CHAPTER 3
SPENDING TRENDS AND PRIORITIES
Chapter 3: Spending Trends and Priorities

3.1 Introduction

117. **Public spending has a critical role to play in supporting Thailand’s long-term development goals and securing fiscal sustainability.** Chapter 1 highlighted that Thailand’s long-term fiscal sustainability is dependent on economic growth, which in turn hinges on structural reforms to enhance productivity. Human and physical capital accumulation are key pillars of the structural reform agenda, as they can drive higher productivity and economic growth, poverty reduction, and improved wellbeing. The composition and quality of public spending is key in building human and physical capital, and thus has a critical role to play in supporting this agenda.

118. **However, overall public spending has traditionally been low, and its composition only moderately growth enhancing.** Prior to the pandemic, Thailand’s level of public spending averaged 21 – 22 percent of GDP—far lower than in structural peers (31 percent) and aspirational peers (28 percent), and close to half the OECD average (41 percent). Further, growth-enhancing spending—defined as spending on: (i) health and education (investment in human capital); (ii) transport and communication (investment in infrastructure); and (ii) R&D (associated with innovation and technological development)—accounted for only 26 percent of total expenditure in Thailand. This is lower than the share of growth-enhancing expenditures in aspirational peers and OECD countries (Figure 3-1). Furthermore, the share of growth-enhancing spending in Thailand has declined over the past decade. This is due to a decline in the share of spending on education (see paragraph 125) and temporarily higher spending on social protection in FY20 as part of the COVID-19 response package, which saw the shares of other allocations decline. Even accounting for the FY20 increase in social protection spending, the share of the budget directed to this function remains much lower than in structural and aspirational peers, and in OECD countries (Figure 3-2). A key driver of this gap is old-age pension spending, which accounts for 7.8 percent of GDP in OECD countries (18 percent of total spending), compared to 1.3 percent of GDP in Thailand (6 percent of total spending).

![Figure 3-1: The share of growth-friendly spending is lower than in comparator countries and has declined over the past decade.](image1)

![Figure 3-2: The share of total spending directed to social protection is also low relative to comparator countries.](image2)


119. **This chapter and subsequent chapters focus on the key components of growth- and welfare-enhancing spending.** The following chapters analyze the adequacy, efficiency, and equity of public spending related to the accumulation of human capital—education, health, and social protection. This chapter has two objectives: (i) to put spending in these social sectors in the context of overall public spending; and (ii) to undertake a deeper analysis of public investment

---

spending. It does this by first assessing the overall level of spending in relation to peers and outlining the broad structure of spending by levels of government. Overall spending is then disaggregated by function (health, education, etc.) and by economic classification (wages, goods and services, capital spending, etc.), using Thailand’s performance on the Human Capital Index (HCI) relative to its peers to provide context and broad framing for the subsequent discussion of the adequacy, efficiency, and effectiveness of social sector spending. Historical trends are analyzed, and the composition of spending is compared with international benchmarks to identify potential allocative inefficiencies and whether rigidities in spending are likely to constrain the ability of the government to respond to emerging pressures. Particular attention is paid to the response to COVID-19 and the war in Ukraine and its impact on spending in these social sectors. The chapter then turns to public investment and the public capital stock: assessing its adequacy, efficiency, and quality, and outlining recommendations to boost the capacity of the government to implement these investments and raise their quality. The chapter concludes with a summary of key findings.

3.2 Public expenditure trends

120. Prior to the pandemic, Thailand’s level of public spending was low given its income level and compared with peer countries (Figure 3-3). This reflects relatively low levels of revenue collection (as outlined in Chapter 2), and the government’s efforts to prioritize fiscal sustainability. Public spending remained low and stable between FY13 – FY19, at 21 – 22 percent of GDP (Figure 3-4). This placed Thailand below most of its aspirational and structural peer countries, and well below the OECD average.

121. Spending increased substantially in response to COVID-19. Thailand responded to the pandemic with one of the largest counter-cyclical fiscal packages in the region (equivalent to 14.6 percent of GDP). In doing so, it reaped the benefits of previous fiscal discipline. Total spending averaged 26.1 percent of GDP in FY20 and FY21—4.5 percentage points above the average of FY13 – FY19. While the recent surge in spending due to COVID-19 relief measures has brought Thailand closer to its peers, much of this spending is expected to be unwound over the coming years. Section 3.2.3 summarizes the fiscal measures adopted by the Thai authorities in response to COVID-19 and the Ukraine war.

Figure 3-3: Government spending is low compared to Thailand’s level of income and peer countries...

(Public Expenditure, % of GDP, average FY18 – FY20)

Figure 3-4: ...And was not rising prior to the pandemic.

(Total General Government Expenditure, % of GDP)

122. The central government continues to dominate spending, despite long-standing efforts to decentralize service delivery (Figure 3-5). The 1997 Constitution introduced reforms aimed at decentralizing service delivery responsibility and finances to local authorities—particularly for health, education, and local infrastructure. This was expected to make public services more efficient, increase public participation in decision making at the local level, and enhance local economic development. Despite several rounds of legislative and administrative reform, there remains limited decentralization of health and education services (see Annex 3-1 for a detailed discussion). Consequently, the central government continues to dominate spending and service delivery, with local governments (referred to as Local
Administrative Organizations, or LAOs) averaging 17 percent of general government spending in recent years (3.9 percent of GDP). This proportion falls to 13 percent when considering current spending—reflecting the limited decentralization of service delivery. However, LAOs play a more prominent role in infrastructure spending, accounting for around a quarter of public capital spending (see Section 3.2.2). In addition, SOEs also represent an important component of total public spending, particularly public investment (see Box 3-1).

Composition of Government Spending by Function

123. In recent years, social sector expenditures have become the largest share of general government spending (Figure 3-6). Over the period FY16-FY19, health, education, and social protection overtook general public service expenditure as the largest share of total expenditure, at over 35 percent. This was driven by an expansion in health and social protection spending, offsetting a decline in the share of total spending directed to education. The share of social sector spending increased further to over 39 percent in FY20-FY21 as the authorities implemented extensive income support as part of the COVID-19 response.

Figure 3-5: The central government dominates general government spending.

(Spending by institutional level, % of fiscal year GDP, GFS basis)

Figure 3-6: Prior to the pandemic, social expenditure became the largest share of general government spending by function.

(% of total expenditures, expenditures-functional classification, GFS basis)


Note: p = preliminary data. General Government spending is less than the sum of the components due to the netting out of central-local government transfers.

124. Public spending on health has increased steadily over time but remains below aspirational peers and the OECD average. Although public health spending has steadily increased over the past 20 years, it remains slightly below what would be expected for a country at Thailand’s level of income (Figure 3-7 and Figure 3-8). Government spending on health increased substantially from 10.3 percent in 2002 to average 14.5 percent of total government spending since 2006, reflecting efforts to increase coverage under the Universal Coverage Scheme. This is high compared to Thailand’s structural and regional peers (Figure 3-9). Yet, since 2015, Thailand’s public spending on health as a share of GDP (2.9 percent) has been lower than the average for structural peers (3.0 percent), aspirational peers (5.2 percent) and the OECD (6.5 percent). This suggests that health spending has been constrained by the overall spending envelope, despite prioritization in the government budget (see Chapter 4).
Health spending has increased gradually over the past 20 years but remains below the OECD average and aspirational peers...

(Public expenditure on health as a share of GDP)

Source: WHO Global Health Expenditure Database

...and is slightly lower than would be expected for Thailand’s income level...

(Public expenditure on health per capita, average FY18 – FY20)

Source: WDI

...but its share of the budget is slightly higher than in most peer countries.

(Public expenditure on health as a percent of total spending, average FY18 – FY20)

Source: WDI.

125. **Public spending on education is low relative to peer countries and Thailand’s income level; and has fallen further in recent years.** Over the past decade, Thailand has fallen behind its peers in terms of education spending as a share of GDP, with spending falling from almost 4 percent to barely 3 percent (Figure 3-10 and Figure 3-11). Furthermore, education spending has been deprioritized in the budget, with education accounting for a lower share of total spending compared to the nation’s peers and relative to its income level (Figure 3-12). Indeed, education spending as a share of total expenditure fell from 17.3 percent in FY16 to 14.5 percent pre-pandemic (FY19); and was only 11.7 percent in FY21 (although the recent decline is partially explained by the temporary increase in overall spending due to the COVID-19 fiscal response).

126. **While social protection spending increased prior to the pandemic, it was low compared with regional peers (Figure 3-13).** Prior to the COVID-19 stimulus package, annual spending on social assistance was less than 1 percent of GDP. Spending on the immature social insurance scheme is also low but spending on civil service pensions has been growing and exceeded 1 percent of GDP in 2020. Yet, overall social protection expenditure remained well below aspirational peers and the OECD average. Recent work has found that prior to the pandemic, Thailand’s total social assistance spending was
lower than other countries at similar income levels (Sharpe and Lamanna et al, 2021). While a large share of the population was covered by some form of social assistance, the amounts transferred were very small, and most poor and vulnerable households did not receive a full package of support due to the fragmented nature of the social protection system. The spending on social assistance almost doubled (as a share of GDP) to mitigate the impact of COVID-19 but much of this increase in spending is currently only expected to be temporary.

**Figure 3-10:** Education expenditure is below peers and has fallen as a share of GDP over the past decade. (Public expenditure on education as a percent of GDP)

![Graph showing education expenditure as a share of GDP over the past decade for Thailand, OECD members, Aspirational peers, and Structural peers.](image)

Source: MTI benchmarking and WDI

**Figure 3-11:** In recent years, education spending has been slightly lower than would be expected, given Thailand’s level of development... (Public expenditure on education per capita, average FY18 – FY20)

![Graph showing education spending per capita for Thailand and peers.](image)

Source: WDI

**Figure 3-12:** ...and has accounted for a low share of the budget compared to peers and its level of income. (Public expenditure on education as a share of total expenditure, average FY10 – FY20)

![Graph showing education expenditure as a share of total expenditure for Thailand and peers.](image)

Source: WDI

**Figure 3-13:** Social protection expenditure was rising gradually prior to the pandemic, but remained well below peers. (Percent of GDP, GFS figures GFS functional classification of expenditure)

![Graph showing social protection expenditure as a share of GDP for Thailand and peers.](image)

Source: MTI benchmarking. Note: Data for other Regional Peer countries not available.

127. Despite low social sector spending, the quality of Thailand’s human capital is relatively high—though poor education outcomes indicate that public spending efficiency and effectiveness could be improved. Thailand’s HCI score is above what would be expected for its level of income and public spending (Figure 3-14). Thailand also outperforms some of its peer countries, such as Uruguay, Indonesia, and the Philippines. However, its HCI score lags its three structural peers (Belarus, China, and Vietnam). Steadily improving health outcomes over the last 20 years push up Thailand’s HCI score—indicating that public spending in the sector has been relatively efficient. However, poor education outcomes...
(highlighted by falling harmonized test scores and learning-adjusted school years) drag down Thailand's overall score—and indicate potentially poor spending efficiency and effectiveness, particularly in recent years (Figure 3-15). Chapters 4 to 6 and Chapter 8 explore the adequacy, efficiency, and effectiveness of social spending in detail.

Figure 3-14: Thailand's HCI is high given its income level and public spending...

![Graph showing HCl and GNI per capita]

A. HCl and GNI per capita

![Graph showing HCl and public spending per capita]

B. HCl and public spending per capita

Figure 3-15: ...though poor education outcomes drag down the nation's overall score.

![Graph showing HCl components]

Note: Large circle represents Thailand in 2020. Diamond represents Thailand in 2010. Small circles represent other countries. Lines and color of circles represent quartiles of the distribution.

Source: World Bank WDI.

Box 3-1: Interpreting public spending data sources in Thailand

Thailand uses two systems of fiscal accounting, the cash-based system and the Government Financial Statistics (GFS) system. The cash-based system is widely used by the authorities, including in the preparation of the budget. However, the budget estimates for revenues and spending can differ significantly from the GFS estimates reported elsewhere, including in this PER, which can complicate the interpretation of budget outcomes and projections. One major difference is that the GFS estimates include a range of revenues and expenditures that are excluded from the cash-based budget, including those treated as off-budget.

The most important spending item excluded from the cash-based budget estimates in FY20, FY21, and FY22 has been the COVID-19 response package financed by the two borrowing decrees. By authorizing this spending through an emergency off-budget instrument, the government was able to quickly implement a range of relief and recovery measures, the details of which did not need to be reviewed by the legislature when the spending was
Box 3-1: Interpreting public spending data sources in Thailand

approved. Moreover, classifying this spending as off-budget ensured that the government would not violate its deficit rule, which states that the annual budget deficit cannot exceed 20 percent of the annual budget plus 80 percent of expenditures allocated for principal repayment (see Chapter 1). However, approving spending through emergency borrowing decrees means that there is less Parliamentary scrutiny over the specific measures deployed. It also implies that – unlike the GFS estimates – the actual and projected budget deficits do not give an accurate indication of changes in the government debt stock, due to the exclusion of substantial debt-financed expenditure. Finally, the practice calls into question the relevance and enforceability of the government's deficit rule, which is established by law.

*Thailand’s Fiscal Policy Office (FPO) within the Ministry of Finance (MoF) produce the nation’s GFS statistics.* Comprising data from FY13 to FY21, these include a breakdown of spending by economic and functional (Classification of the Functions of Government, COFOG) classifications. Spending by economic classifications is provided for the Central Government, an aggregation for all LAOs, and an aggregation of the Social Security Funds. These are combined to produce economic classifications spending data for the General Government (after applying some adjustments to correct for aggregation errors). COFOG data are provided for the General Government level only (i.e., disaggregated breakdowns for central government, LAOs, and the Social Security Funds are not available). Neither data set includes SOE spending.

This PER uses IMF estimates of total public investment spending to analyze the adequacy and efficiency of Thailand's public investment. Investments by SOEs account for approximately 30-40 percent of total public investments (IMF 2022). Thus, it is important to account for this spending when considering the adequacy and efficiency of Thailand’s public investment and comparing Thailand's performance to its peers. Further, SOE debt is part of total public debt, meaning that SOE borrowing and investment decisions have direct implications on government finances. The IMF produces estimates of SOE gross public investment as part of its macroeconomic monitoring. In addition, the IMF estimates gross general government investment. These are broadly similar to the FPO's GFS net investment figures, adjusted for depreciation (Figure Box 3-1). Finally, the IMF also produces a cross-country dataset for investment and capital stock, covering the public, private and PPP sectors.

**Figure Box 3-1: Comparison of data sources and measurements of public investment spending**

![Graph showing comparison of data sources and measurements of public investment spending]

Source: FPO, MoF, IMF Article IV documents (several years).

To facilitate international comparison, the PER uses World Health Organization (WHO) data on aggregate public health spending. Public financing for the health system is administered by several government agencies. It appears that not all the activities of these spending units are captured in the GFS statistics. For example, spending under the public health insurance schemes appears to be included as “sickness and disability spending” under Social

---

39 These include the Ministry of Public Health, National Health Security Office, Social Security Office, Comptroller General’s Department of MOF, local governments, SOEs, public independent agencies, and other ministries.
Box 3-1: Interpreting public spending data sources in Thailand

Protection rather than under Health. The WHO Global Health Expenditure Database provides comparable data on health expenditure for 192 countries over the past 20 years, based on health accounts data, government expenditure records and official statistics. WHO estimates for total public health spending in Thailand are generally 2 – 3 times higher than the FPO GFS data.

Given the short timeseries of the FPO’s COFOG data, the PER also utilizes sectoral spending from the cash-based budget system to analyze longer-term sectoral spending trends. Achieving improvements in health and education outcomes take time. Indeed, the literature recognizes that outcomes today generally reflect investments stretching back over many years. It is thus important to put current spending and outcomes in the context of historical spending. Consequently, this PER utilizes both the GFS and the cash-based spending data. As explained above, differences in sectoral spending statistics between the GFS and cash-based systems is due to the wider coverage of revenue and expenditure categories (including off-budget spending) included in the GFS figures.

Composition of Government Spending by Economic Classification

128. By economic classification, the composition of the budget had remained relatively stable pre-pandemic (Figure 3-16). The FPO’s GFS figures show that most of the key economic classifications—such as the public sector wage bill, goods & services, interest payments, and transfers—remained relatively stable over the period FY13 – FY19. However, lower capital spending (both in nominal terms and as a share of GDP) resulted in a decline in the share of general government capital spending in FY16 – FY19, which naturally led to a rise in the share of current spending. The decline in the share of capital spending reportedly continued during the pandemic as ‘Other expenses’ expanded, reflecting the COVID-19 stimulus spending. However, as noted in Box 3-1, the GFS figures for general government investment spending are only about 70 percent the value of the figures estimated by the IMF, as the GFS figures do not include SOE investment. The IMF figures indicate that total public sector investment spending picked up during the pandemic, particularly due to higher SOE investment spending (see Box 3-1).

Figure 3-16: Expenditures-Economic Classification

(% of total expenditures, GFS basis)

<table>
<thead>
<tr>
<th>Year</th>
<th>Compensation of employees</th>
<th>Use of goods and services</th>
<th>Current Transfers</th>
<th>Interest Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020-2021</td>
<td>23.0</td>
<td>25.2</td>
<td>16.8</td>
<td>4.3</td>
</tr>
<tr>
<td>2016-2019</td>
<td>29.1</td>
<td>28.7</td>
<td>16.5</td>
<td>4.5</td>
</tr>
<tr>
<td>2013-2015</td>
<td>29.8</td>
<td>27.5</td>
<td>15.9</td>
<td>4.9</td>
</tr>
</tbody>
</table>

Source: Fiscal Policy Office, Ministry of Finance

129. Key drivers of current spending—such as the public sector wage bill, interest payments, and use of goods and services—have been relatively well contained (Figure 3-17 and Figure 3-18). Compensation of employees has been gradually declining over the past decade (both as a share of GDP and a share of total spending) and is low as a share of GDP compared to peers.40 This reflects the overall conservative fiscal approach, combined with relatively strong controls on civil service remuneration and headcount. General use of goods and services was stable as a share of GDP prior to the pandemic and was comparable to OECD benchmarks. Finally, debt servicing has also remained well contained and stable,

---

40 As a share of total spending, Thailand’s public wage bill in 2020-21 (23 percent) was comparable to the OECD and aspirational peers (23 and 25 percent in 2020) and was lower than regional peers (27 percent).
at around 1 percent of GDP over the past decade before increasing to 1.3 percent in FY21—reflecting both lower GDP and the higher debt burden.

**Figure 3-17:** Thailand’s public sector wage bill has declined in recent years, and is now lower than most peers

(General government Compensation of Employees expenditure, % of GDP)

![Graph showing the decline in Thailand's public sector wage bill compared to OECD members, aspirational peers, and regional peers.](image)

Source: MTI benchmarking, WDI
Note: Data for other Structural Peer countries not available.

130. **The composition of spending is relatively less rigid than in peer countries.** Herrera and Olaberria (2020) define non-discretionary (rigid) budget components as the sum of public wages, pensions, and debt service. They decompose these items into structural and non-structural components for a large set of countries over time (Box 3-2). In their data, Thailand’s rigid spending as a share of total expenditures stood at 37.4 percent in 2017 (Figure 3-19), well below the levels of peer countries included in the dataset. With the wage bill and interest expenses relatively well contained, this indicates that the Thai authorities have somewhat greater capacity to adjust spending in line with emerging priorities. Greater flexibility can also facilitate improved quality of spending. Nevertheless, there are risks that spending rigidities could increase over the medium to long term. This is associated with an aging population (higher pensions/social security costs) and with higher debt (higher interest costs), both of which have the potential to crowd out other forms of spending and reduce budget flexibility.

**Box 3-2: Measuring Government expenditure rigidity**

Herrera and Olaberria (2020) propose a new measure of rigidity based on analyzing structural and non-structural components of government expenditure over time. It focuses on wages, pensions, and interest payments as the key non-discretionary areas of public spending. The approach defines the structural component of these spending areas as being determined by long-run economic fundamentals such as level of development, demographic and geographic characteristics, and long-term institutional arrangements. The non-structural component is determined by policy decisions or short-run effects associated with the business cycle. Interest payments are taken as a rigid expenditure due to their contractual nature and the negative consequences of default.

The authors define rigidity as the sum of interest payments, structural public wages, and structural other current expenditure (including pension payments, transfers to the private sector, and other current spending), as a proportion of total general government spending. Structurally rigid expenditure is estimated using a fixed-effect model in which the log of the expenditure per capita in constant international dollars depends on a set of

---

Box 3-2: Measuring Government expenditure rigidity

structurally independent variables including GDP per capita, population, and the dependency ratio. The structural components of wages and other current spending are estimated separately.

Figure 3-19: Spending is relatively less rigid than in peer countries.
(Rigid expenditure = structural wages + interest + structural other current expenditures; percent of total expenditures, 2017)

Source: Herrera and Olaberria (2020).
Note: Rigid expenditure is measured by calculating the structural component of wages, social security benefits, other current expenditures, and interest payments as a percentage of total expenditure. Thailand in red, Aspirational Peers in yellow, Structural Peers in blue, Regional Peers in green.

131. Public investment has declined as a share of GDP over the past 30 years and has been deprioritized in the budget. Capital spending fell from 14 percent of total spending in FY13 – FY15 to 11 percent in FY16 – FY19 (Figure 3-16). Nevertheless, capital spending as a share of GDP remains higher than most peer countries—only China, Malaysia and Vietnam are higher (Figure 3-20). The central government accounts for less than half of total public investment spending (44 percent, on average, over the period FY13 – FY21) (Figure 3-21). SOEs account for around a third of investment spending, on average. Local governments accounted for over 30 percent of spending during FY13 – FY16; but dropped to 18 percent from FY17 – FY21. Despite the recent decline, LAOs still comprise a significant proportion of total public capital spending. This is consistent with the government’s decentralization agenda, which is designed to bring spending decisions closer to citizens and enhance local economic development (see Annex 3-1 for a detailed discussion).

Figure 3-20: Public investment has been declining over the past 30 years.
(General government gross fixed capital formation, percent of GDP, IMF data)

Source: IMF Investment and Capital Stock Dataset, 2021, WB staff calculations.
Most of the on-budget COVID-19 response spending was recorded under ‘Other Expenses’ to facilitate spending tracking and reporting. The COVID-19 response measures consisted of various types of economic classifications of current spending, including public servant wages, goods and services, and transfers (as well as capital spending). Facing challenges in accurately tracking and reporting on these current expenses, the authorities decided to record most of the spending under ‘Other Expenses’ in the government’s GFS accounts (Figure 3-22). Of the 6.3 percentage point of GDP increase in total spending from FY19 to FY21, over 60 percent was recorded in ‘Other Expenses’. As the stimulus package is unwound, this category of expenditure is expected to return to its previously low level.

Figure 3-21: The central government accounts for less than half of public investment spending
(General government gross fixed capital formation, percent of GDP, IMF data)

![Figure 3-21: The central government accounts for less than half of public investment spending](image)

Source: IMF Investment and Capital Stock Dataset, 2021, FPO, WB staff calculations.

Figure 3-22: Other expenses spiked in FY20-FY21, reflecting the COVID-19 stimulus package
(General government Other Expenses expenditure, % of GDP)

![Figure 3-22: Other expenses spiked in FY20-FY21, reflecting the COVID-19 stimulus package](image)

Source: MTI benchmarking. Note: Data for other Structural and Regional Peer countries not available.

Fiscal Measures in Response to COVID-19 and the Ukraine war

During FY20 – FY22, the government of Thailand implemented a COVID-19 response package worth 14.6 percent of GDP to mitigate the health and economic impact of the pandemic. The package was very large compared to its peers and income level (Figure 3-23). Across Thailand’s aspirational and regional peers, as well as the UMIC grouping, pandemic fiscal response packages averaged 6 – 8 percent of GDP, with considerable variation in size and breadth across countries. While Thailand’s health-related measures were slightly larger than peers (1.7 percent of GDP), non-health related fiscal measures (7.6 percent of GDP) and below the line measures (5.4 percent of GDP) were much higher than in comparator countries.

---

42 Thailand was not unique in recording a large proportion of COVID-19-related fiscal stimulus as ‘other expenditure’—with Japan and Belarus (and to a lesser extent, other peers) showing a similar spike in FY20.

43 Central and local government figures are calculated by applying the ratio of gross investment spending in non-financial assets from the FPO GFS from the two levels of government to the aggregate IMF data.
134. **The response was unprecedented for Thailand in terms of size, coverage and the variety of instruments employed (Table 3-1).** The package included three phases of fiscal stimulus, announced in March 2020, April 2020, and May 2021, totalling THB 1.56 trillion. These were organized around three themes: (i) **Health**; (ii) **Relief** (financial aid and cash handouts); and (iii) **Economic Restoration/Recovery**. In addition, the BoT provided extensive liquidity support to the private sector. Significant resources were allocated to income support measures, including cash transfers and subsidies for vulnerable households, informal workers, and farmers. A relatively large proportion of the total package was allocated to SMEs, to be provided via soft loans from state-owned banks. This reflects the importance of SMEs as a driver of incomes and employment in the Thai economy, and their need to maintain access to credit to deal with the cash flow impacts of COVID-19. The three themes of the fiscal response were:

(i) **Health**: THB 280 billion for health-related measures such as medical personnel and equipment, vaccine procurement, laboratory operations, and medical emergency responses.

(ii) **Relief**: THB 886 billion for measures such as: cash transfers and subsidies to affected groups; lower water and electricity bills, and social security contributions; tax relief; infrastructure projects; and debt restructuring for firms and households. While vertical transfers or top ups were paid to almost eight million beneficiaries of pre-COVID programs, the bulk of the economic relief spending was through the scaling up of social assistance to citizens that would not have been considered vulnerable prior to the pandemic.

(i) **Economic Restoration/Recovery**: THB 391 billion for measures such as co-payment programs for general consumption and to encourage domestic tourism, and local employment programs.

135. **In addition, the BoT provided financial relief to SMEs and large firms to minimize cash flow constraints and ensure job preservation.** This included: (i) soft loans to businesses from the BoT via commercial banks and Specialized Financial Institutions\(^44\) (SFIs); (ii) establishment of the Corporate Bond Liquidity Stabilization Fund to help firms roll over maturing bonds and support financial market stability; and (iii) regulatory forbearance, while balancing risk disclosure and supervisory expectations.

\(^44\) Thailand has 8 specialized financial institutions which are state-owned, often deposit-taking, banks mandated with implementing the government’s social and economic agenda. The three largest SFIs are Government Savings Bank (GSB), Bank for Agriculture and Agricultural Cooperatives (BAAC) and Government Savings Bank (GSB).
Table 3-1: Summary of key measures of the COVID-19 relief and recovery package, and additional measures in response to high global commodity prices

<table>
<thead>
<tr>
<th>Measures</th>
<th>Baht (bn)</th>
<th>% of FY19 GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fiscal Measures: COVID-19</td>
<td>2,457</td>
<td>14.6</td>
</tr>
<tr>
<td>Fiscal Stimulus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health spending</td>
<td>280</td>
<td>1.7</td>
</tr>
<tr>
<td>Relief (Cash handouts)</td>
<td>886</td>
<td>5.3</td>
</tr>
<tr>
<td>Economic Restoration/Recovery</td>
<td>391</td>
<td>2.3</td>
</tr>
<tr>
<td>Below the line measures (contingent liabilities)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guarantees on BoT soft loans to SMEs</td>
<td>500</td>
<td>3.0</td>
</tr>
<tr>
<td>BoT Stabilization Fund</td>
<td>400</td>
<td>2.4</td>
</tr>
<tr>
<td>Additional Fiscal Measures: Ukraine War</td>
<td>152.5</td>
<td>0.9</td>
</tr>
<tr>
<td>Cost of living support</td>
<td>74.7</td>
<td>0.4</td>
</tr>
<tr>
<td>Subsidy of diesel oil and gas</td>
<td>39.5</td>
<td>0.2</td>
</tr>
<tr>
<td>Temporary cut to Social Security contributions</td>
<td>33.9</td>
<td>0.2</td>
</tr>
<tr>
<td>Tourism recovery</td>
<td>4.5</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Source: Office of the National Economic and Social Development Council, Budget Bureau, Fiscal Policy Office, Bank of Thailand, WB staff calculations.

136. The package was financed by THB 1.5 trillion (8.9 percent of FY19 GDP) in off-budget loans, combined with reallocations from the budget, and BoT and SFI balance sheets. The first phase of measures (March 2020) was financed by reallocations from the FY20 budget and allocations from the BoT and SFIs to fund soft loans. The second phase (April 2020) was financed by a THB 1 trillion (5.9 percent of GDP) emergency loan decree—an off-budget loan that enabled authorities to quickly implement the response package in the early stages of the pandemic (see Box 3-1). In May 2021, the government approved an additional THB 500 billion (3.0 percent of GDP) in off-budget borrowing to support the third phase of fiscal measures. Finally, the government has access to a “contingency fund for emergencies or immediate needs” at part of the Central Fund in the annual budget. This is set aside to respond to unexpected events such as a natural disaster or global crisis. In FY21 and FY22, THB 57 million was allocated from the contingency fund to cover spending on vaccine procurement and rollout, active COVID-19 testing, and treatment.

137. From February to July 2022, the authorities announced a further 0.9 percent of GDP of fiscal measures to mitigate cost-of-living pressures due to the Ukraine war and rising global commodity prices. To counteract price pressures and support vulnerable households, in the months following Russia’s invasion of Ukraine the government announced new fiscal measures amounting to THB 152 billion (0.9 percent of GDP). The set of measures included energy subsidies, transfer payments for low-income households and taxi drivers (including through the expanding state welfare card scheme), a cap on electricity prices for lower-income households, and cuts to the employers’ and employees’ social security contributions. Though some of the welfare subsidy measures were targeted at lower-income households, which generally results in larger multiplier effects, subsidies on diesel and cooking gas prices continue to incur a large fiscal cost and lead to an inefficient allocation of resources (see Chapter 8).

3.3 Public investment for stronger growth

138. Thailand has a history of low execution of planned capital spending, despite legislation designed to increase public investment spending. All data sources on public investment spending—the cash-based budget system, the FPO GFS, and the IMF estimates—point to a decline over the past 30 years. As outlined in Box 3-1, the cash-based system is widely used by the authorities, including in the preparation of the budget. Based on the cash budget figures, capital spending accounted for around 38 percent of total budgeted spending prior to the Asian Financial Crisis. This fell to around 21 percent of the total cash-basis budget in FY16 – FY19, and below 20 percent in FY20-FY21. Thailand’s Fiscal Responsibility Act B.E.2561 (2018) Section 20 states that “Capital expenditures must account for no less than 20 percent of the annual
budget and must not be less than the budget deficit of the fiscal year.” However, the law only mentions the annual budget, not actual execution. While execution of the current budget has consistently been around 100 percent, the execution rate on planned capital spending has remained around 60-70 percent (Figure 3-24). This largely reflects low execution at the central government level, particularly in the ministries of transport and communication, interior, agriculture, and defense. Raising the capital budget execution rate equivalent to the rate for current spending could deliver an additional 1 – 2 percentage points of GDP in public investment spending, returning it to levels of the 1990s and early 2000s (Figure 3-20).

Figure 3-24: The execution rate of planned investment spending by the central government is low.

(Central government execution rate, FPO cash-based budget figures)

139. Higher public investment could support the economic recovery, boost potential growth, and catalyze Thailand’s green transition—and ultimately support fiscal sustainability. Prior to the pandemic, Thailand had been growing slower than peers, largely due to low productivity growth and lackluster physical and human capital accumulation, high household debt, and weak social safety nets for a rapidly ageing population. The pandemic has increased the urgency of structural reforms needed to mitigate economic scarring and spur new drivers of growth. Public infrastructure investments to connect lagging regions and crowd in private investment can help support the recovery and raise the medium-term growth path, which is critical for fiscal sustainability (Chapter 1). Such investments are also essential to achieve Thailand’s ambitious goal of reaching high-income status by 2037. This section assesses the adequacy, efficiency, and quality of public investment and the public capital stock, and outlines recommendations to enhance the government’s capacity to implement these investments and raise their quality.

140. While capital spending has slowed in recent years, Thailand’s stock of public physical capital (i.e., infrastructure and other fixed assets) still compares favorably to its income level and peers. The public capital stock (as a share of GDP) has also fallen over the past 20 years—suggesting that new public investment is not keeping up with depreciation and output growth (Figure 3-25). Nevertheless, Thailand’s level of public capital stock is higher than would be expected for its level of income and compares favorably to its peers (Figure 3-26).
Figure 3-25: Declining capital spending has led to a fall in the public capital stock...

[Graph showing nominal and real public capital stock as a percentage of GDP from 1991 to 2019.]

Source: IMF Investment and Capital Stock Dataset, 2021, WB staff calculations.
Note: Capital stock is estimated using the perpetual inventory method.

Figure 3-26: ...Yet, Thailand’s level of public capital stock still compares favorably to its income level and peers.

[Graph showing public capital stock per capita and GDP per capita, 2017-19 averages.]

Source: IMF Investment and Capital Stock Dataset, 2021, WB staff calculations.
Note: Capital stock is estimated using the perpetual inventory method.

141. Nevertheless, the quality of infrastructure underperforms peers (Figure 3-27 and Figure 3-28). Previous studies found that Thailand’s Infrastructure Development Programs of the 1970s to early 1990s placed the nation in an outstanding position among emerging economies in terms of infrastructure—an advantage that Thailand retained into the 2000s. However, this advantage appears to have diminished. Over the past decade, the quality of Thailand’s infrastructure is perceived to have deteriorated, while the quality of infrastructure in peer counties has improved. Major deficits in infrastructure were identified as far back as 2004, with identified priorities focused on reducing transport congestion within greater Bangkok, improving connectivity with other parts of Thailand, and expanding power supply. Recent analyses identify gaps in Thailand’s infrastructure as a key factor contributing to the slowdown in productivity over the past 20 years, weakening its economic competitiveness and worsening congestion and air pollution. Deteriorating infrastructure quality despite higher spending relative to peers is also an indicator of potentially inefficient spending.

46 Ibid.
Cross-country analysis indicates that there is scope for enhancing public investment efficiency in Thailand. Thailand’s marginal capital to output ratio improved remarkably during the 2000s compared to the years prior to the Asian Financial Crisis, indicating a more efficient allocation of capital to higher quality projects. This improvement was driven by a sharp improvement in the marginal productivity of private investment spending. However, this trend has reversed over the past decade (Figure 3-29). In comparison, the marginal capital to output ratio for public investment has gradually deteriorated over the past 30 years. Further, the public marginal capital to output ratio is now higher than most of Thailand’s peer countries (Figure 3-30). This can be partially explained by Thailand’s relatively high public capital stock, as additional projects would be expected to have lower marginal returns. Nevertheless, Thailand’s ratio is higher than China and Uruguay—countries that also have a high level of public capital stock relative to their level of development in Figure 3-26 — suggesting that there is space to improve the efficiency of public capital allocation. Improvements in public investment management could significantly enhance the efficiency and productivity of public investment.

Source: IMF Investment and Capital Stock Dataset, 2021, WB staff calculations.

Note: Marginal capital-output ratio is ratio of increment in the stock of capital to the increment in output (\(\Delta K/\Delta Y\)).
143. **Strengthening public investment management (PIM) could unlock a triple benefit of economic stimulus, structural reform, and fiscal savings through efficiency gains.** As outlined in paragraph 138, since the Asian Financial Crisis, Thailand has consistently underspent its capital budget by around 30 percent. This suggests that a constraint to increasing public investment is implementation capacity, and not just available financing. Some flagship investment projects worth billions of THB—initiated many years prior to the pandemic—remain delayed in Thailand’s investment pipeline (see Box 3-3). These projects present an opportunity for economic stimulus in the short to medium term, with evidence that the public investment multiplier is relatively high in Thailand, while boosting the productive capacity of the economy over the longer term. Chapters 1 and 7 also show that increasing public investment in human capital and green resilient infrastructure will be essential to improve productivity and address Thailand’s climate mitigation and adaptation needs. Finally, strengthened PIM can help improve project design to minimize expensive cost overruns, enhance value for money through the procurement process, align operational and maintenance costs with capital spending to minimize costly repairs, and curtail the opportunity for graft. Combined, these effects can support Thailand’s long-term fiscal sustainability.

**Box 3-3: The Eastern Economic Corridor (EEC) and Thailand’s public investment pipeline**

The EEC is a key pillar of the Thailand 4.0 strategy to promote economic integration across the Eastern seaboard and foster manufacturing and innovation. Established in 2017, the EEC is a special economic zone of three provinces in eastern Thailand—Chachoengsao, Chonburi, and Rayong. The EEC builds on the 1980 Eastern Seaboard project which managed to attract significant investments from Japanese manufacturers of automobiles and electronics. The EEC aims at transforming the eastern provinces into a hub for technology, high-tech industries, and services, and a regional gateway for trade and investment.

**The pandemic has delayed the implementation of EEC investment projects.** On 28 June 2022, the cabinet approved the Action Plan on EEC Infrastructure and Public Utilities (2023-27) to enhance the linkages between the key EEC infrastructure investment projects. Key infrastructure projects in the EEC aimed at enhancing connectivity, transportation, and logistics in the region include:

- **High-Speed Rail Link.** This will connect three major airports in the EEC - Don Mueang, Suvarnabhumi, and U-Tapao and reduce travel time between Bangkok and Rayong to less than an hour. The project is estimated to cost around THB 258 billion (USD 8.3 billion or 1.5 percent of GDP).

- **The extension of U-Tapao International Airport and Airport City.** The project is expected to significantly increase the airport’s capacity from an estimated 5 million to 12 million passengers per year in the initial stage. The estimated cost of the project is around THB 204 billion (USD 6.6 billion or 1.2 percent of GDP).

- **Laem Chabang Port Phase 3.** The project will expand the capacity of Thailand’s largest deep-sea port, located in Chonburi province. The project will increase the port’s capacity to handle up to 18.1 million TEUs (twenty-foot equivalent units) of cargo by 2025, up from its current capacity of 8 million TEUs. The project is estimated to cost around THB 110 billion (USD 3.5 billion or 0.6 percent of GDP). The project is under construction and expected to be completed in 2027.

- **Map Ta Phut Port Expansion.** The Map Ta Phut Port Expansion project will increase the capacity for handling LNG in the industrial deep-sea port, located in Rayong province. The project is estimated to cost around THB 65 billion (USD 2.1 billion or 0.4 percent of GDP). The project is under construction and expected to be completed in 2026.

The combined cost of these investments is around THB 637 billion (3.7 percent of GDP). Several of these investments - including the High-Speed Rail Link and the extension of U-Tapao International Airport - were originally scheduled to be completed by 2023 but have experienced significant delays. Accelerating the implementation of these and other

---


49 The zone was established on 17 January 2017, at the direction of the National Council for Peace and Order (NCPO), with the mission of promoting economic integration across the Eastern seaboard. The first law of the EEC is the Eastern Special Development Zone Act, proclaimed on 15 May 2018.

50 See “Thailand's Eastern Economic Corridor: A Bold Strategic Move”, ISEAS Yusok Ishak Institute, Issue 2020 No. 12)
Six key bottlenecks that delay large public investment projects have been identified in previous work.\textsuperscript{51} Resolving the following six challenges could help increase the speed, efficiency, and quality of public investment spending and boost economic growth.

First, strengthen investment planning and the medium-term expenditure framework (MTEF).

- **Challenge:** The public sector has multiple, overlapping multi-year plans, but lacks a detailed national investment plan and a true multi-year budget. Thailand has a five-year National Development Plan, four-year Government Administrative Plan, 32 annual Ministerial Operating Plans, 76 Provincial Development Plans, 18 Regional/Cluster Development Plans, and more than 5,000 local authority development plans. These plans are not effectively linked or informed by the medium-term resource envelope, and proposed investments are not costed, appraised, and prioritized. This makes it extremely difficult for the single-year budget system to allocate resources consistent with these plans. Further, under single-year budgeting, every year agencies are required to submit budget requests—even for multi-year projects that have received funding in the past. Budget requests are then debated and sometimes not approved or delayed. This disincentives agencies from undertaking multi-year projects.

  - **Potential Solution:** First, develop a comprehensive multi-year pipeline of public investment projects—particularly projects that are identified as potential PPPs—that are costed, appraised, and prioritized at a whole of government level. This can help streamline decision making and make choices between sectors and different investment channels more transparent and efficient. Second, implementation of the four-year MTEF has improved the strategic focus of the annual budget and helped maintain fiscal discipline within Thailand's existing fiscal space. However, continued progress towards a truly multi-year budget system—i.e., one that allows for the appropriations (indicative or otherwise) of capital spending for future years—would help to strengthen the linkages between the MTEF and the annual spending prioritization process. It would also encourage agencies to reflect the capital and operational costs from detailed and costed project appraisals in the MTEF, improving its realism and consistency with prospectively available resources.

Second, improve the quality of project appraisals.

- **Challenge:** First, the current appraisal guidelines issued by the Bureau of the Budget and the National Economic and Social Development Board provide a good general guidepost for implementing agencies to prepare project appraisal cases. However, for complex multi-dimensional projects like high-speed rail and integrated water management systems, the appraisal guidelines do not provide detailed guidance. Second, during budget requests, all agencies are required to submit a detailed project design to the BOB as a criterion for investment budget review. However, some project designs were drafted years prior and have not been updated with geographical changes of the construction site. Once the projects are allocated, a detailed project design is prepared for implementation at the construction site, which can lead to design changes. Those changes may require approval from the Minister, BOB, and the Cabinet depending on the scale of the project and size of the adjustment. Such changes and approval processes cause delays in construction.

  - **Potential Solution:** First, more detailed appraisal guidelines should be provided for more complex projects. Second, the project appraisal review process should require detailed project designs, cost/benefit analysis, and an implementation timeline to minimize post-selection design modifications.

---

147. Third, establish an independent appraisal review body to validate project appraisals and increase transparency.

- **Challenge:** Thailand does not have an independent appraisal review body with appropriate capacity and institutional arrangements to check soundness of the appraisal case submitted by line agencies. This encourages information asymmetries—where line agencies rely on external consultants to prepare project appraisals, with central agencies lacking the capacity to ascertain the quality of the underlying analysis. Countries without an effective independent appraisal review function have been affected by project delays and economically unsound projects being implemented.

- **Potential Solution:** Korea experienced a similar issue in the early 2000’s and established an independent Public Investment Management Appraisal Centre (PIMAC) at the Korean Development Institute (KDI) to advise the Ministry of Strategy and Finance on the technical aspects of project appraisals. Between 2004 and 2013, 38 percent of projects that were proposed by line ministries were returned at the appraisal review stage (before going to project selection and budgeting), due to technical deficiencies in the project appraisal. A similar independent project appraisal review body in Thailand could help improve the quality of project appraisals, leading to more efficient project implementation.

148. Fourth, institute mechanisms to effectively follow through on Environmental Impact Assessments (EIAs).

- **Challenge:** Thailand has instituted robust environmental and social safeguard policies that ensure projects are implemented in a socially and environmentally sustainable manner. Each project that adversely impacts environmental or social conditions is required to develop an EIA. However, agencies are not mandated or monitored to effectively implement the EIA, and a lot of EIAs languish. This causes two issues: (i) a dead weight loss due to the time taken to conduct the EIA (average of 18 months for large projects) that is not implemented; and (ii) gives rise to a lack of trust in government by affected stakeholders—which means that in the next round, stakeholders do not agree to EIAs for new projects because they believe authorities will not follow through on implementation. Furthermore, agencies often do not get enough budget allocation for mitigation measures. As a result, affected communities do not trust mitigation measures and may be unwilling to move.

- **Potential Solution:** Consider instituting mandatory follow through of EIAs and reporting to Cabinet on progress for large projects. Another option could be to outsource EIA implementation to civil society organizations with the appropriate capacity. Ensuring that mitigation measures are accurately costed and sufficiently financed is also essential for smooth project implementation.

149. Fifth, modernize procurement rules and electronic systems, and increase transparency.

- **Challenge:** First, agencies are not allowed to start procurement until the budget has been secured, and by the time procurement is concluded, the fiscal year is closing. Second, despite the Comptroller General’s Department (CGD) having introduced e-GP a decade ago (FY13), there is still a lot of misunderstanding among line agencies due to the unfriendly user interface and limited technical support. The e-GP system is also prone to instability and disconnects. Third, government-to-government procurement lacks transparency, which can result in inefficiencies and undermine confidence in the procurement system.

- **Potential Solution:** First, pre-procurement should be allowed so implementation can start right after the budget approval. Second, upgrading the stability of the e-GP system would help to reduce time-consuming disconnections, which can also lead to errors as staff in line agencies are required to re-submit documents and restart processes. Regular, structured training for line-agency procurement officers and a centralized technical support team would also help to minimize errors, thereby reducing processing times. Third, the cost of borrowing and terms of repayment between government agencies should be published, to improve oversight and accountability.

150. Sixth, develop real-time monitoring systems that allow agencies to make project modifications during implementation.

- **Challenge:** It is natural that project implementation does not go exactly as planned. However, it is important to have in place a monitoring system that provides early warning of implementation bottlenecks and to have
mechanisms to resolve identified issues. Currently, monitoring systems are fragmented and focus mostly on tracking disbursements and compliance with regulations. There is lack of systematic tracking of outputs, outcomes, and impact from projects during implementation. This means that during project implementation there is no feedback on intermediate outputs/impact that would be used to make appropriate modifications to the project.

- Potential Solution: The government could integrate the physical, technical, and beneficiary details contained in project appraisal cases into the existing financial reporting systems, along with intermediate output/impact objectives. This would facilitate regular monitoring and evaluation of progress against pre-determined goals and timelines, as well as early course-correction.

### 3.4 Conclusions

151. The chapter highlights two key structural changes in the composition of spending in recent years: (i) the increasing importance of social sector spending; and (ii) the long-term decline in investment spending. First, the analysis highlights that overall public spending in Thailand is low compared to the nation's income level and peer countries, reflecting the constraint of low revenue collection and the government's conservative approach to fiscal policy. Within this constrained fiscal envelope, there has been a gradual shift towards prioritizing social sector spending in the budget, reflecting increased spending on health and social protection, offset by a decline in education spending. Nevertheless, spending on all three sectors remains low relative to Thailand's level of development and peers. This underscores the need to increase spending from its current level as the nation seeks to address key challenges arising from the aging population and the need to invest in human capital to raise productivity and potential growth.

152. Second, public investment spending has been declining as a share of GDP for 30 years and has been deprioritized in the budget. Yet, the level of public investment spending (including SOE spending) as a share of GDP remains high relative to peers. While the stock of Thailand's public physical capital also compares favorably with peers, the quality of infrastructure appears to have declined, and now underperforms peers. This has resulted in Thailand giving up a competitive advantage that it previously enjoyed relative to other regional economies; and has likely contributed to low productivity growth over the past 20 years. Furthermore, deteriorating infrastructure quality despite higher expenditure relative to peers suggests potential inefficiencies in public investment spending. Cross-country analysis of public marginal capital to output ratios confirm that there is scope for enhancing public investment efficiency in Thailand.

153. Encouragingly, the analysis finds that the composition of spending is relatively less rigid than in peer countries. This provides authorities with greater flexibility to respond to emerging priorities and to improve spending quality. However, spending associated with the aging population and higher debt servicing has the potential to crowd out other forms of spending and reduce budget flexibility. These risks call for careful monitoring.

154. In addition, the chapter highlights the role of sub-national governments in capital spending. Despite long-standing efforts to decentralize spending and service delivery, the central government continues to dominate both. LAOs account for around 17 percent of general government spending—a ratio that has not changed over the past decade. The ratio is even lower for current spending (13 percent), reflecting the limited decentralization of service delivery. LAOs have a more prominent role in capital spending, accounting for 26 percent of total public investment spending prior to the pandemic (FY13 – FY19). However, the central government retains influence over LAO spending priorities, as LAO budgets must be approved by the provincial governor—who is appointed by the central government and reports to the Ministry of Interior. Annex 3-1 provides additional analysis on Thailand's progress in implementing the decentralization agenda.

155. Finally, the chapter highlights six key bottlenecks that undermine the quality and efficiency of public investment spending; and outlines potential solutions to resolve these challenges and boost economic growth. Declining public infrastructure spending reflects long-standing challenges due to implementation capacity. Resolving the six identified constraints and raising the capital budget execution rate can unlock a triple benefit of economic stimulus in the short term, higher productivity and potential growth in the longer term, and fiscal savings through efficiency gains. Combined, these measures can thus boost Thailand's economic prospects and while helping to secure long-term fiscal sustainability.