OECD Economic Surveys
Economic Assessment

Thailand

October 2020

OVERVIEW

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This is the first Economic Assessment of Thailand.
### LAND, PEOPLE AND ELECTORAL CYCLE

<table>
<thead>
<tr>
<th>Population (million)</th>
<th>69.6</th>
<th>Population density per km² (2018)</th>
<th>135.9 (38.0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 15 (%)</td>
<td>16.8 (17.9)</td>
<td>Life expectancy at birth (years, 2018)</td>
<td>76.9 (80.1)</td>
</tr>
<tr>
<td>Over 65 (%)</td>
<td>12.4 (17.1)</td>
<td>Men (2018)</td>
<td>73.2 (77.5)</td>
</tr>
<tr>
<td>International migrant stock (% of population, 2015)</td>
<td>5.8 (9.7)</td>
<td>Women (2018)</td>
<td>80.7 (82.8)</td>
</tr>
<tr>
<td>Latest 5-year average growth (%)</td>
<td>0.3 (0.6)</td>
<td>Latest general election</td>
<td>March-2019</td>
</tr>
</tbody>
</table>

### ECONOMY

<table>
<thead>
<tr>
<th>Gross domestic product (GDP)</th>
<th>Value added shares (%)</th>
<th>Agriculture, forestry and fishing</th>
<th>8.0 (2.6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In current prices (billion USD)</td>
<td>544.4</td>
<td>Industry including construction</td>
<td>33.4 (26.8)</td>
</tr>
<tr>
<td>In current prices (billion THB)</td>
<td>16 875.9</td>
<td>Services</td>
<td>58.6 (70.5)</td>
</tr>
<tr>
<td>Latest 5-year average real growth (%)</td>
<td>3.4 (2.2)</td>
<td>19.2 (48.3)</td>
<td></td>
</tr>
<tr>
<td>Per capita (000 USD PPP)</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

### GENERAL GOVERNMENT

<table>
<thead>
<tr>
<th>Per cent of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure (2018)</td>
</tr>
<tr>
<td>Revenue (2018)</td>
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</tbody>
</table>

### EXTERNAL ACCOUNTS

<table>
<thead>
<tr>
<th>PPP exchange rate (USA = 1, 2018)</th>
<th>12.37</th>
</tr>
</thead>
<tbody>
<tr>
<td>In per cent of GDP</td>
<td></td>
</tr>
<tr>
<td>Exports of goods and services</td>
<td>59.8 (54.2)</td>
</tr>
<tr>
<td>Imports of goods and services</td>
<td>50.6 (50.5)</td>
</tr>
<tr>
<td>Current account balance</td>
<td>7.0 (0.3)</td>
</tr>
<tr>
<td>Net international investment position (2017)</td>
<td>-7.1</td>
</tr>
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### LABOUR MARKET, SKILLS AND INNOVATION

<table>
<thead>
<tr>
<th>Employment rate (aged 15 and over, %)</th>
<th>66.5 (57.5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment rate, Labour Force Survey (aged 15 and over, %)</td>
<td>0.7 (5.4)</td>
</tr>
<tr>
<td>Participation rate (aged 15 and over, %)</td>
<td>67.0 (81.1)</td>
</tr>
<tr>
<td>Mean weekly hours worked</td>
<td>42.3 (37.6)</td>
</tr>
</tbody>
</table>

### ENVIRONMENT

<table>
<thead>
<tr>
<th>Total primary energy supply per capita (toe, OECD: 2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO2 emissions from fuel combustion per capita (tonnes, 2017, OECD: 2018)</td>
</tr>
<tr>
<td>Renewable internal freshwater resources per capita (1 000 m³, 2014)</td>
</tr>
<tr>
<td>Exposure to air pollution (more than 10 µg/m³ of PM 2.5, % of population, 2017)</td>
</tr>
</tbody>
</table>

### SOCIETY

<table>
<thead>
<tr>
<th>Income inequality (Gini coefficient, 2018, OECD: latest available)</th>
<th>0.364 (0.332)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty gap at $USD3.10 a day (2011 PPP, %, 2013)</td>
<td>0.12</td>
</tr>
<tr>
<td>Public and private spending (% of GDP)</td>
<td></td>
</tr>
<tr>
<td>Health care (2017)</td>
<td>3.7 (12.5)</td>
</tr>
<tr>
<td>Education (% of GNI, 2018)</td>
<td>4.2 (4.5)</td>
</tr>
</tbody>
</table>

### Notes

* The year is indicated in parenthesis if it deviates from the year in the main title of this table.

** Where the OECD aggregate is not provided in the source database, a simple OECD average of latest available data is calculated where data exist for at least 80% of member countries.

*** For Thailand, data refers to aged 25 and over.

Executive summary
COVID-19 has abruptly interrupted Thailand’s socioeconomic progress

Thailand made impressive economic and social progress over the past decades, thanks to its strong policy framework, friendly business climate, and attention to citizens’ well-being. However, the COVID-19 crisis has interrupted this progress, and a severe recession will occur in 2020, like in most other countries. The economic recovery will be slow, and achieving high-income country status will require more policy reforms focused on productivity growth and human capital accumulation. Together with environmental protection and inclusive growth, these goals are at the centre of the government’s “National Strategy 2018-2037”.

Growth will contract sharply in 2020, before bouncing back in 2021 (Table 1). The government has managed the COVID-19 outbreak well and rapidly flattened the curve of new cases and deaths. Nevertheless, the lockdown measures to contain the outbreak have severely affected domestic demand. Tourism has been hit particularly severely. Macroeconomic policies have been supportive, but risks are nonetheless tilted to the downside due to high uncertainties about the future course of the outbreak. Investments to strengthen the healthcare system and to prepare for a second wave, with sufficient protective and testing capacity, would help to bolster confidence.

Table 1. Activity is projected to contract, before bouncing back in 2021

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP</td>
<td>4.2</td>
<td>2.4</td>
<td>-6.9</td>
<td>3.5</td>
</tr>
<tr>
<td>Private consumption</td>
<td>4.6</td>
<td>4.5</td>
<td>-3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>Exports</td>
<td>3.3</td>
<td>-2.6</td>
<td>-19.2</td>
<td>6.0</td>
</tr>
<tr>
<td>Imports</td>
<td>8.3</td>
<td>-4.4</td>
<td>-16.4</td>
<td>5.2</td>
</tr>
<tr>
<td>Inflation (CPI)</td>
<td>1.1</td>
<td>0.7</td>
<td>-1.1</td>
<td>1.8</td>
</tr>
<tr>
<td>Federal government fiscal balance¹</td>
<td>-2.2</td>
<td>-2.6</td>
<td>-7.8</td>
<td>-6.8</td>
</tr>
<tr>
<td>Public debt, gross¹</td>
<td>41.8</td>
<td>41.2</td>
<td>49.8</td>
<td>55.8</td>
</tr>
<tr>
<td>Current account balance¹</td>
<td>5.6</td>
<td>7.0</td>
<td>4.5</td>
<td>4.9</td>
</tr>
</tbody>
</table>

Note: ¹ % of GDP.
Source: OECD calculations.

Vulnerable workers are being hit hard. Even before the outbreak, labour informality was widespread despite the rapid eradication of extreme poverty. Informal workers lack access to sufficient social protection, including training opportunities, weighing on overall productivity. Together with targeted formalisation measures, particularly for women, the emergency supports need to be gradually transformed into structural measures to up- and re-skill vulnerable workers, thus making the post-outbreak economy more inclusive and productive.

Low oil prices risk undermining efforts to mitigate climate change during the post-COVID recovery. Instead, further investments in renewables energy capacity could be key levers for a sustainable economic recovery (Figure 1). The tourism industry also needs to become greener and more productive in the recovery phase by adopting digital technology, especially in rural areas. In addition to preserving the country’s rich natural and cultural assets, a better management of local environments, including water and waste, would shore up the whole attractiveness of the region.

Figure 1. The share of renewable energy supply is high

Source: IEA, IEA World Energy Statistics and Balances Database.

Macroeconomic support is needed

Thanks to its sound macroeconomic policy framework, Thailand was well placed to respond rapidly to the sharp economic downturn. Monetary policy has been quick to inject liquidity and support credit, while fiscal policy has cushioned the loss of income and helped struggling companies.
Inflation has dropped sharply, not only due to low energy prices, but also to weak demand, raising concerns about deflation and fast-deteriorating economic prospects. The Bank of Thailand has reacted quickly, cutting its policy rate to a record low level. If downside risks materialise, the Bank could ease its monetary stance further. The use of additional policy tools should also be considered if space to lower its policy rate becomes insufficient.

Fiscal policy has focused on providing financial relief to affected households and enterprises. The size of the fiscal measures included in the various packages (14.8% of GDP) has been sizable. This has been made possible by ample fiscal space, thanks to its past prudence, and measures to contain the deficit and public debt prior to the crisis. After the exit from lockdown measures, fiscal resources should be reallocated to boost public investment and foster the long-term growth potential (Figure 2).

The catch-up with advanced countries has slowed down

![GDP per capita in 2017 USD PPP](image)

Source: World Bank, World Development Indicators Database.

The tax and transfer system has little impact on the distribution of income. Revenue collection remains low, and relies strongly on VAT, which is not progressive. In the long term, rapid population ageing will put pressure on fiscal sustainability. Higher tax revenue will be needed to strengthen social and healthcare expenditure.

Getting the right skills for prosperity

Thailand has made remarkable progress in expanding access to education. Participation in general education in Thailand is high, particularly at the primary level, with access to primary education nearly universal.

The number of out-of-school children has fallen since the turn of the century, though many students from the poorest families still do not attend school, and the rates of exclusion are higher in rural areas and among various ethnic and linguistic communities. Consequently, students of the age 15 achieve lower scores in reading, science and mathematics, on average, than OECD countries and Asian peers (Figure 3).

The share of highly educated workers has nonetheless increased significantly and many young graduates hold degrees in engineering and manufacturing, social sciences and ICT. Although the wage premium for university degrees remains strong, it has declined relative to, for example, lower secondary qualifications. The rapid expansion of tertiary education has not always been matched with job opportunities for graduates. High-quality career guidance services, together with policies stimulating the demand for higher-level skills in the labour market, will be essential.

![PISA mean scores](image)

Source: OECD (2019), PISA 2018 Results (Volume I).

Because of skills mismatches, substantial labour shortages prevail in a range of occupations and industries. The largest shortages are found in professional and office support occupations, but also in more technical occupations, like crafts and related trades, machine operators and assemblers (Figure 4).

This situation makes it important to improve the matching of demand and supply of skills. Thai employers could greatly benefit from a more thorough analysis of the type of skills that they need to hire, and should be involved more
actively in the formulation of vocational education and training programmes. Efforts are being made to provide high-quality career guidance, and this could be further expanded.

**Figure 4. Skills shortages are substantial**  
Shortage (+) and surplus (-) intensity, 2018 or latest

![Skills chart]

Source: OECD, Skills for Jobs Database.

**Expanding foreign trade in services**

The services sectors have become important (Figure 5) and essential to international trade. Compared to its very large tourism sector, the sector of high-end services remains small. As the COVID-19 pandemic has severely affected international tourism, nurturing other services exports would make the Thai economy more resilient. As IT and information, and professional services are traded indirectly through value chains and are now crucial elements of manufacturing, strengthening these services would benefit Thailand in reconfiguring its participation in global value chains and enhance the competitiveness of its manufacturers.

The expansion of services sector is hindered by tight regulations. Liberalising these sectors would restore their competitiveness and boost productivity not only in the services sectors themselves, but also in manufacturing sectors that rely on these services as input. The government recognises its importance, but there are still a number of barriers, notably in international mobility of skilled workers and FDI.

As goods and services trades are intertwined, barriers to both must be addressed in a coherent manner. Thailand has committed to trade integration, but can benefit more from service-oriented Preferential Trade Agreements (PTAs). PTAs that contain ambitious regulatory reforms “behind the borders”, such as the Regional Comprehensive Economic Partnership (RCEP) and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), could provide the Thai manufacturers with better access to more efficient services providers.

**Figure 5. Services sectors are important**

![Services share of GDP chart]

Source: World Bank, World Development Indicators Database.

**Foreign direct investment is essential to expand exports of services.** Restrictions on inward FDI have been eased in manufacturing, but not sufficiently in services. Eliminating FDI restrictions would not only spur employment and exports, but also benefit consumers.

As trade integration would entail job displacement and wage adjustment, policies will need to be put in place to mitigate the impact on affected workers. In addition, since opening markets would stimulate demand of the manufacturing sector for more sophisticated business services, it would increase the demand for highly skilled workers, exacerbating the existing skills imbalances. To maximise the benefits of services trade integration, Thailand needs to step up policies to re- and up-skill workers and make the labour market more flexible. Particularly, given the significant regional disparities and a large share of agriculture employment in Thailand, facilitating labour force adjustment among different sectors and occupations is crucial.
<table>
<thead>
<tr>
<th>MAIN FINDINGS</th>
<th>KEY RECOMMENDATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Macroeconomic policy, fiscal sustainability</strong></td>
<td>Extend the emergency support measures to vulnerable households and SMEs, if the situation worsens. Strengthen the capacity of public health system including testing.</td>
</tr>
<tr>
<td>The COVID-19 outbreak has severely hit economic activities, and growth is expected to be negative in 2020 and remain weak, while there is the high risk of a second wave of the pandemic.</td>
<td>As high uncertainty about the future course of the outbreak and weak employment prospects weigh on confidence of businesses and households, the recovery will be slow, which would have a scarring effect on long-term productivity.</td>
</tr>
<tr>
<td>Although the government’s fiscal position has been healthy, spending needs will increase further if the COVID-19 outbreak worsens.</td>
<td>In the short run, maintain employment and stimulate demand. As the recovery becomes steady, boost the productive capacity of the economy by gradually shifting from income and employment supports to structural measures including the up- and re-skilling of workers.</td>
</tr>
<tr>
<td>Inflation has dropped sharply and is expected to be negative in 2020 before bouncing back to the lower bound of the target in 2021, with risks tilted to the downside.</td>
<td>Keep monetary policy very accommodative, and if downside risks materialise, reduce the policy rate further. Consider additional monetary policy tools, if interest rate cuts further narrow policy space.</td>
</tr>
<tr>
<td><strong>Boosting productivity, tackling inequality and informality and narrowing gender gaps</strong></td>
<td>Consider developing a single dedicated law to protect whistle-blowers. Lower the costs of formalisation by reviewing the stringent employment protection policies and preparing customised policy measures to the targeted people with enhanced awareness among vulnerable people. Reach out to female informal workers and make formalisation measures more in line with their needs.</td>
</tr>
<tr>
<td>Whistle-blower protection is partially covered by separate laws.</td>
<td>Labour informality is high and female workers are concentrated in the informal sector, including as domestic workers.</td>
</tr>
<tr>
<td>Labour informality is high and female workers are concentrated in the informal sector, including as domestic workers.</td>
<td></td>
</tr>
<tr>
<td><strong>Greening growth</strong></td>
<td>To attain a sustainable high growth path, invest in green infrastructure, particularly strengthen the capacity of renewable energy production.</td>
</tr>
<tr>
<td>The share of renewable energy production is growing, but still lower than in other regional peers.</td>
<td>Encourage further digitalisation of the tourism industry, especially in rural areas and the reduction of its environmental footprint.</td>
</tr>
<tr>
<td>Mass tourism and narrow stakeholder involvement have caused degradation of tourism resources, while the overall productivity level of the tourism industry has been low.</td>
<td>Involve wider local communities to retain broader environmental resources, including the management of water and waste.</td>
</tr>
<tr>
<td><strong>Getting the right skills for future prosperity</strong></td>
<td>To attain a sustainable high growth path, invest in green infrastructure, particularly strengthen the capacity of renewable energy production.</td>
</tr>
<tr>
<td>Skill needs in the Thai labour market are not assessed in a regular and systematic way.</td>
<td>Develop robust tools to regularly assess skill needs at the national, regional and sectoral level.</td>
</tr>
<tr>
<td>Student achievement is low by international standards and regional inequalities are large.</td>
<td>Consolidate the implementation of school curricula and improve education infrastructure in rural areas.</td>
</tr>
<tr>
<td>Despite a slight decline in recent years, the wage benefit to university degrees is strong.</td>
<td>Pair skills policies with policies that stimulate the demand for high-level skills in the labour market by lowering barriers to entry for firms, intensifying efforts to boost technology adoption levels and actively promoting entrepreneurship through professional and educational channels.</td>
</tr>
<tr>
<td>Data collection and analysis of participation of adults in training and employers’ provision of training are lacking. Workers going through structural changes do not have sufficient labour market information and access to necessary trainings.</td>
<td>Sufficiently use labour market information to develop relevant policies and promote adult learning programmes.</td>
</tr>
<tr>
<td><strong>Making the best of international trade in services</strong></td>
<td>Promote targeted support (e.g. career guidance and trainings on skills in high demand) for workers in jobs with high risk of significant changes.</td>
</tr>
<tr>
<td>Services sector markets in Thailand are more strictly regulated than in other Asian countries.</td>
<td>Remove barriers in restricted sectors, particularly regarding the international mobility of skilled workers by expanding the coverage of Smart Visa.</td>
</tr>
<tr>
<td>Restrictions of FDI tend to be stricter in the services sectors.</td>
<td>Remove obstacles to FDI by relaxing the rules on capital thresholds and listed sectors.</td>
</tr>
<tr>
<td>Thailand has concluded preferential trade agreements (PTAs), some of which contain services elements.</td>
<td>Pursue PTAs that contain ambitious regulatory reforms beyond the current commitments under the General Agreement on Trade in Services (GATS).</td>
</tr>
</tbody>
</table>
Despite successful economic and social progress in the past decades, new challenges are emerging, not least those that result from the COVID-19 outbreak and its socioeconomic consequences. To achieve a high-income status, returning to “business as usual” is no longer sufficient. Implementing substantial structural reforms, while maintaining macroeconomic stability and improving inclusiveness, is more than ever a prerequisite to re-boost economic growth. This chapter discusses policies to regain productivity and tackle social imbalances, both of which would further improve the wellbeing of Thailand’s population.
Re-boosting growth after the COVID-19 outbreak

Until the outbreak of the COVID-19 pandemic, Thailand had achieved successful economic and social progress. After the Asian Financial Crisis of the late 1990s, which severely hit the economy, a series of structural reforms restored growth at a pace robust enough to achieve resiliency when hit by the Global Financial Crisis in 2008-09 and to become an upper-middle economy (Figure 1.1). The transformation from an agrarian economy to an export-oriented manufacturing regional centre in past decades has created higher-wage jobs and significantly reduced poverty. Progress was also made towards universal education and social security, thus improving people’s welfare considerably.

Figure 1.1. Thailand's economy was performing well until the COVID-19 crisis

GDP per capita relative to the OECD average, computed at 2017 USD PPP

Source: World Bank, World Development Indicators Database.

Integration into the global economy brought economic prosperity. Thailand has benefited from being located at the geographical centre of the Association of South East Asian Nations (ASEAN) and Asian regions, making it an attractive place to invest and trade. One of Thailand's ports, Laem Chabang, is the world’s 21st largest container port and the fourth largest in ASEAN, after Singapore and two Malaysian ports. From the outset of its development in the 1960s, Thailand promoted openness and investment. Building on a friendly business environment, Thailand has been successful in attracting large inflows of foreign direct investment (FDI). Its manufacturing sectors, particularly in automobiles and electronics, are deeply connected to global value chains (GVCs). Lessons have been learnt from natural disasters, such as the floods that disrupted manufacturing production in 2011, thus making the value chains more resilient.

However, progress towards higher economic and social levels has been suddenly interrupted by the COVID-19 outbreak, despite the good management of the sanitary situation by the government. A severe recession is projected for 2020, with a sharp contraction of activity and employment, like in most other countries, and the recovery will be slow. A second wave of the pandemic in Thailand or in other countries would further postpone the return to growth. The crisis will delay the achievement of high-income country status and will require an adequate macroeconomic policy response and structural reforms focused on productivity growth and human capital accumulation.

Thailand was in a sound macroeconomic situation when it was hit by the crisis, with a strong fiscal position and low inflation. However, trade tensions had already weakened growth before the recession, while
competitiveness had deteriorated in the manufacturing sector. International trade disputes and political uncertainties have damaged the dynamism of trade among Asian countries, and this is likely to persist in the future, with supply chains accelerating their relocation to low-wage Asian countries, such as Viet Nam and Cambodia. On the other hand, as the health emergency has revealed, digitalisation and new technologies are likely to provide significant opportunities, which Thailand should seize to thrive. An export-oriented services sector is emerging, which could take up the slack left behind by the manufacturing sector. A successful strategy to expand sectors of high value-added services, such as information and professional services, and digital industries, will require large improvements in the quality of education, which is considered as insufficient by both the OECD PISA scores and the World Bank’s Human Capital Index. Getting the right skills will lift not only overall productivity but also the welfare of current and future generations.

Sharing growth more equally and ensuring that no large groups of people are left behind will also be important. Based on the international poverty line of USD 1.90 (2011 PPP) per day, extreme poverty was eradicated in 2011, but according to the poverty line used for upper-middle income countries (USD 5.5 in 2011 PPP), 8.6% of households still lived below the poverty line in 2018. Moreover, the national average conceals large disparities across regions, notably in terms of income and health status, and a divide persists between rural and urban areas (Figure 1.2). About half of workers employed in the informal economy do not benefit from social protection and their wages are low. In addition to strengthening social protection, accumulating further human capital would help to achieve higher quality of life.

**Figure 1.2. Inequality between regions is significant**

### A. Income inequality in selected countries

Gini coefficient, 2018 or latest available year

### B. Human achievement index

2015 2017 2019

Note: The Gini coefficient refers to disposable income for OECD countries and to consumption or income for non-OECD countries. The NESDC human achievement index is calculated based on 32 indicators covering 8 sub-indices including health, education, employment, income, housing and living environment, family life and community, transport and communication, and participation.

Source: World Bank, World Development Indicators Database; OECD, Income Distribution Database; and NESDC.

The government recognises the importance of these challenges and its National Strategy 2018-2037 provides a comprehensive policy framework to achieve ambitious governance reforms. The implementation of this framework should involve all stakeholders with the goal to attain sound and sustainable growth through materialising efficient and effective resource allocation, nurturing new industries and boosting innovation. Improving the business environment is crucial to this end, in particular achieving high standards in terms of public sector integrity through combatting corruption.
In line with the government’s strategy, the main messages of this Economic Assessment are:

- Re-boosting growth rapidly after the COVID-19 crisis is essential to avoid the scarring effect of joblessness and widespread corporate bankruptcies. Monetary and fiscal support should continue until the recovery becomes sustainable, and further actions might be needed if a second wave of contamination hits Thailand and the world. The crisis highlights the importance of further enhancing resiliency to prepare for future shocks, with a rebuilding of fiscal buffers after the return to normal.
- The prolonged crisis will trigger a large-scale labour reallocation, with sectors such as tourism likely to experience a downturn while digital industries will probably expand. Investing more in human capital to facilitate this labour force allocation will help avoid persistent joblessness. To this end, Thailand needs to provide more up- and re-skilling opportunities throughout people’s lives and strengthen the quality of education.
- Strengthening services sectors to move up the ladder of global value chains by opening up services markets more to foreign firms and workers and by achieving a friendlier business climate through regulatory reforms would help to stimulate innovation and to prepare the business sector for becoming a new growth engine in the post-COVID environment.

The COVID-19 outbreak struck an already slowing economy

Before the COVID-19 outbreak occurred, Thailand’s economic activity had already moderated to a slower pace than that in regional peers (Figure 1.3, Panel A). Despite low interest rates, subdued inflation and stable labour market conditions, private consumption remained weak (Figure 1.3, Panel B and C). The government introduced two consumption-boosting stimulus packages in 2019, worth THB 460 billion or approximately 2.7% of GDP. However, the positive impact of this fiscal package was mitigated by the sharp decline in purchases of durable goods, notably passenger vehicles. Likewise, private investment moderated from late 2019, as uncertainties in both domestic and external economic environments continued to dampen business confidence (Figure 1.3, Panel D). Moreover, the below-average rainfall in 2019 has caused one of the worst droughts in the past decades since the beginning of 2020, damaging the agriculture sector severely.

The contribution of foreign trade to growth has deteriorated and the current account surplus has narrowed, even though it remains at a healthy level (Figure 1.3, Panel E). The trade tensions between the United States and China, Thailand’s largest export markets (Figure 1.4), reduced Chinese exports to the United States, leading to a decline in China’s imports from Thailand, such as computer parts, integrated circuits and printed circuits. On the other hand, Thailand benefited from trade diversion – exports to the US market seeking to avoid the new import tariffs by China – although less so than in peer countries of the region (Figure 1.5).
Figure 1.3. Recent economic developments

Note: The business confidence index varies from the minimum value of 0 to 100, an index above 50 means that business sentiment has improved and an index below 50 means a deterioration. The consumer confidence index is ranged between 0-200. An index equals 100 suggests that consumer confidence is stable.

Source: CEIC, NESDC, Bank of Thailand; and Refinitiv.
The global outbreak of COVID-19 has severely affected the economy since early 2020. As it ranked 9th in 2018 for international arrivals (see Chapter 3), Thailand was one of world’s most popular tourist destinations. This has, however, resulted in a severe hit by the sharp decline of international travel (Figure 1.6, Panel A). It was also one of the largest beneficiaries of the boom in Chinese tourism among...
the ASEAN countries, with 11 million Chinese tourists visiting the country in 2019, contributing to about a third of total international tourist arrivals. Starting from China’s ban of outbound group tours in late January 2020, restrictions on international travel imposed by many other countries including Thailand’s own border restriction have hit the Thai tourism sector significantly (Figure 1.6, Panel B). Moreover, as many countries imposed shutdown measures, external demand deteriorated rapidly at an unprecedented scale, leading to a sharp contraction of private investment.

Figure 1.6. The sharp drop of international tourists affects Thailand significantly

![Graph showing tourism receipts and international tourist and visitor arrivals](image)

Note: The 5 main airports are: Suvarnabhumi, Don Mueang, Phuket, Chiang Mai, Hat Yai.
Source: World Bank, World Development Indicators Database; CEIC.

Although Thailand has prevented a severe outbreak, the restrictions on business and people’s activities have severely affected domestic sectors. After a gradual step-up of the restrictions on business and social activities, such as the closure of public parks, the government tightened the restrictions in late March to suspend non-essential businesses and people’s inter-provincial travel because of the spike in confirmed cases (Box 1.1). Although the rules were less tight than in neighbouring peers (staying-at-home was mandatory only during night time and factories were able to operate), they have dragged down economic activity significantly since March (Figure 1.8). The government promptly adopted a series of relief measures amounting to 14.8% of GDP altogether to support the income of vulnerable households and to provide liquidity to affected businesses, notably SMEs (Table 1.2). As the number of newly confirmed cases declined to single digits, the restrictions had been relaxed gradually since early May, and were removed mostly at the end of June.
Box 1.1. South-East Asia’s public health policy reactions to counter the COVID-19 outbreak

On 13 January 2020, Thailand became the first country that confirmed a COVID-19 case (a Chinese tourist) outside of China. In South-East Asian countries, as the number of confirmed cases started accelerating from mid-March (Figure 1.7), the governments have stepped up the efforts to contain an outbreak.

Figure 1.7. The COVID-19 outbreak intensity varies in the region
Cumulative number of COVID-19 cases

Except for the Philippines and Viet Nam, where the confinement measures were introduced at a much earlier stage due to their weak public health capacity, most other countries imposed their confinement measures from mid-March to early April at almost the same phase of the outbreak, though the restrictiveness of the measures differs among countries (Table 1.1). Almost simultaneously, most South-East Asian countries shut borders to ban foreign visitors’ entry (Thailand restricted most of international visitors’ entry from 26 March).

Nevertheless, the situations have diverged since then. It is premature to detect which factors have contributed to it, but the past severe experiences would help some countries.

Viet Nam, which has moved swiftly to contain the COVID-19 outbreak through thorough quarantine and district-level isolation measures, experienced a number of outbreaks of zoonotic and infectious diseases in the past decades, such as severe acute respiratory syndrome (SARS) and avian influenza A (H5N1) to name a few. The government adopted in 2007 the Law on Prevention and Control of Infectious Diseases that provides a framework to specify the responsibilities of government agencies and their coordination. The law forbids concealing information related to diseases, and emphasises the importance of public mobilisation and information dissemination.

Thailand, which also has past experience of a Middle East respiratory syndrome (MERS) outbreak, has prevented a rapid increase of cases. After experienced a few cases of Middle East respiratory syndrome outbreak, the government decided in 2016 a National Strategic Plan for Emerging Infectious Diseases 2017-2021. According to the Global Health Security Index 2019 (Johns Hopkins Center for Health Security, NHI and The Economic Intelligent Unit, 2019[1]), Thailand was in the 6th place out of 195 countries, with its robust health capacities. It also has a universal healthcare system.

As the number of new confirmed cases declined or stabilised, countries started easing the restrictions to resume economic activities. In Thailand, the night curfew was removed on 15 June, and most of the domestic restrictions on social and economic activities, including the school closure, were relaxed on 1...
July. Nevertheless, Thailand has extended several times the state of emergency. Like other countries, Thailand had not yet relaxed the border restrictions fully in September, although the entry of a very limited number of foreigners, such as business people and medical tourists, has been partially allowed. While daily cases in Thailand has been subdued since then, some countries continue to see the rise of infections and others have been faced with a resurgence of new cases. (as of 7 September)

Table 1.1. An overview of South-East Asia’s confinement measures

<table>
<thead>
<tr>
<th>Confinement measures</th>
<th>Thailand</th>
<th>Indonesia</th>
<th>Malaysia</th>
<th>Philippines</th>
<th>Singapore</th>
<th>Viet Nam</th>
</tr>
</thead>
<tbody>
<tr>
<td>State of Emergency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large-scale social distancing</td>
<td>√</td>
<td>-</td>
<td></td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Movement Control Order</td>
<td>√</td>
<td>√</td>
<td></td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enhanced Community Quarantine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Circuit Breaker</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social distancing campaign</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stay-at-home restrictions</td>
<td>√</td>
<td>-</td>
<td></td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Business activity suspension</td>
<td>√</td>
<td>√</td>
<td></td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regional coverage</td>
<td>Nationwide</td>
<td>Nationwide</td>
<td>Nationwide</td>
<td>Luzon island</td>
<td>Nationwide</td>
<td>Nationwide</td>
</tr>
<tr>
<td>Start day of confinement measures</td>
<td>26 March</td>
<td>3 April</td>
<td>18 March</td>
<td>17 March</td>
<td>7 April</td>
<td>1 April</td>
</tr>
<tr>
<td>Number of new confirmed cases at the start day of confinement (accumulated)</td>
<td>111 (1 045)</td>
<td>196 (1 986)</td>
<td>120 (673)</td>
<td>45 (187)</td>
<td>66 (1 375)</td>
<td>9 (212)</td>
</tr>
<tr>
<td>Start day of partial easing</td>
<td>3 May</td>
<td>-</td>
<td>4 May</td>
<td>15 May</td>
<td>12 May</td>
<td>23 April</td>
</tr>
<tr>
<td>Number of new confirmed cases at the start day of partial easing (accumulated)</td>
<td>3 (2 969)</td>
<td>- ( -)</td>
<td>122 (6 298)</td>
<td>258 (11 876)</td>
<td>486 (23 822)</td>
<td>0 (268)</td>
</tr>
</tbody>
</table>

1. Indonesia introduced on 3 April a restriction scheme that allows the state governments to impose containment measures. Before that, Jakarta had imposed its own restrictions on business activities and people’s movement since 20 March. The confinement measures started in most of the regions by mid-April. Some provinces eased the restrictions from early June.
2. The Philippines changed the regional coverage of the restrictions on 23 April.
3. Singapore eased the international travel restrictions from a certain countries, which include short-term non-business purposes, from 1 September.
4. Thailand started a night curfew from 3 April.

Figure 1.8. Economic activity hit by lockdown orders has shown a slight rebound

Percentage change from visits in period 3 January - 6 February 2020

Note: The monthly data are averages of available daily data. Countries are ranked by the August average.
Table 1.2. Relief measures were promptly introduced
An overview of the relief packages introduced by the Thai government

<table>
<thead>
<tr>
<th>Announced packages (Date)</th>
<th>Amounts (% of 2018 GDP)</th>
<th>Major policy measures</th>
</tr>
</thead>
</table>
| Phase 1 stimulus package (10 March, 2020) | THB 400 billion (2.4%) | - Provision of low interest loans by the Government Savings Bank and Social Security Office to affected businesses  
- Extension of principal repayment periods and reduction of interest payment for those affected by COVID-19  
- Reduction of withholding tax rate from 3% to 1.5%  
- 300% tax deduction for salary expenses of SMEs that keep employment from April to July 2020  
- Reduction of water and electricity bills  
- Reduction of social security contribution of both employers and employees |
| Phase 2 stimulus package (24 March) | THB 117 billion 0.7% of GDP | - Provision of cash handout of THB 5,000 per month to workers not covered by the social security system (from April to June 2020)  
- Emergency loan provision to affected people and SMEs by state-owned banks  
- Delayed personal income tax payment (from June to August 2020)  
- Postponing of corporate income tax payment  
- Exemption of import duties on medical products used for COVID-19 treatment  
- Exemption of personal income tax for medical staffs |
| Phase 3 stimulus package (7 April) | THB 1.9 trillion 11.6% of GDP | - Loan payment holiday of six months for all SMEs  
- Provision of soft loans amounting to THB 500 billion with 2% interest to SMEs  
- Establishment of a THB 400-billion Corporate Bond Liquidity Stabilisation Fund (BSF) for the central bank to buy corporate bonds  
- Reduction of banks contribution to the Financial Institution Development Fund, a bailout fund  
- Enhancement of healthcare capacity (THB 45 billion)  
- Preparation of relief measures for those who affected by COVID-19 (THB 555 billion)  
- Economic rehabilitation including infrastructure investment in rural areas and subsidies to boost domestic tourism (THB 400 billion) |

Source: Source: Ministry of Finance, Bank of Thailand.

Even though the first outbreak was contained in mid-2020 and a second wave has not occurred, the economy is projected to contract sharply by 6.9% in 2020, the largest since the Asian Financial Crisis, with a weak recovery in 2021 (Table 1.3) (Box 1.2). Private consumption declined in the first half of 2020 and is projected to remain weak throughout the year. Although the government’s relief measures will buttress household incomes, including those of the most vulnerable, high uncertainty about the future course of the outbreak and weak employment prospects will weigh on consumer confidence. Continued health measures to prevent a second wave, such as distancing, will also hamper consumer services activities. The liquidity support in the emergency phase and measures to reduce insolvency risks in the private businesses, notably among SMEs, is expected to mitigate the deterioration of employment. Nevertheless, unemployment is projected to increase to levels unseen since the Asian Financial Crisis. Private investment is also expected to contract sharply in 2020 before rebounding in 2021 mostly in line with external demand and investors’ sentiments. Moreover, the record hard drought from the beginning of 2020 will hinder the recovery of the agriculture sector and rural areas.

In addition to the additional government spending related to the COVID-19 outbreak, which is part of the fiscal stimulus packages, the Board of Investment (BOI) introduced several measures, including a 50% reduction of corporate income tax for three years to accelerate investment in the medical equipment manufacturing. Nevertheless, the government should further strengthen the capacity of the public health system, including protective and testing capacity to prepare for a possible second wave of the COVID-19 outbreak, which will help to improve confidence. In case of a new virus outbreak, the government needs to extend the targeted emergency support measures to vulnerable households and sectors. Particularly,
given the importance of SMEs in driving growth, it is essential to extend the support measures to SMEs if the situation worsens. As the crisis continues, policy support needs to shift from addressing liquidity constraints in the initial phase, such as soft loans, to reducing insolvency risks. In the short run, this requires reducing burdens of businesses, such as interest payments, while stimulating the severely weakened demand. Job retention subsidies would also be useful, although it would risk supporting non-viable firms, particularly if used a longer period. In this regard, a loan scheme with the option to convert loans in equity stakes would mitigate the burden of businesses, while helping restore their momentum. It is also crucial to facilitate structural adjustment through reducing excess capacity in less viable sectors and helping shift resources to sectors that are more promising. A number of countries have introduced structural measures for SMEs to transform their businesses amid the rapidly changing environment, such as subsidies to help find new or alternative markets and facilitate digitalisation, including teleworking (OECD, 2020).
As the initial strong recovery is expected to slow, policy needs to shift to supporting sustainable and inclusive growth in the long run. While, in the short run, propping up domestic demand is required, the government will need to shift to targeted measures aimed at shoring up long-term economic growth. To maximise the benefits of these measures, the government should focus its spending on activities that will help to build up the productive capacity of the economy, such as investment in green infrastructure, human capital and digitalisation. The government should also focus on the levels of household debt, which was already high before the outbreak and could become a threat to consumer spending once support measures are withdrawn. To address this concern, while stimulating demand to support employment during the initial recovery phase, it is crucial to create high-wage job opportunities by promoting investment in the growing services sectors, such as logistics, information and digital services, which have shown their resiliency during the outbreak, and by strengthening human capital to support these sectors. More attention needs to be paid to vulnerable groups. As new graduates will severely be affected by the deteriorating job market, to avoid long-term scarring effects for their human capital accumulation, in addition to placement services, provision of skills training and internship opportunities would be useful. While providing income support, the formalisation of informal workers, particularly immigrant workers, should also be advanced (see below).

The implementation of public-private partnership (PPP)-funded and public-funded infrastructure projects, in particular projects within the Eastern Economic Corridor (EEC) area, are expected to be the main driver of investment activities in the medium- and long-term horizon. The EEC is a government initiative under the Thailand 4.0 Plan to revitalise and enhance the eastern seaboard of Thailand. The EEC Act was enacted in 2018 to support the development of Thailand’s Eastern regions. Dedicated tax and non-tax incentives have been provisioned to spur business investment in the Special Economic Promotion Zones within the 13 000 square kilometre EEC area (OECD, 2018[9]). Investment projects include two large seaports and a high-speed rail link between Suvarnabhumi and Don Muang International Airports in Bangkok, and U-Thapao International Airport in the EEC area.

Nevertheless, overall business investment activities, including foreign direct investment, have also been affected by the COVID-19 outbreak. Application for investment promotion measures submitted to the Board of Investment (BOI) in the targeted ten sectors plummeted by 26% in H1 2020 compared with the same period of the previous year. While the medical treatment sector increased its investments by 123% thanks to the sector-specific stimulus measures (see above), the other sectors reduced their investments, except the aircraft sector that has a small share. The BOI has introduced additional measures to stimulate investment amid the COVID-19 outbreak. In May 2020, it strengthened the Thailand Plus package introduced in 2019, extending the period of corporate income tax reduction with additional five years and expanding the investment promotion zones to all provinces. In addition to short-term investment promotions, providing a more friendly business climate, including for the services sectors, would restore better long-term investment prospects (see below).

On the external front, the current account is projected to remain in surplus in 2020, even though it is expected to narrow significantly due to a sharp decline of exports. Sluggish global demand and uncertainties around the COVID-19 outbreak are likely to drag down export performance further before a gradual recovery in 2021. Even if border restrictions were lifted, inbound tourism would not be able to recover in the near future because of tightened health regulations – from quarantine at airports to distancing in various places – as well as the changes in people’s behaviour and psychological fear of being infected. This calls for an overdue transformation of the tourism industry towards a greener and higher value-added sector in the recovery phase (see Chapter 3). The strong exchange rate will also affect the competitiveness of Thailand’s exports and further drag down exports. According to the Bank of Thailand (BOT), a 1% appreciation of the real effective exchange rate would lower GDP growth by 0.02 percentage points. Merchandise imports are also expected to recover slowly on account of weak investment activities despite the strong baht.
Box 1.2. How did Thailand recover from the previous severe shocks?

Although the COVID-19 health crisis is unprecedented, revisiting previous crises can provide a useful perspective. In the past seven decades, Thailand experienced negative annual growth only three times: during the Asian Financial Crisis (AFC) in 1997 (-2.8%) and in 1998 (-7.6%) and during the Global Financial Crisis (GFC) in 2009 (-0.7%) (Figure 1.9, Panel A). The next lowest growth (+0.8%) was recorded in 2011, when the severe floods hit 65 out of 77 provinces in Thailand including Bangkok.

Figure 1.9. Thailand has experienced three severe shocks since 1960

Note: The curves in panel B to panel F show the percentage change of selected indicators relative to the trough (quarter 0) of each period crisis. Quarter 0 corresponds to 1998 Q2 for the Asian Financial Crisis (AFC), 2009 Q1 for the Global Financial Crisis (GFC), 2011 Q4 for the 2011 Floods, and Q2 2020 for the current crisis. G&S stands for goods and services.

Source: World Bank, World Development Indicators Database; NESDC; and OECD calculations.
While the pickup of exports led the initial recovery from the two crises, GDP returned to the pre-crisis peak only when private consumption regained its previous peak level (Figure 1.9, Panels B-E) (Table 1.4). Moreover, though recovering together with exports, investment (private and public) restored the pre-crisis level much later than GDP. This was particularly the case for the Asian Financial Crisis, as massive overinvestment had accumulated before the crisis with huge capital inflows from abroad: until now, investment level has not yet exceeded the pre-AFC peak. On the other hand, despite the long spell of the floods from July 2011 to January 2012, the effect was rather short-lived amid robust external demand.

### Table 1.4. Length to restore the pre-crisis peak level

<table>
<thead>
<tr>
<th></th>
<th>GDP</th>
<th>Private consumption</th>
<th>Investment</th>
<th>Exports</th>
<th>Imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFC</td>
<td>13</td>
<td>12</td>
<td>Not yet</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>GFC</td>
<td>3</td>
<td>3</td>
<td>8</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>2011 Floods</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: National Economic and Social Development Council of Thailand.

Previous episodes highlight three useful lessons for the current crisis:

- Sustaining private consumption is key to overall economic performance. Hence, during the exit from confinement, it will be essential to transition from emergency income support to longer term measures, such as skills upgrading of workers, though gradually (see Chapter 2).
- As investment tends to be weak after a crisis, structural reforms would facilitate the recovery with measures, such as creating new markets and business opportunities, in particular in the digital economy, is crucial. Public investment can also play a catalytic role.
- Foreign direct investment is also crucial for the recovery. The disruption in cross-border trade has pulled down foreign direct investment into Thailand, as estimated by imports of capital goods (Figure 1.10). Thus, securing smooth trade facilitation in the turbulent period would help to secure buoyant foreign direct investment (see Chapter 3).

### Figure 1.10. Private investment has contracted with weakening imports of capital goods

Source: Bank of Thailand.
Risks to these economic projections are tilted to the downside. A second wave of the pandemic, which might be already underway in some countries and could also hit Thailand, would be a huge strain and require further policy action. Downside risks also include the impact of escalating geopolitical tensions and heightened trade protectionism. Although the United States and China signed the phase-one trade deal in January 2020, uncertainties remain about its implementation and future negotiations to resolve other issues and to mend the relationship between the two largest economies in the world. On the domestic front, high household debt level could potentially curtail private consumption and financial sector stability. Low-probability vulnerabilities that could have a severe impact on economic growth are discussed in (Table 1.5).

### Table 1.5. Low-probability vulnerabilities could hit the economy

<table>
<thead>
<tr>
<th>Shocks</th>
<th>Potential impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political instability</td>
<td>Political instability could affect the already-low market sentiment and weaken consumption and private investment further, in particular foreign direct investment.</td>
</tr>
<tr>
<td>Natural disasters</td>
<td>Extreme floods and droughts, large tsunamis and a high scale earthquake would severely affect the economy.</td>
</tr>
<tr>
<td>High-mortality pandemic</td>
<td>Outbreak of highly contagious diseases similar to COVID-19 would disrupt economic activities, especially in the tourism-related sectors.</td>
</tr>
<tr>
<td>Military confrontations</td>
<td>Escalating conflicts in the South China Sea destabilise economic activity in the region and undermine investors’ confidence.</td>
</tr>
</tbody>
</table>

**Monetary policy should remain very accommodative**

Since 2000, the Bank of Thailand (BOT) has conducted monetary policy under a flexible inflation targeting framework with the objectives of ensuring price and financial stability as well as stable and sustainable economic development. The BOT replaced the core inflation target with a headline inflation target in 2015 to better reflect changes in people’s cost of living, with food and energy components accounting for about a third of the household consumption basket. The monetary policy target is now anchored on a yearly headline inflation with a target range approved by the Cabinet.

In recent years, inflation was subdued mainly due to a moderation of wage growth and a decline in energy prices, especially domestic retail prices. Between January 2015 and December 2019, headline inflation was within the current target range of 1% to 3% only during 13 out of 60 months (Figure 1.11, Panel A). In addition, the strong appreciation of the Thai baht from late 2018 to the end of 2019 contributed to low inflation. The low inflation environment provided room for the BOT to pursue an accommodative policy stance, and therefore support economic growth. The central bank had kept its policy rate below 2% since March 2015, and reduced it twice in 2019, to 1.25% (Figure 1.11, Panel B).

Since early 2020, as the COVID-19 outbreak started affecting domestic and external economic activities, the BOT has acted decisively, cutting its policy rate three times to a record low level of 0.5%. Inflation has dropped sharply since April 2020, not only due to low energy prices, but also to weak demand, raising concerns about deflation and fast-deteriorating economic prospects. According to OECD projections, before bouncing back to the lower bound of the target range in 2021, headline inflation is expected to be negative in 2020. Despite the government’s stimulus packages, significant uncertainty around the future course of the COVID-19 outbreak will weigh on business prospects. Monetary policy should therefore retain its very accommodative stance and reduce its policy rate further if downside risks materialise. Since room for further rate cuts is becoming smaller, additional monetary policy tools should be considered (Box 1.3). As part of the government’s stimulus package, the BOT has introduced a corporate bond purchase programme to provide a liquidity backstop. It also conducted outright purchases of government bonds in March 2020 to address market dislocations. Nevertheless, in case of new downside risks, the BOT should be bold enough to introduce new policy measures.
Figure 1.11. Policy reaction has been prompt when inflation turned negative

The strong exchange rate has weighed on the competitiveness of Thailand’s exports and contributed to lower inflation. In 2019, the Thai baht outperformed many currencies in the Asian region, including Japan’s, on account of a strong external position characterised by a high current account balance and high international reserves (Figure 1.12, Panels A and B). Attracted by Thailand’s sound economic framework, and in an environment of low interest rates in advanced economies, significant inflows of non-resident capital have been recorded since May 2019 (IMF, 2019[4]) (Figure 1.12, Panel C). In addition, the greater stability in political developments following the formation of the new coalition government in June 2019 and the increased weighting of Thai equities in Morgan Stanley Capital International (MSCI) Emerging Markets Index also led to greater capital inflows. The Thai baht has rebounded again since April 2020, after depreciating together with other Asian currencies at the outset of the COVID-19 outbreak.

The BOT has taken various measures to mitigate the rapid appreciation of the Thai baht. For instance, a new measure was introduced in July 2019 to contain the impact of short-term speculative flows. This measure reduced the ceiling on non-resident baht-account holdings from THB 300 million per non-resident to THB 200 million and strengthened the reporting requirements for non-resident holdings of debt securities, with an obligation to report the final beneficiaries of all non-residents’ holdings of Thai debt securities. Since November 2019, the BOT has introduced additional measures to contain inflows, relaxing the limit on export proceeds kept overseas indefinitely. The BOT also relaxed rules to facilitate capital outflows, i.e. allowing retail investors to invest up to USD 200 000 in foreign securities without going through a Thai financial intermediary; making transfer funds abroad more freely for businesses and individuals; and allowing gold trading in foreign currencies.
Figure 1.12. Thai Baht appreciated more than other currencies in the region

A. Nominal exchange rates

B. Current balance and official reserves

C. Net capital flows

D. Non-performing loans

Box 1.3. The pandemic has expanded central bank’s toolkit in emerging market economies

As the economic consequence of the COVID-19 pandemic is unprecedented, central banks, not only in advanced countries, but also in emerging market economies, have introduced new policy measures. In the past, central banks in emerging market economies used the adjustment of short-term interest rates as a main policy tool. Nevertheless, at this juncture, a number of central banks in emerging market economies have already adopted local currency bond purchasing measures to mitigate market dislocations, in some cases without specifying its size (Table 1.6). Studies suggest that these measures have stabilised markets (Arslan, Drehmann and Hofmann, 2020[5]), (Hartley and Rebucci, 2020[6]).

Table 1.6. Bond purchasing measures in Asia’s emerging market economies

<table>
<thead>
<tr>
<th>Country</th>
<th>Measures (announcement date, in 2020)</th>
<th>Size, % of GDP</th>
</tr>
</thead>
</table>
| India   | - Outright purchases of government bonds (13 and 20 March)  
          - Swap operation of government bonds (23 April) | 0.2%         |
| Indonesia | Outright purchases of government bonds (1 April) | -            |
| Korea   | - Outright purchases of government bonds (19 March and 9 April) | 0.1%         |
| Philippines | Outright purchases of government bonds (10 April) | -            |
| Thailand | - Outright purchases of government bonds (19 and 22 March)  
          - Outright purchases of corporate bonds (7 April) | 0.6%         |

Source: (Arslan, Drehmann and Hofmann, 2020[5]).

It has been argued that central banks in emerging market economies with a sound macroeconomic framework could utilise quantitative easing (QE) (Bruegel, 2020[7]). Thailand is in a good position in this regard. It pursues a flexible exchange rate regime and inflation expectations are well anchored thanks to its flexible monetary policy. Most sovereign bonds are issued in the local currency, while the share of foreign bondholder is smaller (below 20%) than in other emerging countries.

Expanding QE together with a large fiscal expansion without a credible fiscal target should be avoided, as it would harm the well-established credibility of Thailand’s macroeconomic policy framework. Nevertheless, enhancing the central bank’s policy options is urgently required as the main policy interest rate is approaching the zero lower bound. The already introduced measures, lending operation expansions and bond purchases programmes, could be further enhanced. Besides, some other measures, including forward guidance and yield curve control, could also be considered. Clear communication and transparent policy decision-making are crucial elements for the effective implementation of these new policy tools. A strong collaboration and coordination between government agencies are also important to mitigate their side effects and ensure their effectiveness.

The financial sector appears sound, but risks are rising

Thanks to strong financial system oversight, the banking sector in Thailand has been sound, with limited systemic and contagion risks stemming from interlinkages (IMF, 2019[8]). The BOT has implemented three main forms of macroprudential policies to increase the resilience of the financial system and contain the build-up of systemic vulnerabilities: loan-to-value (LTV) ratios, dynamic loan loss provisioning; and maximum credit limits on credit cards and personal loans.

Although the banking sector has been considered to be well capitalised, with capital adequacy at 19.2% in Q2 2020, well above the Basel III requirement, it is under severe pressure due to the COVID-19
outbreak. Non-performing loans, which have a relatively high share compared with other countries in the region (Figure 1.12, Panel D), have edged up (NPL ratio: from 2.98% in Q4 2019 to 3.09% in Q2 2020), and higher provisioning expenses put downward pressure on banks’ profitability. To alleviate the burden, the BOT reduced banks’ contribution to a bailout fund, the Financial Institution Development Fund (FIDF), from 0.46% to 0.23% of deposits as part of the government’s relief packages (Table 1.2). Moreover, to strengthen the capital buffer, the central bank asked commercial banks to suspend dividend payments and repurchases of their shares (announced in June 2020). Particularly, the emergency liquidity support measures to SMEs should be prudently withdrawn to avoid the increase of business defaults, which would deteriorate banks’ loan quality. The tourism industry, which is severely affected, will likely increase nonperforming loans. To address the solvency issues, in addition to mitigate current spending burdens of these businesses, a better coordination with fiscal policy that can directly support vulnerable firms is essential (see above).

Moreover, household debt is relatively high compared to other countries in the region, even though macroprudential policies helped to contain it (Figure 1.3, Panel F). The BOT has considered household debt as a risk to the financial system and a vulnerability for households, especially those with weak financial conditions. It has also posed a threat to economic growth as higher debt service would limit the ability of households to consume. To mitigate the impact of the COVID-19 outbreak on the debt burden, the BOT adopted emergency debt relief measures, which include delayed loan repayment of households. Besides, a couple of relief measures have been introduced for a recovery phase covering from July 2020 to December 2021, which include the reduction of interest rates charged on credit cards balances and on personal loans and the conversion of loan’s term structure. Nevertheless, going forward, it is crucial that the BOT continues to address household debt issues, especially if the economic recovery is delayed, as it affects the solvency of vulnerable households.

Despite a high penetration of financial services, whereby 98.7% of households have access to financial services, a further promotion of financial inclusion remains important to the social development in Thailand. According to a survey conducted by the BOT, 1.3% – equivalent to about 316 000 households – requested, but did not obtain access to financial services in 2018. The situation is more severe for low-income households because 4.4% of them were excluded from formal financial services.

The rise of technology adoption and digitalisation is transforming the financial sector. Advanced and innovative digital applications for financial services, or Fintech, are being adopted to change the way financial services providers interact with consumers and make it more efficient (OECD, 2018[9]). Fintech companies can provide financial services or products through digital platforms that are easily accessible to consumers without face-to-face interaction. Therefore, Fintech can be an important enabler to promote greater and effective access to formal financial products and services to Thai people.

Fintech development in Thailand is one of the fastest in the region with more than 160 Fintech companies registered as of 2019, the fourth largest in terms of number in ASEAN, after Singapore, Indonesia and Malaysia (CCAF, ADBI and FinTechSpace, 2019[10]). Fintech companies comprise of start-ups as well as initiatives launched by a broad range of services providers, from financial institutions, regulators to academic institutions, both in private and public sectors (World Bank, 2019[11]). These Fintech companies are mainly dominant in business services, lending & credit, and payment system business models (Figure 1.13). Given the high penetration rates for mobile phone subscriptions, at 105% (in 2018, ITU), and a strong ecosystem that is supported by a good regulatory framework (Table 1.7), there is a huge potential for Fintech to continue flourishing in Thailand. The on-going regulatory reforms, which aims for a better business environment, should support this development. Nevertheless, Fintech activities warrant vigilance due to its unknown risks and consequences that could potentially threaten financial stability.
Figure 1.13. Fintech companies in Thailand are mainly in corporate finance, lending & credit and payment system

Source: Thailand Economic Monitor, July 2019; World Bank.

Table 1.7. Regulatory framework for Fintech in Thailand is in line with the regional best practices

<table>
<thead>
<tr>
<th>Country</th>
<th>P2P Lending</th>
<th>Equity Crowdfunding</th>
<th>Digital Payments</th>
<th>ICO/Crypto</th>
<th>InsurTech</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>Regulated under bespoke regulation</td>
<td>Regulated under bespoke regulation</td>
<td>Regulated under existing legislation</td>
<td>Regulated under existing legislation</td>
<td>Regulated under existing legislation</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Regulated under bespoke regulation</td>
<td>Regulated under bespoke regulation</td>
<td>Regulated under bespoke regulation</td>
<td>Regulated under bespoke regulation</td>
<td>Regulated under existing legislation</td>
</tr>
<tr>
<td>Philippines</td>
<td>Regulated under existing legislation</td>
<td>Unregulated but not prohibited</td>
<td>Regulated under bespoke regulation</td>
<td>Regulated under existing legislation</td>
<td>Regulated under existing legislation</td>
</tr>
<tr>
<td>Singapore</td>
<td>Regulated under existing legislation</td>
<td>Regulated under existing legislation</td>
<td>Regulated under bespoke regulation</td>
<td>Regulated under existing legislation</td>
<td>Regulated under existing legislation</td>
</tr>
<tr>
<td>Thailand</td>
<td>Regulated under bespoke regulation</td>
<td>Regulated under bespoke regulation</td>
<td>Regulated under bespoke regulation</td>
<td>Regulated under bespoke regulation</td>
<td>Regulated under existing legislation</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>Unregulated but not prohibited</td>
<td>Regulated under existing legislation</td>
<td>Regulated under bespoke regulation</td>
<td>Unregulated but not prohibited</td>
<td>Regulated under existing legislation</td>
</tr>
</tbody>
</table>


Fiscal management is sound, but could be more flexible

The fiscal framework is transparent

Fiscal management has been prudent, especially in the aftermath of the Asian Financial Crisis 1997-1998. Among others, the fiscal sustainability framework introduced self-imposed fiscal rules, and the Public Debt Management Office, established in 1999, oversees public debt management operations in an efficient manner. Fiscal management was further strengthened recently with the enactment of the Fiscal Responsibility Act (FRA) in 2017 and the adoption of Medium-term Fiscal Framework in 2018. The FRA introduced a set of binding fiscal rules to ensure fiscal discipline through a more transparent public spending practices and better governance of overall fiscal management (Table 1.8).
The government’s fiscal position has been healthy with the fiscal deficit decreasing significantly to 2.2% of GDP in 2018, thanks mainly to stable revenue collection amid lower government expenditure (Figure 1.14). The share of external debt is low and declining. Prudent fiscal management in past years has provided the government with ample policy space to react to the COVID-19 outbreak. To finance the phase 3 stimulus package, the government decided to borrow an additional THB 1 trillion (6.1% of GDP in 2018), which is expected to raise public debt to 55.8% of GDP in 2021. Moreover, in August 2020, the government made it possible to borrow an additional THB 214 billion for the fiscal 2020, which ends in September 2020, amid the weaker-than-expected revenue prospect. In case further spending is required due to the resurrection of a severe pandemic, using the available fiscal space would be warranted and would remain within the fiscal constraints, but cost-effectiveness and transparency must be ensured. Moreover, although expenditure has been prudent so far, the decline in the deficit is unlikely to continue as revenue is also declining – a trend that should be reversed in the medium term.

Government spending has been prudent in recent years. However, the quality of the spending mix has deteriorated, as government expenditure growth was largely driven by current spending. Although the government has been complying with the fiscal rule of allocating at least 20% of the annual budget to capital spending since 2017, actual capital spending was much lower (Figure 1.15). Therefore, capital spending needs to be increased to strengthen the long-term economic potential. Given the sound fiscal position and the robust fiscal management framework, the fiscal medium-term trajectory should be made more flexible to allow for more capital spending to improve the economy’s growth prospects, particularly in the recovery phase from the current economic downturn.

### Table 1.8. Selected fiscal rules under the Fiscal Responsibility Act

<table>
<thead>
<tr>
<th>Fiscal rules</th>
<th>Threshold</th>
<th>Status as of December 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public debt</td>
<td>&lt; 60% of GDP</td>
<td>41.2</td>
</tr>
<tr>
<td>Debt service</td>
<td>&lt; 35% of revenue</td>
<td>27.16</td>
</tr>
<tr>
<td>Foreign currency debt</td>
<td>&lt; 10% of public debt</td>
<td>3.59</td>
</tr>
<tr>
<td></td>
<td>&lt; 5% of exports of goods and services</td>
<td>0.21</td>
</tr>
<tr>
<td>Capital expenditure</td>
<td>&gt; 20% of annual budget and no less than FY budget deficit</td>
<td>20.5%¹</td>
</tr>
<tr>
<td>Principal repayment</td>
<td>2.5-3.5% of annual budget</td>
<td>3.0%¹</td>
</tr>
</tbody>
</table>

Note: 1) 2021 Budget.
Figure 1.14. The central government’s fiscal deficit has narrowed, but is expected to rise sharply

![Graph showing fiscal deficit and OECD forecast](image)

Note: Data from 2019 are targets set under the Medium-Term Fiscal Framework. Source: Fiscal Policy Office, Ministry of Finance; Bank of Thailand; and OECD calculations.

Figure 1.15. Disbursements of public capital spending allocations have declined

![Graph showing budget appropriation, actual spending, and actual spending as % of budget appropriation](image)

Source: Government Fiscal Management Information System.

### Tax revenue can be increased and made more progressive

In Thailand, tax revenue collection in terms of its ratio to GDP is relatively low compared to OECD countries (Figure 1.16), partly reflecting the narrow tax base and the high degree of informality, with about 54% of employment in the informal sector in 2019 (National Statistical Office of Thailand) and about 28 million people unregistered in the income tax system (Pitidol, 2018[12]). Moreover, revenue collection from value added tax (VAT) accounted for almost a quarter of total revenue in 2019 (Figure 1.17).
Although income inequality in Thailand has improved over the past four decades, the tax and transfer system has played a limited role in income redistribution (Figure 1.18). The structure of tax receipts is significantly less progressive than in many OECD countries as Thailand, like many other developing countries, relies heavily on regressive taxes, notably VAT (Matsumoto, 2018[13]). VAT should continue to be an important and stable revenue source in the long run. Nevertheless, while improving its weak social transfer system, overall tax revenue could be strengthened in a more progressive manner.

**Figure 1.16. Thailand’s tax revenue collection is still low compared to OECD countries**

As a percentage of GDP, average 2014-18

![Graph showing tax revenue collection as a percentage of GDP for Thailand and other countries over the years 2010 to 2019.](source)


**Figure 1.17. The value added tax accounts for almost a quarter of total revenue**

![Graph showing the share of value added tax in total revenue from 2010 to 2019.](source)

Note: The item "Others" includes non-tax revenue and all other taxes not shown in the figure such as excise tax, import-export duties.

The Thai government has made many efforts to improve tax compliance in recent years. These include the introduction of an automatic risk-based corporate income tax auditing system (World Bank, 2018\(^{[14]}\)) as well as an enhanced online platform to facilitate the filing of taxable corporate income (World Bank, 2019\(^{[15]}\)). To further enhance its tax base, the Thai government has introduced a new recurrent tax on immovable property under the Land and Building Act 2019, effective from 1 January 2020. The new property tax will widen the tax base from the previous regime that taxed only the earnings from renting or leasing of properties (Mahanakorn Partners Group, 2019\(^{[16]}\)). In addition, it will also help to reduce income inequality as the property owners, which are typically the high-income bracket households, will pay higher taxes on their properties. The new tax is a property tax and replaces the income tax levied on certain income from immovable property. Taxes are levied on individuals or companies that own or possess immovable properties, i.e. land and buildings, including condominiums, based on values appraised by the government and not on earnings from renting or leasing out of these assets. It is essential that the value of property sufficiently reflects the market value and its use (Jangratsameekan and Phijaisanit, 2018\(^{[17]}\)). To mitigate the impacts of the COVID-19 outbreak, the enforcement of the new tax was delayed by four months and the tax rates have been reduced by 90%. Nevertheless, the government could fully implement the new tax when overall economic activity will have recovered.

Given the low number of registered personal income taxpayers, only about 30% of total employment, the government should also focus on increasing the collection of personal income taxes, including using technology to increase personal income tax compliance. Currently, the share of personal tax returns filed electronically is about 55%, which is below the OECD average of above 70% (OECD, 2019\(^{[18]}\)). International experience with applications of behavioural insights may also help to increase tax compliance. Behavioural insights help to understand the root-causes of non-compliant behaviour and coupled with insights of effective nudges for changing taxpayers’ behaviour to increase tax compliance at minimal cost. For instance, by adding a locality specific profiling to tax debt letters, the UK tax authority has successfully increased payments by up to 15 percentage points (OECD, 2019\(^{[18]}\)). In Poland, behaviour design was adopted in communicating with taxpayers and all behavioural letters have contributed to higher tax payments (Hernandez Hernandez et al., 2017\(^{[19]}\)).

In addition, the implementation of the VAT reform needs to be accelerated to capture VAT revenues on rapidly expanding e-commerce. Thailand has one of the fastest growing e-commerce markets in ASEAN,
with its online retail market is expected to increase from USD 2 billion in 2015 to USD 10-15 billion by 2020 (Export.gov, 2019[20]). Existing VAT rules present a number of challenges to securing effective VAT collection on these online sales, particularly where goods, services and digital products are acquired by private consumers from suppliers abroad. As regards the online sale of goods, the volume of imports of low-value goods continues to rise, presenting VAT collection challenges under the traditional customs procedures. These challenges may not only lead to considerable VAT revenue losses but also create unfair competitive pressures on domestic businesses. To address these challenges, the OECD has developed standards and solutions that have been implemented and/or are being implemented worldwide (OECD, 2017[21], OECD, 2019[22]). Thailand is planning to introduce measures to tax online sales of digital services by foreign suppliers. Thailand is strongly encouraged to implement reform for the effective collection of VAT on online sales of goods, services and digital products in line with the internationally agreed standards developed by the OECD in the context of the OECD/G20 BEPS Project. These standards were included in the 2015 BEPS Action 1 (Digital Economy) Report and in the detailed implementation guidance that has been developed since then.

The healthcare and social protection systems need to be put on a more sustainable footing

The social protection system in Thailand has evolved over time and now provides a basic level of health care protection and income security to vulnerable households, including a cash transfer that covers a large number of informal workers in the agricultural sector. The main programmes under the social protection system include the Government Officials’ Pension System, Government Pension Fund, Civil Servant’s Medical Benefit Scheme, Workmen’s Compensation Fund, Social Security Fund (SSF), Universal Coverage Scheme, and National Saving Fund. These programmes serve different purposes that safeguard the quality of life of the targeted groups, namely the elderly, women and children, the disabled and disadvantaged. As such, Thailand’s social protection system is more comprehensive than those of its peers and as comprehensive as those of advanced countries (Table 1.9). Nevertheless, there is still room to improve the effective coverage of the system.

Due to budget constraints, the social protection system only provides a low level of benefits and has a limited impact on narrowing income inequalities (ILO, 2017[23]). For instance, the monthly allowance of THB 600 for a 60-year-old person is only 2.8% of the average monthly household expenditure in 2018 and 22% of the national poverty line of THB 2 710. Therefore, despite its comprehensive coverage, public social protection expenditure in Thailand is one of the lowest in the region and far below the OECD average (Figure 1.19). Given the huge impacts of the COVID-19 outbreak compared with the low level of its social protection system, the government has adopted various measures in the fiscal stimulus packages. Particularly, as unemployment insurance set up in 2004 only covers private sector employees under the Social Security Fund, a direct income support scheme targeted to temporary and self-employed worker (16 million people are eligible) and farmers (10 million households are eligible) was introduced. In the long run, Thailand needs to consider strengthening its social protection system to protect people from socioeconomic disruptions.
Table 1.9. Thailand’s social protection is more comprehensive than other Asian countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Existence of a statutory programme¹</th>
<th>Child and family</th>
<th>Maternity</th>
<th>Sickness</th>
<th>Unemployment</th>
<th>Employment injury</th>
<th>Disability/invalidity</th>
<th>Survivors</th>
<th>Old age</th>
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<tr>
<td>Selected Developing and emerging countries</td>
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</tbody>
</table>

1. **** At least one programme anchored in national legislation, including employer-liability programmes based on mandatory risk pooling. *** Legislation not yet entered into force. ** Limited provision (e.g. labour code only). * Only benefit in kind (e.g. medical benefit).
2. Currently only public servants receive pensions. A pension scheme for workers in the private sector is yet to be implemented.
3. Maternity and sickness: provisions at state level.

Figure 1.19. Public social protection expenditure has much room to expand


The healthcare system in Thailand is also deemed one of the best in the world, ranked at 6th position out of 89 countries with the best healthcare systems (Ireland, 2019[24]). Thanks to the introduction of the
Universal Coverage System (or UHC, universal healthcare coverage) in 2002, which covers 72% of total population, coupled with the Civil Servants’ Medical Scheme, Social Security System’s Medical Benefits and the Compulsory Migrant Workers’ Health Insurance, every Thai citizen has access to essential health services at all life stages (Sumriddetchkajorn et al., 2019[25]) (Table 1.10). These schemes are financed predominately from the government budget and only requires minimum out-of-pocket expenditure by the patient. Therefore, the share of out-of-pocket expenditure to total healthcare expenditure in Thailand is one of the lowest in the region, and even lower than in many OECD countries (Figure 1.20, Panel A). Healthcare expenses related COVID-19, diagnosis, treatment and rehabilitation, are all covered by the Universal Coverage System.

The healthcare services are provided by a diverse mix of public and private institutions (public or private hospitals, private clinics, and public primary care centres). Among hospitals, 25% of them were run privately and public hospitals accounted for 75% in 2015 (one fifth of beds were in private hospitals) (Legido-Quigley and Asgari-Jirhandeh, 2018[26]). Most private hospitals are small with less than 100 beds, but large private hospitals focusing on profitable high-end services, which are also promoted as a medical tourism facility, tend to concentrate in urban areas. The difference in salaries and other benefits has been a cause of internal brain drain from the public to the private sector, particularly during the periods of high economic growth (Asia Pacific Observatory on Health Systems and Policies, 2015[27]). Nevertheless, the private hospital services could also have positive impacts, providing training opportunities, increasing competition, and shoring up the overall services quality through acquiring international accreditation (Lindelow, Hawkins and Osornprasop, 2012[28]). As the government has implemented a range of measures including financial incentives, the geographical distribution of health workers has been improved over the years, although the mandates and financing of the health services between the central and local governments are still fragmented (Lindelow, Hawkins and Osornprasop, 2012[28]).

While the Universal Coverage System is making good progress in ensuring affordable access to healthcare services, it comes with a significant fiscal burden. Like in many other countries in the Asia Pacific region, the growth of healthcare spending in Thailand outpaced that of real GDP during the period 2010-2015 (Figure 1.20, Panel B), resulting in higher healthcare spending relative to GDP (OECD/WHO, 2018[29]). Although healthcare spending accounted for only 3.8% to GDP in Thailand in 2015, rising relative prices and demographic factors (Figure 1.21) such as ageing will contribute to higher healthcare spending in the future (OECD, 2013[30]). The government thus plans to undertake reforms to ensure inclusiveness and sustainability (NESDC, 2018[31]). Given the low out-of-pocket healthcare expenditure, a financing system that is not overly dependent on government funding needs to be considered. This includes introducing a more balanced cost-sharing mechanism. Nevertheless, this reform needs to be implemented in a way that ensures affordability and accessibility for low-income groups.

Table 1.10. Almost all Thai citizens are covered by healthcare programmes

<table>
<thead>
<tr>
<th>Programmes</th>
<th>2005</th>
<th>2010</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal Health Coverage Scheme (million people)</td>
<td>47.34</td>
<td>47.34</td>
<td>48.61</td>
</tr>
<tr>
<td>Social Security System Medical Benefits (million people)</td>
<td>8.74</td>
<td>9.90</td>
<td>10.77</td>
</tr>
<tr>
<td>Civil Servants’ Medical Benefit Scheme (million people)</td>
<td>4.15</td>
<td>4.92</td>
<td>4.98</td>
</tr>
<tr>
<td>Veterans/private school teachers (million people)</td>
<td>0.13</td>
<td>0.52</td>
<td>0.49</td>
</tr>
<tr>
<td>Local officials (million people)</td>
<td>-</td>
<td>-</td>
<td>0.10</td>
</tr>
<tr>
<td>Total eligible population 1) (million people)</td>
<td>62.81</td>
<td>63.47</td>
<td>65.04</td>
</tr>
<tr>
<td>Population with coverage (% of total population)</td>
<td>96.24</td>
<td>99.35</td>
<td>99.88</td>
</tr>
</tbody>
</table>

Note: 1) Not including displaced persons and the Thai diaspora.
Source: (Paitoonpong, Tasee and Waisuriya, 2016[32]).
Figure 1.20. Healthcare expenditure is rising fast

A. Out-of-pocket expenditure relative to current health expenditure, 2017

B. Per capita health expenditure and GDP
Annual average, real terms, 2010-17

Source: World Bank, World Development Indicators Database.

Figure 1.21. Thailand’s old-age dependency ratio is expected to increase rapidly

Note: The old-age dependency ratio is defined as the number of persons aged 65 and over relative to the 20-64 years old population. A country is defined as an ageing nation (respectively aged nation) when the share of those aged 65 and plus over the total population exceeds 7% (respectively 14%).

The pension system needs to be made more inclusive

Thailand’s pension system has evolved over the past decades. It now covers both formal and informal workers, including government officials, and has become a relatively comprehensive but fragmented system with a number of different schemes coexisting (OECD, 2018[3]). All private workers are eligible for the Old-age Allowance, a non-contributory pension from the age of 60. In addition, formal workers enrol in the Social Security Fund (SSF), a defined benefit scheme, to which employees, employers and the
government contribute. The amount of pension is 20% of the average wage of the last 60 months and 1.5% per additional 12 months of contributions beyond 180 months (capped at 50%). On top of the SSF, the government plans to introduce a mandatory defined contribution scheme (currently, a few voluntary schemes are available). This would address the sustainability concerns of the SSF that have been identified by some studies (the SSF is projected to become unsustainable by 2050), and could pave the way for a comprehensive scheme that covers all private workers. Participation to voluntary saving schemes could also be further encouraged. For example, the coverage of one of the voluntary schemes, the Provident Funds, has increased, but remains low at 20%. While the pensionable age of government employees is 60, that of private workers’ is 55. Raising the retirement age would be one option to improve the sustainability of the SSF. However, as the labour force participation of elderly people is already high (for male in 2016: 55-59, 87.7%; 60-64, 68.5%; 65+, 34.6% (ILO estimates)), it would not ameliorate the situation significantly.

Although informal workers are covered by the Old-age Allowance, the benefit is small and not sufficient (see above). Increasing the allowance to cover most of living costs would add considerable fiscal burden and discourage formalisation. Therefore, preparing a supplementary saving scheme to complement the Old-age Allowance is an appropriate approach. The government provides matching contributions to encourage informal workers to participate in voluntary schemes. However, the enrolment is still low. For example, in 2019, only 3.2 million people signed up for the Section 40 scheme of the SSF. Moreover, multiple schemes are run by different government agencies. Even though it is a voluntary scheme, participating in the formal pension system is an important first step for formalisation. The government could strengthen information provision about the schemes for workers to make an appropriate decision.

Table 1.11. Past OECD Recommendations on fiscal policy

<table>
<thead>
<tr>
<th>KEY RECOMMENDATIONS</th>
<th>MEASURES TAKEN SINCE MARCH 2018</th>
</tr>
</thead>
</table>
| Continue fiscal prudence and increase revenue to fund impending commitments by boosting tax efficiency, increasing compliance and relying more heavily on less distortive tax bases. | - The medium-term fiscal framework was adopted in 2018.  
- A new property tax under the Land and Building Act 2019 was introduced in 2019 (though effective from January 2020, the implementation was delayed in four months due to the COVID-19 outbreak).  
- An amendment to the Revenue Code to collect VAT on online sales of digital services by foreign suppliers was approved by the Cabinet in June 2020 and has been under the deliberations of the Parliament. |
| Make greater use of alternative financing sources such as infrastructure bonds priced in Thai baht. | - The Thailand Future Fund (TFFIF), an infrastructure fund, which had been established in 2016 to raise funds from domestic and foreign investors, was listed on the Stock Exchange of Thailand in October 2018. THB 44.7 billion was raised by the initial listing. The fund invests in the right to receive 45% of the net toll revenues from the Chalong Rat and Burapha Withi Expressways for 30 years.  
- A new Public-Private Partnership Act, B.E. 2562 (2019) was enacted in 2019. The law stipulates four principles for PPPs, namely, facilitation, alignment, streamlining and transparency of project procedures, and distinguishes 12 different types of infrastructure projects and public services, including hospitals and schools. It also defines the role of Public-Private Partnership Policy Committee that oversees PPP projects. |
| Align PPP policies with the OECD’s Principles for Public Governance of PPPs. | |

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Box 1.4. Fiscal reform can ensure fiscal sustainability

Thailand’s public debt stood at 41.2% to GDP as of 2019 and is projected to increase to around 55.8% of GDP by 2021 due to the stimulus packages and lower revenue collections related to the COVID-19 pandemic (Figure 1.22). Nevertheless, public debt is projected to remain below the 60% of GDP binding threshold set under the Fiscal Responsibilities Act. The public debt is well managed. It is predominantly financed through long-term local currency-based debt instruments. This reduces the exposure to unexpected external shocks as well as short-term economic shocks. Moving forward, the debt sustainability is assessed based on the following macroeconomic and fiscal policy assumption (Figure 1.23):

- Real GDP growth: 2020-2021: -1.4% per annum; 2022-2037: 3.2% per annum; average annual growth rate for the period of 2011-2019
- Nominal GDP growth: 2020-2021, 0.2% per annum; 2022-2037, 5.0% per annum, average annual growth rate for the period of 2011-2019
- Nominal interest rate: 5-year average of 10-year bond yield: 2.2%

Four scenarios are considered as follows:

- **Baseline**: The debt-to-GDP ratio is expected to increase to 55.8% by 2021 due to higher borrowing to finance the three stimulus packages announced by the government. The ratio of the primary deficit to GDP is set at 1.3% in 2022 and increase gradually, reflecting the rapidly ageing population structure of Thailand. The debt-to-GDP ratio is projected to increase to 60.2% by 2037, slightly above the threshold of 60.

- **Fiscal reform**: The government undertakes tax reform to collect more revenue and the primary deficit is gradually narrowing until fiscal balance is achieved by 2026, as targeted by the Fiscal Policy Committee in December 2018. The public debt will be on a sustainable path, with the debt-to-GDP ratio declining to 43.3% by 2037.

- **Higher interest rate**: Under this scenario, the nominal interest increases by 100 basis points from 2020. The debt-to-GDP ratio will exceed the threshold and reach 68.3% by 2037.

- **Strengthened social protection**: This scenario assumes that the government further strengthens social protection starting from 2023. Public spending on old age is assumed to increase from 1.7% to GDP in 2019 to 5.7% of GDP by the end of the National Strategy period in 2037 – similar to the estimated potential spending for OECD emerging economies in 2030 (OECD, 2018[33]). The debt-to-GDP ratio increases substantially to 79.0% by 2037. This implies that, given the demographic changes with increased old-age dependency, further strengthening the social protection system without a fiscal reform to increase revenue collection would rather be challenging.
Figure 1.22. Public debt is on the rise, but still below the threshold set by the government

Note: Overall public debt for 2020 and 2021 are OECD forecast.
Source: Public Debt Management Office and Fiscal Policy Office, Ministry of Finance; and OECD calculations.

Figure 1.23. Public debt scenarios

Reforms to boost productivity are required for future prosperity

Achieving a high-income country status against the headwind of the rapidly ageing society requires sustained high productivity growth. The size of the labour force already peaked in 2012, and is projected to continue declining (Figure 1.24), while, in contrast, neighbouring peers will benefit from steady increases in their working-age populations over the next decades. Although employment growth could be achieved by raising the statutory retirement age and increasing the number of migrant workers, future prosperity will depend crucially on boosting productivity. Between 2010 and 2017, Thailand’s labour productivity growth was comparable to regional peers (Asian Productivity Organization, 2019[34]). Similar to the other ASEAN countries, the share of agriculture in employment is high at 32% in 2017, but only contributed 8% to GDP. Because productivity is considerably lower in agriculture than in other sectors, boosting the sector’s productivity has been a longstanding policy agenda in Thailand, while labour force reallocation from agriculture to other industries would go a long way towards lifting overall productivity. Increasing productivity growth in the manufacturing sector is also needed, after its decline in the recent period. Moreover, the level of productivity remains low in several services sectors, such as the hospitality and restaurant industry, which have become important parts of the Thai economy (Figure 1.25). Empirical work suggests that an inefficient allocation of labour and capital hampers Thailand’s growth potential, resulting in a significant gap in Total Factor Productivity (TFP) with the frontier level of the United States (Dheera-Aumpon, 2014[35]). In addition, weak investment drags down productivity growth (Figure 1.26). A recovery from the economic downturn caused by the COVID-19 outbreak should be considered as a good opportunity to put forward the necessary reforms to transform the economy.

Figure 1.24. Thailand’s labour force has been declining

Source: International Labour Organisation, ILO modelled estimates.
Figure 1.25. Productivity is weakening in some sectors, including manufacturing

A. Value added per worker and employment share, 2017

Thailand’s manufacturing sector succeeded in strengthening its competitive edge in international markets, and created plenty of jobs. Particularly, active participation in global value chains from the mid-1990s helped Thailand’s machinery industry to concentrate its resources in the production processes where it had strengths, thus improving productivity, while importing more intermediate goods and services. However, as Thailand becomes a high-income country, its manufacturing sector will need to upgrade the value added content of its products. Since, modern manufacturing needs a lot of sophisticated services contents, such as R&D and maintenance, improving the productivity of the Thai manufacturing sector requires not only upgrading the production processes in manufacturing but also the modernisation of the Thai services sector (see Chapter 3).

Thailand has significantly invested a lot in human capital, with the goal of improving well-being, inclusiveness and productivity growth. Substantial progress in access to education has resulted in better quality of labour input and is contributing to higher economic growth despite the shrinking labour force (Asian Productivity Organization, 2019[34]). Nevertheless, a swathe of challenges remains, in particular a significant imbalance between the supply and demand for skills. The labour market is already facing substantial shortages in a range of occupations and industries (see Chapter 2), and these shortages will worsen in the future as fast population ageing will decrease the supply of talents, and fast technological change will affect deeply the mix of skills needed by employers. This would also aggravate income inequality. Getting the right supply of skills to address present and future shortages of talents would unleash people’s potential and support buoyant long-term inclusive economic growth.

**Improving the business environment is key to boosting productivity**

Enhancing competition in product markets can bring benefits to consumers, strengthen productivity, and improve export performance. Thailand’s competition framework has been appropriately revamped in recent years, but more could be done. In 2017, Thailand revised its competition law in line with international standards, including the elimination of an exemption for unincorporated state-owned enterprises (SOEs), most of which are in the services sector (OECD, 2018[3]). However, the scope of SOEs and the public interest exemption are still vaguely defined in the Trade Competition Act, and could be clarified (OECD, 2020[36]). As SOEs play a large role in some sectors, notably in services, further efforts are needed to level
the playing field. In Thailand, private firms can compete with SOEs under the same terms and conditions with respect to market share, products/services, and incentives in most sectors, including public procurement, but there are some exceptions, such as fixed line operations in the telecommunications sector (OECD, 2020[37]). Utility sectors, such as power, natural gas purchase and distribution, and water supply, are also dominated by SOEs, regardless of recent efforts to open these areas to competition through private investment (Asian Development Bank, 2015[38]). More could be done to reduce the favourable treatment of SOEs, such as the exemption of signboard tax (a tax imposed on any signs or billboards which display a name, trademark or product) (OECD, 2020[37]) and corporate income tax on unincorporated SOEs, although unincorporated SOEs need to transfer part of their profit to the government.

Foreign direct investment (FDI) is an essential source to boost productivity. Driven by FDI, Thailand has become one of global hubs of the automobile industry and a major exporting country. Nevertheless, Thailand is now faced with severe competition from neighbouring countries in attracting FDI (see Chapter 3). As investment rules are stricter than in those countries, particularly in the services sector, which is becoming more important for the economy, easing them could reinvigorate inward FDI (OECD, 2020[39]).

Special Economic Zones (SEZs) have been deployed to modernise Thailand's industrial structure and regain competitiveness. The SEZs are expected to develop several selected sectors, known as First and New S-Curve industries, through targeted FDI and intensified value chains with the clustering of economic activities in a certain geographical area. Thailand designated several SEZs in different locations with specific purposes. In 2016, the government set out a flagship SEZ, the Eastern Economic Corridor (EEC) in the three provinces along the east coast area. The government provides tax incentives and other privileges to both domestic and foreign firms investing in SEZs. Moreover, some restrictions on FDI are waived upon approval by the authorities. SEZs can be considered a useful instrument to experiment with structural reforms, which are sometime difficult to implement at the national level at the outset. Nevertheless, this approach confines activities of domestic and foreign firms to SEZs or in their vicinity. Regulatory and administrative reforms which prove to be conducive to promoting productivity and job creation in special economic zones therefore should gradually be extended to the rest of the economy. On the other hand, extending tax incentives to wider areas would result in tax revenues losses, which should be weighed against the potential economic gains.

Thailand has drastically improved its business environment for the past years. These reforms aim at delivering an operating framework for effective legislative drafting processes (OECD, 2020[40]). The new 2017 Constitution includes Section 77 that requires the use of good regulatory practices, including ex ante Regulatory Impact Assessments, stakeholder consultation and ex post review. In addition, the Act on Legislative Drafting and Evaluation of Law B.E. 2562 (2019) was enacted to strengthen Regulatory Impact Assessment (RIA) and to introduce mandatory consultation with stakeholders prior to the introduction of new regulations as well as when repealing or amending existing ones. Nevertheless, more could be done. Thailand’s laws and regulations are rarely repealed, thus increasing the stock of laws and regulations when new ones are introduced. Many laws and regulations are outdated, resulting in obstacles to do business and sometimes cementing vested interests. To address this problem, in 2017, the government launched a “Regulatory Guillotine” and “Simple and Smart Licence” programme under the leadership of the Office of the Prime Minister. The programme aims at revising or repealing any legal acts that are no longer necessary to ameliorate the business environment. Accordingly, Thailand’s ranking in the World Bank’s Ease of Doing Business Index improved drastically, from being placed 48th out of 190 economies in 2017 to 26th in 2018 (Figure 1.27). Nevertheless, there is room for further improvement. The on-going second phase focuses on reviewing national licenses and permit requirements. As the phase moves forward, implementation is becoming more difficult as all low hanging fruits have already been taken. Therefore, continuing the review process with an effective implementation scheme is crucial. Enhancing transparency of the planning and implementation process will sustain strong momentum and strengthen engagement with various stakeholders.
Better intellectual property rights (IPR) protection would stimulate private R&D investment. Thailand aims at increasing R&D investment, which has become more essential for economic growth. Since most R&D investment comes from the private sector, especially foreign firms, intellectual property rights protection is one of the most important aspects of the business environment (Figure 1.28). To this end, the ASEAN Economic Community (AEC) Blueprint 2025 encourages member countries to promote an intellectual property rights policy that is supportive of innovation, including the strengthening of IP Offices. Moreover, IPR protection has become more important in the age of digitalisation, in which the marginal cost of copying is virtually zero. Better protection of IPR is also essential to promote innovative research activities in higher education institutions.

Overall, Thailand is on par with regional peers in terms of intellectual property rights protection, but lags behind Malaysia and China in the area of copyright piracy (Property Rights Alliance, 2019[4]). The government has made several efforts to ameliorate the situation. After acceding to the Patent Cooperation Treaty in 2009, it joined the Madrid System, an international trademark protection scheme, in 2017, and is currently planning amendments of Copyright Act B.E. 2558 (2015) to improve its consistency with international standards. Progress was made by the amended Customs Act B.E. 2560 (2017), which contains stricter punishments on the cross-border trade of pirated goods. Nevertheless, a lot more has to be done. Particularly, the government could further strengthen its enforcement mechanism through better inter-agency co-operation under the initiative of the National Committee on Intellectual Property and the Subcommittee on Enforcement against intellectual property infringements, including the Customs Department. Given the increasing importance of the issue, the capacity of IP Offices should also be enhanced further.
More investment in public infrastructure is needed

High quality public infrastructure can have a positive effect on economic growth through lower transportation costs, which would promote economies of scale, network externalities and enhanced competition. Particularly in Asia, the quality of infrastructure is crucial to join global value chains (GVCs) together with market reforms in the GVC-related sectors, such as logistics services. As Thailand is at the centre of the east–west and north–south highway and rail corridors within the Greater Mekong sub-region, connecting Cambodia, China, Laos, Myanmar, Thailand and Viet Nam, well-organised infrastructure that connects cross-border and domestic transportation networks would help Thailand act as an integral regional hub. Moreover, better infrastructure is conducive to broader social inclusion amid the persistent regional economic and social disparities in Thailand.

The overall quality of infrastructure of Thailand is comparable to regional peers, though it lags behind Malaysia (Figure 1.29), especially railways infrastructure, which has suffered from underinvestment (Asian Development Bank, 2015[38]). Moreover, because of lack of sufficient public transportation systems, urban transport heavily relies on passenger cars, resulting in massive congestion and air pollution. This brings about longer commuting time and worsening air quality, thus hampering business activity and people’s health and well-being. These deficiencies make it important to invest public infrastructure at the appropriate level. Even including public-private partnerships (PPPs), the share of infrastructure investment in GDP is currently lower than that of regional peers.
Thailand has made efforts to improve its infrastructure. In Bangkok, public rail transit has expanded gradually since the first elevated train opened in 1999. In 2016, the government approved a Bangkok Mass Transit Master Plan to expand the network further within Bangkok and to its vicinity areas, which will extend the total length from 153km (as of 2019) to 508km by 2029. A high-speed rail link project is envisaged to connect the Eastern Economic Corridor (EEC) to Bangkok. Because a significant portion of the infrastructure projects will be implemented as PPPs, an assessment of risk sharing is crucial to avoid unexpected delays and to prepare for any adverse changes in the economic environment, which would undermine the project's value (ITF, 2008[42]). Thailand’s PPP framework is considered supportive and conducive. It came out on top out of 69 emerging countries in the 2019 Infrascope Index (The Economic Intelligence Unit, 2019[43]). Nevertheless, strengthening information disclosure further, including e-access to project documentation, would help private partners to manage risks, while also helping the government to consider the potential size of contingent liabilities. Moreover, as infrastructure investment increases property values of neighbouring areas, the recently introduced property tax will become a useful tool to capture and redistribute economic gains from infrastructure development.
Box 1.5. Seeking for a better practice in PPPs

Chile’s experience – A dispute resolution scheme and a present value-of-revenue (PVR) contract

Chile has utilised PPPs intensively to develop infrastructure, such as highways. Learning from the past failures by itself, it has developed one of the world’s most sophisticated policy frameworks. Chile placed 2nd in the 2019 Infrascope Index, and its score in “renegotiations” dimension was 100 (the best is 100 and the worst is 0), where Thailand’s was 33.

In PPPs, a renegotiation of contract conditions can occur because contract durations are usually much longer than ordinary policy cycles, which would entail moral hazard both in governments and in concessionaires. Moreover, weaker-than-expected demand could also trigger a renegotiation of agreed contract conditions. Since renegotiations are often bilateral and less transparent, they would add additional costs to government finance and sometimes end up with corruption.

Chile amended its PPP law in 2010 to implement two major policy changes. First, it established the Technical Experts Panel, an independent board to review renegotiation disputes, which can issue non-binding recommendations of arbitration within 30 days after an open hearing. Besides, any additional works agreed in renegotiations must now be put out to tender, but the incumbent concessionaires are excluded. Comparing the periods before and after the 2010 reform, the incidence of renegotiations occurring during construction periods dropped drastically from 26-28% to below 1% concerning transport investment.

Since 2006, Chile has expanded its use of present value-of-revenue contracts in addition to fixed-term contracts. In a present value-of-revenue contract, the government sets a discount rate and a fee schedule, then a bidder who presents the lowest present value of revenue can obtain the concession. Contract terms are not pre-determined, but continue until the accumulated revenue meets the initially contracted amounts. Renegotiations under present value-of-revenue contracts have occurred less frequent than under fixed-term contracts, 6% and 57% respectively during the periods of construction and the first eight years of operation together. Although present value-of-revenue contracts are useful for infrastructure with exogenous demand risks, they are less useful for the other types of projects, such are railways and airport operations, as the scheme provides no incentives for concessionaires to increase demand.

Source: (Engel, Fischer and Galetovic, 2020[44]).

Denmark’s State Guarantee Model for large-scale infrastructure projects

PPPs are not extensively utilised in Denmark compared with other European countries. Nevertheless, it has developed a unique approach to infrastructure projects with huge financial risks mostly associated with varying demand. A few large-scale transportation links has been built by using this model, notably the Storebælt fixed link (18 km) connecting Zealand and the island of Funen, where Copenhagen is located.

In the Danish model, the government sets up a 100% state-owned company specific to a project, i.e. a special purpose vehicle. The state-owned entity can, however, run the designated project independently from the government, except for the setting of toll charges due to their wider social implications. As the project is treated completely as off-budget, the revenue from toll charges covers all project costs, including operation, maintenance and improvement. The payment period is set for shorter than the lifetime of the infrastructure: normally 30-40 years against more than 100 years of the facility’s lifetime. This approach has some advantages as it makes risk allocation more discernible among related parties.
Compared with a project directly funded by governments, the designated state-owned company can optimise the whole operations of the project.

This scheme also gives an incentive to prolong the lifetime of the infrastructure concerned, while a private entity with a fixed-term PPP contract does not have such an incentive.

Moreover, the government guarantee allows the state-owned company to lower various project costs, including borrowing costs.

Design, construction and inspection of the project, where the private sector has expertise, are contracted out to them, under the supervision of the state-owned company.

However, in order to maximise these benefits, it is important to monitor regularly the performance of state-owned companies together with giving them clear financial targets. For the state-owned company to enjoy lower financial costs, the credit rating of the government itself should be sufficiently higher, which is sometimes a difficult condition for developing countries. It is also crucial to avoid unnecessary political interferences.

The Danish model has also been applied to some international transportation projects, which connect Denmark with Sweden (the Oresund fixed link, 16 km) and Germany (the Fehmarn Sund fixed link, 18 km).

Source: (Holm and Horstmann Nielsen, 2018[45])

Fostering the digital economy can also help boost productivity and social inclusion. The COVID-19 outbreak has revealed that robust internet infrastructure is indispensable for a range of socio-economic activities from businesses to education. For example, in Thailand, in the second half of March 2020, the download speeds of mobile services decreased by 10-20% compared with the previous weeks (Opensignal.com), while data use, such as demand for online delivery services, increased due to the confinement. To make certain that the benefits from the digital economy are spread across all individuals and businesses, the government must ensure that reliable and affordable access to digital networks and services is appropriately provided. As part of the 20-year Thailand Digital Economy and Society Development Plan, launched in 2016, the government has implemented a number of initiatives. It became the first ASEAN country to introduce 5G technology in 2020, though starting with a few areas. Nevertheless, further efforts are needed. While the gradual expansion of competition in the mobile telephone market has lowered the price of mobile services (Figure 1.30), pushing up the subscription rate of mobile phone to above 100% (although the smartphone penetration rate is likely to be much lower), the usage of the Internet is lower than in some neighbouring peers, such as Malaysia and Viet Nam (Figure 1.30). Making sophisticated digital devices and services more affordable, through enhanced competition and public-private partnerships in infrastructure investment, would help ameliorate the situation.
The potential of SMEs is still untapped

The share of SMEs in the economy varies among the ASEAN countries, and Thailand is in the middle of the range. Although the definitions are slightly different, in 2011, the share in employment was 76.7% in Thailand and the highest Indonesia was 97.2%, while the lowest Viet Nam was 51.7%. The share in GDP was 37% in Thailand; the highest Indonesia, 58%; the lowest Brunei Darussalam, 23% (2008) (OECD, 2018[46]). Particularly, in Thailand, micro- and small-sized enterprises (MSEs, less than 50 employees) account for a large and rising share of employment (Figure 1.31). On the other hand, large-sized enterprises have the lion’s share in GDP, a sign of a dual economy. Moreover, there are more than 1 million SMEs, most of them engaging in agriculture-related activities (OECD, 2011[47]). However, excluding SMEs engaged in agriculture, the value added created by small-sized enterprises grew faster than that of other firms. This implies that SMEs are an important source of economic growth in Thailand. Thus, addressing the obstacles for SMEs to grow and unleashing their potential would stimulate the overall economy and support socio-economic development.

SMEs are severely affected by the COVID-19 crisis in Thailand like in other countries. Among SMEs, the retail trade and services sectors account for more than 80% of establishments. These sectors, which include retail trade vendors and restaurants heavily reliant on tourism, are severely hit by weak demand and strict health measures. The government adopted a number of emergency support measures, such as loan payment holiday and soft loans. As SMEs are essential driving force of the economy, supporting viable SMEs during the crisis and the recovery phase by unleashing their potential is crucial (see above).
In Thailand, reviewing size-dependent policy measures would be useful. Firm-level research points to threshold effects, whereby firms are reluctant to grow above 50 and 200 employees (Paweenawat, Chucherd and Amarase, 2017[48]). This suggests that some size-dependent policies applicable to SMEs would hinder their growth beyond a certain threshold, although these policies provide SMEs with incentives to expand their businesses. As the definitions of SMEs vary across policies, it is difficult to pinpoint which policy measures discourage SMEs to grow. However, for example, depreciation allowances of business assets are different between general companies and SMEs, the latter of which are defined as a company or juristic partnership with fixed assets (excluding land) of no more than THB 200 million and with no more than 200 employees. SMEs with annual turnover less than THB 1.8 million are exempted from VAT. Moreover, a lower corporate income marginal tax rate could also be considered to avoid discouraging expansion. In Thailand, SMEs with paid-up capital below THB 5 million and an annual income below THB 30 million qualify for a reduced corporate tax rate of either 0%, 15% or 20%, depending on their net profit (THB 1-300 000, 300 000-1 million and over 1 million, respectively), while the standard tax rate is 20%. Besides, a better environment for e-commerce and access to GVCs would also help SMEs to grow (see Chapter 3). Trade facilitation measures promises to be one of the most impactful. A simpler tax regime would also help reduce informality.

Enhanced public sector integrity will help improve the overall business climate

Inefficient public services thrive under a corrupt environment, and thus increase the costs of doing business, hindering efficient resource allocation. Therefore, many countries, including Thailand, are combatting corruption to achieve higher public integrity, which is an essential foundation of high economic growth. Strengthening public integrity would also help the government raise more tax revenues and improve inclusiveness.
Figure 1.32. Thailand needs to strengthen its anti-corruption framework

Note: Panel B shows the point estimate and the margin of error. Panel D shows sector-based subcomponents of the “Control of Corruption” indicator by the Varieties of Democracy Project.

Source: Panel A: Transparency International; Panels B & C: World Bank, Worldwide Governance Indicators; Panel D: Varieties of Democracy Institute; University of Gothenburg; and University of Notre Dame.

Figure 1.33. Thailand has stepped up anti-money laundering measures

Note: The anti-money laundering measures show ratings from the FATF peer reviews of each member to assess levels of implementation of the FATF Recommendations. The ratings reflect the extent to which a country’s measures are effective against 11 immediate outcomes. “Investigation and prosecution¹” refers to money laundering. “Investigation and prosecution²” refers to terrorist financing.

Thailand has stepped up its anti-corruption policy framework in recent years. In 2003, Thailand adhered to the UN Convention against Corruption (ratified in 2011). Although Thailand is not yet a signatory of the OECD Anti-Bribery Convention, bribery of foreign public officials is an offence in the Organic Act on Anti-Corruption B.E. 2561 (2018). Thailand also displays a generally high-level of political commitment to combat money laundering and terrorist financing (The Asia/Pacific Group on Money Laundering, 2017[49]). The Parliamentary Committee on Corruption Suppression and Prevention was re-established in 2019 for the first time after its 5-year absence, and has been investigating over 130 cases.

In Thailand, various institutions are responsible for integrity policies, weakening enforcement through overlapping and conflicting mandates (OECD, 2018[50]). Therefore, enhanced inter-agency coordination would strengthen corruption prevention and enforcement mechanisms. In the case of anti-money laundering and counter-terrorist financing, the role of the Anti-Money Laundering Office has been strengthened significantly, as it took over the supervisory functions dispersed among the Bank of Thailand, the Security Exchange Commission and the Office of Insurance Commission (The Asia/Pacific Group on Money Laundering, 2017[49]). Improving coordination among anti-corruption and public integrity agencies while maintaining a solid independence of the National Anti-Corruption Commission (NACC) would improve the effectiveness of integrity policies. The NACC is an independent anti-corruption agency established by the 1997 Constitution with a preventive and an investigative mandates. In addition to the NACC, the Public Sector Anti-Corruption Commission (PACC) has the mandate for corruption investigation in the public sector. Running investigations by one single institution, independent from the executive branch, may increase coherence and efficiency of investigations, and strengthen data security. Strengthening the investigative power should also be associated with enhanced independence. Currently, the appointment of the NACC’s nine commissioners is based on the advice of the Senate from persons selected by the Selection Committee. Thailand may strengthen the merit-based system for appointing NACC commissioners. In turn, corruption prevention policies in the public sector would benefit from consolidating the mandate within the PACC, which has a high level of trust within the executive branch. Moreover, given the high presence of SOEs in Thailand, the OECD Guidelines on Anti-Corruption and Integrity in State-Owned Enterprises (OECD, 2019[51]) would provide a good framework to review the anti-corruption measures related to SOEs.

Enhancing whistle-blower protection would strengthen the social deterrent to corruption. As dedicated legislation ensures a more comprehensive degree of protection than the one stemming from various laws, a growing number of OECD countries have a specific legal framework (OECD, 2018[50]). In Thailand, although whistle-blower protection is partially covered by the Executive Measures in Anti-Corruption Act, B.E. 2551 (2008) and the Penalty in Witness Protection Act, B.E. 2546 (2003), there is no dedicated legislation. Thailand could consider developing a single dedicated law to protect whistle-blowers. In particular, introducing a broader interpretation of the term whistle-blower would make it possible to offer protection to a larger number of individuals, including former employees, consultants and temporary employees of SOEs.

**Making agriculture more sustainable and productive**

Although advancing as a manufacturing exporter, Thailand remains one of world’s largest producers in agricultural and fishery products, such as natural rubber and cassava. Boosting productivity of agriculture while making it more sustainable will, therefore, help improve the overall economic and environmental performance. Moreover, as agriculture is concentrated in a few regions, improving the sector’s productivity would also help ameliorate income inequality among regions.

Pursuing sustainable farming is conducive to stronger productivity in the long run. As a case in point, Thailand’s yield of natural rubber is much higher than those of other peers, but has stagnated recently due to less sustainable farming. Amid the commodity boom, Thailand rapidly expanded the cultivation of natural rubber in the past decades. Nevertheless, new plantations from the beginning of the 2010s sprawled to
less suitable lands and the subsequent price decline in the early 2010s led to poor management of cultivation (Figure 1.34) (the gestation period of rubber tree is 5-7 years and the yield declines after 30 years). Against this background, in 2019, the government approved a first 20-year plan for the rubber industry that aims to reduce rubber plantations by 21%, which is a useful first step. To maintain the long-term soil fertility, appropriate land use policies would be useful for the agriculture sector based on scientific evaluation of each region’s environmental and natural conditions. Moreover, to make the Thai fishery more sustainable, the government has stepped up its efforts to combat illegal, unreported, and unregulated fishing, through the introduction of sanctions. Rigorous implementation and enforcement are crucial to this end.

Better adaptation to climate change is urgently needed to enhance the economic resilience of Thailand’s agriculture. One of the imminent threats is frequent occurrence of severe floods and droughts, which have disrupted production significantly, and makes farmers more vulnerable to market fluctuations. The long-lasting drought in 2016 reduced sugar cane production almost by 10% (in weight term): the overall economic cost of the drought was estimated at 0.3% of GDP (Guha-Sapir et al., 2017[52]). Since 90% of freshwater is used by the agriculture sector, the improvement of water management, including an appropriate investment in irrigation/drain systems, is crucial (see below), in addition to the deployment of advanced technologies, such as drought- or submergence-tolerant varieties and precision farming.

To improve profitability, a wide range of reforms have been conducted. Some intervening policies, such as price supports, have been eliminated gradually, while encouraging farmers to shift to higher value-added products. Thailand used to be the world’s top rice exporter. However, due to weakened price competitiveness, it is now the second to India and Viet Nam, the third top producer, is catching up by raising productivity. With the aim of reducing low-productivity rice farming, in 2017, the government started a new programme that provides financial support to organic farming. To improve land productivity further, in addition to improved infrastructure, including soft one, such as early weather warning and the dissemination of modern techniques, tackling the issue of prevalent smallholders, who are rapidly ageing, is crucial.

Strengthening the connection with the downstream industry would help the agriculture and fishery sector to diversify its products and improve product qualities. As it aims for a “kitchen of the world”, Thailand has a competitive edge in food processing (see Annex 3.B). Nevertheless, the industry may not fully exploit the expansion of the upstream agricultural sector: the value-added share of food processing has been relatively smaller than that of agriculture and stable for the past decade in Thailand (Figure 1.35). In many countries, the lack of competitiveness and capacity in their food processing industries limits the expansion of agriculture, innovation and export capacity in the food system, while in the United States and the Netherlands, the diverse and competitive food processing sector has contributed to agro-food production and export growth (OECD, 2019[53]). Thailand would strengthen its food processing industry through supporting start-ups and encouraging research collaboration among SMEs, academia and foreign affiliates. As Thailand’s agricultural products are more diverse, from rubber to raw materials for biofuel, it would give more business opportunities for the food processing industry and beyond with positive feedbacks to the agriculture sector. In early 2020, the government approved the first action plan of the Food and Food Processing Development Plan 2020-2027 aiming at strengthening business-research collaboration, which is the right direction.
Figure 1.34. Land productivity of natural rubber has declined

Source: FAO.

Figure 1.35. Thailand's food processing industry could thrive more

As a percentage of total value added in all sectors

Source: OECD, Trade in Value Added (TiVA) Database.
### Table 1.12. Past OECD Recommendations on structural policy

<table>
<thead>
<tr>
<th>KEY RECOMMENDATIONS</th>
<th>MEASURES TAKEN SINCE MARCH 2018</th>
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</table>
| Invest in lifelong learning and skills training.                                   | - The Ministry of Higher Education Science Research and Innovation (MHESI) was established in 2019 to promote, support and supervise higher education, science, research and innovation policies, including human capital development.  
- The Engineering, Technology and Innovation Workforce Development Project, also known as the KOSEN Project, started in 2019 to meet new labour market demands through the development of practical engineers and technicians.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Upgrading business skills and foster greater ICT use in agriculture.               | - The Office of National Higher Education Science Research and Innovation Policy Council (NXPO) under the MHESI has conducted since 2019 a survey on job positions and their corresponding functional competencies in the 12 target industries to formulate a skills development policy for the next five years (2020-2024). The survey covers the advanced agriculture and biotechnology sectors.  
- To mitigate the impacts of the COVID-19 outbreak, the MHESI launched in 2020 a platform, the Future Skill New Career Thailand, to facilitate the up-skilling and re-skilling of unemployed workers and other affected people. The platform includes curricula for smart farming techniques.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Boost public R&D spending to no less than 1.5% of GDP by 2021, as planned.         | (R&D investment increased to 1.1% of GDP in 2018 from 0.5% in 2013.)  
- The Ministry of Higher Education Science Research and Innovation (MHESI) was established in 2019 to promote, support and supervise higher education, science, research and innovation policies with a better coordination among private, academic and public partners.  
- The Board of Investment (BOI) adopted in 2019 a new Thailand Plus incentive package to strengthen research and development capacity. The policy measures include additional corporate tax exemption allowance of expenses or investment in STEM training of students and in providing employee training relating to the targeted technologies  
- The Policy and Strategy for Higher Education, Science, Research and Innovation 2020 - 2027 was adopted. This defines the objectives and key results for the seven granting bodies for research and innovation, the Programme Management Units.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Create a special lower-cost bourse in the Thai stock exchange.                     | - Live Fin Corp Company Limited, a subsidiary of the Stock Exchange of Thailand (SET), launched in 2020 a web-version of the LiFE Platform, a business platform for start-ups, which aims at providing start-ups with business knowledge and fundraising opportunities through crowdfunding. The platform also intends to offer start-ups opportunities to pitch their products and services. The platform’s fundraising facility has been in the process of compliance with required regulations, operational system development and communication with related parties. This process is expected to be completed in 2021.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Ensure effective co-ordination across existing agencies responsible for SMEs development and promotion in the delivery of financial and other support. | - The budget allocated for the Office of Small and Medium Enterprises Promotion (OSMEP) responsible for SME policies increased (THB 1.23 billion in Fiscal 2018 and THB 1.25 billion in Fiscal 2019) in the past years. The programmes of the OSMEP include the continuation of the SME Regular Level programme, which provides SMEs and start-ups with business knowledge and consultations.  
- The Thai Securities and Exchange Commission (SEC) amended related regulations in 2020 to allow SMEs to offer shares to new investors in the form of convertible debentures with a cap of ten investors and not exceeding THB 20 million.  
- A range of support measures have been implemented to support SMEs amid the COVID-19 outbreak, including soft loans and tax deferral.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Review regulations on foreign business operations including restrictions on foreign firms’ entry and movement of people. | - The Eastern Economic Corridor (EEC) Act was enacted in May 2018, which includes rules to govern expats working in the EEC area and to facilitate foreign investment through a range of incentives.  
- The Foreign Business Commission reviewed in 2019 the list of restrictive business categories in the Foreign Business Act, and identified four additional activities (telecommunications business, treasury centre, aircraft maintenance and high value-added software development activities) to be removed from the list.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

### Addressing informality would benefit growth and well-being

Despite significant social progress, regional inequalities continue to prevail and have recently increased: between 2015 and 2018, the incidence of poverty has increased at the national level from 7.21% to 9.85%, but not in Bangkok where it declined from 2.01% to 1.41% – a sign of rising urban-rural divide. Moreover, labour informality is pervasive. Progress has also been made in gender equality, but it is still uneven. The
government acknowledges that addressing social issues would contribute to improving human capital, resulting in a better well-being of people as well as higher productivity growth. The COVID-19 outbreak hitting vulnerable people harder underscores the importance of these policy issues.

**Reducing informality would bring multiple benefits to the economy**

In Thailand, although social protection programmes is comprehensive (see above) (OECD, 2017[54]), most workers tend to stay out of the system, as their employers or workers themselves (in case of self-employed) avoid taxes and other government regulations to minimise short-term business costs. This has a wide range of socio-economic implications, including persistent inequality. Informality is associated with occupational health hazards, a lack of investment into workers’ human capital and reduced tax revenues, amongst others. As informal firms tend to be smaller to stay under the radar of government enforcement, it is an impediment to productive use of human capital and efficient resource allocation, which results in lower productivity. Therefore, curbing labour informality is most crucial for Thailand (Figure 1.36).

**Figure 1.36. Informality remains high and is concentrated in agriculture and services**

According to other countries’ experiences, a four-pillar approach would be effective to reduce informality (OECD, 2018[55]):

- Equipping the workforce with skills and reducing skills mismatches. This would help informal workers to find formal jobs and informal firms to improve profitability. Thailand exhibits considerable skills shortages in several occupations and sectors (see Chapter 2). In addition to the reforms in education, Thailand needs to enhance access to re-skilling and up-skilling opportunities for workers by reinforcing its vocational education and training programmes.

- Lowering the costs of formality. Thailand’s employment protection legislation is stricter than the OECD average and more flexible labour market policies could help reduce informality. Moreover, more flexible product markets together with a more effective legal system and judiciary would encourage the creation of formal jobs. Reducing social contribution and lowering tax burden of formalisation are also effective policy tools, like in the case of Colombia.

- Improving the efficiency of enforcement. The effective enforcement of labour, tax, and social security regulations is the most crucial element in combatting labour informality. In Thailand, the enforcement of labour protection is weak. For example, the minimum wage regulation is not fully
applied to workers, despite its overall positive effects on employment. Improving public sector integrity would also help the enforcement of these regulations.

- Protecting vulnerable workers with an effective social protection system, which would encourage workers to formalise, so as to be part of the social protection net. A customised social security system that meets the needs of different informal groups would give more effective incentive for formalisation. For example, a special package for single people to contribute a larger amount of money in the Social Security Fund and get better returns in the retirement period would be useful for Thailand.

To this end, preparing a registry of vulnerable workers helps the government reach out to these people and tailor targeted policy measures. A number of vulnerable people have been registered for the COVID-19 Cash Handout scheme and the State Welfare Card in Thailand. These databases could be utilised to develop precision welfare measures, which would be more effective. The introduction of these policy measures would further be enhanced if implemented with efforts to raise awareness about these measures among those people.

Reducing informality would also benefit migrant workers. Thailand is one of the most popular destinations for migrant workers in ASEAN, mostly from neighbouring countries. Over 3 million migrants, approximately 10% of all employment, are working in Thailand. Immigrant workers are relatively young and active in many fast-growing occupations, implying that they are responsive to labour demand (OECD/ILO, 2017[56]). The agriculture sector, which requires a seasonal workforce, relies a lot on immigrant workers. Despite a significant presence of immigrant workers in Thailand, many of them are not covered by labour regulations and social protection schemes, including the minimum wage. This leaves immigrant workers in informal status with low wage (Dasgupta, Bhula-Or and Fakthong, 2015[57]), and dampens productivity growth, particularly in the primary sector, giving less incentives for firms to revamp their production processes. To address these problems, the government launched a regularisation process to promote formalisation and protection. So far, about 1.2 million people have completed their registration as immigrant workers. Nevertheless, the social protection coverage of immigrant workers remains narrower than that of Thai workers. For example, seasonal agricultural workers do not receive some basic benefits. Expanding the social protection of immigrants would make Thailand more attractive to productive immigrant workers. The government is also stepping up the efforts to eliminate human trafficking.

**Gender gaps still persist in some domains despite recent efforts**

Gender equality has made a steady progress in Thailand over the past years. In the 2020 Global Gender Gap Index (World Economic Forum), Thailand placed 75th out of 153 countries, lower than the Philippines, but higher than other regional peers, such as Indonesia, Viet Nam and Malaysia (Figure 1.37). The score has improved since 2006. Women represent a high share in management of large companies (28%), the second largest next to the Philippines (34%), out of 25 economies in 2019 (Credit Suisse Gender 3000 Report). Particularly, the policy framework has been revamped considerably in recent years. In 2015, the Gender Equality Act was adopted, which legally defines and prohibits gender discrimination. Moreover, the Constitution of the Kingdom of Thailand 2017 requires the equality of rights between men and women.

Nevertheless, further efforts are needed to narrow the gap, as Thailand does not perform well in some dimensions of gender equality. According to the Global Gender Gap Index, Thailand underperforms in political empowerment of women: it ranked 129th out of 153 countries in 2020 (Figure 1.37). This might partly stem from strong stereotypical attitudes about the roles and responsibilities of women and men in political life. In this regard, a number of countries, including some from the OECD have a political quota system at the subnational or national level, which would increase female political leadership, contributing to a reduction in overall gender discrimination in the long run.

Moreover, economic participation and opportunity for women could be further improved. Female labour participation in Thailand is on par with the OECD average (Figure 1.37). Nevertheless, alleviating various
gender-based disparities would reduce discrimination in the workplace, including with regard to recruitment and promotion. For example, while female employees are entitled to paid maternity leave, there are no legal entitlements for paternity leave, paid or unpaid, for male employees in the private sector. Furthermore, although aggregated data does not necessarily capture it well, it has been pointed out that the high concentration of women in the informal employment sector, including as domestic workers, has exacerbated gender inequality, as they are excluded from labour and social security protections, such as minimum wage protection, overtime compensation and maternity leave (United Nations, 2017[58]). This highlights the importance of paying more attention to gender perspective in formalisation. As female workers tend to stay informal, thus avoiding burdensome procedures, the formulation of formalisation measures should be more flexible and less bureaucratic in line with their needs and remove gender blindness by reaching out to those workers (Hearle, Baden and Kalsi, 2019[59]). Thailand’s annual survey of informal workers could be utilised as a good platform to collect necessary information.

Figure 1.37. Despite overall progress, Thailand lags behind in political empowerment of women

Note: The gender gap index scores from 0 to 1 where 0 means "large gap" and 1 means "no gap". Source: World Economic Forum, Global Gender Gap Report 2020; World Bank, World Development Indicators Database.

The COVID-19 crisis is an opportunity to make the economy greener

Thailand has made improvements in environmental performance and its policy framework. The emphasis has been given to the environmental issues in the government’s national development strategy for the past decades. The Promotion and Conservation of National Environmental Quality Act B.E. 2535 (1992) has been the main environmental law in Thailand. The government is now drafting a Climate Change Act, which is expected to be enacted by the end of 2020. The law will cover a wider range of cross-cutting issues and aim at involving multi-stakeholders, including both the public and private sectors. As sustainable development is also a high priority, it also steps up sustainable consumption and production. A new growth model, Bio-Circular-Green (BCG) model, has been promoted to underpin Thailand 4.0, which covers four industries: the food and agriculture industries; the medical and healthcare industries; bio-related industries; and the tourism and creative economy. The model aims at strengthening the overall sustainability capacity of these sectors, such as energy efficiency and environmental footprints, through advanced technology and innovation, while improving the quality of products and services.

Nevertheless, challenges remain, particularly in water and waste management, air pollution and climate change mitigation (OECD, 2018[3]), (OECD, 2019[60]). To regain strong growth after the COVID-19 crisis,
Thailand needs to spend more in growth-friendly investment. In particular, infrastructure that can green the recovery will also be able to transform the economy more efficient, health-friendly and climate-resilient. To this end, despite recent low oil prices, its ambitious targets to step up renewables energy capacity should not be undermined. Investment to enhance energy efficiency, including that of businesses, also needs to be encouraged on this occasion, as it has not shown improvement for the past decade (Figure 1.38, Panel B). Moreover, the crisis also reiterates the importance of the environmental protection in people’s well-being. Ambient air pollutants increase mortality, aggravating disease infection including COVID-19, which is also an irretrievable economic loss. On the other hand, according to the Air Quality Index (World Air Quality Project), air pollution in Bangkok, usually worse from winter to early spring, was better in March 2020 than in recent years, partly due to the confinement. The Index, which can show six different pollution levels, indicated “good”, the best score, for 12 days compared with six, eight and five days in 2019, 2018 and 2017 respectively in terms of PM2.5. Thailand could also pursue more sustainable and greener tourism (see Chapter 3).

Recurrent floods and droughts harm the resilience of local communities. In the past few years, the policy framework for water management improved significantly. The National Water Resources Act B.E. 2561 (2018) effective in 2019 has enhanced the mandate of the Office of the National Water Resources (ONWR). The ONWR serves as a secretariat of the National Water Resources Committee chaired by the Prime Minister, and is a key pillar of water resource management (including disaster prevention and recovery) at all levels of the government. In terms of water quality, improving wastewater treatment capacity at the local government level is duly needed, as Thailand has only 105 main household water treatment stations and some of them do not operate at full capacity. The lack of economic incentives to treat water also needs to be addressed. The government could utilise the new framework to strengthen the supports to local governments in adopting the polluter pays principle, including the enhancement of public awareness. Moreover, an economic instrument, such as collecting fees that reflect costs of water production, or charging the agricultural sector for water fees, could be considered. Better water management would also improve overall environmental quality of local communities, which embrace tourist attractions.

Air pollution remains worse in Thailand than in other countries (Figure 1.38, Panel D). Industrial activity, vehicle traffic in urban areas, agricultural burning in the Northern district and transboundary pollution are major sources of air pollution. The government has stepped up a range of policy measures to damage the harm, such as the extensive use of a Pollutant Release and Transfer Register (PRTR) system, which provides the public with data regarding the amount of hazardous chemicals and pollutants released to the environment. In 2019, the government decided to accelerate the introduction of more stringent emission standards for vehicles: Euro 5 and 6 will be applied from 2021 and 2022, instead of its original plan of 2023 and 2029. From January 2020, the excise tax on motorcycles is levied based on their CO2 emission level instead of their engine size. Moreover, the government is planning to review the national standards for air pollution in the coming years. The revision should be ambitious enough to follow an international standard, such as the WHO guidelines. A carbon tax is also useful to curb air pollution. Given low oil prices, Thailand could raise its excise taxes on fossil fuels once the economy fully recovers, which would also increase its tax revenue. To tackle Northern haze pollution, in 2019, the government established the Single Command System. This has strengthened coordination among central agencies and regional governments through the enhanced information sharing and swift interventions.

Policy tools for waste management could be further strengthened. Amounts of waste exceeding the collecting fee could be further strengthened. Amounts of waste exceeding the collecting fee, including the enhancement of source management (including disaster prevention and recovery), the government has launched a wide range of programmes, including the creation of mechanisms that increase the separation of household hazardous waste and recycling at the local government level. Moreover, to deal with the growing amounts of electrical appliances and electronics waste (e-waste), the government has drafted an enhanced producer responsibility (EPR) bill for e-waste. Introducing an EPR
law will be a strong tool to achieve the government's policy goal of waste reduction (OECD, 2016[62]). To this end, effective enforcement, particularly an appropriate licencing to qualified scrappers, will be the most crucial.

Thailand is also accelerating the management of plastic waste at source. Based on the Roadmap for Plastic Waste Management 2018-2037, it started banning single-use plastics from January 2020. Nevertheless, the COVID-19 outbreak has increased the amount of plastic waste due to the spike in the use of online delivery during lockdowns, which heavily relies on plastic packages, and single-use hygiene materials. On the other hand, the government’s National Waste Management Master Plan 2016-2021 aims at creating mechanisms to increase separation of household hazardous waste and recycling. Local governments including the Bangkok Metropolitan Administration are encouraged to operate waste separation. A survey in a Thai community suggests that enhancing public awareness and a strong social partnership by local governments are essential to promote waste separation (Charuvichaipong and Sajor, 2006[63]). The current health crisis should be used as a rare opportunity to raise public awareness in reducing plastic waste and wider recognition of separation for reuse and recycling, and to strengthen the initiatives of local governments.

To address the increasing carbon dioxide emissions while sustaining high economic growth, the government set out the Nationally Determined Contribution Roadmap on Mitigation 2021-2030 and aims at reducing its greenhouse gas emissions by 20-25% from the current level by 2030. To this end, the government updated its Power Development Plan (PDP) after the previous revision in 2015, with much emphasis on renewables. In the new PDP, renewable energy projects will occupy 37% of new power capacity by 2037, while the coal-fired power capacity will be contained to 12%. In 2017, the share of renewable energy in electricity generation, excluding hydroelectric, was around 11%, lower than the Philippines, but is rapidly growing (IEA, Electricity Information 2019). Currently, solar energy does not account for a large share in renewables, but the government intends to increase its capacity further. In Thailand, three state-owned-enterprises are sole buyers of renewables, and a feed-in-tariff scheme has promoted the expansion of renewables. To further facilitate renewables, stable electricity supply is crucial. Thailand needs to improve its grid capacity and develop storage technology, in addition to better weather forecasting technique. In addition to strengthening the excise taxes on fossil fuels, a broader usage of carbon tax like in Singapore would also be a useful tool in the long run.
Figure 1.38. Renewables are increasing

A. CO₂ intensity

CO₂ per GDP, kg/2015 USD

B. Energy intensity

Primary energy supply per GDP ktoe/USD (2015 PPP)

C. Renewable energy share

% of primary energy supply

D. Population exposure to PM₂.₅

µg/m³, 2017

E. Built-up area per capita

m² per capita

F. Forest coverage

% of land area

G. Environment-related inventions

% of all technologies

Source: OECD (2020), OECD Environment Statistics database (Green Growth Indicators; Patents); OECD National Accounts database; IEA (2020), IEA Energy Prices and Taxes database; World Bank, World Development Indicators database.
Table 1.13. Recommendations to macroeconomic stability, structural and social policies

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<tr>
<th>Findings (main findings in bold)</th>
<th>Recommendations (key recommendations in bold)</th>
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<tr>
<td><strong>Macroeconomic policy and fiscal sustainability</strong></td>
<td></td>
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<tr>
<td>The COVID-19 outbreak has severely hit economic activities, and growth is expected to be negative in 2020 and remain weak, while there is the high risk of a second wave of the pandemic.</td>
<td>Extend the emergency support measures to vulnerable households and SMEs, if the situation worsens. Strengthen the capacity of public health system including testing.</td>
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<tr>
<td>As high uncertainty about the future course of the outbreak and weak employment prospects weigh on confidence of businesses and households, the recovery will be slow, which would have a scarring effect on long-term productivity.</td>
<td>In the short run, maintain employment and stimulate demand. As the recovery becomes steady, boost the productive capacity of the economy by gradually shifting from income and employment supports to structural measures including the up- and re-skilling of workers.</td>
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<td>Although the government’s fiscal position has been healthy, spending needs will increase further if the COVID-19 outbreak worsens.</td>
<td>In case further spending is required, use the available fiscal space within the fiscal constraints, and ensure cost-effectiveness and transparency.</td>
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<td>Inflation has dropped sharply and is expected to be negative in 2020 before bouncing back to the lower bound of the target in 2021, with risks tilted to the downside.</td>
<td>Keep monetary policy very accommodative, and if downside risks materialise, reduce the policy rate further. Consider additional monetary policy tools, if interest rate cuts further narrow policy space.</td>
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<td>The tax-transfer system has little impact on income equality. Tax revenue collection is low and social spending is limited.</td>
<td>Improve tax compliance, particularly in the personal income tax. Once the solid economic recovery is restored, broaden the tax base, with a full implementation of the new property tax.</td>
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<td>Healthcare spending is expected to increase in tandem with the fast ageing society.</td>
<td>Undertake the planned healthcare financing reforms.</td>
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<td><strong>Boosting productivity</strong></td>
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<tr>
<td>The government provides tax incentives and other privileges to firms investing in SEZs and workers.</td>
<td>Gradually extend regulatory and administrative reforms in SEZs to the rest of the economy.</td>
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<td>Protection of intellectual property rights has been improved, but a number of challenges remain including the area of copyright piracy.</td>
<td>Strengthen enforcement of intellectual property rights protection regime further through better inter-agency co-operation.</td>
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<td>The growth of firms is hampered by too many, partly outdated laws and regulations.</td>
<td>Continue the on-going review of the existing laws and regulations with an effective implementation scheme.</td>
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<tr>
<td>Despite recent improvement, the quality and quantity of infrastructure remain insufficient.</td>
<td>Enhance the public-private partnerships scheme by disclosing sufficient information about projects.</td>
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<td>Preferential policies targeting SMEs adversely affect their growth.</td>
<td>Review size-dependent policy measures, including taxes.</td>
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<td>Various institutions are responsible for integrity policies, weakening enforcement through overlapping and conflicting mandates.</td>
<td>Improve coordination among anti-corruption enforcement agencies, while maintaining a solid independence of the National Anti-Corruption Commission (NACC).</td>
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<td>Whistle-blower protection is partially covered by separate laws.</td>
<td>Consider developing a single dedicated law to protect whistle-blowers.</td>
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<td>Rapid expansion of cultivation and poor management result in lower land productivity in agriculture.</td>
<td>Make land use for cultivation more align with its environmental and natural conditions.</td>
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<tr>
<td>International competition on productivity and product quality in agriculture has become severe.</td>
<td>Shift to more market-oriented policies and encourage farmers to cultivate higher value-added products, such as organic farming.</td>
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<tr>
<td><strong>Tackling inequality and informality, narrowing gender gaps and pursuing Green Growth</strong></td>
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<tr>
<td>Labour informality is high and female workers are concentrated in the informal sector, including as domestic workers.</td>
<td>Provide informal workers more training opportunities and make the workforce more equipped with skills in shortage. Lower the costs of formalisation by reviewing the stringent employment protection policies and preparing customised policy measures to the targeted people with enhanced awareness among vulnerable people. Improve the efficiency of enforcement of tax, labour regulations and social security through better coordination of responsible agencies. Reach out to female informal workers and make formalisation measures more in line with their needs.</td>
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<tr>
<td>Though improved, air pollution remains worse than in other countries.</td>
<td>Make the national standards for air pollution stricter in line with international standards. Consider increasing the excise taxes on fossil fuels, once the solid economic recovery is restored.</td>
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<tr>
<td>The policy framework for water management has improved significantly, but challenges remain, particularly in water quality.</td>
<td>Improve the nationwide wastewater treatment capacity. Use the enhanced mandate of the Office of the National Water Resources (ONWR) to strengthen the supports to local governments.</td>
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<td>Despite the introduction of the ban on single-use plastics, the amount of plastic waste has increased during the lockdown period.</td>
<td>Improve public awareness intensively by connecting the problem on plastic waste with the COVID-19 outbreak. Strengthen supports for local governments to implement waste separation.</td>
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<tr>
<td>The share of renewable energy production is growing, but still lower than in other regional peers.</td>
<td>To attain a sustainable high growth path, invest in green infrastructure, particularly strengthen the capacity of renewable energy production.</td>
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References


Asia Pacific Observatory on Health Systems and Policies (2015), The Kingdom of Thailand health System Review, WHO.


CCAF, ADBI and FinTechSpace (2019), The ASEAN Fintech Ecosystem Benchmarking Study.


Jangratsameekan, S. and E. Phijaisanit (2018), *An Assessment of Pre-Reform Property Tax Revenue in Bangkok Metropolitan Region and Post-Reform Implications.*


OECD (2019), *Innovation, Productivity and Sustainability in Food and Agriculture: Main Findings*


OECD (2017), Mechanisms for the Effective Collection of VAT/GST WHERE THE SUPPLIER IS NOT LOCATED IN THE JURISDICTION OF TAXATION.


OECD (2013), What Future for Health Spending?.

OECD (2011), Thailand: Key Issues and Policies, OECD Studies on SMEs and


