

# Executive Summary

# THAILAND ECONOMIC MONITOR

## BUILDING BACK GREENER: THE CIRCULAR ECONOMY

June 2022



# EXECUTIVE SUMMARY

## Recent Developments

**While economic activity recovered in late 2021 and early 2022, it continues to lag regional peers.** GDP growth has picked up modestly since the surge in COVID-19 cases last year, but economic activity remained below pre-pandemic levels in Q1 2022, in contrast to countries such as Malaysia, Philippines and Indonesia which have recovered more quickly. While cases surged again in early 2022, high vaccination rates have contained the number of deaths. Some containment measures have been eased and a continuation of fiscal stimulus measures has helped support private consumption. On the other hand, recent economic indicators suggest a slowdown in the second quarter, in large part due to the impact of Russia's invasion of Ukraine on prices and global activity. Survey results indicate that negative income effects from the increase in energy prices have constrained consumer spending. Demand for merchandise exports has softened amid the slowdown in the global economy, and global supply chain disruptions have impacted the manufacturing sector. Moreover, foreign tourist arrivals remained 94 percent below pre-COVID levels in the first four months of 2022, and headwinds persist due to the ongoing Omicron wave and continued travel restrictions in China.

**The current account has remained in deficit through the first quarter of 2022, due to increased fuel imports and freight costs, and continued weakness in tourism receipts.** Merchandise exports continued to rise – by 15 percent in Q1 2022 – but the fuel import bill has also risen substantially. As a result, the current account deficit was broadly stable at just over 1 percent of GDP. US monetary policy tightening and a loss of investor confidence due to Russia's invasion of Ukraine prompted substantial outflows from Thai equity and bond markets in early 2022. The real effective exchange rate remained largely unchanged. International reserves have declined but remain ample at close to a year's worth of imports, with Thailand maintaining strong buffers against external shocks.

**Headline inflation has breached the Bank of Thailand's target range of 1-3 percent, reaching a 13-year high of 7.1 percent in May largely due to surging oil prices.** Core inflation (excluding energy and raw food prices) has also risen to 2.2 percent, close to 10-year highs. While forward looking measures of inflation expectations remain well-anchored at around 2 percent, continued monitoring will be necessary to determine whether the pick-up in inflation is temporary or more permanent. Price controls applied to energy and public transport are playing a role in containing cost of living pressures, but such controls tend to be an inefficient method of redistributing income, are often regressive in their impact and may complicate monetary policy. While the central bank has maintained an accommodative monetary policy stance so far, it has also signaled the prospect of rate normalization amid heightened inflation risks as the economic recovery gains traction.

**The fiscal deficit remained substantial at 9.2 percent of GDP in the first half of FY22, and public debt has risen to above 60 percent of GDP.** The government has continued to use expansionary fiscal policy to spur recovery from the pandemic and more recently to mitigate rising cost of living pressures. Total public spending remained relatively high in the first half of FY22, at around 25 percent of GDP, around the same level as a year ago and substantially higher than the average of 20 percent recorded in the three years FY17-FY19. Spending was supported by continued COVID-19 stimulus in Q1 FY2022, although most of the THB 1.5 trillion package for COVID-19 response has now been disbursed. Additional fiscal measures amounting to around 0.5 percent of GDP have also been implemented to counteract energy price pressures, including subsidies on diesel and cooking gas prices.

**The financial system remains stable overall, though risks associated with increased levels of corporate and household debt persist.** Capital and liquidity buffers at commercial banks remain well above regulatory requirements, and profitability has stabilized after declining significantly in 2020. Indicators of asset quality have been mixed. Non-performing loans declined slightly to 3.2 percent of total gross loans as

at the end of 2021, but the proportion of special mention loans increased, indicating a deterioration in asset quality. Several of the financial assistance measures recently introduced by the government to support borrowers may mask underlying vulnerabilities in loan quality, which have the potential to be revealed as these forbearance measures expire in 2022. There are particular risks associated with high household debt levels – at above 90 percent of GDP as at end-2021 – and debt to small and medium enterprises (SMEs). As a proportion of total loans to SMEs, NPLs have increased to 7.5 percent as at end-2021, well above pre-COVID levels of between 4.5 and 5 percent. The central bank has extended the SME soft loan facility until the end of 2022, while several businesses have entered debt restructuring through asset warehousing programs.

**While poverty and unemployment are estimated to have declined over the past year, labor incomes have fallen and household debt has increased to meet expenditure needs.** The official unemployment rate declined to 1.5 percent in Q1 2022 from 2.0 percent a year earlier. Poverty is estimated to have declined to its pre-pandemic level in 2021 after a slight increase in 2020 as the impacts of the economic slowdown were mitigated by covid-relief measures. Nevertheless, since 2019 the average labor income of Thai households has declined and average household debt has increased by about a quarter, driven by loans for housing and education.

## Outlook and Risks

**The economy is expected to expand by 2.9 percent in 2022, one percent slower than expected in December 2021, but the recovery will strengthen in the medium term.** Private consumption and merchandise exports will be the main drivers of growth in 2022. However, their impact on growth will be smaller than previously expected due to recent external shocks, including the Ukraine war and the slowdown in China. Despite the negative impacts of higher energy prices, consumption will be supported by increased mobility and the release of pent-up demand for consumer goods. On the other hand, government relief measures will be scaled back. Over the medium term, private consumption will continue to recover and public and private investment are expected to increase as confidence improves. Tourist arrivals are projected to increase to 6.0 million arrivals in 2022, up from 0.4 million in 2021. With restrictions being eased in Thailand and internationally, the number of arrivals in the second half of 2022 is expected to be more than double the number of first half arrivals. In the medium term, the tourism recovery is expected to gain further momentum, with arrivals reaching 24 million, or around 60 percent of pre-pandemic levels, by 2024. As a result, growth of 4.3 percent and 3.9 percent is projected for 2023 and 2024, respectively. This is substantially faster than the pre-pandemic average of 3.4 percent over the five years to 2019, and consistent with a narrowing of the negative output gap.

**While a modest current account deficit is expected for 2022, the resolution of supply bottlenecks, a recovery in tourism arrivals, and a decline in the global oil price is expected to see the current account return to positive territory in 2023 and 2024.** Net exports will continue to contribute to support overall activity, though the forecast contribution to growth in 2022 is now 1.4 percentage points less than projected in December 2021. This is due to downward revisions to growth in major trading partners, and ongoing supply chain disruptions which will continue to restrict access to imported inputs, particularly from China. Exports of machinery, electronics, and transport equipment – which have a relatively large share of Chinese inputs embedded in their value – are particularly vulnerable to these disruptions.

**Headline inflation is projected at 5.2 percent in 2022, with core inflation at 2.3 percent.** High domestic oil prices are projected to persist to the end of the forecast period (2024), with global oil prices assumed to average USD 100 per barrel in 2022 and decline only modestly in 2023 and 2024. The spike in inflation is expected to be largely temporary, with inflation projected to ease to 2.2 percent in 2023. However, the risks of a more sustained increase in inflation require close monitoring as the negative output gap narrows. After maintaining the policy rate at a historical low throughout the pandemic, there is now increased scope for the central bank to commence interest rate normalization.

**Public debt is expected to peak at 62.5 percent of GDP in FY23, slightly above current levels.** The fiscal deficit is projected to narrow from 6.9 percent of GDP in FY21 to 5.1 percent in FY22 and 2.4 percent in FY23. This is the result of a reduction in covid-related spending. This path is consistent with medium-term fiscal sustainability. Fiscal risks are mitigated by the largely local currency denominated debt stock, and by the continued availability of sufficient domestic liquidity to absorb the government’s refinancing needs. But the recent rise in public debt levels has made it harder to reconcile the pressures for ongoing fiscal support – in the context of a still incomplete economic recovery – with the need for fiscal consolidation. More targeted means-based social assistance spending, a rebalancing of expenditure towards public investment, and further effort on revenue mobilization will be necessary to manage these competing pressures.

**Risks remain skewed to the downside, highlighting the importance of rebuilding fiscal buffers, monitoring financial sector vulnerabilities, and exploring more environmentally sustainable and efficient approaches to economic production.** The global trajectory of the pandemic remains unpredictable. The emergence of new vaccine-resistant strains of coronavirus could affect domestic activity, goods trade, and the projected recovery in tourism arrivals. The economic fallout from Russia’s invasion of Ukraine could also last for longer than expected, with a more prolonged impact on prices likely to put further downward pressure consumer demand, while a more prolonged impact on imported input costs would tighten constraints on production. Meanwhile, increasing levels of corporate and household debt also pose risks, including risks to the financial sector once existing regulatory forbearance measures expire. The authorities should continue closely monitor the financial stability risks associated with these forbearance measures. At the same time, strengthening the insolvency regime would help keep viable businesses operating, and allow their recovery once the negative impact of recent shocks subsides. Finally, recent developments have highlighted Thailand’s oil dependence and vulnerability to global supply chain disruptions. More environmentally sustainable approaches to economic production, such as the circular economy model, can help promote growth that is more sustainable and more resilient to external shocks.

## **The Circular Economy: Building Back Greener**

**Circular economy (CE) models offer the potential for a more environmentally sustainable and efficient approach to economic production.** In contrast to the conventional linear model of production (take – make – dispose), circular economy approaches adopt product designs and production processes to keep materials in use for longer, and to promote the regeneration of natural systems. Strategies to keep resources in use include sharing, reuse, maintenance, repair, refurbishing, remanufacturing, and recycling. In addition to the environmental benefits of reduced natural resource depletion, such strategies can also boost the economic productivity of material resources (i.e., value added for a given quantity of natural resource input) through savings of raw material, shifts to renewable energy, longer product lifespans, and the promotion of product sharing.

**Global and domestic momentum for more sustainable models of economic production – as encapsulated by the circular economy approach – is building.** First, Thailand’s ability to meet its global commitments to reduce carbon emissions will be in part dependent on the adoption of a more sustainable and innovation-led growth model. To this end, the government has adopted a Bio-Circular-Green (BCG) economic model for 2021–2026, which reflects circular economy approaches. Second, Thailand is a net importer of energy and raw materials (energy trade deficit of 4.5 percent of GDP in 2020), which makes it vulnerable to supply-chain disruptions and high commodity prices. The adoption of CE models could help mitigate and potentially manage Thailand’s dependence on these imported commodities. Third, global awareness to environmental and climate risks is growing, adding pressure on Thai companies to reshape their business models.

**This chapter identifies the potential benefits of adopting circularity in Thailand, assesses the key constraints, and offers some recommendations.** A recent diagnostic of private sector opportunities to use

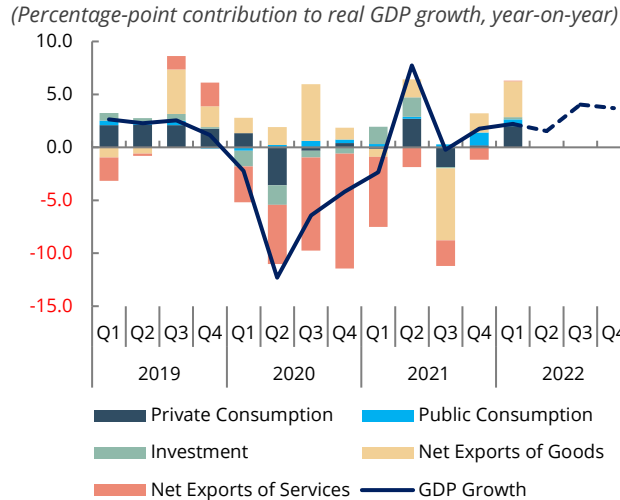
circular business models (World Bank 2022) identified potential benefits in the form of cumulative cost savings and additional revenues totaling USD 1.6 billion by 2025 – equivalent to approximately 0.3 of GDP in 2022, in three sectors: food and agriculture, construction, and electrical appliances and electronics. These sectors are also the focus of this TEM, which includes additional economic modeling of growth outcomes under different scenarios of resource efficiency and the adoption of CE approaches in production and consumption. Based on this analysis, a transition towards circularity could increase GDP by about 1.2 percent and create nearly 160,000 additional jobs by 2030, representing about 0.3 percent of total employment, compared to a baseline business-as-usual scenario. Thailand’s greenhouse gas emissions could be reduced by about 5 percent by 2030, and dependence on imported energy would decline, helping to insulate Thailand from high and volatile commodity prices. These estimates are indicative of the economic potential of CE in Thailand.

**However, there are several cross-cutting and sector-specific constraints to the adoption of circular approaches, driven largely by market and government failures.** First, by their design CE approaches can help mitigate negative externalities associated with existing production processes. But pursuing these solutions may not be profitable for individual private firms, even if they are justified from a broader environmental and social welfare perspective. This means that private investment in CE solutions has remained below socially optimal levels. Second, there are government failures including inhibitory regulations that distort incentives to adopt CE models. For example, price support policies incentivizing output maximization rather than sustainable production. In other cases, further regulations (such as laws governing recycled plastic in the food industry) are needed to help address negative spillovers associated with waste and pollution. Third, information failures can mean that firms will continue to exploit status quo methods in areas where they have developed a comparative advantage, without recognizing the potential gains of CE approaches. Fourth, coordination failures between public and private actors in improving infrastructure and public investment on research and development (R&D) is hampering the development of reverse logistics and practical industrial applications in the CE. Finally, the necessary skills needed to support CE are missing.

**The chapter provides a range of recommendations to address these challenges and support the Circular Economy.** There are several actions that can be taken by government. First, strong policy, legal and institutional frameworks are necessary to support the transition and address the market and government failures identified above. To this end, the Office of the PM, the Ministry of Higher Education, Science, Research and Innovation (MHESI), and sectoral ministries, should develop a comprehensive CE policy framework. MHESI should introduce enabling regulatory incentives, including non-R&D incentives, while removing inhibitory regulations and standards to support CE. Second, building institutional capacity and inter and intra agency coordination is a must, including through the establishment of a central CE implementation agency. Establishing monitoring and evaluation systems on domestic material consumption, resource productivity, waste generation rates, recycling rates, demand for raw materials is also a necessary part of the capacity building process. Third, concerted action and targeted measures need to be introduced to enable missing complementarities, such as reverse logistics, design standards, and incentives to compensate for the risk of innovating in the CE. The Ministry of Transport, Ministry of Digital Economy and Society, and the Ministry of Natural Resources and Environment (MNRE) as well as local and provincial governments should invest in a solid reverse logistics chain across sectors. Finally, advocacy for CE and awareness building on resource intensity, pollution, and resource degradation will prepare stakeholders to act.

## Recent Developments and Near-Term Outlook

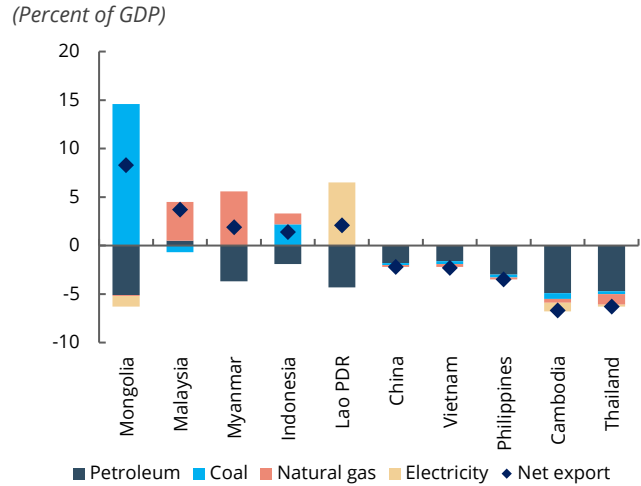
**Figure ES 1: External shocks have disrupted Thailand's incipient recovery...**



Source: NESDC

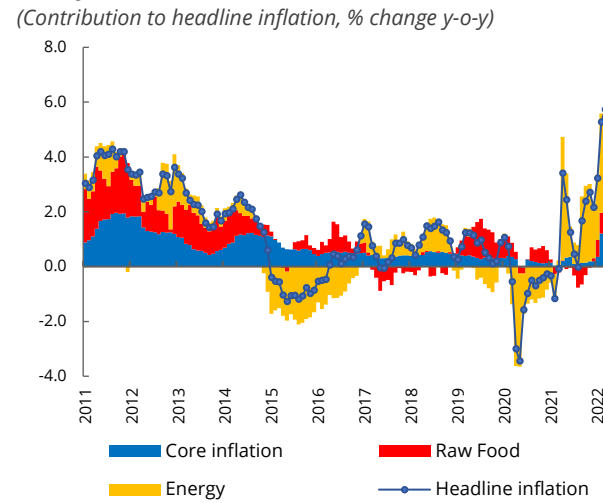
Note: Change in inventories explain the difference between other components and total GDP growth.

**Figure ES 2: ...and highlighted the economy's vulnerability to high global oil prices and dependency on energy imports, percent of GDP.**



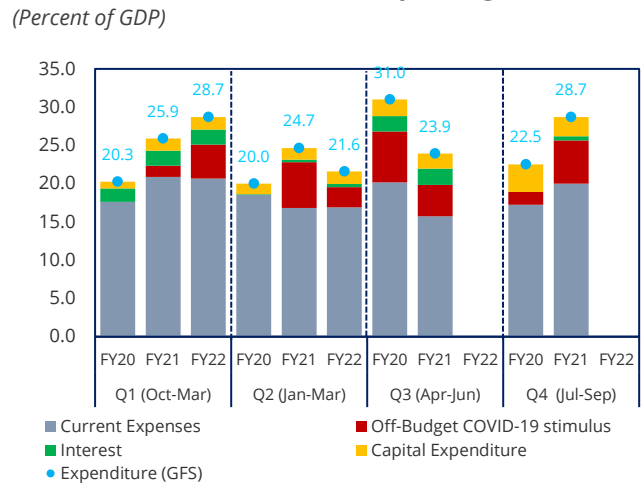
Source: World Bank Global Economic Prospects June 2022

**Figure ES 3: Both headline and core inflation have climbed due to energy and food but price pressures have yet to become broad-based.**



Source: CEIC; World Bank staff calculations

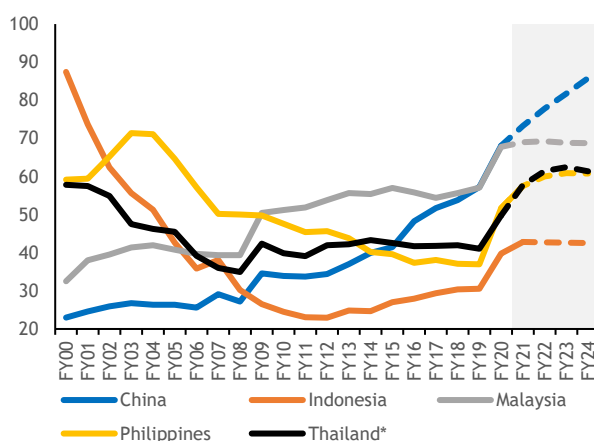
**Figure ES 4: Government spending declined in Q2 2022 reflecting a reduction in COVID-19 stimulus and a broader effort to consolidate spending.**



Source: Fiscal Policy Office, Ministry of Finance, NESDC

**Figure ES 5: Thailand's public debt has surged but is projected to remain below the public debt ceiling at 70 percent of GDP.**

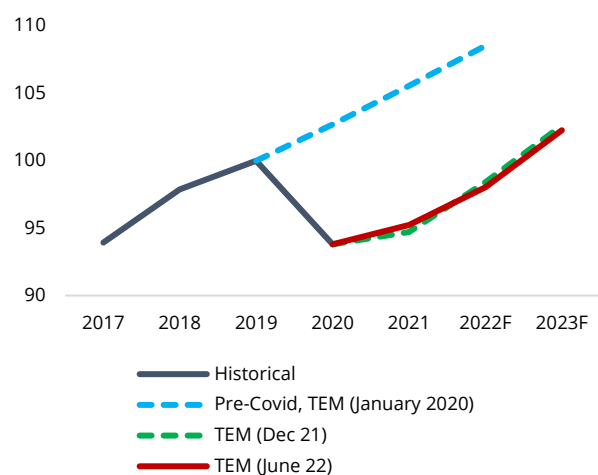
(Percent of GDP)



Source: IMF WEO; World Bank staff projections

**Figure ES 6: Output is projected to return to pre-pandemic levels by end-2022, subject to the continued recovery of tourism.**

(Index, 2019 = 100)



Source: World Bank staff projections

**Table ES 1: Macroeconomic Indicators**

	2019	2020	2021	2022f	2023f	2024f
<b>Real GDP Growth Rate (at constant market prices)</b>						
Real GDP Growth Rate	2.2	-6.2	1.5	2.9	4.3	3.9
Private Consumption	4.0	-1.0	0.3	3.9	4.1	3.6
Government Consumption	1.6	1.4	3.2	-0.4	0.4	2.6
Gross Fixed Capital Investment	2.0	-4.8	3.4	2.0	5.1	4.0
Exports of Goods and Services	-3.0	-19.7	10.4	6.5	7.8	5.1
Imports of Goods and Services	-5.2	-14.1	17.9	4.3	5.9	4.3
<b>Real GDP Growth Rate (at constant factor prices)</b>						
Agriculture	-0.5	-3.2	1.3	2.0	2.2	2.2
Industry	-0.7	-5.3	3.4	1.7	3.7	3.5
Services	4.2	-5.8	0.5	3.6	4.9	4.0
<b>Inflation (Consumer Price Index)</b>	0.7	-0.8	1.2	5.2	2.2	1.0
<b>Current Account Balance (% of GDP)</b>	7.0	4.2	-2.1	-0.9	1.9	3.4
<b>Fiscal Balance (General Government, % of GDP)</b>	-0.8	-4.5	-6.9	-5.1	-2.4	-0.1
<b>Debt (% of GDP)</b>	40.9	50.2	57.7	61.5	62.5	61.4

Source: NESDC; World Bank staff calculations



**WORLD BANK GROUP**

---



World Bank Group, Siam Piwat Tower, 30th Floor, 989 Rama I Road, Pathumwan, Bangkok 10330

Email. [thailand@worldbank.org](mailto:thailand@worldbank.org) | Tel. 0-2686-8300



[www.worldbank.org/thailand](http://www.worldbank.org/thailand) |



<http://www.facebook.com/worldbankthailand>