TOWARDS A SUSTAINED RECOVERY
ACKNOWLEDGEMENTS

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KEY INDICATORS

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
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<tr>
<td>Population (million)</td>
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</tr>
<tr>
<td>GDP (USD billion)</td>
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</tr>
<tr>
<td>GDP per capita (USD)</td>
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</tr>
<tr>
<td>Poverty headcount ratio – national poverty line (% population)</td>
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</tr>
<tr>
<td>Poverty headcount ratio – $1.90 a day (2011 PPP, % population)</td>
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</tr>
<tr>
<td>Poverty headcount ratio – $3.20 a day (2011 PPP, % population)</td>
<td>73.2</td>
</tr>
<tr>
<td>GINI index</td>
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</table>

Notes: Population and GDP data are for 2018. Poverty and inequality data are for 2014.
SUMMARY

RECENT DEVELOPMENTS

- The COVID-19 pandemic and renewed political instability have taken a heavy toll on the economy. The lack of a 2020 budget constrained public spending, while public health measures and voluntary changes in behaviour have weakened private sector activity. However, an economic response package – financed through a special fund – provided some relief to households and businesses.
- Following months of uncertainty, a political solution was found to avert a third election since 2017. A new majority coalition was formed in May – comprising PLP, FRETILIN, KHUNTO, and PD. Several new ministers were sworn in, and other political appointments have been made since then.
- Public expenditure declined by 7 percent in the first half of 2020, but would have fallen by 27 percent in the absence of ad-hoc COVID-19 expenses. Spending on capital projects was particularly affected. Domestic revenues suffered from lower economic activity and temporary relief measures (e.g. electricity subsidy).
- Inflation slowed to 0.4 percent in the second quarter of 2020, while the real exchange rate appreciated by 4 percent due to the strengthening of the U.S. dollar. Credit to the private sector grew by 3 percent in June (year-on-year), as lending to individuals continued to expand.
- Exports declined by 46 percent in the first half of the year, mainly due to lower travel services – the main export earner. Imports decreased by 20 percent, with services declining further than goods. The current account weakened due to lower primary (petroleum) income.

OUTLOOK AND RISKS

- Gross domestic product (GDP) is expected to contract by 6.8 percent in 2020 – the largest fall since independence – due to the combined impacts of COVID-19 and political uncertainty (earlier in the year). The recovery will be gradual, owing to economic scarring caused by the magnitude of the shocks.
- The global economic recession and lower demand for transport services are shaping the energy market outlook, which could influence decisions on the development of the Greater Sunrise petroleum fields. Reduced demand for liquefied natural gas, coupled with new capacity to be added by 2026, will likely contribute to subdued international prices.
- A second wave of COVID-19 infections is a key external risk to the outlook, while political instability remains the main internal risk. Strengthening health preparedness and building a durable political consensus are important preconditions for a robust and sustained economic recovery.

SPECIAL FOCUS: GROWTH-ENHANCING FISCAL POLICY

- Economic growth has decelerated sharply over the past decade, calling for a renewed economic strategy backed by strong political will. Fiscal policy is one of the main instruments available to policymakers to stimulate economic activity, but quality and sustainability considerations should prevail.
- Public expenditure levels have been very high since 2008, but have failed to support medium-term economic growth. Public spending is not engendering a process of private capital accumulation and productivity growth, which is necessary to accelerate and sustain economic activity.
- Enhancing the efficiency and effectiveness of public spending is essential to improve the impact of fiscal policy. Strengthening public investment management would help ensure that public funds catalyse private sector activity and generate acceptable economic and social returns.
- A moderation of key spending items – particularly within goods & services and public transfers – would release additional resources for growth-enhancing expenditures. Sound fiscal management supports macroeconomic stability, which is a necessary condition for sustained economic growth.
- Fiscal rules will encourage fiscal responsibility if they are set at prudent levels and are complied with. The Estimated Sustainable Income remains a strong benchmark and thus a path could be charted to ensure compliance within 3-5 years, ideally through a legally binding medium-term expenditure framework.
SNAPSHOTS OF 2020

Public health measures helped stem the spread of COVID-19, but a second wave remains a concern

Economic activity declined considerably due to both COVID-19 and a new political stalemate

Human mobility fell sharply in late March, but has progressively recovered

Air passenger arrivals plummeted, affecting exports of travel services and tourism-related sectors

Public expenditure decreased by 7 percent, despite strong spending by the COVID-19 Fund

Inflation decelerated further, notwithstanding strong increases in international rice prices

**Note:** With the ratification of the Maritime Boundary Treaty in August 2019, oil and gas fields previously shared between Australia and Timor-Leste in the Joint Petroleum Development Area (JPDA) transitioned to Timor-Leste's exclusive jurisdiction. With this change, offshore petroleum production is now considered to be part of Timor-Leste's gross domestic product (GDP), and therefore trade statistics. However, official statistics do not yet reflect these changes, which require detailed technical work. Therefore, the data presented in this report (e.g. national accounts and balance of payments) continues to follow the previous convention.
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This report uses innovative data to investigate the economic impacts of the COVID-19 pandemic. Timor-Leste is a relatively data-scarce country, which poses a considerable challenge for real-time evidence-based policymaking. Data on overall economic activity is published on an annual basis, household and enterprise surveys are infrequent, and administrative data is often inaccessible or incomplete. Proxy indicators are typically used to gauge recent economic trends. However, the breadth and depth of the shocks induced by COVID-19 call for the use of novel high-frequency data sources to better monitor their economic impacts. Therefore, this report uses data on human mobility (e.g. smartphone location data from Facebook), online and social media (e.g. news articles and Twitter), transport traffic (e.g. air and sea), and satellite imagery (e.g. night-time lights). These alternative sources of data provide a valuable complement to existing official statistics by offering additional insights on economic activity. Findings from existing COVID-19 surveys are also reported.

COVID-19 PANDEMIC

Public health measures and voluntary changes in behaviour helped stem the spread of COVID-19. The first case of COVID-19 in Timor-Leste was reported on 21 March, but the number of cases only increased significantly in the second-half of April (Figure 1). A State of Emergency was declared on 28 March and several public health measures were introduced to prevent an outbreak. These included restrictions on international travel, mandatory confinement for people entering the country, school closures, restrictions on gatherings, and rules on access to commercial premises (e.g. face mask, handwashing, and safe distancing). The swift implementation of these measures helped avert community transmission and thus the spread of the virus, with the country recording only 24 (imported) cases and no deaths by the end of July. Other factors also played an important role, such as voluntary changes in behaviour, the small population size, and relative geographical isolation.
A potential second wave remains a key concern from both health and economic perspectives. Restrictions have been gradually eased, especially in late May – as corroborated by the Oxford COVID-19 Government Response Tracker (OxCGRT). However, a few (imported) cases have been reported since August, raising concerns of a possible second wave. Timor-Leste shares a land border with Indonesia, one of the hardest hit countries in the East Asia Pacific region. Timor-Leste has one of the lowest COVID-19 incidence rates in the world – at about 20 cases per million inhabitants – but testing levels are also very low (Figure 2). Without a vaccine or effective treatment, the trade-off between easing restrictions (especially on international travel) and protecting lives remains a predicament for policymakers.

Public awareness of the COVID-19 disease likely played a role in preventing the spread of the virus. While television and radio are the main sources of information for households, data from online media shows a strong coverage of COVID-19. The number of news articles mentioning COVID-19 peaked in late March on the Tatoli website – the state-owned news agency (Figure 3). A similar pattern can be found in other online media outlets. However, media coverage has gradually declined through time, perhaps due to news fatigue – with the exception of early August, when a new case was reported after several months without cases. Google searches for COVID-19 (or related terms) peaked in March and April, as the outbreak accelerated worldwide and the first cases were reported in the country (Figure 4). This may reflect a growing concern from the population, whether seeking information about the virus or the country’s situation. Most searches were traced back to Dili and Bobonaro, a municipality bordering Indonesia. Public information campaigns remain vital to communicate risks, promote preventive behaviours, and announce planned health and economic measures.

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4 The OxCGRT produces a stringency index that measures the strictness of (containment) policies that restrict people’s behaviour – such as school closures, suspension of public transport, and international travel restrictions.
5 See the Special Focus of the TLER April 2020.
6 Several keywords were used, including ‘coronavirus’ and the colloquial ‘corona’. For Tempo Timor, relevant keyword searches did not yield results, so data was extracted from the ‘#COVID19’ category – which may explain the lower volume.
7 According to surveys conducted by The Asia Foundation (TAF) in May and July, most respondents (out of the 400+ adults interviewed) stated that COVID-19 was the biggest challenge facing the country, while reporting concerns over money, health and food.
Information shared on social media seems to have been mostly reliable, but misinformation can be harmful.

Social media data can provide vital information to support policymaking. Automated information analysis (including text mining) can sift through large amounts of data to provide insights on public awareness, sentiment, and socio-economic concerns. Data from Twitter shows a strong increase in COVID-19 tweets in March, with a visible decline since June (Figure 5). Most tweets provided reliable information, since about 85 percent of tweets had linked content judged to be from trustworthy sources (i.e. URLs pointing to reliable news and scientific sources). However, the number of Twitter users in Timor-Leste is relatively small, so inferences should be made with some caution. In fact, there is anecdotal evidence of misinformation – including the spread of false or inaccurate information on Facebook, the most used social media platform in Timor-Leste. Strong measures to tackle disinformation remain crucial.

Popular sentiment has improved, as the political impasse was resolved and COVID-19 contained. Machine learning techniques can be used to assess sentiment from Twitter posts (i.e. tweets), with values ranging from very negative (-1), to neutral (0) and very positive (+1). Data suggests an improving sentiment in Timor-Leste (Figure 6). The negative sentiment recorded in February may have been related to the political situation, while there has been a noticeable improvement since June. This is likely due to the resolution of the political impasse, as well as the lack of a COVID-19 outbreak and the roll-out of the economic relief measures.

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8 The COVID Infodemics Observatory uses automated software to analyse millions of daily COVID-19 tweets over time. Twitter volume relates to the number of Tweets about COVID-19 (or related terms), while the URLs in tweets are used to determine the trustworthiness of the linked content (i.e. reliability).

9 Moreover, the related Infodemic Risk Index (measuring the potential number of users exposed to unreliable news) is occasionally quite high.
The policy response to COVID-19 has been strong, although some economic measures were implemented with a lag. Several public health measures were enacted in late March, while there was a notable easing in late May – particularly regarding restrictions on gatherings, public event cancelations, and workplace closures (Figure 7). These measures may have prevented the spread of COVID-19, but they have had a profound impact on economic activity. Cognisant of this indirect effect, the Government prepared an economic response package to support people’s livelihoods and affected businesses – which comprised a $200 cash transfer to most households and a 60 percent wage subsidy for registered firms. This package was vital to mitigate expected income losses. However, some of these economic support measures came into effect later due to planning and implementation challenges. For instance, the cash transfer payment only started to be disbursed to households in June, nearly three months after the first State of Emergency.

Figure 7. Containment measures (sum of scores)

Figure 8. Government response index


The health response was appropriate and its timing was similar to other countries in the region. The public health measures introduced to tackle the public health threat were suitable to prevailing conditions and were not as severe as in other countries. Some countries implemented stay-at-home orders (i.e. lockdown) and imposed business closures, which would have been less effective in Timor-Leste – due to crowded housing and the need for physical transactions – and would have had a disproportionate impact on the poor. Most countries in the Southeast Asia region also implemented (strong) policy responses in late March (Figure 8). This was followed by a gradual easing of restrictions, although some countries have recently reinstated stricter measures. Looking forward, greater preparedness – from both health and economic perspectives – remains critical to minimise the direct and indirect impacts of the global COVID-19 pandemic.

About $123 million have been spent through the COVID-19 Fund, mostly on a cash transfer to households. An autonomous COVID-19 fund was created in April and allocated $150 million to finance urgent medical expenditures and economic relief measures. Its budget was increased to about $220 million in June. About $123 million were spent by the end of September, mostly on the economic response – perhaps highlighting that it takes time to build health preparedness. Disbursements from the fund started in May, mainly relating to a cash transfer to households (Figure 9).

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10 The Oxford COVID-19 Government Response Tracker (OxCGRT) compiles publicly-available information on 17 indicators of government responses: eight indicators on containment policies, such as school closures and restrictions on movement; five indicators on health policies, such as COVID-19 testing and investments in healthcare; and four indicators on economic policies, such as income support to citizens. Four indices are then constructed: (i) an overall government response index; a containment and health index; an economic support index; and a stringency index (which records the strictness of policies that restrict people’s behaviour).

11 According to the TAF survey (July), most interviewees found the government response appropriate (53 percent), while 30 percent found it too extreme.

12 The IMF’s report “The economic effects of COVID-19 containment measures” suggests that workplace closures and stay-at-home orders have been effective in curbing infections but are associated with the largest economic costs.
A purchase of imported rice to build food stocks accounted for most spending in June.\textsuperscript{13} Spending on health-related measures – such as purchases of medical supplies and equipment – has been comparatively low, perhaps explained by the difficulty in sourcing imports and the (in-kind) support provided by the international community (Figure 10). Other measures have either been implemented or are planned for execution (Box 1).

The economic measures had a positive impact, but implementation constraints may have undermined their effectiveness. The absence of high-frequency surveys makes it difficult to assess the impact of both the COVID-19 shock and the policy response on households and enterprises. A small-scale survey conducted by The Asia Foundation (TAF) in May suggested high levels of satisfaction with the electricity subsidy (93 percent), but less so with the ‘Eskola ba Uma’ (47 percent). A second round conducted in late July reported that only 63 percent of respondents had received the cash transfer. Other surveys suggest that the cash transfer programme was broadly successful in supporting household incomes.\textsuperscript{14} However, institutional, administrative, and technical constraints may have had an impact on the efficacy of the economic policy measures implemented. For instance, the lack of consolidated and (digitally) integrated administrative records likely undermined the implementation and effectiveness of some support measures. A timely monitoring of economic conditions is also crucial to improve decision making.

\textsuperscript{13} In addition to the cash transfer and rice purchase, spending on economic measures included $7 million on a wage subsidy, $5 million on a credit moratorium, and $3.9 million on utility subsidies (electricity and water).

\textsuperscript{14} For instance, a MDI-Oxfam survey of informal businesses reported an increase in sales after the cash transfer.
The COVID-19 Fund was established in April 2020 under law 2/2020 (6 April) and amended by law 5/2020 (30 June). Its objective is to finance preventative health measures – such as the acquisition of medical supplies and equipment, establishment of facilities for quarantine and isolation, and staff training – and well as economic support measures. The initial budget was set at $150 million, but subsequently increased to nearly $220 million.

The Government announced an economic response package on 17 April. The package included direct support measures, such as a $100 cash transfer to eligible households (i.e. with no individual members earning more than $500 per month) for two months, and a wage subsidy covering 60 percent of wages for eligible firms (i.e. registered with social security). Public utility customers also benefited from a $15 electricity credit for two months and a temporary water fee waiver. To build up food stocks, the Government purchased a three-month emergency supply of rice from Vietnam. The eligibility of a credit guarantee scheme originally designed for small and medium enterprises (SMEs) was extended to micro-enterprises and additional types of economic activities. Moreover, a moratorium on interest and repayment obligations was also agreed.

### Main Economic Response Measures

<table>
<thead>
<tr>
<th>Type of measure</th>
<th>Description</th>
<th>Budget (USD m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport connectivity</td>
<td>Airline subsidy to secure at least three flights a week between Darwin and Dili (10 weeks)</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>Maritime transport subsidy to secure the transport of goods between Dili, Atauro and Oecusse</td>
<td>0.1</td>
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<tr>
<td>Distribution of essential goods</td>
<td>Rice purchase to guarantee emergency stocks (30,000 tons)</td>
<td>17.0</td>
</tr>
<tr>
<td></td>
<td>Support for continuous (24h) cargo transportation between port and warehouse</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>Acquisition of inputs to support agriculture and aquaculture</td>
<td>5.0</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>Internet subsidy for students in secondary and higher education</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>Alert system (COVID-19 messages) to support contact tracing</td>
<td>0.3</td>
</tr>
<tr>
<td>Essential services</td>
<td>Electricity subsidy for consumers through a $15 (x 2 months) electricity voucher</td>
<td>7.7</td>
</tr>
<tr>
<td></td>
<td>Water fee waiver for households</td>
<td>0.3</td>
</tr>
<tr>
<td>Credit</td>
<td>Support for payment renegotiation, emergency lines, and guarantee for importers of essential goods</td>
<td>19.7</td>
</tr>
<tr>
<td>Direct Support</td>
<td>Cash transfer to households ($100 x 2 months)</td>
<td>66.9</td>
</tr>
<tr>
<td></td>
<td>Wage subsidy providing 60 percent of wages for registered firms (≈ 30,000 workers)</td>
<td>14.7</td>
</tr>
<tr>
<td></td>
<td>Social security exemptions for both workers and companies</td>
<td>2.4</td>
</tr>
<tr>
<td></td>
<td>Rent exemption on state property (≈ 4,000 lessees)</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>Student subsidy to cover the living costs of Timorese students abroad (≈ 3,500 students)</td>
<td>3.2</td>
</tr>
</tbody>
</table>

**Total** 139.9

Source: Compiled from the Ministry of Finance.
REAL SECTOR

Disruptions caused by COVID-19 produced multifaceted impacts on economic activity. The direct costs arising from the COVID-19 disease – from mortality and temporary absence from work – have been relatively low in Timor-Leste (Figure 11). However, the indirect costs have been very large. Public health measures lowered both the demand and supply of goods and services, while voluntary changes in behaviour also had a strong impact on economic activity – as consumers delayed spending and firms postponed investments. External conditions also affected the economy, albeit to a lesser extent. Transport disruptions impacted on (tourism and business) travel receipts and the sourcing of imports, lower global demand reduced coffee exports, and (commodity and asset) prices affected the Petroleum Fund balance. Moreover, renewed political uncertainty led to lower public spending and also contributed to reduce private demand – through lower consumer and business confidence. The construction sector was affected by the lack of a state budget, while the accommodation & food sector was impacted by international travel restrictions and lower household spending.

Figure 11. Economic impacts of COVID-19

Proxy indicators suggest a strong fall in economic activity, implying a third recession in four years. Political uncertainty and the COVID-19 pandemic triggered unparalleled impacts on the economy. Total public expenditure was 7 percent lower than in the first half of 2019 – when including the COVID-19 Fund – partly due to the lack of a 2020 state budget (Figure 12). Consumption-related tax collection declined strongly, with the excise tax falling by 28 percent and the sales tax by 18 percent. New vehicle registrations fell by 34 percent, mostly due to motorcycles but also (light) passenger vehicles. Electricity consumption declined by 10 percent, especially owing to lower domestic (household) usage. Passenger arrivals at Dili’s airport dropped by 62 percent due to international travel restrictions. Imports of cement and vehicles fell by 25 percent each. However, some of these declines are much more pronounced when considering only the second quarter of the year – i.e. the period from April to June. For instance, air passenger arrivals declined by 98 percent when compared to the second quarter of 2019 (Figure 13), imports of cement and vehicles dropped by around 50 percent each, excise tax collection by 48 percent, vehicle registrations by 45 percent, and electricity consumption by 29 percent. Overall, the economic impacts are striking.

15 Petroleum revenues (such as taxes and royalties) are accounted as primary income in the balance of payments, but are then invested through the Petroleum Fund and recorded as portfolio outflows in the financial account.

16 The economy has been affected through three main channels: public health measures (and consumer choices) impacted on private consumption (affecting the manufacturing, wholesale & retail trade, and transport sectors), political uncertainty impacted on public spending (affecting the construction and wholesale & retail trade sectors), and international travel restrictions impacted on travel service exports (affecting the accommodation & food and transport sectors).
**Precautionary behaviours and domestic restrictions had a strong impact on human mobility.** The public health measures introduced on 28 March included school closures, restrictions on public gatherings, and the suspension of collective transport (e.g. minibuses and taxis) – although the latter was abandoned one month later. However, people’s preventative behaviours – owing to a fear of contracting the virus – also played a key role in avoiding an outbreak. Data from Facebook suggests that human mobility in Dili dropped considerably in late March (by about 50 percent), particularly on 22 March – a day after the first COVID-19 case was reported (Figure 14). Hence, the reduction in mobility can be attributed to both voluntary changes in behaviour and the preventative measures adopted. Mobility has recovered gradually since mid-April, perhaps suggesting that fear and compliance with restrictions tend to wear off. There is also anecdotal evidence of voluntary business closures and people leaving Dili towards other municipalities. Data from Facebook shows a significant increase in users outside Dili, with a gradual convergence to the February-March benchmark since the end of May – when public health measures were eased (Figure 15).

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17 The Facebook mobility data reports two metrics: (i) change in movement (‘visited’), calculated as the change in the average number of Bing tiles (approximately 600m x 600m) a user is seen at a given day (relative to a baseline); and (ii) the proportion ‘stay put’ (‘stayed’), calculated as the share of people that are only seen in one Bing tile at a given day. Data is for Dili West only, but values for Dili East are very similar. It is not possible to assess mobility levels by type of activity, since Google community mobility reports are not available for Timor-Leste.

18 The TAF COVID-19 survey points to early compliance with recommendations, such as wearing a facemask, washing hands, avoiding public spaces and public gatherings, among others – although compliance declined between May and July.
Economic activity is mainly concentrated in Dili, but mobility disruptions likely had a strong impact across the country. According to the Business Activity Survey, about 80 percent of economic activity takes place in (or around) Dili – which is broadly corroborated by night-time lights (Figure 16). Satellite imagery can provide a valuable complement to ground measurements and has been shown to be a good correlate of socio-economic development. Night-time lights data seems to corroborate a decline in economic activity between February and June (Figure 17). However, there is some noise in the data (e.g. cloud coverage) and potential seasonality, so further analysis to refine these estimates is warranted.

Figure 16. Night-time lights (2020)  
Figure 17. Night-time lights (% change Feb-Jun)

Demand and supply shocks likely led to a strong fall in personal incomes, job losses, and firm closures. It is difficult to capture the impact of COVID-19 on the labour market due to very limited data. Formal private sector employment declined steadily from about 62,000 in 2014 to 53,000 in 2018, and likely dropped further in 2020 despite the wage subsidy aimed at protecting jobs.\(^9\) In fact, small-scale surveys point to a large drop in incomes, job losses, and food insecurity.\(^9\) Loss of learning (due to school closures and drop-outs), lower use of health services, and job losses will have a strong effect on long-term productivity and undermine recent human development achievements. Projections suggest that the impacts on income poverty are likely to be significant (Box 2). Firm registrations in the first half of 2020 have been broadly in line with recent years, despite an economic (and political) environment that has not always been conducive (Figure 18). Nonetheless, firm closures appear to be surprisingly low (Figure 19). The 2017-2018 economic recession had already pushed many (inefficient) firms out of business, while other firms may have delayed terminating their activity due to the announcement of economic support measures – such as the wage subsidy, tax relief, and access to credit.

\(^9\) Jobseeker registrations do not reliably reflect labour market conditions, since the data is predominantly collected for job matching – as there are no unemployment benefits. Jobseeker registrations increased considerably in late 2018 and early 2019, possibly because of an increase in seasonal work vacancies in Australia and a broader scope of recruitment (nationwide).

\(^{20}\) A UN socio-economic impact survey covering 419 households and 99 enterprises in June-July found strong evidence of income declines and job losses. An MDI-Oxfam survey of 446 informal businesses reported a 65 percent drop in incomes during the first and second State of Emergency (mainly April and May) due to lack of customers and restrictions (e.g. transport). Moreover, a rapid food security assessment led by the Ministry of Agriculture and Fisheries (MAF) suggested that 40 percent of households are engaging in coping strategies and experiencing food insecurity. Heavy rains in mid-March, crop pests and diseases (e.g. fall armyworm), and African swine fever have also affected the agricultural sector.
Box 2. Estimating the impact of COVID-19 on poverty

Simple simulations are used to illustrate the potential impact of the COVID-19 pandemic on income poverty. The economy is projected to contract by nearly 7 percent in 2020, which will affect poverty levels. A common approach to estimating these impacts is to use macro-micro simulations that link economic growth shocks to income poverty. However, the lack of recent poverty data makes such simulations challenging. In addition, there is limited real-time information on how the COVID-19 pandemic is affecting different economic sectors. Therefore, simple simulations are used to shock household consumption. Two main poverty scenarios are developed based on: (1) a decline of 4.3 percent in private consumption in 2020 (in line with the GDP forecast); and (2) a 50 percent consumption loss in one quarter for households engaged in severely affected sectors (e.g. manufacturing, construction, and tourism-related), and a 25 percent consumption loss in one quarter for households engaged in mildly affected sectors (e.g. commodities).

The poverty rate is estimated to increase by 5-7 percentage points, with a more severe impact in rural areas. The national poverty rate is estimated to increase from about 38 percent (baseline without COVID-19) to nearly 43 percent under scenario 2 (i.e. consumption loss approach) or to almost 45 percent under scenario 1 (i.e. private consumption growth approach). The impact is expected to be more severe in rural areas because many households are clustered around the poverty line, making them vulnerable to falling into poverty. The estimated poverty gap and poverty severity using both approaches also suggest that the impact will be more prominent in rural areas.
The estimated increase in poverty (relative to the baseline) varies across municipalities and sectors. For example, an urban area of Dili is estimated to experience a poverty increase of 3-8 percentage points, while a predominantly rural area of Manatuto is estimated to have an increase of almost 10 percentage points. In terms of sectors, tourism-related sectors are the hardest hit by the COVID-19 pandemic – with poverty incidence increasing by 6-10 percentage points. About 20 percent of households engaged in tourism-related sectors are in the third quintile and thus vulnerable to falling into poverty. Meanwhile, the commodity sectors are estimated to experience a poverty increase of around 6 percentage points under both approaches. These sectors remain associated with the highest poverty incidence – as 45 percent of households working in these sectors are poor.

The cash transfer programme mitigated the impact of COVID-19, but close monitoring is needed to assess its effectiveness. A one-time cash transfer of $200 has been disbursed to households with individual monthly incomes not exceeding $500. However, there is limited information on its beneficiaries and impact. If the cash transfer is received by 60 percent of the poorest households, then the poverty rate could return to the same level as the baseline. These results are encouraging, especially since the cash transfer is not the only measure supporting households. However, the extent to which these results will materialise depends on several factors. High-frequency data on the reach and efficacy of government assistance at the household level is critically needed. Such near-real-time reliable monitoring can be designed to also monitor the impact of the COVID-19 pandemic more broadly. The information from such monitoring efforts can then be used to inform policymaking by identifying gaps that may require to be addressed or redirect policy responses as the crisis evolves.

There are important caveats to the simulations, including the data and underlying assumptions used. Simulations are inherently dependent on existing data and the set of assumptions adopted. The poverty data was collected through the 2014 household survey – about six years ago – while strong and (structurally) disruptive shocks may also increase the uncertainty of the estimates. Moreover, it is assumed that people’s behaviours and incentives remain largely unchanged, which may not be the case. Another limitation of the simulations, mostly due to lack of data, relates to their inability to account for non-monetary dimensions of poverty and potential implications of changes in service delivery – except in the case of direct transfers. Nonetheless, the simulations provide an initial set of estimates to gauge the potential poverty impact of the COVID-19 pandemic.

Source: World Bank staff.

FISCAL SECTOR

Public spending has been constrained by the absence of a state budget and political uncertainty. The Budget and Financial Management law provides for a duodecimal regime until a state budget is approved by Parliament. The regime entails temporary budget appropriations for the same purpose foreseen in the budget law of the previous year – to ensure the continuation of activities. The duodecimal regime has been in place since January, allowing monthly appropriations of up to one-twelfth of the 2019 state budget. However, new activities – such as new capital projects – cannot be initiated. Public spending has thus been constrained by the absence of a state budget for 2020, possibly exacerbated by delayed (and sub-optimal) decision-making in a period of political uncertainty. Nonetheless, an autonomous COVID-19 Fund was created to facilitate the health and economic response – which has complemented regular treasury outlays.

Government expenditure was 7 percent lower than in the first half of 2019, despite strong spending related to COVID-19. Public spending amounted to $452 million by June 2020, which was 7 percent below 2019 levels but 8 percent above those recorded in 2018 (Figure 20).21 Nonetheless, public spending was boosted by expenses undertaken through a newly-created autonomous COVID-19 fund – which included both economic and health-related measures. Spending in January and February was higher than in 2019, but it did not increase significantly in March or April (Figure 21). The higher level registered in May was largely enabled by cash payments to households.

21 Most fiscal data were accessed from the Budget Transparency Portal in September. Revisions may have been made since then. Quarterly and semi-annual percentage changes are calculated year-on-year to avoid seasonality.
while a purchase of imported rice (to build up food stocks) contributed to sustain spending in June. Excluding the unexpected COVID-19 expenses, total government expenditure would have been 27 percent lower than in the first half of 2019. Spending in the third quarter of the year has been low in the recent past, but it is likely to recover in the last quarter.

Public transfers and goods & services have been the key components of public expenditure in 2020. Public transfers increased by 15 percent when compared to 2019, predominantly because of the cash transfer to households (Figure 22). Spending on goods & services was 25 percent lower, but still accounted for 30 percent of total expenditure. A surge in June was driven by a large rice purchase ($17 million). Capital expenditure was severely constrained, partly because the duodecimal regime only allows the processing of payments related to existing projects. Moreover, travel restrictions and disruptions to maritime trade may also have affected the availability of foreign workers and construction supplies. Capital spending was 46 percent lower when compared to the first half of 2019, and 82 percent lower than in 2018 – which also had a duodecimal regime (Figure 23). Spending on salary & wages was broadly unchanged when compared to the same period in 2019. Contingency spending was mainly to the benefit of public transfers ($10 million) and minor capital ($7 million).

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22 These dates reflect payments processed by the COVID-19 fund, but actual delivery may have taken place at a later stage. For instance, payments relating to the cash transfer were initially made to the bank accounts of village administrations, before being delivered to households.

23 Capital spending comprises capital & development (mainly major infrastructure projects) and minor capital. Minor capital is predominantly used to purchase vehicles, furniture, electronic equipment, and other movable assets.

24 In fact, the pipeline of capital projects might have been severely affected by the recent political uncertainty. Payments were delayed in late 2017, there was no budget for the first 9 months of 2018, the budget for 2019 was prepared in a short period of time, and the budget for 2020 was only recently approved by Parliament.
Recurrent spending accounted for over 90 percent of total public expenditure, as capital spending nearly came to a halt. Recurrent expenditure represented 92 percent of total spending in the first half of 2020, which is partly justified by limited capital outlays (Figure 24). Professional services ($33 million), operational spending ($30 million), and fuel for generators ($30 million) accounted for 70 percent of the expenditure on good & services. Public transfers mainly comprised the COVID-19 cash transfer to support households ($64 million) and veteran pensions ($44 million), although other expenditure items were also noteworthy. Salary & wages, which includes allowances and overtime, amounted to $92 million – mostly paying for teachers, health professionals, and the police force. Capital spending only represented 8 percent of total expenditure, partly owing to the lack of an approved state budget that would enable the start of new capital investments.

Figure 24. Public spending by economic classification (% first half of 2020)

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recurrent spending</td>
<td>92%</td>
</tr>
<tr>
<td>Capital spending</td>
<td>8%</td>
</tr>
<tr>
<td>Transfers</td>
<td></td>
</tr>
<tr>
<td>Goods &amp; Services</td>
<td></td>
</tr>
<tr>
<td>Salary &amp; Wages</td>
<td></td>
</tr>
<tr>
<td>Capital</td>
<td></td>
</tr>
<tr>
<td>Contingency</td>
<td></td>
</tr>
</tbody>
</table>

The Petroleum Fund was valued at $18 billion in June 2020, an all-time high due to large investment returns and limited withdrawals. Petroleum revenues mainly comprise taxes and royalties related to offshore production from the Bayu-Undan field. In recent years, these revenues have been relatively small when compared to investment returns (Figure 25). Investment returns were strongly negative in the first quarter of 2020 – as stock markets reeled while COVID-19 spread across the world – but have rebounded strongly in the second quarter. Meanwhile, withdrawals have been limited in 2020, partly due to the absence of an approved state budget that would grant regular access to the Petroleum Fund. The value of the Petroleum Fund declined by more than $600 million in early 2020, but gained $1 billion in the second quarter – to reach $18 billion at the end of June. The Petroleum Fund balance is heavily dependent on international stock market performance, with asset revaluations accounting for most of the variation (Figure 26). Interest and dividend income (from bonds and stocks) have been broadly stable, while unrealised returns have ultimately shaped the value of the Petroleum Fund. With petroleum production in Bayu-Undan likely to end in a few years, it is crucial to manage the Petroleum Fund prudently.

25 ‘Professional services’ includes both individual consultants/advisors and corporations, while ‘fuel for generators’ relates to the diesel fuel purchased to operate the Hera and Betano power stations. Travel & vehicles and maintenance were also significant items, albeit much smaller in value.

26 Public benefit payments included $23 million for developing the social security system. Public grants included $12 million for the Ministry of Mineral Resources and Oil (for business plan implementation and ISO certificate) and about $10 million for health-related spending (e.g. facility readiness and medical services).

27 These are accounted as primary income in the balance of payments.

28 The Petroleum Fund was valued at $18.5 billion at the end of September.
Domestic revenue collection suffered from lower economic activity and the implementation of temporary relief measures. Domestic revenue was strong at the start of the year, with income taxes accounting for most of the increase in the first quarter of 2020 (Figure 27). However, revenue collection suffered in the second quarter – dropping by about 30 percent. Commodity taxes were 44 percent lower, mainly reflecting lower imports. Income taxes fell by 15 percent, owing to personal income and withholding taxes – the latter constrained by limited public capital spending. Corporate tax collections increased, likely reflecting stronger business activity in the previous fiscal year. Non-tax revenues were also lower – by 19 percent – predominantly because of electricity fees & charges. Property rentals, visa fees, and port charges & fees also suffered losses in the second quarter of the year – owing to a rent waiver, limited travel, and lower vessel traffic. Overall, revenue performance has been impacted by both lower economic activity and (to a lesser extent) temporary relief measures. Tax revenue is thus set to decline for a fourth consecutive year, heightening concerns over fiscal sustainability.

\[\text{Figure 25. Petroleum Fund flows (USD million)}\]

\[\text{Figure 26. Petroleum Fund receipts (USD million)}\]

\[\text{Source: Central Bank.} \]

\[\text{Source: Central Bank.} \]

\[\text{Figure 27. Domestic revenue (USD million)}\]

\[\text{Figure 28. Domestic revenue (USD million)}\]

\[\text{Source: Ministry of Finance.} \]

\[\text{Source: Ministry of Finance.} \]

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29 Commodity taxes include import duties, excise tax, and sales tax. Other taxes mainly comprise the services tax.

30 This was partly due to an electricity subsidy of $15 per eligible customer, but electricity consumption was also low.

31 The Estimated Sustainable Income (ESI) for 2020 is $544 million. The ESI is calculated as 3 percent of the total petroleum wealth, which is the Petroleum Fund balance plus the ‘net present value’ of future Petroleum Fund revenues. The undeveloped Greater Sunrise fields are not included in the calculations, and neither are Chuditch or Buffalo. The ESI is classified as government revenue because of its recurrent nature, while Petroleum Fund withdrawals above the ESI are accounted as budget financing.
Consumer price inflation declined further in the first half of 2020, despite strong increases in international rice prices. Domestic price levels were muted in the first quarter of the year, with very limited changes across all categories (Figure 29). Overall inflation increased to 0.4 percent in the second quarter (year-on-year), largely due to food & beverages. Inflation has been lower than expected, especially given the feared impact of COVID-19 on global food prices. Global food stocks were relatively high at the start of 2020, easing some concerns over protectionist policies (e.g. export bans) and transport disruptions. In fact, many international food prices have declined since January, including cereals, meat, vegetable oils, and sugar. However, the price of Thai rice increased by 30-40 percent between November 2019 and April 2020 – depending on the type – although it has declined since then. Moreover, Vietnamese rice prices increased by nearly 40 percent between October 2019 and June 2020. Nonetheless, these large increases do not seem to have significantly affected domestic inflation – as domestic rice prices increased only by 3 percent between February and June 2020.

The real effective exchange rate appreciated in the second quarter of 2020, mainly due to the strengthening of the U.S. dollar. Since Timor-Leste uses the U.S. dollar as its legal tender, an assessment of external competitiveness requires the calculation of a trade-weighted average of bilateral exchange rates. This measure – the nominal effective exchange rate (NEER) – shows that the U.S. dollar has strengthened against the currencies of Timor-Leste’s main trading partners (Figure 30). In particular, the NEER appreciated by 4 percent in the second quarter of 2020 (year-on-year). The real effective exchange rate (REER), which takes into account price differentials across countries, has appreciated by the same amount – as prices did not play a role in this quarter. Although the REER is thought to be overvalued, the current exchange rate regime has contributed to stem inflationary pressures – thus protecting the purchasing power of households. Enhancing international competitiveness to promote exports will require measures to address existing supply-side constraints, such as low (labour) productivity and high relative costs.

Food & beverages have a large weight in the representative consumption basket – 54 percent – which means that overall inflation is sensitive to changes in these prices. Given that domestic food production is not sufficient to meet demand, international food prices often have a significant impact on inflation. For instance, inflation averaged 10 percent in 2007-2008 and 12 percent in 2011-2013 – largely due to shocks in global food markets.

However, the ‘Food Security Bulletin’ from the Ministry of Agriculture and Fisheries reports that cereal prices (imported rice, maize and wheat flour) increased by an average of 15 percent.

For instance, Indonesia’s rupiah depreciated against the U.S. dollar as COVID-19 fears unsettled foreign investors and caused a flight to safety.
Private credit growth continued to decelerate in 2020, with individuals still accounting for most lending. Commercial lending to the private sector amounted to $234 million by June 2020, a 3 percent increase over the levels recorded in June 2019 (Figure 31). Hence, commercial credit continued to grow in 2020, albeit at a slower pace than in the previous year. As in 2019, credit creation was mainly driven by individuals, and moderately offset by a decline in construction. Credit to trade & finance bounced back from a drop in mid-2019, while lending to industry & manufacturing also exhibited a similar pattern. The latter increased from $5 to $12 million between March and June 2020, possibly signalling a resort to credit to address cash-flow constraints induced by COVID-19. Commercial bank credit to individuals accounted for 55 percent of the total.

Non-performing loans have not increased, but the impact of the recession might be observed later. The proportion of non-performing loans declined from 6.4 percent of total gross loans in June 2019 to 5.1 percent in June 2020 (Figure 32). Loan loss provisioning has also decreased, perhaps suggesting that commercial banks do not expect many loan defaults. Overall, the economic difficulties caused by the COVID-19 pandemic do not seem to have had immediate repercussions on the financial sector. However, firms and individuals with access to bank credit are probably better able to withstand shocks – especially when compared to informal (low-productivity) firms and poor households. Moreover, the impacts might be felt with a lag.

EXTERNAL SECTOR

The trade deficit improved significantly due to a strong decline in imports and despite a sharp fall in exports. The trade balance recorded a deficit of $332 million in the first half of 2020, owing to a reduction in imports of goods & services (Figure 33). Total imports declined by 20 percent, with services suffering a stronger reduction than goods – 28 versus 15 percent. Imports of travel and transportation services were considerably affected, particularly in the second quarter due to COVID-19, although construction and other services (including government services) also had strong declines. Lower demand for imports thus seems to have been caused by both COVID-19 disruptions and the lack of a state budget. In terms of merchandise imports, mineral fuels and vehicles accounted for most of the decline, while cereals recorded an increase – supported by the government’s rice purchase. Consequently, cereals were the second largest import after mineral fuels (Figure 34). Merchandise exports – which are mostly accounted by coffee – are typically low in the first half of the year, but exports of services decreased by 20 percent.35 Travel services, which

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35 Official data on merchandise exports and primary income still do not reflect the changes introduced by the Maritime Boundary Treaty between Australia and Timor-Leste – with regard to the jurisdiction of the Joint Petroleum Development Area (JPDA).
are typically the main export earner, fell by 95 percent in the second quarter – as a direct consequence of international travel restrictions. Overall, exports dropped by 46 percent in the second half of 2020 and are likely to continue underperforming until 2021 – even if coffee exports are likely to pick up.

Figure 33. Trade balance (USD million)

Figure 34. Merchandise imports (2020H1, %)

The current account deteriorated in the first half of the year, mostly due to lower primary income. The current account had an overall surplus in 2019 – the first since 2015 – despite a large deficit in the last quarter (Figure 35). However, a recent reduction in primary income earnings – especially in the second quarter of 2020 – has weakened the current account. Imports of goods & services declined by 37 percent in the second quarter, when compared to 2019, but this was largely offset by larger secondary income outflows. Overall, the current account recorded a deficit of nearly $80 million in the first half of 2020, largely due to lower primary income – mostly Joint Petroleum Development Area (JPDA) income, but also investment income (Figure 36). Income from JPDA declined by 43 percent in the first half of 2020, affected by both lower petroleum production and falling prices. A strong decline in imports of goods & services helped cut the large trade deficit, although exports of goods & services nearly halved. Secondary income, which comprises foreign grants and net workers’ remittances, registered a larger net outflow – mainly because of an increase in remittance outflows. Annex 2 provides further insights on the impact of COVID-19 on the movement of people, goods, and capital.

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36 ‘Travel services’ covers goods and services acquired from an economy by non-resident travellers for business and personal purposes during their visits (of less than one year), including local transport but excluding international passenger services (which is included in passenger transport).

37 Income from the Joint Petroleum Development Area (JPDA) essentially comprises taxes and royalties on petroleum activities, while investment income mainly includes interest and dividends accrued from Petroleum Fund assets.

38 Foreign workers likely sent remittances abroad to help their families cope with the economic impact of COVID-19. Remittance inflows also increased, but from a lower base. In the second quarter of 2020, remittance inflows stood at $49 million, compared to $155 million of outflows.
The financial account remained negative, despite lower portfolio investment outflows. Portfolio investment outflows mainly relate to new Petroleum Fund investments in foreign assets – such as equities and debt securities. These are usually offset by portfolio investment inflows resulting from Petroleum Fund withdrawals to finance the state budget. There were no withdrawals from the Petroleum Fund in the first quarter of 2020, which cushioned the fall in JPDA income – compared to the same period in 2019 – and thus portfolio investment outflows (Figure 37). In the second quarter, the withdrawal of $250 million from the Petroleum Fund helped turn the financial account balance positive. Overall, portfolio investment (net) outflows declined in the first half of 2020, contributing to an easing of the financial account deficit (Figure 38). Direct investment increased marginally, although this often reflects reinvested earnings rather than new (greenfield or brownfield) investments. Other investments, which are typically associated with public external debt disbursements and currency & deposits from the commercial banking sector, also increased. However, direct and other investments only account for a small proportion of the financial account.

Official reserve assets declined by 21 percent due to a sharp deterioration in the external position. Both the current and financial accounts registered negative balances, which meant that the balance of payments position weakened significantly (Figure 39). The current account had a deficit of nearly $80 million, while the financial account had a deficit of almost $100 million. A small capital account surplus and positive errors & omissions (i.e. net unrecorded inflows) were insufficient to reverse this trend. As a result, official reserve assets fell by 21 percent in the first half of the year – settling at $520 million by June 2020.

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The balance of payments (BoP) records economic transactions between a country’s residents and the rest of the world in three key accounts: capital (which is typically very small), current, and financial.
External debt has grown rapidly since late 2019 due to the operations of foreign commercial banks. Gross external debt stood at $412 million by the end of June 2020, a 58 percent increase since mid-2019 (Figure 40). This increase was mainly accounted by a large rise in the debt stock of deposit-taking corporations (DTC) – i.e. commercial banks. An increase in DTC’s (short-term) currency & deposits since late 2019 was due to an increase in foreign bank branches’ liabilities to their headquarters.\(^4\) Central government (long-term) liabilities rose by 22 percent (year-on-year), although quarter-on-quarter growth was relatively low in 2020. The international debt position of the central bank and other sectors was broadly unchanged.

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\(^4\) The Central Bank revised the data for the last quarter of 2019. DTC’s (short-term) currency & deposits was originally reported as $73 million, which was subsequently revised to $135.
GDP is expected to suffer the largest fall since independence (nearly 7 percent), due to the combined impacts of COVID-19 and political uncertainty. Renewed political uncertainty and the lack of a state budget have constrained public spending for several months. However, spending is expected to recover somewhat in the last two months of the year owing to the recent approval of the 2020 state budget.\textsuperscript{41} Moreover, public health measures and voluntary changes in behaviour may have prevented the spread of COVID-19, but their impacts on the economy have been unparalleled. Private consumption is expected to contract due to a combination of risk aversion and an increase in precautionary savings (Table 1).\textsuperscript{42} Exports of travel services will remain affected by international travel restrictions and quarantine requirements. Private investment will also remain subdued, as businesses delay investment decisions because of high levels of uncertainty. Constrained domestic demand will also impact imports. Despite a package of economic measures to support households and businesses, GDP is projected to decline by 6.8 percent in 2020.\textsuperscript{43} This is significantly worse than the decreases experienced during the 2006 civil unrest (4.1 percent) and the 2017 political deadlock (3.8 percent), while real GDP per capita will be near 2009 levels. However, this needs to be set against the potential losses of human lives that have likely been averted.

Table 1. Economic Forecasts

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019 (e)</th>
<th>2020 (f)</th>
<th>2021 (f)</th>
<th>2022 (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP growth (%)</td>
<td>-3.8</td>
<td>-0.8</td>
<td>3.4</td>
<td>-6.8</td>
<td>3.1</td>
<td>4.2</td>
</tr>
<tr>
<td>Private Consumption</td>
<td>3.6</td>
<td>2.6</td>
<td>3.2</td>
<td>-4.3</td>
<td>2.9</td>
<td>3.5</td>
</tr>
<tr>
<td>Government Consumption</td>
<td>-5.8</td>
<td>-1.0</td>
<td>10.9</td>
<td>-11.0</td>
<td>2.9</td>
<td>3.0</td>
</tr>
<tr>
<td>Gross Fixed Capital Investment</td>
<td>-16.7</td>
<td>-1.8</td>
<td>-10.1</td>
<td>-27.1</td>
<td>14.4</td>
<td>9.4</td>
</tr>
<tr>
<td>Exports, Goods and Services</td>
<td>-39.1</td>
<td>8.4</td>
<td>1.5</td>
<td>-51.8</td>
<td>47.6</td>
<td>8.0</td>
</tr>
<tr>
<td>Imports, Goods and Services</td>
<td>-8.7</td>
<td>2.3</td>
<td>2.2</td>
<td>-20.3</td>
<td>8.7</td>
<td>4.5</td>
</tr>
<tr>
<td>Inflation (Consumer Price Index)</td>
<td>0.6</td>
<td>2.2</td>
<td>0.9</td>
<td>1.1</td>
<td>1.6</td>
<td>1.9</td>
</tr>
<tr>
<td>Fiscal balance (% of GDP)</td>
<td>-33.4</td>
<td>-27.5</td>
<td>-30.8</td>
<td>-30.4</td>
<td>-33.7</td>
<td>-37.1</td>
</tr>
</tbody>
</table>

Note: ‘e’ stands for estimate and ‘f’ for forecast. Source: World Bank staff.

\textsuperscript{41} This timeframe is tighter than in 2018, when the (late) 2018 budget was promulgated in September.

\textsuperscript{42} Lower household spending will affect several sectors, such as accommodation & food and recreation. To a certain extent, precautionary savings may have offset the impact of the cash transfer on aggregated demand.

\textsuperscript{43} This is lower than the previous (baseline) forecast of -4.8 percent, but above the previous downside projection of -9.3 percent. There is still significant uncertainty around forecasts for 2020 and beyond. The forecast does not foresee stricter measures than those currently in place.
The recovery is likely to be slow, due to the lasting effects of the unprecedented economic shock. The complexity and depth of the impacts induced by COVID-19 are likely to lead to irreversible income losses, unemployment, and firm closures, and thus permanent economic scarring. In fact, successive domestic and external shocks have produced three recessions in four years – 2017, 2018 and 2020 – which will have a persistent impact on the economy. This phenomenon is known as ‘hysteresis’, a term that refers to the enduring effects of an economic shock even after its underlying causes have subsided. Overall, reduced global demand, falling commodity prices, and a tighter financial environment have had a limited (direct) impact on economic activity. This is partly due to the relatively low exposure to international trade and financial shocks, especially when compared to other countries in the region. However, the approval of the 2021 state budget, continued restrictions on international travel, and a possible reinstatement of stricter public health measures are likely to shape the medium-term outlook. An economic recovery plan was recently approved, with a focus on agriculture, tourism, housing, education, health, social protection, and institutional reform (Box 3). Nonetheless, the recovery is expected to be gradual, with GDP forecast to grow by 3.1 percent in 2021.

Box 3. Economic Recovery Plan (2020-2023)

In June 2020, the Government established a commission to prepare a plan to support the economic recovery. The plan was finalised in August and includes 71 short- and medium-term measures to be implemented by 2023 – when its current legislative mandate ends. The plan covers two distinct phases: a first phase aiming to mitigate the impacts of COVID-19 through short-term responses (mainly in the second half of 2020), and a second phase with medium-term measures aimed at the economic recovery (covering a period of 2-3 years). The first phase is focused on avoiding job losses, supporting households, and preventing firm closures – with a view to sustain consumption levels and living standards. Short-term measures include the provision of a basic basket of goods (or voucher) worth $25 per person (using the Uma-Kain registry), a four-month recovery subsidy for firms that have recorded revenue losses, and exemptions from social security contributions. The second phase seeks to respond to the challenges caused by the pandemic, but also structural weaknesses. This phase covers several areas:

- **Agriculture** (and small agro-industry). The focus is on coffee (through a subsidy to support the renewal of plantations), as well as sandalwood and teak. Over time, the Government foresees the implementation of a (partial) import substitution policy, particularly for rice.
- **Tourism**. The aim is to create a state-owned company to boost the sector, improve vocational education and training, rehabilitate infrastructure (such as former administrator residences and rural roads), and promote eco-tourism (by combining accommodation with coffee or rice plantations).
- **Housing**. The plan aims to implement a social housing programme managed by the National Institute of Social Security or a new institution, as well as achieve universal provision of basic sanitation, water, and electricity across the country.
- **Education**. The objective is to increase the proportion of the state budget allocated to the sector, expand the number of CAFE schools – as well as the network of secondary schools, pre-school and vocational training centres – and promote the maintenance and recovery of school buildings.
- **Health**. The goal is to increase recurrent spending to improve the quality of health services, strengthen the financial and technical support to key programmes (such as family health, school health, and occupational health), invest in infrastructure, and improve health personnel training.
- **Social protection**. The aim is to create alternative payment mechanisms (to avoid cash and reduce costs), expand coverage of ‘Bolsa da Mãe’; increase protection (e.g. death in non-contributory regime), implement active employment programmes, and assess the feasibility of a universal basic income.

It is important to guarantee consistency between these measures and existing strategic documents (such as the SDP), undertake a detailed costing exercise to support implementation, and develop an adequate monitoring & evaluation framework to track progress – with appropriate measurable targets and baselines. Moreover, it is crucial to ensure that (short-term) recovery measures are time-bound and do not crystallise as recurring public liabilities.
A second wave of COVID-19 infections is a key (external) risk to the outlook. After a hiatus that lasted more than three months, a few COVID-19 cases have been reported since August. Although there is no evidence of community transmission, a potential second (and larger) wave remains a critical concern. Tighter restrictions have been imposed in the land border with Indonesia, while international air connectivity will likely remain limited in the foreseeable future.

The duration and scope of public health measures will affect economic activity, as well as the policy response. In the absence of a vaccine or effective treatment, it is crucial to accelerate health preparedness, increase testing, and enhance contact tracing capacity – to avoid the need for stricter measures that will further constrain economic activity. The key challenge is to revive the economy while mitigating new waves of infection. Moreover, the economy remains vulnerable to climate shocks, as the floods in mid-March attest. La Niña is expected to create adverse weather conditions in late 2020 and early 2021.

Political stability is a fundamental precondition to ensure a sustained economic recovery. The main internal risk to the economic outlook is political instability. Timor-Leste is a young democratic nation that has devoted considerable energy to re-build its institutions. Nevertheless, the country has had eight different Governments since independence was formalised 18 years ago (Figure 41). A civil crisis contributed to three changes in Government between 2006 and 2007. In 2015, tensions between CNRT and FRETILIN were resolved with a national unity government – which was formed without an election. However, this was the start of an intermittent period of political uncertainty. There have been four Governments in the past six years, while the recent reconfiguration of the ruling coalition could also be considered as a new Government. The new coalition controls the majority of seats in Parliament, which presents an opportunity for a timely approval of the 2021 state budget, and for building a political consensus around key policy and regulatory reforms (see Special Focus) – both of which are key to support the economic recovery and overcome socio-economic challenges.

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45 Three cases were reported in August, one in September, and another one in October.
46 The land border is now open only every 17 days, with a limit of 200 people entering the country and priority given to Timorese citizens.
47 See the World Bank’s ‘Costs and Trade-offs in the Fight Against COVID-19: A Developing Country Perspective’.
49 Timor-Leste had a score of 71 (out of 100) in the Freedom House’s evaluation of access to political rights and civil liberties. The country ranked 83rd (out of 210 countries and territories), well above most regional peers.
50 In January, a budget proposal was defeated in Parliament with the implicit support of several members of the (then) ruling coalition – who abstained in the vote. Months of uncertainty followed, as a political solution was required to avoid a third election since 2017. In May, a new (majority) coalition was formed – comprising the People’s Liberation Party (PLP), the Revolutionary Front for an Independent East Timor (FRETILIN), KHUNTO and the Democratic Party (PD). Several new ministers were sworn in, and other political appointments have been made since then.
The impact of COVID-19 on global energy markets will likely influence decisions on the development of Greater Sunrise. COVID-19 is having a profound impact on international energy markets, due to an unprecedented decline in mobility (air, land and sea transport) and lower economic activity – contributing to lower energy demand. In fact, COVID-19 could have a lasting impact on energy markets beyond 2020, as shifts to remote work and near-shoring can lead to permanently lower energy demand. A relative shift from fossil fuels to renewable sources of energy is also likely to occur. The global liquefied natural gas (LNG) market is not expected to need new supply until after 2030, since new capacity is anticipated to be added during 2023-26, while demand could remain constrained in the near future (Figure 42).\textsuperscript{51} As a result, LNG prices are expected to remain subdued (Figure 43). The bleak energy market outlook raises additional concerns over the proposed development of the Greater Sunrise fields. Changing global circumstances would warrant a reassessment of the development options for the project.\textsuperscript{52}

\textbf{Figure 41. Timeline of main events}

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<tbody>
<tr>
<td>Consultation and violence</td>
<td>Independence and election (President)</td>
<td>Offshore petroleum production</td>
<td>Elections (President)</td>
<td>Petroleum Fund established</td>
<td>Elections and protests</td>
<td>Assassination attempt on President</td>
<td>Elections</td>
<td>New government to ease political tensions</td>
<td>Elections</td>
<td>Government reshuffle</td>
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\textbf{Constitutional Government}

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<th>III</th>
<th>IV</th>
<th>V</th>
<th>VI</th>
<th>VII</th>
<th>VIII</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mari Alkatiri</td>
<td>Horta*</td>
<td>Xanana Gusmao</td>
<td>Rui Araujo</td>
<td>Alkatiri</td>
<td>Matan Ruak</td>
<td>Francisco Guterres</td>
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</tr>
<tr>
<td>Xanana Gusmao</td>
<td>Ramos Horta**</td>
<td>Matan Ruak</td>
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</tbody>
</table>

*2007: Estanislau da Silva  
**2008: Guterres and Araujo

\textbf{Figure 42. LNG supply-demand outlook}

\textbf{Figure 43. Energy market outlook (USD)}

Note: Crude oil ($ per bbl), LNG ($ per MBtu)  

\textsuperscript{51} In 2019, six LNG supply projects were taken to final investment decision (FID) – in Mozambique, Nigeria, Russia and U.S. – representing a record expansion of liquefaction capacity (71 million tonnes per annum).

\textsuperscript{52} The recent political transition also led to new appointments at TIMOR GAP and the Ministry of Petroleum and Minerals, perhaps indicating a change in approach. See LUSA’s interview with the Minister of Petroleum and Minerals (30 August 2020).
Fiscal policy can stimulate economic growth, but quality and sustainability considerations should prevail. The macroeconomic framework comprises a fixed exchange rate regime (full dollarisation) with no independent monetary policy, which makes fiscal policy one of the main instruments available to policymakers to encourage economic activity (Figure 44). However, this does not necessarily imply that an expansionary fiscal stance is required to accelerate growth. A fiscal stimulus will boost aggregate demand in the short-term, but only expenditures addressing binding supply-side constraints will raise potential output and thus support medium-term economic growth. Devising a sustainable growth-oriented fiscal strategy, coupled with pragmatic public financial management reforms, will be key to enhance the efficiency and effectiveness of public spending (Figure 45). This will entail improving the quality of capital spending while rationalising undue recurrent expenditures to help accelerate and sustain economic growth.

Figure 44. Macroeconomic framework

Figure 45. Quality of public spending

Source: World Bank staff.

53 However, regulatory reforms can also play a key role in promoting private sector activity. See the TLER October 2019.

54 Public expenditure management has three key objectives: aggregate fiscal discipline, allocative efficiency, and technical (or operational) efficiency. These are linked to three key questions, respectively: Is public spending sustainable? Is the allocation of public resources aligned with the government’s strategic priorities? Are public services provided at a reasonable quality and cost?
ECONOMIC GROWTH AND LIVING STANDARDS

Policymakers have set an ambitious vision for the country, but progress has been rather disappointing. The Strategic Development Plan (SDP) for 2011-2030 lays out a bold agenda for reaching upper-middle-income country (UMIC) status and eradicate extreme poverty by 2030. While the country was near the graduation threshold in 2011, gross national income (GNI) per capita has declined considerably since 2012 – owing to lower petroleum production and prices (Figure 46). While this was somewhat anticipated, the expectation was that the domestic economy would pick up pace and compensate for the decline in petroleum income. However, this failed to materialise and the gap has widened considerably instead. Poverty levels increased in the first few years after independence, but then declined between 2007 and 2014 (Figure 47). The national poverty headcount in 2014 was still higher than at independence. The international poverty line, which is used for cross-country comparisons, suggests that poverty reduction is lagging peer countries. Progress is likely to have stalled since 2014, owing to the economic impacts of political instability – experienced intermittently since 2017 – and the COVID-19 pandemic.

Economic growth has decelerated sharply over the past decade, calling for a renewed economic strategy backed by strong political will. Timor-Leste faced a difficult set of circumstances at independence, which were compounded by the 2006 civil unrest. Economic growth was strong following the restoration of peace, reaching a peak of about 11 percent in 2008 (Figure 48). However, growth has decelerated steadily since then, while recessions in 2017-2018 and (almost certainly) 2020 have further aggravated this trend. Average economic growth rates have been considerably below the targets stated in both the SDP (11.3 percent for 2011-2020) and the VIII Constitutional Government programme (7 percent for 2018-2023). Accelerating and sustaining economic growth ought to be a key priority for policymakers, with a view to meaningfully and sustainably raise living standards.

Figure 46. GNI per capita (USD, Atlas method)  

Source: World Development Indicators.

Figure 47. Poverty headcount (% , PPP $1.90 day)  

Source: World Development Indicators.

55 The World Bank’s income classification uses GNI per capita (calculated through the Atlas method) rather than GDP per capita. For Timor-Leste, GNI is considerably higher than GDP because the former includes offshore petroleum income.  

56 The purchasing power parity (PPPs) estimates are regression-based, since Timor-Leste is a non-benchmark country.  

57 The fourth Timor-Leste Survey of Living Standards (TL-SLS) is scheduled to take place in 2022.
Living standards have generally improved since 2006, but economic growth has not benefited households proportionately. GDP per capita is a widely used (albeit crude) measure of living standards. GDP per capita levels increased between 2006 and 2016, even if improvements were slowing (Figure 49). This is broadly corroborated by additional metrics, including household final consumption expenditure (HFCE) and survey-based mean consumption. However, the gap between GDP per capita and household consumption per capita has been widening, suggesting that economic growth is not benefiting households commensurately. In fact, the level of (real) household consumption per capita remains lower than at independence. A revamped economic strategy to promote sustainable and inclusive growth will be required to considerably improve living standards.

Economic activity has been predominantly driven by public expenditure, while the private sector remains incipient. Between 2008 and 2018, public consumption and public investment accounted for nearly 60 percent of total domestic expenditure. While private consumption was also sizeable – at 37 percent – this partly relates to self-consumption and is supported by government payments such as civil service wages and social transfers. Private investment levels are small, at about 4 percent during this period. Moreover, much of this domestic demand is met by imports of goods and services. Imports covered nearly half of total domestic expenditure, while exports of goods and services were very small. GDP growth was mostly driven by public investment and public consumption in 2006-2011, while net exports were a drag on growth (Figure 50). In 2011-2016, private expenditure (and a reduction in imports) provided positive contributions to economic growth, while public expenditure acted in the opposite direction. Data for 2017-2018 is not included because the economy contracted in those years and asymmetric impacts are expected. The prolonged slowdown in economic activity suggests that improving the quality of public spending and spurring private investment are key to accelerate growth. Without a more dynamic private sector, the economy’s medium-term growth potential will remain hampered by supply-side constraints.

58 Household final consumption expenditure (HFCE) is difficult to estimate in the absence of household surveys.
59 Domestic expenditure is the sum of total consumption expenditure and total investment – both public and private.
60 According to the national accounts, subsistence agriculture accounted for over 50 percent of total income attributable to households.
Construction and public services have been the key sectoral drivers of output, but these engines are unlikely to be sustainable. Public services account for a growing share of gross value added (GVA), increasing from 13 percent in 2007 to nearly 30 percent in 2018. Agriculture, commerce and construction lag considerably behind.\footnote{Construction and public services have been the key sectoral drivers of output, but these engines are unlikely to be sustainable.} However, construction also grew significantly in importance over the past decade, from 3 percent in 2007 to 18 percent in 2016. Both construction and public services – and even commerce – are heavily reliant on government spending. The performance of the agriculture sector is often dependent on weather conditions, but the sector’s share in total GVA has nearly halved since 2006. Construction and public services were the key drivers of GVA growth in 2006-2011 and have remained important since then (Figure 51). However, these sectors are unlikely to yield strong sustained growth in the medium-term – as the steady growth deceleration suggests – which calls for stronger support for strategic productive sectors, such as agriculture, manufacturing, and tourism.\footnote{FISCAL POLICY OVERVIEW}

**FISCAL POLICY OVERVIEW**

Public expenditure levels have been among the highest in the world for the past 10 years. Public expenditure grew considerably after 2006, averaging more than 80 percent of GDP since then (Figure 52). This is very high, even when considering that small states tend to have bigger governments – owing to higher costs induced by diseconomies of scale. Large public spending has been enabled (and sustained) by petroleum revenues, which started to flow around 2005. From a policy perspective, public spending has been used as the key instrument to drive economic activity and secure peace. However, high levels of spending have not translated into strong and sustained economic growth – as the latter has been decelerating since 2008. Regional comparisons suggest that other countries have been able to considerably improve average incomes per capita with much lower levels of government spending (Figure 53).\footnote{Tourism is not a sector in the International Standard Industrial Classification of All Economic Activities (ISIC), but spans several activities (e.g. transport, accommodation, commerce, recreation, etc.)}

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\footnote{\textsuperscript{61} Public services include public administration & defence, education, health, and social work activities – which are mostly (but not exclusively) provided by the public sector – while commerce comprises wholesale & retail trade, transportation & storage, and accommodation & food services. Official data sources do not enable a disaggregation of these sectors.}

\footnote{\textsuperscript{62} Tourism is not a sector in the International Standard Industrial Classification of All Economic Activities (ISIC), but spans several activities (e.g. transport, accommodation, commerce, recreation, etc.)}

\footnote{\textsuperscript{63} The economies of Cambodia, Lao PDR, Myanmar, and Vietnam grew at an average of about 7 percent per year in 2013-2019, compared to Timor-Leste’s 1.7 percent. Even pacific island states with smaller populations than Timor-Leste (such as Fiji, Samoa, and Vanuatu) have expenditure ratios around 30 percent of GDP.}
Petroleum Fund withdrawals finance most public spending, but its revenues have declined sharply since 2012. The Petroleum Fund was created in 2005 to receive petroleum-related proceeds. Petroleum revenues include income taxes, royalties, and profits related to offshore petroleum production, while investment returns are accrued from Petroleum Fund assets. Petroleum revenues have declined steeply from the nearly $4 billion peak in 2012, due to a combination of lower production and lower international prices (Figure 54). Petroleum production in the last field in operation (Bayu-Undan) is expected to cease in 2-3 years. In terms of investment returns, interest income and dividend income tend to be quite stable through time, but asset revaluations and foreign exchange gains/losses have been much more volatile and larger in magnitude. Transfers to the government budget have been very high – averaging $1 billion per year in 2010-2019. About $12 billion have been withdrawn to date, while the current balance is around $18 billion. Net inflows have declined considerably since 2013 – while volatility has increased due to equity market trends – which raises concerns over its sustainability.

Assets are allocated as follows: about 60 percent to fixed-income products (mostly U.S. treasury bonds), about 35 percent to international equities, and about 5 percent to a private debt instrument for domestic petroleum operations. The latter enabled TIMOR GAP – the state-owned oil company – acquire a 56.6 percent stake in the Greater Sunrise Joint Venture for $650 million.
The Estimated Sustainable Income is steadily declining, while domestic revenues remain small. Petroleum revenues are not automatically available to the government, since withdrawals require parliamentary approval. The Petroleum Fund law provides for an Estimated Sustainable Income (ESI), a benchmark that reflects the annual amount that can be sustainably withdrawn for budget financing. However, the ESI is often seen as an indicative (rather than a binding) fiscal rule. Excess withdrawals are often justified by the need to front-load public investment to achieve the ambitious SDP goals.\textsuperscript{65} The ESI has been gradually declining because of the erosion of petroleum wealth.\textsuperscript{66} Moreover, domestic resource mobilisation has been weak. Domestic revenues, which include tax and non-tax revenues, are very low by international standards – the tax-to-GDP ratio was 7.5 percent in 2019 (Figure 56).\textsuperscript{67} Limited domestic revenues are partly due to low per capita incomes, but also because of the structure of the tax system and poor compliance and enforcement. Enhancing domestic resource mobilisation is vital to bridge the budget financing gap without compromising the viability of the Petroleum Fund.

The fiscal deficit is very large and predominantly financed by excess withdrawals from the Petroleum Fund. The fiscal balance has been strongly negative since 2007, as public expenditure far exceeded revenues – even including the ESI. Moreover, the fiscal deficit has widened through time, reaching a peak of 53 percent of GDP in 2016. Although the fiscal balance has recently improved, this was due to the 2017-2018 political stalemate rather than a deliberate policy choice. The deficit has been predominantly financed through excess withdrawals from the Petroleum Fund, while external loans and use of cash balances have been limited (Figure 57). There are no other domestic financing sources, such as treasury bills or bond issuance. Large and persistent fiscal deficits are unsustainable and inconsistent with sound fiscal management with a view to preserving macroeconomic stability. Excess withdrawals threaten the sustainability of the Petroleum Fund and have high implicit costs, such as foregone revenues from investment returns.

The public debt stock is low – albeit growing – and mostly composed of external concessional lending. Public debt amounted to $193 million at the end of 2019, corresponding to about 12 percent of GDP. There is no domestic public debt, while the total value of external loans signed as of December 2019 amounted to $459 million. Most loans are provided on concessional terms and pertain to road infrastructure projects. Debt servicing, which comprises both interest and principal repayments, is low ($7 million in 2019) but expected to grow moderately in the medium term as grace periods expire and liabilities increase. The 2019 Debt Sustainability Analysis undertaken by the International

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\textsuperscript{65} However, excess withdrawals have been larger than capital & development spending, implying that they are also financing the recurrent budget. The ESI is reported under total revenue – because it is seen as a recurrent revenue – while excess withdrawals are reported under deficit financing. This ensures that the corresponding budget balance provides an adequate measure of medium-term fiscal sustainability.

\textsuperscript{66} The ESI is set at 3 percent of total petroleum wealth, which is the Petroleum Fund balance plus the net present value of anticipated petroleum revenues.

\textsuperscript{67} This measure does not include petroleum-related taxes, which are directly assigned to the Petroleum Fund.
Monetary Fund (IMF) and the World Bank classified the country at a low risk of debt distress and assessed the country’s debt-carrying capacity as medium. Nonetheless, public debt management is an important area that needs to be strengthened. The monitoring and reporting of fiscal risks – such as contingent liabilities related to credit guarantees, pensions, public corporations, and public-private partnerships (PPP) – should also be improved.

PUBLIC EXPENDITURE MANAGEMENT

Budget credibility has been undermined by regular mid-year revisions, such as budget rectifications and virements. The initial budget approved by Parliament often suffers modifications during the year, either through a budget rectification and/or virements – which can be quite large (Figure 58). While this flexibility enables a response to changing circumstances, it can undermine the credibility of the budget as a statement of government policy – especially if adjustments are due to poor planning and budgeting, or are politically motivated. Budget rectifications were made in 2008, 2010, 2015 (even if not affecting the overall fiscal envelope), and 2016. Moreover, virements occur every year and have averaged about 7 percent of the original budget in 2015-2019 – although this is within the 20 percent rule set forth in the Budget and Financial Management (BFM) law. Improving planning and budgeting processes can reduce the need for mid-year revisions.

![Budget revisions (USD million)](source: Ministry of Finance)

Budget execution has been low, likely reflecting difficulties in planning, budgeting, and execution. Budget credibility is also affected by implementation constraints. Budget execution is often used as a measure of absorptive capacity, although it may reflect a combination of public financial management bottlenecks in planning (e.g. anticipation of needs), budgeting (e.g. estimation of costs), and execution (e.g. procurement), as well as political decisions (or uncertainty). To assess budget execution, a focus on the initial budget is warranted – rather than the final budget – since it is likely to provide better insights on the quality of the budget process and implementation capacity. Budget execution averaged 97 percent since 2008, but this value masks significant variations across years – as under-budgeting offsets over-budgeting (Figure 59). Paradoxically, comparing actual spending with the final (revised) budget yields a large execution gap – averaging 83 percent since 2008. Significant deviations are noted,

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68 There are some gaps in capacity and coordination between units involved in debt management. Given the rising portfolio, it would be advisable to prepare a medium-term debt management strategy (MTDS), upgrade software, and set up a modern debt management function.

69 Contingent liabilities are obligations that may occur in the future, and are usually based on contracts or legislation. See the World Bank’s Debt Transparency Report.

70 Budget rectifications are amendments that require parliamentary approval, while virements entail a shift of budget allocations across appropriation categories.

71 The large volume of public grant transfers (e.g. to other public institutions) may artificially raise the execution rate and conceal implementation underperformance – since it may not reflect actual spending.
with large under-budgeting in 2008 and 2010, and considerable over-budgeting in 2009, 2011, 2012, 2015, 2017 and 2019 – all with execution rates below 90 percent. Only 83 percent of the 2019 state budget was spent, the lowest level since 2012.\(^{72}\) Systematic over- or under-budgeting leads to sub-optimal outcomes in terms of the efficiency and effectiveness of public spending.

**Delays in approval and promulgation have also impacted the quality and execution of state budgets.** The Budget and Financial Management (BFM) law states that the Government should submit a draft budget law to the legislature by the 15 October of every year, which should then be approved by the Parliament and promulgated by the President before the start of the new fiscal year.\(^{73}\) In the past 10 years, only three state budgets were promulgated on time – that is, before 31 December (Table 2). Most delays have been caused by political, rather than technical, reasons. For instance, the President vetoed the initial 2016 and 2019 budget proposals. The 2018 budget was 9 months late and the 2020 budget has suffered similar delays – both due to political stalemates in Parliament. A timely and adequate budget process is key to enable a smooth preparation and execution of the budget.

<table>
<thead>
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<th>Budget Year</th>
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<th>Promulgation (President)</th>
<th>Delay</th>
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<td>28 Jan 2011</td>
<td>14 Feb 2011</td>
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<tr>
<td>2012</td>
<td>25 Nov 2011</td>
<td>21 Dec 2011</td>
<td>-</td>
</tr>
<tr>
<td>2013</td>
<td>20 Feb 2013</td>
<td>1 Mar 2013</td>
<td>2 months</td>
</tr>
<tr>
<td>2014</td>
<td>24 Jan 2014</td>
<td>3 Feb 2014</td>
<td>1 month</td>
</tr>
<tr>
<td>2015</td>
<td>18 Dec 2014</td>
<td>29 Dec 2014</td>
<td>-</td>
</tr>
<tr>
<td>2016</td>
<td>18 Dec 2015 / 8 Jan 2016</td>
<td>14 Jan 2016</td>
<td>2 weeks</td>
</tr>
<tr>
<td>2017</td>
<td>9 Dec 2016</td>
<td>28 Dec 2016</td>
<td>-</td>
</tr>
<tr>
<td>2018</td>
<td>7 Sep 2018</td>
<td>27 Sep 2018</td>
<td>9 months</td>
</tr>
<tr>
<td>2019</td>
<td>22 Dec 2018</td>
<td>7 Feb 2019</td>
<td>1 month</td>
</tr>
<tr>
<td>2020</td>
<td>8 Oct 2020</td>
<td>19 Oct 2020</td>
<td>10 months</td>
</tr>
<tr>
<td>2021</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
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Source: Ministry of Finance and news articles.

**Public spending has increased across most categories, although it has moderated recently.** The size and composition of public spending can provide useful information on the overall fiscal policy stance. Public expenditure increased steadily until 2016, after which it was constrained by the 2017-2018 political stand-off (Figure 60). Spending on salary & wages has increased through time, although its budget share remains relatively low. Nonetheless, the wage bill as a share of GDP is large (12 percent) when compared to regional peers – thus warranting some scrutiny. Spending on goods & services grew very strongly between 2011 and 2014, but has subsequently moderated. Spending is largely concentrated in six items representing nearly 80 percent of the category’s total during 2008-2019: professional services (19 percent), fuel for generators (19 percent), operational material & supplies (14 percent), operational expenses (10 percent), other miscellaneous services (10 percent), and training & workshop (8 percent).\(^{74}\)

\(^{72}\) Capital & development is the main responsible for differences between the initial budget and actual expenditure. The establishment of the Infrastructure Fund (IF) in 2011 was aimed at improving the capacity to implement the capital budget. However, this institutional development has not led to an improvement in the execution rate, partly because it has been accompanied by even larger allocations.

\(^{73}\) The fiscal year coincides with the calendar year – i.e. 1 January to 31 December – since 2007.

\(^{74}\) There is an overuse of miscellaneous categories, which undermines fiscal transparency. Moreover, budget items under goods & services have been systematically over-budgeted, suggesting that this budget item is used as a buffer for ad-hoc expenses (through virements).
Public transfers have also risen considerably through time, in part due to the establishment of a generous social protection system – which includes a pension for war veterans – as well as large grants to a wide range of institutions. Spending on capital & development has been very volatile, with clear peaks in 2011-2012 and 2016.\(^75\) In terms of composition, goods & services have lost some ground to public transfers – which increased its share in total spending from 13 percent in 2011 to 34 percent in 2017 – while capital & development is also a large component.

**Figure 60. Economic categories (USD million)**

![Economic categories graph](image)

**Figure 61. Expenditure (% GDP, average 2013-2016)**

![Expenditure graph](image)

The perceived lack of impact of public spending on economic activity raises questions about its quality. Recurrent spending – which comprises salary & wages, goods & services, and transfers – is typically associated with the basic functioning of the government and public service provision. Recurrent spending has increased strongly until recently, which has been coupled with a clear policy of front-loading public investment – especially after the creation of the Infrastructure Fund in 2011.\(^76\) Capital spending averaged 28 percent of GDP in 2013-2016, which is very high by international standards (Figure 61). This raises questions about the efficiency and effectiveness of public spending, since large capital investments have not led to faster economic growth. Moreover, some budget items might be not be adequately classified – such as large transfers to the Special Administrative Region of Oecusse (RAEOA-ZEESM), which are spent mostly on capital projects – thus heightening concerns over the low impact of capital spending on economic growth.\(^77\)

**Capital spending has been mainly associated with investments in electricity and roads, but other important sectors have lagged.** Large capital spending in 2011 and 2012 was mostly accounted by the electricity programme, which comprised the construction of large power plants in Hera and Betano (Figure 62). Spending on road construction and rehabilitation has become the largest programme since 2015.\(^78\) The ports programme had a large expenditure in 2016 related to the Tibar Bay Port. The airports programme has had a relatively low allocation, but the Oecusse airport was funded through a public transfer to the RAEOA-ZEESM. Spending on the Tasi Mane programme has been large since 2016, especially relating to the construction of the highway linking Suai, Betano and Beaço. However, investments in several key sectors have lagged, such as agriculture, water & sanitation, education, and health (Figure 63).

\(^75\) Minor capital has declined significantly since 2014, but this category has typically had a very small weight in total spending. Contingency expenditures are small, averaging 1 percent of total spending – which is below the limit of 5 percent established by the BFM law.

\(^76\) Timor-Leste has a dual budgeting system, whereby the recurrent budget is mostly under the responsibility of the Ministry of Finance, while the capital budget is under the mandate of the Administrative Council of the Infrastructure Fund (known as CAFI). Other institutions also play a key role in the project-cycle of capital investments, including the Major Projects Secretariat (MPS), National Development Agency (known as ADN), and the National Procurement Commission (NPC).

\(^77\) On the other hand, the 2016 Tibar Bay Port Viability Gap Funding should probably have been classified as a public transfer.

\(^78\) Connective infrastructure is important to improve access to (agricultural) markets and social services (e.g. health facilities).
Discretionary spending is high – albeit declining – suggesting that there is considerable scope for fiscal adjustments. Budget components vary within a spectrum of flexibility, since not all can be easily modified by the authorities in the short term. Having a clear understanding of the budget items driving expenditure growth and how rigid they are can support policymakers in anticipating fiscal pressures and help consolidation efforts. Most public expenditure comprised items classified as having low rigidity, while high rigidity expenditures averaged 23 percent of the total – owing to salary (12 percent) and personal benefits transfers (11 percent) – Figure 64. The combined share of high and medium rigidity expenditures in total spending has risen through time, which is concerning since it constrains fiscal policy. Future fiscal adjustments to bring expenditure down to more sustainable levels could be costly if the share of rigid expenditures continues to rise – especially if these are legally binding (Figure 65). It is thus important to curb key items (e.g. salary & wages and public transfers) before they build a strong momentum that is difficult to halt. At present, the relatively low degree of budget rigidity suggests that there is ample scope for changes in budgeting – particularly to consolidate and reallocate resources across categories to improve efficiency and effectiveness. However, there are some emerging risks in salaries (set to grow with decentralisation), professional services (reliance on consultants), pensions (generous contributory and non-contributory schemes), public grants (limited accountability), among other categories.

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79 Budget items that cannot be reassigned without entailing a high cost are generally said to be ‘rigid’. Civil servant salaries and public benefit transfers (which includes pensions) fall under the high rigidity category. Payments for overtime, allowances, and professional services are classified as medium-high rigidity. Public grant transfers and contingency expenditures are classified as medium rigidity. Lastly, all capital expenditures and spending on goods & services (excluding professional services) are categorised as low rigidity.

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**Figure 62. Infrastructure spending (USD million)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Other</th>
<th>Ports</th>
<th>Bridges</th>
<th>Roads</th>
<th>Airports</th>
<th>Tasi Mane</th>
<th>Health</th>
<th>Electrical Energy</th>
<th>Education</th>
<th>Water &amp; Sanitation</th>
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</tr>
<tr>
<td>2015</td>
<td>400</td>
<td>400</td>
<td>300</td>
<td>200</td>
<td>100</td>
<td>60</td>
<td>30</td>
<td>10</td>
<td>10</td>
<td>5</td>
</tr>
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<td>2016</td>
<td>350</td>
<td>350</td>
<td>250</td>
<td>150</td>
<td>75</td>
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<td>2017</td>
<td>300</td>
<td>300</td>
<td>200</td>
<td>100</td>
<td>50</td>
<td>30</td>
<td>20</td>
<td>5</td>
<td>5</td>
<td>2.5</td>
</tr>
<tr>
<td>2018</td>
<td>250</td>
<td>250</td>
<td>150</td>
<td>75</td>
<td>25</td>
<td>15</td>
<td>15</td>
<td>2.5</td>
<td>2.5</td>
<td>1</td>
</tr>
</tbody>
</table>

*Source: Ministry of Finance.*

**Figure 63. Infrastructure spending (%), 2011-2018**

- Agriculture: 1%
- Education: 0%
- Health: 0%
- Water & Sanitation: 0%
- Ports & airports: 7%
- Roads: 23%
- Tasi Mane: 11%
- Roads & bridges: 34%
- Electricity: 34%
- Other: 24%

*Source: Ministry of Finance.*

**Figure 64. Fiscal rigidity (% total expenditure)**

- Low: 0-20%
- Medium: 20-40%
- Medium-High: 40-60%
- High: 60-100%

*Source: Calculated from Ministry of Finance.*

**Figure 65. Fiscal rigidity (USD million)**

- Low: 0-200 million
- Medium: 200-400 million
- Medium-High: 400-600 million
- High: 600-1,000 million

*Source: Calculated from Ministry of Finance.*
Assessing the effectiveness of public spending is key to ensure that resources have the desired impact. Measures of spending effectiveness assess how inputs and outputs translate into outcomes. For instance, fiscal multipliers provide insights on the effectiveness of fiscal policy in boosting economic activity. In practice, fiscal multipliers estimate the change in GDP induced by a unit increase in public spending. A multiplier larger than 1 suggests that public expenditure stimulates GDP by more than the initial increase in spending. This ‘crowding in’ effect implies that public spending complements and encourages private spending. However, a multiplier lower than 1 indicates that public spending is counteracted by effects that reduce its effectiveness – such as a ‘crowding out’ of private sector activity and/or import ‘leakage’. There is an interest in evaluating the impact of public investment on GDP, since the economic literature posits a strong correlation with economic growth. For over a decade, Timor-Leste’s has pursued a front-loading of (large-scale) public investments with a view to stimulate domestic economic activity. Estimates suggest that the impact of public expenditure on economic activity has been very limited. Using quarterly data from 2010 to 2018, econometric analysis confirms that GDP responds positively to government expenditure, although confidence intervals are large.80 The impulse responses are significant at both impact (i.e. same quarter) and longer horizons – with the multiplier estimated at 0.17 and 0.08, respectively. These estimates are well below unity, implying that the increase in GDP is much lower than the initial increase in spending. For all fiscal indicators – total spending, consumption, and investment – the increase in expenditures is shown to increase output at impact, but the gains fade by the first quarter. The fiscal shock is more effective in the short term – especially for public consumption, albeit still considerably below 1 – as the magnitude of the multiplier is much lower in the long run. The long-run multiplier for capital expenditure is only 0.13, raising strong concerns over the effectiveness of capital spending (Figure 66).81 The estimated fiscal multipliers are modest and much lower than those estimated for other countries. Low impact multipliers indicate that much of the spending leaks into imports (such as capital goods and construction services), as there is limited domestic productive capacity to satisfy this demand. Moreover, low long-run multipliers suggest that the (large) expansionary fiscal policy stance is not addressing supply-side constraints and is thus jeopardising fiscal sustainability. In sum, public spending drives economic growth in the short-term, but fails to have a lasting impact on the economy.

Figure 66. Fiscal multiplier (investment)  
Figure 67. RoRK public capital (percentage points)

Note: 95 percent confidence interval.  
Source: World Bank staff estimates.

80 The analysis uses a structural vector autoregression (SVAR) model and official (ex-post) quarterly national accounts data.
81 This might be an overestimate since some capital spending is recorded as a public transfer (e.g. RAEOA-ZEESM), although the Tibar Bay Port PPP Viability Gap Funding (recorded as capital spending) entailed a transfer to an escrow account.
The rate of return on capital has been declining, implying that public investment management needs to be improved. The rate of return to capital (RoRK) measures the change in output brought about by a unit change in the capital stock. The rate of return on public capital expenditures has been declining since 2008 (Figure 67). This suggests inadequate public investment management, as very large investments appear to have been undertaken without a judicious assessment of needs. For instance, about $1 billion have been invested in the electricity sector since 2008. Although access to electricity improved remarkably, service provision remains unreliable and there is significant overcapacity. The new $120 million international airport in the exclave of Oecusse has capacity for over 1 million passengers per year, even though the region has less than 70,000 inhabitants and limited economic activity. The Suai airport was also rehabilitated for $80 million. Finally, about $319 million have been spent on the Tasi Mane project since 2011, most of which on a highway linking Suai and Beacão. With a planned total investment of $1.1 billion – including $720 million for a supply base in Suai – returns on capital will be highly conditional on the successful development of the planned petrochemical industry. Overall, prioritising growth-enhancing cost-effective infrastructure should be a key priority for the selection of future investment projects – which should include improvements to education and health facilities, and digital infrastructure.

Fiscal sustainability is a key medium-term concern, especially given the limited efficiency and effectiveness of public spending. The Petroleum Fund is used to bridge the large financing gap, which emerges from the combination of very high expenditure levels and low domestic revenue collection. The fact that the ESI, as a fiscal rule, has been consistently breached over the past 10 years is a matter of concern (Figure 68). Excess withdrawals from the Petroleum Fund have been defended by the need to front-load investments in infrastructure, but these do not seem to have had a lasting impact on economic activity. In fact, the scaling up of public investment has been associated with a steady deceleration in economic growth. Moreover, the increasing rigidity of public spending indicates that the scope for discretionary policy is diminishing. With the exhaustion of offshore petroleum reserves and uncertainty over future petroleum developments, the Petroleum Fund is expected to deteriorate in the medium-term – as inflows will rely exclusively on investment returns from existing assets. This could lead to a sudden and agonising fiscal adjustment with significant consequences to service delivery and human development. Projections suggest that the Petroleum Fund will be exhausted by 2035 (Figure 69). A prudent management of the Petroleum Fund – by gradually reducing withdrawals beyond the ESI – is crucial to secure fiscal sustainability and ensure that future generations can benefit from these savings. The development of a medium-term expenditure framework would be crucial to improve planning and budgeting processes, as well as reduce budget uncertainty.

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**Notes:**

82 The capital stock is estimated through the perpetual inventory method, with initial capital calculated through two methods (1) initial-year gross fixed capital formation, and (2) ‘rule of thumb’ for capital output ratio. Papua New Guinea, Lao PDR, Cambodia, and Myanmar have estimated rates ranging from 28 to 44 percent – compared to Timor-Leste’s 20 percent.

83 The current peak load (i.e. maximum demand) of about 70 MW is less than 25 percent of the total installed capacity (over 300 MW). This entails a large penalty associated with sunk costs and maintenance of idle capacity.

84 The Dili airport received 122,000 passengers in 2018 and 93,000 in 2019.

85 Low internet penetration, slow connection, and limited digital uptake have undermined the COVID-19 response, especially e-learning and the possibility of disbursing cash to households electronically.

86 In recent years, the Council of Ministers has approved budget ceilings that are higher than any of the three fiscal scenarios presented by the Ministry of Finance. Moreover, public expenditure volatility – caused by political uncertainty – has had a significant impact on economic performance. Hence, it will be crucial to decouple political developments from the implementation of an effective medium-term fiscal strategy that can deliver sustained economic growth.
CONCLUSION AND KEY RECOMMENDATIONS

Public expenditure levels have been very high since 2008, but have failed to support economic growth. Public expenditure has averaged more than 85 percent of GDP in the past decade. These are remarkably high levels when compared to other countries in the world, even those that face similar structural challenges such as smallness and an incipient private sector. Although the Petroleum Fund is large, dwindling petroleum revenues and sizeable withdrawals will gradually erode its value, while rising rigidities in spending will make future adjustments increasingly difficult. Moreover, public spending is not engendering a process of private capital accumulation and productivity growth, which is necessary to accelerate and sustain economic growth. The estimated fiscal multipliers suggest that much of the spending leaks into imports, has failed to address supply-side constraints, and is thus jeopardising fiscal sustainability. However, these results implicitly suggest that the impact of a fiscal consolidation on medium-term economic growth would be limited, if carefully planned and executed. Hence, a moderation in spending on goods & services and public transfers need not undermine economic activity and affect living standards. On the contrary, these savings would release additional resources for growth-enhancing expenditures – such as those related to human capital and the productive sectors of the economy.

Enhancing the efficiency and effectiveness of public spending is essential to improve the impact of fiscal policy. Public capital expenditure has been dominated by large-scale investment projects. However, low economic and social returns raise efficiency and effectiveness concerns. Improvements are required along the entire project cycle – identification, selection, design, implementation, and evaluation. Strengthening institutional capacities, while streamlining institutional roles and responsibilities, can significantly improve the impact of public investment. There has been a clear focus on economic infrastructure (namely, energy and transport), but other economic and social infrastructure has been neglected – such as water & sanitation, education, and health. The composition of the recurrent budget also deserves scrutiny, given its size and the poor levels of service delivery. Adopting a coherent medium-term planning framework can promote a more strategic prioritisation of spending while improving resource predictability for key sectors. Pursuing pragmatic public financial management reforms will be key to improve planning, budgeting and execution.

87 The first 2020 budget proposal (which was withdrawn from Parliament before a vote was held) amounted to nearly $2 billion, about 120 percent of GDP.
88 This is supported by the TLER October 2018 analysis on structural change, which reveals that there have been very limited within-sector productivity improvements.
89 Although spending on education and health has not been low as a share of GDP, this has mainly covered salaries.
Digital technologies can help enhance planning and budgeting processes, which could yield significant socio-economic benefits. New technologies can be deployed to generate user-centric data and harness previously fragmented information to improve policymaking. For instance, a geo-referenced platform combining information on dwellings, the road network, schools, and health facilities can be used to improve medium-term planning and budgeting (Figure 70). It is timely to invest in the internet infrastructure – especially by fast-tracking a submarine cable connection – with a view to promote internet-enabled services such as e-government (including e-learning) and government-to-person (G2P) payments. This would help reduce the digital divide. The forthcoming Population and Housing Census presents an opportunity to improve household registration and accurately record the geographic location of dwellings and key public infrastructure.

Figure 70. Education and health facilities platform for planning and budgeting

Source: Ministry of Finance and World Bank.

A moderation of key spending items would release additional resources for growth-enhancing expenditures. Sound fiscal management supports macroeconomic stability, which is a necessary condition for sustained economic growth. Fiscal sustainability is a key medium-term concern that needs to be tackled while the adjustment costs are low. There are several spending items that warrant some attention. For instance, it is crucial to contain the wage bill, particularly because it is a rigid expenditure item that already represents 13 percent of GDP. An in-depth reassessment of civil servant competencies, career regimes, and pay grades could help promote a modern client-oriented civil service. Equally important is to streamline professional services – which complement the wage bill – while considering the nature of functions performed and value added. Social pensions are another rigid spending item that ought to be carefully scrutinised. The contributory system needs to be viable in the long-term, while changes could be made in the non-contributory system to enhance its impact on poverty and inequality. Since the implicit electricity subsidy is large – as electricity fees & charges only cover a fraction of production costs – improving cost recovery and service efficiency would be key priorities. Greater transparency and selectivity in the attribution of public grants would also be warranted, given its fast-growing levels. Strengthening public investment management, through detailed cost-benefit evaluations and greater transparency in decision-making, would help ensure that public funds catalyse private sector activity and generate acceptable returns. Finally, fiscal risks such as contingent liabilities also ought to be better measured and monitored. Overall, curbing unwarranted spending would release additional resources (financial and otherwise) for growth-enhancing expenditures.

\[90\] This can be done by generating policy scenarios under different sets of constraints, such as which schools should be prioritised for an upgrade given an overall budget ceiling and future student demand.

\[91\] For instance, switching from automotive diesel oil to cheaper fuels (heavy fuel oil or natural gas) could reduce costs by 30 percent. See Box 2 in the TLER October 2019.
Fiscal rules can promote fiscal responsibility, especially if set within a coherent medium-term expenditure framework. The Ministry of Finance has recently undertaken a review of existing and potential fiscal rules covering revenue, expenditure, deficit, and debt. This is an extremely important area of work. If rules are set at prudent levels and are complied with, then they will encourage fiscal responsibility. In the case of Timor-Leste, which has abundant fiscal resources but limited implementation capacity, fiscal rules would compel decision-makers to prioritise spending and focus (human, financial and political) resources to enhance efficiency (i.e. value for money) and effectiveness (i.e. impact). Overall, the ESI remains a strong benchmark with a clear rationale, methodology, and application. A path could be charted to ensure compliance with the ESI within 3-5 years, ideally through a legally binding medium-term expenditure framework. A medium-term framework would promote greater alignment between long-term plans (such as the SDP) and yearly budgets, as well as improve resource predictability for ministries – thus helping medium-term sectoral planning. Timor-Leste requires better – rather than larger – state budgets.
## ANNEX 1: KEY INDICATORS

<table>
<thead>
<tr>
<th>Real sector</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross domestic product</td>
<td>3.1%</td>
<td>3.6%</td>
<td>-3.8%</td>
<td>-0.8%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Final consumption expenditure</td>
<td>1.2%</td>
<td>1.9%</td>
<td>-1.0%</td>
<td>0.9%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Gross fixed capital formation</td>
<td>-3.6%</td>
<td>15.3%</td>
<td>-16.7%</td>
<td>-1.8%</td>
<td>-10.1%</td>
</tr>
<tr>
<td>Consumer price index, period average</td>
<td>0.6%</td>
<td>-1.5%</td>
<td>0.5%</td>
<td>2.3%</td>
<td>0.9%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Revenue</td>
<td>51%</td>
<td>45%</td>
<td>42%</td>
<td>47%</td>
<td>43%</td>
</tr>
<tr>
<td>Domestic revenue</td>
<td>11%</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
<td>11%</td>
</tr>
<tr>
<td>Estimated Sustainable Income</td>
<td>40%</td>
<td>33%</td>
<td>30%</td>
<td>35%</td>
<td>32%</td>
</tr>
<tr>
<td>Total expenditure</td>
<td>84%</td>
<td>100%</td>
<td>75%</td>
<td>75%</td>
<td>74%</td>
</tr>
<tr>
<td>Recurrent expenditure</td>
<td>64%</td>
<td>64%</td>
<td>59%</td>
<td>53%</td>
<td>55%</td>
</tr>
<tr>
<td>Capital expenditure</td>
<td>19%</td>
<td>36%</td>
<td>16%</td>
<td>22%</td>
<td>19%</td>
</tr>
<tr>
<td>Fiscal balance</td>
<td>-33%</td>
<td>-55%</td>
<td>-33%</td>
<td>-28%</td>
<td>-31%</td>
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<tr>
<td>Financing</td>
<td>33%</td>
<td>53%</td>
<td>54%</td>
<td>49%</td>
<td>31%</td>
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<tr>
<td>Cash balances</td>
<td>-9%</td>
<td>9%</td>
<td>15%</td>
<td>19%</td>
<td>2%</td>
</tr>
<tr>
<td>Excess PF withdrawals</td>
<td>40%</td>
<td>42%</td>
<td>37%</td>
<td>28%</td>
<td>26%</td>
</tr>
<tr>
<td>Loans</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>3%</td>
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<table>
<thead>
<tr>
<th>Monetary and Financial sector</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit to the private sector (% growth)</td>
<td>9.1%</td>
<td>-5.3%</td>
<td>24.5%</td>
<td>-2.4%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Lending interest rate (%)</td>
<td>13.9%</td>
<td>14.5%</td>
<td>12.5%</td>
<td>14.5%</td>
<td>16.3%</td>
</tr>
<tr>
<td>Nominal effective exchange rate (index)</td>
<td>94.1%</td>
<td>94.4%</td>
<td>94.8%</td>
<td>96.3%</td>
<td>97.4%</td>
</tr>
<tr>
<td>Real effective exchange rate (index)</td>
<td>114.0%</td>
<td>110.9%</td>
<td>109.0%</td>
<td>111.2%</td>
<td>112.0%</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>External sector</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current account</td>
<td>13%</td>
<td>-33%</td>
<td>-18%</td>
<td>-12%</td>
<td>8%</td>
</tr>
<tr>
<td>Goods and services</td>
<td>-76%</td>
<td>-67%</td>
<td>-60%</td>
<td>-60%</td>
<td>-55%</td>
</tr>
<tr>
<td>Primary income</td>
<td>81%</td>
<td>33%</td>
<td>46%</td>
<td>54%</td>
<td>67%</td>
</tr>
<tr>
<td>Secondary income</td>
<td>8%</td>
<td>2%</td>
<td>-4%</td>
<td>-6%</td>
<td>-4%</td>
</tr>
<tr>
<td>Capital account</td>
<td>2%</td>
<td>3%</td>
<td>2%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Financial account</td>
<td>2%</td>
<td>29%</td>
<td>31%</td>
<td>16%</td>
<td>-5%</td>
</tr>
<tr>
<td>Direct investment</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Portfolio investment</td>
<td>9%</td>
<td>42%</td>
<td>21%</td>
<td>12%</td>
<td>-16%</td>
</tr>
<tr>
<td>Other investment</td>
<td>-9%</td>
<td>-12%</td>
<td>9%</td>
<td>0%</td>
<td>7%</td>
</tr>
<tr>
<td>Net errors and omissions</td>
<td>-3%</td>
<td>-9%</td>
<td>1%</td>
<td>1%</td>
<td>-6%</td>
</tr>
<tr>
<td>Change in reserves</td>
<td>-14%</td>
<td>9%</td>
<td>-16%</td>
<td>-8%</td>
<td>1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Memorandum items</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil production (million BOE)</td>
<td>52</td>
<td>47</td>
<td>42</td>
<td>39</td>
<td>38</td>
</tr>
<tr>
<td>Petroleum Fund, closing balance (USD million)</td>
<td>16,218</td>
<td>15,844</td>
<td>16,799</td>
<td>15,804</td>
<td>17,692</td>
</tr>
</tbody>
</table>
ANNEX 2: MOVEMENT OF PEOPLE, GOODS, AND CAPITAL

The synchronised implementation of (domestic) health-related measures across the world has had a severe impact on cross border flows of people, goods and capital.\(^{92}\) 

Air travel has been severely impacted, and it is difficult to predict when it will recover. COVID-19 had an extraordinary impact on air passenger travel, even if domestic flights are supporting a recovery of total commercial flights – mainly owing to the United States and China (Figure 71). In Timor-Leste, air passenger levels have been lower since late 2018, when prices to and from Bali (Indonesia) were raised considerably (Figure 72). This also led to a change in the composition of passengers, with Timorese citizens travelling much less frequently since then.\(^{93}\) However, air travel has recently come to a halt with the restrictions imposed by Timor-Leste and destination countries. About 500 passengers arrived in Dili during the second quarter of 2020, in contrast to over 23,000 in the same quarter of 2019.\(^{94}\) It is unclear when the international travel situation will normalise, which is a source of great concern for the nascent tourism sector, business operations (e.g. availability of foreign workers), and for human mobility in general.

Cross-border road transport has also been affected, impacting the circulation of goods and people. In the absence of flights from Indonesia, many people have tried to enter the country through the land border with West Timor (East Nusa Tenggara) – sometimes illegally. The land border is porous and has been a key concern from a health perspective. In fact, the land border has been the main source of imported COVID-19 cases. Strict border controls were introduced in March, including the decision to only open the border for two hours per week (every Wednesday). More recently, this was changed to once every 17 days, due to the difficulty in managing quarantine levels. As a consequence, cross-border trade is thought to have been significantly affected – even if it is not possible to assess the magnitude of the impact.

\(^{92}\) Pandemics typically generate simultaneous demand and supply shocks, which are both domestic and external in scope, and last longer than other types of crisis (e.g. natural disaster). See the World Bank's ‘Recovery from the Pandemic Crisis: Balancing Short-Term and Long-Term Concerns’. The World Economic Forum's Global Risk Report (published in January 2020) assessed the spread of communicable diseases with the lowest risk for doing business (at number 30) and as having a weak interconnection to the economy.\(^{93}\) Foreign travellers – including tourists, workers and business executives – were more resilient to the price increases.\(^{94}\) Before COVID-19, there were daily flights to Bali and Darwin, and a weekly flight to Singapore. Currently there is only a (chartered) weekly flight to Darwin.
Maritime transport has been less frequent than in 2019, due to a combination of shipping disruptions and lower import demand. Global sea transport services have been disrupted by the COVID-19 pandemic, leading to delays at ports (due to social-distancing requirements and labour shortages) and reduced shipping frequency (due to lower global demand). The number of global port calls started to decline considerably in late December – mainly because of China – but in South East Asia this occurred later. In Timor-Leste, the weekly arrival of vessels at the Dili port has been significantly below the 2019 average (Figure 73). Nonetheless, this cannot be exclusively explained by global disruptions in shipping services, since domestic demand was also lower during this period.

Figure 73. Weekly vessel arrivals (Dili port)  
Figure 74. Global commodity markets (index)

International merchandise trade and commodity markets have been strongly affected. Air and sea transport disruptions have affected global supply chains, while weaker global demand also impacted on international trade volumes. Global merchandise trade dropped by over 25 percent in the second quarter of 2020. Most commodity markets have been severely affected, as the COVID-19 pandemic depressed demand and disrupted supply chains, but some have started to recover. For Timor-Leste, the prices of oil, natural gas, coffee, and rice are the most pertinent. The average price of crude oil dropped by 66 percent between January and April 2020 – hitting a low of $21 per barrel – but bounced back to $42 in July (Figure 74). Natural gas prices were already declining before COVID-19, and currently are 60 percent lower than in January 2019. The price of coffee – Timor-Leste’s main merchandise export – was also decreasing before the COVID-19 pandemic. Finally, the price of rice increased considerably in March and April, but it has partly eased since then.

Merchandise imports declined significantly, but coffee exports might be affected later in the year. Timor-Leste’s merchandise imports declined by 13 percent in the first half of 2020 – when compared to the same period in 2019 (Figure 75). This value drops to 25 percent if only the second quarter is considered, owing to mineral fuels (64 percent decline), vehicles (54 percent), cement (47 percent), machinery & parts (38 percent), and beverages (33 percent) – Figure 76. Imports of cereals increased by 200 percent, mainly due to the Government’s rice purchase. As previously stated, these sharp declines are likely to be a combination of lower domestic demand and some difficulties in sourcing imports. The bulk of coffee exports – which account for about 95 percent of merchandise exports – usually takes place in the second half of the year, due to the timing of the harvest. However, lower global demand and lower prices could affect export proceeds.

95 In terms of countries of origin, imports from China declined somewhat in the first quarter of 2020, but subsequently increased. However, there were significant declines from Indonesia, Hong Kong and Singapore in the second quarter of 2020, suggesting that COVID-19 may have had an impact in sourcing imports from affected countries. Export prohibitions (bans on medical supplies and equipment, as well as foodstuffs) may also have played a role. For instance, imports of pharmaceutical products declined by 78 percent in the second quarter of 2020.
Global financial markets suffered a large shock, but have been gradually recovering. Trends in equity and bond markets affect the investment income of the Petroleum Fund (e.g. dividends and interest), in addition to its valuation. Between 9 February and 15 March, the S&P 500 and the Dow Jones Industrial Average recorded a 30-35 percent reduction in value (Figure 77). The MSCI World Index, which accounts for about 35 percent of the assets of the Petroleum Fund, suffered a drop of the same magnitude. However, global equity markets have gradually recovered since then – and even surpassed pre-crisis levels, which may seem at odds with the economic realities (and outlook) of many countries. Bond markets have also been affected by global economic conditions. The yields of U.S. treasury bonds, which account for a large proportion of the Petroleum Fund’s investment portfolio, have fallen considerably across different maturities (Figure 78). Increased financial market volatility – due to high economic uncertainty – may also dampen the outlook.