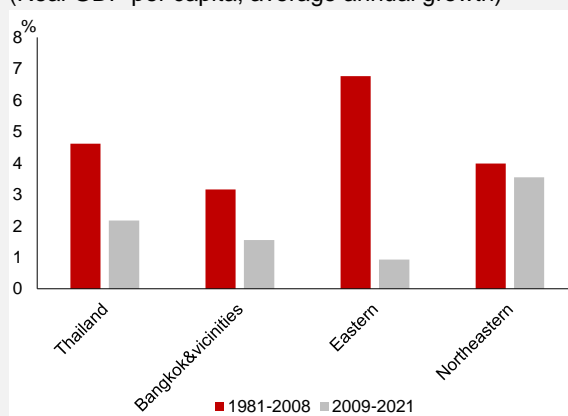
Regional economic disparity has improved since the global financial crisis (GFC), but this is due to the considerably slower economic growth in the previously fast-growing regions. The ratio of real GDP per capita between the east and the northeast regions peaked at about 7 prior to the GFC and has since been declining. The nation's real GDP per capita growth averaged 2.3 percent between 2009 and 2021 but was only 1.6 percent for Greater Bangkok and 0.9 percent for the eastern region. In contrast, the corresponding growth rates were 4.7 percent, 3.2 percent and 6.8 percent between 1981 and 2008 (Figures C3, C4).

Figure C3: Regional disparity has improved since the GFC...
(Ratio of real GDP per capita by region)



Source: NESDC; CEIC; AMRO staff calculations

Figure C4: ...due to a slowdown in previously faster growing regions.
(Real GDP per capita, average annual growth)



Source: NESDC; CEIC; AMRO staff calculations

Aging patterns also vary across Thailand, with the poorest regions having older populations. The north and northeast are the poorest regions by GDP per capita and have higher concentrations of older population (Figures C5, C6). More than half of people above 65 years old live in these two regions. Bangkok is one of the youngest parts of Thailand despite having low birth rates as it attracts inward migration among younger individuals from other regions.

Figure C5: The two regions with the lowest GDP per capita have the highest proportion of older people...
(Regional share of total population aged 65 and older in 2022)

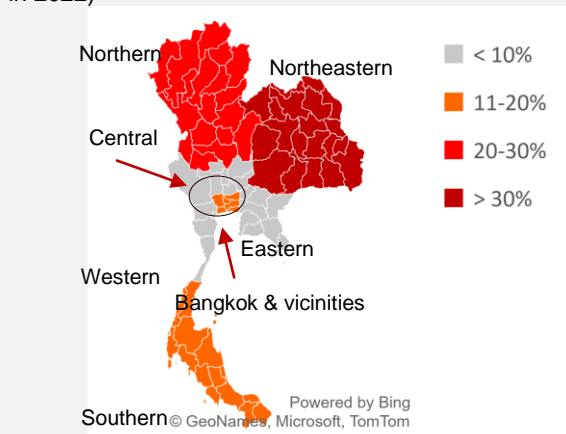
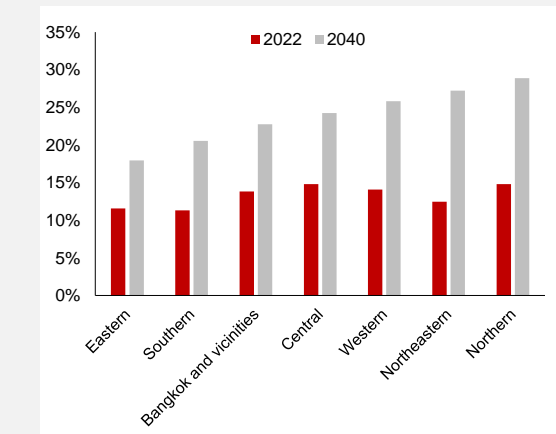


Figure C6: ... and are expected to age rapidly going forward.
(Share of regional population aged 65 and older in 2022 and 2040*)



Source: National Statistical Office; AMRO staff calculations

* Forecast

Source: World Bank; AMRO staff calculations

Thailand's economic journey has been marked by impressive achievements in industrialization and rapid economic growth. Beneath the surface of these accomplishments lies a complex mix of economic realities across the nation. As Thailand navigates toward sustainable long-term growth, ensuring equitable development across regions and addressing the needs of its changing demographic profile will be vital to securing a prosperous and inclusive future for all its citizens.

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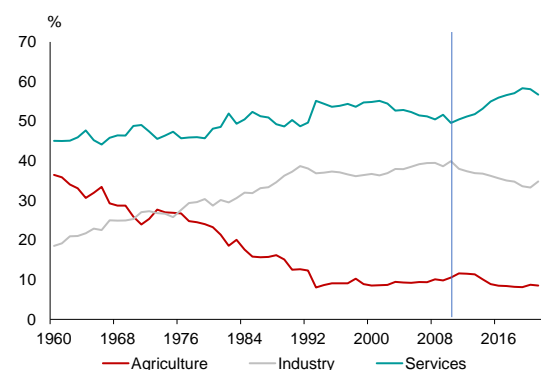
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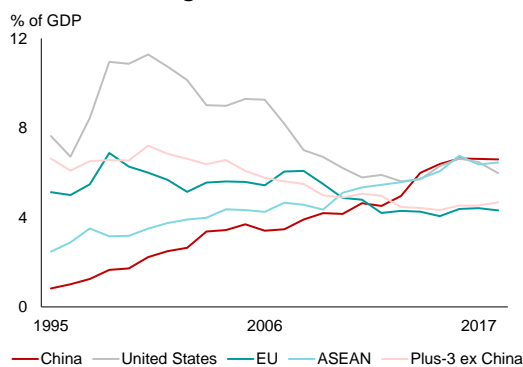
19. Escalating geopolitical tensions between the U.S. and China can have significant repercussions for Thailand (Selected Issue 2). The U.S. is Thailand's largest export market in 2022, taking up 16.5 percent of gross exports, while China is Thailand's largest source of imports, accounting for 23.5 percent (Figure 23). Thailand's trade linkages with both markets encompass different segments; it exports mostly capital goods to the U.S., and primarily agricultural goods to China, suggesting that decoupling with one or the other is highly unlikely. A third of Thailand's imports, mostly capital and intermediate goods, are sourced from China. At the same time, China has become the single largest final consumer of Thailand's domestic *value-added* exports, and the single largest source of FDI last year. Given these strong linkages, worsening geopolitical relations between the two economic giants that lead to widespread disruption of global supply chains and translate into a growth slowdown in either market, will ultimately reduce demand for Thailand's exports, especially from key sectors such as electronics, auto manufacturing including electric vehicles (EVs), and even services – with attendant consequences for its FDI outlook.

Figure 22. Sector Share of GDP



Source: NESDC

Figure 23. Thailand's Domestic Value-added in Trading Partner's Final Demand



Source: OECD Trade in Value-added (TIVA) database; AMRO staff calculations

20. Threats from climate change remain high and need to be urgently addressed to protect long-term growth. Thailand is especially vulnerable to rapid and extreme changes in weather patterns induced by climate change. Floods and droughts are the most imminent physical threats, with past shocks incurring high socioeconomic and fiscal costs. Many existing critical infrastructures, such as major roads, railroads and hospitals, are prone to substantial physical damage from heavy floods, while the agricultural sector will face a high risk of lost output if this year's El Niño weather conditions persist longer than expected. Reliance on fossil fuels has yet to decline substantially, while key legislations to facilitate the energy transition, notably the Climate Change Act, are still awaiting approval. Further delays could hamper Thailand's ability to smoothly meet its carbon neutrality targets and result in a lost opportunity to attract clean energy investments. The Bank of Thailand's February 2023 policy guideline for commercial banks, addressing environmental and climate change risks, is a welcome initial step in ensuring the financial sector's resilience against physical and transition risks.

C. Policy Discussions and Recommendations

C.1 Ensuring Economic Recovery is Entrenched

21. The current tight monetary policy stance is appropriate, given the economic outlook and prevailing financial conditions. The BOT raised the policy rate incrementally to 2.50 percent by September³³ 2023 from 1.25 percent as of end-2022 given the improving recovery and in view of longer-term macro-financial stability considerations. We view the current policy rate as consistent with the baseline expectation of strengthening growth momentum and the closing of the output gap in the near term. Looking ahead, monetary policy calibration should remain dependent on evolution of the economic outlook, given the uncertainties over the external environment and upside risks to inflation. Although inflationary pressures have eased and wage-price spiral dynamics remain absent currently, upside risks to inflation could arise in the near to medium term from several factors, including additional fiscal spending by the new government, the impact of higher food prices due to El Niño, and the proposed minimum wage hikes. Due consideration should also be given to the effect of higher interest rates on corporate and household debt-servicing capability, particularly for the vulnerable segments.

Authorities' Views: Significant uncertainties remain with regard to the global economic outlook and the severity of El Niño on agricultural yield and prices. Nevertheless, monetary policy should also give due consideration to longer-term macro-financial stability concerns, as a prolonged period of low interest rates could lead to a further buildup of financial vulnerabilities. The current policy rate is near the inflection point, which allows the economy to grow at its potential rate of 3 to 4 percent, and inflation to stabilize within the target range of 1 to 3 percent, while fostering longer-term macro-financial stability. A higher policy rate would also provide greater scope for monetary policy to respond to negative shocks.

³³ The policy rate incorporates a 25 basis points hike on 27 September 2023, which was after the cut-off date of the annual consultation report. This does not materially affect the policy recommendation.

22. We commend the authorities' regulatory and supervisory efforts in supporting post-pandemic recovery for borrowers while safeguarding the banking system. The authorities' flexible and nimble approach has helped banks and borrowers cope amid the challenging macroeconomic backdrop – the prolonged weak recovery amid a sharp increase in the cost of living – while ensuring that the banking system remains stable and sound. Based on AMRO's assessment, the BOT's policies to support borrowers, particularly households, via guidelines on long-term and forward-looking debt restructuring and continued debt mediation efforts have allowed borrowers to recover more fully and prevented a large spike in NPLs. At the same time, banks have maintained strong capital and liquidity buffers and raised loan-loss provisions. These efforts have not only helped Thai banks prepare for potential credit losses from the materialization of near-term downside risks, but also enhanced their resilience to future unanticipated financial shocks.

23. The progressive rollback of pandemic-related financial support for financial institutions and borrowers is appropriate amid ongoing economic recovery. As the economic recovery is expected to strengthen further, the continued phasing out of pandemic-related support is welcome. In particular, the BOT's discontinuation of the asset warehousing scheme as scheduled, considering the strong tourism rebound and the planned expiry of the relaxation on asset classification regulations by end-2023, is welcomed. Based on AMRO's assessment, overall asset quality has been improving and is expected to improve further in line with the stronger economic recovery. That said, a temporary extension of the relaxed regulation may be considered should there be a sharp deterioration in the near-term outlook. As the measures progressively expire, authorities are encouraged to continue to closely monitor financial institutions' asset quality for early signs of credit deterioration, especially among SMEs, vulnerable household segments, and borrowers with restructured loans.

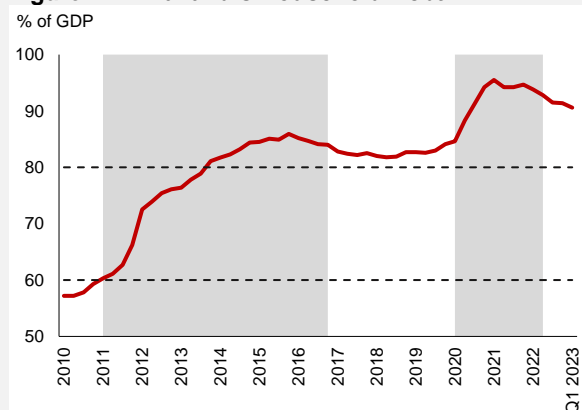
C.2 Rebuilding Policy Space and Addressing Emerging Vulnerabilities

24. AMRO welcomes the authorities' new measures to address high household debt and informal-sector debt (Box D). AMRO supports the authorities' plan for a series of measures to address vulnerabilities arising from the high household debt, such as guidelines on responsible lending, risk-based pricing and a DSR framework, as well as a plan to enhance prudential standards for non-bank lenders such as providers of hire purchase and leasing services. Nevertheless, careful calibration of these measures is important, in order to minimize the migration of credit activity from the formal banking system to more risky lenders. In particular, the measures should not cause an excessive restriction of access to financing for vulnerable groups, such as low-income households and small businesses, which may force them to turn to predatory lenders. A more comprehensive regulatory approach that encompasses all relevant segments of the financial system should be explored to address these concerns. To achieve this, financial authorities may explore legislative amendments to extend the current regulatory and supervisory framework to include cooperatives.

Box D. Use of Macroprudential Policies to Address High Household Debt³⁴

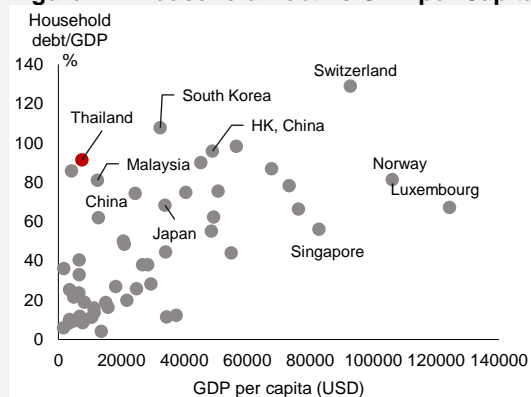
Household debt has been on the rise throughout the past decade. The economic impact of a major flood in 2011, coupled with the government’s stimulus packages, catalyzed a growing reliance on loans among households in the ensuing 10 years. The COVID-19 pandemic in 2020 aggravated this issue, as households turned to borrowing to cushion income shocks, and policy responses, such as debt moratorium, led to delayed repayment of existing debt (Figure D1). Although the household debt-to-GDP ratio has declined from pandemic-period levels following the gradual economic recovery and phasing out of financial assistance, the current household debt level of 90.6 percent of GDP (as of Q1 2023) remains very high and continues to surpass the 60 percent and 80 percent thresholds – the levels at which the debt will begin to have long-term negative effects on consumption and GDP growth, respectively (Lombardi, Mohanty, Shim 2017). The high leverage of households also makes Thailand one of the most indebted economies among its emerging market economy peers (Figure D2).³⁵ Within ASEAN+3, Thailand ranks behind only South Korea and Hong Kong, China, in terms of indebtedness.

Figure D1: Thailand’s Household Debt



Source: BOT
Note: Pre-2012 data does not include loans granted by the Student Loan Fund; the National Housing Authority; or agricultural, fisheries, land settlement, consumer and service cooperatives.

Figure D2: Household Debt vs GDP per Capita



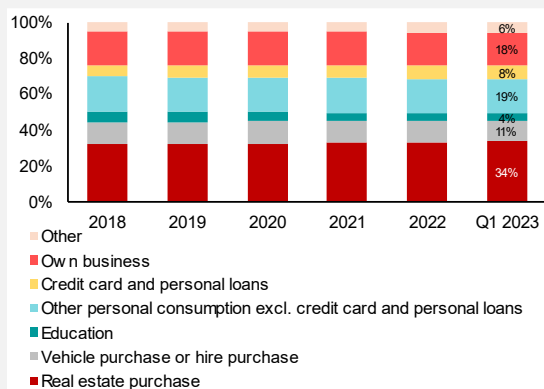
Source: CEIC; AMRO staff compilation
Note: Annual data as of end-2022.

An area of concern is the prevalence of non-productive consumption-based loans and informal debt. Such loans, which include credit card and personal loans extended by commercial banks, non-banks and SFIs, account for about one-third of total household debt (Figure D3). Housing loans also make up around a third of all household loans; however, this is lower than the average of 72 percent in advanced economies and 45 percent in emerging markets (IMF 2022). In recent years, the growth of household debt has been increasingly driven by non-productive loans, whereas asset-based loans such as housing loans, and income-generating debt such as education and personal business loans, have been rising at a slower pace (Figure D4). Another complication stems from the substantial informal economy, whose size is estimated at 45 percent of Thailand’s GDP (Elgin, C. et al 2021). As informal workers typically lack financial data and a credit history, estimating households’ true income and indebtedness remains a challenge for policymakers.

³⁴ This box is prepared by Benyaporn Chantana, Associate Economist.

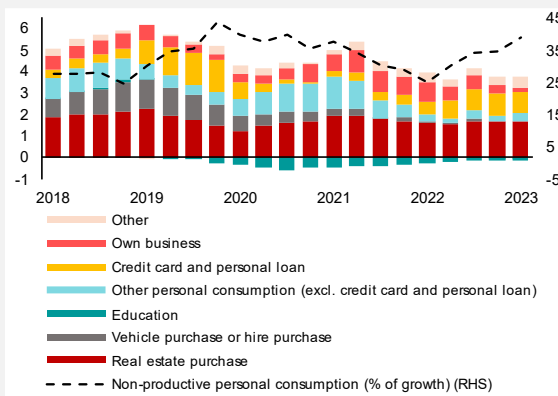
³⁵ The relatively high household debt figures may also be partially attributable to Thailand’s more comprehensive coverage of household debt. For example, BOT includes lending by non-bank lenders (such as cooperatives, credit card companies, pawn shops), student loans, and personal business loans as household debt while such debt components are typically excluded from the household debt calculations of its peers.

Figure D3: Share of Household debt by Purpose



Source: BOT; AMRO staff calculations

Figure D4: Contribution to Household Loan Growth



Source: BOT; AMRO staff calculations

Note: "Non-productive personal consumption" refers to personal consumption loans, which includes credit card and personal loans

Higher household debt also increases the risk of rising NPLs, most of which are personal or agricultural loans. Although NPL ratios did not spike during the pandemic, due in part to regulatory forbearance measures, continued high indebtedness increases the risk of default as more income is used to service these debts, particularly for young working-age and elderly borrowers who may lack financial discipline and planning ([NESDC 2023](#)).

Recognizing these risks, the BOT has announced a series of policies to curtail household debt and informal borrowing, with the aim to bring down the household debt level to 80 percent of GDP over time. The following measures are set to take effect in 2024-2025 ([BOT Directional Paper](#) and [BOT Press Release](#) 2023):

- **Responsible lending (January 2024):** Requires creditors to lend in a responsible and fair manner, particularly by clearly disclosing terms and conditions of loan products to help borrowers make well-informed decisions throughout their debt journey.
 - **Persistent debt (April 2024):** Requires creditors to help debtors with severe persistent debt – defined as having higher interest payment than principal payment over the preceding five years – to fully repay their loans within the next five years at an effective interest rate of no more than 15 percent per annum. The credit line of debtors who opt into such a debt restructuring program must be closed to stop further debt accumulation.
- **Risk-based pricing (2024):** Through the BOT’s regulatory sandbox, qualifying creditors, who have proper risk management and responsible lending assessment, are allowed to test lending out unsecured personal loan and/or Nano Finance for a period of 1-2 years using their risk-based models. This aims to provide more opportunity for borrowers with risks above the current interest rate ceiling to be able to obtain credit through formal channels, and at the same time, lower-risk borrowers or borrowers with good credit history will have more opportunity to borrow at interest rates lower than the current interest rate ceiling, which eventually foster good credit culture.
- **Debt service ratio (DSR) limit (2025):** Applies a DSR limit to new unsecured consumer loans, such as credit card and personal loans, to prevent over-indebtedness and ensure borrowers have sufficient disposable income. The DSR will be set at 60 percent for individuals earning less than THB30,000 per month, and at a slightly higher DSR ceiling of 70 percent for those earning more than THB30,000 per month. Creditors may exceed this limit, going up to 90 percent, if it can be shown that the borrower is able to service the debt. The period in which the DSR limit measure is to be implemented has yet to be confirmed and could be postponed beyond 2025, depending on the prevailing economic and financial conditions.

Many economies with high household debt have adopted macroprudential policy tools to manage household debt levels. Particularly, caps on DSR and the loan-to-value (LTV) ratio are

commonly used to prevent excessive borrowing, as the ceilings allow regulators to proactively manage borrowers' ability to take on debt and can be flexibly tailored to specific targets by setting specific conditions such as the borrowers' income level, sector, loan size and type (Table D.1).

While Thailand's macroprudential policies are positive steps toward curtailing household debt, there remains a risk of unintended consequences and a limitation on its coverage. The planned DSR framework is set to be primarily enforced on lenders under the supervision of the BOT, which would account for 73 percent of total credit extended by all lenders as of Q1 2023. This would leave segments of the financial system uncaptured by the DSR framework, on top of the large informal economy, which may mask borrowers' true income and indebtedness. To tackle this challenge, authorities will need to carefully calibrate their policy toolkits, including the DSR framework and existing targeted measures such as the LTV limit, to avoid the risk of credit activity migrating from the formal banking system toward less regulated sectors. Given legal constraints, authorities could explore legislative amendments to allow for a comprehensive application of macroprudential policies to include a wider range of lenders, including those currently beyond the BOT's supervision. At the same time, it is also imperative to adopt a principle-based and risk-proportionate approach that can be adapted to the diverse nature of Thailand's financial landscape, which comprises both bank and non-bank lenders, so as to serve debtors that vary greatly in terms of borrowing needs and risk profiles.

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Table D.1 Macroprudential Policies Related to Household Debt

Economy	Effective date	Current limit for each borrower	Current limit or conditions for lender	Target segment	Coverage
Debt Service Ratio Limit					
Thailand	2025 (tentative); phase 2 implementation to be determined	60% for lower income and 70% for higher income, with flexibility to lend more than the limit, of up to 90%, if the debtor can show capacity to service debt	Loans with DSR above the limits, going up to 90%, must amount to less than 15% of total new loans	Phase 1 Unsecured consumer loans (credit card, personal loans, personal loans granted by SFIs) Phase 2 Housing loans, digital personal loans, auto loans, nanofinance	Banks, SFIs, and regulated NBFIs
Korea	2014; gradually tightening	40% of income if total obligations exceed KRW200 million. Certain loan products are excluded from DSR calculation for lower-income households and vulnerable groups	Commercial banks 'Risky' loans (DSR>70%) below 15% 'Highly risky' loans (DSR>90%) below 10% Local banks 'Risky' loans below 30% 'Highly risky' below 25% Specialized banks Risky loans below 25% Highly risky loans below 20%	Broad-based	Banks only in 2018; expanded to NBFIs in 2019
Singapore	2013; tightened in 2021	55% total debt servicing ratio (TDSR) for all borrowers	-	Housing loans	Banks and regulated NBFIs
Malaysia	2012	60% for lower-income borrowers (implicit target)	-	Broad-based	
Hong Kong, China	2010; tightened in 2012, 2015, 2017	30-60%, depending on borrower's income and outstanding loans	-	Housing loans	
Loan-to-Value Limit					
Thailand	2003; gradually being revised	70-100%, depending on house price and number of housing loan contracts	Higher risk weight for capital adequacy requirements for high-value housing loans with LTV>80% (2009); high-rise property with LTV>90% (2011); and low-rise property with LTV>95% (2013)	Housing loans	Banks and regulated NBFIs
Korea	2002; gradually tightening	30-50%, depending on property value; 0-40% in overheated speculative zones	-		
Singapore	1996; gradually being revised	15-75%, depending on loan tenure, age of borrower and existing housing loans	-		
Malaysia	2010 and 2011	70% on the third and above residential property loan. 60% on any residential property loan taken out by non-individuals	Higher risk weight for capital adequacy requirements for housing loans with LTV>90%		
Hong Kong, China	2009; gradually tightening	30-60%, depending on borrowers' purpose for the loan (occupation or investment)	-		

Source: National authorities; Pongsaparn R. et al (2017); AMRO staff compilation

25. A swifter pace of rebuilding fiscal policy space, focusing on revenue enhancement, is encouraged (Selected Issue 1). AMRO supports the contractionary fiscal stance of Budget FY2023, especially the withdrawal of remaining pandemic measures to bolster the economy, given the strengthening recovery. Nevertheless, there is scope to increase the pace of fiscal consolidation, although this should be done cautiously and gradually in view of the downside risk to growth. This rebuilding of fiscal space will be essential for economic resilience as it enhances the capacity to address future economic shocks. Authorities could consider introducing more revenue enhancement measures³⁶ and implement tax policy and administration reforms to raise the declining tax-to-GDP ratio. Such moves will also help mobilize additional resources in anticipation of the trend increase in social protection and aging-related spending needs in the long term. A number of measures could be considered, including restoring the value-added tax (VAT) rate from 7 percent to 10 percent³⁷ complemented by financial assistance to lower-income individuals;³⁸ streamlining deductions for personal income tax to align with the current economic environment;³⁹ and reforming corporate income tax incentives, shifting away from granting tax holidays to offering more targeted tax incentives on new capital expenditures⁴⁰. Overall, these measures can be complemented by initiatives aimed at expanding the tax base, especially by leveraging technology.⁴¹

C.3 Prioritizing the Revitalization & Enhancement of Sustainable Long-term Growth

26. Focusing on growth-enhancing fiscal spending to strengthen Thailand's longer-term growth prospects and address structural challenges is warranted. In the medium term, the need to rebuild fiscal policy space and enhance public debt sustainability should be complemented by increased prioritization on growth-enhancing fiscal spending – especially in capital expenditure – as higher growth can lead to faster rebuilding of fiscal space and improvement in the overall fiscal position. In particular, to close Thailand's infrastructure gap, allocating more of the budget to capital expenditures, coupled with strengthened institutional capacity in implementing infrastructure projects, can accelerate the completion of key infrastructure projects and crowd-in domestic and foreign investments that are critical in supporting the structural upgrading of the economy. Improvements in inter-city road and rail

³⁶ In addition, it would be prudent to consider proceeding with revenue enhancement measures that have been announced but are yet to be implemented, such as the financial transaction tax and the tourism fee.

³⁷ A one percentage point increase in the statutory VAT rate could generate the equivalent of about 0.4 percent of GDP in additional net revenue, based on 2022 nominal GDP. VAT revenue accounted for 30 percent of total revenue in 2022, making up the highest share of total revenue that year, followed by corporate income tax and personal income tax, at 24 and 12 percent of total revenue, respectively.

³⁸ Financial assistance could be done via existing infrastructure, for instance, in the form of VAT rebates for state welfare cardholders. As of April 2023, the government had granted state welfare cards to 14.6 million low-income individuals with an annual income below THB100,000. Under this scheme, the government is giving a monthly living allowance of THB200 - THB300 to state welfare cardholders to buy staple goods at designated stores.

³⁹ For instance, deductions could be retained to encourage retirement contribution and long-term financial planning, while deductions to stimulate domestic consumption should be reviewed in light of the improving economic environment. In addition, a systematic cost-benefit analysis could also be performed to assess the effectiveness of these deductions in achieving their intended goals.

⁴⁰ The reform of tax incentives tied to capital expenditures, including tax deductions and tax credits, aligns with Pillar Two of the OECD global tax reform, which seeks to curb jurisdiction competition in attracting investments through corporate income tax rate reductions via tax credits and incentives by applying a 15 percent global minimum tax rate on multinational entity.

⁴¹ For example, the government's e-Payment Law can be used to reduce tax avoidance by freelancers and online sellers. In addition, enhancement of the digital tax system could contribute to lower compliance costs and overall improved tax administration.

systems – the key factors behind the infrastructure gap⁴², would also reduce regional disparity in Thailand.

27. Industrial policy to revitalize long-term growth should be a key priority. To bolster Thailand’s growth potential, authorities should expedite the implementation of the EEC 2.0 and the S-curve industries plans in a concerted and bold manner, given intensifying competition from regional peers for FDIs and talents amid the rapidly changing geo-economic landscape. In addition, improvement in agricultural productivity, especially in regions that are more concentrated in the primary sector, could catalyze more balanced economic development overall. This is especially so, given the low productivity and high informality in the agricultural sector. Lastly, in light of the rapidly aging population, efforts to raise labor productivity are also vital, especially in enabling more effective adoption of new technologies across different sectors of the economy. In particular, a deepening of technical skills via vocational training programs is encouraged.

28. Diversifying exports, along with improving the economy’s competitiveness, will help safeguard against rising geopolitical risks. Thailand’s pursuit of new free trade agreements (FTAs) – to cover about 80 percent of its total trade by 2027, from about 60 percent currently – will facilitate its goal of achieving “balanced ties” with the U.S. and China. A timely conclusion of ongoing FTA negotiations in the short to medium term, including with the United Arab Emirates (UAE) and the European Union, will provide more options for domestic exporters and broaden the sources of foreign investment. Similarly, enhancing the scope of existing FTAs to cover areas such as health services, intellectual property and the digital economy, can facilitate new sources of trade and investment. For services, targeted incentives and programs that focus on expanding niche markets, such as medical tourism, that generate higher per capita spending – rather than chasing volumes – would move the tourism industry up the value chain. While the ongoing reconfiguration of global supply chains means that Thailand will increasingly compete with other economies for FDI to set up alternative production bases, upskilling the labor force alongside accelerated use of technology and automation will enhance its competitiveness.

29. Catalyzing climate-related investment will bolster the economy’s long-term growth outlook. Thailand’s post-pandemic growth strategy, the Bio-Circular-Green model, along with its ambitious emission reduction targets, should help ensure consistency across various levels of climate change policymaking. This could in turn increase the private sector’s ability to make climate-informed investment decisions, especially as a massive amount of new infrastructure will be needed to boost resilience to heightening physical risks and shift away from the fossil fuel consumption. Rapid growth in the electric vehicle sector highlights the critical role that targeted policy support can play in the transition to renewable energy. Sustainable finance initiatives would need to grow in tandem with stronger adaptation and mitigation measures. The BOT and Securities and Exchange Commission’s release of Thai

⁴² Thailand’s road infrastructure gap is by far the largest component of the overall infrastructure gap, amounting to more than 0.5 percent out of 0.7 percent of GDP of the total infrastructure gap, as per the Global Infrastructure Hub’s estimation (<https://outlook.gihub.org/countries/Thailand>).

taxonomy standards (Phase 1) is a welcome first step in developing and growing the green finance sector, but the taxonomy's full benefits will hinge on the expansion of its coverage and the presence of other enablers, such as a green loan framework, that will help mobilize funding for green projects. Over the medium to longer term, other transition drivers would have to be implemented, including requirements for climate data reporting and building the financial sector's capability to incorporate climate considerations in its operations.

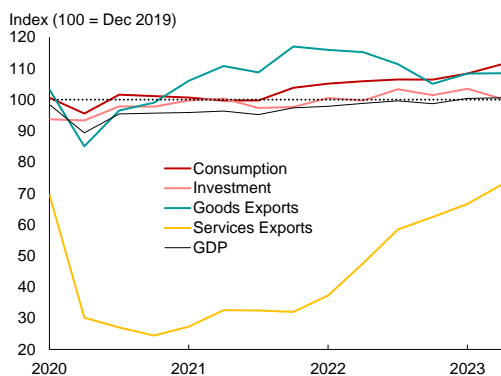
Authorities' Views: The authorities are committed to Thailand's sustainable growth agenda and to addressing the various structural issues. In particular, the country embarked on the Bio-Circular-Green (BCG) economic model in 2021 to drive the national green and sustainable growth agenda. The successful implementation of climate change policies requires close coordination among diverse government agencies. Careful consideration must also be given to the impact on the various economic sectors. The 13th National Economic and Social Development Plan (2023-2027) and investments under EEC 2.0 will further propel Thailand toward an innovation-based and high value-added economy. Thailand will also need to skillfully navigate the changing geopolitical landscape while seeking new growth opportunities abroad through new FTAs.

Appendices

Appendix 1. Selected Charts

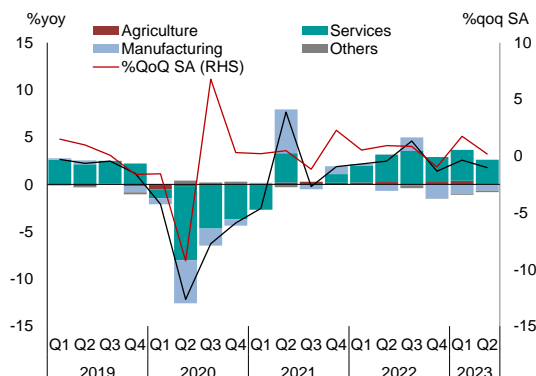
Figure 1. Real Sector

Thailand's GDP has recovered to pre-pandemic levels since 1Q 2023...



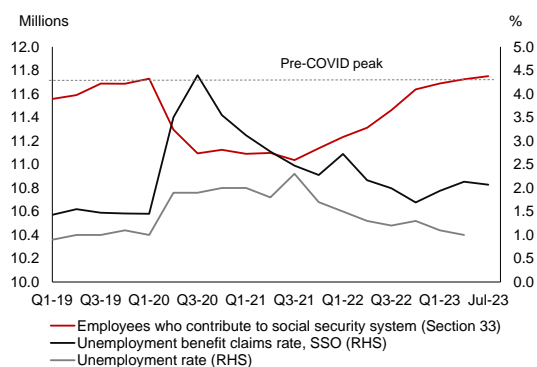
Source: NESDC

... driven by a sustained rebound in tourism-related services.



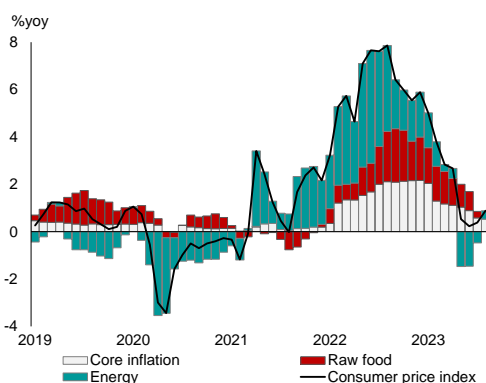
Source: NESDC

The number of formally employed workers returned to pre-pandemic level.



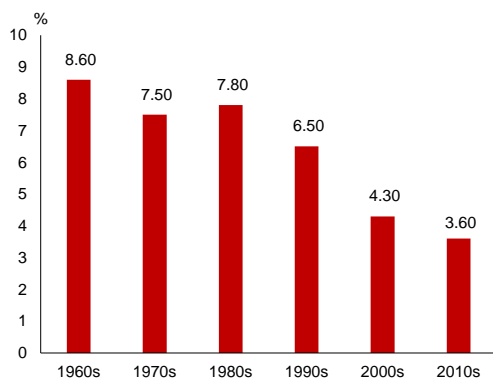
Source: National Statistics Office; BOT; Ministry of Labor

Headline inflation decelerated sharply due to lower oil and commodity prices.



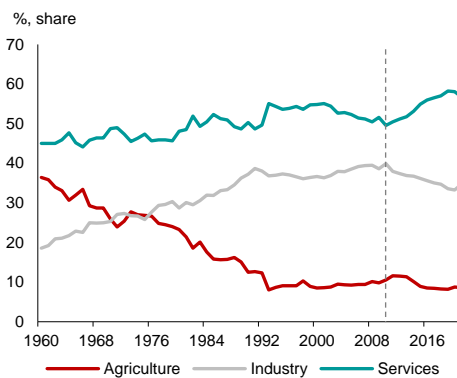
Source: BOT

Growth slowed sharply to an average of 3.6 percent in the 2010s, half the rate in the 1980s...



Source: NESDC

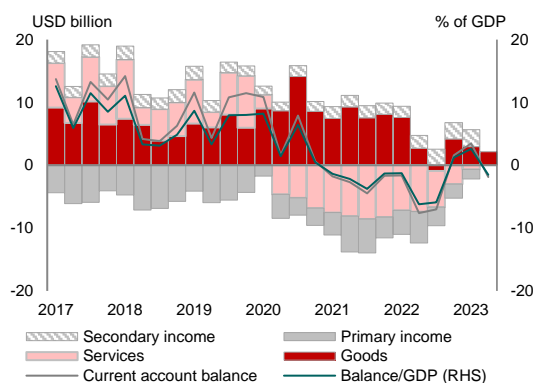
... with manufacturing's share of value-added trending downwards since 2010.



Source: NESDC

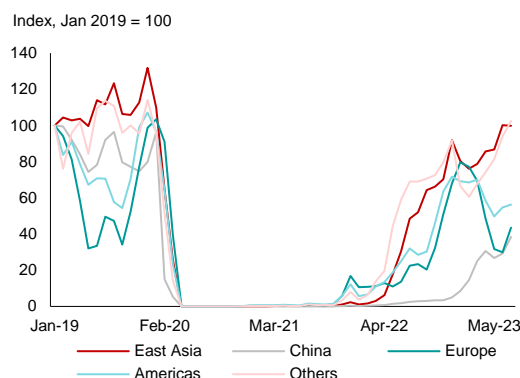
Figure 2. External Sector

The current account balance narrowed in Q2 2023 despite the trade surplus holding up...



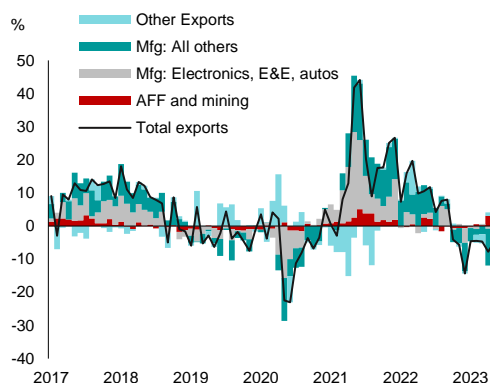
Source: CEIC; BOT; AMRO staff calculations

... as seasonal factors tempered the robust volume of tourist arrivals in recent months.



Source: CEIC; BOT; AMRO staff calculations

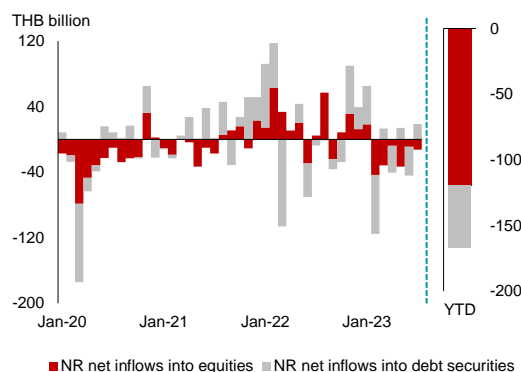
Goods exports overall have remained weak so far in 2023 on sluggish external demand...



Source: CEIC; BOT; AMRO staff calculations

Note: AFF = agriculture, fishery and forestry; E&E = electrical machinery and equipment.

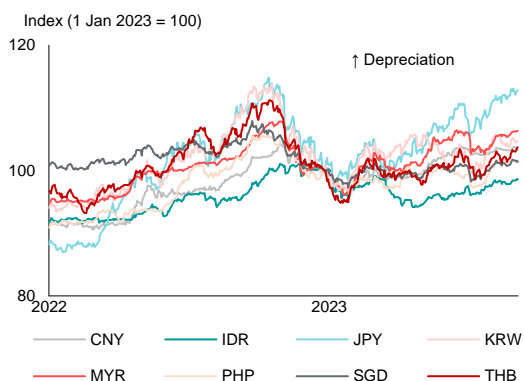
... which, along with high external and domestic uncertainty, have weighed on market sentiment.



Source: CEIC; BOT; AMRO staff calculations

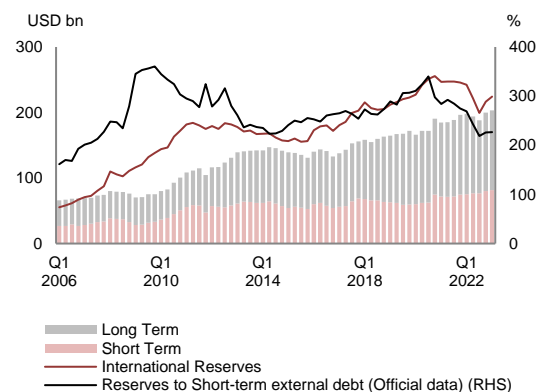
Note: NR = non-resident; YTD = year-to-date.

The Thai baht has weakened on a combination of global and domestic factors.



Source: CEIC; BOT; AMRO staff calculations

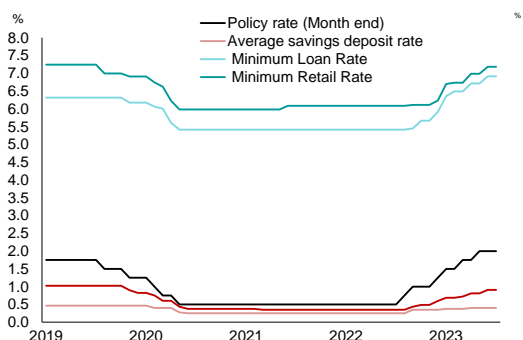
Overall risks to the external position are mitigated by solid reserve buffers.



Source: CEIC; BOT; AMRO staff calculations

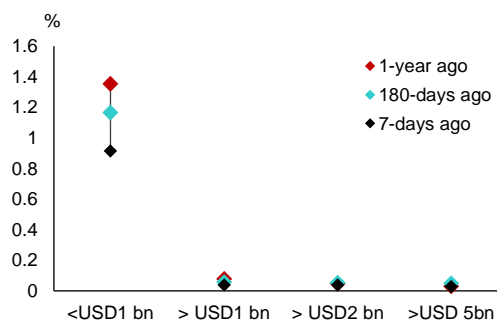
Figure 3. Monetary and Financial Sector

Deposit rates rose more gradually than lending rates.



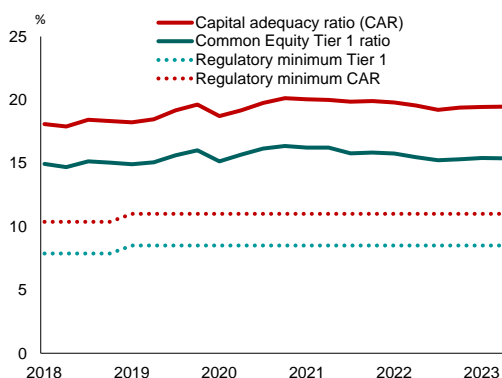
Source: BOT

Corporates' default risk is low and has declined from a year ago.



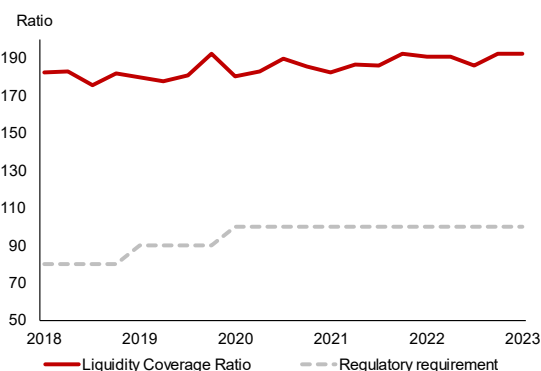
Source: Bloomberg

Banks remain resilient with strong capital buffers...



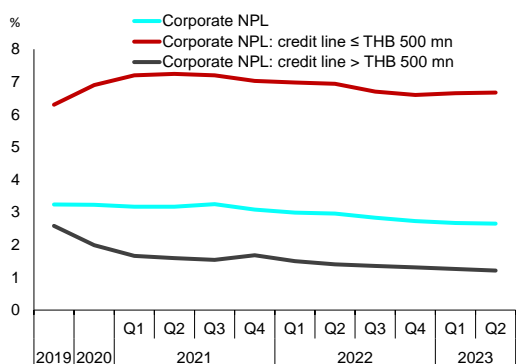
Source: BOT; CEIC

...and a high LCR, both well above regulatory requirements.



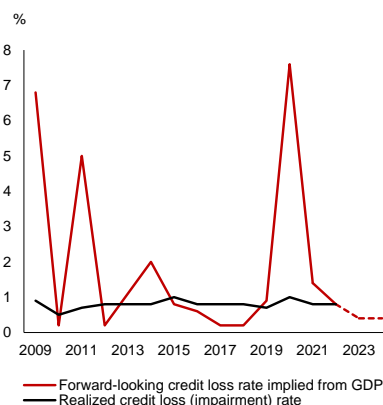
Source: BOT

Banks' asset quality remains stable, partly due to continued debt restructuring efforts...



Source: BOT

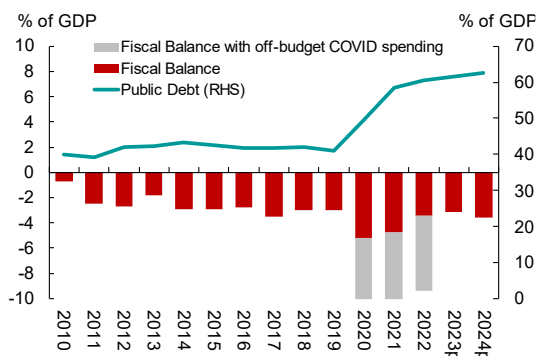
... and is projected to improve further in line with the economic recovery



Source: Li Lian Ong, Christian Schmieder, and Min Wei. 2023. "Insights into Credit Loss Rates: A Global Database." AMRO Working Paper 23-01, ASEAN+3 Macroeconomic Research Office, Singapore. Projection based on AMRO's ARTEMIS Global Credit Loss Rates (CLR).

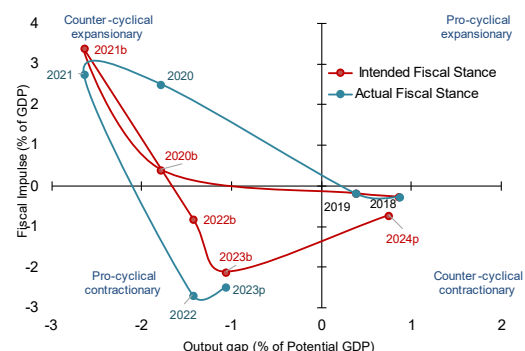
Figure 4. Fiscal Sector⁴³

Withdrawal of COVID 19 spending narrowed the budget deficit, but public debt remains elevated given past borrowing for the spending



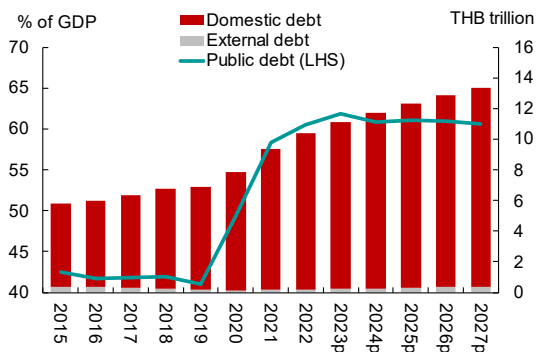
Source: Ministry of Finance; CEIC; AMRO staff calculations

Expenditure decline and stronger revenue collection have led to a more contractionary fiscal policy stance from FY2022 onwards



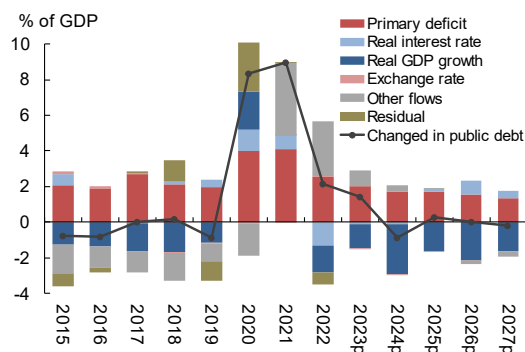
Source: Ministry of Finance; CEIC; AMRO staff calculations

The public debt-to-GDP ratio is expected to rise and stabilize above 60 percent in the medium term



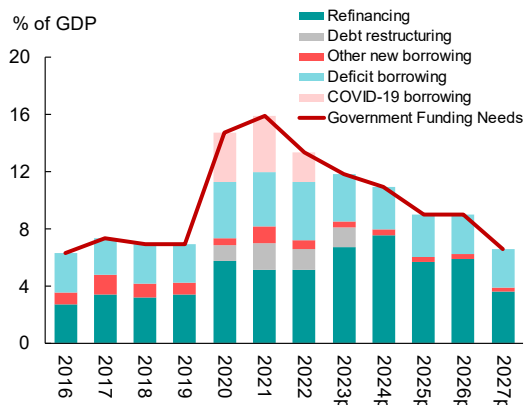
Source: Ministry of Finance; CEIC; AMRO staff calculations

Debt dynamics are driven predominantly by the primary deficit and GDP growth



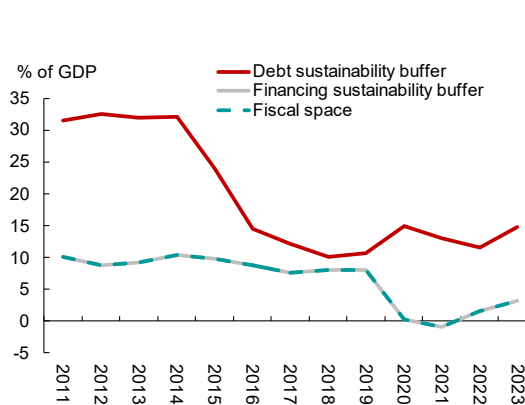
Source: Ministry of Finance; CEIC; AMRO staff calculations

Government funding needs are projected to decrease, given expected smaller new borrowing and lengthening of the maturity structure...



Source: Ministry of Finance; CEIC; AMRO staff calculations

... in line with improved fiscal space due to the continued economic recovery



Source: Ministry of Finance; CEIC; AMRO staff calculations

⁴³ On a fiscal year basis

Appendix 2. Selected Economic Indicators for Thailand

	2019	2020	2021	2022	Projections	
					2023	2024
Real sector	(In percent change unless specified)					
Real GDP	2.1	-6.1	1.5	2.6	3.5	3.9
Final consumption	3.4	-0.3	1.3	4.9	4.2	3.0
Private sector	4.0	-0.8	0.6	6.3	6.1	3.4
Public sector	1.6	1.4	3.7	0.2	-2.8	1.3
Gross fixed capital formation	2.0	-4.8	3.1	2.3	-0.2	3.3
Private sector	2.6	-8.1	3.0	5.1	1.2	2.4
Public sector	0.1	5.1	3.4	-4.9	-4.4	6.1
Export of goods and services	-3.0	-19.7	11.1	6.8	6.3	5.2
Goods	-3.7	-5.8	15.3	1.3	-1.1	3.3
Services	-0.5	-61.3	-19.9	65.8	49.3	13.5
Import of goods and services	-5.2	-13.9	17.8	4.1	1.4	3.6
Goods	-5.8	-10.6	18.2	5.4	-0.4	3.9
Services	-2.7	-26.7	16.0	-0.6	6.3	2.4
Consumer price inflation (period average)	0.7	-0.8	1.2	6.1	1.6	2.0
Core inflation (period average)	0.5	0.3	0.2	2.5	1.5	1.9
Unemployment rate (period average)	1.0	1.7	1.9	1.3	1.1	1.1
External sector	(in billions of U.S. dollars unless specified)					
Current account balance	38.3	20.9	-10.6	-14.7	3.7	5.3
(In percent of GDP)	7.0	4.2	-2.1	-3.0	0.7	0.9
Trade balance	26.7	40.4	32.4	13.5	11.0	13.5
(In percent of GDP)	4.9	8.0	6.5	2.8	2.2	2.4
Exports, f.o.b.	242.7	227.0	270.6	285.2	282.4	293.4
Imports, f.o.b.	216.0	186.6	238.2	271.6	271.4	280.0
Services, net	24.3	-14.5	-32.4	-23.3	-3.1	18.0
Receipts	81.2	31.0	25.4	39.5	59.7	70.6
Payments	56.9	45.5	57.9	62.8	62.8	68.0
Primary income, net	-20.0	-11.1	-18.0	-14.0	-12.7	-19.1
Secondary income, net	7.2	6.1	7.4	9.0	8.5	8.3
Financial account balance	-14.8	-11.7	-6.0	3.2	1.7	-0.1
Direct investment, net	-4.6	-23.5	-4.5	2.6	3.0	1.9
Portfolio investment, net	-8.8	-12.0	-11.9	5.8	-2.4	-3.4
Financial derivatives, net	0.8	-0.4	-1.2	0.2	0.1	0.2
Other investment, net	-2.1	24.3	11.6	-5.4	1.0	1.3
Errors and omissions	-9.9	9.1	9.5	1.3	0.0	0.0
Overall balance	13.6	18.4	-7.1	-10.2	5.4	5.2
Gross official reserves excluding net forward position	224.3	258.1	246.0	216.6	221.4	225.6
(In months of imports of goods & services)	9.9	13.3	10.0	7.8	7.9	9.6
Short-term debt in percent of total debt	34.8	39.2	38.1	40.1		
Total external debt	171.9	190.7	196.3	199.8		
Short-term debt (In percent of international reserves)	26.6	29.0	30.4	37.0		
Fiscal sector /1	(in percent of FYGDP)					
Revenue	15.3	15.0	14.9	14.9	14.6	14.4
Expenditure	18.1	20.0	20.1	18.4	17.9	17.4
Budget balance	-2.8	-4.9	-5.2	-3.5	-3.3	-3.0
Fiscal balance (including off-budget COVID spending) /2	-3.0	-7.1	-9.0	-5.8	-3.3	-3.0
Public debt	41.1	49.4	58.4	60.5	61.8	60.8
Monetary sector	(In percent change)					
Domestic private credit (in percentage change)	3.1	5.0	5.0	4.0		
(in % of GDP)	126.6	142.0	143.4	137.1		
Policy rate (percent per annum, end of period)	1.3	0.5	0.5	1.0		
10-year government bond yield (period average)	2.0	1.3	1.8	2.7		
Broad money	3.6	10.2	4.8	3.9		
Memorandum items						
Exchange rate (THB per US\$, average)	31.0	31.3	32.0	35.1	35.0	34.5
Exchange rate (THB per US\$, end of period)	38.8	39.8	32.8	33.8		
Nominal GDP (THB trillion)	16.9	15.7	16.2	17.4	17.9	19.2
Nominal GDP (USD billion)	541.5	507.4	499.9	488.8	512.2	553.7
GDP per capita (USD)	8,175.1	7,561.7	7,638.9	7,469.5		

Source: Thai authorities; AMRO staff estimates

Note: 1/ The fiscal year is from October to September. FY2022 is the actual outcome on a cash basis. Fiscal-sector figures for FY2023 are based on AMRO staff estimates. 2/ The central government fiscal balance, excluding extra-budgetary funds and the social security fund.

Appendix 3. Balance of Payments

Unit: US\$ billion	2019	2020	2021	2022	Q1 2023
Current account balance (I)	38.3	20.9	-10.6	-14.7	3.5
Trade balance	26.7	40.4	32.4	13.5	2.9
Exports, f.o.b.	242.7	227.0	270.6	285.2	69.8
Imports, f.o.b.	216.0	186.6	238.2	271.6	66.9
Services, net	24.3	-14.5	-32.4	-23.3	-0.7
Receipts	81.2	31.0	25.4	39.5	
Payments	56.9	45.5	57.9	62.8	
Primary income, net	-20.0	-11.1	-18.0	-14.0	-1.5
Secondary income, net	7.2	6.1	7.4	9.0	2.7
Capital account balance (II)	0.0	0.0	0.0	0.0	0.0
Financial account balance, net¹ (III)	-14.8	-11.7	-6.0	3.2	1.7
Direct investment, net	-4.6	-23.5	-4.5	2.6	3.0
Portfolio investment, net	-8.8	-12.0	-11.9	5.8	-2.4
Financial derivatives, net	0.8	-0.4	-1.2	0.2	0.1
Other investment, net	-2.1	24.3	11.6	-5.4	1.0
Errors and omissions (IV)	-9.9	9.1	9.5	1.3	1.7
Overall balance (=I + II - III + IV)	13.6	18.4	-7.1	-10.2	2.7
Reserve assets (+ indicates increases)	13.6	18.4	-7.1	-10.2	-2.7
Memorandum items					
Current account balance (% of GDP)	7.0	4.2	-2.1	-3.0	2.6
Gross official reserves excluding net forward position	224.3	258.1	246.0	216.6	224.5
GDP	544.1	500.5	505.5	495.5	498.1

Source: Thai authorities; CEIC; AMRO staff calculations

Note: 1/ The financial account is presented based on the BPM5 format. Net outflows in net balances are indicated by a minus (-) sign.

Appendix 4. Statement of Central Government Operations

Unit: THB billion	FY2019	FY2020	FY2021	FY2022	FY2023 (budgeted)	FY2024 (budgeted)
Gross revenue collected by the government	3,061.1	2,864.6	2,829.2	3,071.3	3,002.8	
Revenue Dept.	2,009.3	1,833.8	1,875.8	2,166.4	2,029.1	
Excise Dept.	585.4	548.4	531.6	503.5	567.0	
Customs Dept.	108.5	93.9	102.4	110.5	105.5	
Other Sections ²	357.8	388.5	319.5	290.9	301.2	
Net revenue³	2,566.1	2,388.3	2,372.5	2,531.7	2,490.0	2,787.0
(% of GDP)	15.3	15.0	14.8	14.8	13.9	14.6
Expenditure	3,043.2	3,168.7	3,208.7	3,146.2	3,185.0	3,480.0
(% of GDP)	18.1	20.0	20.1	18.4	17.8	18.2
Current	2,396.1	2,575.9	2,583.8	2,415.1	2,402.5	
Capital	387.1	367.9	428.4	382.8	689.5	
Carry over	254.9	224.9	196.5	213.7	0.0	
Budget balance / Domestic borrowings	-503.0	-824.2	-762.0	-594.8	-695.0	-693.0
(% of GDP)	-3.0	-5.2	-4.8	-3.5	-3.7	-3.6
Budget balance / Domestic borrowings, including off-budget COVID spending (% of GDP) ⁴	-3.0	-7.1	-9.0	-5.8		
Non-budgetary balance⁵	33.5	99.3	42.3	-51.1	-	-
Cash balance: before financing	-469.5	-725.0	-719.7	-645.9	-	-
Borrowing to finance the deficit	349.0	784.1	736.4	681.2	695.0	0.0
Fiscal cash balance	-120.5	59.1	16.6	35.3	-	-
Public debt (% of GDP)	41.1	49.4	58.4	60.5	-	-

Note: 1/ The fiscal year falls between October and September. Using the fiscal cash balance basis.

2/ Other sections include revenue from state-owned enterprises (SOEs) and other government agencies.

3/ Net revenue is the gross revenue excluding tax rebates granted by the Revenue Department, VAT allocation to provincial and local administrative organizations, export duty compensation and other taxes.

4/ Refers to the central government fiscal balance and spending under emergency loans, but excludes extra-budgetary funds and the social security fund.

5/ The non-budgetary balance covers the operation of autonomous organizations that are established under specific laws, such as the National Health Security Office and Social Security Office. Therefore, their budget proposals do not need to be scrutinized by the government.

6/ Details of the composition of gross revenue are not publicly available.

Source: FPO; CEIC; AMRO staff calculations

Appendix 5. Thailand’s “Climate Clipboard” – Risks, Responses and Opportunities⁴⁴

For Thailand, adapting to climate change is a more pressing issue than mitigation. The potential macro-financial impacts of floods and droughts, the country’s top climate-related hazards, are wide-ranging and anticipated to deteriorate in the next few decades. Given the rapidly changing climate policy landscape, it is critical to monitor not only Thailand’s rollout of adaptation and mitigation strategies, but also the evolution of enablers that will help the economy execute these responses in a concrete and feasible way. AMRO’s *Climate Clipboard* aims to monitor these key developments in a systematic manner and will evolve as policymakers boost efforts to increase long-term climate resilience (see the Table).

This year, Thailand has made key strides in increasing the economy’s capability to respond to climate change. The BOT’s February 2023 policy statement for financial institutions and the release of Taxonomy Phase 1 are key milestones that should help mobilize climate-related finance, especially in the face of massive investment needs. In the short term, progress in practical implementation of the policy statement will be key, as will the final sign-off on the Climate Change Act.

Table. Thailand’s “Climate Clipboard” (September 2023)

A. Physical risks						
Sources of risk	Potential macro-financial impacts					
<ul style="list-style-type: none"> Flooding (acute, chronic) Tropical cyclones (acute) Drought (acute, chronic) 	<ul style="list-style-type: none"> <i>Lower growth prospects</i>, with average annual losses associated with flooding at 0.5 percent of GDP. Estimated losses could reach up to 1.4 percent of GDP annually by 2030 under the business-as-usual (BAU) scenario because of urban and infrastructure damage (WBG-ADB 2021). <i>Decline in manufacturing activity and exports</i>, especially if flooding hits key manufacturing provinces. In 2011, nearly 70 percent of Thai manufacturers were affected. <i>Decline in tourism</i>, as extreme flood events do not only damage tourism infrastructure but also lead to revenue losses in tourism-related activities, such as accommodation and transport. Droughts increase the risks of forest fires, which can also affect tourism, a sector accounting for about 20 percent of GDP. <i>Deterioration in the current account</i>, resulting from a combination of a decline in manufacturing exports and a significant fall in tourism revenues. <i>Increase in inflation</i>, arising from a decline in agricultural output due to floods and droughts. <i>Potential weakness in the financial system stems</i> from higher credit risks, as borrowers might not be able to generate adequate income to repay loans. <i>Decline in productivity</i>, with flooding likely to affect up to 2.2 million people by 2030 via loss of human life and deteriorating public health conditions from waterborne diseases. 					
B. Transition risks						
Sources of risk	Potential macro-financial impacts					
<ul style="list-style-type: none"> Phasing out use of coal and other fossil fuels Border carbon adjustments in other economies Domestic carbon pricing instruments 	<ul style="list-style-type: none"> <i>Increase in inflation</i>, especially if green alternatives are not widely available or affordable during the phaseout. <i>Decline in exports</i>, arising from global carbon pricing policies. AMRO analysis suggests that Thailand is among those most affected in ASEAN if the EU’s Carbon Border Adjustment Mechanism covers a wider range of sectors (AMRO 2023). <i>Higher unemployment</i> or underemployment, due to the potential displacement of workers in sectors that need to make the transition rapidly out of fossil fuel use. <i>Lower FDI and funding sources</i> available to high-emitting sectors, which could lead to liquidity risk for businesses that are not able to make the transition fast enough. 					
C. Adaptation response framework and strategies						
Adaptation framework	Key initiatives/strategies	Estimated financing needs and sources				
<ul style="list-style-type: none"> Climate Change Master Plan 2015-50 (Jul 2015) National Adaptation Plan 2018-37 (Dec 2018) 	<ul style="list-style-type: none"> Implementation of climate change adaptation focuses on building adaptive capacity in six priority sectors: water resource management, agriculture and food security, tourism, public health, natural resources management, and human settlement and scarcity. 	<ul style="list-style-type: none"> About 1.1 percent of GDP annually for public (0.4 percent) and private infrastructure (0.7 percent) resilience (IMF 2022) 				
		<table border="1"> <thead> <tr> <th>Domestic</th> <th>External</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> Annual budgets </td> <td> <ul style="list-style-type: none"> Green Climate Fund Multilateral development banks (ADB) </td> </tr> </tbody> </table>	Domestic	External	<ul style="list-style-type: none"> Annual budgets 	<ul style="list-style-type: none"> Green Climate Fund Multilateral development banks (ADB)
Domestic	External					
<ul style="list-style-type: none"> Annual budgets 	<ul style="list-style-type: none"> Green Climate Fund Multilateral development banks (ADB) 					
D. Mitigation response framework and strategies						

⁴⁴ Prepared by Marthe Hinojales, Senior Economist.

<p>Nationally Determined Contribution (NDC)</p> <ul style="list-style-type: none"> • Unconditional reduction of economy-wide greenhouse gas (GHG) emissions by 20 percent from the projected BAU level by 2030 relative to 2005 level (BAU2030: about 555 MtCO₂e) • The above target could increase up to 25 percent, subject to “adequate and enhanced access to technology development and transfer, financial resources, and capacity building support.” (UNFCCC 2022) 	<p>National framework/strategies</p> <ul style="list-style-type: none"> • NDC Roadmap on Mitigation 2021-30 <ul style="list-style-type: none"> ➢ Identifies mitigation actions in four sectors – energy, transport, industrial processes and product use, and waste management – to achieve the NDC target, the implementation of which will be guided by the NDC Sectoral Action Plans 2021-30 ➢ Energy and transport account for about 70 percent of Thailand's total emissions • Long-term Low GHG Emission Development Strategy (Oct 2021) <ul style="list-style-type: none"> ➢ Sets targets and measures to achieve Thailand's net-zero GHG goal, including peaking emissions by 2030 and meeting carbon neutrality by 2065. <p>Key sectoral strategies and initiatives</p> <ul style="list-style-type: none"> • Power Development Plan 2018-37 • Alternative Energy Development Plan 2018-37 • Energy Efficiency Plan (2018) • Smart Grid Development Master Plan 2015-36 • Thailand Integrated Energy Blueprint (Jun 2015) • Master Plan for Sustainable Transport System and Mitigation of Climate Change Impacts (2013-30) 	<p>Estimated financing and sources</p> <ul style="list-style-type: none"> • USD30 billion per annum in energy system investments over 30 years (AIGCC 2021)
<p>E. Enabling regulations for climate resilience</p>		
<p>E.1. Legal frameworks</p> <ul style="list-style-type: none"> • The Climate Change Act, pending Cabinet approval in 2023, includes sections involving citizen rights, government obligations and the creation of a national GHG database (as of Jan 2023) • The 13th National Economic and Social Development Plan (2023-27) explicitly identifies mitigating risks from natural disasters and climate change as a development milestone (11 of 13) 	<p>E.3. Carbon pricing frameworks</p> <ul style="list-style-type: none"> • Carbon tax for energy (particularly fuel) and transport sectors are being explored in order to ensure exports to the U.S. and Europe can be tax-deductible (Sep 2023) • Excise tax currently levied on products that cause environmental damage, namely passenger vehicles, with tax rates varying according to the level of carbon emissions 	<p>E.4. Sustainable finance frameworks</p> <ul style="list-style-type: none"> • Kingdom of Thailand Sustainable Financing Framework (Jul 2020) sets out the process of raising green, social and sustainability financing instruments. <ul style="list-style-type: none"> ➢ The framework is established in line with key ASEAN-wide standards and those issued by the International Capital Market Association
<p>E.5. Financial system</p>		
<p>Initiatives</p>	<p>Guidelines</p>	<p>Status</p>
<p>1. Taxonomy</p>	<ul style="list-style-type: none"> • Thailand Taxonomy Phase 1 (Jun 2023) 	<ul style="list-style-type: none"> • Phase 1 is focused on two sectors, energy and transport, which account for about 70 percent of economy-wide emissions. • Phase 2 is being drafted and will focus on four sectors: manufacturing, agriculture, construction and real estate, and waste management.
<p>2. Risk management assessments</p>	<ul style="list-style-type: none"> • Sustainable Banking Guidelines (2019) • Policy Statement of the Bank of Thailand Re: Internalizing Environmental and Climate Change Aspects into Financial Institution Business (Feb 2023) 	<ul style="list-style-type: none"> • The BOT's evaluation of financial institutions in accordance with the policy statement is anticipated to be implemented from 2024 onwards, using self-assessment to evaluate progress in the early stage. • An industry handbook is being developed this year to support practical implementation of the policy statement, and will be used as the minimum standard in risk management (BOT Directional Paper on Financial Landscape, Aug 2022)
<p>3. Climate-related disclosures</p>	<ul style="list-style-type: none"> • The Stock Exchange of Thailand Guidelines for Sustainability Reporting, including “One Report” (2021) • Guidelines on Management and Disclosure of Climate-related Risk by Asset Managers (Jan 2023) 	<ul style="list-style-type: none"> • The BOT plans to launch guidelines for financial institutions on good practices for sustainable banking and is also collaborating with stakeholders to create a central database on ESG disclosures (Mar 2023)
<p>F. Potential opportunities from the low-carbon transition</p>		
<ul style="list-style-type: none"> • Exports of solar-related products, such as solar panels 	<ul style="list-style-type: none"> • Manufacturing of EVs and parts 	<ul style="list-style-type: none"> • Energy storage, including EV batteries • Carbon capture and storage • Carbon credits and offsets

Source: Information updated as of 11 September 2023. Information sourced and compiled from AIGCC (2021); AMRO (2023); Baker McKenzie (2023); BOT (2022, 2023a, 2023b); Chantanusornsiri (2023); IMF (2022); NESDC (2022); NewClimate Institute (2023); PDMO (2020); UNFCCC (2021, 2022); WBG-ADB (2021)

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Annexes: Selected Issues

1. Assessment of Thailand's Fiscal Space⁴⁵

1. **The fiscal space built up prior to the pandemic has allowed Thai authorities to implement a timely and sizable fiscal policy in response to COVID-19.** The fiscal stimulus amounted to about 10 percent of GDP between FY2020 and FY2022 and led to concerns of a diminished fiscal space to address future economic shocks. In this selected issue, the fiscal space of Thailand is assessed based on AMRO's new fiscal space assessment framework. AMRO is currently revising its fiscal space assessment framework, aiming to introduce both a qualitative assessment framework and quantitative measures.⁴⁶

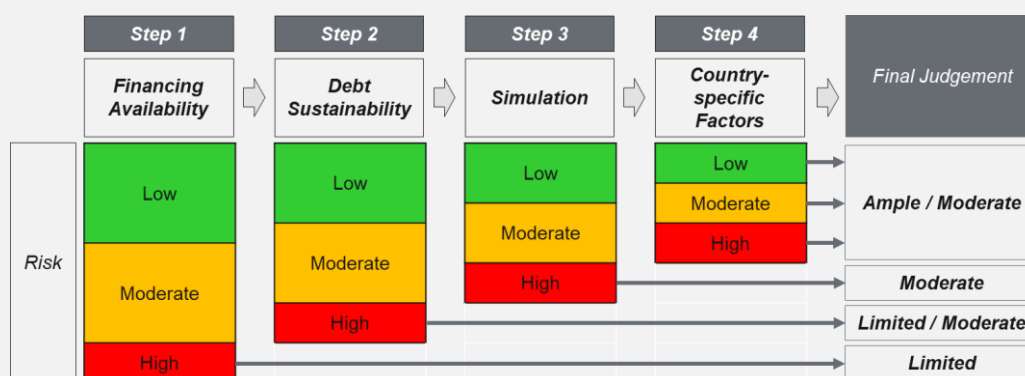
2. **AMRO's new fiscal space assessment framework proposes an operational definition of fiscal space based on a qualitative approach, complemented with quantitative measures.** Although there is no clear consensus on the definition of fiscal space, key aspects from various definitions can be used as a guide to define it as "room for a government to undertake discretionary fiscal policy relative to the baseline with the availability of financing without endangering debt sustainability."⁴⁷ By closely following this definition of fiscal space, AMRO has been revising its previous fiscal space assessment framework.

A. Qualitative Assessment of Fiscal Space

Box A1.1. AMRO's Qualitative Assessment of Fiscal Space Using a Hierarchical Approach

Qualitative assessment of fiscal space is based on a four-step approach to assessing whether the fiscal space is ample, moderate or limited (Figure A1.1). This approach adopts the IMF's hierarchical approach (IMF, 2016) with modifications, and sequentially assesses financing availability, debt sustainability, simulation and country-specific factors.

Figure A1.1.1. AMRO's Four-step Approach to Fiscal Space Assessment



Source: AMRO staff illustration

- **Step 1. Financing availability.** Financing availability primarily determines fiscal space because it is difficult for countries without funding sources at reasonable costs to undertake discretionary fiscal policy, regardless of their debt levels or

⁴⁵ Prepared by Ravisara Hataiseree, Economist; and Byunghoon Nam, Senior Economist.

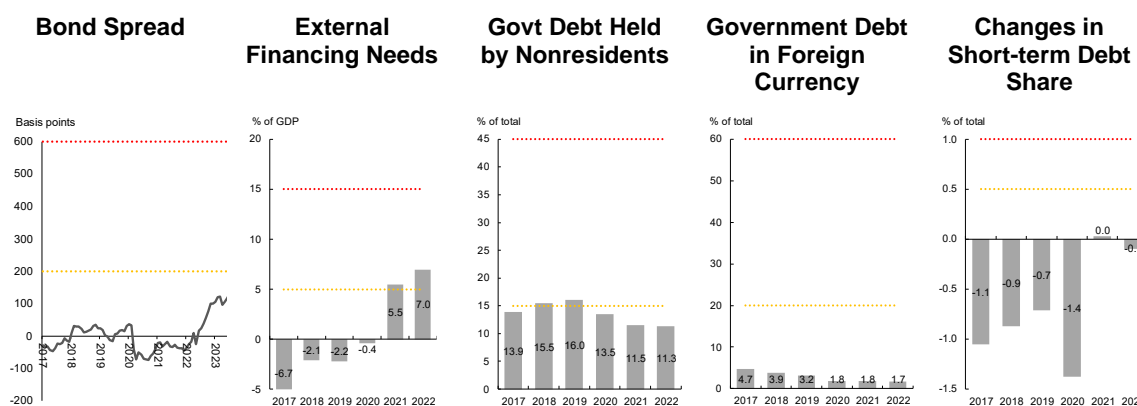
⁴⁶ See Poonpatipibul et al. (2020) for AMRO's previous fiscal space assessment framework. A forthcoming AMRO Working Paper has the detailed methodology.

⁴⁷ See IMF (2016, 2018), Kose et al. (2017), OECD (2016), Romer and Romer (2019), Heller (2005), and Roy et al. (2009) for various definitions.

financing needs. Financing availability is assessed through market perception of risk (Emerging Markets Bond Index: EMBI) and debt profile vulnerabilities (external financing requirements, government debt in foreign currency, government debt held by nonresidents, changes in short-term government debt) with the respective thresholds suggested by the IMF (2013).⁴⁸ In addition, the availability of liquid public financial assets, such as fiscal reserves, should be taken into account.

- **Step 2. Debt sustainability.** For countries that are deemed to have financing availability, the risks of debt and gross financing needs (GFNs) are then assessed. Specifically, this step analyzes whether the debt-to-GDP and GFN-to-GDP ratios breach the respective thresholds suggested by the IMF (2013) under baseline and standard stress test scenarios.⁴⁹
- **Step 3. Simulation.** Simulation is conducted with a stimulus of two standard deviations of primary balance on debt-to-GDP and GFN-to-GDP ratios. Assuming fiscal spending is expanded, the effect of a stimulus on growth and the debt-to-GDP ratio is analyzed by applying fiscal multipliers and debt dynamics equations.
- **Step 4. Country-specific factors.** Before the final judgment, country-specific factors that may affect financing availability and debt sustainability are considered, and the fiscal space assessment derived from the previous three steps can be adjusted. Country-specific factors may include long-term fiscal costs (e.g., infrastructure gap, population aging), the fiscal framework (e.g., fiscal rules and discipline), contingent liabilities (e.g., public-private partnership), and sources of government debt (e.g., asset-linked debt).

Figure A1.2. Fiscal Space Assessment: Financing Availability



Source: Ministry of Finance; CEIC

Note: 1) Bond yield spreads are computed by the difference between the Thai Government Bond Yield Curve 10 Years and the U.S. Treasury Notes Yield 10 Years; 2) External financing requirements = current account deficit + amortization of public external debt + amortization of private external debt.

3. Based on AMRO’s qualitative assessment, Thailand’s fiscal space is deemed “moderate”, with sound market perception of sovereign risks and debt profiles. Thailand’s bond spread and debt profile indicators remain below the respective thresholds. The declining share of government debt held by nonresidents and the small percentage of

⁴⁸ The lower and upper thresholds for market access countries (MACs) and emerging market economies (EMEs), as suggested by the IMF (2013), are as follows: (i) EMBI spread: 200/600bp; (ii) external financing requirements: 5/15 percent of GDP; (iii) government debt in foreign currency: 20/60 percent of total; (iv) government debt held by nonresidents: 15/45 percent of total; (v) changes in short-term government debt: 0.5/1.0 percent of total. If any indicator breaches the respective upper threshold, the financing risk is assessed to be at most moderate.

⁴⁹ The lower and upper thresholds for MACs and EMEs, as suggested by the IMF (2013), are as follows: (i) debt-to-GDP ratio: 70 percent of GDP; (ii) GFN-to-GDP ratio: 15 percent of GDP. If any indicator breaches the respective threshold under the baseline scenario (or the stress test scenarios), the debt sustainability risk is assessed to be high (or moderate).

foreign currency-denominated debt also limit risks from external shocks. The share of short-term debt declined, except for 2021, indicating that the government has relatively low financing stress. The recent surge in external financing needs, driven mainly by current account deficits, surpassed the lower early-warning threshold. However, the expected current account surplus in 2023 and 2024 will alleviate external financing needs and accommodate the rebuilding of fiscal space (Figure A1.2).

4. Despite increased public debt and GFNs during the pandemic, the government has maintained the ratios of debt and financing needs at manageable levels. Under debt sustainability analysis and fiscal stimulus simulations,⁵⁰ debt and GFN ratios are assessed to have low risk since the projected baseline debt and GFN ratios, along with all their stress test scenarios, are expected to stay below their respective thresholds (Figures A1.3, A1.4). Considering that the impact of fiscal stimuli on growth diminishes over time, both the debt and GFN ratios fell below the baseline (Figures A1.5, A1.6).

Figure A1.3. Debt-to-GDP Projection

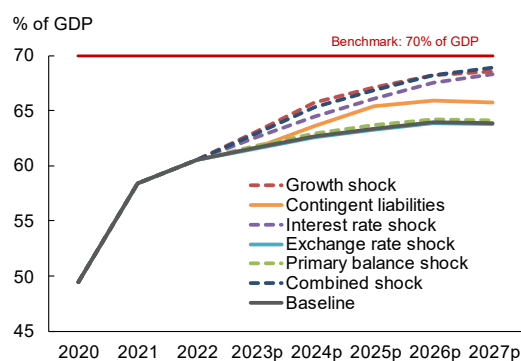
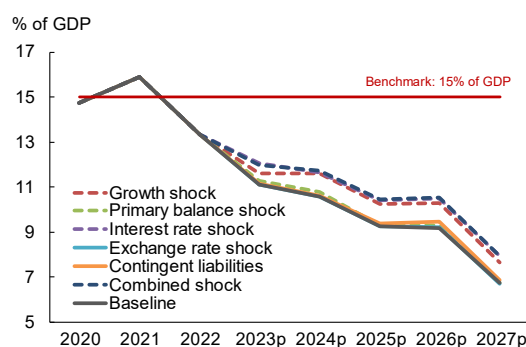


Figure A1.4. GFN-to-GDP Projection⁵¹



Source: Ministry of Finance; AMRO staff projections

Note: The scenarios for the stress test are as follows: 1) Real GDP growth shock: one standard deviation or -1.5 percentage point shock to 2023 and 2024; 2) Primary balance shock: one standard deviation or -1 percent of GDP shock to 2023 and 2024; 3) Interest rate shock: +1 percentage point shock from 2023; 4) Exchange rate shock: one-time +1.5 percentage point shock in 2023 and 2024; 5) Contingent liability shock: one-time 1 percent of GDP shock in 2023 and 2024, by recognizing the quasi-fiscal operations in the corresponding years; 6) Combined shock: a combination of growth (half size), primary balance (half size), interest rate (half size), and exchange rate shocks (half size).

Figure A1.5. Debt-to-GDP Simulation

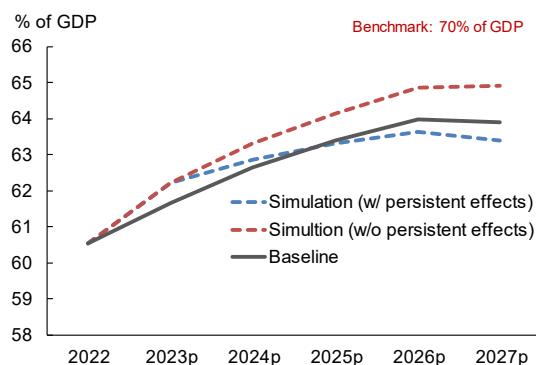
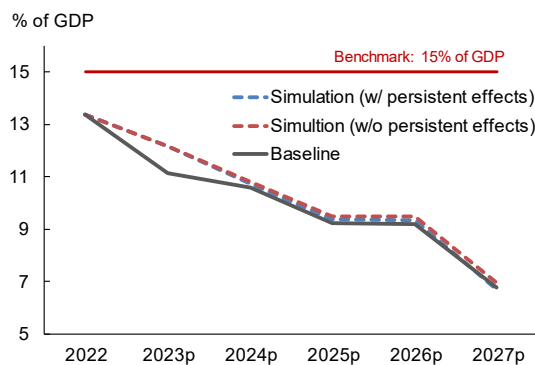


Figure A1.6 GFN-to-GDP Simulation



Source: Ministry of Finance; AMRO staff projections

Note: The simulation with persistent effects assumes the fiscal multiplier gradually fades from t to t+4, while the simulation without persistent effects assumes the fiscal multiplier is in effect only in t.

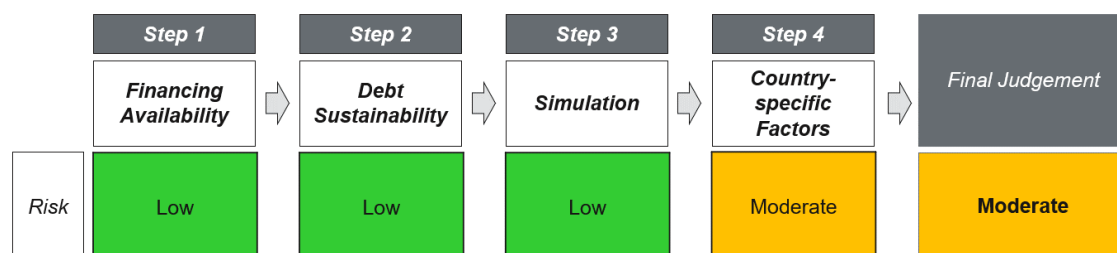
⁵⁰ The projected fiscal numbers used in the simulations are based on the outcome of a Cabinet meeting on 13 September 2023, which outlined a revised medium-term fiscal framework for FY2024 to FY2027. At the time of drafting, details of the new government's planned stimulus measures were unavailable, and as such projections of GDP and other macro-variables do not incorporate these measures. The implication is that the simulations are likely more conservative, but this does not change the overall conclusion of the simulation exercise.

⁵¹ In 2021, GFNs made up 16 percent of GDP, mainly due to new borrowing for the budget deficit and COVID-19 off-budget spending. This ratio is projected to decline in the medium term as off-budget spending is withdrawn and fiscal deficits are reduced through fiscal consolidation.

5. However, there are some Thailand-specific factors that could pose challenges to fiscal sustainability, especially in the longer term. These factors include the need for increasing spending related to population aging over time, and the continued infrastructure gap. On the latter, the estimated additional annual fiscal expenditure needed to align with Thailand’s best-performing peers in infrastructure development averages 0.8 percent of GDP from 2023 to 2040,⁵² equivalent to about 3 percent of total government spending. Furthermore, quasi-fiscal operations, with an outstanding amount exceeding THB1 trillion in FY2022, have given rise to contingent liabilities risks.⁵³ The authorities acknowledge these challenges and have been taking measures to manage them.

6. From the four-step assessment, Thailand is deemed to have “moderate” fiscal space (Figure A1.7). Market perception of sovereign risk and debt profile indicators suggests low financing risk. Both debt and GFN risks are low, with projected debt-to-GDP and GFN-to-GDP ratios well below their respective thresholds in baseline and stress test scenarios. Considering the interplay of macroeconomic and fiscal indicators, debt sustainability remains robust. However, longer term structural spending needs, alongside contingent liabilities risks associated with the potential ongoing use of quasi-fiscal operations to fund further policy stimulus could pose risk on the adequacy of fiscal space of Thailand going forward.

Figure A1.7. AMRO’s Four-step Approach to Fiscal Space Assessment



Source: AMRO staff illustration

B. Quantitative Measures of Fiscal Space

Box A1.2. AMRO’s Quantitative Measurement of Fiscal Space

The quantitative size of fiscal space is measured by the maximum amount of discretionary fiscal policy relative to the baseline that would not endanger debt sustainability. That is, the size of the fiscal stimulus should not exceed the level that would raise debt-to-GDP and GFN-to-GDP ratios above their respective thresholds of 70 percent of GDP and 15 percent of GDP over the projected period.

- Measure 1. Debt sustainability buffer. By using the standard debt dynamics equation with simple manipulation, the debt sustainability buffer, defined as the maximum

⁵² See Global Infrastructure Hub (<https://outlook.github.org/countries/Thailand>)

⁵³ Section 28 of the State Fiscal and Financial Discipline Act of 2018 allows the government to order state-owned financial institutions to fund projects that improve the public’s quality of life or rehabilitate the economy. The government will borrow from state-owned financial institutions and set a budget to repay these financial institutions every year.

stimulus that would not exceed the debt-to-GDP threshold over the medium term, can be obtained by:⁵⁴

$$c_t^{d*} = \frac{d^*}{\delta_{t:t+n}} - d_{t-1}\varphi_t + \frac{\sum_{i=0}^n pb_{t+i}\delta_{t+i:t+n}}{\delta_{t:t+n}} - \frac{\sum_{i=0}^n o_{t+i}\delta_{t+i:t+n}}{\delta_{t:t+n}} \quad (\text{Equation 1})$$

where c_t^{d*} : debt sustainability buffer, d^* : debt ratio threshold, d_t : debt ratio at year t, pb_t : primary balance at year t, o_t : other flows at year t,

$$\text{and } \delta_{t:t+k} = \varphi_{t+1} \varphi_{t+2} \cdots \varphi_{t+k}, \varphi_t = \frac{1+i_t^w + \alpha_{t-1}\varepsilon_t(1+i_t^f)}{(1+g_t)(1+\pi_t)}$$

where i_t^w : effective interest rate of total debt, i_t^f : effective interest rate of FCY debt, ε_t : exchange rate, α_t : share of FCY debt, g_t : real growth, π_t : GDP deflator inflation

Equation 1 suggests that the debt sustainability buffer is determined by (i) the initial buffer between the threshold and the current debt ratio (first and second components); (ii) the primary balance over the medium term (third component); (iii) other flows over the medium term (fourth component); and (iv) macroeconomic developments.

- **Measure 2. Financing sustainability buffer.** The financing sustainability buffer, defined as the maximum stimulus size that would not exceed the GFN-to-GDP threshold, can be computed by:

$$c_t^{f*} = gfn^* - pb_t - ip_t - pp_t \quad (\text{Equation 2})$$

where c_t^{f*} : financing sustainability buffer, gfn^* : GFN ratio threshold, pb_t : primary balance at year t, ip_t : interest payments at year t, pp_t : principal payments at year t
Unlike the debt sustainable buffer, the financing sustainability buffer does not require projections because the increase in debt services over the medium term will be smaller than the stimulus at year t.

- **Fiscal space indicator.** To ensure debt sustainability, the stimulus should not raise either the debt-to-GDP or GFN-to-GDP ratio beyond their thresholds. Thus, the size of fiscal space can be measured by the minimum of debt sustainability buffer and financing sustainability buffer.

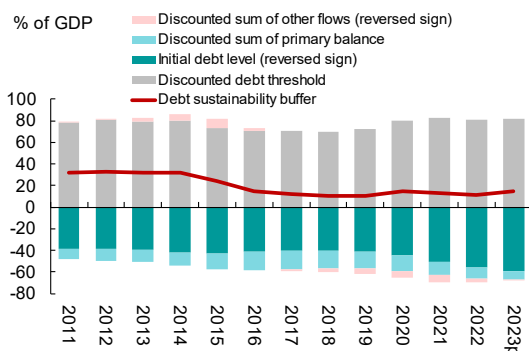
$$fs_t = \min(c_t^{d*}, c_t^{f*}) \quad (\text{Equation 3})$$

7. Thailand's fiscal space has diminished due to the pandemic but is expected to be gradually rebuilt, given its planned consolidation and the ongoing recovery of the economy. The formula provides a quantitative estimate of the reduction in fiscal space, stemming from the large fiscal stimulus package implemented during the pandemic. Thailand's debt sustainability buffer and financing sustainability buffer both narrowed significantly due to large borrowing during the pandemic, a bigger primary deficit, and additional flows primarily stemming from THB1.5 trillion in emergency loans for COVID-19, amounting to around 10 percent of GDP between 2020 and 2022. Thailand's quantitative fiscal space – as indicated by the financing sustainability buffer, the lower of the two buffers – declined from 8 percent of GDP in 2019 to near zero during the pandemic years but have gradually recovered to 1.6 percent in 2022 and 3.3 percent of GDP in 2023. (Figures A1.9). Under the baseline scenario of planned consolidation and ongoing economic recovery, both

⁵⁴ Starting from the standard debt dynamics equation of $d_t = \varphi_t d_{t-1} - pb_t + o_t$, the repeated forward substitution and simple manipulation can easily lead to Equation 1. See a forthcoming AMRO Working Paper for the detailed derivation.

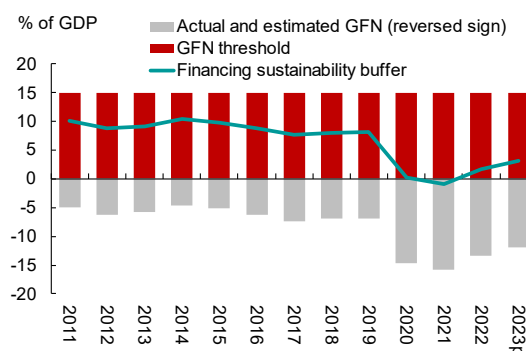
debt sustainability and financing sustainability buffers are expected to be rebuilt, albeit gradually.

Figure A1.8. Debt Sustainability Buffer



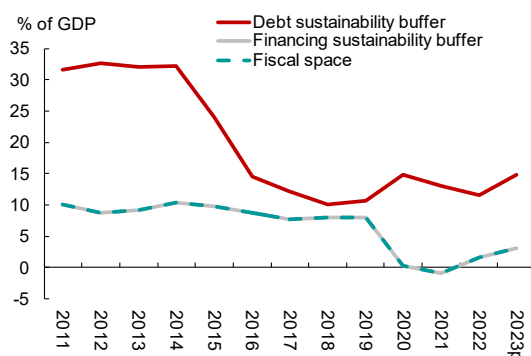
Source: Ministry of Finance; AMRO staff projections

Figure A1.9. Financing Sustainability Buffer



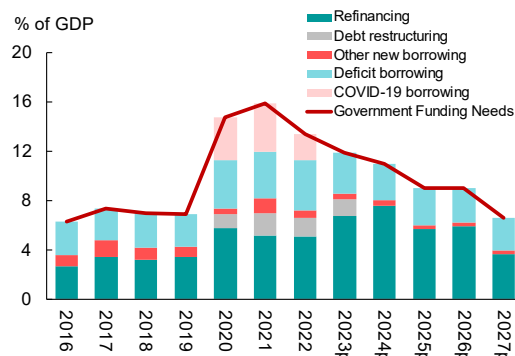
Source: Ministry of Finance; AMRO staff projections

Figure A1.10. Fiscal Space



Source: Ministry of Finance; AMRO staff projections

Figure A1.11. Composition of Government Financing Needs



Source: Ministry of Finance; AMRO staff projections

8. The reduced fiscal space underscores the need to remain on the planned consolidation path and to consider additional revenue enhancement measures. Due to fiscal stimulus during the pandemic, the quantitative size of fiscal space has narrowed substantially (Figure A1.10). Although fiscal space is expected to gradually recover in tandem with economic rebound, a swifter rebuilding of fiscal space will help to better prepare Thailand for future economic shocks. Authorities could consider introducing additional revenue-enhancement measures and implement tax policy and administration reforms. These efforts aim not only to bolster the rebuilding of fiscal space but also to secure additional funding for Thailand’s structural spending needs. Importantly, additional large procyclical fiscal stimulus spending even as the economy is recovering in the near-term could upend the expected rebuilding of fiscal space, and further worsen the ability for the authorities to address future economic challenges.

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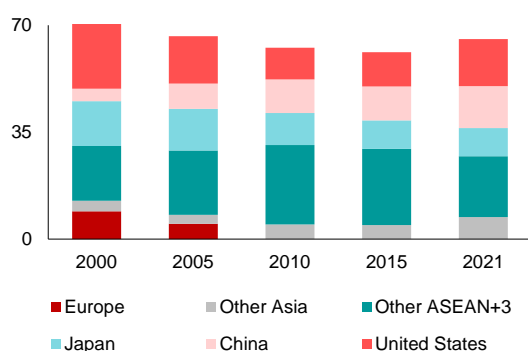
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2. Shifting Ties: Thai Trade and Investment Amid Geo-economic Changes⁵⁵

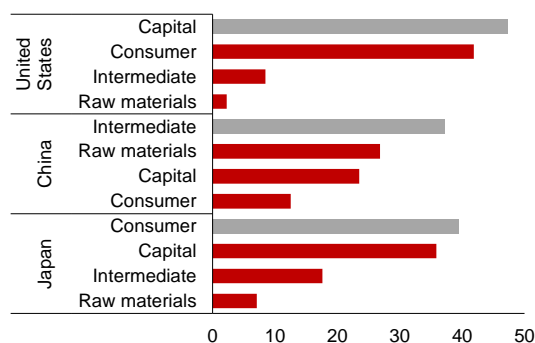
1. Robust expansion of Thailand’s trade in the last two decades has occurred alongside closer linkages with the rest of Asia vis-à-vis the rest of the world. Steady efforts to integrate with regional and global economies, improve trade competitiveness and learn from past economic shocks continue to change the face of Thai trade. While the value of its total trade has quadrupled since 2000, Thailand’s key trade relationships are now mostly with Asian economies. European markets exited Thailand’s list of top 10 export markets starting 2005, replaced by those in the ASEAN+3 bloc, such as Indonesia, the Philippines and Vietnam. By 2020, key export destinations were almost completely from the Asia-Pacific except for the U.S., which remains the top partner, followed by China, then Japan (Figure A2.1). While Thailand has reduced export reliance on the U.S. over time, this trend has reversed somewhat in the wake of 2018-19 U.S.-China trade tensions. Thailand is uniquely linked to its top three markets, primarily exporting capital goods to the U.S., intermediate goods to China, and mostly consumer goods to Japan (Figure A2.2). The U.S. continues to be the top destination for Thai consumer and capital goods, whose share has risen in the last 10 years; this pattern is also true for China in the case of intermediate goods and raw materials.

Figure A1.1. Top 10 Export Markets
(Percent share to total exports)



Source: UN Comtrade; AMRO staff calculations
Note: 2021 data for “Other ASEAN+3” includes Hong Kong, Indonesia, Malaysia, Singapore and Vietnam. “Other Asia” includes Australia and India.

Figure A2.2. Exports to U.S., China and Japan by Product Group, 2021
(Share to total exports per economy)



Source: UN Comtrade; AMRO staff calculations

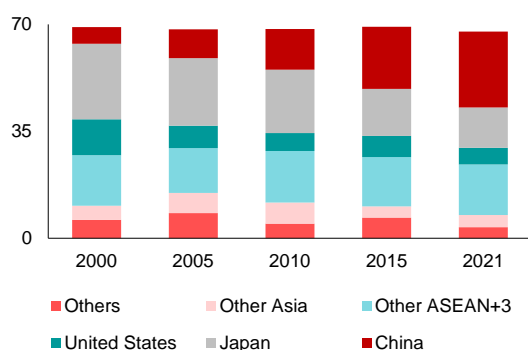
2. China has become a key trading partner for both Thai exports and imports as the shares of other economies, such as the U.S. and Japan, shrink. Between 2000 and 2021, China’s export share increased by about 10 percentage points, almost equivalent to the combined loss of the U.S. and Japan over the same period. Its increasing importance is further emphasized by its growing share of Thailand’s domestic *value-added* exports (see Figure 23 of main text). Additionally, it has become the largest source of imports in the last decade, more than double the share of Japan, which is in second place (Figure A2.3). While Thailand has not substantially diversified *outside* its top 10 import markets, it also has, in fact, moved closer to China – especially with many foreign manufacturers setting up bases there to serve demand in ASEAN+3 (AMRO 2021). While much of this linkage is driven by capital goods, its import of intermediates has accelerated in the last 10 years, mostly in parts and accessories of capital goods (including for transport equipment manufacturing) and

⁵⁵ Prepared by Marthe Hinojales, Senior Economist.

processed inputs for industrial supplies.⁵⁶ Consequently, reliance on Japan, the U.S., Malaysia and other Asian economies for imports have declined over time.

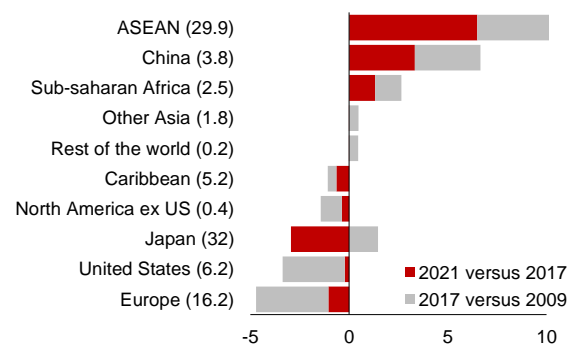
3. Ongoing dynamic changes in Thailand’s foreign direct investment inflows suggest the growing importance of China and ASEAN peers. Japan is the Thai economy’s biggest foreign investor, accounting for more than a third of inward FDI stock in 2021 – reflecting Thailand’s position as ASEAN’s largest automotive producer, and one largely dominated by Japanese manufacturers. Nonetheless, other key investors have emerged in the last two decades: ASEAN and China have significantly increased their FDI stakes in the economy, while traditional major investors such as Europe and the U.S. have declined (Figure A2.4). In particular, their share in Thailand’s FDI stock increased between 2017 and 2021, illustrating Thailand’s potential as an alternative investment destination at a time of heightened geo-economic uncertainty. While Japan has long dominated annual FDI applications,⁵⁷ China overtook it for the first time in 2019 as multinationals beefed up supply chain resilience amidst deteriorating U.S.-China trade relations (Regalado 2023). The pandemic thereafter froze Chinese investment activity, briefly allowing Japan to regain its position, but new applications had returned by Q3 2022 in full force. China will likely hold on to this top position, especially given its increasing investments in Thailand’s emerging growth sectors, such as EVs (Box A2.1).

Figure A2.3. Top 10 Import Markets
(Percent share to total imports)



Source: UN Comtrade; AMRO staff calculations
Note: 2021 data of “Other ASEAN+3” includes Indonesia, Korea, Malaysia, Singapore and Vietnam. “Others” refers to the UAE, while “Other Asia” refers to Taiwan Province of China, per UN Comtrade’s definition.

Figure A2.4. Share of Inward FDI Stock by Investor Economy
(Change in percentage points)



Source: IMF’s Coordinated Direct Investment Survey via Haver Analytics; AMRO staff calculations
Note: Numbers in figures are respective shares to total FDI stock as of 2021.

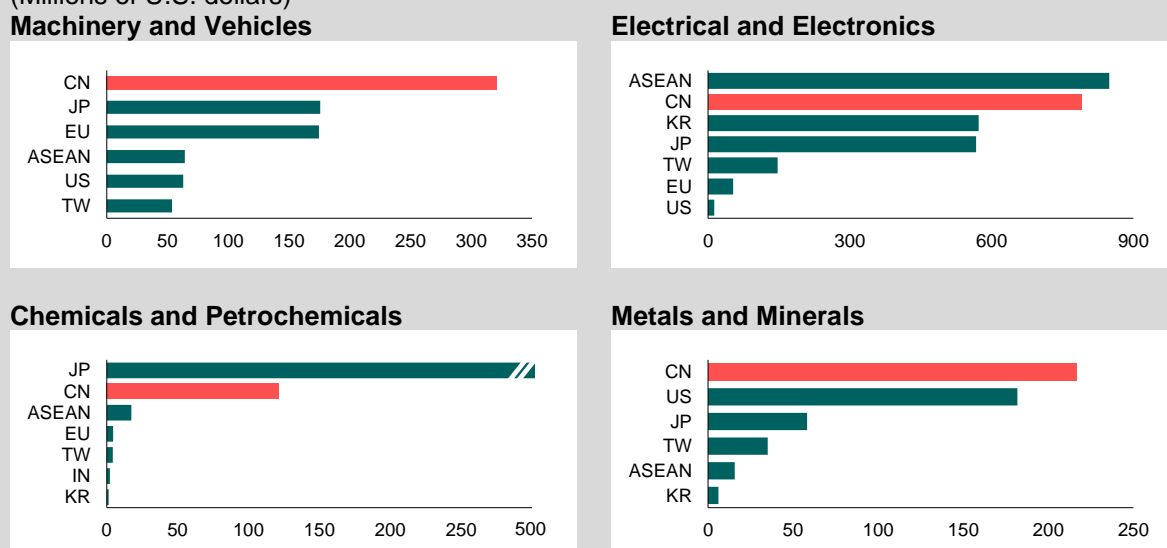
Box A2.1. Thailand’s EV Sector: A Microcosm of Geo-economic Currents

Electric vehicles are among Thailand’s “new” S-curve industries, namely, sectors that are geared toward being new sources of economic growth, especially in a highly digitalized post-pandemic era. Aiming to become a global production hub of EVs and parts, Thailand has rolled out a “30@30” policy, aiming for EVs to makeup at least 30 percent of its annual vehicle production by 2030, backed by a variety of government subsidies and incentives to attract global EV manufacturers (Utamote 2022).

⁵⁶ In 2020, Thailand sourced about 30 percent of intermediate goods used for the manufacturing of capital goods from China. Industrial supplies drew 24 percent of intermediate goods from China, and transport equipment manufacturing about 15 percent.
⁵⁷ Between 1995 and 2018, new FDI applications to Thailand were dominated by Japanese investors – except in 1997 and 2009, when Japan was overtaken by applications from Europe. China emerged as the number 1 investor in 2019, and then again in 2022. Japan regained the top spot in 2020-21.

Chinese automakers dominate the domestic EV landscape, as opposed to a higher Japanese and Western presence in the internal combustion engine (ICE) vehicle sector, which earns Thailand the nickname of “Detroit of Asia”. Chinese EV giants, including Great Wall Motor, SAIC Motors, BYD and Chongqing Changan, are either expanding existing production lines or have billions of U.S. dollars of EV investments in the pipeline ([Ghoshal 2023](#)) – all enticed by growing domestic demand for EVs in Thailand, as well as the country’s ability to serve as a regional production base outside China that could cater to the rest of ASEAN (Figure A2.2.1, top left).

Figure A2.1.1 Approved FDI Applications by Investor Economy, H1 2023
(Millions of U.S. dollars)



Source: National authorities via Haver Analytics; AMRO staff calculations

Note: Board of Investments’ data on country-sector FDI applications began only in 2023. ASEAN = Association of Southeast Asian Nations; CN = China; EU = Europe; IN = India; JP = Japan; KR = Korea; TW = Taiwan Province of China; US = United States.

As Thailand accelerates its move away from fossil fuels and toward clean(er) energy in the next few decades, the implication is that the future of the Thai automobile industry could be increasingly linked with China, whether in terms of capital, skills and knowledge such as technology and manpower, or in the form of EV-related systems and standards. The stronger linkages would also have ripple effects across the trading channel – for example, in the import of intermediate goods for auto manufacturing, including electronics, metals and minerals – which could further increase Thailand’s reliance on China as a source of *imports* (see paragraph 2 of Annex 2t; box figure). In addition, since Chinese automakers envision Thailand as their regional hub, this could also imply a gradual redirection of auto *exports* toward ASEAN and away from the U.S., the major export market for ICE vehicles, in the medium to long term.¹

¹ Note that ASEAN+3 EV exports have already been moving away from the U.S. and toward other destinations. See [Hinojales and Tan \(2023\)](#) for further discussion.

4. Changing geo-economic circumstances, along with the reconfiguration of global trade and investment, will affect Thailand in multifaceted ways. The observed changes in Thailand’s trade and FDI patterns, including in global relocation activities, can be attributed to a combination of factors, such as multinational enterprises’ efforts to protect supply chains from potential shocks, especially in the wake of massive disruptions brought about by past natural disasters, COVID-19, and more recently, geopolitical tensions. Other factors include the specific nature of Thailand’s competitive advantage, especially in the manufacture of electronics and semiconductors, electrical machinery such as computers,

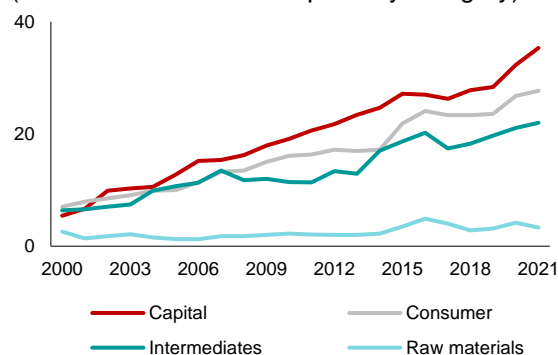
and automobiles. During the 2018-19 U.S.-China tensions, not only was Thailand able to capture a portion of the diverted demand for imports from the U.S., but new FDI project announcements also rose (Figure A2.5). Heightened interest to move operations to Thailand compared to other destinations within and outside ASEAN+3 has also been driven by its extensive trade links with the rest of Asia (given its many trade agreements), information and communications technology readiness and pro-investment policies (AMRO 2021). However, closer linkages with any one partner also bring to the fore the risk of over-reliance, in this case, on China, as seen in disruptions to the Thai electronics supply chain during the pandemic (The Nation Thailand 2022). Additionally, with the Chinese economy now the single largest *final* consumer of Thailand’s domestic *value-added* exports, this could amplify any spillovers from China’s expected slowdown in the upcoming decade.⁵⁸

Figure A2.5. Monthly Inward FDI Announcements to Thailand (6-month moving average)



Source: Orbis; AMRO staff calculations

Figure A2.6. Imports from China by Product Category (Percent share to total imports by category)



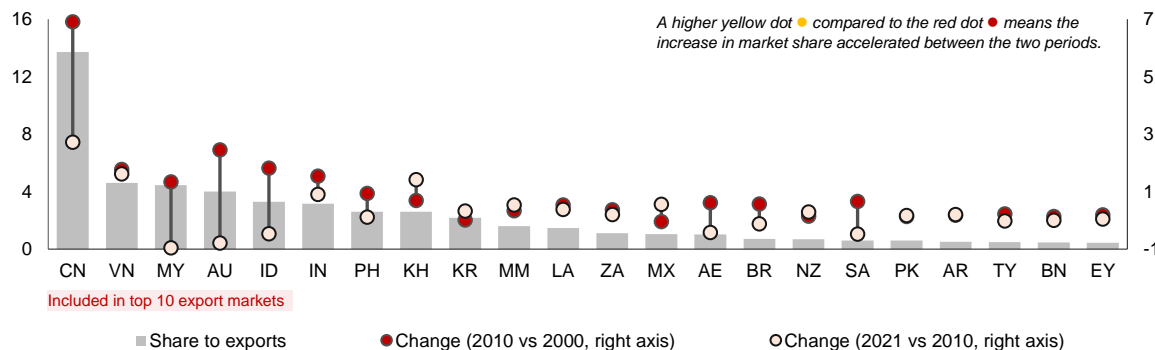
Source: UN Comtrade; AMRO staff calculations

5. For Thailand to be agile in the face of these shifting currents, policies to increase competitiveness while pursuing market diversification will play crucial and complementary roles. The country’s ability to boost global trade and investment activities will continue to benefit strongly from the implementation of the Thailand 4.0 strategy, progress in the Eastern Economic Corridor (AMRO 2023), and ongoing initiatives to improve the investment ecosystem (Thailand BOI 2022) – all crucial steps in the right direction. However, its future competitiveness is not a given, and other economies are also ramping up their own investment programs to attract new FDI. Policy improvements are crucial, especially in pull factors that are weaker than other economies – such as the level of intellectual property rights protection, availability of highly skilled labor, and infrastructure (AMRO 2021). Second, FTAs in the pipeline, which could cover an additional 20 percent of total exports (Arunmas 2023), will be highly beneficial in a volatile geo-economic environment and allow further benefits from diversification. In fact, Thailand’s share of exports outside its top 10 markets accelerated in recent years, while exports to its top 10 markets slowed (Figure A2.7). Prospective FTAs that involve Korea, Mexico (part of the Pacific Alliance), Pakistan and Argentina (part of MERCOSUR), could be sped up to further boost their share in Thailand’s exports, especially if Thai policymakers leverage existing FTAs such as those with ASEAN and the Regional Comprehensive Economic Partnership. In markets with above-average share of Thailand’s exports but where expansion has slowed – such as

⁵⁸ China is expected to experience a deceleration in its economic growth in the next 10 years, lower than the average of 7.7 percent recorded in the post-GFC decade. This slowdown can be attributed primarily to unfavorable demographics and a deceleration in productivity (International Monetary Fund 2023).

Saudi Arabia, South Africa, Turkey and the UAE – substantial progress in FTAs could help reverse the trend. Markets with below average shares could also offer diversification gains, but these will materialize only over a much longer horizon.

Figure A2.7. Evolution of Thailand’s Select Export Markets, 2000–21
(Percent; percentage points)



Source: UN Comtrade; AMRO staff calculations

Note: Only economies that have met the following two criteria are included: (1) the economy’s share of Thai exports is above average (0.42 percent); and (2) the economy increased its overall market share between 2000 and 2021.

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