INTERNATIONAL MONETARY FUND

IMF Country Report No. 22/300

THAILAND

September 2022

2022 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR THAILAND

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2022 Article IV consultation with Thailand, the following documents have been released and are included in this package:

- A **Press Release** summarizing the views of the Executive Board as expressed during its August 31, 2022, consideration of the staff report that concluded the Article IV consultation with Thailand.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on August 31, 2022, following discussions that ended on June 10, 2022, with the officials of Thailand on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on August 30, 2022.
- An **Informational Annex** prepared by the IMF staff.
- A **Supplementary Information** updating information on recent developments.
- A **Statement by the Executive Director** for Thailand.

The documents listed below have been or will be separately released.

Selected Issues

The IMF's transparency policy allows for the deletion of market-sensitive information and premature disclosure of the authorities' policy intentions in published staff reports and other documents.

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International Monetary Fund

Washington, D.C.

PRESS RELEASE

PR/22/299

IMF Executive Board Concludes 2022 Article IV Consultation with Thailand

FOR IMMEDIATE RELEASE

Washington, DC – **August 31, 2022:** The Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with Thailand.

Economic activity in Thailand is recovering from an unprecedented crisis, supported by a swift and bold policy response, while inflation is on an upward trend reflecting rising commodity prices. Thailand's economy grew by 1.5 percent in 2021 bolstered by the implementation of a multi-pronged policy support package, and a rebound in exports. The current account balance turned into a deficit of 1.7 percent of GDP in 2021, from a surplus of 4.2 percent of GDP in 2020, largely reflecting a sharp decline in tourism receipts and soaring shipping costs amid supply chain disruptions. The growth momentum continued so far this year based on strong consumption and exports. Reflecting rising energy prices, headline inflation accelerated to 5.9 percent y/y during Jan-July 2022 from a 1.2 percent average inflation recorded in 2021.

The economic recovery continues in 2022 but is clouded by the deteriorated global outlook. Real GDP is projected to grow by 2.8 percent in 2022, lower than initially expected, as the prolonged war in Ukraine dampens domestic demand through rising commodity prices and lowers external demand. As the pandemic subsides, GDP growth is expected to rebound to about 4 percent in 2023 before trending down to its potential rate of about 3 percent in the medium term. Headline inflation is expected to average 6.1 percent in 2022 driven by high commodity prices, before decelerating to 2.5 percent in 2023—within the Bank of Thailand's (BOT) target range. The current account deficit is expected to narrow to -0.8 percent of GDP in 2022 as tourism receipts gradually pick up along with the removal of COVID-19 entry restrictions, and to return to a surplus of around 3-3.5 percent of GDP over the medium term. Growth prospects critically hinge on the return of foreign tourists, while soaring energy prices due to the prolonged war in Ukraine could further weigh on private consumption and external demand. A disorderly tightening of global financial conditions and spillovers from a sharper growth slowdown in China amidst already-stretched private sector balance sheets could derail the economy's rebound.

[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

Executive Board Assessment[2]

Executive Directors commended the authorities for their bold and appropriate policy response, which helped maintain macroeconomic and financial stability and facilitated a growth rebound despite the severe impact of the COVID-19 pandemic. Directors acknowledged that the recovery is fragile and uneven with risks to the outlook tilted to the downside. In that context, they encouraged the authorities to remain agile in their policy response under fast-changing circumstances and to press ahead with structural reforms to support sustainable, inclusive growth. Directors also emphasized the importance of a well-coordinated and integrated approach to recalibrate monetary, exchange rate, and fiscal policies should an adverse scenario materialize.

Directors welcomed the Bank of Thailand's efforts to ensure that inflation expectations remain well anchored. They emphasized the importance of a data-dependent monetary policy normalization path and welcomed the recent policy rate increase and clear communication of a gradual normalization on the back of continued economic recovery. Directors also welcomed ongoing progress in strengthening financial sector risk analysis, specialized financial institutions' supervision and bank resolution, as well as efforts to accelerate household debt restructuring, which should be accompanied by a gradual tapering of the financial sector support measures. Continued efforts to enhance the AML/CFT framework are also important.

Directors agreed with the near-term fiscal consolidation while encouraging the authorities to continue to gradually replace untargeted energy subsidies with targeted support to vulnerable groups. Over the medium term, a more gradual fiscal consolidation underpinned by enhanced domestic revenue mobilization could support structural reforms to strengthen the economy's resilience while rebuilding policy buffers. Enhancing fiscal governance and transparency also remains a priority.

Most Directors noted that Thailand's external position remains moderately stronger than warranted by medium term fundamentals and desirable policies, while some other Directors called for a more cautious interpretation of the external balance assessment given the pandemic-induced structural shifts in the global economy. Directors welcomed the authorities' commitment to exchange rate flexibility and the easing of foreign exchange regulations and concurred that FX interventions should be limited to avoiding disorderly market conditions.

Directors encouraged the authorities to implement a well-coordinated structural reform agenda, supported by capacity development, to boost potential output and capitalize on the growth opportunities provided by the ongoing digital and green transformations. In this regard, measures to enhance human capital to close the skills gap will be important. They welcomed the authorities' efforts to reposition Thailand's financial sector for a sustainable, digital economy and highlighted the importance of balancing efficiency gains from financial innovation against financial stability risks.

[2] At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summing up can be found here: http://www.IMF.org/external/np/sec/misc/qualifiers.htm.

Table 1. Thailand: Selected Economic Indicators, 2018–23

					Projections	
	2018	2019	2020	2021	2022	2023
Real GDP growth (y/y percent change) 1/	4.2	2.2	-6.2	1.5	2.8	4.0
Consumption	4.1	3.4	-0.6	-0.2	5.1	0.5
Gross fixed investment	3.9	2.0	-4.8	2.0	4.5	1.2
Inflation (y/y percent change)						
Headline CPI (period average)	1.1	0.7	-0.8	1.2	6.1	2.5
Core CPI (period average)	0.7	0.5	0.3	0.2	2.6	1.7
Saving and investment (percent of GDP)						
Gross domestic investment	25.2	23.8	23.7	29.1	29.2	27.7
Private	16.9	16.9	16.8	17.0	18.4	18.1
Public	5.8	5.7	6.4	6.6	6.3	5.7
Change in stocks	2.4	1.2	0.4	5.5	4.6	3.9
Gross national saving	30.8	30.8	27.9	26.9	28.5	29.9
Private, including statistical discrepancy	25.3	26.7	26.8	27.8	27.8	27.3
Public	5.5	4.1	1.1	-0.8	0.7	2.6
Foreign saving	-5.6	-7.0	-4.2	2.2	0.8	-2.2
Fiscal accounts (percent of GDP) 2/						
General government balance 3/	0.1	-0.8	-4.7	-7.0	-5.6	-3.2
SOEs balance	0.5	0.6	-0.1	-0.4	-0.7	0.2
Public sector balance 4/	0.6	-0.3	-4.8	-7.4	-6.2	-3.0
Public sector debt (end of period) 4/	41.9	41.1	49.5	58.4	61.2	61.4
Monetary accounts (end of period, y/y percent change)						
Broad money growth	4.7	3.6	10.2	4.8	-0.2	3.5
Narrow money growth	2.8	5.7	14.2	3.5	6.9	5.0
Credit to the private sector by depository corporations	5.8	2.4	4.5	4.5	6.9	5.0
Balance of payments (In billions of U.S. dollars)						
Current account balance	28.4	38.0	21.2	-11.0	-4.2	12.5
(In percent of GDP)	5.6	7.0	4.2	-2.2	-0.8	2.2
Exports, f.o.b.	251.1	242.7	227.0	270.6	301.7	312.5
Growth rate (dollar terms)	7.5	-3.3	-6.5	19.2	11.5	3.6
Growth rate (volume terms)	3.9	-3.7	-5.8	15.4	3.1	2.1
Imports, f.o.b.	228.7	216.0	186.1	230.7	271.9	280.9
Growth rate (dollar terms)	13.7	-5.6	-13.8	23.9	17.9	3.3
Growth rate (volume terms)	7.6	-5.8	-10.4	18.8	6.2	4.5
Capital and financial account balance 5/	-21.2	-24.5	-2.8	3.5	4.2	-12.5
Overall balance	7.3	13.6	18.4	-7.5	0.0	0.0
Gross official reserves (including net forward position, end of period) (In billions of U.S. dollars)	239.4	258.7	287.4	279.2	279.2	279.2
(Months of following year's imports)	13.3	16.7	15.0	12.3	11.9	11.2
(Percent of short-term debt) 6/	288.4	325.8	310.4	299.2	312.7	299.7
(Percent of ARA metric)	224.7	232.6	253.3	236.3	227.4	213.5
Forward position of BOT (end of period)	-33.7	-34.3	-29.3	-33.2	…	…
Exchange rate (baht/U.S. dollar)	32.3	31.0	31.3	32.0	…	…
NEER appreciation (annual average)	4.0	6.9	-0.5	4.1	…	…
REER appreciation (annual average)	3.0	5.7	-2.6	3.2	…	…
External debt						
(In percent of GDP)	32.2	31.6	38.2	39.0	39.4	39.0
(In billions of U.S. dollars)	163.1	171.9	190.7	197.5	210.3	225.5
Public sector 7/	35.7	38.0	37.2	41.5	41.8	42.4
Private sector	127.4	133.9	153.5	156.0	168.5	183.0
Medium- and long-term	65.9	74.6	80.0	84.1	99.1	109.7
Short-term (including portfolio flows)	61.5	59.3	73.5	71.8	69.4	73.3
Debt service ratio 8/	6.0	6.3	6.3	7.3	7.3	7.3
Memorandum items:						
Nominal GDP (billions of baht)	16,373.3	16,892.4	15,636.9	16,178.7	17,295.2	18,156.5
(In billions of U.S. dollars)	506.5	544.0	499.7	505.9	…	…

Sources: Thai authorities; CEIC Data Co. Ltd.; and IMF staff estimates and projections.
1/ This series reflects the new GDP data based on the chain volume measure methodology, introduced by the Thai authorities in May 2015.
2/ On a fiscal year basis. The fiscal year ends on September 30.
3/ Includes budgetary central government, extrabudgetary funds, and local governments.
4/ Includes general government and SOEs.
5/ Includes errors and omissions.
6/ With remaining maturity of one year or less.
7/ Excludes debt of state enterprises.
8/ Percent of exports of goods and services.

INTERNATIONAL MONETARY FUND

THAILAND

STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION

August 30, 2022

KEY ISSUES

Context. Thailand's economy is recovering from an unprecedented crisis emanating from multiple waves of the COVID-19 pandemic. Ample policy space has allowed a swift and bold policy response and vaccine rollout has accelerated. However, the recovery is weak and uneven across sectors, with inflation rapidly rising driven by energy prices. Downside risks dominate the outlook, sharpening policy tradeoffs. The pandemic has also brought to the fore the urgency for Thailand to identify new growth drivers to reverse the pre-pandemic trend of declining productivity growth and meet the challenges of the post-pandemic world.

Policies. An agile and carefully calibrated policy mix is required to deal with rapidly-evolving circumstances, harness the growth benefits of the digital and green transformation and improve social outcomes.

- *Monetary*. A data-dependent monetary policy normalization path will be critical to avoid the risk of de-anchoring inflation expectations. The Bank of Thailand (BOT) should continue to closely monitor inflation developments and react timely to generalized price pressures.
- *Financial*. An acceleration of ongoing efforts to facilitate private debt restructurings is needed, including by addressing remaining gaps in the insolvency regime, complemented by macro-prudential measures to limit excessive private leverage and related financial stability risks.
- *Fiscal*. While the gradual withdrawal of the unprecedented pandemic-era fiscal stimulus is appropriate, fiscal policy should continue to play an active role in protecting vulnerable groups and support the still-fragile recovery. A slower medium-term consolidation, buttressed by revenue mobilization could help balance the objectives of rebuilding buffers and supporting needed structural reforms.
- *Structural*. Well-coordinated efforts to upskill Thailand's labor force, increase investments in digital infrastructure and R&D, and ease business regulations will be key in enabling Thailand to capitalize on the growth opportunities of the digital and green transformations and meet the needs of the post pandemic economy.

Approved By
Anne-Marie Gulde-Wolf (APD) and
Maria Gonzalez (SPR)

Discussions took place in Bangkok during May 17-31, 2022, and the concluding meeting was held by video conference on June 10, 2022. The team comprised C. Deléchat (head), S. Kaendera, U. Rawat, A. Stepanyan, and M. Sy (all APD). The mission met with the Minister of Finance Arkom Termpittayapaisith, Bank of Thailand Governor Sethaput Suthiwartnarueput, senior government officials, private sector representatives and development partners. Ms. Lim, Executive Director, and Mr. Dacharux (OED) accompanied the mission. Mr. Nahata (APD) provided analytical inputs. Ms. Reis and Ms. Tanseco (APD) coordinated the production of the report.

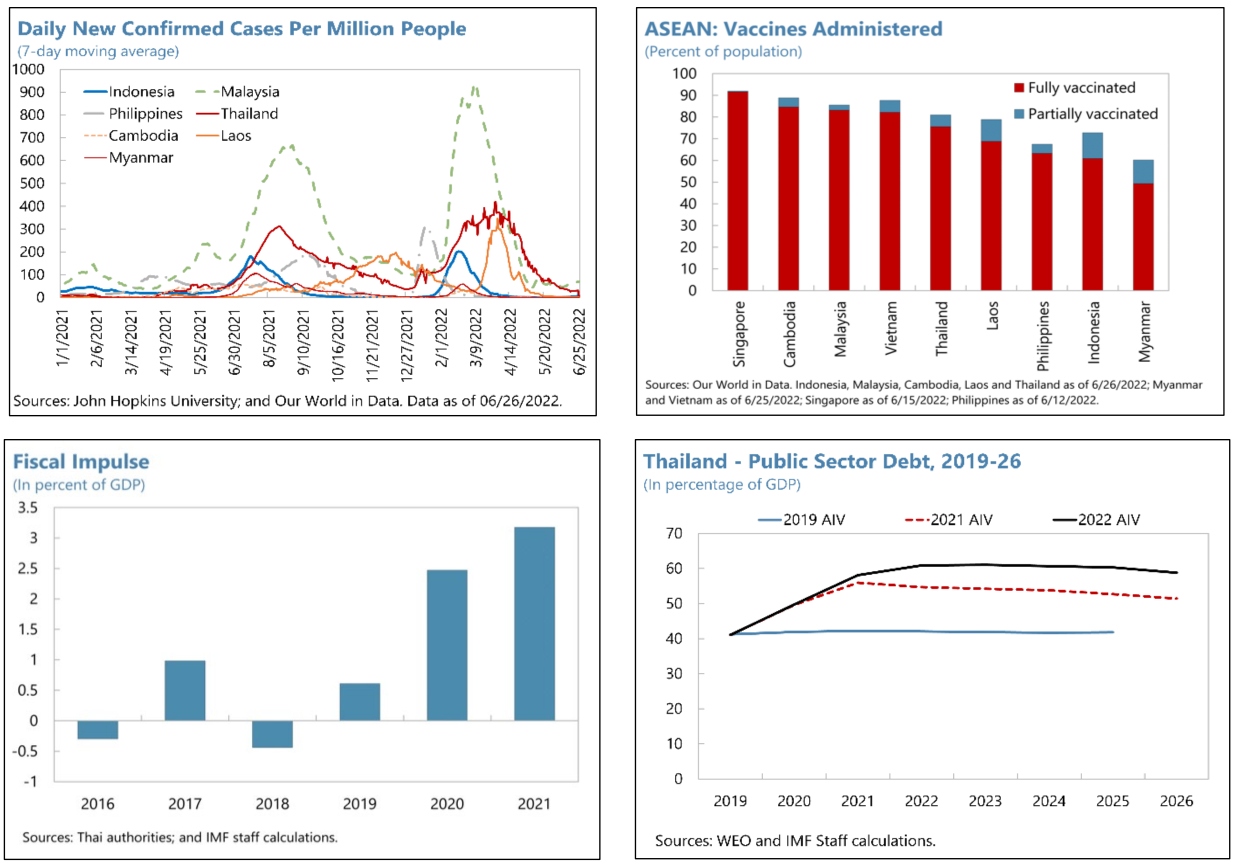
CONTENTS

ANNEXES

CONTEXT: BUILDING BACK BETTER POST-PANDEMIC

1. **The authorities' judicious use of their ample economic buffers helped maintain economic stability during the pandemic**. Economic activity saw its largest fall since the Asian crisis in 2020 and only gradually rebounded in 2021, as successive COVID-19 outbreaks weighed on Thailand's tourism-dependent economy and hindered the government's reopening efforts. The government used available fiscal space to deploy an unprecedented policy package to mitigate the pandemic's impact on consumption and employment, which pushed up public debt to 58 percent of GDP at end-2021 (from 41 percent of GDP pre-pandemic, Figure 1). With over 75 percent of the population fully vaccinated, the government has gradually relaxed travel restrictions (Text Figure 1).[1]

Text Figure 1. Thailand: Pandemic's Evolution and Fiscal Response

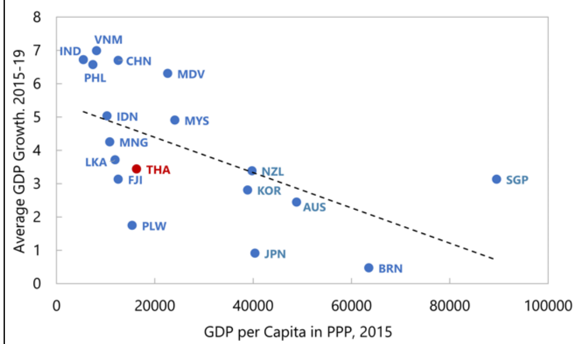


2. **The pandemic induced various structural shifts, which, combined with Thailand's pre-existing structural weaknesses, point to a need to identify new growth drivers**. Pre-pandemic, Thailand had been growing slower than peers, largely reflecting low productivity growth and lackluster human and physical capital accumulation, high household debt, and weak

[1] Testing requirements for vaccinated travelers were eliminated on May 1, 2022, and COVID-19-related entry requirements were eliminated on July 1, 2022.

social safety nets for a rapidly-aging population. Protracted political uncertainty and policy fragmentation stalled structural reforms and weighed on investment, limiting Thailand's participation in the global value chains (GVCs) for innovation-based manufacturing and services. By putting in motion sectoral shifts away from contact-intensive sectors and accelerating digital and green transformation trends, the COVID-19 pandemic has increased the urgency of structural reforms needed to mitigate the economic scarring from the pandemic and leverage growth opportunities from the ongoing transformation.

Unconditional Convergence: Thailand vs. Asia and Pacific



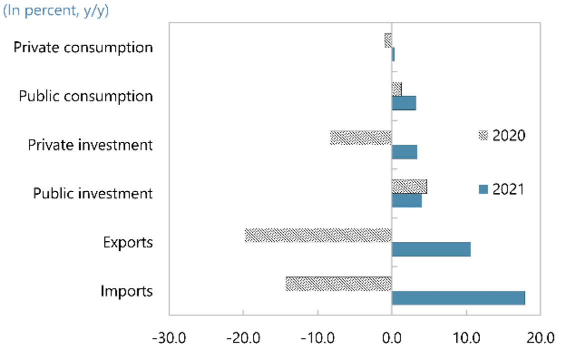
Sources: World Bank; Haver Analytics; and IMF staff calculations.

RECENT DEVELOPMENTS: A FRAGILE AND UNEVEN RECOVERY

3. **A gradual but uneven recovery is underway, helped by policy support and a rebound in exports**. GDP expanded by 1.5 percent in 2021 after a 6.2 percent contraction in 2020 (Table 1). Strong public consumption and investment on the back of a 2.3 percent of GDP fiscal stimulus and targeted liquidity support schemes for SMEs (Annex I), together with a rebound in goods' exports, supported the recovery (Text Figure 2; Table 2; Tables 3a-b). The growth momentum continued in 2022 with GDP expanding by 2.2 percent (y/y) in 2022Q1 thanks to strong consumption and exports (Figure 2). High frequency indicators point to improved consumer confidence and business sentiment in 2022Q2. With the gradual relaxation of travel restrictions, tourism has picked up, with over 2 million arrivals in January-June 2022 (0.4 million in 2021).

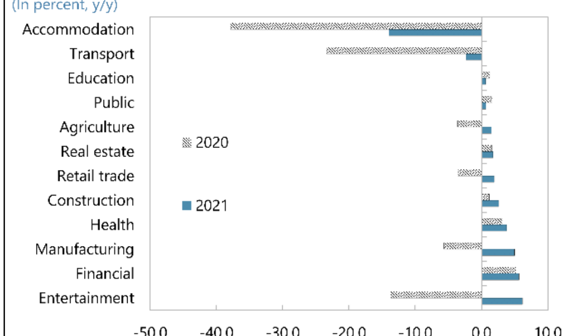
Text Figure 2. Thailand: Real Sector Developments

Demand: Growth Rates
(In percent, y/y)



Sources: Thai authorities; and IMF staff calculations.

Supply: Growth Rates
(In percent, y/y)

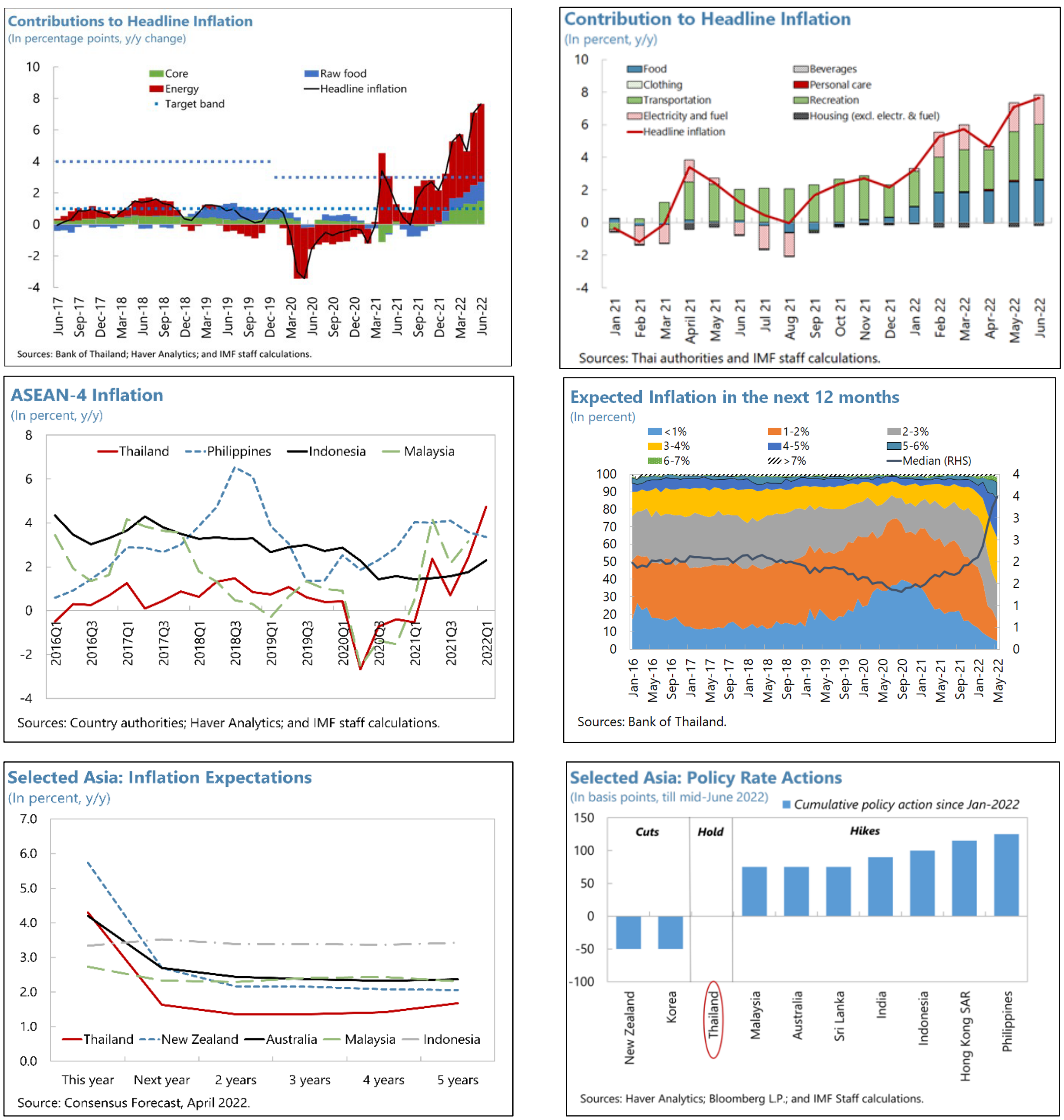


Sources: Thai authorities; and IMF staff calculations.

4. **Inflation reached its highest level in over a decade reflecting rising commodity prices**. Headline inflation averaged 1.2 percent in 2021 increasing from a negative inflation of 0.8 percent in 2020, and further accelerated to 5.6 percent y/y during Jan-June 2022 reflecting rising energy prices (Text Figure 3). Core inflation averaged 1.9 percent during the same period largely driven by

higher prepared food prices. Price caps introduced by the government on key fuel products, administered prices for goods and services representing about 26 percent of the CPI basket, and targeted subsidies on electricity mitigated the impact of high commodity prices on inflation in early 2022. However, the gradual phasing out of the fuel products' price caps helped push June headline inflation to 7.7 percent, its highest level in 14 years. Food and beverages, transportation, and electricity and fuel represented the largest increases in the June CPI components. Short-term inflation expectations also picked up, although they remain well-anchored over the medium term.

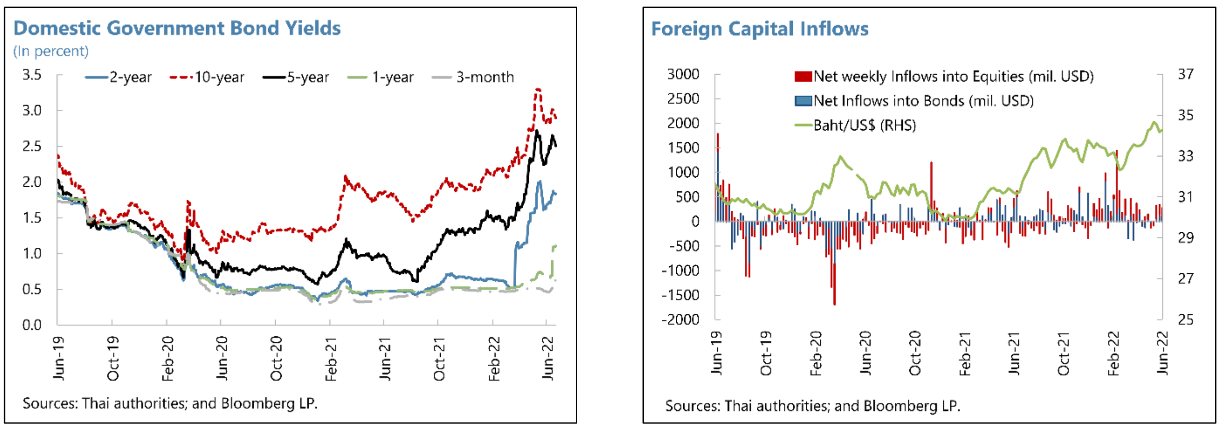
Text Figure 3. Thailand: Inflation Dynamics



Note: The energy component in top left chart is much broader and accounts for 12.4 percent of the CPI basket than the component electricity and fuel in the top right chart that accounts for only 5.5 percent of the CPI basket.

5. The Bank of Thailand (BOT) has started signaling an earlier-than-initially envisaged start of policy normalization and financial conditions have tightened. Although the policy rate remains at an historic low of 0.5 percent, in June the BOT shifted its communication from an "on-hold for longer" position to signaling that a very accommodative monetary policy might be less needed going forward. The BOT revised its inflation projection upwards from 4.9 to 6.2 percent for average headline inflation and from 2.0 to 2.2 percent for core inflation in 2022. Bond yields started to increase in March 2022 and financial conditions are tightening (Text Figure 4). Capital continued to flow into the economy, largely driven by equity flows, while bond flows receded with the tightening global financial conditions. The Thai baht has depreciated by over 5 percent against the USD in 2022 and the stock market valuation has declined by around 6 percent, though with limited volatility so far.

Text Figure 4. Thailand: Financial Conditions



6. The pandemic has led to highly-differentiated socio-economic outcomes across sectors and skill levels. Despite an expansion in overall employment, the unemployment rate inched up to 2 percent in 2021 from 1.7 percent in 2020 reflecting increased participation rates to compensate for the decline in family incomes. Employment outcomes of low-skilled workers continued to be weak, while female employment recovered faster than male (though female employment was initially more impacted). Nonetheless, the government's efforts to shield vulnerable groups, including disadvantaged informal workers, mitigated the impact of the pandemic on poverty and inequality (Text Figure 5). Without government support poverty would have doubled in 2020 (social assistance schemes are estimated to have reached more than 80 percent of households).[2]

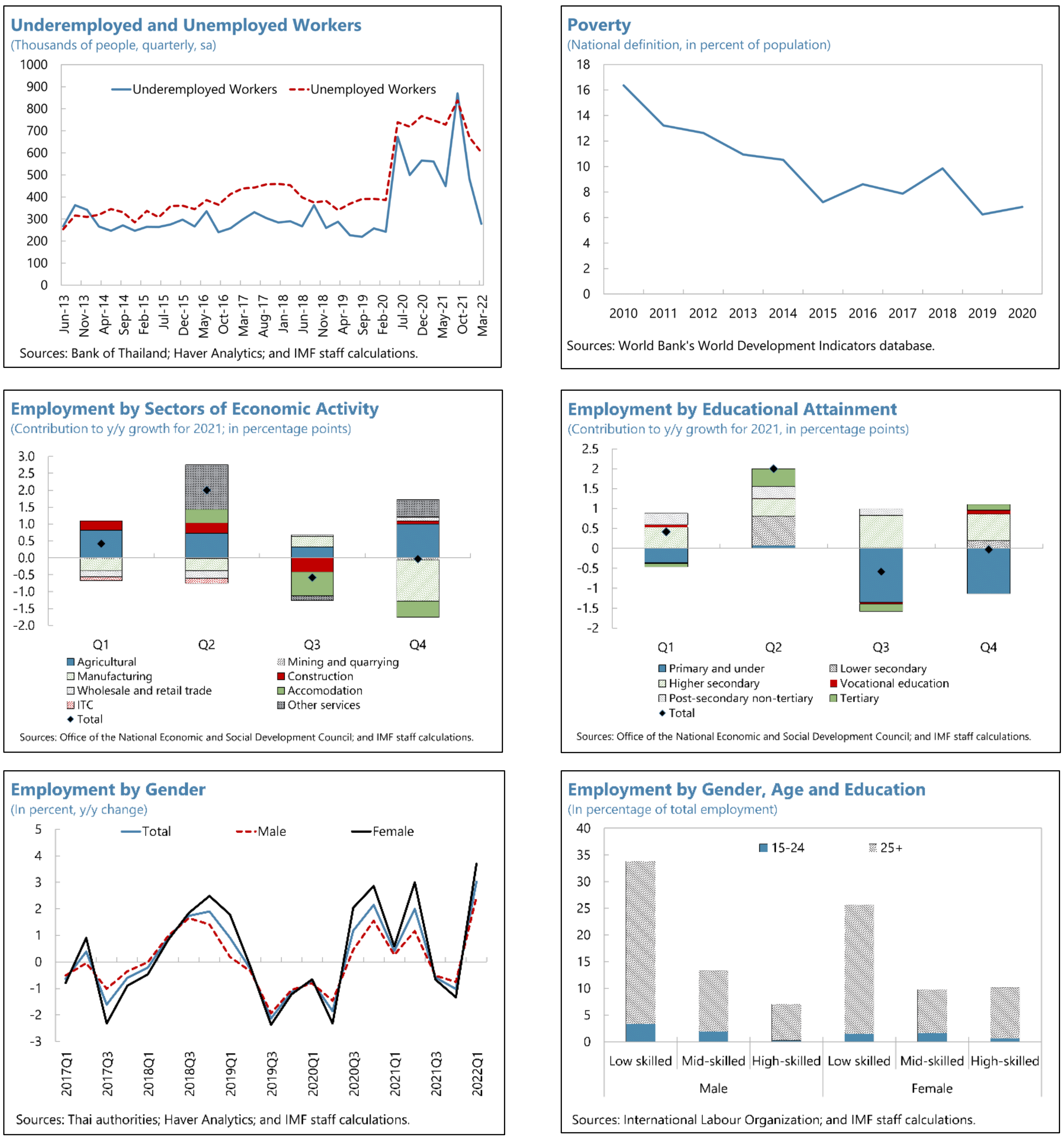
7. The financial sector weathered the pandemic well, but high private leverage remains a source of vulnerability. The banking system remains profitable, liquid, and adequately-capitalized with low NPLs (3 percent), though this reflects policy support and relaxation measures (Figure 3; Table 4). [3] Credit to the private sector expanded by 4.5 percent in 2021Q4 and 4.3 percent in 2022Q1 (though turning negative in real terms in 2022Q1), mostly driven by large corporates, although SME credit also increased, supported by the soft loan program (Figure 4; Table 5). Thus, corporate debt

[2] World Bank, 2021, "Towards Social Protection 4.0".

[3] Loan loss provisions remained high at end-2021 equivalent of an NPL coverage ratio of about 163 percent (from 144 percent in Q22020). The liquidity coverage ratio stood at 189 percent at the end of 2021. The 2019 FSAP found that the banking system is resilient to large funding withdrawals despite a front-loaded funding maturity structure.

increased by about 2 percentage points to about 79 percent of GDP in 2021, while household debt remained stable at about 90 percent of GDP after a sharp rise in 2020.[4] Loans under relief (LUR) halved to 17 percent of total loans at end-2021 compared with mid-2020, and further declined to about 14 percent in 2022Q1, owing to the economic recovery and increased targeting of the support

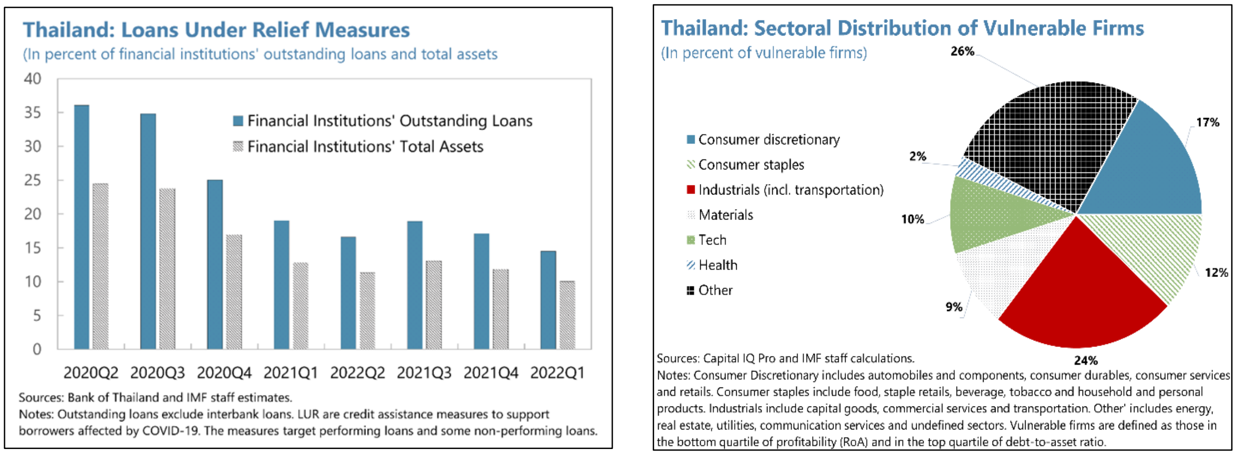
Text Figure 5. Thailand: Socio Economic Developments



[4] Mortgage loans account for about 35 percent of total household debt at end of 2021 in Thailand.

measures.[5] However, many firms in sectors hit hard by the pandemic remain vulnerable (Text Figure 6). A sharp deterioration in the financial situation of SMEs, in particular, could affect the financial sector indirectly as SMEs account for over two-thirds of total employment.[6]

Text Figure 6. Thailand: Loans Under Assistance and Vulnerable Firms



8. **Thailand's overall external position in 2021 was moderately stronger than warranted by medium-term fundamentals and desirable policies** (Annex II). The current account balance declined from 4.2 percent of GDP in 2020 to -2,2 percent of GDP in 2021, largely reflecting a sharper decline in tourism receipts and soaring shipping costs amid supply chain disruptions (Figure 5; Table 6). This, together with tightening global financial conditions, resulted in a 7.6 percent REER depreciation in 2021 (relative to the 2020 average). Foreign exchange intervention (FXI) was largely two-sided in line with capital flow movements (Text Figure 7), though FX reserves (excluding the net forward position) declined by US$12 billion to US$246 billion at end-2021 (still well-above reserve adequacy metrics).[7] Based on an update of the External Balance Assessment (EBA), and accounting for Thailand-specific factors, staff assess the cyclically-adjusted current account gap to be around 0.7–2.1 percent of GDP, and the REER gap to be 1.6-4.8 percent.[8] Structural factors, including weak social safety nets and widespread informality resulting in high precautionary savings and subdued investment, are important drivers of the persistent savings-investment gap in Thailand.

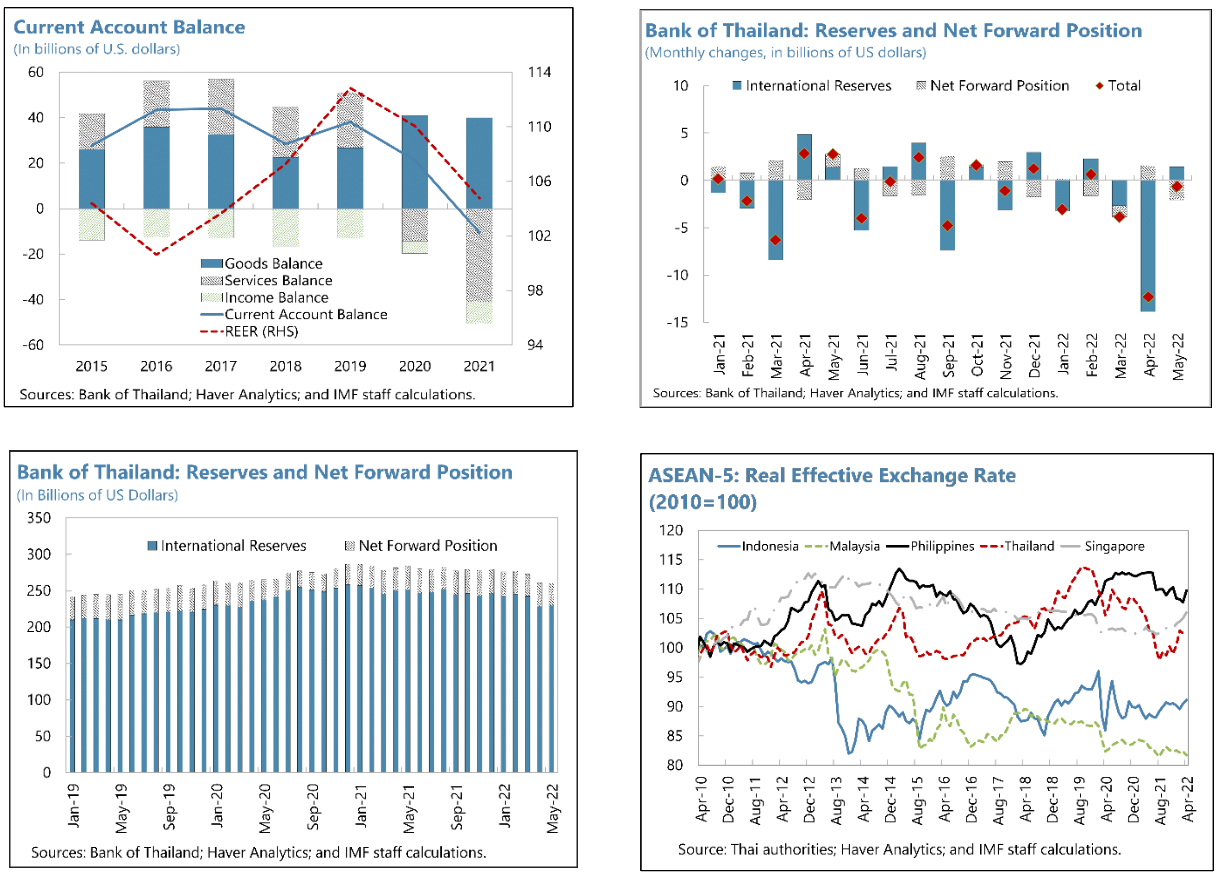
[5] LUR are credit assistance measures to support borrowers affected by COVID-19. They include, for example, debt repayment deferment, interest rate or principal reduction, debt restructuring with new financing, etc. The measures target performing loans and some non-performing loans.

[6] Loans to SMEs account for about 19 percent of banks' total lending in 2022Q1.

[7] In August 2021, Thailand received 3078.5 million SDR as part of a general SDR allocation. The authorities have not used the SDR allocation.

[8] The estimated current account gap is subject to higher-than-usual uncertainty given the large swing in services balance in 2021 and the associated uncertainty about the appropriate adjustments to account for COVID-19 related factors.

Text Figure 7. Thailand: Current Account Balance and Reserves



OUTLOOK AND RISKS: GATHERING CLOUDS

9. The worsening global outlook is weighing on Thailand's recovery prospects.[9] Thailand's growth is projected at 2.8 percent in 2022, as the prolonged war in Ukraine dampens domestic demand, mostly through rising commodity prices and lowers external demand. As the pandemic subsides, GDP growth is projected to rebound to 4 percent in 2023 before trending down to its potential rate of about 3 percent in the medium term. Some hard-hit sectors such as tourism and transportation are expected to recover more slowly. This, combined with the impact of the crisis on private sector balance sheets, would weigh on medium-term growth, keeping the level of GDP in 2025 at about 11 percent below pre-pandemic expectations.[10] Thus, the large output gap caused by the pandemic is projected to close only by 2024 (Text Figure 8, Annex III). Headline inflation is expected to average 6.1 percent in 2022 driven by high commodity prices. Assuming no further

[9] Staff's baseline projections incorporate the materialization of several risks, including (i) a prolonged war in Ukraine (but with no further extension of the conflict) and related sanctions; (ii) the faster-than-envisaged normalization of monetary policy in Advanced Economies (AEs) in response to high and persistent inflation, which will depress global output in 2022-23; and (iii) the slowdown of growth in China. The COVID-19 pandemic's health and economic impacts are assumed to gradually fade over 2022.

[10] Emerging markets, particularly those with leveraged public and private sectors, large shadow economy and restrictive business and labor regulations tend to experience a larger scarring from the pandemic compared with advanced economies (see IMF Country Report No. 21/97, Appendix III).

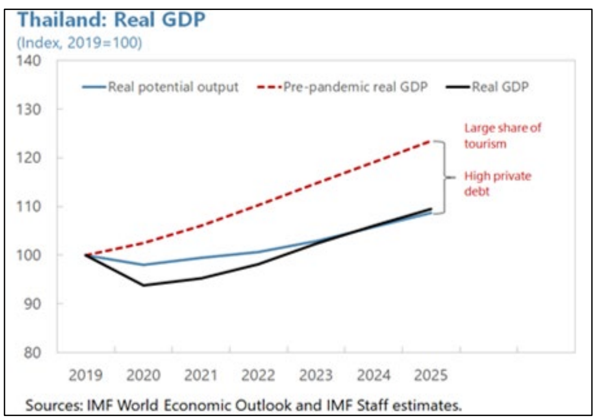
increase in global commodity prices, headline inflation would average 2.5 percent in 2023—within the BOT's target range and converge to 2 percent over the medium term. The CA balance would narrow to -0.8 percent of GDP in 2022 as tourism receipts recover and return to a surplus of around 3-3.5 percent of GDP over the medium term (Text Table 1).[11]

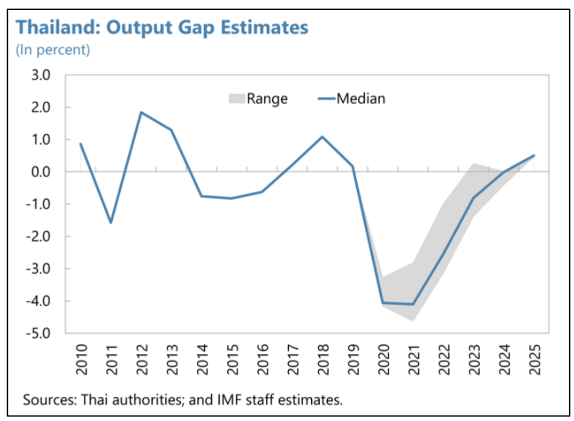
Text Table 1. Thailand: Selected Economic Indicators, 2018-27

					Projections					
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Real GDP growth (y/y percent change)	4.2	2.2	-6.2	1.5	2.8	4.0	3.6	3.3	3.2	3.0
Headline CPI inflation (period average, y/y percent change)	1.1	0.7	-0.8	1.2	6.1	2.5	1.5	2.3	2.0	2.0
Output Gap (in percent of potential output) 1/	1.1	0.2	-4.2	-4.1	-2.6	-0.8	0.0	0.5	0.5	0.0
Fiscal accounts (percent of GDP, fiscal year basis)										
General government balance	0.1	-0.8	-4.7	-7.0	-5.6	-3.2	-3.2	-3.4	-3.4	-3.5
Public sector balance	0.6	-0.3	-4.8	-7.4	-6.2	-3.0	-2.9	-3.1	-2.9	-3.0
Public sector debt (end of period)	41.9	41.1	49.5	58.4	61.2	61.4	61.2	60.9	59.4	59.6
Balance of payments (Percent of GDP)										
Current account balance	5.6	7.0	4.2	-2.2	-0.8	2.2	3.7	3.3	3.4	3.3
Gross official reserves (including net forward position, billions of U.S. dollars	239.4	258.7	287.4	279.2	279.2	279.2	279.2	279.2	279.2	279.2
External debt (percent of GDP)	32.2	31.6	38.2	39.0	39.4	39.0	40.7	40.2	41.3	39.1

Sources: Thai authorities; CEIC Data Co. Ltd.; and IMF staff estimates and projections.
1/ Based on Multivariate filter.

Text Figure 8. Thailand: Real GDP, Potential Output and Output Gap Developments





10. Uncertainty around the outlook is likely to remain elevated for some time, with the balance of risks tilted to the downside. While a faster-than-envisaged recovery in tourism and a swift end to the war in Ukraine could contribute to stronger growth than currently envisaged, most risks would lead to a worse economic outlook (Table 7).

[11] Tourist arrivals are expected to gradually increase from 8 million in 2022 to 18 million in 2023 as travel restrictions in China are removed.

Global risks

- *Resurgent pandemic. A resurgence of the COVID-19 pandemic with the spread of new variants and associated* mobility restrictions could weigh on Thailand's tourism sector, delaying the recovery in the near term and prompting persistent behavioral changes, requiring a deep restructuring of the sector.
- *Further escalation of the war in Ukraine.* Due to a prolonged war in Ukraine commodity prices are likely to remain elevated for longer increasing inflationary pressures both for Thailand and globally. Further broadening of sanctions on Russia could push commodity prices even higher and generate large spillovers to the euro area, which would further intensify inflation pressures and depress goods exports and tourism, as well as intensify global risk aversion, leading to a disorderly tightening of global financial conditions (see below).
- *Disorderly tightening of global financial conditions.* Given the faster tightening of advanced economies' (AE) monetary policy, the increase in global risk aversion could be larger than anticipated and generate sizable financial spillovers, resulting in further exchange rate depreciation and adding to already-high inflationary pressures. The lack of significant balance sheet mismatches in Thailand should however limit the negative impact on financial stability.
- *Spillovers from a further growth slowdown in China*. A further slowdown of economic activity in China would considerably reduce Thailand's external demand and further weigh on tourist arrivals from China.[12]
- *De-globalization.* Fragmentation in global value chains could result in reshoring and shortening of value chains that would adversely affect Thailand's trade-dependent economy. In addition, shortages of commodities and materials used in manufacturing could negatively affect the automotive and electronics sectors.

Domestic risks

- *Financial sector stress.* Given the elevated private leverage, a prolonged pandemic (and/or war in Ukraine) and AEs' monetary policy tapering in combination with a faster-than-envisaged withdrawal of the policy support in Thailand could trigger an increase in insolvencies and derail the recovery.[13]
- A lack of reforms, including due to the political fragmentation, needed to address pre-pandemic structural weaknesses would amplify the scarring impact of the pandemic. This would also likely widen already-elevated income disparities. A fast-aging population presents potential challenges on productivity and fiscal sustainability (Figure 6). Thailand is also susceptible to climate-related natural hazards, which is a long-term concern (Selected Issues Paper, Chapter I).

Authorities' Views

11. The authorities broadly shared staff's views on the economic outlook and risks. They were however slightly more optimistic on Thailand's growth outlook. They highlighted that robust

[12] Model estimates suggest that a one percent decline in China's GDP lowers Thailand's output by about 0.2 percent (IMF Country Report No. 16/140.)

[13] The 2019 FSAP noted that systemic risk remains limited.

private consumption, underpinned by the gradual rebound of tourism on the back of a continued progress of the vaccination roll-out, will support the near-term recovery. They agreed that uncertainty is high and viewed rising inflation and geopolitical tensions as key risks.

12. The authorities expressed reservations about the external balance assessment. They reiterated their view that the current account approach of the EBA has technical limitations. They viewed that it is difficult for the EBA adjustors to adequately capture the transitory versus structural effects of the pandemic with a high degree of precision. Given the higher-than-usual uncertainty around the CA gap estimation due to the pandemic, they urged for caution regarding the presentation and interpretation of the EBA results, including on the role of the exchange rate versus macroeconomic and structural policies in closing the CA gap.

POLICY DISCUSSIONS: TOWARDS A NEW, SUSTAINABLE AND INCLUSIVE GROWTH MODEL

13. Discussions focused on the near-term policy mix and contingent policies under exceptional uncertainty and on mutually-reinforcing reforms to minimize scarring from the pandemic and raise productivity. In the near term, staff recommends a gradual tapering of the unprecedented policy support, while improving the targeting of the remaining programs to better support the recovery and enhance inclusion. If downside risks materialize, an integrated policy approach including close coordination between monetary and fiscal policies would help address the sharpened output-inflation tradeoffs. Over the medium term, reforms to address pre-pandemic weaknesses in human and physical capital are needed to harness the productivity benefits of a digital and green economy, minimize scarring from the pandemic, and improve social outcomes. The authorities made notable progress in implementing staff's past advice (Table 8) and largely shared staff's views on the near- and medium-term policy mix.

A. Monetary and Exchange Rate Policies

14. Though the monetary policy stance remains accommodative, the BOT's clear communication of a data-dependent normalization path is welcome. The authorities are facing a difficult trade-off between continuing to buttress the still-weak recovery and fending off risks of de-anchoring of inflation expectations triggered by the rapid rise in inflation. Staff noted that an earlier start of the normalization might be warranted given heightened risks of wage and generalized price pressures from second-round effects of higher energy prices as well as exchange rate depreciation.[14] In this regard, the BOT should continue to closely monitor inflation developments to ensure a forward-looking monetary policy and timely initiate a data-dependent adjustment of the policy rate. Complementary and proactive use of macroprudential policy tools, including a generalized debt-service-to-income (DSTI) ratio would help address financial stability risks stemming from high private leverage (see below).

[14] Even though the exchange rate pass-through has been found to be generally low in Thailand, Nookhwun (2019) finds that the pass-through from depreciation is asymmetric and larger than for appreciations (Annex IV).

15. An agile and coordinated policy response will be essential if an adverse scenario materializes. An adverse scenario of prolonged war in Ukraine triggering a broad-based risk-off shock accompanied with disorderly normalization in advanced economies will further worsen the output-inflation trade-off in Thailand. Based on the IPF approach, under the adverse scenario monetary policy should tighten to bring inflation back to the target range and anchor inflation expectations (Annex IV).[15] A complementary increase in discretionary spending, using remaining fiscal space, followed by a gradual consolidation, would help mitigate the output impact of the shock. However, if the shock turns out to be more severe resembling the impact of growth and combination shocks (Annex V) with deteriorating debt dynamics, the room for a fiscal response would be limited. Given Thailand's relatively liquid FX market, with no strong evidence of FX mismatches that pose systemic risks, the exchange rate should continue to act as a shock absorber with FXI limited to disorderly market conditions (DMC). However, in a scenario of sharp and disorderly exchange rate depreciation and a spike in risk premia threatening to de-anchor inflation expectations, a complementary use of FXI along with interest rate hikes would help lower the output-inflation trade-off, given Thailand's strong external position (Annex IV). Staff encourages the authorities to continue with their efforts to promote a more resilient FX ecosystem and welcomes the recent relaxation of foreign exchange regulations on residents.[16] Staff recommends phasing out the remaining capital-flow management (CFMs) measures on non-resident baht accounts. In line with past advice, staff recommends the publication of FXI data (with an appropriate lag to guard against market sensitivities).

Authorities' Views

16. The BOT reaffirmed its commitment to bringing inflation back within the target range. The authorities broadly agree with staff that the economy will recover gradually against the backdrop of heightened risks. In this dynamic environment, which calls for monetary policy to be forward-looking and data-dependent, they also agree that communication is an integral part of the central bank tools to help anchor expectations and enhance the effectiveness of monetary policy.

17. The authorities appreciated the use of an integrated policy approach to analyze adverse macroeconomic scenarios and welcomed ongoing IMF CD on the IPF. They noted the importance of initial conditions and country-specific characteristics in the choice of appropriate policy instruments. In Thailand's case, these include the high costs of FX hedging, particularly for smaller firms, and vulnerabilities related to high household debt. They broadly agreed with staff's analysis, including on the complementary role of monetary and fiscal policies. However, they noted that the inclusion of financial stability considerations—notably household-specific macroprudential tools—and strengthening the fiscal block in the model will further enhance the framework. While remaining committed to a flexible exchange rate regime, the BOT reiterated that publication of FXI data, even

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[15] See 'A quantitative micro founded model for the integrated policy framework', Adrian et. al. (2021) for more details. The BOT is currently receiving TA from MCM on the IPF model.

[16] This includes measures to remove limits for purchase of immovable properties abroad and for lending to unaffiliated companies, increase the scope of outward transfer without approval requirement, facilitate hedging, and remove a requirement for supporting documents.
(https://www.bot.or.th/English/PressandSpeeches/Press/2022/Pages/n2265.aspx)

with a lag, might compromise the effectiveness of their FX operations and may induce speculative activities leading to disorderly exchange rate movements.

B. Financial Sector Policies

18. The authorities should gradually unwind policy interventions in the banking system while further strengthening risk analysis and the bank resolution toolkit. Staff emphasized that regulatory relaxation and other policy support measures should be removed as soon as the underlying conditions justifying the measures are no more present. The authorities' ongoing efforts to strengthen risk analysis and stress-testing of commercial banks, SFIs, and other nonbank institutions would complement the policy support's tapering. Staff welcomes recent steps in implementing key recommendations from 2019 FSAP including the BOT regulations to bring the largest retail deposit-taking SFIs under the same supervision standards as commercial banks, as well as progress on the bank resolution toolkit and the development of a playbook to enhance its executability (Table 9). IMF TA on both stress-testing and bank resolution will support ongoing work in these areas.

19. Elevated private debt is a source of financial sector vulnerability and could be a drag on future growth.[17] A further deterioration of private balance sheet brought about by a shock to growth or higher borrowing costs could lead to a sharp increase in NPLs. Timely asset quality reviews of loans under relief (LUR) to identify non-viable borrowers—particularly for SFIs given their high exposure to LUR—together with an acceleration of ongoing efforts to facilitate household debt restructuring are needed. These measures should be accompanied by further strengthening of the insolvency regime, including by adding informal and hybrid restructuring options to facilitate the orderly exit of nonviable firms and restructuring of private debt (Selected Issues Paper, Chapter IV). [18] Complementary measures to prevent excessive debt accumulation should include lower debt thresholds, stronger lending standards informed by comprehensive credit information systems and a broad-based DSTI ratio. Removing the relaxation of the LTV ratio by the end of 2022, as intended, could also help limit leverage.

20. Over the medium term, repositioning Thailand's financial sector for a sustainable, digital economy requires carefully-calibrated policy efforts. The Thai authorities made progress in developing a taxonomy to gear financial flows toward sustainable development, promoting regulatory sandboxes to better oversee new technologies and continuing research on both retail and wholesale CBDCs.[19] As the authorities prepare the financial sector for the transition to a sustainable, digital economy, it will be important to balance trade-offs between generating efficiency gains through financial innovation and financial stability. Both the CBDC and the emerging crypto assets should be regulated in a coordinated and flexible manner to maintain monetary and financial stability. A

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[17] See IMF, World Economic Outlook, April 2022, chapter 2. This is particularly the case in countries where: (i) indebtedness is concentrated among financially constrained households and vulnerable firms; (ii) the insolvency regime is inefficient; (iii) fiscal space is limited and (iv) monetary policy could be tightened quickly. In Thailand, it is found that household debt poses a stronger drag on growth than corporate debt in the medium term (IMF Country Report No. 19/309).

[18] Thailand has overall a strong insolvency regime. This is particularly the case with respect to the institutional framework and corporate reorganization. See Selected Issues Paper, Chapter IV for more details.

[19] See BOT's consultation paper: https://www.bot.or.th/landscape/files/consultation-paper-en.pdf

forthcoming IMF CD will provide advice on CBDC cyber-security. Given Thailand's exposure to natural disasters, the authorities should place greater emphasis on measuring and understanding financial sector risks stemming from physical asset losses.[20]

21. The authorities are making progress in enhancing the AML/CFT framework. Staff welcomes the strengthening of AML/CFT regulatory regime led by the Anti-Money Laundering Office (AMLO) as highlighted in a 2021 APG report (e.g., corresponding banking relationships, wire transfers, improving STR reporting requirements). The authorities should also enhance the transparency and availability of beneficial ownership information of legal entities and strengthen AML/CFT risk-based supervision to ensure that financial institutions effectively comply with preventive measures, including the identification of sources of wealth of politically exposed persons.

Authorities' Views

22. The authorities shared staff's views on the need to gradually unwind policy interventions. They confirmed their intention to allow some policy relaxation measures to expire by end-2022 as intended and increase the targeting of policy support. They noted that the removal of all financial assistance policies will be gradual to avoid derailing the economic recovery. They continue to closely monitor developments in the banking system including through stress testing. The authorities see the Thai banking system as healthy, with sufficient capital to withstand a possible deterioration in loan quality, and capable to support economic recovery over the coming years. They continue to support long-term debt restructurings to address elevated private debt.[21] In addition, the BOT is in the process of calibrating an appropriate DSTI and has extended DSTI data collection to SFIs and non-banks. Regarding the digital economy, the BOT aims to support the financial system and promote innovation through new digital developments while preventing the buildup of systemic risks. Finally, the forthcoming Beneficial Ownership Information Act to improve transparency of legal persons, trusts, cooperatives, and non-profit organizations will further strengthen the AML/CFT framework.

C. Fiscal Policy

23. The authorities have started to withdraw the large pandemic-related support in FY2022, though energy subsidies and other measures to mitigate the rise in energy prices are slowing the consolidation. The authorities envisage a 1.2 percent of GDP reduction in the fiscal stimulus in FY2022 compared with FY2021, achieved mostly through a spending consolidation.[22] This includes measures to keep oil and gas prices in check and relieve the burden on vulnerable consumers, estimated at about 1.4 percent of GDP (Text Table 2).

[20] The BOT has requested IMF TA in both stress-testing and CBDC security.

[21] There are various debt restructuring schemes (e.g., the Debt Clinic and the Assets Warehouse) that target different borrowers. The BOT has refined the Debt Clinic's eligibility criteria to cover more debtors. Established in June 2017, the Debt Clinic is a multi-creditor debt restructuring program with low interest rates and long repayment terms for non-performing credit card and personal loan borrowers.

[22] The FY2022 Budget was passed in September 2021 and does not include the fiscal response to the Ukraine war.

Some of the measures, initially approved in March for 3 months, were extended in June until the end of the fiscal year.[23] The price caps (universal subsidies) are particularly costly and regressive and are mostly financed through extra-budgetary and quasi-fiscal operations. While staff assesses the near-term fiscal stance as broadly appropriate, the authorities should gradually phase out universal energy subsidies as planned. The additional targeted cash transfers to vulnerable groups (0.2 percent of GDP) approved in June would help mitigate the impact of the higher cost of living.

Text Table 2. Thailand: Measures to Mitigate the Rise in Energy Prices

Measure[1]	Cost[2] (Percent of GDP)	Mode of Financing
Universal Subsidies		
Price caps on diesel, natural gas for vehicles, LPG, subsidies to electricity generation authority	1.1	Budget reallocations, extra-budgetary operations, quasi-fiscal operations including profit-sharing with oil refineries
Targeted Measures		
Subsidies on electricity bills for the poor, cooking gas for welfare card holders, fuel for taxi and mototaxi drivers	0.03	Central budget financing through spending reallocations
Tax Expenditures		
Diesel excise tax reduced by half	0.1	Lower tax revenue to the central government budget
Reductions in Social Security Contributions	0.2	Lower social security contributions
Total	1.4	

Source: Thai authorities and IMF staff estimates.

[1] All measures are temporary for a duration of about 6 months, starting in March-April 2022.

[2] Estimated cost as of June 2022.

24. **Enhanced revenue mobilization efforts could support a more gradual medium-term consolidation to help address Thailand's structural challenges while rebuilding fiscal buffers**. While the FY2023 budget aims to steer the economic recovery with higher development spending than in previous years (21 percent of the budget), the overall fiscal stance entails a 3.5 percent of GDP tightening.[24] Staff recognizes the need to rebuild buffers following the unprecedented pandemic fiscal support, but notes that it is also imperative to start addressing Thailand's medium-term challenges. Starting with the FY2023 budget, additional growth-enhancing and well-prioritized spending accompanied with enhanced revenue mobilization would help minimize scarring and boost productivity while keeping the debt-to-GDP ratio well-below the 70 percent of GDP debt ceiling (Box 1).[25] A more gradual, growth-friendly consolidation would also contribute to external rebalancing.

- *Boosting revenue mobilization is an important priority*. Thailand's tax effort, measuring the ratio of collected taxes to the tax collection capacity is estimated at 46 percent, which is low compared to

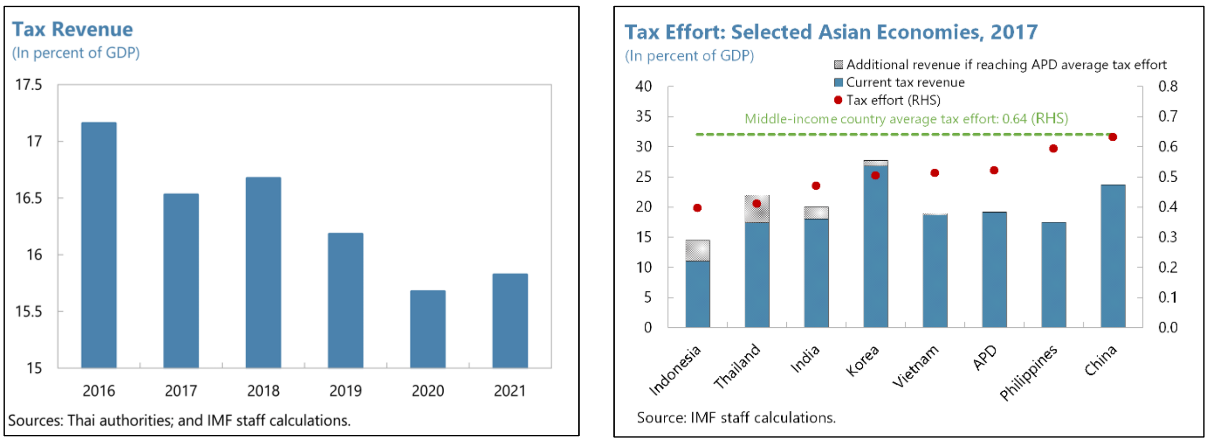
[23] Diesel and LPG prices have gradually increased since March. Subsidies on both products have been extended until September with the price increase for diesel capped at 35 baht per liter (from 30 until April) and LPG to increase 408 baht per 15-kilo canister in September. Staff's estimates of the total cost of energy support measures are based on preliminary information.

[24] The first reading of the FY2023 Budget was approved by Parliament in June 2023. The fiscal year runs from October 1 to end-September.

[25] Results of the debt sustainability analysis show that debt dynamics become unfavorable when debt reaches about 70 percent of GDP (Annex V).

the effort of an average middle-income country at 64 percent (Text Figure 9).[26] Staff recommends frontloading reforms to expand the tax base, including rationalizing tax exemptions, improving compliance, and bringing more micro and small enterprises into the tax net. Once the recovery is well-entrenched, increasing the VAT rate (currently at a low 7 percent), reforming the CIT and PIT, and further developing property taxation should be considered, as recommended by IMF CD. These efforts could increase the tax-to-GDP ratio by at least 2.2 percentage points by 2027, compared with 2022, helping finance additional priority spending.

Text Figure 9. Thailand: Tax Revenue and Tax Effort



- *Scaling up public spending on education and investment*. Staff recommends increasing public spending on education[27] and, mostly, training, while focusing the composition of spending towards STEM topics and expanding vocational training in partnership with the private sector, to reskill and upskill Thailand's labor force.[28] Increasing public investment in ICT and green resilient infrastructure will also be essential to leverage digitalization and provide adequately for climate mitigation and adaptation needs. This will help to crowd in private investment as envisaged in the Eastern Economic Corridor (EEC) infrastructure projects.

- *Expanding coverage of the social protection system while ensuring its sustainability*. Staff recommends improving social protection coverage (including for informal workers) while preserving sustainability including through greater coordination between schemes to avoid

[26] The tax effort is the ratio of actual tax revenue to the country's maximum achievable tax collection. If Thailand were to bring its tax effort to that of the average middle-income country, tax revenue could be higher by up to 6 percent of GDP. Estimates of tax effort based on methodology by Fenochietto and Pessino in https://www.imf.org/en/Publications/WP/Issues/2016/12/31/Understanding-Countries-Tax-Effort-41132.The MTRS considers that a tax revenue increase by 3-4 percent of GDP would be realistic (FAD, Thailand: Formulating a Medium-Term Revenue Strategy for Financing Development Plans, 2019.

[27] Thailand's public spending on education is about 1 percentage point of GDP below the OECD average.

[28] The overall low to mid skill composition of the Thai workforce (and relatively low productivity) is related to the large size of the tourism and agriculture sectors, composed for the most part of informal small firms that employ low skilled workers, and to the assembly based manufacturing sector, which relies more on mid skilled workers compared to higher value added products (World Bank, Country Private Sector Diagnostics for Thailand, 2022).

Box 1. Alternative Fiscal Scenario

Staff advocates a more gradual and growth friendly medium-term consolidation plan to accommodate higher priority spending supported by revenue enhancing measures. Starting in FY2023, the policy scenario builds in a growth-friendly base broadening revenue enhancement of about 5.8 percent of GDP cumulatively over the medium term (implying a 2.2 percentage points higher revenue-to-GDP ratio in 2027 compared to 2021), as recommended in the Medium-Term Revenue Strategy for Thailand (MTRS). On the spending side, staff recommends:

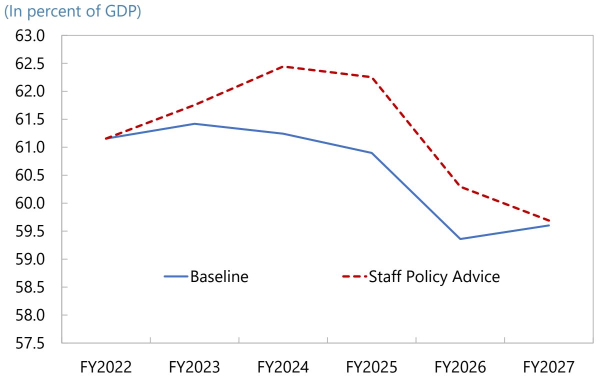
- Increasing the country's productive capacity through new public investments in macro-critical, green and climate-resilient projects (by a cumulative 2.8 percent of GDP over the medium term, in line with recommendations from the 2021 Article IV consultation).
- Providing adequately for climate adaptation (amounting to a cumulative 2.1 percent of GDP over the medium term, based on IMF staff estimates),
- Improving vocational training and education (amounting to a cumulative 1 percent of GDP over the medium term).
- Expanding targeted transfers and age-related spending (cumulative 1.6 percent of GDP over the medium term, based on World Bank estimates).

	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
	(In percent of GDP, unless otherwise indicated)					
	Baseline					
General Government Expenditure	25.6	23.6	23.7	23.9	23.9	24.0
General Government Revenue	20.0	20.5	20.6	20.6	20.6	20.6
General Government Balance	-5.6	-3.2	-3.1	-3.3	-3.3	-3.4
SOEs overall balance	-0.7	0.2	0.2	0.2	0.4	0.5
Overall Public Sector Balance	-6.2	-3.0	-2.9	-3.1	-2.9	-3.0
Cyclically adjusted primary balance (CAPB)	-3.9	-0.4	-0.4	-0.5	-0.3	-0.3
Public Debt	61.2	61.4	61.2	60.9	59.4	59.6
	Staff's Policy Advice					
General Government Expenditure	25.6	26.2	25.6	25.3	24.6	25.0
Recommended expenditure measures 1/						
Infrastructure scale up		1.0	1.0	0.8		
Provision for adaptation		0.4	0.4	0.4	0.4	0.5
Targeted transfers		0.5	0.2			
Education expenses and reskilling		0.4	0.1	0.1	0.2	0.2
Aging		0.2	0.1	0.1	0.1	0.2
General Government Revenue	20.0	21.1	21.6	21.8	22.0	22.2
Recommended revenue measures 1/						
Tax reform		0.6	1.0	1.2	1.4	1.6
General Government Balance	-5.6	-5.1	-4.0	-3.5	-2.6	-2.8
Cyclically adjusted primary balance	-3.9	-2.3	-1.2	-0.7	0.4	0.4
Overall Public Sector Balance	-6.2	-4.9	-3.7	-3.3	-2.2	-2.3
Public Debt	61.2	61.8	62.4	62.3	60.3	59.7

Sources: Thai authorities; and IMF staff estimations.
Note: Public debt projections in the baseline scenario is different from the projections by the PDMO, which are based on the inforamtion as of Decemebr 2021.
1/ Deviation from the baseline, percentage points of GDP.

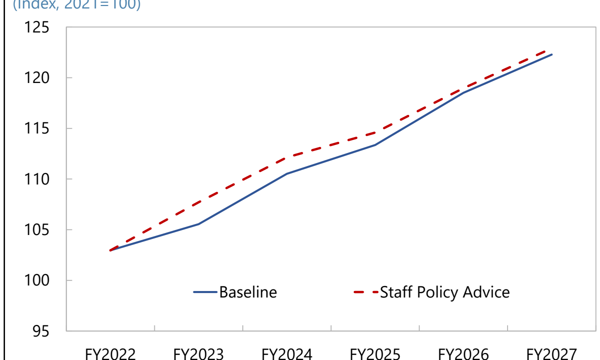
The growth benefits of the public investment push and targeted transfers combined with the revenue-enhancement measures help keep the debt-to-GDP ratio well below the government's debt ceiling of 70 percent.[1] The debt to GDP ratio peaks at 62.5 percent in 2023 before declining to about 59.7 percent of GDP by 2027.

Public Debt
(In percent of GDP)



Sources: Thai authorities; and IMF staff projections.

Real GDP Level
(Index, 2021=100)



Sources: Thai authorities; and IMF staff projections.

[1] There are upside risks to the growth if staff's proposed fiscal measures deliver higher than envisaged productivity gains.

duplication and to provide more coherent benefits.[29] Raising the retirement age and/or the contribution rate, will be critical to managing age-related spending. Overall, the goal should be to provide adequate social security and pension coverage to a larger share of the labor force, including non-wage workers, while avoiding reliance on voluntary schemes, adding to the fragmentation of the current system or allowing lump-sum withdrawals that would compromise financial viability of existing schemes.

25. Robust fiscal governance and transparency are critical to ensure the efficiency of public spending and limit contingent liabilities stemming from quasi-fiscal operations. The guidelines issued by the authorities to enhance fiscal transparency and accountability for all budget spending including COVID-19-related expenditures are welcome. Staff recommends stepping-up efforts to manage subsidies on budget, to boost transparency, including the publication of the audits related to COVID-19 related spending and investigations of potential misuse of funds, and limit contingent liabilities. It is also important to continue addressing bottlenecks in infrastructure spending, including robust monitoring of fiscal risks. Developing a comprehensive multi-year pipeline of public investment projects, in line with government priorities, would make choices between sectors and different investment channels more transparent and efficient. Noting rigidities in the budget process, staff considered that more realistic and flexible annual budgets in line with international best practices would help enhance the credibility of the authorities' medium-term fiscal framework as the key driver of development policies. Finally, full implementation of the 2018 anti-corruption law, which introduced strict corporate liabilities, will help bolster governance.

Authorities' Views

26. The authorities indicated that their policy response thus far has averted a deeper downturn but that the time is right to begin fiscal consolidation. In the near term, the authorities' focus is on balancing fiscal sustainability efforts with measures to mitigate the impact of higher energy prices on vulnerable groups. They recognize that broad-based subsidies are costly and are gradually winding down the price caps on energy prices while introducing targeted measures to protect the poor. For example, they have provided targeted support to vulnerable groups through a cooking gas subsidy and reduction in gasohol costs for motorcycle drivers. In addition, Cabinet approved a new, faster registration scheme for low-income welfare recipients.

27. The authorities are cognizant of medium-term spending pressures and agreed with staff on the need to enhance expenditure prioritization while providing adequately for investment and social safety nets. Their development strategy envisages an ambitious scaling-up of public investment, including through Public Private Partnerships. They agreed on the need to upskill Thailand's labor force, but argued that the issue is not the lack of funding for education, but the misalignment of the education system with the needs of the private sector.

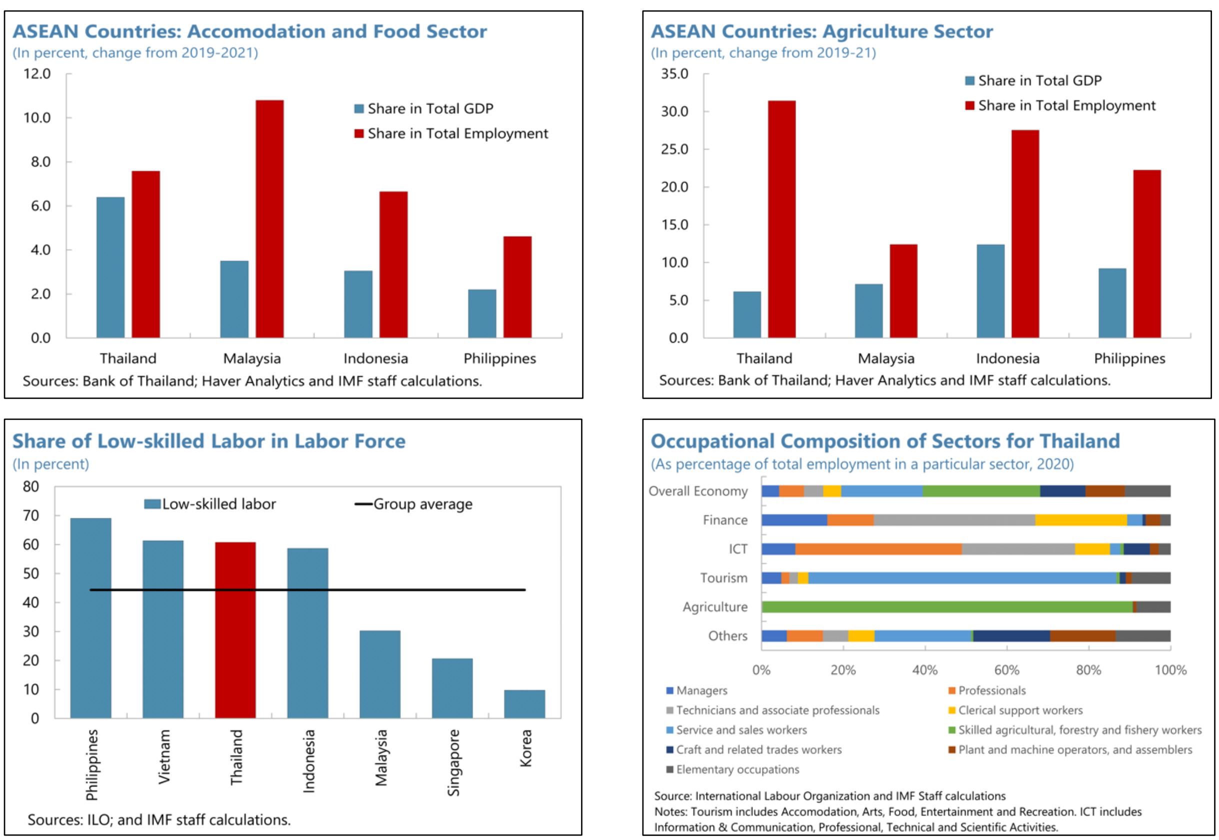
[29] See 'The Macroeconomic and Fiscal Impact of Aging in Thailand' World Bank (2021), and 'Expanding access to social security for all workers in Thailand', ILO, (2021) for more details. The ILO estimates that 71 percent of all private sector workers (about 37 million) are not covered by social security. The pension system is fragmented in regimes for public, (formal) private, and informal employees, and low coverage, particularly of the informal sector but also the formal private sector raises old-age poverty risks. Due to the fast-aging population the combined fiscal costs of the Civil Service Pension Scheme, the Old Age Allowance, and health care are projected to rise from 6.2 percent of GDP in 2020 to 11.3 percent of GDP by 2060.

Planned reforms to the social security system include extended coverage, and the proposed new National Pension Fund would help increase post-retirement income for formal workers from 20 to 50 percent of their pre-retirement income. The authorities also recognize the cost of tax exemptions and are seeking to broaden the tax base including by extending VAT to e-commerce, enhancing compliance, and simplifying tax payments. The authorities affirmed that all procurements including for COVID-19 spending are conducted on the government's e-platform with information about the winning bidders being published at www.gprocurement.go.th. Contracts are subject to strict guidelines on transparency and accountability including ex post assessments of program effectiveness and investigations of potential abuse.

D. Structural Policies

28. Skill-building will be essential to meet the needs of the post-pandemic economy and reverse the trend of declining productivity growth. Advance signals from financial markets suggest that the pandemic-induced contraction of contact-intensive sectors and expansion of others such as information and communication technology (ICT) could be a permanent trend, which will require a long-lasting reallocation of production factors. This may be particularly challenging for Thailand given the large share of low- and mid-skilled workers in the labor force and fast-aging population (Text Figure 10, Selected Issues Paper, Chapter II, OECD, 2021).

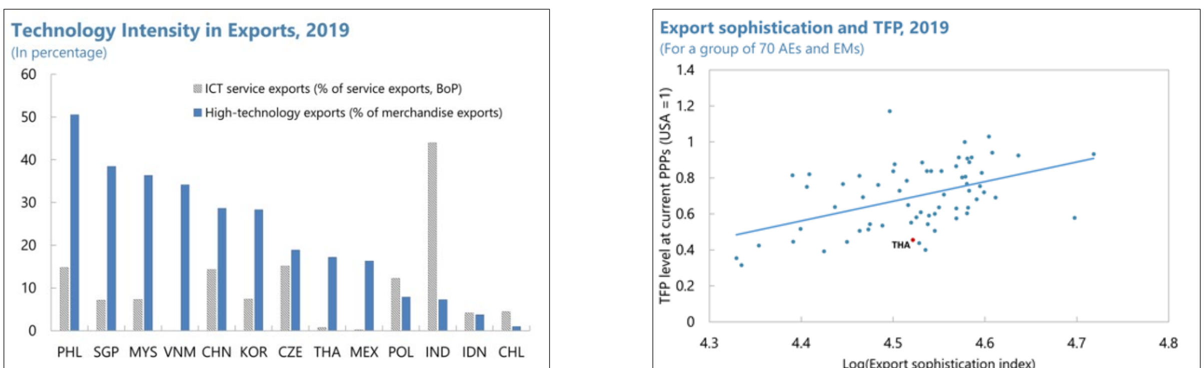
Text Figure 10. Thailand and Selected Asian Countries: Skill and Occupational Composition of Labor Force



The authorities should use active labor market policies (ALMPs) and well-designed education policies to support occupational mobility and reduce the skills mismatch, thus facilitating labor reallocation.[30] Increasing the attractiveness of training programs targeted to older people would mitigate the job losses among the elderly due to automation and digitalization (World Bank, 2021).[31] Strengthening the cooperation with the private sector, including to scale up vocational training, can help align the skills' supply with the private sector's needs. In this regard, the recent decision to provide about 70,000 new graduates and unemployed with on-the-job training in the bio-circular and green (BCG) sector is a welcome step. Since nurturing talent takes time, administrative requirements for hiring non-resident skilled workers could usefully be streamlined.

29. Staff recommends leveraging digitalization to boost productivity and economic resilience. Thailand's manufacturing exports' competitiveness has declined partly owing to stagnant sophistication content, while tourism has relatively few linkages and diversification prospects compared to other service subsectors (Text Figure 11).[32] Thailand can leverage on digitalization to move towards more sophisticated manufacturing and innovative services' exports. (Selected Issues Paper, Chapter III).[33] This would require: (i) leveraging the existing manufacturing base to rise up the value chain through production of more complex products and greater linkages to services; (ii) expanding R&D and access to digital technologies to strengthen innovation and increase productivity; (iii) upskilling workers to ensure availability of labor in digital and skill-intensive subsectors (see above); (iv) further liberalizing the services sector—particularly global innovator services—including by reducing the number of service sectors that require a foreign business license; and (v) ramping up public investment in IT and digital infrastructure, as also envisaged in the Eastern Economic Corridor (EEC) development plan.

Text Figure 11. Thailand: Export Sophistication



Sources: World Development Indicators and IMF staff calculations.
Notes: ICT service exports data unavailable for Vietnam.

Sources: ILO, Penn World Table and IMF staff calculations.

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[30] OECD, 2021 report on Thailand's Education System and Skills Imbalances, argues for a need to make Thailand's adult learning systems more focused and better funded to be able to address future skill challenges.

[31] The old age dependency ratio is expected to more than double by 2050 (World Bank, 2021. "Aging and the Labor Market in Thailand.")

[32] Thai firms tend to specialize in low-level final assembly, with little production of intermediate parts (Apaitan et al., 2019). Further, most Thai suppliers of foreign exporters remain in Tier 3 (and some in Tier 2), revealing a low level of sophistication in manufacturing (AsDB, 2015).

[33] Felipe, Kumar and Abdon (2010) find that countries unable to upgrade and diversify their exports may become caught in a middle-income trap. Jarreau and Poncet (2012) similarly find that regions specializing in more sophisticated goods in China grew more subsequently.

30. Achieving Thailand's ambitious climate mitigation and adaptation goals will require implementation of a well-coordinated policy package. Thailand's long-term low greenhouse gas emission development strategy implies achieving carbon neutrality in 2050, and net zero emissions in or before 2065. Moving to carbon pricing over time while phasing out broad-based energy subsidies will help achieve these goals by encouraging a gradual shift to cleaner energy alternatives (Selected Issues Paper, Chapter I).[34] Staff's simulations show that a well-designed transition comprising a US$50 carbon price, gradual phasing out of subsidies and use of carbon tax revenues to finance high-impact investments and targeted transfers can boost long-run output by about 2 percentage points compared to the baseline trajectory. Climate adaptation will require investing in climate-resilient infrastructure, addressing water scarcity and soil degradation, and investing in R&D, which will unlock opportunities for innovation and new, green, and inclusive growth drivers as encapsulated in the Bio-Circular Green Strategy. A successful implementation of the climate strategy requires strong institutional coordination and a clear implementation framework, monitoring of progress across government agencies and the private sector, and an evaluation of the macro-fiscal implications of both adaptation and mitigation policies.

Authorities' Views

31. The authorities' concurred with the medium-term structural reform priorities highlighted by staff. Labor reskilling and upskilling, leveraging digitalization, and promoting green transformation are key milestones of the 13th National Economic and Social Development Plan (NESD).

- The authorities share staff's view on the need to improve the quality of education and align the education system to meet the future skill demands of the economy. As part of the national reform plan, E-Workforce Ecosystem platform is developed to integrate data on workforce and labor market collected by multiple agencies. The platform will be used to develop a tailored lifelong learning and upskilling/reskilling path for each worker and to improve the efficiency of job matching. The authorities also launched the Education to Employment scheme aiming to align skill development in vocational education with the demand of the new growth-driving sectors. To mitigate the impact of an aging society and shortages of skilled labor, as well as to boost inward investment, the government recently launched a new long-term residence visa system to attract highly-skilled professionals.
- The authorities highlighted that restructuring manufacturing to adapt to the digital economy requires prioritizing research and development and investment in digital infrastructure. In this regard, they are building comprehensive infrastructure (logistics, digital and innovation) to enhance investment in the Eastern Economic Corridor (EEC) complemented with incentives for investment promotion—tax and non-tax (land ownership, foreign entry, and residency)—in knowledge-based and high-technology activities. EEC also provides a one-stop service for facilitating permits and business licensing application processes as well as a regulatory sandbox aiming to create optimal rules and regulations.
- The authorities are taking steps to facilitate a shift to clean energy including by incentives to encourage renewable energy investments and implementing renewable energy projects or pilot programs. Furthermore, they have incorporated carbon emission considerations in the automobile

[34] IMF Country Report No. 21/97.

tax structure since 2017 and motorcycle excise tax structure since 2019. They will build up on these experiences to shift to broader carbon taxation in the future. The authorities are working on climate change legislation, which will assist in developing a more comprehensive carbon footprint reporting and give them a better indication of firms' pollution habits and a basis for a carbon pricing framework.

STAFF APPRAISAL

32. The authorities' response to the COVID-19 pandemic has been strong and appropriate. The ample policy buffers, accumulated owing to the past prudent macro-management, enabled the government to deploy a bold policy response to the pandemic that helped stabilize the economy. However, the pandemic reemphasized the urgency of implementing decisive and comprehensive reforms to address long-standing structural challenges, minimize scarring from the pandemic and seize the opportunities of the digital and green transformations to achieve high-income status.

33. The decisive policy actions helped put the economy back on a growth path, but uncertainty remains unusually large. The recovery is still fragile and incomplete amidst a deteriorated global outlook. Growth prospects critically hinge on the return of foreign tourists, while soaring energy prices due to the prolonged war in Ukraine sharpen inflation-output trade-offs. Disorderly tightening of global financial conditions and spillovers from a sharper growth slowdown in China amidst already-stretched private sector balance sheets could derail the economy's rebound.

34. The envisaged gradual withdrawal of the pandemic stimulus is broadly appropriate, though policies will need to remain agile under fast-changing circumstances. The BOT should stand ready to embark on an earlier, data-dependent normalization path if warranted by inflation dynamics. Financial sector support measures should be gradually tapered, combined with the ongoing strengthening of risk analysis, household debt restructuring, and the bank resolution toolkit. In this regard, the BOT's efforts to strengthen the supervision of the largest retail deposit-taking SFIs is welcome. Staff concurs with the near-term fiscal consolidation and welcomes the gradual withdrawal of untargeted energy subsidies accompanied by targeted support to vulnerable groups.

35. A well-coordinated recalibration of near-term policies will be needed in an adverse scenario. If a prolonged war in Ukraine and AE monetary policy normalization has larger-than-expected spillovers to Thailand, monetary policy should tighten to bring inflation under control, while a discretionary increase in government spending should mitigate the output impact of the shock. The exchange rate should continue to act as a shock absorber with FXI limited to disorderly market conditions. However, given Thailand's strong external position, a complementary use of FX sales along with interest rate hikes would lower the output inflation volatility tradeoff if disorderly exchange rate depreciation and a spike in risk premiums threaten to de-anchor inflation expectations.

36. Medium-term policies should balance the objectives of rebuilding buffers and implementing needed structural reforms to strengthen the resilience of the economy and boost productivity. A more gradual fiscal consolidation underpinned by enhanced revenue mobilization would help rebuild policy buffers while supporting the structural reform agenda. A well-coordinated structural reform agenda, with a clear implementation strategy for upskilling the workforce, scaling up investments in digital and climate-resilient infrastructure, and promoting R&D spending will help

Thailand's economy to face post-pandemic challenges from the position of strength. A careful assessment and monitoring of macro-fiscal risks associated with green transformation would make the transition smoother. The authorities' efforts to repositioning Thailand's financial sector for a sustainable, digital economy are welcome, but require a careful balancing act between efficiency gains through financial innovation and financial stability.

37. Further efforts to enhance fiscal governance and transparency would enhance fiscal policy effectiveness. Reduced resort to quasi-fiscal operations, including by bringing all subsidies on budget, would help reduce risks from a buildup of contingent liabilities. More realistic and flexible budgets including comprehensive investment plans would allow the development of medium-term fiscal frameworks supportive of the authorities' development priorities.

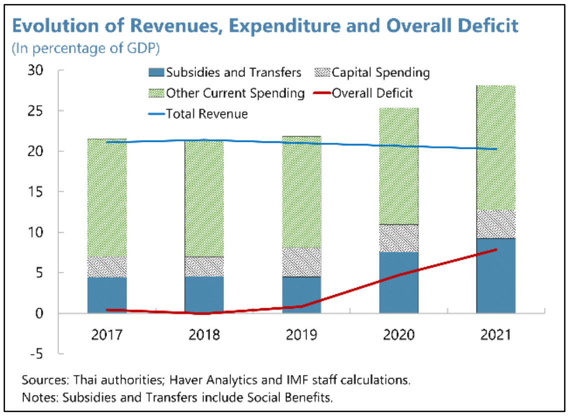
38. Thailand's external position in 2021 was moderately stronger than warranted by medium-term fundamentals and desirable policies. Going forward, a more gradual fiscal consolidation focused on enhancing social safety nets, boosting investment in critical physical and IT infrastructure and creating high-productivity jobs will help further reduce Thailand's persistent saving-investment gap.

39. The Fund's capacity development (CD) work is well-integrated with the authorities' policy priorities. While the ongoing CD on the IPF supports the authorities' efforts to continue to strengthen the monetary policy framework, CD on stress-testing and bank resolution will help them bolster financial stability. A forthcoming, novel CD on CBDC cyber-security will contribute to the authorities' initiative to position the financial sector for a sustainable and digital economy.

40. It is recommended that the next Article IV consultation with Thailand takes place on a standard 12-month cycle.

Figure 1. Thailand: Fiscal Sector Developments

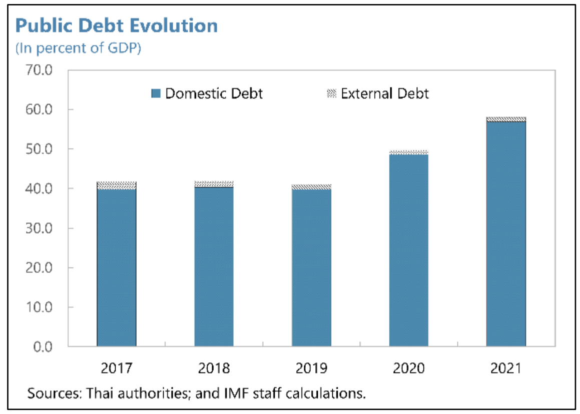
The fiscal deficit widened during 2020-2021, as spending increased while revenues weakened…



Evolution of Revenues, Expenditure and Overall Deficit
(In percentage of GDP)

Sources: Thai authorities; Haver Analytics and IMF staff calculations.
Notes: Subsidies and Transfers include Social Benefits.

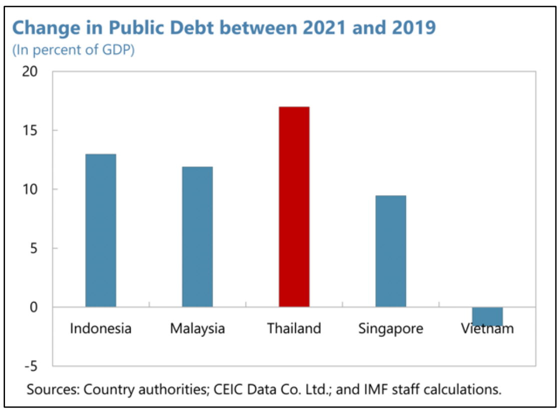
…and debt increased rapidly.



Public Debt Evolution
(In percent of GDP)

Sources: Thai authorities; and IMF staff calculations.

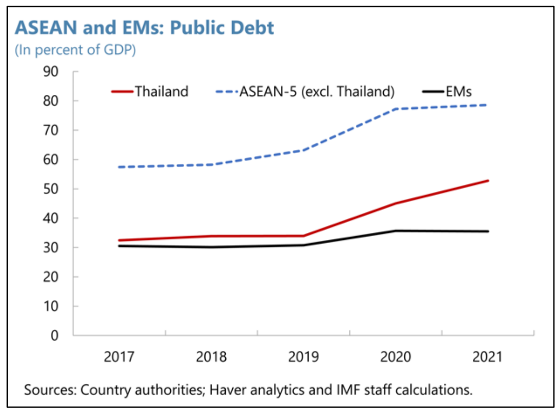
Thailand accumulated significant debt during the pandemic, reflecting the strong fiscal response…



Change in Public Debt between 2021 and 2019
(In percent of GDP)

Sources: Country authorities; CEIC Data Co. Ltd.; and IMF staff calculations.

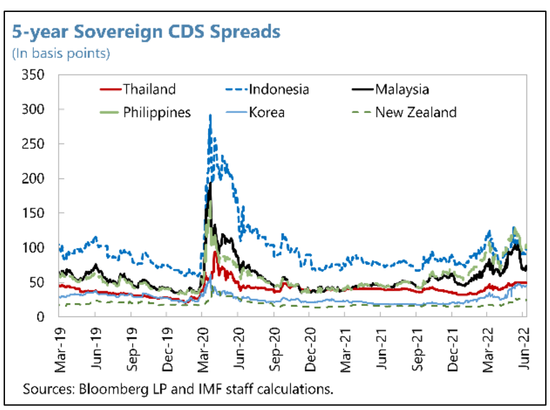
…but Thailand's public debt remains lower than that of other ASEAN 5 countries.



ASEAN and EMs: Public Debt
(In percent of GDP)

Sources: Country authorities; Haver analytics and IMF staff calculations.

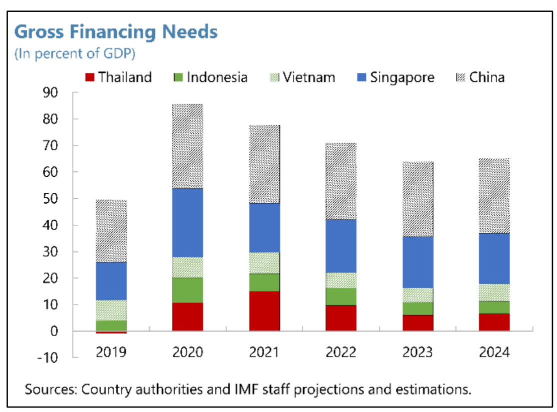
Despite the sharp debt accumulation, Thailand's sovereign spreads are one of the lowest among peers…



5-year Sovereign CDS Spreads
(In basis points)

Sources: Bloomberg LP and IMF staff calculations.

…and gross financing needs are expected to decline going forward.



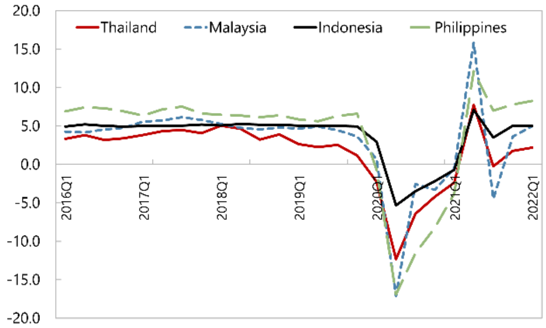
Gross Financing Needs
(In percent of GDP)

Sources: Country authorities and IMF staff projections and estimations.

Figure 2. Thailand: Recent Real Sector and Price Dynamics

Thailand's recovery lags that of the peers ....

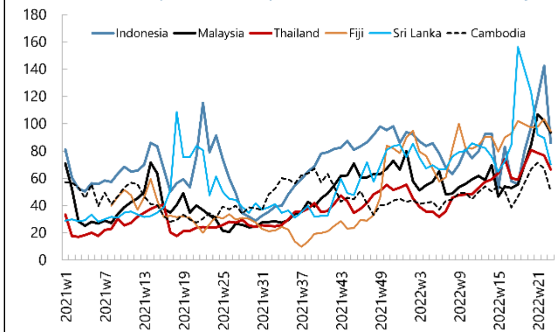
Real GDP Growth
(Y/y percentage change)



Sources: Haver Analytics and IMF staff calculations.

...reflecting continued weaknesses in the tourism sector.

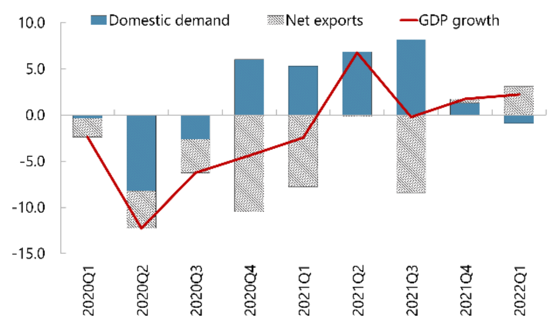
Hotel Rooms Occupancy Rate, 2021-22
(Percent of 2019, occupied rooms as a percent of total available rooms, weekly)



Source: Smith Travel Research Hotel Data

Domestic demand was the key driver for the recovery, while external demand continued to be a drag.

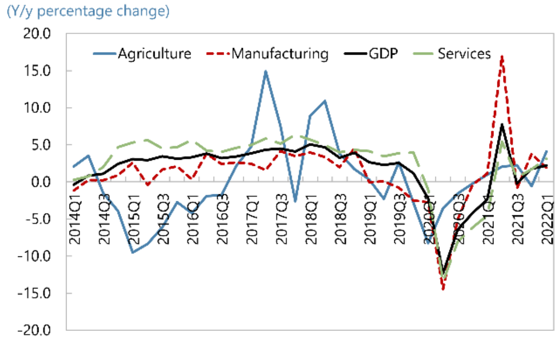
Thailand: Contribution to GDP Growth, Expenditure
(In percent, y/y)



Sources: Thai authorities; and IMF staff calculations.

Manufacturing outperformed the services sector.

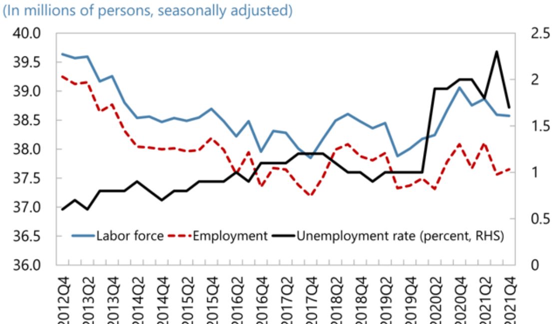
Real GDP Growth, Supply
(Y/y percentage change)



Sources: Thailand Authorities; CEIC Data Co. Ltd.; and IMF staff calculations.

The unemployment rate remains elevated amidst increased labore force and stable employment since the pandemic.

Labor Market[1]
(In millions of persons, seasonally adjusted)

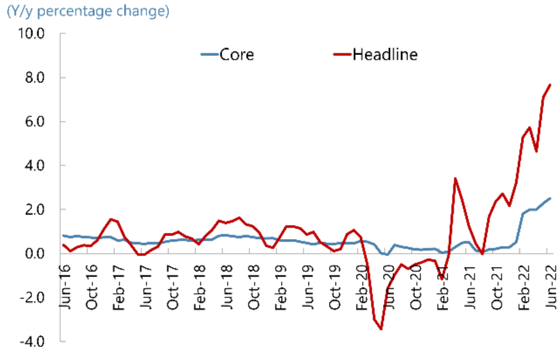


Source: Haver Analytics

[1] All series are affected by a methodological break in 2014 Q1 as the methodology for calculating the population structure was modified.

Both headline and core inflation soared in 2022 reflecting high commodity prices.

Inflation
(Y/y percentage change)

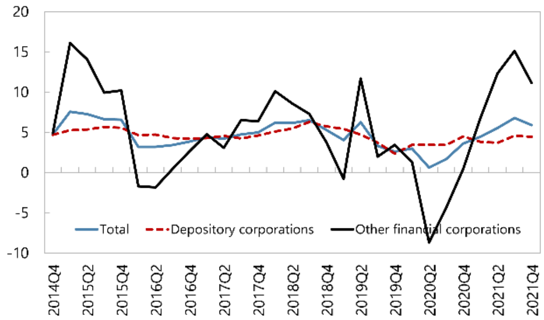


Sources: Haver Analytics; and IMF staff calculations.

Figure 3. Thailand: Financial Sector Developments

Credit growth accelerated in 2021….

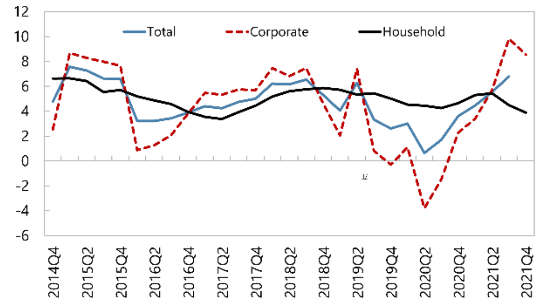
Credit Growth
(Percent change, y/y)



Sources: CEIC Data Co. Ltd; and IMF staff calculations.

…driven by corporate loans.

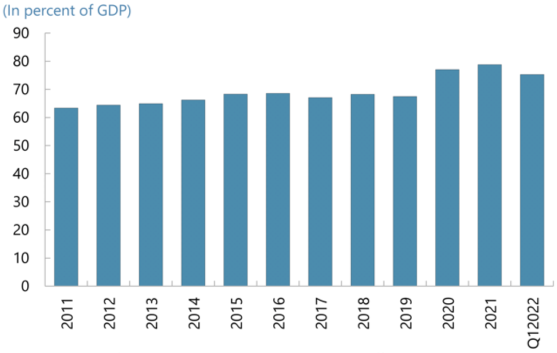
Credit Growth by Sector 1/
(Percent change, y/y)



Sources: CEIC Data Co. Ltd; and IMF staff calculations.
1/ Excludes external debt.

Corporate debt increased in 2021 as a result….

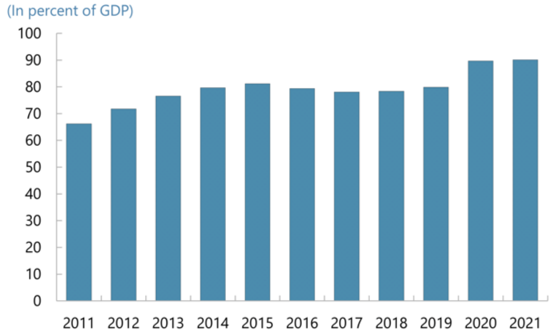
Thailand: Corporate Debt
(In percent of GDP)



Sources: Bank of Thailand; Haver Analytics and IMF staff calculations.

…while household debt remained relatively stable after a large increase in 2020.

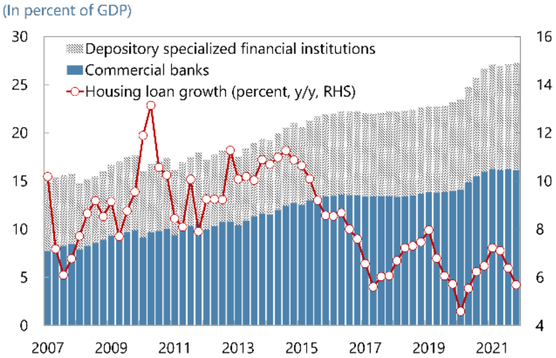
Thailand: Household Debt
(In percent of GDP)



Sources: Bank of Thailand; Haver Analytics and IMF staff calculations.

Housing loan growth moderated in 2021H2…

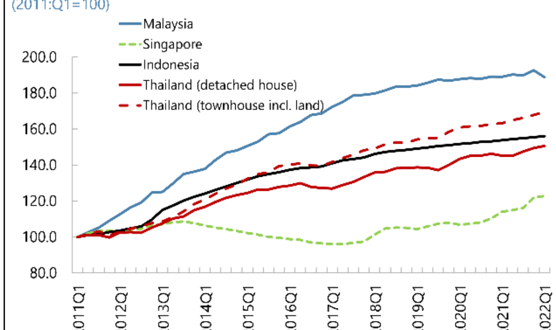
Housing Loans
(In percent of GDP)



Sources: Bank of Thailand; and IMF staff calculations.

…while housing prices continued to increase.

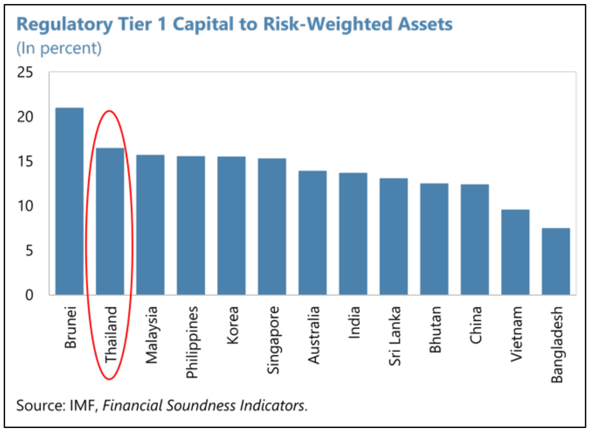
House Price Index 1/
(2011:Q1=100)



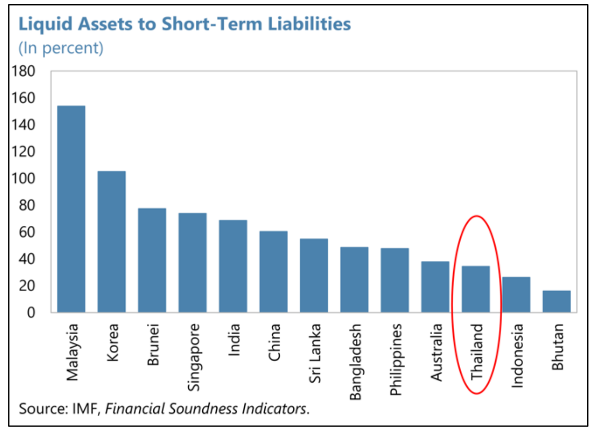
Sources: Haver Analytics; and IMF staff calculations.
1/ Quarterly averages. House price indices for Thailand start in 2008:q1

Figure 4. Thailand: Financial Soundness Indicators of Commercial Banks 1/

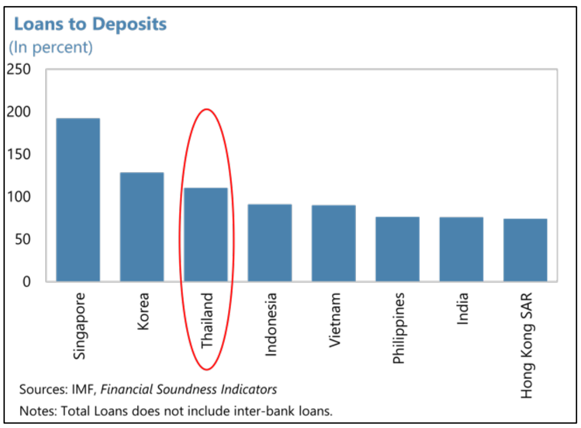
Thai commercial banks remain well-capitalized….



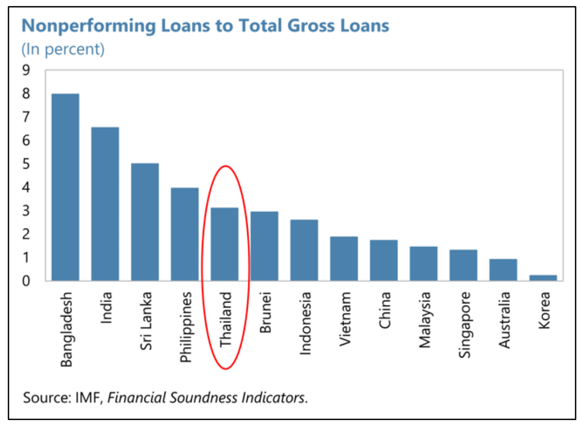
…though they still rely more on short-term liabilities than commercial banks in other countries in Asia.



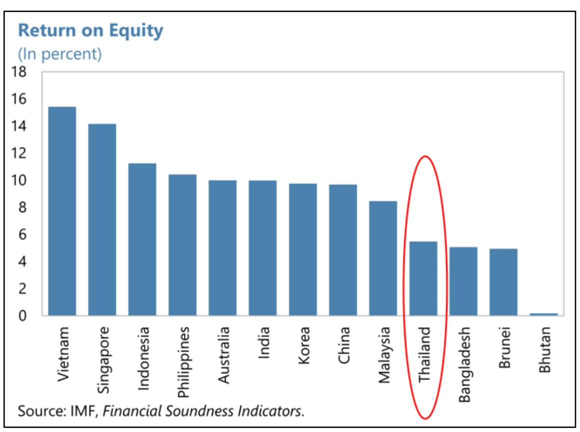
Thailand's loan-to-deposit ratio remains high….



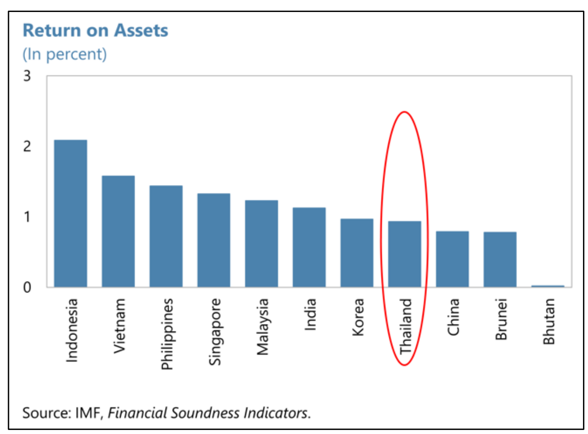
…and NPLs are low.



Profitability indicators remain sound…



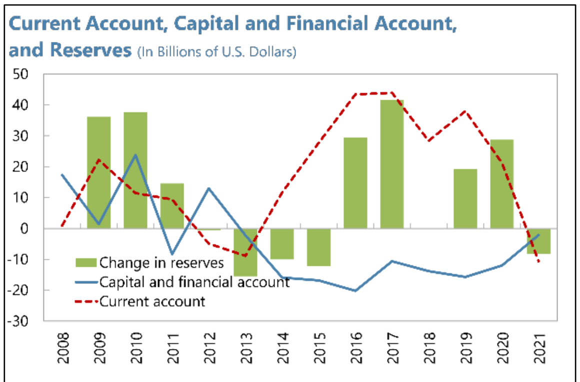
…though somewhat below those of peers.



1/ 2021Q4 or latest available.

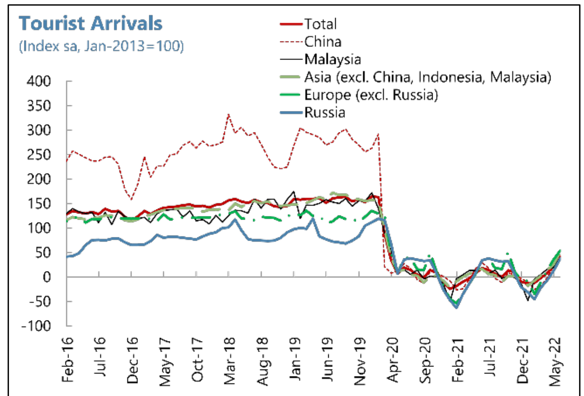
Figure 5. Thailand: External Sector Developments

The current account turned into deficit in 2021, while reserves decreased.



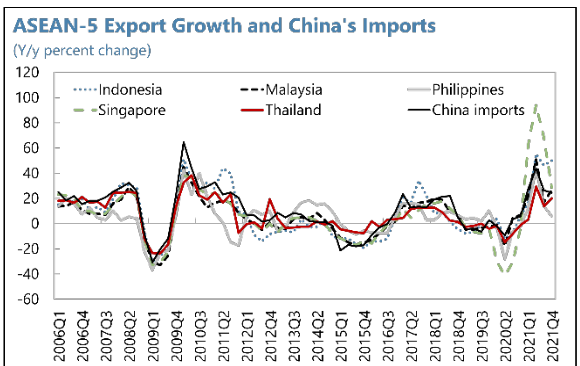
Sources: CEIC Data Company Ltd.; and IMF staff calculations.

Tourist arrivals are slowly picking up with the relaxation of travel restrictions.



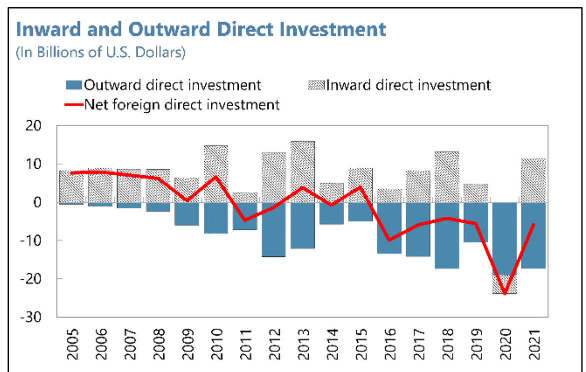
Sources: Haver Analytics; and IMF staff calculations.

Goods exports rebounded as external demand recovered…



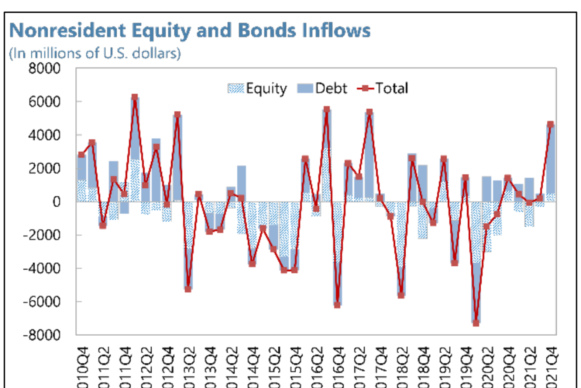
Sources: IMF, *Direction of Trade*; and IMF staff calculations.

…and inward direct investment also showed a strong recovery in 2021.



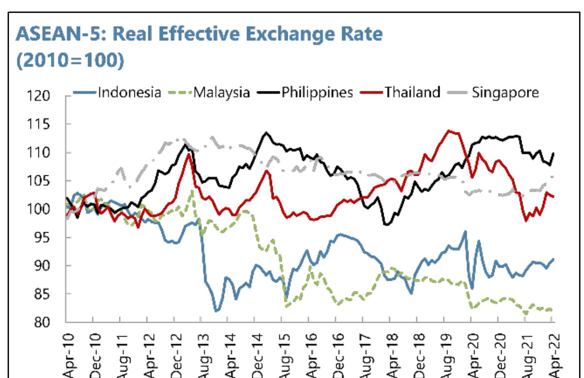
Sources: Haver Analytics; and IMF staff calculations.

Nonresident inflows increased driven largely by bond flows.



Sources: Bank of Thailand; Haver Analytics; and IMF staff calculations.

The real exchange rate depreciated through the year.

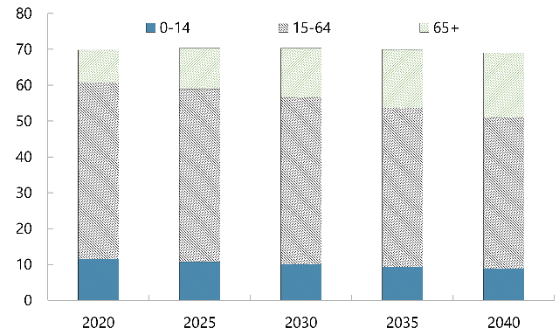


Source: Thai authorities; Haver Analytics; and IMF staff calculations.

Figure 6. Thailand: Structural Challenges

Thailand is one of the fastest-aging populations in Asia.

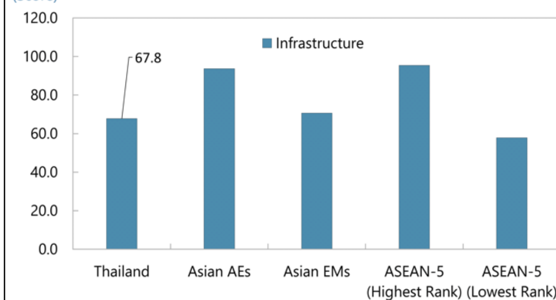
Projected Composition of Population
(In millions of individuals)



Sources: Latest revisions to the World Population Prospects, 2019 (United Nations)

Relative to peers, Thailand has room to improve infrastructure and its overall global competitiveness.

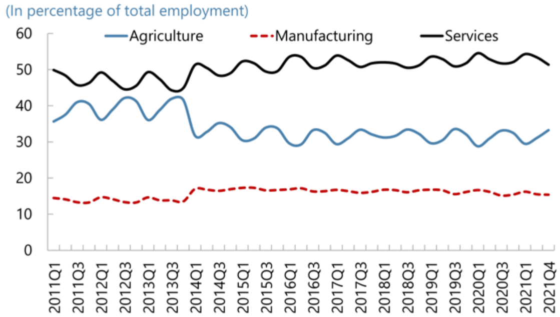
Infrastructure
(Score)



Sources: World Economic Forum, Global Competitiveness Report 2019.
Notes: The Infrastructure sub-index of the Global Competitiveness Index 4.0 is based on opinion surveys of business executives as well as data from the International Telecommunications Union and International Air Transport Association.

Services dominate employment...

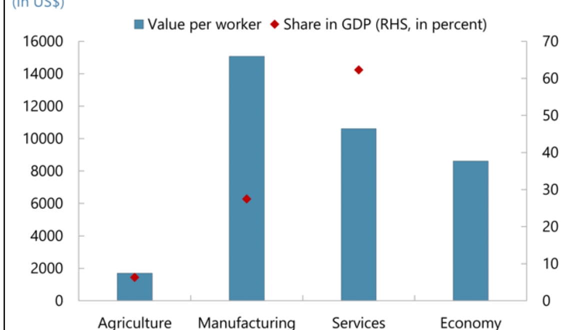
Employment by Sector[1]
(In percentage of total employment)



Source: Haver Analytics.
[1] All series are affected by a methodological break in 2014 Q1 as the methodology for calculating the population structure was modified

Agriculture lags other sectors in productivity

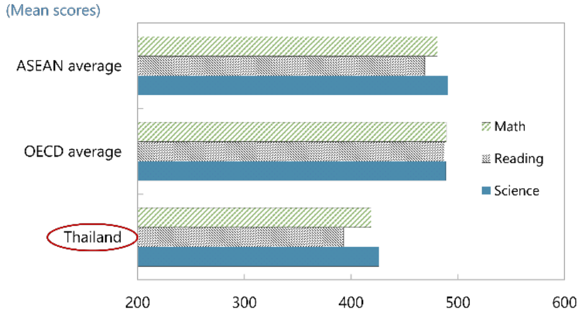
Value of Output per Worker, 2021
(In US$)



Sources: Thai authorities; Haver Analytics and IMF staff calculations.

Thailand lags competitors in educational attainment.

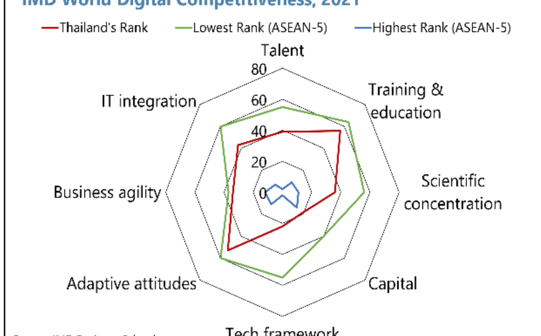
Selected Countries: PISA Scores
(Mean scores)



Source: OECD, *Programme for International Student Assessment*, 2018.
Notes: ASEAN includes Vietnam, Indonesia and Singapore and excludes Thailand. PISA measures 15-year-olds' ability to use their reading, mathematics and science knowledge and skills to meet real-life challenges. 2015 data for Vietnam.

Key areas to improve competitiveness include ICT adoption and innovation capacity.

IMD World Digital Competitiveness, 2021



Source: IMD Business School;
Notes: Numbers indicate rankings received by countries and measure the relative capacity of economies to adopt digital technologies to drive economic transformation. Rankings are based on data from country authorities, international organizations, and surveys of business executives and government officials.

Table 1. Thailand: Selected Economic Indicators, 2018–23

Main exports (percent of total 2020): machinery (43), food (13)
GDP per capita (2021): US$7,232
Unemployment rate (2021): 2 percent
Poverty headcount ratio at national poverty line (2020A1): 6.8 percent
Net FDI (2021): US$-5.65 billion
Population (2021): 66.2 million
Exchange Rate (2021): 31.98 Baht/USD

					Projections	
	2018	2019	2020	2021	2022	2023
Real GDP growth (y/y percent change) 1/	4.2	2.2	-6.2	1.5	2.8	4.0
Consumption	4.1	3.4	-0.6	-0.2	5.1	0.5
Gross fixed investment	3.9	2.0	-4.8	2.0	4.5	1.2
Inflation (y/y percent change)						
Headline CPI (period average)	1.1	0.7	-0.8	1.2	6.1	2.5
Core CPI (period average)	0.7	0.5	0.3	0.2	2.6	1.7
Saving and investment (percent of GDP)						
Gross domestic investment	25.2	23.8	23.7	29.1	29.2	27.7
Private	16.9	16.9	16.8	17.0	18.4	18.1
Public	5.8	5.7	6.4	6.6	6.3	5.7
Change in stocks	2.4	1.2	0.4	5.5	4.6	3.9
Gross national saving	30.8	30.8	27.9	26.9	28.5	29.9
Private, including statistical discrepancy	25.3	26.7	26.8	27.8	27.8	27.3
Public	5.5	4.1	1.1	-0.8	0.7	2.6
Foreign saving	-5.6	-7.0	-4.2	2.2	0.8	-2.2
Fiscal accounts (percent of GDP) 2/						
General government balance 3/	0.1	-0.8	-4.7	-7.0	-5.6	-3.2
SOEs balance	0.5	0.6	-0.1	-0.4	-0.7	0.2
Public sector balance 4/	0.6	-0.3	-4.8	-7.4	-6.2	-3.0
Public sector debt (end of period) 4/	41.9	41.1	49.5	58.4	61.2	61.4
Monetary accounts (end of period, y/y percent change)						
Broad money growth	4.7	3.6	10.2	4.8	-0.2	3.5
Narrow money growth	2.8	5.7	14.2	3.5	6.9	5.0
Credit to the private sector by depository corporations	5.8	2.4	4.5	4.5	6.9	5.0
Balance of payments (billions of U.S. dollars)						
Current account balance	28.4	38.0	21.2	-11.0	-4.2	12.5
(In percent of GDP)	5.6	7.0	4.2	-2.2	-0.8	2.2
Exports, f.o.b.	251.1	242.7	227.0	270.6	301.7	312.5
Growth rate (dollar terms)	7.5	-3.3	-6.5	19.2	11.5	3.6
Growth rate (volume terms)	3.9	-3.7	-5.8	15.4	3.1	2.1
Imports, f.o.b.	228.7	216.0	186.1	230.7	271.9	280.9
Growth rate (dollar terms)	13.7	-5.6	-13.8	23.9	17.9	3.3
Growth rate (volume terms)	7.6	-5.8	-10.4	18.8	6.2	4.5
Capital and financial account balance 5/	-21.2	-24.5	-2.8	3.5	4.2	-12.5
Overall balance	7.3	13.6	18.4	-7.5	0.0	0.0
Gross official reserves (including net forward position, end of period) (billions of U.S. dollars)	239.4	258.7	287.4	279.2	279.2	279.2
(Months of following year's imports)	13.3	16.7	15.0	12.3	11.9	11.2
(Percent of short-term debt) 6/	288.4	325.8	310.4	299.2	312.7	299.7
(Percent of ARA metric)	224.7	232.6	253.3	236.3	227.4	213.5
Forward position of BOT (end of period)	-33.7	-34.3	-29.3	-33.2	…	…
Exchange rate (baht/U.S. dollar)	32.3	31.0	31.3	32.0	…	…
NEER appreciation (annual average)	4.0	6.9	-0.5	4.1	…	…
REER appreciation (annual average)	3.0	5.7	-2.6	3.2	…	…
External debt						
(In percent of GDP)	32.2	31.6	38.2	39.0	39.4	39.0
(In billions of U.S. dollars)	163.1	171.9	190.7	197.5	210.3	225.5
Public sector 7/	35.7	38.0	37.2	41.5	41.8	42.4
Private sector	127.4	133.9	153.5	156.0	168.5	183.0
Medium- and long-term	65.9	74.6	80.0	84.1	99.1	109.7
Short-term (including portfolio flows)	61.5	59.3	73.5	71.8	69.4	73.3
Debt service ratio 8/	6.0	6.3	6.3	7.3	7.3	7.3
Memorandum items:						
Nominal GDP (billions of baht)	16,373.3	16,892.4	15,636.9	16,178.7	17,295.2	18,156.5
(In billions of U.S. dollars)	506.5	544.0	499.7	505.9	…	…

Sources: Thai authorities; CEIC Data Co. Ltd.; and IMF staff estimates and projections.

1/ This series reflects the new GDP data based on the chain volume measure methodology, introduced by the Thai authorities in May 2015.
2/ On a fiscal year basis. The fiscal year ends on September 30.
3/ Includes budgetary central government, extrabudgetary funds, and local governments.
4/ Includes general government and SOEs.
5/ Includes errors and omissions.
6/ With remaining maturity of one year or less.
7/ Excludes debt of state enterprises.
8/ Percent of exports of goods and services.

Table 2. Thailand: Macroeconomic Framework, 2018–27

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
					Projections					
Real GDP growth (y/y percent change)	4.2	2.2	-6.2	1.5	2.8	4.0	3.6	3.3	3.2	3.0
Consumption	4.1	3.4	-0.6	1.1	5.1	0.5	4.6	4.2	2.2	3.8
Gross fixed investment	3.9	2.0	-4.8	3.4	4.5	1.2	4.3	4.6	2.2	2.7
Headline CPI inflation (period average, y/y percent change)	1.1	0.7	-0.8	1.2	6.1	2.5	1.5	2.3	2.0	2.0
Core CPI inflation (period average, y/y percent change)	0.7	0.5	0.3	0.2	2.6	1.7	1.8	2.0	2.0	2.0
	-0.2	*-0.1*	*-0.1*	*0.2*	*1.4*	*-0.2*	*0.8*	*-0.2*	*0.0*	*-1.4*
Saving and investment (percent of GDP)										
Gross domestic investment	25.2	23.8	23.7	29.1	29.2	27.7	22.9	23.2	25.8	23.7
Private	16.9	16.9	16.8	17.0	18.4	18.1	18.9	18.7	18.7	17.3
Public	5.8	5.7	6.4	6.6	6.3	5.7	5.9	5.7	5.5	5.0
Change in stocks	2.4	1.2	0.4	5.5	4.6	3.9	-1.9	-1.1	1.7	1.4
Gross national saving	30.8	30.8	27.9	26.9	28.5	29.9	26.6	26.6	29.2	27.0
Private, including statistical discrepancy	25.3	26.7	26.8	27.8	27.8	27.3	24.0	24.2	26.9	25.0
Public	5.5	4.1	1.1	-0.8	0.7	2.6	2.6	2.4	2.3	2.0
Foreign saving (- = current account surplus)	-5.6	-7.0	-4.2	2.2	0.8	-2.2	-3.7	-3.3	-3.4	-3.3
Credit to the private sector by depository corporations (y/y percent change)	5.8	2.4	4.5	4.5	6.9	5.0	1.3	8.8	5.1	13.3
Fiscal accounts (percent of GDP, fiscal year basis)										
Central government budgetary balance	-2.5	-2.6	-5.0	-9.4	-6.6	-2.7	-3.0	-3.2	-3.4	-3.5
General government balance	0.1	-0.8	-4.7	-7.0	-5.6	-3.2	-3.2	-3.4	-3.4	-3.5
Revenue and grants	21.4	21.0	20.7	20.2	20.0	20.5	20.6	20.6	20.6	20.6
Expense and net acquisition of nonfinancial assets	21.4	21.8	25.4	27.3	25.6	23.7	23.8	24.0	24.0	24.1
Public sector balance	0.6	-0.3	-4.8	-7.4	-6.2	-3.0	-2.9	-3.1	-2.9	-3.0
Non-financial public enterprise balance	-0.5	-0.5	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
Public sector debt (end of period)	41.9	41.1	49.5	58.4	61.2	61.4	61.2	60.9	59.4	59.6
Balance of payments (billions of U.S. dollars)										
Exports, f.o.b.	251.1	242.7	227.0	270.6	301.7	312.5	327.6	345.8	362.2	380.7
(Volume growth)	3.9	-3.7	-5.8	15.0	3.1	2.1	2.9	4.0	3.5	3.9
Imports, f.o.b.	228.7	216.0	186.1	230.7	271.9	280.9	298.1	317.7	333.8	352.1
(Volume growth)	7.6	-5.8	-10.5	18.3	6.2	4.5	6.2	6.0	3.9	4.0
Trade balance	22.4	26.7	40.9	39.9	29.8	31.6	29.5	28.0	28.4	28.5
Services, income, and transfers	6.0	11.3	-19.7	-50.9	-34.0	-19.0	-7.6	-6.6	-5.5	-3.1
Current account balance	28.4	38.0	21.2	-11.0	-4.2	12.5	21.9	21.4	22.9	25.4
(Percent of GDP)	5.6	7.0	4.2	-2.2	-0.8	2.2	3.7	3.3	3.4	3.3
Financial account balance 1/	-21.2	-24.5	-2.8	3.5	4.2	-12.5	-21.9	-21.4	-22.9	-25.4
Overall balance	7.3	13.6	18.4	-7.5	0.0	0.0	0.0	0.0	0.0	0.0
Gross official reserves (including net forward position, billions of U.S. dollars)	239.4	258.7	287.4	279.2	279.2	279.2	279.2	279.2	279.2	279.2
(Percent of ARA metric)	224.7	232.6	253.3	236.3	227.4	213.5	203.6	204.8	198.8	192.1
External debt										
External debt (billions of U.S. dollars)	163.1	171.9	190.7	197.5	210.3	225.5	239.8	257.7	277.2	297.6
External debt (percent of GDP)	32.2	31.6	38.2	39.0	39.4	39.0	40.7	40.2	41.3	39.1

Sources: Thai authorities; CEIC Data Co. Ltd.; and IMF staff estimates and projections.

1/ Includes errors and omissions.

Table 3a. Thailand: Medium-Term Fiscal Scenario, FY2018–FY2027 1/

(In billions of baht, unless otherwise stated)

					Projections					
	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
General Government										
Revenue	3462.6	3530.9	3276.1	3235.0	3418.9	3663.8	3865.9	4063.6	4337.9	4493.3
Tax revenue	2695.7	2720.1	2486.6	2517.1	2653.5	2861.4	3023.7	3178.3	3392.8	3514.4
Taxes on income	975.0	1031.9	912.6	923.8	984.9	1081.7	1135.5	1193.6	1274.2	1319.8
Taxes on goods and services	1566.6	1539.1	1441.8	1477.1	1574.8	1650.8	1732.9	1821.5	1944.5	2014.1
Taxes on international trade	93.8	98.0	84.2	93.0	69.1	102.8	107.9	113.4	121.1	125.4
Other	60.3	51.0	47.9	23.2	24.7	26.1	47.4	49.8	53.2	55.1
Social contributions	162.1	171.5	150.1	107.2	114.3	119.8	125.8	132.2	141.2	146.2
Other revenue	602.3	637.7	638.0	608.7	648.9	680.3	714.1	750.6	801.3	830.0
Total expenditure	3452.2	3668.0	4023.8	4359.2	4366.7	4226.9	4452.4	4719.0	5034.8	5244.8
Expense	3055.8	3263.7	3516.4	3946.8	3858.5	3696.0	3896.3	4135.5	4434.4	4622.9
Compensation of employees	981.4	998.2	960.9	955.4	1012.6	1061.5	1114.2	1171.2	1250.3	1295.1
Purchase/use of goods and services	1013.0	1046.4	971.8	1102.3	1061.6	1057.2	1098.6	1154.8	1232.8	1276.9
Interest	165.0	169.8	153.7	201.9	278.6	368.4	413.3	462.6	501.0	534.8
Social benefits	420.4	445.7	498.6	541.5	690.0	550.9	589.3	631.2	686.4	724.7
Other	475.9	603.7	931.3	1145.6	815.7	658.1	680.8	715.6	763.9	791.3
Net acquisition of nonfinancial assets	396.4	404.3	507.4	412.4	508.2	531.0	556.2	583.6	600.4	622.0
o.w. fixed assets	397.1	402.7	507.1	474.9	658.2	531.0	556.2	583.6	600.4	622.0
o.w. nonproduced assets	0.1	0.3	0.1	-63.1	0.0	0.0	0.0	0.0	0.0	0.0
Overall fiscal balance	10.4	-137.1	-747.7	-1124.2	-947.8	-563.2	-586.6	-655.4	-696.9	-751.6
SOEs										
Overall fiscal balance 2/	79.4	93.1	-20.7	-65.5	-113.3	34.5	39.6	45.0	94.0	103.2
Public Sector										
Overall fiscal balance 3/	89.8	-44.0	-768.4	-1189.7	-1061.1	-528.7	-547.0	-610.4	-603.0	-648.3
Primary balance	301.8	167.2	-581.0	-949.4	-736.2	-101.4	-73.1	-85.6	-40.3	-55.4
Cyclically adjusted primary balance	266.8	161.4	-449.1	-818.2	-657.9	-72.3	-73.1	-105.3	-62.7	-55.4
Structural primary balance	228.2	266.9	161.7	-449.0	-881.2	-657.9	-72.3	-73.1	-105.3	-62.7
Debt	6781.0	6901.8	7848.2	9337.5	10429.0	10979.7	11492.4	12012.3	12499.1	12999.9
Memorandum items:										
Public sector investment 4/	836.5	867.0	1065.7	1014.4	1068.0	994.1	1040.3	1090.4	1100.3	1139.7
General government	558.5	581.0	689.6	595.0	622.9	651.2	682.4	716.2	742.0	768.6
Public enterprises	278.0	286.0	376.0	419.4	445.1	343.0	357.9	374.2	358.2	371.1

Sources: Thai authorities; and IMF staff estimates and projections.

1/ Fiscal year runs from October to September.
2/ Estimated from the evolution of SOEs debt.
3/ Includes General Government and SOEs.
4/ Official GFS data are not available for the Public Sector. Historical data are estimated based on GFS General Government official data, and information from SEPO and national accounts.

Table 3b. Thailand: Medium-Term Fiscal Scenario, FY2018–FY2027 1/

(In percent of fiscal year GDP, unless otherwise stated)

			Act				Projections			
	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
General Government										
Revenue	21.4	21.0	20.7	20.2	20.0	20.5	20.6	20.6	20.6	20.6
Tax revenue	16.7	16.2	15.7	15.7	15.6	16.0	16.1	16.1	16.1	16.1
Taxes on income	6.0	6.1	5.8	5.8	5.8	6.1	6.1	6.1	6.1	6.1
Taxes on goods and services	9.7	9.2	9.1	9.2	9.2	9.2	9.2	9.2	9.2	9.2
Taxes on international trade	0.6	0.6	0.5	0.6	0.4	0.6	0.6	0.6	0.6	0.6
Other	0.4	0.3	0.3	0.1	0.1	0.1	0.3	0.3	0.3	0.3
Social contributions	1.0	1.0	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Other revenue	3.7	3.8	4.0	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Total expenditure	21.4	21.8	25.4	27.3	25.6	23.6	23.7	23.9	23.9	24.0
Expense	18.9	19.4	22.2	24.7	22.6	20.7	20.8	21.0	21.1	21.2
Compensation of employees	6.1	5.9	6.1	6.0	5.9	5.9	5.9	5.9	5.9	5.9
Purchase/use of goods and services	6.3	6.2	6.1	6.9	6.2	5.9	5.9	5.9	5.9	5.9
Interest	1.0	1.0	1.0	1.3	1.6	2.1	2.2	2.3	2.4	2.5
Social benefits	2.6	2.7	3.1	3.4	4.0	3.1	3.1	3.2	3.3	3.3
Other	2.9	3.6	5.9	7.2	4.8	3.7	3.6	3.6	3.6	3.6
Net acquisition of nonfinancial assets	2.5	2.4	3.2	2.6	3.0	3.0	3.0	3.0	2.9	2.9
o.w. fixed assets	2.5	2.4	3.2	3.0	3.9	3.0	3.0	3.0	2.9	2.9
o.w. nonproduced assets	0.0	0.0	0.0	-0.4	0.0	0.0	0.0	0.0	0.0	0.0
Overall fiscal balance	0.1	-0.8	-4.7	-7.0	-5.6	-3.2	-3.1	-3.3	-3.3	-3.4
SOEs										
Overall fiscal balance 2/	0.5	0.6	-0.1	-0.4	-0.7	0.2	0.2	0.2	0.4	0.5
Public Sector										
Overall fiscal balance 3/	0.6	-0.3	-4.8	-7.4	-6.2	-3.0	-2.9	-3.1	-2.9	-3.0
Primary balance	1.9	1.0	-3.7	-5.9	-4.3	-0.6	-0.4	-0.4	-0.2	-0.3
Cyclically adjusted primary balance	1.7	1.0	-2.8	-5.1	-3.9	-0.4	-0.4	-0.5	-0.3	-0.3
Structural primary balance	1.7	1.0	-2.8	-5.5	-3.9	-0.4	-0.4	-0.5	-0.3	-0.3
Debt	41.9	41.1	49.5	58.4	61.2	61.4	61.2	60.9	59.4	59.6
Memorandum items:										
Public sector investment 4/	5.2	5.2	6.7	6.3	6.3	5.6	5.5	5.5	5.2	5.2
General government	3.5	3.5	4.3	3.7	3.7	3.6	3.6	3.6	3.5	3.5
Public enterprises	1.7	1.7	2.4	2.6	2.6	1.9	1.9	1.9	1.7	1.7

Sources: Thai authorities; and IMF staff estimates and projections.

1/ Fiscal year runs from October to September.

2/ Estimated from the evolution of SOEs debt.

3/ Includes General Government and SOEs.

4/ Official GFS data are not available for the Public Sector. Historical data are estimated based on GFS General Government official data, and information from SEPO and national accounts.

Table 4. Thailand: Financial Soundness Indicators, 2016–21
(In percent, unless otherwise stated)

	2016	2017	2018	2019	2020	2021 March	2021 June	2021 September
				(In percent)				
Capital adequacy								
Regulatory capital to risk-weighted assets	17.8	18.0	17.9	19.4	19.8	19.7	19.7	19.5
Regulatory Tier 1 capital to risk-weighted assets	14.5	15.1	15.0	16.1	16.7	16.7	16.7	16.4
Asset quality								
Nonperforming loans net of provisions to capital	8.4	9.1	9.1	9.1	8.9	8.7	8.9	9.0
Nonperforming loans to total gross loans	3.0	3.1	3.1	3.1	3.2	3.2	3.2	3.3
Earnings and profitability								
Return on assets	1.4	1.2	1.3	1.7	0.8	0.9	1.1	1.0
Return on equity	10.7	9.1	9.4	11.8	5.5	6.5	7.8	7.2
Liquidity								
Liquid assets to total assets (liquid asset ratio)	18.8	19.9	18.9	19.7	22.2	22.2	22.6	22.1
Liquid assets to short term liabilities	30.7	32.6	30.7	33.6	34.5	34.3	34.6	33.9
Loan-deposit ratio 1/	96.9	96.3	98.3	96.3	92.3	92.2	92.8	93.8

Sources: Bank of Thailand; and Haver Analytics.

1/ This ratio excludes interbank data and covers all commercial banks (commercial banks registered in Thailand and foreign bank branches).

Table 5. Thailand: Monetary Survey, 2016–22
(In billions of baht, unless otherwise stated)

	2016	2017	2018	2019	2020	2021	Mar-22
Central Bank Survey							
Net foreign assets	6,043	6,398	6,523	6,617	7,679	7,915	7,799
Net domestic assets	-4,226	-4,461	-4,523	-4,546	-5,348	-5,334	-5,261
Reserve money	1,816	1,937	2,001	2,071	2,332	2,580	2,538
Depository Corporations Survey							
Net foreign assets	6,152	6,410	6,715	6,823	7,775	7,763	7,801
Net domestic assets	12,144	12,803	13,395	14,018	15,183	16,299	16,757
Domestic credit	18,396	19,265	20,196	20,750	22,300	24,396	24,761
Net credit to central government	482	500	408	464	1,115	2,277	2,405
Credit to local government	18	16	14	12	10	9	8
Credit to nonfinancial public enterprises	287	306	339	373	400	455	499
Credit to other financial corporations	1,012	1,079	1,072	1,102	1,127	1,132	1,174
Total credit to private sector	16,598	17,363	18,364	18,799	19,647	20,524	20,676
Credit to other nonfinancial corporations	6,412	6,735	7,138	7,114	7,444	7,904	8,005
Credit to other resident sector	10,186	10,628	11,226	11,685	12,203	12,620	12,671
Other items (net)	-6,252	-6,462	-6,801	-6,732	-7,117	-8,098	-8,004
Broad Money	18,296	19,213	20,110	20,841	22,958	24,062	24,558
Narrow money	1,864	2,039	2,095	2,214	2,530	2,884	2,945
Currency in circulation	1,336	1,438	1,504	1,591	1,813	2,070	2,051
Deposits at depository corporations	528	601	591	624	717	814	894
Quasi-money	16,432	17,174	18,014	18,627	20,429	21,178	21,613
Memorandum Items:							
Broad money growth (y/y percent change)	4.2	5.0	4.7	3.6	10.2	4.8	6.3
Narrow money growth (y/y percent change)	4.8	9.4	2.8	5.7	14.2	14.0	12.6
Credit to private sector growth by depository corporations (y/y percent change)	4.2	4.6	5.8	2.4	4.5	4.5	4.3
Contribution to Broad Money Growth							
Net foreign assets (in percent)	1.6	1.4	1.6	0.5	4.6	-0.1	0.6
Net domestic assets (in percent)	2.6	3.6	3.1	3.1	5.6	4.9	5.7
Domestic credit (in percent)	4.5	4.7	4.8	2.8	7.4	9.1	8.6

Sources: CEIC Data Co. Ltd.; and IMF staff calculations.

Table 6. Thailand: Balance of Payments, 2018–27 1/

				Projections						
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
	(In billions of U.S. dollars)									
Current Account Balance	**28.4**	**38.0**	**21.2**	**-11.0**	**-4.2**	**12.5**	**21.9**	**21.4**	**22.9**	**25.4**
Trade balance	22.4	26.7	40.9	39.9	29.8	31.6	29.5	28.0	28.4	28.5
Exports, f.o.b.	251.1	242.7	227.0	270.6	301.7	312.5	327.6	345.8	362.2	380.7
Imports, f.o.b.	228.7	216.0	186.1	230.7	271.9	280.9	298.1	317.7	333.8	352.1
Services balance	22.5	24.3	-14.3	-39.8	-24.4	-6.9	6.6	6.9	12.0	12.4
Of which: tourism receipts	56.4	59.8	13.5	1.8	15.4	31.2	48.8	53.2	59.7	68.0
Primary Income balance	-24.5	-20.2	-11.4	-18.6	-17.9	-20.8	-22.2	-21.8	-25.8	-24.1
Secondary Income balance	8.0	7.2	6.1	7.4	8.4	8.6	8.0	8.3	8.4	8.6
Capital and Financial Account Balance	**-13.8**	**-15.7**	**-11.9**	**-2.1**	**4.2**	**-12.5**	**-21.9**	**-21.4**	**-22.9**	**-25.4**
Foreign direct investment	-4.2	-5.6	-23.8	-5.7	-10.9	-11.9	-11.6	-11.4	-11.1	-10.7
Abroad	-17.4	-10.4	-19.0	-17.8	-15.7	-17.4	-18.0	-18.7	-19.5	-20.3
In reporting economy	13.2	4.8	-4.8	12.2	4.8	5.5	6.3	7.3	8.4	9.6
Portfolio investment	-5.9	-8.8	-12.1	-11.5	-8.0	-8.1	-7.7	-8.5	-9.4	-10.6
Financial derivatives	0.1	0.8	-0.4	-1.2	-0.3	-0.5	-1.0	-1.3	-0.8	-0.8
Other investment	-3.3	-2.1	24.4	16.1	23.3	7.9	-1.6	-0.2	-1.6	-3.3
Errors and omissions	-7.3	-8.7	9.1	5.6	0.0	0.0	0.0	0.0	0.0	0.0
Changes in Official Reserves (Increase -)	**-7.3**	**-13.6**	**-18.4**	**7.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
	(In percent of GDP)									
Current Account Balance	**5.6**	**7.0**	**4.2**	**-2.2**	**-0.8**	**2.2**	**3.7**	**3.3**	**3.4**	**3.3**
Trade balance	4.4	4.9	8.2	7.9	5.6	5.5	5.0	4.4	4.2	3.7
Exports, f.o.b.	49.6	44.6	45.4	53.5	56.6	54.0	55.6	54.0	54.0	50.1
Imports, f.o.b.	45.2	39.7	37.2	45.6	51.0	48.5	50.6	49.6	49.7	46.3
Services balance	4.4	4.5	-2.9	-7.9	-4.6	-1.2	1.1	1.1	1.8	1.6
Of which: tourism receipts	11.1	11.0	2.7	0.4	2.9	5.4	8.3	8.3	8.9	8.9
Primary Income balance	-4.8	-3.7	-2.3	-3.7	-3.4	-3.6	-3.8	-3.4	-3.9	-3.2
Secondary Income balance	1.6	1.3	1.2	1.5	1.6	1.5	1.4	1.3	1.2	1.1
Capital and Financial Account Balance	**-2.7**	**-2.9**	**-2.4**	**-0.4**	**0.8**	**-2.2**	**-3.7**	**-3.3**	**-3.4**	**-3.3**
Foreign direct investment	-0.8	-1.0	-4.8	-1.1	-2.0	-2.0	-2.0	-1.8	-1.7	-1.4
Abroad	-3.4	-1.9	-3.8	-3.5	-2.9	-3.0	-3.1	-2.9	-2.9	-2.7
In reporting economy	2.6	0.9	-1.0	2.4	0.9	1.0	1.1	1.1	1.2	1.3
Portfolio investment	-1.2	-1.6	-2.4	-2.3	-1.5	-1.4	-1.3	-1.3	-1.4	-1.4
Financial derivatives	0.0	0.2	-0.1	-0.2	-0.1	-0.1	-0.2	-0.2	-0.1	-0.1
Other investment	-0.6	-0.4	4.9	3.2	4.4	1.4	-0.3	0.0	-0.2	-0.4
Errors and omissions	-1.4	-1.6	1.8	1.1	0.0	0.0	0.0	0.0	0.0	0.0
Overall balance	-1.4	-2.5	-3.7	1.4	0.0	0.0	0.0	0.0	0.0	0.0
Changes in official reserves (increase -)	-1.4	-2.5	-3.7	1.4	0.0	0.0	0.0	0.0	0.0	0.0
Memorandum Items										
Gross official reserves (In billions of U.S. dollars)	206	224	258	246	246	246	246	246	246	246
Gross official reserves (incl. net forward position)										
(In billions of U.S. dollars)	239	259	287	279	279	279	279	279	279	279
(Percent of GDP)	47.3	47.5	57.5	55.2	52.4	48.2	47.4	43.6	41.6	36.7
(Months of following year's imports)	13.3	16.7	15.0	12.3	11.9	11.2	9.9	9.6	9.1	8.5
(In percent of short-term debt)	288.4	325.8	310.4	299.2	312.7	299.7	288.6	342.9	325.8	309.8
Forward/swap position of BOT	-33.7	-34.3	-29.3	-33.2	-33.2	-33.2	-33.2	-33.2	-33.2	-33.2
Export growth (y/y percent change)	7.5	-3.3	-6.5	19.2	11.5	3.6	4.8	5.6	4.7	5.1
Export volume growth	3.9	-3.7	-5.8	15.0	3.1	2.1	2.9	4.0	3.5	3.9
Export unit value growth	3.4	0.3	-0.8	3.3	8.2	1.4	1.9	1.5	1.2	1.2
Import growth (y/y percent change)	13.7	-5.6	-13.8	23.9	17.9	3.3	6.1	6.6	5.1	5.5
Import volume growth	7.6	-5.8	-10.5	18.3	6.2	5.0	6.2	5.2	5.3	5.3
Import unit value growth	5.7	0.3	-3.8	4.3	11.0	-1.1	-0.1	0.5	1.1	1.4
External debt (percent of GDP)	32.2	31.6	38.2	39.0	39.4	39.0	40.7	40.2	41.3	39.1
(Billions of U.S. dollars)	163	172	191	197	210	225	240	258	277	298
Debt service ratio (percent) 2/	6.3	6.9	8.9	7.1	7.4	8.0	7.6	6.9	6.5	6.3
GDP (billions of U.S. dollars)	507	544	500	506	533	579	589	640	671	760

Sources: Thai authorities; CEIC Data Co. Ltd.; and IMF staff estimates and projections.

1/ Includes financing facilities arranged by AsDB and IBRD and disbursements under the Miyazawa Plan.

2/ Percent of exports of goods and services.

Table 7. Thailand: Risk Assessment Matrix

Nature/Source of Threat	Likelihood	Impact	Policies to Minimize Impact
		Conjunctural Risks	
Outbreaks of Lethal and Highly Contagious COVID-19 Variants	*Medium*	Rapidly increasing hospitalizations and deaths due to low vaccine protection or vaccine-resistant variants could force more social distancing and/or new lockdowns, weighing on the tourism recovery in the near term and prompt persistent behavioral changes, requiring a deep restructuring of the sector. This could also result in extended supply chain disruptions and a reassessment of growth prospects, triggering capital outflows, financial tightening, and currency depreciations	Continue more targeted support to vulnerable groups and viable firms. Build-in incentives in policy support measures to facilitate reallocation of resources and encourage modification of firms' business models. Frontloading and scaling up public investments, combined with acceleration in structural reforms, could mitigate the scarring impact of the pandemic.
Russia's Invasion of Ukraine Leads to Escalation of Sanctions and De-globalization.	*High*	Further intensification of the conflict could lead broadening of sanctions on Russia to include oil and gas sectors, and disconnecting Russia from much of the global financial and trade system. Countersanctions by Russia and secondary sanctions on countries and companies that continue business with Russia could aggravate geopolitical tensions. This could lead to higher commodity prices and generate large spillovers to the euro, which would further intensify Thailand's inflation pressures and depress goods exports and tourism. Moreover, a prolonged crisis with elevated commodity prices could increase global risk aversion, leading to a disorderly tightening of global financial conditions	Deploy an integrated policy approach with close coordination between monetary, macroprudential, fiscal, and structural policies to shield vulnerable groups from high commodity prices, guard against development of a wage-price spiral that will de-anchor inflation expectations and maintain financial stability.
De-anchoring of Inflation Expectations in the U.S. and/or Advanced European Economies.	*Medium (for US)/Low (for Euro area)*	The faster tightening of advanced economies' (AE) monetary policy could result in sharper-than-anticipated tightening of global financial conditions and spiking risk premia generating sizable financial spillovers, leading to further currency depreciations, asset market selloffs, bankruptcies, and contagion across EMDEs.	Allow exchange rate flexibility to be the first line of defense, with judicious intervention to address disorderly market conditions. Continue to implement prudent fiscal policy and promote labor and product market flexibility. Strengthen the macroprudential framework and policies through addressing current leakages in the macroprudential toolkit by covering cooperatives and nonbanks and broadening the set of macroprudential tools used. The lack of significant balance sheet mismatches should however limit the negative impact on financial stability.
Abrupt Growth Slowdown in China	*Medium*	A combination of extended COVID-19 lockdowns, rising geopolitical tensions, a sharper-than-expected slowdown in the property sector, and/or inadequate policy responses could result in a further growth slowdown of economic activity, with spillovers affecting Thailand through supply chain disruptions, trade, including tourist arrivals from China, commodity-price, and financial channels.	Continue more targeted support to vulnerable groups and viable firms. Build-in incentives in policy support measures to facilitate reallocation of resources. Accelerate structural reform implementation to address pre-pandemic structural weaknesses that limited productivity growth and human and physical capital accumulation.
Rising and Volatile Food and Energy Prices	*High*	Commodity prices are volatile and trend up amid pent-up demand and supply disruptions, wars, export restrictions, and currency depreciations. This could disrupt the green transition and lead to bouts of price and real sector volatility, food insecurity, social unrest, and acute food and energy crises.	Accommodate the first-round effect of the cost-push shock, given the significant slack in the economy and anchored inflation expectations. Stand ready to address second-round effects of the shock that threaten to de-anchor inflation expectations.
Widespread Social Discontent and Political Instability	*High*	Social tensions, which have taken place in Thailand over the last few months, could intensify as the pandemic gets more protracted and inadequate policy response cause socio-economic hardship (unemployment, poverty, and shortages and higher prices of essentials—often exacerbating pre-existing inequities and political polarization). Growing political polarization and instability weaken policymaking and confidence dampening private investment and FDI inflows weighing on broader economic recovery. Public investment execution would also slow down. In extreme bound scenarios, capital outflows would put pressure on credit and asset markets.	Allow automatic stabilizers to work. Provide adequate liquidity to banks to minimize disruptions in the financial system. Let the exchange rate be the first line of defense in case of capital outflows but use FX intervention to address disorderly market conditions.
Disorderly Private Sector Deleveraging	*Medium*	A prolonged pandemic (and/or war in Ukraine) and advanced economies' monetary policy tapering in combination with the withdrawal of the policy support in Thailand could trigger bankruptcies and disorderly private sector deleveraging, derailing the recovery and undermining financial stability. The elevated level of Thailand's private debt could amplify the impact of this shock.	Strengthen insolvency regime for corporates and households. Strengthen the macroprudential framework and policies through addressing current leakages in the macroprudential toolkit by covering cooperatives and nonbanks and broadening the set of macroprudential tools used.

Table 7. Thailand: Risk Assessment Matrix (Concluded)

		Structural Risks	
Geopolitical Tensions and De-globalization	***High***	Intensified geopolitical tensions, security risks, and conflicts and wars cause economic and political disruptions, disorderly migration, production reshoring, a decline in global trade, and lower investor confidence. Associated supply chain disruptions and commodity price shocks could lead to shortages of intermediate and final consumer goods, growth slowdowns, and price surges, compounded by the passthrough from currency depreciations. This would adversely affect Thailand's trade-dependent economy. In particular, Thailand's auto sector could be negatively affected by the continued shortages in semiconductors.	Structural reforms and infrastructure development would raise returns to private investment and strengthen domestic-demand-led growth. Allow exchange rate flexibility to be the first line of defense.
Cyberthreats	***Medium***	Cyberattacks on critical physical or digital infrastructure (including digital currency platforms) could trigger financial instability or widespread disruptions in socio-economic activities. Bank of Thailand has been a leading voice in the region on work on both fintech and digital economy, which also saw the setting up of a new Ministry of digital economy.	BOT should sustain current efforts to strengthen its capacity to deal with cyber-attacks and fintech-related challenges.
Natural Disasters Related to Climate Change	***Medium***	Higher frequency of natural disasters could cause severe economic damage to smaller vulnerable economies and accelerate emigration. Severe events in large economies hitting key infrastructure reduce global GDP, cause further supply chain disruptions and inflationary pressures, and prompt a recalculation of risk and growth prospects.	Improve social safety net programs to better target most vulnerable populations. Use efficient carbon pricing and scale up investments in climate resilient infrastructure and in research and development. Incorporate climate risks in prudential policies and in stress and financial sector assessments. Encourage a shift toward a more sustainable and higher value-added tourism mode, which may help reduce the health risks and foster a greener recovery.
Political Uncertainty	***Medium***	The political fragmentation could prevent the government from deploying the needed structural reforms to address pre-pandemic structural weaknesses that limited productivity growth and human and physical capital accumulation, which could amplify the scarring impact of the pandemic.	Deploy an integrated policy approach with close coordination between monetary, macroprudential, fiscal policies to mitigate the scarring impact of the pandemic.

The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of IMF staff). The relative likelihood of risks listed is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on

the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly.

Table 8. Thailand: Implementation of the Main Recommendations of the 2021 Article IV Consultation

Fund Recommendations	Policy Actions
Fiscal Policy:	
• Implement ambitious fiscal expansion focused on scaling up public investment and protecting the vulnerable. • For all COVID-19-related spending, follow strict guidelines for fiscal transparency and accountability, including the publication of procurement contracts. • Address bottlenecks in executing infrastructure spending and strengthen the operational aspects of the procurement law. • Move to an efficient carbon pricing over time. • Pursue tax administration and policy reforms guided by the 2019 MTRS.	• The government provided an additional 3.4 percent of GDP fiscal stimulus in 2021 financed by additional borrowing of 3 percent of GDP. The share of capital spending in overall budget outlets is set to increase by about 5 percentage points in FY2022 compared with FY2021. • COVID-19 measures, particularly under the Emergency Decrees, follow a strict process of monitoring and evaluating. Specifically, Thai Government Procurement system follows four main principles: the value for money, the transparency, the efficiency and effectiveness, principle, and accountability. • The Comptroller-General's Department plans revisions to the state procurement law to discourage appeals for frivolous reasons by bidders after losing bids. • The authorities are preparing the legislation to assist in developing a more comprehensive carbon footprint reporting for a broad-based carbon pricing regime to achieve 2030 Thailand's mitigation commitments. • The government is working to enhance the following elements of the tax administration: ease of paying taxes, fraud prevention, promoting the international tax agreement, technology adaption.
Monetary and Exchange Rate Policies:	
• Ease monetary policy and prioritize targeted measures to channel existing systemic liquidity to credit-constrained firms. • Deploy UMP if downside risks materialize. • The exchange rate should continue to act as a shock absorber. • Publish data on foreign exchange intervention (FXI). • Phase out of the remaining capital-flow management (CFMs) measures on non-resident baht accounts.	• The BOT used bank-based tools to channel excess liquidity in the banking system to SMEs. The BOT remains skeptical on the effectiveness of capital-market based UMP tools. • FXI was largely two-sided in line with capital flow movements and was used to deal with excessive exchange rate movements due to volatile risk premia to provide the private sector with sufficient time to adjust. • In early 2021, the BOT has introduced the Non-resident Qualified Company (NRQC) scheme to allow non-resident corporates having trade and direct investment in Thailand to apply for NRQC status. This scheme allows NRQCs to manage Thai baht liquidity more flexibly without being subject to the end-of-day outstanding limit on NRBA. The BOT is now considering further relaxations such as qualifications of NRQCs so that more non-resident corporates would be eligible to apply.
Financial Policies:	
• Address leakages in the MPP toolkit. • Link the support type the nature of the pandemic-induced problem faced by firms. • Enhance efficient restructuring and resolution options. • Implement AML/CFT risk-based supervision to ensure that financial institutions effectively comply with preventive measures.	• The BOT has supported the Cooperative Promotion Department (CPD) in issuing more stringent regulations regarding corporate governance, disclosure, and capital requirement. The BOT, CPD, Cooperative Auditing Department (CAD), and the FPO finalized the White Paper for enhancing Thrift and Credit Cooperatives and Credit Unions supervision and their future financial landscape. • The BOT has encouraged financial institutions, specialized financial institutions, and non-banks to provide a long-term debt restructuring, which is in line with individual debtor's debt serviceability. In addition, the BOT also refined debt consolidation measures to support long-term debt restructuring and reduce the burden of refinancing retail loans, by expanding the scope of debt consolidation measures. • The Anti-Money Laundering Act (AMLA) is being amended to expand the coverage of reporting entities to include leasing business, lawyers, and accountants classified as Designated Non-Financial Businesses and Professions (DNFBPs). The Counter-Terrorism and • Proliferation of Weapon of Mass Destruction Financing Act is being amended to provide the mechanism for delisting request. The draft Beneficial Ownership Information Act is being drafted with an aim to improve transparency of legal persons, trusts, cooperatives, and non-profit organizations.
Structural Policies:	
• Enhance active labor market policies in a coordinated fashion with information sharing across government agencies. • Streamline labor and business regulations. • Move to lower-density tourism	• The Ministry of Higher Education, Science, Research and Innovation has launched a "Reskill, Upskill and Newskill Project" in January 2022, which offers 22 non-degree courses in three main dimensions: (i) the smart farming, (ii) the smart tourism, and (iii) the other skills, based on domestic demand, including logistic, data management, food preservation, and etc.

Table 9. Thailand: Implementations of 2019 FSAP Key Recommendations

FSAP Recommendations	Policy Actions
Overall Regulatory and Supervisory Framework	
Establish an overarching body to strengthen cooperation, coordination, and information sharing, with a "comply or explain" mechanism where it makes recommendations to member agencies.	The BOT is currently reviewing alternatives that would be most appropriate for Thai context, including inviting other regulator(s) to the 3-regulator steering committee meeting for issues that extend beyond the purviews of the steering committee.
Improve further the accountability mechanism of the FIPC and the OIC, including by reinforcing the accountability of the FIPC to include hearings to an appropriate legislative body.	See above.
Strengthen further the independence of regulators including by removing representatives of other institutions from the FIPC and boards of regulatory agencies and by removing requirements for MOF approval to issue regulation to SFIs and take corrective actions.	
Risks to the Banking Sector Stability	
Enhance the data management system and improve capacity for liquidity risk analysis.	The BOT has developed and assessed systemic liquidity risk of Thrift and credit cooperatives (TCC) and credit unions (CU) . Currently, the BOT is in the process of developing systemic liquidity risk indicators for non-banks, specialized financial institutions (SFIs) and TCC/CUs.
Extend to the risk analysis to better cover a wider range of sources of risk with potential systemic spillovers, including concentration in loan portfolio.	The BOT has developed a new financial stability dashboard for monitoring key risks that are deemed important for Thailand's financial system. Moreover, the BOT includes big corporates (SiCorps), search-for-yield behaviors and new emerging risk into the dashboard, i.e., digital assets, which play an increasing role in the current financial system with possible implications on financial stability going forward.
Collect more granular data on SFIs to refine the stress tests on solvency and liquidity.	SFIs in Thailand have conducted solvency and liquidity stress test, and the BOT is currently reviewing the model used by SFIs.
Macroprudential and Financial Stability	
Clarify the financial stability mandate of the FIPC and the MPC	See above.
Address potential leakages by extending BoT's macroprudential authority, including extending DTIs to personal loans granted by SFIs, TCCs, and CUs.	See progress in Thrift and Credit Cooperatives and Credit Unions
Introduce a broad-based DSTI ratio	Regulated SFIs and NBFIs started submitting DSTI data with the same definition standard as commercial banks and the BOT is in the process of calibrating an appropriate DSTI. The BOT is currently extending regulatory scope to hire purchase and leasing companies to ensure that there is no regulatory leakage once DSTI ratio is introduced to all lending firms.
Amend internal guidelines on preventive and corrective action to reflect flexibility granted under FIBA.	The BOT amended the PPA/PCA internal guideline, which enhanced the BOT's flexibility in taking PPA actions before a bank's supervisory rating of 4 (weak bank) is reached.
Implement new definitions of loan restructuring and rescheduling and current practices surrounding NPL identification to meet international standards.	IFRS 9 became effective in Thailand since January 2020. The BOT revised relevant regulations and coordinated with the Thailand Federation of Accounting Profession (TFAC) to support the adoption of IFRS9.

Table 9. Thailand: Implementations of 2019 FSAP Key Recommendations (Concluded)

Banking and SFIs Oversight	
Continue reforms to supervise the three largest retail deposit taking SFIs under the same standards as commercial banks.	The BOT issued rules and regulations (SFI's phase 1-2) as well as guidelines aiming at stability and prudence, which include standards on governance, capital requirement, liquidity reserve requirement, credit process, single lending limit, accounting, branches services, outsourcing, KYC, IT risk management, mortgage loan, and market conduct. To enhance the efficiency, security, and sustainability of SFIs in conducting the businesses relating to their mandates, the BOT issued the Regulation on Telebanking and Digital banking Channel (SFI's phase 3), the Guideline on Operational Risk Management and the Guideline on Internal Control.
Thrift and Credit Cooperatives and Credit Unions	
Define and initiate the implementation of a regulatory and supervisory regime for financial cooperatives that is proportionally equivalent to that applied to the banking system.	The BOT has supported the CPD in issuing more stringent regulations, such regulation that have been issued are corporate governance, disclosure, and capital requirement The Thai authorities finalized the White Paper for enhancing TCCs/CUs supervision and future financial landscape of TCCs/CUs.
Address a potential over-indebtedness problem including by defining maximum DTI ratios and requiring TCCs and CUs to report to the NCB.	
AML/CFT	
Enhance scope and capacity for risk-based AML/CFT supervision	The Anti-Money Laundering Act is being amended to expand the coverage of reporting entities. The Counterterrorism and Proliferation of Weapon of Mass Destruction Financing Act is being amended to provide the mechanism for delisting request and procedure relating to false positives. The draft Beneficial Ownership Information Act is being drafted with an aim to improve transparency of legal persons, trusts, cooperatives, and NPOs. The draft Operation of Non-Profit Organizations Act is being drafted with an aim to enhance transparency of NPOs. The National Money Laundering and Counter Terrorism Financing Risk Assessment is being updated.
Crisis Management and Resolution	
Review and amend bank and SFI resolution law to align with Key Attributes.	*Banks*. Given that the BOT Act was only amended in July 2018 to set out the current resolution framework which lays down principles and provides adequate resolution tools that are broadly aligned with Key Attributes, the authorities' focus is on the preparation to ensure effective operationalization of the framework. The BOT has developed a resolution toolkit in 2020. To enhance executability, a playbook to assist relevant committees in decision-making has also been developed in 2021. The BOT has also developed a sample resolution plan that may be applied to D-SIBs as appropriate. Bank-specific resolution planning for D-SIBs is ongoing. *SFIs*. The Financial Institutions Business Act provides the statutory ground for the Minister of Finance to assign the BOT as regulator of SFIs. In the event that the condition or the operation of a SFI may cause damage to state interest, the BOT with the approval of the MoF, shall propose to the authorized person (Minister of Finance or the Cabinet) to consider giving an order for the SFI to resolve its financial position or operation, or suspend business operation entirely or partially for a for a temporary period within the time prescribed, or suspend managers or persons with power of management of the SFI from the performance of their duties within the time prescribed, or to decrease or increase its capital.
Develop bank and SFI resolution toolkit and implement bank-specific resolution planning.	
Strengthen ELA and deposit insurance arrangements in line with best practice.	To strengthen ELA arrangements, the principles and guidelines for accepting loan portfolio collaterals were approved in 2020. Key progress has been made in the assessment and pricing of loan portfolio collaterals, the review of financial haircuts, finalizing the process to set-off loans in case of default, and drafting of loan documentations for Section 42 ELA.
Source: Thai authorities and IMF 2019 FSAP.	

Annex I. Policy Support During the Pandemic

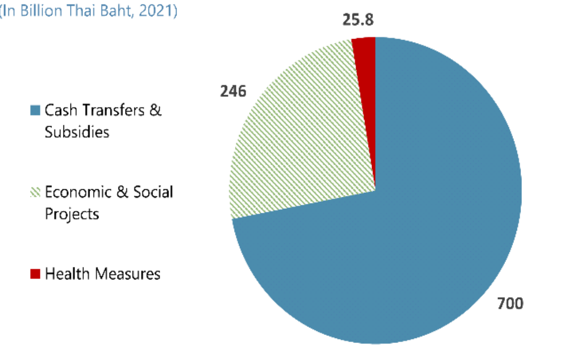
1. The government continued to provide extraordinary support to the economy through 2021.

- *Fiscal support.* After a strong fiscal expansion in 2020, the government provided an additional 2.3 percent of GDP fiscal stimulus in 2021, largely focused on cash handouts to households. This increased budget outlays for health and social spending in 2021, while tax revenue declined due to the deferral of income-tax and VAT payment deadlines and new exemptions. The overall deficit widened to 7.4 percent of GDP (from -4.8 percent of GDP in 2020). Public debt increased to 58.1 percent of GDP (from 41 percent of GDP pre-pandemic, Annex I. Figure 1 and Table 1).
- *Monetary accommodation.* The BOT maintained the monetary accommodation during 2021 by keeping the policy rate to an all-time low of 0.5 percent. The recent rise in inflation pushed real rates even lower. The exchange rate depreciation starting from 2021Q1 further loosened broader financial conditions (Annex I. Figure 1).[1]
- *Targeted support to financial institutions and their borrowers.* The authorities continued to help financial institutions maintain adequate buffers, both through the relaxation of regulatory measures and through restrictions on dividend payments.[2] They launched new liquidity support schemes for SMEs and measures to assist debtors affected by the pandemic through long-term debt restructuring. The BOT also encouraged banks to consider sustainable recovery plans for borrowers under debt restructuring (Annex I. Table 2).

Annex I. Figure 1. Thailand: Pandemic Expenditures and Financial Conditions

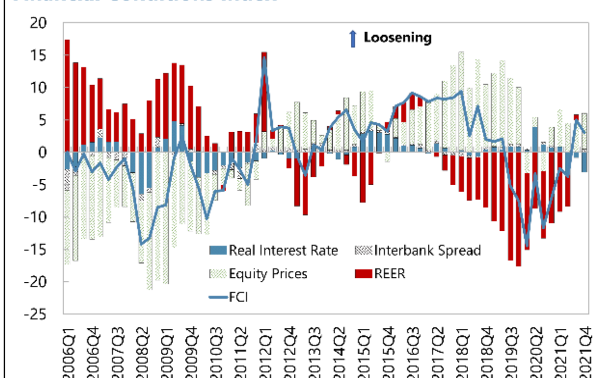
Composition of Pandemic Expenditure Response

(In Billion Thai Baht, 2021)



Source: Thai authorities.

Financial Conditions Index



Sources: Haver Analytics; Bloomberg LP; and IMF staff calculations

[1] Exchange rate depreciation can affect overall financial conditions through trade and financial channel. Given low balance sheet mismatches in Thailand, the impact via financial channel is small. Hence, depreciation loosens financial conditions via the trade channel.

[2] See Annex I, Table 2 for a summary of financial sector support measures in 2020-21.

Annex I. Table 1. Thailand: COVID-19 Fiscal Measures FY2020-22*
(In percent of GDP)

	2020	2021	2022	Total
Total Fiscal Measures				**12.2**
On-Budget, Above the Line	**3.5**	**4.3**	**0.3**	**8.0**
o/w debt financed	1.9	4.3	0.3	6.4
Phases I and II--assumed to be financed within the original FY2020 budget	1.6	...	...	1.6
Phase III: health spending, cash handouts and spending on projects to support economic recovery; financed with additional debt issuance)	1.9	4.3	0.3	6.4
Below the Line				**4.1**
Equity injections, loans, asset purchase or debt assumptions				0.5
Contingent liabilities				3.6
Guarantees (correspond to guarantees on BOT soft loans)				2.0
Quasifiscal				1.6

Sources: Thai authorities and IMF staff estimates. The table is based on IMF's presentation of fiscal accounts (GFS), which differs from the authorities' presentation.

Notes: *Data up to November 2021 for above the line measures

Annex I. Table 2. Thailand: Financial Sector Support Measures to Mitigate the Impact of COVID-19 (Continued)		
	2020	**2021**
Support Measures for Business	**April-October 2020** **Broad-Based Debt Payment Holiday Schemes for SME Borrowers**. Credit line with each financial institution no more than 100 million baht if loan not yet classified as NPL as of 31 December 2019. **BOT soft loan** schemes of 500 billion baht for financial institutions to lend to SMEs with interest up to 2 percent per year. **GSB soft loan guarantee** schemes of 150 billion baht with a maximum of 2 percent interest per year. **TCG's credit guarantee** schemes of 150 billion baht. **August 2020** **DR BIZ Project** to facilitate multi-creditor debt restructuring process. **October 2020** **Targeted Measure for SME With Credit Line With Each Financial Institutions no More than 100 Million Baht After the Broad-Based Debt Payment Holiday Expired**: •Enable financial institutions **to freeze loan classification status** for borrowers who are in the process of debt restructuring negotiation until the end of 2020. • Enable financial institutions **to provide debt payment holiday schemes and freeze loan classification status** for borrowers who are still severely affected and unable to clearly assess cash flows until the end of June 2021. **BOT soft loan:** Extending the application period, modifying eligibility criteria to cover listed firms in Market for Alternative Investment (MAI), additional TCG credit guarantee from year 3 onwards under the **Soft Loan Plus project** (of 57 billion baht). **GSB soft loan:** Targeting SMEs in business sectors which take longer-than-expected time to recover, such as tourism-related businesses, under the existing budget of GSB soft loan schemes.	**February 2021** The Cabinet approved a THB 50 billion **soft loan program** (available until June 30, 2021, through SFIs) to provide low-interest rate loans for up to 3 years to informal workers and SMEs linked to the tourism sector. **April 2021** Two new measures designed to support and transform viable businesses for the post COVID-19 world. These measures include the **special loan facility for business** with credit guarantee scheme (totaling 250 billion baht) and **debt restructuring through asset warehousing** (totaling 100 billion baht) with buy-back options. **June 2021** **Targeted Debt Payment Holiday Schemes and Freeze Loan Classification** Status. **August 2021** **Revise special loan measures to support SMEs** affected by the COVID19 pandemic to provide accessibility for debtors with higher risk. **October 2021** **TCG's credit guarantee** schemes of 175 billion baht.
Support Measures for Households	**February 2020** **Debt Clinic** extended to cover decided legal cases (pre-litigation). **March 2020** Introducing broad-based minimum **assistance to ease debt repayment burden** for retail borrowers, such as reduction of minimum payment rate or conversion to term loan for credit card and personal loans. **April 2020** **Debt Exit Fastlane** is an online platform developed in response to the COVID-19 pandemic. Retail and SME debtors in any status can submit a request for debt-related assistance, which will be sent to relevant lenders for consideration. Debtors who previously received impractical repayment schemes may also re-apply. **June 2020** Extending coverage and duration of support measures for borrowers still being affected by COVID-19 and offering a **wide range of minimum debt relief measures for borrowers** to choose, as well as increasing credit line ceiling for credit card and personal loans for borrowers having good credit record. **August 2020** **Debt Consolidation Schemes** to support borrowers having multiple loans within the same financial institution.	**September 2021** **Additional Measures to Support Households** affected by the C0VID-19 pandemic. The measures such as the reduction of minimum monthly repayment for credit card, increasing the credit limit on credit card and personal loans, the extension of credit limit and repayment period of digital personal loans and assisting debtors through long-term debt restructuring. **Debt Clinic** • Qualification adjustment is on-going to broaden the potential customer pool. At present NPLs before 1 April 2022 may apply. • The program is proposing scheme choices, among key improvement initiatives to attract more lenders and borrowers. **Debt Exit Fastlane** To improve assistance to borrowers, since January 2022, the online platform has also provided linkage to the Multi-creditor Facility for SMEs (previously DR BIZ), and Debt Doctor facility. **Online Debt Mediation Events** • In 2021 the BOT, in collaboration with some retail-debt lenders, launched 2 online debt mediation events to assist the borrowers affected by the COVID-19 pandemic.

Annex I. Table 2. Thailand: Financial Sector Support Measures to Mitigate the Impact of COVID-19 (Concluded)

		• Debtors were able to submit requests to their participating lenders via the BOT. • The restructuring schemes were pre-agreed in principle between the lenders and the BOT to ensure a level of minimum assistance. **November 2021** **Refining Debt Consolidation Schemes** by expanding the scope of debt consolidation measures to enable debt consolidation across different financial institutions.
Support Measures for Financial Institutions	**May 2020** The BoT reduced the rate of contribution from financial institutions to the FIDF to 0.23 percent of deposit base per annum from 0.46 percent until December 2022. **Measures to sustain capital positions of financial institutions:** (i) Commercial banks were asked to prepare capital management plan and assess their financial positions and performances under stress scenarios (stress test analysis) during 2020-22. (ii) Financial institutions are prohibited to pay dividend more than the dividend payout amount of year 2019 or 50 percent of year 2020 net profit. Premature repurchase of stocks and debentures countable as tier 1 or 2 regulatory capital are also forbidden. (iii) The BOT has eased the eligibility criteria for banks' additional tier 1 and tier 2 regulatory capital to be on par with the international standards. **November 2020** The BoT provides guideline for 2020 **dividend payment** by allowing financial institutions to pay dividends for the year 2020 performance not exceeding previous year payout ratio and 50 percent of net profit of 2020.	**October 2021** **Temporarily Easing of Loan-to-Value (LTV) Regulations** **November 2021** The BoT relaxed the dividend payment policy for 2021 **by unwinding the dividend payout limit** (not exceeding the previous year payout rate). Financial institutions have been allowed to pay dividends for 2021 performance not exceeding 50 of the net profit of 2021.

Source: Bank of Thailand and Moody's. Note: The table does not include measures to stabilize the financial markets and fiscal measures.

Annex II. External Sector Assessment[1]

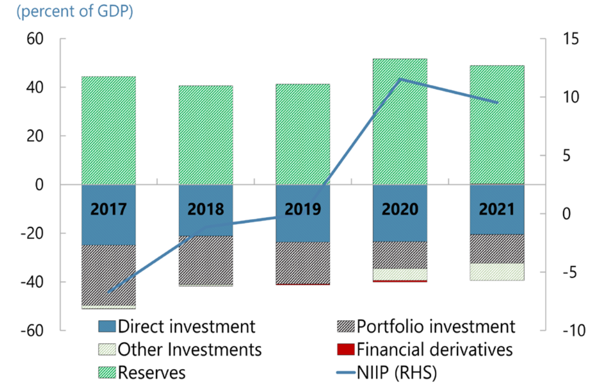
The external position of Thailand in 2021 was moderately stronger than warranted by medium-term fundamentals and desirable policy settings. The current account balance deteriorated from 4.2 percent of GDP in 2020 to -2.2 percent of GDP in 2021, reflecting the collapse in the services balance due to the pandemic. The outturn in 2022 so far shows a gradual pickup of tourism. Notwithstanding the negative impact from the increase in food and oil prices due to the war in Ukraine, the CA balance in 2022 is projected to improve to -0.8 percent of GDP as tourism strengthens later in the year. Over the medium term, a more gradual fiscal consolidation combined with targeted structural reforms should support a pickup in domestic demand, helping to further narrow the CA gap. FX reserves remain well above reserve adequacy metrics, the NIIP position is small and stable, and external debt is assessed as sustainable with limited vulnerabilities.

A. Foreign Assets and Liabilities

Background

1. **After strengthening over the past 4 years, Thailand's net international investment position (NIIP) worsened slightly to 9.5 percent of GDP in 2021**. The deterioration was driven by a decline in gross assets (from 122 to 120 percent of GDP) while gross liabilities remained stable at around 110 percent of GDP. Changes in the financial account contributed to around 52 percent of the change in NIIP in 2021, with valuation effects accounting for the rest. Gross assets are dominated by reserve assets (49 percent of GDP) and FDI (35 percent of GDP); while major gross liabilities include FDI (56 percent of GDP), portfolio investment (30 percent of GDP), and other investment (24 percent of GDP). Overall, in 2021, net portfolio assets declined by 1 percentage point of GDP, while net other investment assets declined by 2 percentage points of GDP.

Thailand: Net International Investment Position
(percent of GDP)



Sources: Thai authorities; and IMF staff calculations.

Assessment

2. **The NIIP is projected to remain in a small creditor position over the medium term given projected current account surpluses**. External debt, at 39 percent of GDP in 2021, remains low and stable, and has limited risks.

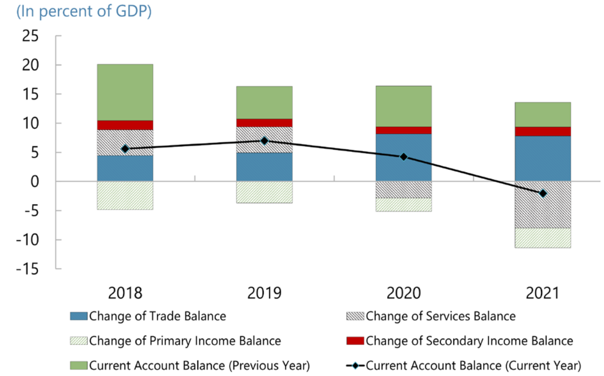
[1] Prepared by Umang Rawat.

B. Current Account

Background

3. The current account balance narrowed markedly in 2021 on account of a collapse in tourism services balance and high shipping costs. Thailand's persistent and large CA surpluses in recent years (an average of 7.4 percent of GDP in 2016–2020) have been driven by positive terms of trade shocks, a boom in tourism receipts, and strong growth in manufacturing exports. Meanwhile, structural constraints (such as high relative labor costs, slowing productivity and incomes, and an aging population) compounded by prolonged political uncertainty have constrained domestic demand, led to high savings rates and muted investment, hampering the downward adjustment of the CA surplus. The current account-to-GDP ratio declined from 4.2 percent of GDP in 2020 to -2.2 percent of GDP in 2021, reflecting a collapse in the services balance and a slight narrowing of the trade balance. International tourist arrivals fell to around 1 percent of their pre-pandemic level and shipping costs surged due to supply chain disruptions caused by the pandemic, resulting in a services and income account balance of -10 percent of GDP. While goods exports bounced back with a recovery in global demand, goods imports (particularly raw material and intermediate goods) also increased as demand for intermediate inputs increased with rising exports. At the same time, fuel imports also increased markedly with the rapid rise in oil prices, resulting in a weakening of the trade balance by 0.3 percent of GDP. In the near term, external factors such as the ongoing war in Ukraine and lingering effects of the pandemic will continue to weigh on export of goods and services. However, over the medium term the current account surplus is expected to converge to around 3-3.5 percent of GDP as tourism strengthens.

Thailand: Current Account Decomposition
(In percent of GDP)



Sources: Thai authorities and IMF staff calculations.

Assessment

4. The IMF's EBA methodology suggests that Thailand's external position is moderately stronger than warranted by macro fundamentals and desirable policy settings. The EBA CA model estimates a cyclically-adjusted CA of -2.8 percent of GDP and a CA norm of 1.4 percent of GDP for 2021, yielding a CA gap of -4.2 percent of GDP.[2] The estimated current account gap is subject to

[2] The EBA's REER level approach suggests an REER gap of -2.8 percent while the index REER approach suggests an REER gap of 6 percent. For Thailand, the CA approach and level REER approach led to very similar REER gap results (indeed, structural breaks can render the Index REER approach less useful). In general, a higher weight tends to be placed on the implied REER gaps from CA model, especially when the results of CA and REER models differ on grounds that quantity-based estimates tend to be more stable and reliable than price-based estimates. The large differences between the different models also signals uncertainty ranges (beyond the statistical approach, which is based on estimating norm standard errors).

higher-than-usual uncertainty given the large swing in services balance in 2021 and the associated uncertainty about the appropriate adjustments to account for COVID-19 related factors. This gap consists of an identified policy gap of -1.2 percent of GDP (-2.2 pp from domestic policy gaps), and an unexplained residual of -3 percent of GDP, which partly reflects the unique nature of the COVID-19 shock as well as Thailand-specific features and structural challenges not fully captured by the EBA model. As in 2020, staff continues to use COVID-19 adjustors to account for the COVID shock, which cannot be explained by the EBA CA model. These include:

- *Travel services (tourism) adjustor*. As for 2020, a tourism adjustor is added to account for the impact of the COVID-19 shock on tourism and CA balances. The adjustment is computed in 2 steps: (i) the estimated relation between changes in the travel services balance and the CA (based on estimated historical relation between the CA and travel services balances using data through 2019), which yields a coefficient of 0.75 (i.e. the impact of a 1 percent of GDP rise in travel services balance on CA is about 0.75 percent of GDP); and (ii) the projected COVID-19 direct impact on the travel services balance in 2021. This second step aims at isolating the impact of the COVID-19 shock on the tourism balance that is temporary as any long-term scarring in the tourism industry would affect the tourism balance over the long run. Taking into account the long-term scarring in the tourism industry projected by staff, a tourism adjustor of 4.4 percent of GDP is employed.

Thailand: 2021 EBA Assessment[1/]

	Percent of GDP	
	2020	2021
Actual CA	3.3	-2.2
Cyclically-adjusted CA	1	-2.8
EBA CA Norm	1.2	1.4
EBA CA Gap	-0.2	-4.2
Of which: Policy gap	1.3	-1.2
Residual	-1.5	-3.0
Staff adjustments	2.4	5.6
Of which: Travel balance	3.7	4.4
Transport balance	-	1.9
Household composition shift	-0.3	-0.9
Medical goods	-0.2	0.1
Others (Gold exports, ToT)	-0.8	
Staff CA Gap	2.2	1.4
Standard error	1.5	0.7
Staff adjusted CA gap, range (staff CA gap ± standard error)	**0.7 - 3.7**	**0.7 - 2.1**

Sources: IMF staff calculations.
1/ EBA Current Account methodology

- *Transport balance adjustor*. In 2021, the combination of high demand for tradable goods in advanced economies and supply bottlenecks associated with the pandemic led to a temporary, three-fold increase in shipping costs. As a result, the transport balance fluctuated in several countries. IMF staff estimates suggest that an empirical relationship between the transport balance and the cyclically adjusted CA yields a coefficient estimate that is close to 1, suggesting that there is little offsetting impact on the CA from movements in the transport balance. For Thailand, the change in the transport services balance between 2020 and 2021 was -2.8 percent of GDP. This change is too large relative to Thailand's net imports of global transportation services. Using an average of the percentage change in transport balances of comparable countries, staff estimates the impact of high freight costs on Thailand's transport service balance and current account to be a worsening of around 65 percent (1.93 percent of GDP). Therefore, to account for this largely transitory impact of high shipping costs, an adjustor of 1.9 is applied for Thailand.[3]

[3] This includes adjustment for multilateral consistency.

- *Household consumption composition shift*. The pandemic has shifted the composition of household consumption from services toward durables and other consumer goods. For example, it increased the demand for work-from-home related equipment in response to lockdowns and teleworking. Thailand also benefitted from a temporary increase in consumer goods exports due to this, for which an adjustor of -0.85 percent of GDP is applied.
- COVID-19 impact on trade in medical products. The pandemic caused an unusual level of exports and imports of medical trade. For Thailand, the net change in medical goods export implies an adjustor of 0.1.

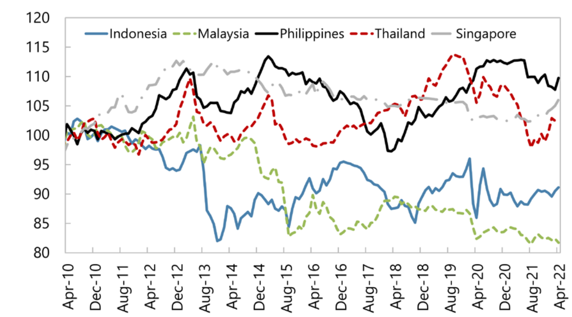
Considering these and other Thailand-specific factors (including structural constraints to domestic demand, such as population aging and large informality in social safety nets), and recognizing uncertainties related to the output gap, staff's assessment is that the Thailand's 2021 current account gap was around 0.7 percent to 2.1 percent of GDP. This CA gap is expected to narrow over the medium term as domestic demand recovers, and steps are taken to reform the social protection system.

C. Real Exchange Rate

Background

5. The REER depreciated throughout 2021, by a total of 7.6 percent. This reflects both the tightening of global financial conditions as advanced economies recovered from the pandemic as well as continued weak growth in Thailand due to the tourism collapse. This comes on the back of a gradual appreciating trend since the mid-2000s despite occasional bouts of volatility (such as the mid-2013 U.S. Fed tapering talks, and domestic monetary policy easing cycle in early 2015). The REER appreciated in 2022Q1(by about 2 percent) despite a depreciation following the war in Ukraine.

ASEAN-5: Real Effective Exchange Rate (2010=100)



Source: Thai authorities; Haver Analytics; and IMF staff calculations.

Assessment

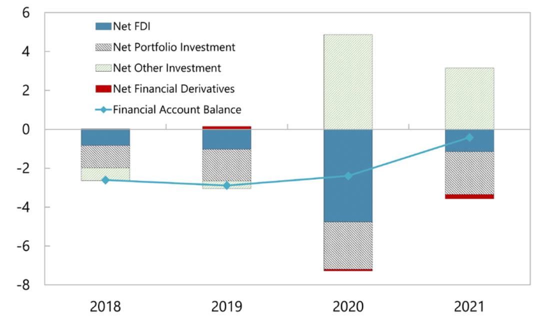
6. Consistent with the EBA CA approach, using an elasticity of 0.44, the 2021 REER would be assessed as around 1.6 percent to 4.8 percent below the levels consistent with medium-term fundamentals and desirable policies. Over the medium term, as domestic demand recovers and structural rigidities are addressed, the REER gap should narrow with a growth-driven real appreciation.

D. Capital and Financial Flows

Background

In 2021, the capital and financial account balance strengthened to -0.4 percent of GDP from -2.4 percent in 2020. This reflects a recovery in inward direct investment (from −1 percent of GDP in 2020 to 2.2 percent of GDP in 2021) while outward direct investment fell from 3.8 to 3.4 percent of GDP. Net portfolio investment remained broadly stable with outflows of about 2.2 percent of GDP. Other net investments declined from 4.9 to 3.2 percent of GDP.

Thailand: Financial Account
(In percent of GDP)



Sources: Thai authorities and IMF staff calculations.

Assessment

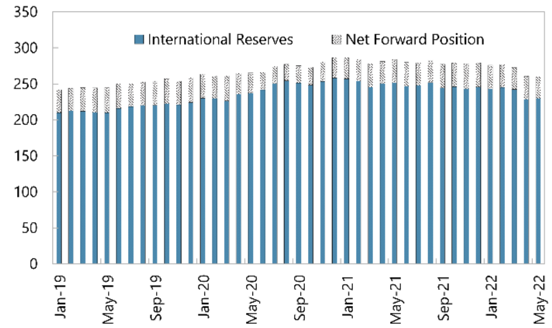
7. Since 2013, Thailand has experienced episodes of volatility reflecting external financial conditions, political uncertainty, and, most recently, the COVID-19 shock. Nevertheless, Thailand has been able to weather such episodes well, given strong external buffers and fundamentals, including the lack of balance sheet mismatches. Thailand has been gradually liberalizing resident outflows and staff welcomes the implementation of measures such as relaxing the annual limit on foreign securities investments abroad by Thai retail investors who do not go through local intermediaries, and abolishing such limit for institutional investors and for retail investors invested through local intermediaries. However, Thailand continues to maintain a general limit of 200 million baht on the outstanding daily balance of non-resident baht accounts (NRBA) and non-resident baht accounts for securities (NRBS). In 2021, the BOT removed the limits on NRBA for qualifying non-resident firms to facilitate baht liquidity management, which is a welcome step. Staff recommends the additional phasing out of the remaining capital flow management measures on non-resident baht accounts, noting that volatile capital flows are better addressed through a package of macroeconomic and financial policies. This includes the use of structural policies to limit distortions related to the large savings investment gap in the medium-to-long term—by reducing precautionary savings, enhancing social safety nets, and boosting investment. This should be complemented by promotion of an FX ecosystem that is more resilient to volatile capital flows (for example, by availability of hedging instruments etc.).

E. FX Intervention and Reserves

Background

8. **Gross reserves (including net forward positions) were stable at US$279.2 billion at end-2021** (55.2 percent of GDP) decreasing slightly from US$286.5 billion (57.3 percent of GDP); they remain well above reserve adequacy metrics (over 200 percent of the IMF's Reserve Adequacy Metric for EMs and 12 months of imports). Although data on FX intervention is not available, staff estimates suggest foreign exchange (FX) intervention has been largely two-sided in 2021. The exchange rate regime is freely floating.

Bank of Thailand: Reserves and Net Forward Position
(In Billions of US Dollars)



Sources: Bank of Thailand; Haver Analytics; and IMF staff calculations.

Assessment

9. **Given that FX reserves exceed all adequacy metrics, there is no need to build up reserves for precautionary purposes.** The exchange rate should move flexibly as the key shock absorber. FX intervention should be limited to avoiding DMC.

Thailand. External Sector Assessment

Overall Assessment: *The external position in 2021 was moderately stronger than the level implied by medium-term fundamentals and desirable policies.* The CA balance turned negative due to a collapse in the tourism-driven services balance and a surge in shipping costs due to the COVID-19 shock. While both goods exports and imports bounced back, the sharp rise in oil prices led to a slight deterioration of the trade balance. The CA balance is expected to narrow to -0.8 percent of GDP in 2022 as tourism receipts recover and return to a surplus of around 3 percent of GDP in the medium term.

Potential Policy Responses: A more gradual consolidation of pandemic era policy stimulus alongside structural reforms should support domestic demand and bring the CA balance more in line with medium-term fundamentals and desirable policies. Public expenditures should be focused on targeted social transfers to mitigate the effects of the pandemic on the most vulnerable, as well as infrastructure investment to support a green recovery and reorientation of affected sectors, while undertaking revenue mobilization reform to keep deficit and debt sustainable. Efforts to reform and expand social safety nets, notably the fragmented pension schemes, should continue, and measures to address widespread informality should help reduce precautionary savings and support consumption.

Foreign Asset and Liability Position and Trajectory

Background. Thailand's NIIP weakened in 2021 to 9.5 percent of GDP (from 11.5 percent in 2020). Gross assets declined from 122 to 120 percent of GDP (49 percent of GDP being reserve assets) and gross liabilities remained stable at 110 percent of GDP (dominated by direct (about half) and portfolio (a quarter) investment). Net direct investment assets increased by 3 percentage points of GDP, while portfolio and net other investment assets declined by 1 and 2 percentage points of GDP, respectively.

Assessment. The NIIP is projected to remain in a small creditor position over the medium term given projected current account surpluses. External debt remained stable at 39 percent of GDP, of which short-term debt (on a remaining maturity basis) amounts to 14 percent of GDP; external debt stability and liquidity risks are limited.

2021 (% GDP)	NIIP: 9.5	Gross Assets: 120.1	Debt Assets: 23.3	Gross Liab.: 110.6	Debt Liab.: 39.0

Current Account

Background. Thailand's current account (CA) balance declined from 4.2 in 2020 to -2.2 percent of GDP in 2021, reflecting the impact of the pandemic. The services account collapsed as international tourist arrivals fell to around 1 percent of their pre-pandemic level and shipping costs surged due to supply chain disruptions caused by the pandemic. Goods exports bounced back with a recovery in global demand and goods imports (particularly raw material and intermediate goods) increased as demand for intermediate inputs increased with rising exports. Fuel imports also increased markedly with the rapid rise in oil prices. Overall, the trade balance weakened by 0.3 percent of GDP. Despite the negative impact from the increase in food and oil prices due to the Ukraine war, the CA balance in 2022 is projected to improve to -0.8 percent of GDP as tourism strengthens.

Assessment. The EBA CA model estimates a cyclically-adjusted CA of -2.8 percent of GDP and a CA norm of 1.4 percent of GDP for 2021. The CA gap of -4.2 percent of GDP consists of an identified policy gap of -1.2 percent of GDP, and an unexplained residual of -3 percent of GDP, which partly reflects the unique nature of the COVID-19 shock as well as structural factors not captured by the EBA model. In this regard, adjustors to account for the large shocks to the travel and transport sectors of 4.4 and 1.9 percent of GDP respectively, are applied as they are not accounted for by the standard EBA cyclical adjustment.[1] Further adjustments to reflect the global shift in private spending composition from services towards consumers good and the related increase in consumer goods exports from Thailand (-0.9 percent of GDP) and net exports of medical supplies triggered by the pandemic (0.1 percent of GDP) are also applied. Overall, staff assesses the CA gap to be in the 0.7-2.1 percent of GDP range with a midpoint of 1.4 percent of GDP. This CA gap is expected to narrow over the medium term as domestic demand recovers and steps are taken to reform the social protection system.

2021 (% GDP)	CA: -2.2	Cycl. Adj. CA: -2.8	EBA Norm: 1.4	EBA Gap: -4.2	COVID-19 Adj.: 5.6	Other Adj.: 0.0	Staff Gap: 1.4

Real Exchange Rate

Background. The baht has been on a gradual real appreciation trend since the mid-2000s, despite occasional bouts of volatility. However, in 2021, owing to both the tightening of global financial conditions as recovery in advanced economies gained a stronghold and still weak prospects in Thailand, the REER depreciated by 7.6 percent by the end of the year relative to its 2020 average. As of May 2022, the REER was 0.05 percent above the 2021 average.

Assessment. Using an elasticity of 0.44 and based on the staff CA gap, staff assess the REER to be undervalued in the 1.6-4.8 percent range, with a midpoint of 3.2 percent. The EBA index REER gap in 2021 is estimated at 6 percent; the EBA level REER gap is estimated at -2.8 percent.

Capital and Financial Accounts: Flows and Policy Measures

Background. In 2021, the capital and financial account balance strengthened to -0.4 percent of GDP from -2.4 percent in 2020, driven by the recovery in inward direct investment (from -1 percent in 2020 to 2.2 percent of GDP in 2021). Other net investments declined from 4.9 to 3.2 percent of GDP.

Assessment. Since 2013, Thailand has experienced episodes of volatility reflecting external financial conditions, political uncertainty, and, most recently, the COVID-19 shock. Nevertheless, Thailand has been able to weather such episodes well, given strong external buffers and fundamentals. IMF staff welcome the Bank of Thailand's removal of the limits on non-resident baht accounts for qualifying nonresident firms to facilitate baht liquidity management, and IMF staff recommend additional phasing out of the remaining capital-flow management (CFMs) measures on non-resident baht accounts. A comprehensive package of macroeconomic, financial, and structural policies should be pursued to address volatile capital flows, complemented with gradual and prudent financial account liberalization.

FX Intervention and Reserves Level

Background. The exchange rate regime is classified as (de jure and de facto) floating. International reserves (including net forward position) declined slightly from 57.3 percent in 2020 to 55.2 percent of GDP in 2021, which is over three times short-term debt and 12 months of imports, and over 200 percent of the IMF's standard reserve adequacy metric. The exchange rate has been allowed to adjust in response to the COVID-19 shock, with some FX sales in outflow episodes.

Assessment. While official intervention data are not published, estimates suggest two-sided intervention for the year. Reserves are higher than the range of IMF's reserve adequacy metrics and there continues to be no need to build up reserves for precautionary purposes. The exchange rate should move flexibly to act as a shock absorber, with FX intervention limited to tackling disorderly market conditions.

[1] For Thailand, the change in the transport services balance between 2020 and 2021 was -2.8 percent of GDP. In staff's view, this change is too large relative to Thailand's net imports of global transportation services. Using an average of percentage change in transport balances of comparable countries, staff estimates the impact of high freight costs on Thailand's transport service balance and current account to be a worsening of around 65 percent (1.93 percent of GDP). Therefore, staff proposes a transportation adjustor of 1.93 percent.

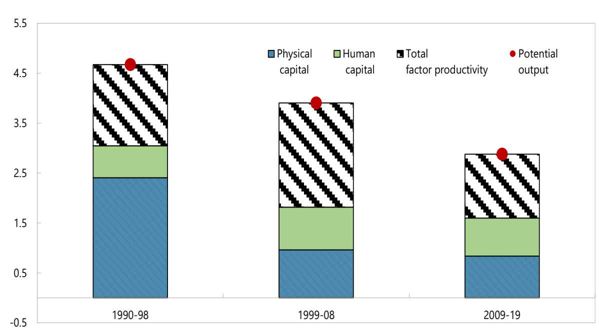
Annex III. An Assessment of Potential Output and Output Gap[1]

This annex studies recent developments—prior and after the pandemic—in potential output and the output gap in Thailand. Its main findings are the following: (i) potential output growth has been decreasing since the 1990s; (ii) the decrease in potential output growth has been mostly driven by a slowdown in total factor productivity (TFP) growth and weak investment—both public and private; (iii) the manufacturing sector has been particularly affected by the slowdown in TFP and investment; (iv) the pandemic induced a large negative output gap which is expected to close in 2024; and (v) under the business as usual scenario, Thailand will not reach high income level status by 2037—the objective of the authorities. *The annex proposes key reforms that could help Thailand boost its potential output.*

Pre-pandemic Potential Output Developments

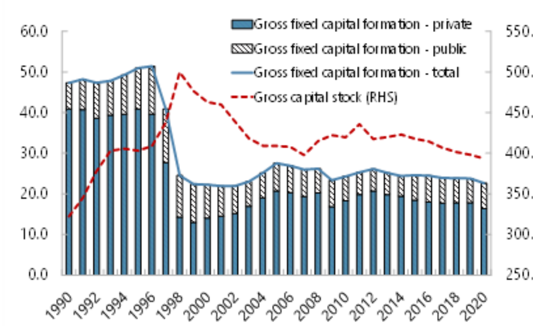
1. **Potential output has been decreasing in Thailand since the early 1990s, driven by lower productivity and weak investment**. Prior to the Asian financial crisis (AFC), potential output growth averaged about 5 percent. This declined to about 4 percent after the AFC until the global financial crisis (GFC) in 2008, and to 3 percent from the GFC until 2019 (chart). Declining TFP growth combined with weak investment (both public and private) have been the major drivers of declining potential output growth in Thailand. From 1999 to 2008, TFP growth compensated the large decrease in capital accumulation. But, during the last decade, TFP growth has fallen too. In addition, investment (public and private) has been almost flat in the last two decades inducing a slowdown in physical capital accumulation (chart).[2] The World Bank (2020) found similar results and cited lower investment, an aging population, and increasing regulations as major macroeconomic factors that could explain the slowdown in productivity.

Thailand: Contribution to Potential Output Growth
(In Percent)



Sources: Thai authorities; Penn World Table and IMF staff estimates.

Thailand: Investment and Capital Stock
(In Percent of GDP)



Sources: Thai authorities; and IMF staff calculations.
Notes: Ratios in 2020 are based on 2019 GDP to account for the large contraction in GDP (about 6 percent) in 2020.

[1] Prepared by Mouhamadou Sy (APD).

[2] Total investment decreased from about 47 percent of GDP in 1990 to about 24 percent of GDP in 2019. The large drop after the Asian crisis is explained by large corrections following the boom years priors to the crisis. However, prior to the pandemic (2015-19), total investment averaged about 28 percent of GDP in other ASEAN countries (Indonesia, Malaysia, and Philippines) compared to 23 percent of GDP in Thailand.

2. All sectors of the economy experienced a decline in capital accumulation but the slowdown in productivity has been most pronounced in the agriculture and manufacturing sectors. Prior to the pandemic, foreign direct investment (FDI) in the manufacturing sector has been volatile and Thailand has been losing FDI market shares with respect to other ASEAN economies over the last two decades (World Bank 2020). This could explain the slowdown of productivity in this sector, as well as in the overall economy, since. the manufacturing sector is seen as the main vector through which positive externalities propagate through the entire economy (Krugman, 1987). This, in turn, could explain the overall slowdown in potential output in Thailand. Kluyev (2015) documents the persistently-low productivity in agriculture in Thailand combined with its relatively high employment share compared with peers,[3] partly explained by the fact that agriculture is considered as the employer of last resort given weak social safety nets.

Thailand: Sources of Capital Accumulation and Productivity Slowdown
(in percent)

	1990-98	1999-08	2009-19
		Agriculture	
Potential output growth	4.1	2.5	0.8
o/w Physical capital	2.4	1.7	1.2
o/w Total factor productivity	1.1	-0.1	-1.1
		Manufacturing	
Potential output growth	7.3	4.5	2.0
o/w Physical capital	3.4	1.2	0.9
o/w Total factor productivity	3.3	2.5	0.3
		Services	
Potential output growth	4.7	3.1	3.8
o/w Physical capital	2.1	0.8	0.7
o/w Total factor productivity	1.9	1.5	2.3

Sources: Thai authorities; and IMF staff estimates.

COVID-19, Potential Output, and the Output Gap: Key Economic Channels

3. The pandemic has affected all components of the economy. The nature of the shocks—both supply and demand driven—and the implementation of unprecedented policies (e.g., containment and lockdown measures) to contain the virus likely affected each component of the production function.

- **Labor market channels**. The pandemic could affect the labor market through lockdown policies and negative shocks to aggregate demand. Key channels are: (i) lower participation rates because of high infection and hospitalization rates; (ii) higher unemployment following the large negative shocks on aggregate demand; (iii) hysteresis and scarring if people remain unemployed during protracted periods and lose their skills; (iv) reduced internal and international migration during the pandemic. But some of these effects could be offset by sizeable policy support by governments. In Thailand, the government deployed a fiscal support package amounting to about 6 percent of GDP to support firms and households in 2020-21. The government also increased the number of insured persons in the social security system, and subsidized employment (3,000 baht per worker and up to 200 employees per firm). As a result, the unemployment rate among insured persons in the private sector peaked at 4.4 percent in 2020Q3 but shrank to 2.5 percent in 2021Q3. The comprehensive and effective social assistance package is estimated to have reached 81.5 percent of households including informal workers and farmers (World Bank 2022a).
- **Investment channels**. The pandemic could affect potential output through lower capital utilization and postponement of investment decisions given rising uncertainty. This could affect potential output through lower accumulation of capital. Exits of firms and mobility restrictions could also affect investment. In Thailand, investment contracted by 4.8 percent in 2020 largely

[3] The agricultural sector employs about 30 percent of the working force but accounts for only 6½ of GDP

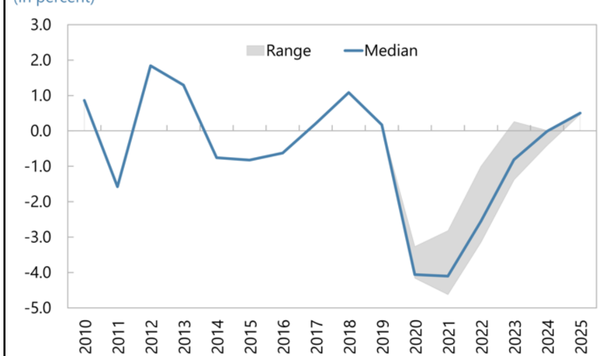
driven by the contraction of private investment (8.2 percent) owing to a drop in investment in equipment. However, private investment quickly recovered in 2021 with a growth of about 3 percent. Public investment remained strong in 2020 and 2021 owing to the large fiscal package deployed during the pandemic. As a result, total investment grew at about 3.4 percent in 2021 which is slightly above pre-pandemic trends.[4]

- **Total factor productivity channels**. Another channel through which the pandemic could affect potential output is through its effect on TFP. Disruptions in supply chains and their effect on the supply of inputs, financial distress and its effect on financing costs, sectoral reallocation of labor (e.g., in the tourism sector) and its impact on sectoral productivity, and the reduction in R&D spending during the crisis could negatively affect productivity. But the pandemic could also boost productivity by forcing ''zombie firms'' to exit (*cleansing effect of recessions*) unless government's policy support maintains them afloat. The pandemic induced an acceleration of digitalization. Firms using information and communication technologies (ICT) could better weather the pandemic shock compared to firms lagging in adoption of ICT that could be forced to be out of the market (Abidi et al. 2022). This *cleansing effect of digitalization* could also boost aggregate productivity. In Thailand, the impact of the pandemic on potential output is mostly through TFP given that strong policy support measures likely cushioned the effect of the pandemic on the labor market[5] and capital accumulation.

Output Gap and Potential Output During and Post COVID-19 Era

4. The pandemic shocks widened the output gap. The median estimate of the output gap is about –4 percent of potential output in 2021 and -2.5 percent of potential output in 2022 (chart). Despite using different methodologies and variables, the estimates of the output gap are close. But there is large uncertainty surrounding the estimates due to shortcomings and differences in various methodologies and the increasing uncertainty related to the period of interest (Annex III. Box 1).

Thailand: Output Gap Estimates
(In percent)

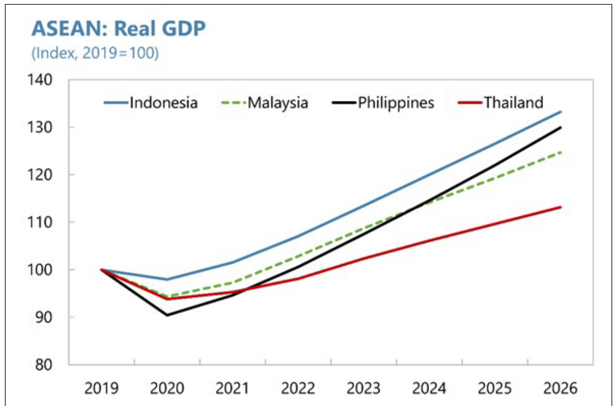


Sources: Thai authorities; and IMF staff estimates.

[4] Growth in total investment averaged about 3 percent between 2015 to 2019.

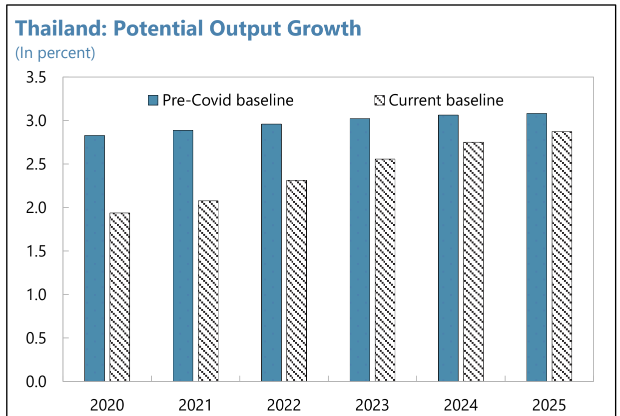
[5] The policy measures cover both formal (insured workers through the Social Security Fund) and informal sectors for example direct cash transfer to self-employed worker, vulnerable group, agriculture farmers, and low-income people.

5. **The various estimates suggest that the output gap is expected to close in 2024**. Some estimates even suggest that the output gap could close in 2023 but the median estimate points to 2024. This could be explained by the fact that the recovery appears to be slow in Thailand compared to its peers probably related to Thailand's overreliance on tourism and the fact that the sector has been hit particularly hard. It is estimated that other ASEAN countries will recover their pre-pandemic real GDP level in 2022 while Thailand will barely do so by 2023 (chart).



Sources: Thai authorities; and IMF staff estimates.

6. **The effect of the pandemic on potential output in Thailand has been large**. We run a counter-factual exercise to quantify the effect of the pandemic on potential output in Thailand. To isolate the effect of the pandemic, we use IMF staff's forecasts prior to the pandemic to assess the trajectory of the potential output in the absence of the COVID-19 outbreak.[6] Potential output growth has decreased about 1 percentage point and 0.8 percentage points in 2020 and 2021, respectively (chart). The drop in TFP is the main driver of lower potential output growth in 2020 and 2021. The fact that investment did not contract much during the crisis could explain this result. However, the large output gap estimated above suggests that the pandemic affected aggregate demand more than potential output.



Sources: Thai authorities and IMF staff estimates.

7. **Over the medium term, growth in potential output will remain too low for Thailand to reach high-income status by 2037—the objective of the authorities**. The estimates also suggest that the level of potential output in 2025 will remain below its pre-pandemic trend. Therefore, the pandemic seems to already induce long-term scarring in Thailand.[7]Post-pandemic, under unchanged policies, potential output growth is estimated to converge toward its long-term value of about 3 percent. This potential output growth is too low to lift Thailand out of middle-income status by 2037 even without any changes in the high-income threshold classification (chart).[8] Post pandemic, a comprehensive package of fiscal and structural reforms (as recommended by staff) will be needed to increase potential output growth back to 5 percent for Thailand to reach high-income status by 2037.

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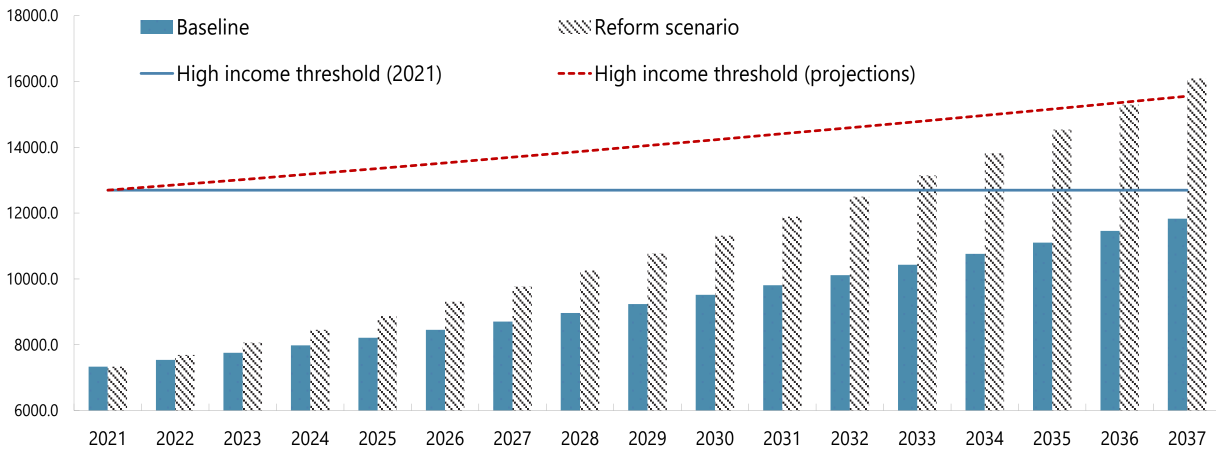
[6] Technically, we compare potential output growth based on pre-pandemic baseline forecasts (January 2020) to the current baseline forecasts to highlight the role of uncertainty and the effect of the pandemic.

[7] See "Appendix III. Analysis of Broader Economic Scarring for Emerging Markets with Policy Options" in IMF Country Report No. 21/97 for an analysis of scarring effect of COVID-19 pandemic for emerging markets, key transmission channels and policy responses to mitigate scarring effects.

[8] $12,695 as of July 2021 by the World Bank.

Thailand GDP Per Capita, 2021-37

(In US Dollars)



Sources: Thai authorities; World Development Indicators and IMF staff estimates.
Notes: The high income threshold assumes an increase of 1.3 percent per year (the growth rate from 2020 to 2021). The baseline assumes an increase in potential growth of 3 percent (average 2009-19) while the reform scenario assumes an increase of potential growth of 5 percent (average 1990-98).

Policies to Increase Potential Output Post-Pandemic

8. **Boosting potential output will require important structural reforms**. Key reforms are needed to reverse the current trends:

- *Physical capital*: Both public and private investments have been stagnant since the late 1990s, resulting in an almost-flat capital stock accumulation. Consequently, new investments are barely offsetting depreciation. Higher public investment combined with the right incentives and favorable economic environment to boost private investment (including FDI, which is also very low) are needed to increase capital accumulation[9]. Gradually lifting the legal barriers for domestic and foreign companies to access infrastructure markets could boost the efficiency of public investment (IMF, 2016a[10]). Important investments are also needed in ICT and digital infrastructure to leverage digitalization to increase participation in global value chains and create better jobs (see Selected Issues Paper, Chapter III).
- *Human capital*: The contribution of human capital to potential output has been modest. A greater focus on Science, Technology, Engineering, and Math subjects (IMF, 2016b) while upgrading skills (see Selected Issues Paper, Chapter II) could boost productivity. It is also important to strengthen oversight of the Technical and Vocational Education and Training (TVET) system institutions and reduce the challenges the private sector faces in participating in the TVET system (World Bank, 2022).

[9] Thai authorities are investing in key infrastructure projects such as rail system, intercity motorway and utilizing the special economic area particularly the Eastern Economic Corridor.

[10] Other measures to improve the efficiency of public investment include: (i) developing and presenting in the budget documents a comprehensive multi-year pipeline of public investment projects; (ii) developing guideline on capacity in project appraisal by line ministries; and (iii) Centralize and coordinate the monitoring of investment projects across agencies including physical verification.

- *Structural transformation under population aging:* Thailand's population is aging rapidly and the country's labor force is shrinking as a result. The ratio of employment to working age population peaked at about 71½ percent in 2009 to reach 66 percent in 2020 and is projected to further decline to 63 percent by 2027. Rapid population aging could be detrimental to human capital, working age population and aggregate investment and therefore to potential output (IMF 2019). Policies to mitigate the impact of aging on long-term growth in Thailand include: (i) increasing the retirement age (currently statutorily set at age 60); (ii) reducing the gap between female and male labor force participation rates; (iii) deploying an effective immigration policy to boost the size of the workforce[11]; and (iv) improving labor productivity through a higher quality of education and skill upgrading (World Bank, 2021, also see Selected Issues Paper, Chapter II). The low productivity in the agricultural sector suggests that there are large productivity gains at the aggregate level to both enhance agriculture productivity (e.g., agro-processing) and facilitate labor reallocation from agriculture to more modern sectors. Better training, appropriate education, enhanced social protection and moving up into value chains could facilitate labor reallocation (Klyuev 2015).
- *Enhanced competition and more openness at the firm level:* The slowdown of productivity in the manufacturing sector is particularly worrying. As highlighted above, productivity in the manufacturing sector affects the entire economy through externalities. Key policies to boot productivity in the manufacturing in Thailand include :(i) enhancing competition in the domestic economy by implementing the new Competition Act; (ii) increasing openness to FDI by reducing FDI restrictions in non-strategic industries; and (iii) boosting skilled labor and reduce skills mismatch (Selected Issues Paper, Chapter II) to promote an ecosystem for firm innovation (World Bank, 2020, 2022b).

[11] The government recently introduced a Long-term Resident Visa to attract potential foreigner to move to Thailand particularly high skill workers.

Box 1. Measuring Potential Output and the Output Gap

Potential output is not observed but inferred from economic relationships and exiting data. This exercise is particularly dauting during times of increased uncertainty such as the current pandemic. Therefore, this annex is based on different methodologies (economic and statistical approaches) to assess potential output and therefore, the output gap in Thailand. Each methodology does not allow to fully grasp the complexity of estimating potential output. Their combination allows to consider various aspects of the complexity and minimize the over reliance on a given methodology.

- *The production function* focuses on the supply side of the economy and allows to estimate potential output and then he output gap. The main advantage of this approach is that it allows to decompose potential output growth into its various components using for example a simple Cobb-Douglas production function. It is possible to analyze the underlying economic factors that drive potential output. However, the methodology requires calibrating many parameters (e.g., the rate of depreciation of the capital stock and the contribution of various inputs to the production function) that are difficult to estimate with standard national accounts data. Our specification follows World Bank (2020).
- *The multivariate approach* used in this annex is based on Blagrave et al. (2015). The main advantage of this approach is that it is based on some economic concepts (e.g., the Philip's curve), is consistent with the Okun concept of potential output, is not data-hungry and allows to incorporate some shocks (e.g., supply and demand). The main variables used to estimate potential output are GDP growth, inflation, and unemployment.
- *Structural vector autoregression* follows Blanchard and Quah (1989) and allows to distinguish between permanent and transitory components. The main embedded assumption is that demand shocks have only a temporary impact on output while supply shocks have a permanent impact. Similar to the multivariate technique, this econometric approach combines a statistical approach with the ability to incorporate economic constraints. Some variables such as credit growth and inflation are used in the estimation.
- *Other approaches:* The annex also uses some statistical approaches such as the Baxter-King and the Christiano-Fitzgerald filters. Statistical approaches tend to be simple, transparent and require few data. However, they do not incorporate any economic structure and suffer from the 'end-sample problem' i.e., the fact that end-period estimations are subject to large revisions.

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Annex IV. An Integrated Policy Approach[1]

While Thailand is gradually recovering from the pandemic, the outlook remains uncertain with risks largely tilted to the downside. This annex applies an integrated approach to assessing policy options in key adverse scenarios. A well-balanced policy mix would depend on the country characteristics, the nature of the shock and initial conditions. The analysis shows that an integrated approach with close coordination between monetary, exchange rate and fiscal policies is desirable.

1. The Thai economy is gradually recovering from the pandemic, but the outlook is highly uncertain. After contracting by 6.2 percent in 2020, the economy grew by 1.5 percent in 2021. The negative output gap remains large and is projected to only close by 2024. Alongside large slack in the economy, inflationary pressures have built up with headline inflation at 7.1 percent y/y in May 2022 significantly breaching the Bank of Thailand's (BOT) upper target band of 3 percent. Core inflation, which has remained muted for several years, has also increased to 2.3 percent. The outlook is marked by large uncertainties—related to the duration and intensity of the war in Ukraine as well as spillovers from policy normalization in advanced economies—in a period when public and private balance sheets are overstretched, and policy space is already constrained following the pandemic era's extraordinary support.

2. Under staff's baseline scenario, the recovery is expected to strengthen in Thailand over 2022-23, despite headwinds from the ongoing war in Ukraine. The baseline projections assume that the conflict remains confined to Ukraine, further sanctions on Russia exempt the energy sector, and the pandemic's health and economic impacts abate over the course of 2022. Growth in 2022 is projected at 2.8 percent as the further relaxation of travel restrictions leads to a gradual recovery in tourism. However, the sharp increase in energy prices and decline in tourism receipts from Europe related to the war in Ukraine are likely to put pressure on inflation, current account and fiscal balances, and economic activity. The anticipated turnaround in the advanced economies' monetary policy stance in 2022 is expected to lead to a gradual and orderly rise in global long-term rates and depreciation of EM currencies, including the Thai baht. While financial conditions in Thailand and other EMs would tighten somewhat as a result, the potential adverse impact on domestic demand is expected to be somewhat offset by stronger exports.

3. Downside risks to the outlook are however significant and an integrated approach is applied to guide policy responses to two illustrative scenarios.[2] These include:

- *Scenario 1: Prolonged war in Ukraine, weighing on global growth, and triggering a broad-based risk-off shock*. Further intensification of the conflict with large spillovers to the euro area would affect Thailand substantially through trade linkages (the euro area accounted for about 9 percent of Thailand's exports and over 50 percent of tourist arrivals in 2021). Moreover, a prolonged crisis with elevated commodity prices for long would increase inflationary pressures both for Thailand and globally. A tightening of global financial conditions amid a worsened global outlook could

[1] Prepared by Umang Rawat (APD), Hou Wang and Jianping Zhou (both MCM).

[2] The scenarios are constructed using an estimated log-linearized formulation of Adrian et. al. (2021).

result in a large increase in global risk aversion generating sizable spillovers (asset market sell offs and a spike in risk premia resulting in further exchange rate depreciation and possibly DMC, adding to already high inflationary pressures). The lack of significant balance sheet mismatches should however limit the negative impact on financial stability.

- *Scenario 2: Disorderly tightening of global financial conditions.* This scenario assumes a relatively fast resolution of the war in Ukraine. A fast recovery in U.S demand amid lagging supply-side response could lead to a rapid de-anchoring of inflation expectations, prompting an abrupt U.S. monetary policy tapering and a sharp tightening of global financial conditions. This could lead to significantly higher borrowing costs, which would weigh on the still-fragile recovery. In addition, it could generate substantial financial spillovers as above. However, some of these effects would be offset by the improvement in the trade balance due to exchange rate depreciation and improvement in external demand.

4. An appropriate response to the adverse scenarios should depend on the country's initial conditions, underlying frictions, and nature of shocks.

- *Initial conditions*. The Thai economy is still suffering from pandemic-driven slack, with a large negative output gap. Meanwhile, the war in Ukraine has further built-up inflationary pressures, largely driven by energy prices. The exchange rate is assessed to be weaker than implied by fundamentals and desirable policies, and there are large reserve buffers (see Annex II).
- *Frictions*. The appropriate use of policies should depend on underlying frictions in the economy (Basu et. al. (2020), Adrian et. al. (2021)). While the exchange rate should act as a shock absorber when faced with an external shock, the benefits of flexibility depend on the presence of both financial (currency mismatches and endogenous financial risks) and real (dollar invoicing of trade) frictions, potentially providing some support for the use of FX interventions (FXI).[3]
- Thailand has a relatively liquid FX market, with no strong evidence of FX mismatches that poses systemic risk to the broader financial system (FX liabilities comprised only 5.4 percent of total banking system liabilities as of 2020Q4). While the UIP premium has been largely stable in past episodes of large outflows (March 2020 COVID-19 outbreak); it is unclear whether it was due to large and deep FX markets being able to absorb the shocks or due to central banks' FXI as BOT does not publish FXI data (due to market sensitivities).
- Thailand faces dominant currency invoicing to a considerable degree, which may limit the reduction in price of exports relative to world prices in response to a depreciation, which may limit the benefits of exchange rate flexibility depending on the nature of the shock (BOT, 2018). Around 75 percent of Thailand's trade (both exports and imports) is invoiced in U.S. dollars.

[3] For countries with financial frictions, the financial transmission channel of exchange rate depreciation may dominate the competitiveness channel, leading the exchange rate to become a shock amplifier rather than a shock absorber (for e.g., Serena and Sousa 2017). Similarly, Boz et al. (2017), Gopinath (2015, 2017) and Gopinath et. al. (2020) argues that the prerequisite for benefits from exchange rate flexibility—strong co-movement of the nominal exchange rate and terms of trade—may not hold when the U.S. dollar is used predominantly in trade invoicing (dominant currency paradigm (DCP).

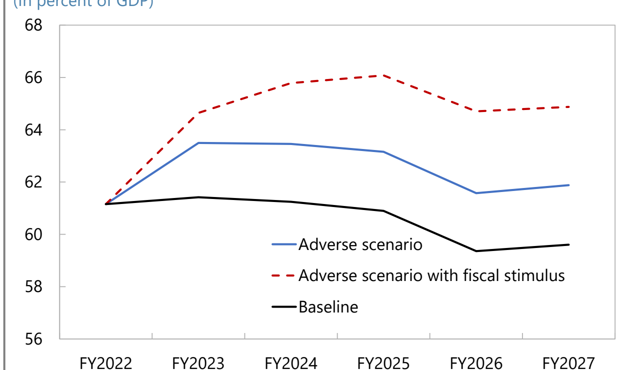
- Thailand has a relatively mature inflation targeting framework with relatively low exchange rate passthrough and well-anchored inflation expectations. However, Nookhwun (2019) finds that the exchange rate pass through is asymmetric and stronger for depreciation versus appreciation. Further, the second round effects and passthrough could be larger in an environment in which producers may not be able to absorb the costs from depreciation for a prolonged period.

5. **In the first shock scenario, policymakers face a difficult trade-off of stabilizing output versus maintaining price stability**. Model simulations show that the external shock further widens the already large output gap (by over 2 percent), largely driven by a collapse in domestic demand. At the same time, the increase in commodity prices and spike in risk premiums would cause a sharp depreciation of the exchange rate which would lead to DMC and further push inflation up. While interest rate hikes would bring inflation closer to target, they would worsen the already-large output gap and increase interest rate exposure of vulnerable borrowers.

6. **An integrated use of available policy instruments would yield better outcomes given the BOT's output, prices, and financial stability objectives**. The counterfactual scenario analysis in Figure 1 compares various policy scenarios: (i) interest rate hike and endogenous FX intervention (FXI) based on estimated reaction functions in the model; (ii) no FXI; (iii) no FXI but more aggressive interest hikes; and (iv) policy scenario (i) along with fiscal support. While monetary policy (interest rate hikes) should be the first line of defense, under this scenario of sharp exchange rate depreciation and a spike in risk premiums threatening to de-anchor inflation expectations and cause DMC, a complementary use of FXI is found to be effective in helping moderate inflationary pressures and alleviating risks of de-anchoring of inflation expectations. Further, by relieving some of the pressure from monetary policy, the use of FXI also results in a lower output cost. The increase in risk premia (and hence long-term yields) is lower (almost by half) when FXI is used along with interest rate hikes limiting impact on funding costs.

7. **A comprehensive package including a fiscal stimulus can further limit the deterioration in the output gap in response to the shock.** The shock to growth and the associated revenue losses would increase the debt-to-GDP ratio by about 2 percent of GDP compared with the baseline. To cushion the impact of the shock on economic activity, the government could increase discretionary spending by 2 percent of GDP compared with the baseline followed by only a gradual consolidation. Total public debt would peak at almost 67 percent of GDP in 2024-25 but would stabilize at about 65 percent of GDP thereafter. However, as shown by the adverse debt dynamics following a growth shock in the DSA, this additional intervention would leave very little room for maneuver and would need to be carefully calibrated as debt dynamics deteriorate as the debt-to-GDP ratio approaches 70 percent of GDP (Annex V).

Public Debt
(In percent of GDP)

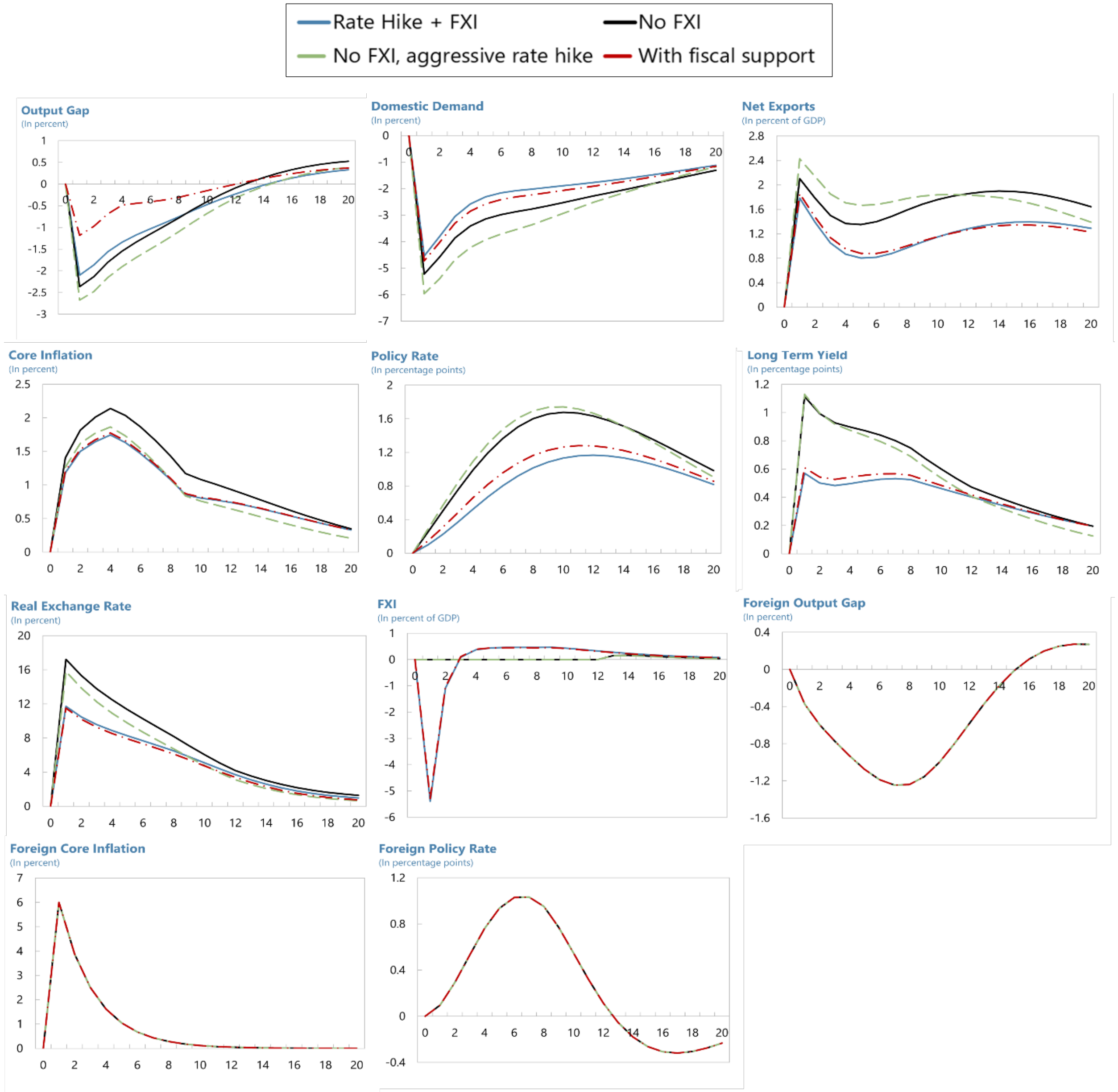


Sources: Thai authorities; and IMF staff projections.

8. **Policy trade-offs are less severe in the second scenario** (Figure 2). Under this scenario also, a tightening of global financial conditions results in exchange rate depreciation and an upward pressure on inflation. However, the effects are not as large as external demand is strong. Further, the depreciation results in an improvement in the trade balance supported by higher external demand due to the faster U.S recovery. While domestic demand falls in response to interest rate hikes, the overall effect of this shock on the output gap is positive (i.e., narrowing the negative output gap). Hence, in this scenario, it is arguable that the additional benefits of using FX intervention do not justify the costs not captured by the model (for example, due to creating a perception of a managed exchange rate regime that can lower the credibility of monetary policy).

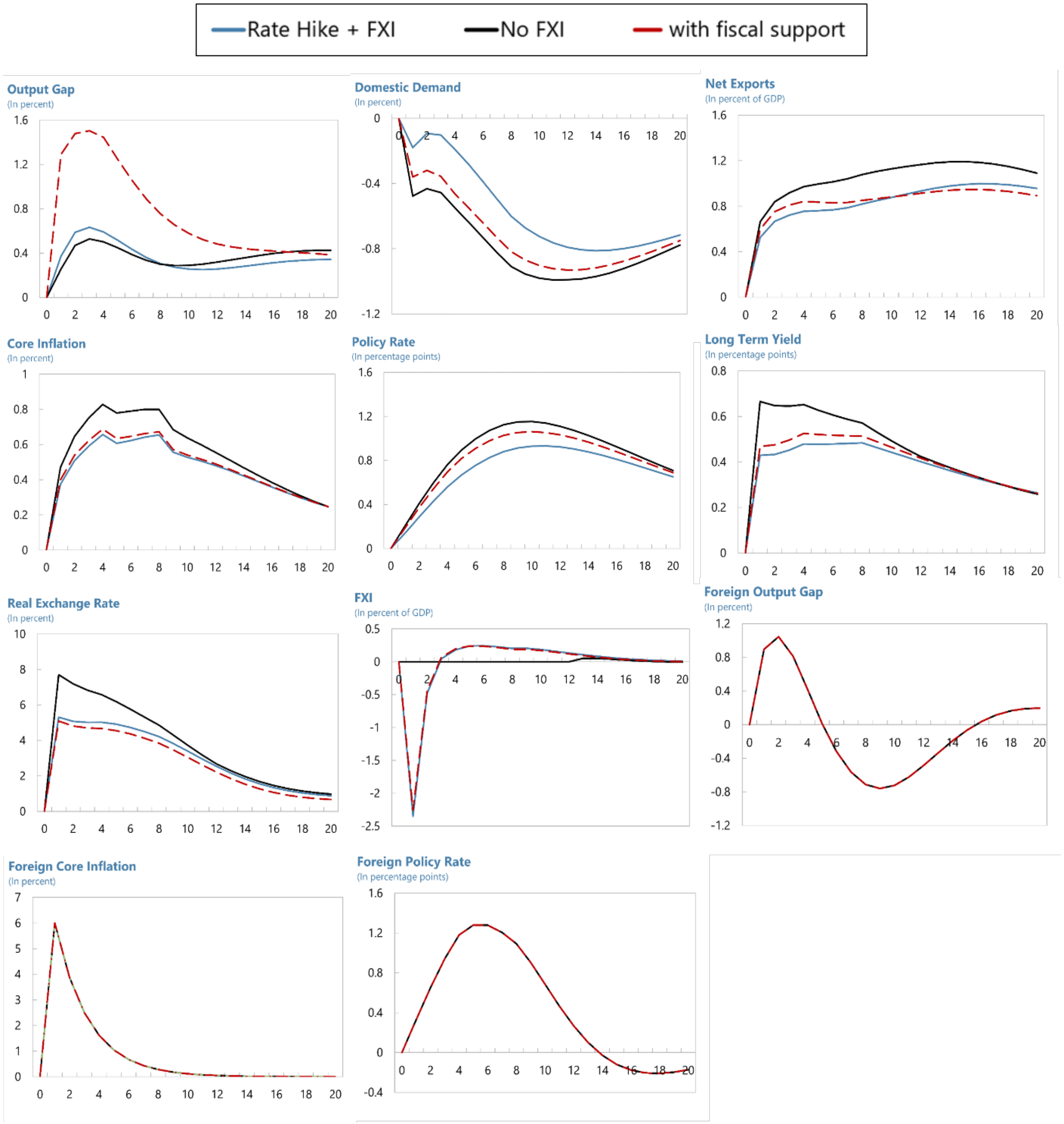
9. **Model simulations suggest that the appropriate use of policies depends on the nature of shocks and countries' initial conditions**. The large uncertainties at the current juncture come against a backdrop of a still-large output gap, mostly supply-side driven inflationary pressures, and an exchange rate that is assessed to be weaker than implied by fundamentals. A well-measured response to future shocks should depend on the nature of shocks. While exchange rate flexibility should be the first line of defense in response to external shocks, sharp exchange rate movements and DMC that might threaten de-anchoring of inflation expectations may motivate the use of FX intervention. Further, fiscal policy should provide support to the economy and limit the contractionary effect of monetary policy tightening on vulnerable economic agents without contributing to further inflationary pressures.

Figure 1. Thailand: Shock Scenario 1 and Policy Mix



Note: The x-axis refers to quarters post-shock.

Figure 2. Thailand: Shock Scenario 2 and Policy Mix



Note: The x-axis refers to quarters post-shock.

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Annex V. Debt Sustainability Analysis

The exceptional fiscal response to the pandemic pushed total public sector debt to 58.38 percent of GDP in 2021 (from 41 percent of GDP in 2019). Debt is expected to further increase to about 61.2 percent of GDP in 2022 and decline moderately over the medium term. Debt levels could be even higher in the event of a protracted economic crisis but would still remain sustainable.

1. **The DSA's macroeconomic and policy assumptions follow staff's baseline projections**. In 2021, the economy moderately recovered from the COVID-19-induced slowdown with real GDP growth at 1.6 percent.[1] The recovery is expected to firm up in 2022 with real growth projected at 2.8 percent of GDP. Over the medium term (2023-27), Thailand's economy is expected to expand by an average of 3.3 percent of GDP. The fiscal deficit widened to 4.8 percent of GDP in 2020 and to 7.4 percent of GDP in 2021 as the authorities implemented large-scale fiscal support to shore up the economy. Under current policies and including initial fiscal measures related to the war in Ukraine to cushion vulnerable groups from rising energy prices, the headline overall deficit is expected to moderate to 6.2 percent of GDP in 2022 as the government claws back the pandemic support. Under current policies, the deficit is projected to gradually moderate to about 3 percent of GDP over the medium term.

2. **Total public debt rose to 58.38 percent of GDP in FY2021, due to increased borrowing to mitigate the impact of the COVID-19 pandemic**.[2]Thailand entered the pandemic with ample fiscal buffers and total debt in 2019 amounted to around 41 percent of GDP, significantly below the authorities' pre-pandemic debt ceiling of 60 percent under the Fiscal Responsibility Law (FRL). The debt ceiling was revised to 70 percent of GDP in 2021 to finance the additional measures to support the economy. As a result, debt rose to 49.47 percent in 2020 and 58.38 percent in 2021. As of February 2022, public debt had reached 60.2 percent of GDP and is expected to increase to 62 percent of GDP by the end of the fiscal year.

3. **Thailand's debt is largely denominated in local currency, and sufficient domestic liquidity is available to absorb the government's refinancing needs**. About 94.16 percent of the debt is in medium and long-term instruments and 98 percent of the debt is denominated in local currency. Gross financing needs (the sum of the fiscal deficit and maturing debt) increased to 15 percent of GDP in 2021 but are projected to decline to 9.0 percent of GDP in 2022 before declining to an average of 5.3 percent of GDP in 2023–27. Debt service in percent of total revenues, which serves as an additional indicator for the authorities to guide fiscal policy, remains very low and well within the authorities' benchmark. The low share of foreign exchange-denominated public debt and

[1] There is a significant difference between fiscal and calendar year GDP growth because of the extraordinary recession and the uneven quarterly recovery path in 2021.

[2] In April 2020, Thailand approved a THB 1 trillion borrowing package aimed at shoring up the economy during the coronavirus crisis with THB 600 billion for health-related spending and financial aid to households and firms and THB 400 billion for project spending. In May 2021, the government approved an additional THB 500 billion (3.2 percent of GDP) in borrowing. The proposed allocations are based on the same categories: cash transfers to households (THB 300 billion or 1.9 percent of GDP); medical expenditures (THB 30 billion or 0.2 percent of GDP); and economic and social projects (THB 170 billion or 1.1 percent of GDP).

long average term to maturity (above 12 years) significantly mitigate the impact from exchange rate and interest rate shocks.

4. Under the baseline scenario, public debt remains within the 70 percent ceiling throughout the projection period.[3] The public debt to GDP ratio is expected to peak at 61.4 percent in 2023 and gradually declines to 59.6 percent in 2027 as GDP growth rebounds to 4.0 percent in 2023 before trending down to its potential rate of about 3 percent in the medium term. The baseline also assumes that the government will use the balance of the THB 1.5 trillion loan to support economic recovery and gradually raises the revenue to GDP ratio to pre pandemic levels (about 16 percent of GDP). While the realism of baseline projections shows the projected 3-year adjustment in the cyclically adjusted primary balance (CAPB) as relatively large—4.7 percent of GDP—at a percentile rank of 11 percent relative to other market access countries, the path is achievable given the extraordinary circumstances of adjusting from the pandemic fiscal expansion. Close attention should nonetheless be paid to medium and long-term fiscal planning to facilitate the needed reduction in the primary balance by increasing revenue generation, improving spending efficiency and investing in growth-enhancing projects.

5. Public debt dynamics deteriorate under growth and combination shocks. Debt rises to about 68.6 percent of GDP in 2024 under the real GDP shock—based on standard deviation of growth for the past decade. Under this scenario, the level of debt remains elevated at above 65 percent of GDP throughout the medium term. Debt indicators deteriorate further under a combined macro-fiscal shock (where real growth declines and interest rates increase). In this case, public debt reaches 69.5 percent of GDP in 2024, almost breaching the 70 percent threshold and remains above 65 percent of GDP throughout the projection period. However, gross financing needs would remain below the DSA's 15 percent benchmark under all shock scenarios.

6. Debt dynamics deteriorate significantly more under stress scenarios than in the 2021 DSA, reflecting the rapid increase in public debt during the pandemic and reduced fiscal space. Containment measures, increased government spending and lower tax revenues have driven an increase in budget deficits and government debt, which as a percentage of GDP has reached its highest levels over the past several decades. While current interest payments on debt are manageable, due to low bond yields and accommodative monetary policy, maintaining high debt increases vulnerability to interest rate increases, raises debt rollover risks and limits the government capacity to respond to future shocks and to scale up priority spending. Restoring public finances through a mix of tax and spending policies is a priority to rebuild fiscal space once the recovery takes hold.

[3] It is unclear whether the higher debt limit will be permanent, but the authorities have not yet indicated otherwise.

Thailand: Public Sector Debt Sustainability Analysis—Baseline Scenario

(In percent of GDP unless otherwise indicated)

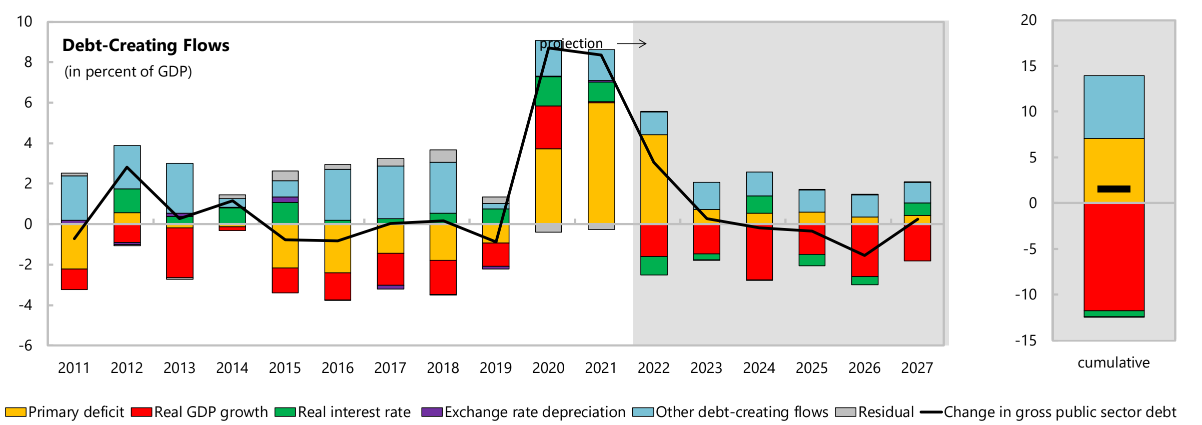
Debt, Economic and Market Indicators [1/]

	Actual			Projections					
	2011-2019 [2/]	2020	2021	2022	2023	2024	2025	2026	2027
Nominal gross public debt	41.7	49.5	58.4	61.2	61.4	61.2	60.9	59.4	59.6
Of which: guarantees	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public gross financing needs	5.6	10.8	14.3	9.2	6.1	6.4	5.7	4.3	4.2
Real GDP growth (in percent)	3.3	-4.8	-0.1	3.0	2.5	4.7	2.6	4.5	3.2
Inflation (GDP deflator, in percent)	1.9	-0.8	0.9	3.5	2.3	0.2	2.5	2.1	0.4
Nominal GDP growth (in percent)	5.3	-5.6	0.8	6.6	4.8	5.0	5.1	6.7	3.6
Effective interest rate (in percent) [4/]	3.4	2.6	2.9	2.0	1.8	1.7	1.6	1.5	1.5

As of September 25, 2020		
Sovereign Spreads		
EMBIG (bp) 3/		66
5Y CDS (bp)		25
Ratings	Foreign	Local
Moody's	Baa1	Baa1
S&Ps	BBB+	A-
Fitch	BBB+	BBB+

Contribution to Changes in Public Debt

	Actual			Projections							
	2011-2019	2020	2021	2022	2023	2024	2025	2026	2027	Cumulative	Debt-stabilizing Primary Balance [9/]
Change in gross public sector debt	0.1	8.4	8.9	3.1	0.3	-0.2	-0.3	-1.5	0.2	1.5	
Identified debt-creating flows	-0.1	9.1	8.6	3.0	0.3	-0.2	-0.3	-1.5	0.2	1.5	
Primary deficit	-1.2	3.7	6.0	4.4	0.7	0.5	0.6	0.4	0.4	7.1	-0.2
Primary (noninterest) revenue and grants	23.8	23.1	22.7	22.3	22.9	23.0	23.0	23.0	23.0	137.4	
Primary (noninterest) expenditure	22.6	26.8	28.7	26.7	23.7	23.6	23.6	23.4	23.5	144.4	
Automatic debt dynamics [5/]	-0.7	3.6	1.1	-2.5	-1.8	-1.9	-2.0	-3.0	-1.2	-12.4	
Interest rate/growth differential [6/]	-0.7	3.6	1.0	-2.5	-1.8	-1.9	-2.0	-3.0	-1.2	-12.4	
Of which: real interest rate	0.6	1.5	1.0	-0.9	-0.3	0.8	-0.5	-0.4	0.6	-0.7	
Of which: real GDP growth	-1.3	2.1	0.0	-1.6	-1.5	-2.8	-1.5	-2.6	-1.8	-11.7	
Exchange rate depreciation [7/]	0.0	0.0	0.1	…	…	…	…	…	…	…	
Other identified debt-creating flows	1.8	1.8	1.5	1.1	1.3	1.2	1.1	1.1	1.0	6.9	
Please specify (1) (e.g., drawdown of deposits) (negative)	1.8	1.8	1.5	1.1	1.3	1.2	1.1	1.1	1.0	6.9	
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Please specify (2) (e.g., ESM and Euroarea loans)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Residual, including asset changes [8/]	0.2	-0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	



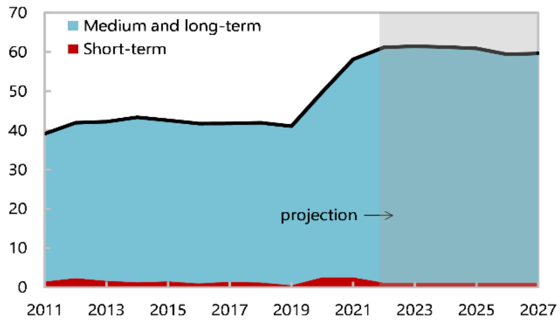
Source: IMF staff calculations and estimations.
Note: All numbers are stated in Fiscal Year terms.

1/ Public sector is defined as consolidated public sector and includes public guarantees.
2/ Based on available data.
3/ Long-term bond spread over U.S. bonds.
4/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.
5/ Derived as [(r - π(1+g) - g + ae(1+r)]/(1+g+π+gπ)) times previous period debt ratio, with r = interest rate; π = growth rate of GDP deflator; g = real GDP growth rate; a = share of foreign-currency denominated debt; and e = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).
6/ The real interest rate contribution is derived from the numerator in footnote 5 as r - π (1+g) and the real growth contribution as -g.
7/ The exchange rate contribution is derived from the numerator in footnote 5 as ae(1+r).
8/ Includes changes in the stock of guarantees, asset changes, and interest revenues (if any). For projections, includes exchange rate changes during the projection period.
9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

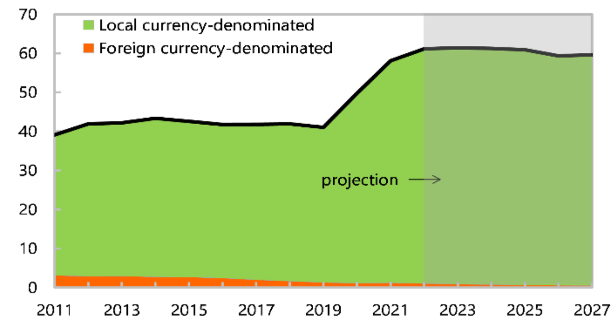
Thailand: Public Debt Sustainability Analysis —Composition of Public Debt and Alternative Scenarios[1]

Composition of Public Debt

By Maturity
(in percent of GDP)



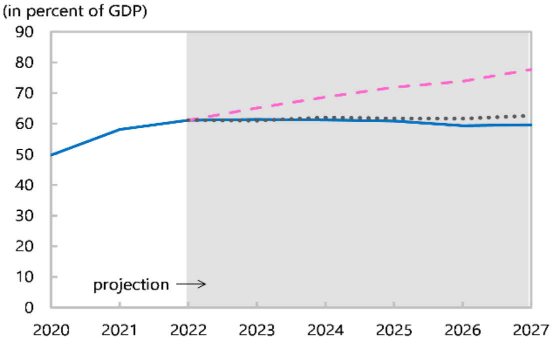
By Currency
(in percent of GDP)



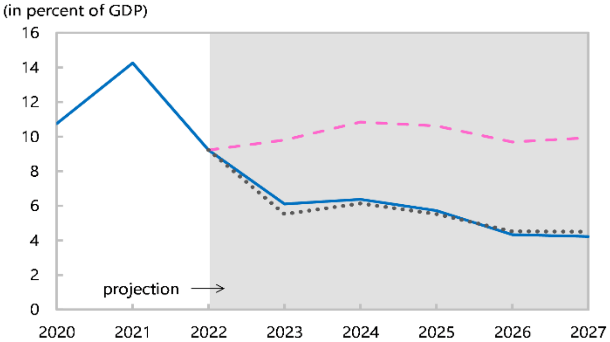
Alternative Scenarios

Baseline Historical Constant Primary Balance

Gross Nominal Public Debt
(in percent of GDP)



Public Gross Financing Needs
(in percent of GDP)



Underlying Assumptions
(in percent)

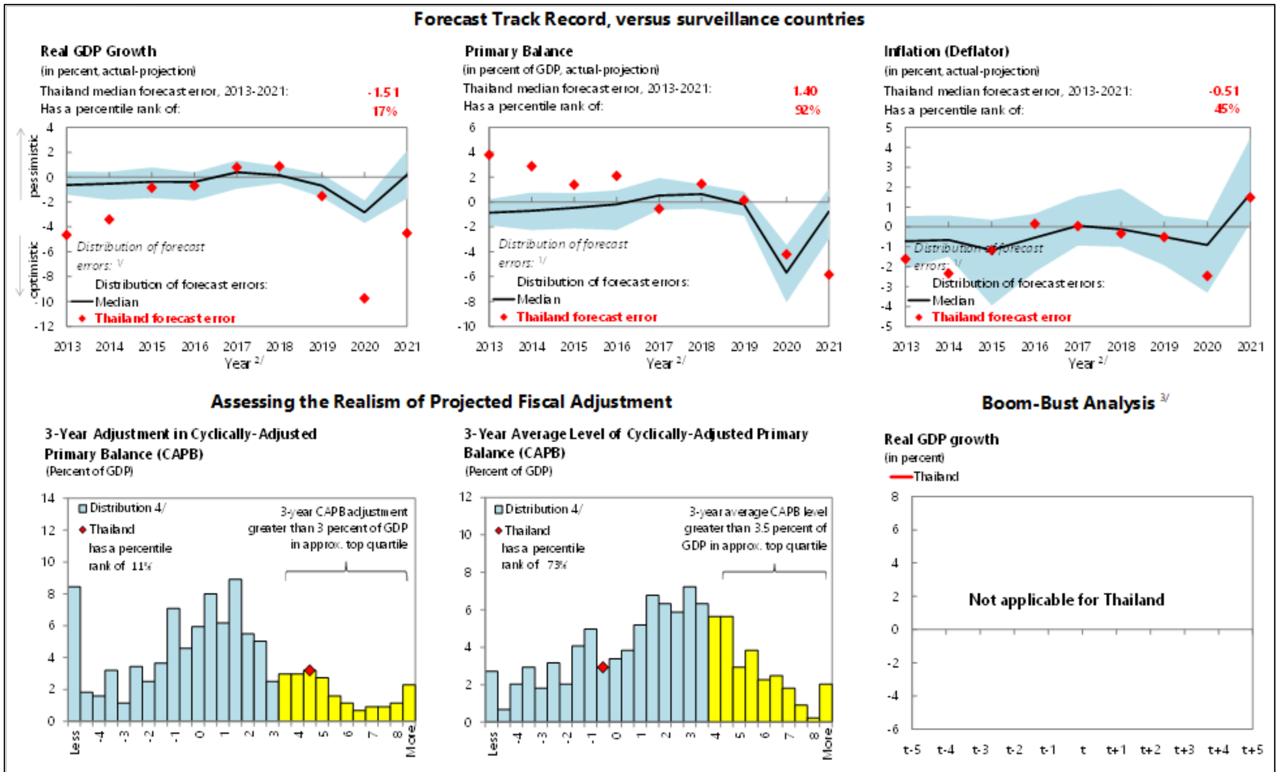
Baseline Scenario	2022	2023	2024	2025	2026	2027
Real GDP growth	3.0	2.5	4.7	2.6	4.5	3.2
Inflation	3.5	2.3	0.2	2.5	2.1	0.4
Primary Balance	-4.4	-0.7	-0.5	-0.6	-0.4	-0.4
Effective interest rate	2.0	1.8	1.7	1.6	1.5	1.5
Constant Primary Balance Scenario						
Real GDP growth	3.0	2.5	4.7	2.6	4.5	3.2
Inflation	3.5	2.3	0.2	2.5	2.1	0.4
Primary Balance	-4.4	-4.4	-4.4	-4.4	-4.4	-4.4
Effective interest rate	2.0	1.8	1.7	1.5	1.5	1.4

Historical Scenario	2022	2023	2024	2025	2026	2027
Real GDP growth	3.0	2.2	2.2	2.2	2.2	2.2
Inflation	3.5	2.3	0.2	2.5	2.1	0.4
Primary Balance	-4.4	-0.1	-0.1	-0.1	-0.1	-0.1
Effective interest rate	2.0	1.8	1.9	2.0	2.1	2.1

Source: IMF staff calculations and estimations.

[1] There is a significant difference between fiscal and calendar year GDP growth because of the extraordinary recession and the uneven quarterly recovery path in 2021.

Thailand: Public Debt Sustainability Analysis —Realism of Baseline Assumptions



Source : IMF Staff.

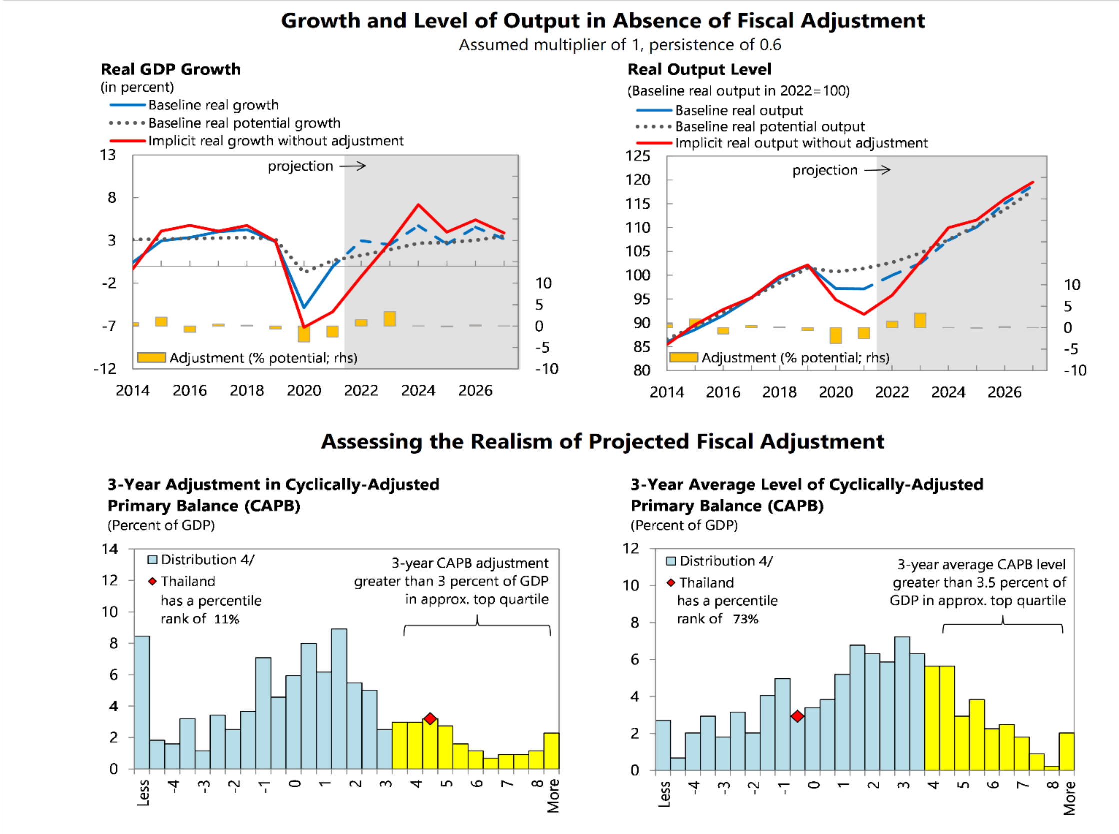
1/ Plotted distribution includes surveillance countries, percentile rank refers to all countries.

2/ Projections made in the spring WEO vintage of the preceding year.

3/ Not applicable for Thailand, as it meets neither the positive output gap criterion nor the private credit growth criterion.

4/ Data cover annual obervations from 1990 to 2011 for advanced and emerging economies with debt greater than 60 percent of GDP. Percent of sample on vertical axis.

Thailand: Public Debt Sustainability Analysis —Realism of Baseline Assumptions (Concluded)

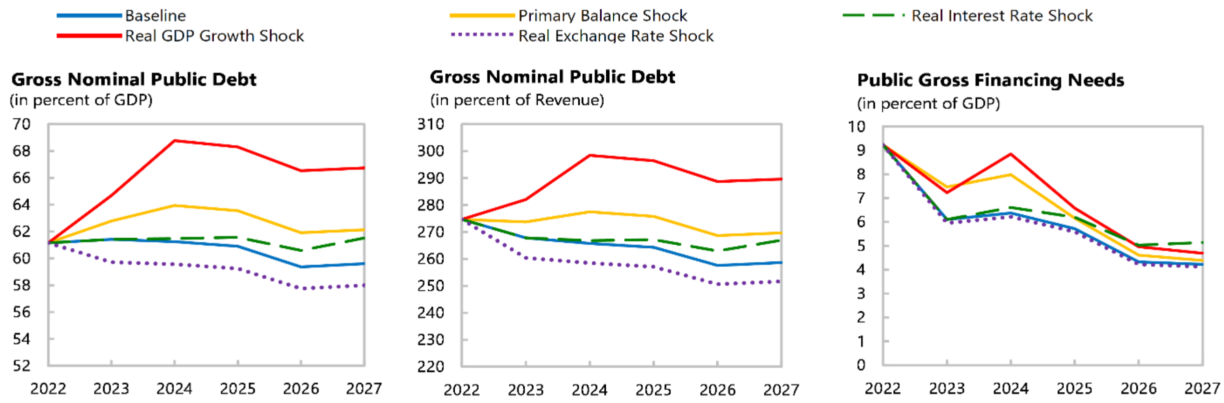


Source: IMF staff calculations and estimations.

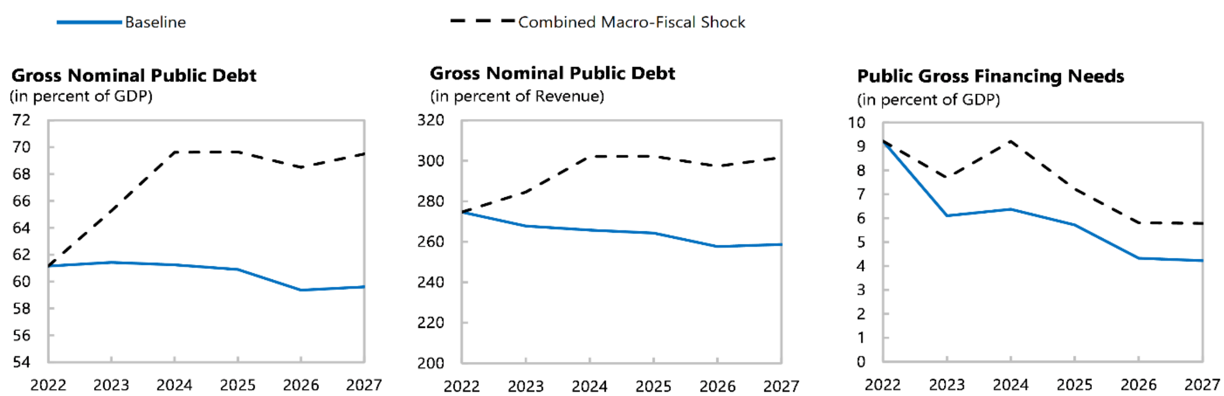
4/ Data cover annual obervations from 1990 to 2011 for advanced and emerging economies with debt greater than 60 percent of GDP. Percent of sample on vertical axis.

Thailand: Public Debt Sustainability Analysis —Stress Tests

Macro-Fiscal Stress Tests



Additional Stress Tests



Underlying Assumptions
(in percent)

	2022	2023	2024	2025	2026	2027
Primary Balance Shock						
Real GDP growth	3.0	2.5	4.7	2.6	4.5	3.2
Inflation	3.5	2.3	0.2	2.5	2.1	0.4
Primary balance	-4.4	-2.1	-1.9	-0.6	-0.4	-0.4
Effective interest rate	2.0	1.8	1.7	1.7	1.6	1.5
Real Interest Rate Shock						
Real GDP growth	3.0	2.5	4.7	2.6	4.5	3.2
Inflation	3.5	2.3	0.2	2.5	2.1	0.4
Primary balance	-4.4	-0.7	-0.5	-0.6	-0.4	-0.4
Effective interest rate	2.0	1.8	2.1	2.4	2.6	2.7
Combined Shock						
Real GDP growth	3.0	-0.6	1.6	2.6	4.5	3.2
Inflation	3.5	1.5	-0.5	2.5	2.1	0.4
Primary balance	-4.4	-2.1	-2.4	-0.6	-0.4	-0.4
Effective interest rate	2.0	1.8	2.1	2.5	2.6	2.8

	2022	2023	2024	2025	2026	2027
Real GDP Growth Shock						
Real GDP growth	3.0	-0.6	1.6	2.6	4.5	3.2
Inflation	3.5	1.5	-0.5	2.5	2.1	0.4
Primary balance	-4.4	-1.6	-2.4	-0.6	-0.4	-0.4
Effective interest rate	2.0	1.8	1.7	1.7	1.6	1.5
Real Exchange Rate Shock						
Real GDP growth	3.0	2.5	4.7	2.6	4.5	3.2
Inflation	3.5	5.4	0.2	2.5	2.1	0.4
Primary balance	-4.4	-0.7	-0.5	-0.6	-0.4	-0.4
Effective interest rate	2.0	1.8	1.7	1.6	1.5	1.5

Source: IMF staff calculations and estimations.

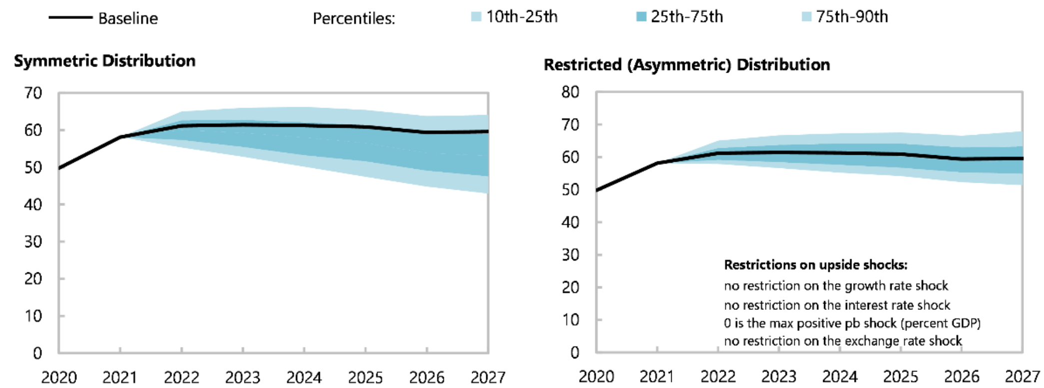
Thailand: Public Debt Sustainability Analysis Risk Assessment

Heat Map

Debt level 1/	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability shock
Gross financing needs 2/	Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability Shock
Debt profile 3/	Market Perception	External Financing Requirements	Change in the Share of Short-Term Debt	Public Debt Held by Non-Residents	Foreign Currency Debt

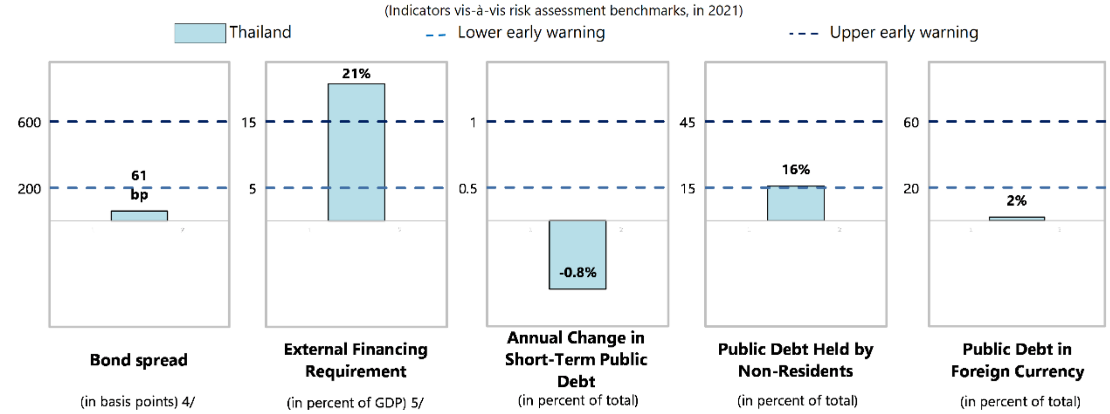
Evolution of Predictive Densities of Gross Nominal Public Debt

(in percent of GDP)



Debt Profile Vulnerabilities

(Indicators vis-à-vis risk assessment benchmarks, in 2021)



Source: IMF staff calculations and estimations.

1/ The cell is highlighted in green if debt burden benchmark of 70% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

2/ The cell is highlighted in green if gross financing needs benchmark of 15% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

3/ The cell is highlighted in green if country value is less than the lower risk-assessment benchmark, red if country value exceeds the upper risk-assessment benchmark, yellow if country value is between the lower and upper risk-assessment benchmarks. If data are unavailable or indicator is not relevant, cell is white.

Lower and upper risk-assessment benchmarks are:

200 and 600 basis points for bond spreads; 5 and 15 percent of GDP for external financing requirement; 0.5 and 1 percent for change in the share of short-term debt; 15 and 45 percent for the public debt held by non-residents; and 20 and 60 percent for the share of foreign-currency denominated debt.

4/ Long-term bond spread over U.S. bonds, an average over the last 3 months, 27-Jun-20 through 25-Sep-20.

5/ External financing requirement is defined as the sum of current account deficit, amortization of medium and long-term total external debt, and short-term total external debt at the end of previous period.

INTERNATIONAL MONETARY FUND

THAILAND

August 30, 2022

STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

Prepared By | Asia and Pacific Department

CONTENTS

FUND RELATIONS

(As of May 31, 2022)

Membership Status: Joined 05/03/1949; Article VIII.

Article VIII Status: Thailand has accepted the obligations of Article VIII, Sections 2, 3, and 4, and maintains an exchange system free of multiple currency practices and restrictions on the making of payments and transfers for current international transactions.

General Resources Account:

	SDR Million	**Percent Quota**
Quota	3,211.90	100.00
Fund holdings of currency	2,307.09	71.83
Reserve position in Fund	904.82	28.17
Lending to the Fund		
New Arrangements to Borrow	4.47	

SDR Department:

	SDR Million	**Percent Allocation**
Net cumulative allocation	4,048.73	100.00
Holdings	4,072.06	100.58

Outstanding Purchases and Loans: None

Latest Financial Arrangements:

In millions of SDR				
Type	**Approval Date**	**Expiration Date**	**Amount Approved**	**Amount Drawn**
Stand-by	8/20/97	6/19/00	2,900.00	2,500.00
Stand-by	6/14/85	12/31/86	400.00	260.00
Stand-by	11/17/82	12/31/83	271.50	271.50

Projected Obligations to Fund
(SDR million; based on existing use of resources and present holdings of SDRs):

	2023	**2024**	**2025**	**2026**
Principal				
Charges/interest	0.05	0.05	0.05	0.05
Total	0.05	0.05	0.05	0.05

Exchange Rate Arrangement:

The de jure and de facto exchange rate arrangements are classified as floating. Under the inflation-targeting monetary policy framework, the value of the baht is allowed to be determined by market forces, reflecting demand and supply in the foreign exchange market. In the case that the resulting movements in Thai baht (THB) are deemed excessive and unjustified by fundamentals, foreign exchange intervention can be undertaken.

During 2021, the REER depreciated by 7.6 percent, while the NEER depreciated by 4.6 percent. This reflects a further decline in tourism receipts and soaring shipping costs amid supply chain disruptions and tightening global financial conditions.

Last Article IV Consultation:

Thailand is on the standard 12-month Article IV consultation cycle. The previous Article IV consultation was concluded on May 17, 2021. Copy of the Staff Report could be downloaded from this link.

FSAP Participation

The Financial Sector Assessment Program (FSAP) missions took place in November 2018 and February 2019. The main findings are presented in the published Financial System Stability Assessment (IMF Country Report No. 19/308).

Recent Technical Assistance:

MCM: A mission in July 2022 advised the BOT on enhancing the operational framework for bank resolution. The ongoing technical assistance (TA) mission on monetary policy modeling that commenced in the spring of 2020 supports the BOT's efforts to develop an analytical framework to enhance its monetary policy analysis and decisions, taking into consideration country-specific features and the interactions of different policy instruments.

FAD: A mission in November 2019 advised the government on developing a strategy for improving the tax compliance of digital platform companies in light of the authorities' draft legislation for taxing certain types of cross-border e-commerce transactions.

LEG: A mission in March 2019 reviewed the existing income tax law, comprising Title 2 of the revenue code and relevant subsidiary legislation, and suggested a need of simplification and modernization to improve its effectiveness to align it with international best practices. A mission in April 2019 conducted a diagnostic evaluation of the capacity development needs for strengthening the anti-money laundering and combating the financing of terrorism (AML/CFT) regime of the country. A mission in September 2019 discussed amendments that are required to make Thailand's AML preventative measures regulations compliant with the international standards.

Resident Representative: None

RELATIONS WITH OTHER INTERNATIONAL FINANCIAL INSTITUTIONS

World Bank: https://www.worldbank.org/en/country/thailand

Asian Development Bank: https://www.adb.org/countries/thailand/main

STATISTICAL ISSUES

(As of May 31, 2022)

I. Assessment of Data Adequacy for Surveillance	
General: Data provision is broadly adequate for surveillance. The authorities have continued to improve the quality and coverage of data. The dissemination of additional data may enhance the basis for macroeconomic analysis.	
National Accounts: The Office of the National Economic and Social Development Council (NESDC) compiles annual and quarterly GDP estimates using both the production and expenditure approaches. The annual GDP volume measures are derived at previous year's prices and as chain-linked indices with 2002 as the reference year. In the 2019 release, the NESDC revised the GDP series back to 2014. The NESDC introduced new quarterly GDP current price and chain-linked volume estimates in May 2015. **Price Statistics**: The Bureau of Trade and Economic Indexes (BTEI) compiles and disseminates a monthly consumer price index with weights based on expenditure data collected from households during the 2015 Socio-Economic Survey since January 2017. Index coverage is restricted to middle-income urban households. In addition to headline CPI, the BTEI publishes aggregate indexes for the low-income and rural populations. The BTEI also publishes monthly producer price index with base year 2010. The Bank of Thailand disseminates a RPPI covering metropolitan Bangkok and STA has provided technical assistance towards broadening coverage to include other regions.	
Government Finance Statistics: The authorities provide data to the Fund, consistent with the *Government Finance Statistics Manual*, 2014 (*GFSM 2014*), for publication in the *Government Finance Statistics Yearbook* and the *International Finance Statistics,* as well as for surveillance purposes. General government fiscal data are reported to the Fund annually. The authorities also publish monthly and quarterly data for key general government GFS-based numbers on their website. In addition, the authorities compile and publish aggregated *GFSM 2014*-based data for selected nonfinancial state-owned enterprises (SOEs), although with substantial delays. The authorities also publish public sector debt data in their website, including debt of nonfinancial SOEs and Specialized Financial Institutions.	
Monetary Statistics: The authorities submit the Standardized Reporting Forms (SRFs) for monetary statistics on a timely basis for publication in *IFS*. The reported SRFs include the central bank, other depository corporations, and other financial corporations (OFCs). **Financial Soundness Indicators**: The authorities report 11 of the 12 core financial soundness indicators (FSIs) and 7 of the 13 encouraged FSIs for deposit takers, one FSI for OFCs, one for households, and 3 FSIs for real estate markets—on a quarterly basis—for posting on the IMF's FSI website with about one quarter lag. **Financial Access Survey:** The authorities also report data on several series and indicators to the Financial Access Survey (FAS), including mobile money and the two indicators (commercial bank branches per 100,000 adults and ATMs per 100,000 adults) adopted by the UN to monitor Target 8.10 of the Sustainable Development Goals (SDGs).	
External Sector Statistics: The Bank of Thailand (BOT) compiles and disseminates balance of payments (BOP) and international investment position (IIP) statistics with quarterly frequency following the sixth edition of the *Balance of Payments and International Investment Position Manual* (*BPM6*). The quarterly BOP and IIP are available for 2022Q1 (at the time of assessment). The historical data on *BPM6* based BOP and IIP goes back to 2005.The methodology for compiling balance of payments data remains adequate. Further improvements are expected to enhance the data coverage and accuracy of BOP and IIP statistics, particularly in areas where new concepts, such as digital trade have been introduced Data on external debt and debt service have significantly improved since the introduction of a quarterly survey of private nonbank external debt. The BOT participates in the coordinated direct and portfolio investment surveys of STA and regularly reports International Reserves and Foreign Currency Liquidity Data Template. There is a need to continue to corroborate the methodology and data released with the Ministry of Tourism and Sports (for tourism, which is one of the most important sectors of activity); improve collaboration with the NESDC (further improvement of the integrated business register supporting harmonized current and financial accounts); and liaise closely with Customs Department to gain knowledge on free zone and ecommerce activities.	
II. Data Standards and Quality	
Subscriber to the Special Data Dissemination Standard (SDDS) since August 9, 1996.	Data ROSC published in April 2006.

Thailand: Table of Common Indicators Required for Surveillance As of June 27, 2022					
	Date of Latest Observation	Date Received	Frequency of Data[6]	Frequency of Reporting[6]	Frequency of Publication[6]
Exchange Rates	6/27/2022	6/27/2022	D	D	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	6/22/2022	6/22/2022	W	W	W
Reserve/Base Money	5/2022	6/14/2022	M	M	M
Broad Money	4/2022	6/3/2022	M	M	M
Central Bank Balance Sheet	5/2022	6/14/2022	M	M	M
Other Depository Corporations Sectoral Balance Sheet	4/2022	6/3/2022	M	M	M
Interest Rates[2]	6/27/2022	6/27/2022	D	D	D
Consumer Price Index	5/2022	6/10/2022	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[3]—General Government[4]	2021	2/2022	A	A	A
Revenue, Expenditure, Balance and Composition of Financing[3]– Central Government	4/2022	6/2022	M	M	M
Stocks of Central Government and Central Government-Guaranteed Debt[5]	4/2022	6/2022	M	M	M
External Current Account Balance	4/2022	5/2022	M	M	M
Exports and Imports of Goods and Services	4/2022	5/2022	M	M	M
GDP/GNP	2022: Q1	5/2022	Q	Q	Q
Gross External Debt	2022: Q1	5/2022	Q	Q	Q
International Investment Position	2022: Q1	6/2022	Q	Q	Q

[1]Includes reserve assets pledged or otherwise encumbered, as well as net derivative positions.
[2] Both market-based and officially determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.
[3] Foreign, domestic bank, and domestic nonbank financing.
[4] The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.
[5] Including currency and maturity composition.
[6] Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A); Irregular (I); Not Available (NA).

INTERNATIONAL MONETARY FUND

THAILAND

STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION—SUPPLEMENTARY INFORMATION

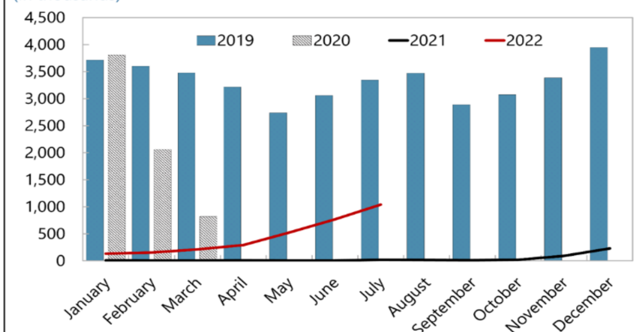
August 30, 2022

Prepared By: Asia and Pacific Department

This statement provides an update on macro-economic developments in Thailand since the issuance of the staff report to the Executive Board on July 21, 2022 (SM/22/193). The update does not change the thrust of the staff appraisal.

1. Real GDP expanded by 2.5 percent (y/y) in 2022Q2 from 2.3 percent in 2022Q1. On the expenditure side, private consumption and export of services have been the drivers of the expansion. On the production side, accommodation and food services (driven by the increase in international tourist arrivals), wholesale and retail trade, as well as transportation are the main the drivers of the 2022Q2 GDP growth. Boosted by the elimination of remaining COVID-19 restrictions, tourist arrivals exceeded 1 million in July (2.1 million in January-June). Annual GDP growth remains projected at 2.8 percent amidst a highly uncertain global outlook and predominantly downside risks, though a faster-than-envisaged tourism recovery could contribute to stronger growth.

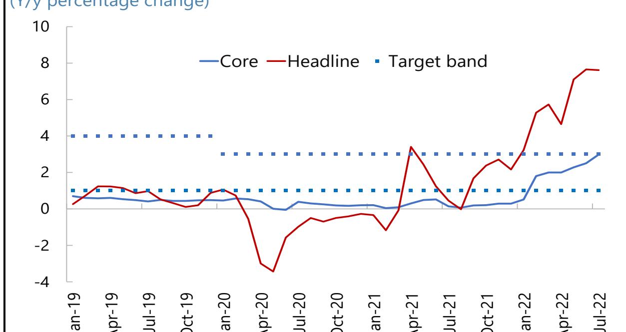
Thailand: Tourist Arrivals by Year
(In thousands)



Sources: Thai authorities; and Haver Analytics.

2. Inflation moderated slightly to 7.6 percent in July 2022 from 7.7 percent in June (y/y). A decrease in transportation and communication prices (from 14.8 percent in June to 10.2 percent in July) is the main driver of the small deceleration in the overall CPI. Energy prices remained elevated though most price caps on fuel products were extended through end-September. Electricity prices are set to be raised by 18 percent for the September-December 2022 period. Core inflation accelerated to about 3 percent in July 2022 from 2.5 percent in June. Average annual inflation remains projected at 6.1 percent.

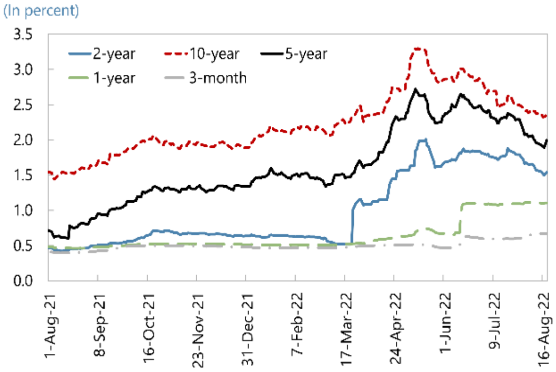
Inflation
(Y/y percentage change)



Sources: Haver Analytics; and IMF staff calculations.

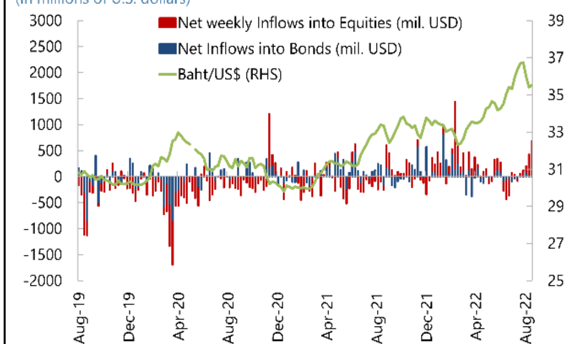
3. Financial conditions remain favorable but volatile. After depreciating for the first seven months of the year, the Thai baht appreciated by 3.8 percent against the U.S. dollar in August (as of August 16). The NEER appreciated by 1.9 percent over the same period. Net portfolio inflows (bonds and equities) declined from around US$6 bn in 2022Q1 to US$0.7 bn in 2022Q2 as global risk sentiment was affected by the war in Ukraine. Net portfolio inflows into equities however rebounded in August supported by the ongoing recovery. Medium-term government bond yields continued to decline.

Thailand: Domestic Government Bond Yields
(In percent)



Sources: Bloomberg LP.

Thailand: Foreign Capital Inflows
(In millions of U.S. dollars)



Sources: Bloomberg LP.

4. The Bank of Thailand (BOT) has started to normalize monetary policy. The BOT raised its policy rate by 25 basis points from 0.5 to 0.75 percent at its August 10th Monetary Policy Committee meeting. The BOT continues to closely monitor inflation dynamics, cost pass-through and inflation expectations, and communicated that it would pursue a gradual normalization of monetary as the economy continues to recover.

Statement by Ms. Rosemary Lim, Executive Director,
Ms. Sukjai Wongwaisiriwat, Senior Advisor to Executive Director, and
Mr. Krist Dacharux, Advisor to Executive Director for Thailand
August 31, 2022

On behalf of the Thai authorities, we would like to express our sincere appreciation to the mission team for the constructive dialogue during the Article IV consultation. Our authorities welcome the staff's acknowledgement of their steadfast efforts to ensure a sustainable economic recovery. We broadly agree with the staff's assessments and policy recommendations, many of which are in line with the current policy priorities.

Recent Economic Development and Outlook

The Thai economy continues to recover and is expected to return to the pre-covid level around the end of this year. The actual outturn of GDP growth in 2022Q2 was 2.5 percent (year-on-year), led by private consumption and exports of services. Going forward, the Thai economy is projected to continue recovering with strong momentum. This is attributable to a significant pickup in the number of tourist arrivals following the relaxation of international travel restrictions and improved travel sentiments. In addition, private consumption would continue to recover in line with improvements in labor market conditions and household incomes. The authorities' GDP growth projections are 3.0 – 3.5 and 3.5 – 4.5 percent for 2022 and 2023 respectively – compared to those of staff at 2.8 and 4.0 percent.

Headline inflation remains high, registering 7.6 percent in July 2022. Inflation is expected to reach its peak in 2022Q3, before gradually falling into the target range in 2023 as the supply-side inflationary pressures subside. Thus far, there is limited pass-through from wages to inflation and low probability of wage-price spiral due to remaining slack in the labor market and low contribution of wages to overall production costs. The latest headline inflation projections are 6.2 and 2.5 percent for 2022 and 2023[1], in line with those of staff.

Key risks remain including (1) a slowdown in the global economy, (2) the impact of higher prices on households' cost of living (3) the high level of private debts amid interest rate uptrend, (4) the uncertainties regarding the pandemic, and (5) geopolitical risks. The upside risks to economic growth could be from higher-than-expected tourist arrivals and pent-up demand and spending by households with excess savings.

Monetary Policy

In August 2022, the Monetary Policy Committee (MPC) decided to raise the policy rate for the first time since 2018 from 0.5 to 0.75 percent. This reflects a shift of key considerations from growth to inflation, as economic recovery has gained traction while

[1] Monetary Policy Report (as of June 2022)

inflation will remain high for some time. Therefore, the extraordinarily accommodative monetary policy will become less needed. The MPC views that the policy rate should be normalized in a gradual and measured manner to the level that is consistent with sustainable growth in the long term.

The Bank of Thailand (BOT) had communicated its data-dependent and gradual normalization strategy to help shape market expectations prior to the actual rate hike. Amidst high inflationary pressure, the BOT has emphasized that monetary policy must first and foremost ensure that high inflation does not become entrenched, hence undermining economic activities.

Exchange Rate Policy and External Balance Assessment

The authorities reiterate their commitment to exchange rate flexibility and highlight the need to remain vigilant of the adverse impact on capital flows from the volatile global environment. Against the backdrop of major central banks' normalization and the risk-off sentiment, Thai Baht has depreciated by around 9 percent in the first seven months of 2022 while foreign exchange intervention continues to be two-sided with an aim to prevent disorderly market conditions and excessive volatility.

The authorities continue to nurture a new FX ecosystem to complement the capital account liberalization effort and facilitate FX hedging activities. Since 2020, the BOT has revised regulations to address structural issues in the FX market to increase the flexibility of risk management while decreasing costs of hedging and improving surveillance to enhance market stability. The recent relaxation of foreign exchange regulations in 2022 further rebalances regulations on capital flows by allowing greater flexibility for both cross-border and domestic transfers of foreign exchange, managing currency risk exposures and easing the process involved in foreign exchange transactions.

Regarding staff's recommendation on phasing out the remaining capital flow management measures on non-resident baht accounts, the authorities call for a holistic interpretation of such measures as part of the FX ecosystem package, which has effectively further liberalized capital flows. In addition, improving market surveillance and enhancing resilience could be emphasized as part of the effort to help safeguard stability along the liberalization journey.

On the External Balance Assessment (EBA), the authorities urge staff to be cautious on the interpretation and communication of EBA results given its technical limitations. Evidently, EBA results are extensively referred to by various third parties. In addition, the authorities see the benefit of having regular discussions with staff to better understand the country's specific issues and circumstances.

Financial Sector Policy

Thailand's financial system is resilient with commercial banks holding ample levels of capital and loan loss provisions, as well as being able to extend liquidity to support continued economic recovery. In 2022Q2, loan loss provision remained high with NPL coverage ratio of 166.6 percent. Liquidity coverage ratio registered at 185.5 percent and BIS ratio was at 19.6 percent. Furthermore, stress test results indicated that commercial banks have sufficient liquidity and strong financial position to withstand shocks under stress scenarios.[2]

The financial relief policy package had been effective in shoring up economic activities during the pandemic and in supporting the recovery. *The soft loan program and special loan facility for SMEs* continued to support the SME loan to expand at 0.9 percent in 2022Q2, which otherwise would have remained flat. *The debt restructuring through asset warehousing program* has been well in progress with the total of 50 billion baht loan under the scheme, as of July 2022. As the economy recovers, the number of debtors under financial assistance from banks, non-banks, and Specialized Financial Institutions (SFIs) continues to decline. The level of *loan under credit assistance* decreased to 2.9 trillion baht in May 2022 from 3.5 trillion baht at the end of 2021, which was a significant decline from the peak of 7.2 trillion baht in July 2020. In addition, *the out-of-court debt resolution* has been improved to facilitate household debt restructuring and repayment for debtors. This effort has been achieved through various schemes: *Debt Consolidation* scheme[3]which helped reduce the burden for unsecured loan customers by sharing collateral from an existing residential mortgage loan to receive lower interest rates; *Debt Clinic* which helped resolve debt issues for around 87,000 accounts and has the success rate of 88 percent; and *Debt Mediation Fair* which processed more than 231,000 accounts with a 75 percent success rate for mediation.

As the economic recovery gathers strength, the authorities seek to normalize policy by gradually unwinding broad-based policy support while maintaining targeted measures to help vulnerable groups. Financial assistance measures are being phased out for debtors, while for creditors, the covid-related restrictions such as a cap on dividend payout were lifted. Nonetheless, debtors who remain in need of financial assistance could still draw on *the special loan facility* and *asset warehousing program* which will continue until April 2023.

The authorities encourage financial institutions to implement long-term debt restructuring to help resolve the private sector's debt overhang. The program aims to

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[2] Both in the event of economic contraction as a result of a new wave of virus outbreak and energy crisis as well as in the event of sluggish economic recovery. as well as in the event of sluggish economic recovery.

[3] The scheme consolidates multiple debts, both with and without collateral, across financial institutions.

support flexible and practical debt restructuring process, with the focus on repayment rate that is commensurate with debtor's income and appropriately stepping-up when income improves. The terms of debt agreement can be renegotiated in an uncertain situation to increase flexibility and ensure sustainability. To help accelerate such long-term debt restructuring, the BOT temporarily eased some of the bank regulations.

Nonetheless, the long-term debt restructuring program is only a part of the overall effort to help resolve the existing household debt overhang problem. It is important to adopt a holistic debt life-cycle approach that includes the lenders' responsible lending practices, the borrowers' financial literacy and discipline, as well as the debt mediation and bankruptcy process. At the same time, macroprudential measures to restrain indebtedness and a comprehensive social safety net to ensure adequate income for borrowers would play a critical role in the overall process.

Fiscal policy

The judicious use of fiscal space has been successful in minimizing the impact of the pandemic while supporting economic recovery. Policy space built during pre-pandemic years, along with the revision of debt ceiling to 70 percent of GDP in 2021, allowed for strong policy responses to protect the poor and the vulnerable. Numerous social assistance schemes, supported by the government's digital platform (e-wallet) and database (national ID initiative), were effective and targeted. Subsidy to state welfare cardholders, special assistance program and Co-payment scheme, reached 41 million beneficiaries and helped shore up consumption, stimulating around 70 billion baht of spending with more than 1.4million entrepreneurs participating in the Co-payment scheme. Recent measures announced on July 26, 2022 (including the new phase of Co-payment scheme and subsidy to state welfare cardholders) will continue to support domestic consumption from 1 September-October 31, 2022.

In response to high inflation, the government has swiftly provided support to cushion the impact of high commodity prices on the purchasing power of vulnerable households and businesses. Energy subsidies and price caps on key basic goods and services have been implemented in a temporary manner. For example, the diesel excise tax was reduced by 5 baht per litre until September 20, 2022. The support measures are now more targeted to help mitigate the impact of higher cost of living, such as subsidies on LPG, cooking gas and electricity.

To this end, the authorities reiterate their commitment to the fiscal sustainability framework and appreciate staff's alternative fiscal scenarios for the purpose of policy simulations. They maintain that fiscal position remains sound under the Medium-Term Fiscal Framework with various scenarios and acknowledge that building sufficient fiscal space is crucial to help withstand shocks in the highly volatile environment going forward. They are also mindful of the fiscal cost of temporary measures to assist households, and thus would gradually allow more cost pass-through, while continuing to protect the poor with targeted measures. On the revenue side, the authorities place an emphasis on the tax reform progress in order to broaden the tax base, such as VAT from e-commerce.

Structural policies

The authorities agree with staff on the need to transform towards a high-value economy post-pandemic by supporting new growth drivers as well as enabling a sustainable and digital economy. Key development targets are presented under *the 13th National Development Plan (2023-2027)*. Main initiatives for sectoral development are *Eastern Economic Corridor (EEC),* which focuses on investment in 12 strategic industries[4], and efforts to reshape tourism[5]. At the same time, *investment in digital innovation and infrastructure* is prioritized, while *the Productivity-enhancing Active Labor Market Policy (ALMP)* has helped address skill-shortages and skill-mismatches.

[4] The 12 strategic industries are Next-Generation Automotive, Intelligent Electronics, Advanced Agriculture and Biotechnology, Food for the Future, High-Value and Medical Tourism, Robotics, Aviation and Logistics, Medical and Comprehensive Healthcare, Biofuel and Biochemical, Digital, National Defense, and Education and Human Resource Development.

[5] The objective of future tourism is to create more value-added in an environmentally sustainable fashion, which includes the Long-Term Resident Program and the development of high-potential specific tourism sectors such as health and wellness, culture, and heritage, as well as natural environment.