TIMOR-LESTE
ECONOMIC REPORT

MAY 2021

CHARTING A NEW PATH

WORLD BANK GROUP

Timor-Leste Economic Report: Charting a New Path
May 2021

World Bank Group

Cover Photo by Timor Skyview/Machel Silveira

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KEY INDICATORS	
Population (million)	1.3
GDP (USD billion)	1.6
GDP per capita (USD)	1,295
Poverty headcount ratio – national poverty line (% population)	41.8
Poverty headcount ratio – $1.90 a day (2011 PPP, % population)	22.0
Poverty headcount ratio – $3.20 a day (2011 PPP, % population)	65.9
GINI index	28.7

Notes: Population and GDP data are for 2019. Poverty and inequality data are for 2014 (with revised PPPs).

ACKNOWLEDGEMENTS

We would like to acknowledge the Ministry of Finance and the Central Bank of Timor-Leste as the producers and compilers of most data used in this report. The report also benefited from information provided by other official sources and feedback from internal and external peer reviewers. The Special Focus is based on recent work undertaken by the World Bank's Health, Nutrition and Population (HNP) Global Practice.

SUMMARY

RECENT DEVELOPMENTS

- COVID-19 is spreading quickly throughout the country, despite early successes in containing the virus. Meanwhile, flooding and landslides have caused considerable human loss and economic damage. These compounding health and humanitarian emergencies are undermining the economic recovery in 2021, but the recent approval of a revised budget can alleviate the negative impacts.
- Estimates suggest that the economy contracted by about 7 percent in 2020, the largest decline since independence. Public health measures and lower consumer confidence weakened private consumption, while political uncertainty in early 2020 undermined public spending – by delaying the approval of the 2020 budget. Moreover, international travel restrictions hampered exports of services.
- Public expenditure declined by 9 percent in 2020. Capital spending nearly halved, but public transfers increased to support households. Domestic revenues suffered from lower economic activity. The fiscal deficit eased to 26 percent of GDP – mostly due to lower spending – but remains very large. The deficit was largely financed by withdrawals from the Petroleum Fund.
- Consumer price inflation eased to 0.5 percent in 2020, while the real effective exchange rate appreciated by about 1 percent – owing to a stronger U.S. dollar. Credit to the private sector grew by 11 percent in 2020, mostly due to higher lending to individuals.
- The current account weakened in 2020 because of lower primary income and despite an improving trade balance. Imports declined by 19 percent, particularly due to construction and travel services. Exports nearly halved, owing to limited travel services and lower coffee earnings.

OUTLOOK AND RISKS

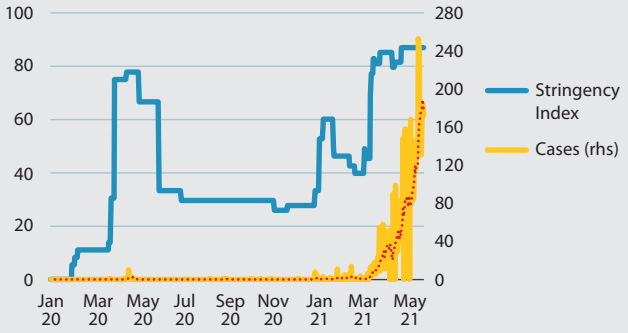
- Economic activity has been weakened by the recent COVID-19 outbreak and the impact of Cyclone Seroja. GDP is forecast to grow by 1.8 percent in 2021, which is lower than the 3.1 projected in October 2020. The economy is expected to recover in the medium-term, but structural constraints will remain an impediment to faster growth. Reforms to boost productivity and competitiveness are critical.
- COVID-19 remains the key risk to the outlook, as it may require prolonged containment measures to avoid large human losses. A swift vaccination rollout is more critical than ever. Natural disasters also present a significant risk, since they often have considerable impacts on economic activity.
- A sustained economic recovery requires political stability, especially as presidential and parliamentary elections are scheduled for 2022 and 2023 – respectively. Improving the quality of spending is a key priority, while devising a sustainable fiscal path is crucial to avert a painful adjustment with large socio-economic consequences.

SPECIAL FOCUS: BUILDING A STRONGER HEALTH SYSTEM

- COVID-19 and recent floods have highlighted and exacerbated underlying weaknesses in Timor-Leste's health system. Disruptions to health and nutrition services arising from these crises may have a multiplier effect on access to care for routine and essential care, setting back the country's progress on health outcomes and human capital development.
- Persistent challenges include a high rate of childhood stunting, infectious diseases, and poor maternal and child health outcomes. A rising burden of noncommunicable diseases and pandemic preparedness and response are emerging needs. Tackling multiple agendas simultaneously will require substantive reforms in how health sector resources – financing, physical resources, information – are used.
- Addressing childhood stunting is a priority that will require government-wide multi-sectoral action. Key interventions to improve health service delivery include increasing investments in primary health care and improving the skills-mix and competencies of health workers. Investing in emergency preparedness will also be key to effective management and response to future crises.

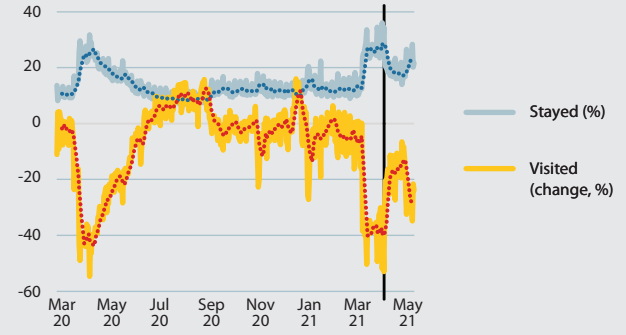
SNAPSHOTS OF 2020 AND EARLY 2021

COVID-19 has been spreading fast in 2021, despite early successes in containing the virus



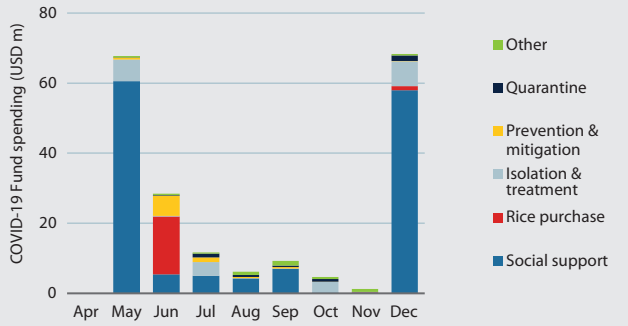
Source: Oxford COVID-19 Government Response Tracker

Human mobility declined considerably in March 2021, but has bounced back rapidly after Cyclone Seroja



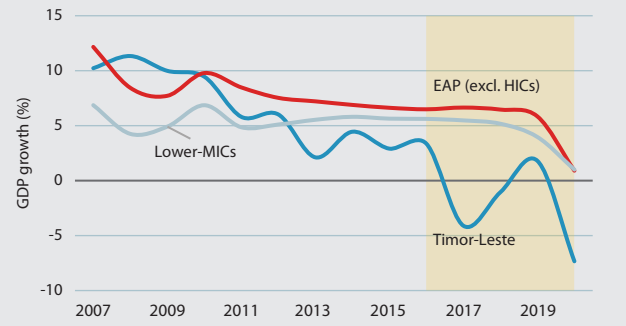
Source: Facebook Movement Range Maps

The COVID-19 Fund financed several measures to support households and businesses in 2020



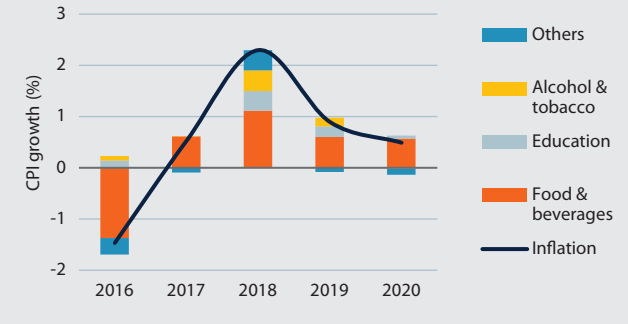
Source: Ministry of Finance

GDP declined by about 7 percent in 2020 due to political uncertainty and the COVID-19 pandemic



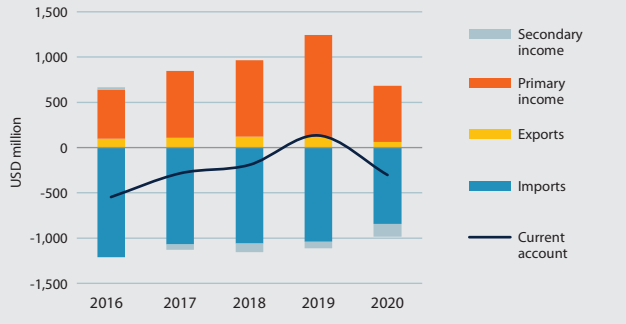
Source: Ministry of Finance

Consumer price inflation eased to 0.5 percent, despite higher international food prices



Source: Ministry of Finance

The current account weakened due to lower primary income and despite an improving trade balance



Source: Ministry of Finance

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, balance of payment (BoP) statistics do not yet reflect these changes. Therefore, the data presented in this report (e.g. national accounts and balance of payments) continues to follow the previous convention – to ensure consistency and provide a more accurate assessment of domestic economic conditions.

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Flood relief is distributed in Dili
Credit: Australian in Timor-Leste

PART 1.

RECENT DEVELOPMENTS

An outbreak of COVID-19 and flash floods have led to the loss of human life and have undermined the economic recovery. March 2020 was marked by heavy rains and the first reported cases of COVID-19 in the country. Communities gradually recovered from the flood damage and the virus was contained for most of the year – despite sporadic cases. However, these were only warning signs of what was to come. In March 2021, COVID-19 cases started to increase rapidly, while Cyclone Seroja caused nationwide floods and landslides in April – causing much more destruction than in 2020. While the initial 2021 budget marked a shift from short-term relief measures to medium-term recovery activities, recent events forced a budget revision to refocus spending on mitigation. This section starts with an analysis of the recent COVID-19 outbreak and the flash floods – using innovative high-frequency data for 2021 whenever possible – before delving into an economic analysis of 2020 developments.[1] The current context presents a time for reflection, which will entail taking stock of current policy priorities and charting a new path to secure inclusive and sustainable development. In essence, Timor-Leste can and should build back better.

COVID-19 AND FLOODS

COVID-19 is spreading fast throughout the country, despite early successes in containing the virus. Most COVID-19 cases reported in 2020 were associated with international travellers testing positive during quarantine. The swift implementation of public health measures and voluntary changes in behaviour helped prevent an outbreak in the early stages of the global pandemic.[2] However, a significant surge in cases in West Timor (Indonesia) towards the end of 2020 and a porous land border – permitting uncontrolled arrivals – led to a rising number of cases. Flash floods in early April further undermined efforts to contain the virus. Reported cases of COVID-19 have increased considerably since early March 2021, raising concerns about the impact of the disease on the population, the health system, and economic activity (Figure 1). Nearly 6,000 cases and 13 deaths have been reported as of 24 May 2021 – mostly in Dili.[3] A State of Emergency has been declared several times since March 2020 (for periods of 30 days), enabling the government to adopt measures that otherwise would be unconstitutional. However, the stringency of these measures has varied through time – partly as a response to the epidemiological situation, but also due to evolving economic needs.[4]

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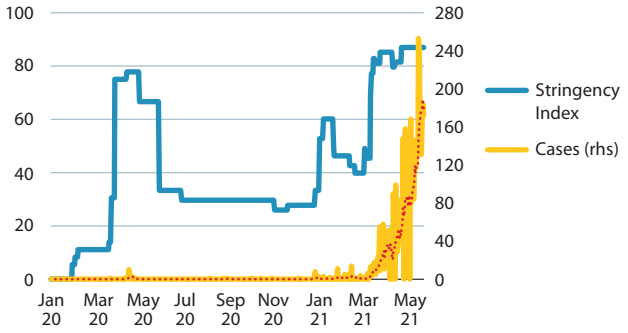
[1] The lack of relevant economic data undermines a timely assessment of the impacts of recent shocks. The next TLER will aim to provide such an assessment with available data.

[2] The small population size and relative geographical isolation were also key factors, as suggested by the early experience of many Pacific island small states.

[3] This corresponds to a rate of about 4,500 cases per million, which is around the first tercile when considering all countries in the world (i.e. 66 percent of values are above those recorded in Timor-Leste).

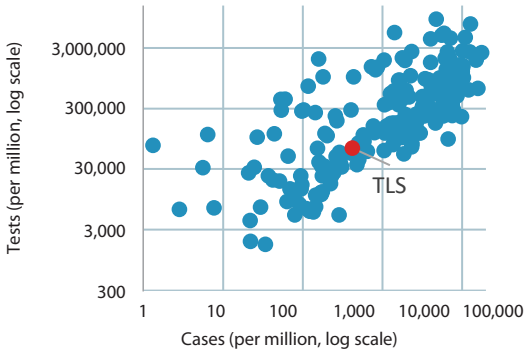
4 The Oxford COVID-19 Government Response Tracker (OxCGRT) produces a stringency index that measures the strictness of (containment) policies that restrict people's behaviour – such as international travel restrictions, school closures, and suspension of public transport.

Figure 1. Stringency index and COVID-19 daily cases



Note: Dotted line shows 7-day average of reported cases.
Source: Oxford COVID-19 Government Response Tracker.

Figure 2. COVID-19 cases and testing (per million)



Note: Data collected on 24 May 2021.
Source: Worldometer.

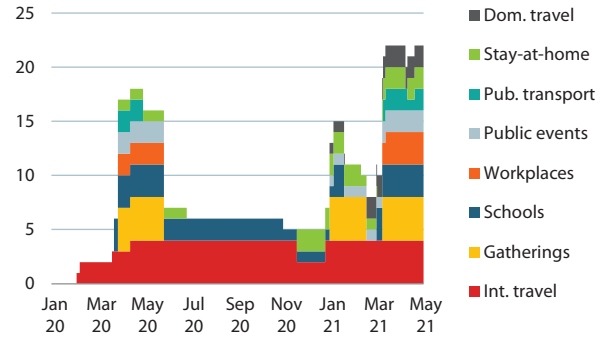
Improvements in testing and contact tracing were insufficient to avert community transmission. Timor-Leste had one of the lowest COVID-19 case incidence rates in the world in 2020, but testing levels were also very low. COVID-19 testing capabilities have increased gradually since March 2020 – when test samples had to be sent to Darwin (Australia) for analysis. In particular, the international community supported efforts to enable the National Laboratory to perform reliable tests and teams were trained to conduct contact tracing. Testing levels are now closer to international benchmarks, but so are the number of cases (Figure 2). Health preparedness was also enhanced, mainly through the purchase of medical equipment and supplies, staff training, and the expansion of clinical and isolation facilities. The World Health Organization (WHO) and other development partners have played an important role in this area. Nonetheless, the current outbreak proved too strong for existing capacities and community transmission was acknowledged in April 2021.

Effective containment measures and widespread immunisation will be key to slowing COVID-19 infections. With an increasing number of cases originating from West Timor, some containment measures were reinstated in late December 2020 – although many were short-lived (Figure 3).[5] Domestic travel restrictions in February 2021 included 'sanitary fences' in municipalities bordering Indonesia – namely, Bobonaro and Covalima. Stronger measures were adopted in March 2021 – in response to a significant surge in cases – such as restrictions on gatherings, workplace closures, suspension of public transport, and school closures. This response was stricter than in March 2020, with the authorities imposing a confinement ('lockdown') in Dili. Nonetheless, the confinement was suspended after the flash floods and was only reinstated about four weeks later. Meanwhile, a national vaccination plan has been approved and is currently under implementation. More than 53,000 doses have been administered, which corresponds to about 4 percent of the population – as of 21 May 2021 (Figure 4).[6] A high immunisation coverage rate will be key to averting high human costs and supporting the economic recovery. Without effective containment measures and a high vaccination take-up rate, the virus will likely spread more widely. Hence, the timely sourcing and administration of vaccines will be crucial to contain the virus, enable the opening of borders, and thus support the economy.

[5] The Oxford COVID-19 Government Response Tracker (OxCGRT) compiles publicly-available information on several indicators of government responses. These comprise containment, health, and economic measures.

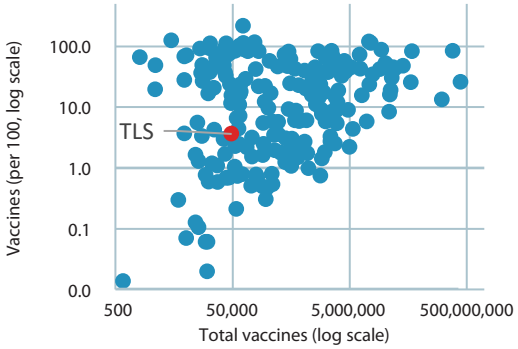
[6] The initial batch of vaccines was supported by the COVAX Facility, while a second batch has been recently provided by the Australian government.

Figure 3. Containment measures (sum of scores)



Source: Oxford COVID-19 Government Response Tracker.

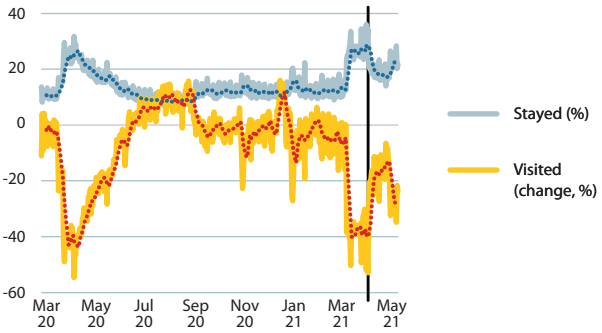
Figure 4. Vaccine doses administered (per 100)



Note: Data collected on 24 May 2021.
Source: WHO.

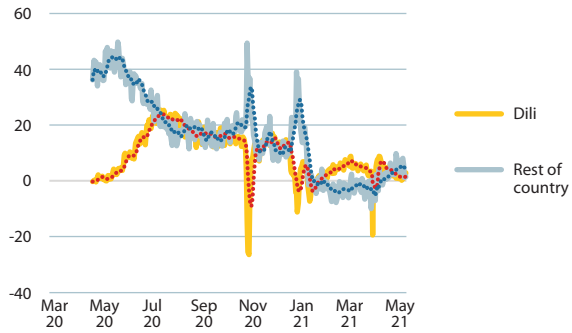
The public response to the recent COVID-19 outbreak appears to be weaker than in 2020. Compliance with public health measures and individual precautionary behaviours can significantly lessen the risk of contagion. In particular, limiting human interactions is crucial to contain the spread of the virus, albeit difficult in a cash economy that requires physical transactions. The impact of public health measures and individual behaviours can be proxied by measures of human mobility. The evidence suggests that human mobility in Dili declined considerably in March 2021 (by about 40 percent), which is comparable to the data from March 2020 (Figure 5).[7] The reduction in mobility can be directly attributed to the implementation of containment measures.[8] Mobility recovered in early April, reflecting a temporary lift of the confinement (to ease the impact of the floods), but this was partly reversed after its reinstatement. It should be noted that Facebook data mainly tracks the wealthier segments of the population, which might be more compliant with the rules – due to their socio-economic conditions. Additional information suggests that compliance (in Dili) has been more limited than in March 2020 – as evidenced by several public statements from the authorities. There is also evidence of people moving from Dili to other municipalities, which is a key factor leading to higher COVID-19 cases outside Dili. In particular, there were significant peaks in early November – coinciding with All Souls Day – and around New Year (Figure 6). Overall, mobility disruptions have a considerable impact on the economy, especially since economic activity is mainly concentrated in Dili.[9]

Figure 5. Mobility in Dili (%)



Note: 'Stayed' is a proxy for staying at home, while 'visited' measures change in movement. Dark line marks the floods.
Source: Facebook Movement Range Maps.

Figure 6. People's location (percentage change)



Note: Percentage change from benchmark.
Source: Facebook Population Density Maps.

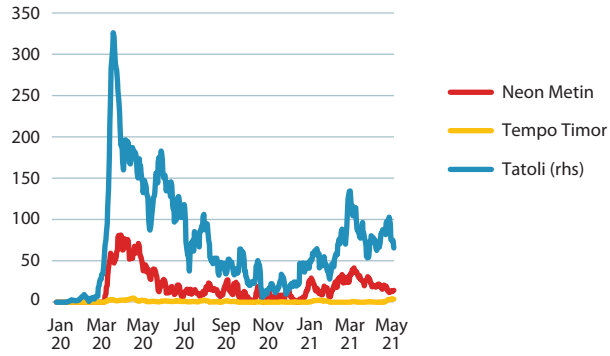
[7] The Facebook mobility data reports two metrics: (i) change in movement ('visited'), calculated as the change in the average number of Bing tiles (approximately 600m x 600m) a user is seen at a given day (relative to a baseline); and (ii) the proportion 'stay put' ('stayed'), calculated as the share 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.

[8] However, some measures are likely to be less effective due to housing overcrowding, especially in Dili.

[9] According to the Business Activity Survey, about 80 percent of economic activity takes place in (or around) Dili.

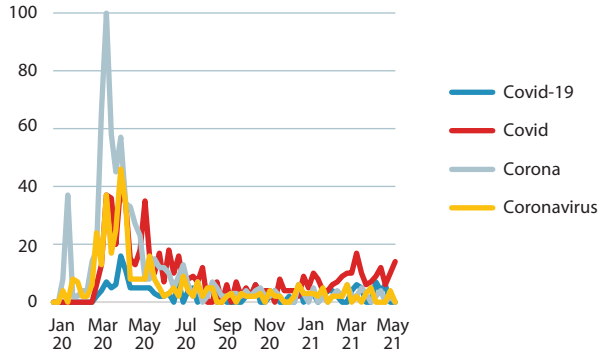
News fatigue, public apathy, and misinformation can undermine the health response. Public awareness of COVID-19 is key to preventing the spread of the virus. However, public information disseminated through online media seems to have covered COVID-19 less frequently than in 2020 – despite the sharp increase in cases and a rising threat to peoples' lives. The number of news articles mentioning COVID-19 in the Tatoli website – the state-owned news agency – has been lower than in March-April 2020 (Figure 7).[10] Lower coverage might be due to news fatigue. Google searches for COVID-19 (or related terms) have been considerably lower (Figure 8). Meanwhile, misinformation on social media platforms – including the spread of false or inaccurate information on Facebook – can have damaging effects, including vaccine hesitancy among the population. Public information campaigns remain crucial to communicate risks, promote preventive behaviours, encourage vaccine take-up, and announce health and economic measures. Strong and coordinated messages from high-level national figures across the political spectrum would be key to enhance public awareness. This would ultimately help avert a severe strain on the healthcare system.

Figure 7. Local news articles mentioning COVID-19



Note: Data presented as a 7-day moving average.
Source: News websites.

Figure 8. Google searches (index = 100)



Note: Highest value across all keywords is set to 100.
Source: Google Trends.

Flooding and landslides caused considerable human and economic loss, while undermining COVID-19 response efforts. Cyclone Seroja brought heavy rains to Timor-Leste and parts of Indonesia in late March and early April 2021. A record amount of rain fell on 4 April, equivalent to about one-third of the annual average.[11] Persistent and intense rainfall led to flash floods and landslides that killed 44 people and temporarily displaced nearly 16,000 people. More than 33,000 households were affected, mostly in Dili. The storm caused lengthy power outages, while damaging several roads, bridges, and buildings. The damage to public infrastructure has been tentatively estimated at $225 million.[12] Flooding in the National Laboratory and SAMES led to the loss of vital medical supplies and medicines to tackle COVID-19. Some isolation facilities were also damaged. Improvised evacuation centres provided shelter to displaced people – as did many relatives in their homes – which likely contributed to the spread of COVID-19.

The economic impact of shocks and subsequent mitigation measures is difficult to assess in the absence of comprehensive data. Regular monitoring of economic conditions is vital to support decision making. The lack of relevant data for 2021 precludes a timely evaluation of the economic impact of shocks – such as COVID-19 and floods – as well as the effectiveness of the policy response.[13] Small-scale surveys conducted in 2020 suggest that the impacts were significant and that relief measures were valuable in supporting households and businesses – despite some

[10] 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.

[11] In Dili, more than 300 millilitres of rain fell in 24 hours – according to the National Directorate of Meteorology and Geophysics, which is part of the Ministry of Transport and Communications.

[12] According to provisional data from the Ministry of Public Works – as reported by Lusa.

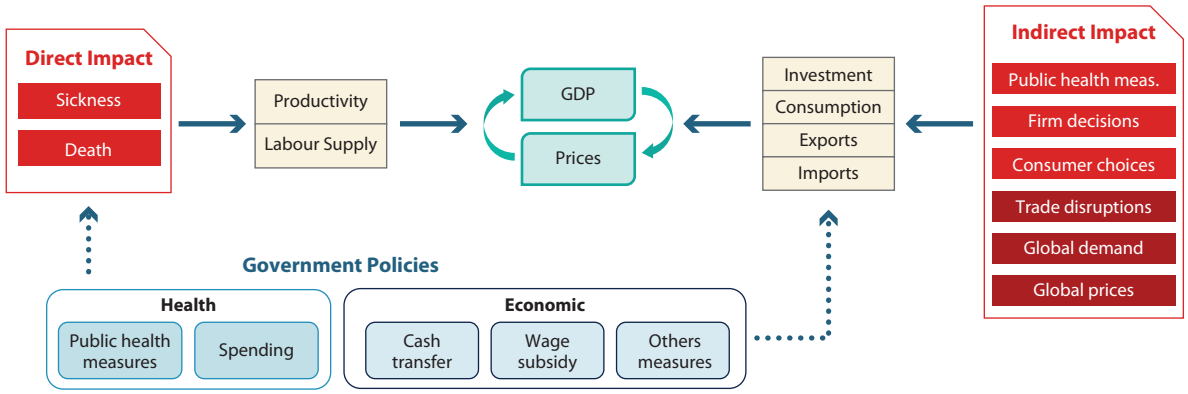
[13] The World Bank, the United Nations, and the European Union are initiating efforts to conduct a post-disaster needs assessment (PDNA) to help inform government policy.

implementation challenges.[14] However, it is unclear how much progress has been achieved in tackling institutional, administrative, and technical constraints – that may have affected the efficacy of the initial policy response – during the past year. For instance, developing consolidated and (digitally) integrated administrative records remains critical to increase the speed and effectiveness of government-to-person (G2P) payments.

REAL SECTOR

COVID-19 has considerably disrupted economic activity, which has been further affected by recent floods. The COVID-19 pandemic hinders economic activity through direct and indirect channels (Figure 9). Mortality and temporary absence from work affect labour supply and productivity. These direct impacts were relatively low in 2020, although they are expected to increase in 2021 – as deaths and sickness increase. Moreover, indirect impacts have significantly dampened aggregate demand. Public health measures have (unintentionally) lowered the demand and supply of goods and services, while consumers have delayed spending and firms have postponed investments.[15] Moreover, transport disruptions continue to hamper (tourism and business) travel receipts, while global demand and prices for certain commodities may affect trade flows. Political uncertainty in early 2020 and flash floods in April 2021 (as well as in March 2020) have further compounded these effects.[16] Nonetheless, several health and economic measures have been (and will be) implemented to mitigate some of these impacts.

Figure 9. Economic impacts of COVID-19



Source: World Bank staff.

GDP is estimated to have contracted by over 7 percent in 2020, the sharpest decline since independence. In 2020, political uncertainty and the COVID-19 pandemic had unprecedented impacts on the economy. These were felt 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). Public expenditure was 9 percent lower than in 2019, partly due to the delayed approval of a 2020 budget and despite large emergency spending related to COVID-19 (Figure 10). Consumption-related tax receipts declined, with the excise tax falling by 5 percent and the sales tax by 4 percent. Electricity consumption declined by 6 percent, especially owing to lower

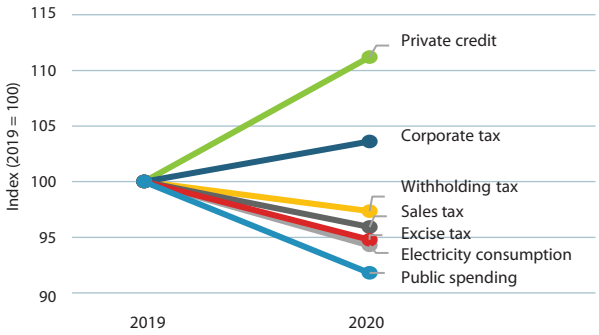
[14] These include surveys conducted by the United Nations (UN) in June-July 2020; a partnership between the Mata Dalan Institute (MDI) and Oxfam in June 2020; and The Asia Foundation (TAF) in May, July, and September 2020.

[15] There is limited data to evaluate the (direct and indirect) economic impacts of COVID-19. However, small-scale surveys conducted in 2020 point to a large drop in incomes, job losses, and food insecurity.

[16] Political uncertainty contributed to a nearly 10-month delay in the approval of the 2020 budget, which resulted in lower public spending and reduced private demand – through lower consumer and business confidence.

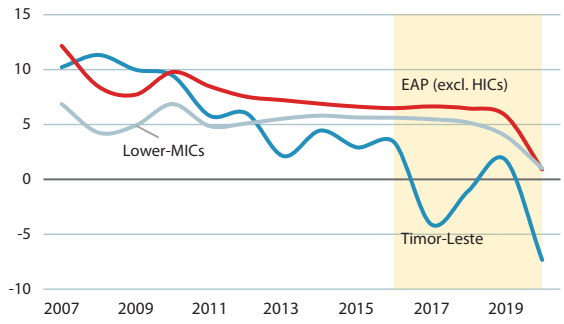
domestic (household) usage. Imports of cement and vehicles fell by 6 and 10 percent, respectively.[17] Passenger arrivals at Dili's airport dropped by 78 percent due to international travel restrictions, which severely affected exports of services.[18] Corporate tax collection increased by 4 percent, but this mainly reflects a positive business performance in the previous (fiscal) year. The withholding tax, which is partly related to public investment projects, declined by 3 percent. Private credit increased by 11 percent, but this was largely accounted by higher individual borrowing. Overall, GDP is estimated to have declined by 7.3 percent in 2020, the largest decline since independence and the third recession in four years (Figure 11).

Figure 10. Proxies of economic activity (Index)



Source: Ministry of Finance and Central Bank.

Figure 11. GDP growth (%)



Source: Ministry of Finance and World Bank.

FISCAL SECTOR

Public expenditure declined by 9 percent in 2020, despite strong spending related to COVID-19. Regular public spending was constrained by the absence of a budget until October 2020, which was caused by renewed political instability. For more than 9 months, spending followed a duodecimal regime.[19] Nonetheless, an autonomous COVID-19 Fund was created in April 2020 – mostly financed by the Petroleum Fund – to facilitate the health and economic response.[20] Total public spending amounted to $1.1 billion in 2020 – about 72 percent of GDP – which was 9 percent below 2019 levels, and 24 percent lower if the COVID-19 Fund is excluded (Figure 12). Public spending has proceeded at a strong pace in the first three months of 2021 – when compared to previous years.[21]

[17] When compared to 2018 and 2019, firm registrations were higher and firm closures were lower in 2020. This might be because the 2017-2018 economic recession had already pushed many (inefficient) firms out of business, while many firms likely avoided closure due to the economic support measures – such as the wage subsidy, tax relief, and access to credit.

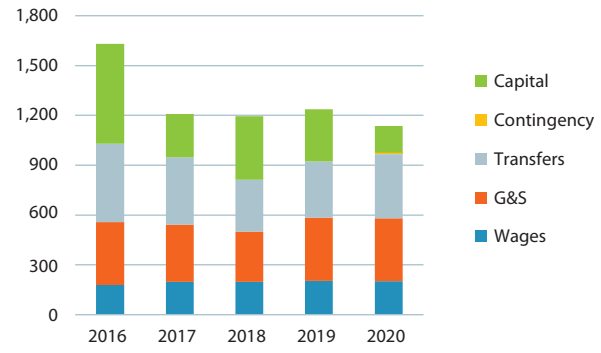
[18] Most of these declines were particularly strong in the second quarter of 2020, which will likely reoccur in the second quarter of 2021.

[19] The regime allows monthly appropriations – for the same purpose foreseen in the previous budget law – of up to one-twelfth of the previous budget. This means that new activities (e.g. new capital projects) cannot be initiated. More importantly, spending is constrained by the lack of access to the Petroleum Fund, since withdrawals require parliamentary approval – usually granted through the regular budget approval process.

[20] The COVID-19 fund was created in April 2020 with an endowment of $150 million to finance urgent medical expenditures and economic relief measures. Its budget was subsequently increased to about $220 million in June. In October 2020, its budget was revised to $333 million, although spending only reached $195 million in 2020.

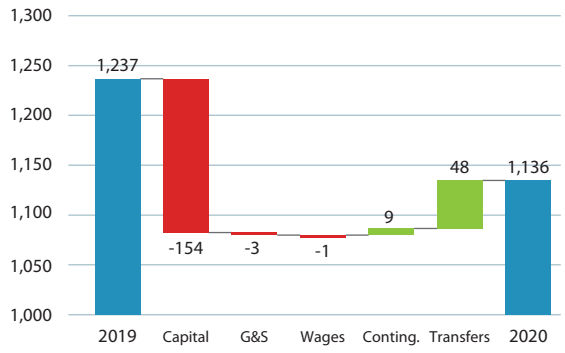
[21] However, this has been mainly driven by public transfers. A large volume of public transfers – such as grants to other public institutions – may artificially raise budget execution and conceal implementation underperformance – since it may not reflect actual spending.

Figure 12. Government expenditure (USD million)



Source: Ministry of Finance.

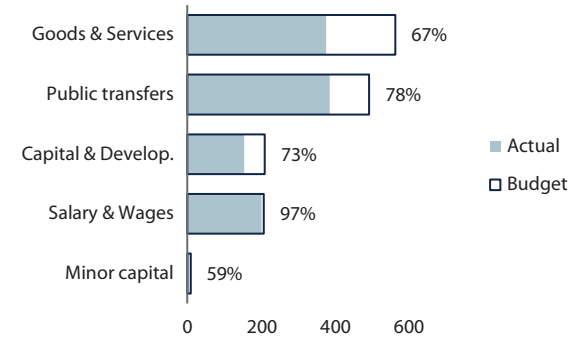
Figure 13. Government expenditure (USD million)



Source: Ministry of Finance.

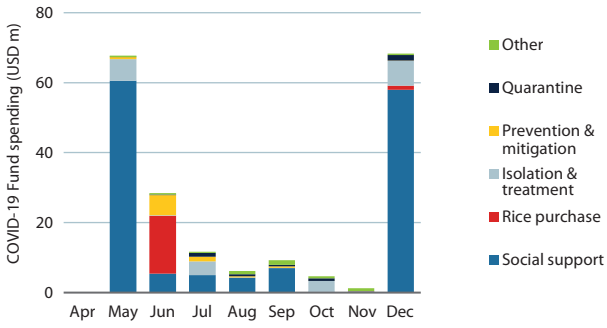
Capital spending nearly halved in 2020, while public transfers increased to support households. Capital expenditures were severely constrained in 2020, declining by $154 million when compared to 2019 – equivalent to a 49 percent drop (Figure 13). This could be partly due to the duodecimal regime, which only allows the processing of payments related to existing projects – as new projects cannot be initiated. However, capital spending in 2020 was also 58 percent lower than in 2018 – which had a duodecimal regime until September. International travel restrictions and disruptions to maritime trade may also have affected the availability of foreign workers and construction supplies. Public transfers increased by 14 percent when compared to 2019, mainly reflecting measures to support households. Spending on both goods & services and salary & wages was 1 percent lower than in 2019. Budget execution was low across several categories (Figure 14). Budget appropriations were only approved in October 2020, so the large execution gap was likely due to overambitious planning for the remaining two months of the year.

Figure 14. Budget execution (million and percent)



Source: Ministry of Finance.

Figure 15. COVID-19 Fund spending (USD million)



Source: Ministry of Finance.

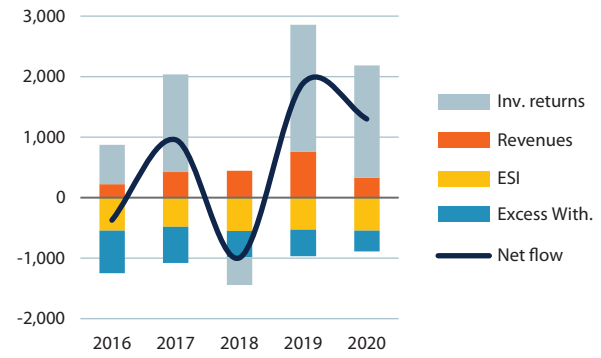
The fiscal response to COVID-19 was strong, which helped mitigate some of its indirect impacts. Public health measures were crucial to prevent the spread of COVID-19 in 2020, but had a considerable (indirect) impact on economic activity. In response to this, the Government prepared an economic response package – financed by the COVID-19 Fund – to support people's livelihoods and affected businesses. The main measures targeting households were cash transfers (May) and the distribution of food baskets (December), while a large purchase of imported rice – to build food stocks – accounted for most spending in June (Figure 15).[22] Economic measures also included $7 million on a wage subsidy, $5 million on a credit moratorium, and about $4 million on utility subsidies (electricity and water). These measures provided some relief in mitigating income losses, even if they were delayed by planning

[22] These dates reflect payments processed by the COVID-19 Fund, although 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.

and implementation challenges.[23] Spending on health-related measures – such as purchases of medical supplies and equipment – was comparatively low.[24] Overall, $195 million was spent through the COVID-19 Fund in 2020 – about 17 percent of total public spending. This was one of the largest relief packages in the world – representing 13 percent of GDP in 2020.[25]

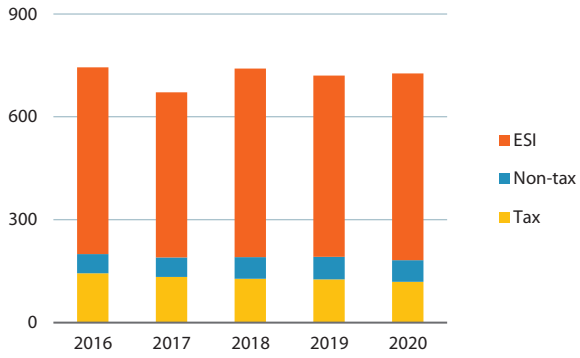
The Petroleum Fund benefited from large investment returns and was valued at nearly $19 billion in December 2020. Petroleum Fund receipts include petroleum revenues and returns on investment. Petroleum revenues mainly comprise taxes and royalties related to offshore production from the Bayu-Undan field, which is predicted to cease by 2023. Investment returns continued to perform strongly in 2020, despite losses in the first quarter (Figure 16). However, most of these investment returns were due to asset revaluations – rather than interest or dividend income from its assets (i.e. bonds and stocks). Withdrawals from the Petroleum Fund were lower than in 2019, partly reflecting lower public spending in 2020. Given this, the Petroleum Fund balance stood at $18.9 billion at the end of 2020 – about 12 times larger than GDP – which is a historic high.[26] The Petroleum Fund has benefited from a strong performance of its asset portfolio in recent years, especially international stocks. However, the end of petroleum revenues and ambitious public spending plans – requiring higher withdrawals – will threaten the sustainability of the Petroleum Fund in the medium-term.

Figure 16. Petroleum Fund flows (USD million)



Source: Central Bank.

Figure 17. Total revenue (USD million)



Source: Ministry of Finance.

Domestic revenue collection declined by 5 percent, mainly on account of lower economic activity. Government revenue comprises the Estimated Sustainable Income (ESI) and domestic revenue.[27] The ESI for 2020 was set at $544 million, which was 3 percent higher than in 2019.[28] Domestic revenue comprises tax and non-tax revenue. Tax revenue was 6 percent lower than in 2019 (Figure 17). This was mainly due to declines in (individual) income taxes and excise taxes – by 15 and 5 percent, respectively. Although domestic revenue performance was impacted by lower economic activity in 2020, total revenue increased by 1 percent due to a higher ESI. Nonetheless, the ESI is set to decline in the medium-term – due to declining petroleum wealth – thus placing further pressures on the Petroleum Fund balance.

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[23] For instance, the cash transfer payment only started to be disbursed to households in June, nearly three months after the first State of Emergency.

[24] This is perhaps explained by the difficulty in sourcing imports and the (in-kind) support provided by the international community. However, complacency may have played a role – ultimately reflected in the absence of adequate allocations in the initial 2021 budget (e.g. for COVID-19 preparedness and vaccines).

[25] In April 2020, the government introduced a substantial fiscal stimulus to respond to the COVID-19 crisis. According to the IMF COVID-19 fiscal tracker, Timor-Leste had one of the largest (relative) amounts of 'above the line measures', such as additional spending and foregone revenues.

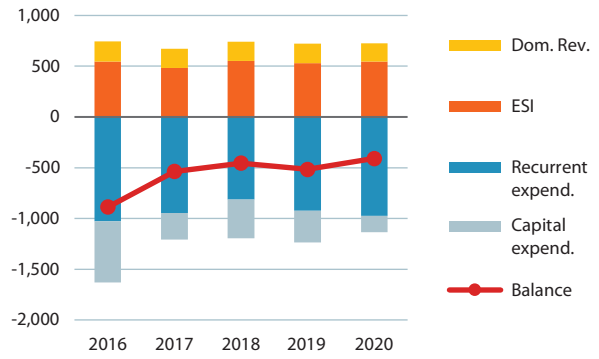
[26] The Petroleum Fund was valued at $19 billion at the end of March 2021.

[27] Development partner grants are mostly off-budget. The values (self-)reported in the aid transparency portal suggest that disbursements have steadily declined from $276 million in 2012 to $139 million in 2020 (including technical assistance).

[28] 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.

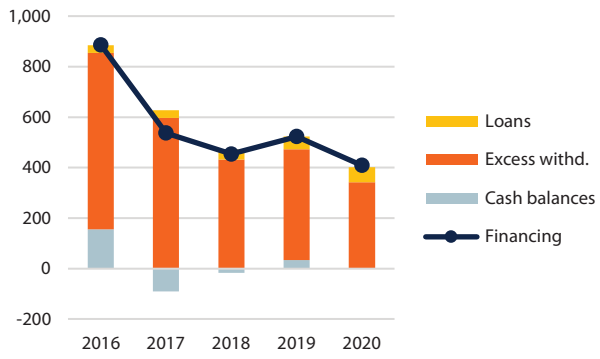
The fiscal deficit declined in 2020 – mostly due to lower spending – but remains very large. The budget balance is calculated as the difference between total revenue (including the ESI) and total expenditure.[29] Government accounts show a deficit of $409 million in 2020 – equivalent to 26 percent of GDP (Figure 18). This represents a decline from the 31 percent recorded in 2019, owing to lower public spending and marginally higher total revenues. The fiscal deficit was predominately financed by excess withdrawals from the Petroleum Fund, although loans and cash balances also contributed to closing the financing gap – albeit to a much lesser extent (Figure 19).

Figure 18. Fiscal balance (USD million)



Source: Ministry of Finance.

Figure 19. Deficit financing (USD million)

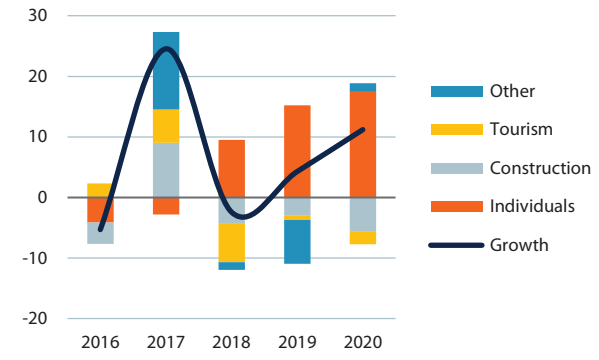


Source: Ministry of Finance.

MONETARY AND FINANCIAL SECTOR

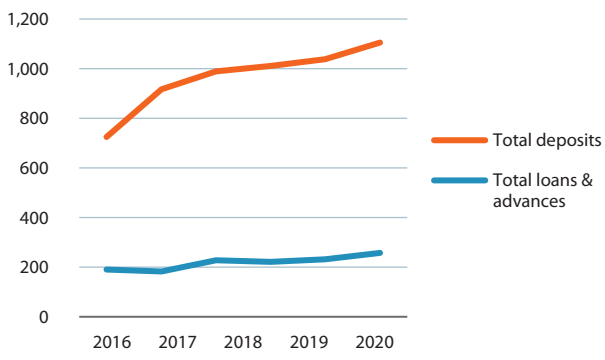
Credit to the private sector grew by 11 percent in 2020, mostly due to high lending to individuals. Commercial bank lending to the private sector increased to $257 million in December 2020, a 11 percent increase over levels recorded in 2019 (Figure 20). This strong performance was driven by larger borrowing from individuals, and to a lesser extent by industry & manufacturing. However, credit was lower to construction and tourism – two key sectors that have suffered from weaker economic activity induced by COVID-19. Businesses do not seem to have resorted to credit to address cash-flow constraints – unlike in 2017 – but it is unclear what has driven the 32 percent growth in credit to individuals. In 2020, individuals accounted for about 64 percent of all credit extended to the private sector. Credit to the private sector amounted to about 16 percent of GDP in 2020.

Figure 20. Private credit growth (%)



Source: Central Bank.

Figure 21. Loans and deposits (USD million)



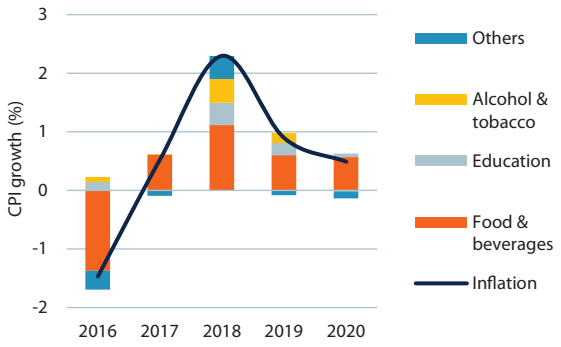
Source: Central Bank.

[29] While the ESI is included in total revenues, excess withdrawals from the Petroleum Fund are part of deficit financing – thus providing a consistent insight on medium-term fiscal sustainability.

Deposits amounted to over $1 billion in 2020, but loans & advances remain a fraction of that value. The domestic banking sector is highly liquid, while a large proportion of bank assets are placed overseas. Liquid assets accounted for about 80 percent of total assets.[30] Total deposits in the banking system increased by 7 percent in 2020 – to $1.1 billion, or 70 percent of GDP (Figure 21). The loan-to-deposit ratio was only 23 percent in 2020, which means that deposits are not being converted into loans that could finance private investment in the country. The interest rate spread remains high – at 11 percentage points – which is a sign of poor financial intermediation. In fact, domestic credit to the private sector remains low by international standards, at 16 percent of GDP. The share of non-performing loans (NPL) did not increase in 2020, perhaps owing to the economic measures designed to support businesses and households – such as the credit moratorium – as well as NPL write-offs.[31] Nonetheless, the impacts of a protracted economic recession might be felt with a lag.

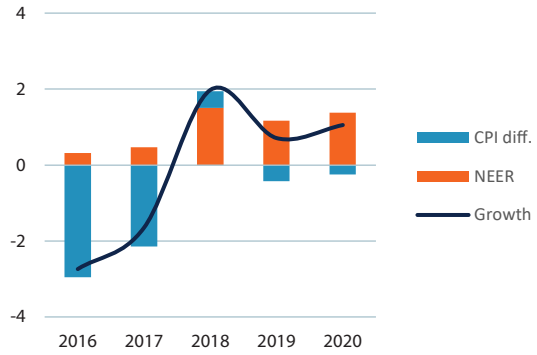
Consumer price inflation eased to 0.5 percent in 2020, despite higher international food prices. Domestic inflation, as measured by the consumer price index (CPI), has been low over the past few years (Figure 22). In fact, inflation has not surpassed 3 percent since 2013. Food & beverage prices have traditionally been the key driver of domestic inflation, owing to their large weight in the consumption basket.[32] Global food prices are a key determinant of domestic inflation, having led to inflation rates above 10 percent in 2007-2008 and 2011-2013. International food prices increased by 6 percent in 2020, with rice prices increasing by about 20 percent. Perhaps surprisingly, this does not seem to have affected domestic inflation. However, inflation appears to be increasing in early 2021. The flash floods in April 2021 could lead to increases in the local prices of some staple foods.

Figure 22. Contribution to inflation (%)



Note: Values may not add up to the total due to rounding.
Source: Ministry of Finance.

Figure 23. Contribution to REER changes (%)



Note: Positive value indicates an appreciation.
Source: Central Bank.

The real effective exchange rate appreciated by about 1 percent in 2020, owing to a stronger U.S. dollar. The U.S. dollar is Timor-Leste's legal tender. The nominal effective exchange rate (NEER) – which is a trade-weighted average of bilateral exchange rates – suggests that the U.S. dollar has strengthened by 1.4 percent against the currencies of Timor-Leste's main trading partners (Figure 23). The real effective exchange rate (REER), which takes into account price differentials across countries, has appreciated by 1.1 percent. Overall, the REER has been relatively stable over the past few years, which has supported macroeconomic stability.[33]

[30] Liquid assets include cash and balances at BCTL – including placement overseas.

[31] NPLs represent about 2 percent of total gross loans.

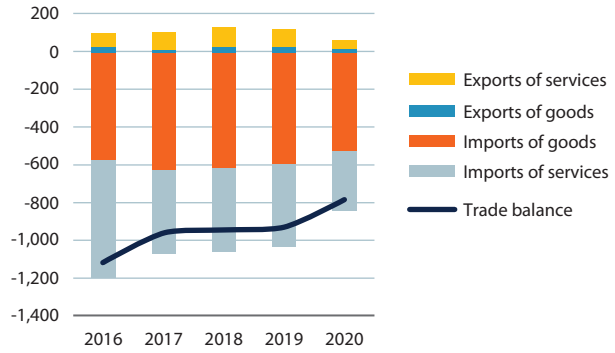
[32] Food & beverages have a large weight in the representative consumption basket – 54 percent – which means that overall inflation is sensitive to changes in these prices. Given that domestic food production is not sufficient to meet demand, international food prices often have a significant impact on inflation.

[33] 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. See recent IMF Article IV reports.

EXTERNAL SECTOR

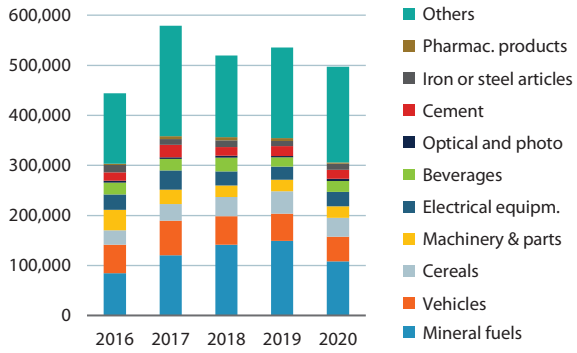
The trade deficit narrowed by 16 percent in 2020, largely due to a sharp decline in service imports. The trade balance recorded a deficit of $779 million in 2020, equivalent to 50 percent of GDP (Figure 24). The trade deficit eased because of lower imports – especially of services – even if exports also fell considerably. Imports of services declined by 30 percent, as construction services dropped by 52 percent and travel services by 42 percent. Imports of goods decreased by 11 percent. Exports also performed poorly in 2020. Exports of services halved – to $46 million – largely due to travel services, which plummeted by 64 percent.[34] Exports of goods also dropped by 33 percent, as coffee export volumes nearly halved.[35] Overall, trade volumes were affected by lower domestic demand (e.g. construction services) and disruptions associated with COVID-19 (e.g. travel services). In terms of merchandise imports, mineral fuels fell by 27 percent in 2020 – partly as a result of lower international prices. Mineral fuels accounted for most of the decline in merchandise imports (Figure 25). Imports of cereals and vehicles also decreased, albeit to a lesser extent.

Figure 24. Trade balance (USD million)



Source: Central Bank.

Figure 25. Merchandise imports (USD million)



Source: Ministry of Finance.

The current account deficit grew in 2020 because of lower primary income, despite an improving trade balance. The current account registered a large deficit – of $302 million, or about 19 percent of GDP – after a rare surplus in 2019 (Figure 26). This was the result of a drop in primary income, accounted by lower income from the Joint Petroleum Development Area (JPDA) as well as investment income. JPDA income was affected by a reduction in petroleum production and falling international prices.[36] Secondary income, which comprises foreign grants and net workers' remittances, recorded a larger net outflow – partly because of an increase in remittance outflows.[37] Although the trade balance improved, mostly owing to lower imports, this was insufficient to compensate for the large decline in primary income and the deterioration in secondary income (Figure 27). The current account is expected to remain in deficit in the medium-term, especially as offshore petroleum production dwindles until it ceases in a few years.

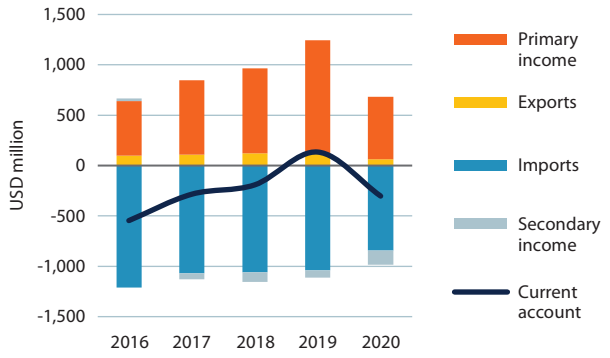
[34] 'Travel services' covers goods and services acquired from an economy by non-resident travellers for business and personal purposes during their visits (of less than one year), including local transport but excluding international passenger services (which is included in passenger transport).

[35] The balance of payments data on merchandise exports and primary income does 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).

[36] JPDA income mainly comprises taxes and royalties on petroleum activities, while investment income predominately includes interest and dividends accrued from Petroleum Fund assets. JPDA income increased between 2016 and 2019, despite declining petroleum production and considerable price fluctuations. This could be partly explained by additional capital expenditures for drilling infill wells – to extend the life of Bayu-Undan – which lowered revenues before 2019. Petroleum prices dropped sharply in early 2020, but have recovered since then.

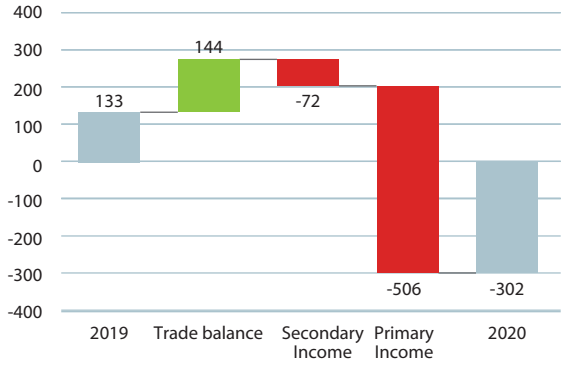
[37] This is likely due to foreign workers sending remittances abroad to help their families cope with the economic impact of COVID-19.

Figure 26. Current account balance (USD million)



Source: Central Bank

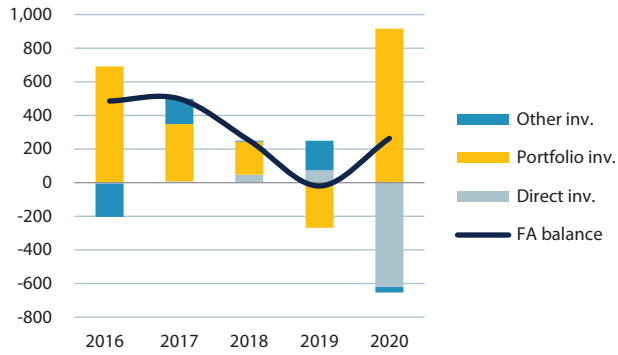
Figure 27. Current account balance (USD million)



Source: Central Bank

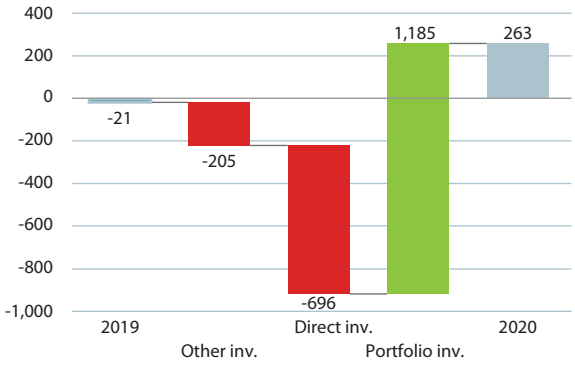
The financial account displayed significant volatility in 2020 due to the accounting of an operation related to Greater Sunrise. In April 2019, the Petroleum Fund invested directly in Timor GAP to enable the state-owned petroleum company to purchase the stakes of ConocoPhillips (30 percent) and Shell (26.6 percent) in the Greater Sunrise Joint Venture – for a combined total of $650 million.[38] However, this operation was only reflected in the balance of payments (BoP) statistics in the third quarter of 2020. This led to the recording of a large portfolio investment inflow – representing a divestment in international assets – and a corresponding direct investment outflow (Figure 28). Excluding this accounting exercise, portfolio investment would still record a net inflow – owing to large withdrawals (i.e. divestments) from the Petroleum Fund – while direct investment would be broadly in line with recent years.[39] Other investments, which usually relate to public external debt disbursements and currency & deposits from the commercial banking sector, declined considerably (Figure 29).

Figure 28. Financial account balance (USD million)



Source: Central Bank

Figure 29. Financial account balance (USD million)



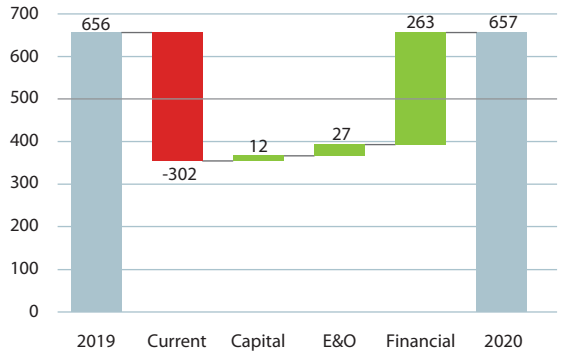
Source: Central Bank

[38] Amendments to the Law on Petroleum Activities were approved by the Parliament and subsequently enacted by the President in January 2019 – despite an initial veto. The Ministry of Finance revised the Petroleum Fund's investment policy and instructed the Central Bank to reduce the proportion allocated to international stocks from 40 to 35 percent and include an investment in TIMOR GAP under 'other eligible investments' (which have a 5 percent cap). The national oil company committed to pay 4.5 percent interest per year on the investment and comply with reporting requirements.

[39] Portfolio investment outflows mainly relate to new Petroleum Fund investments in foreign assets – such as equities and debt securities – which are typically offset by portfolio investment inflows resulting from Petroleum Fund withdrawals to finance the state budget. Direct investment often reflects reinvested earnings from commercial banks rather than new (greenfield or brownfield) investments.

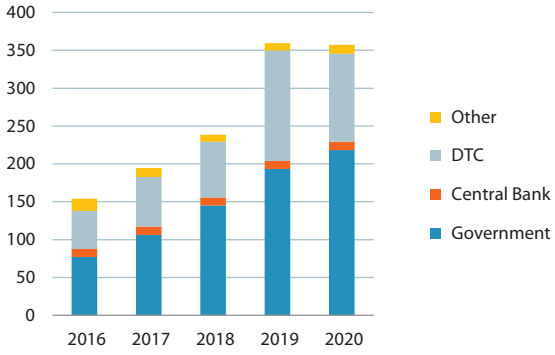
Official reserve assets remained broadly unchanged, as the current account deficit was offset by other components. The current account recorded a large deficit in 2020, as its large trade deficit was not compensated by a sufficiently large primary income. However, this was partly offset by positive balances in the financial and capital accounts, as well as errors & omissions (Figure 30).[40] Hence, the balance of payments position remained broadly unchanged. Official reserve assets increased by about $1 million in 2020, and amounted to about 42 percent of GDP.

Figure 30. Central Bank reserve assets (USD million)



Source: Central Bank

Figure 31. External debt (USD million)



Source: Central Bank

External debt levels declined marginally, despite an increase in government debt. The gross external debt position was broadly stable, declining by $3 million to reach $357 million at the end of 2020 (Figure 31). Total external debt grew considerably in 2019, largely due to deposit-taking corporations (DTC). An increase in DTC's (short-term) currency & deposits in late 2019 was due to the operations of foreign commercial banks – namely, an increase in foreign bank branches' liabilities to their headquarters. These liabilities declined in 2020, but remain relatively high. Central government (long-term) liabilities rose by 13 percent in 2020 – to $218 million. The international debt position of the central bank remained unchanged, while that of other sectors only increased marginally. Overall, gross external debt was equivalent to about 23 percent of GDP in 2020 – with government debt representing almost 14 percent of GDP.

[40] 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.

His Excellency President Francisco Guterres Lu Olo receives his COVID-19 vaccination
Credit: Juliao Fernandez

PART 2.

OUTLOOK AND RISKS

Economic activity has weakened because of the recent COVID-19 outbreak and the impact of Cyclone Seroja. GDP is projected to grow by 1.8 percent in 2021, hampered by the direct and indirect impacts of COVID-19 and the heavy floods that affected many parts of the country (Table 1).[41] Private consumption is expected to grow modestly in 2021, as consumer confidence is affected by the pandemic and the natural catastrophe. Government consumption will be supported by the recent promulgation of a revised budget for 2021, which will enable the implementation of several mitigation measures.[42] However, investment will rebound at a slower pace than previously anticipated. Some public projects will be postponed, while businesses will delay investment decisions. Exports of travel services will remain affected by international travel restrictions, but coffee exports are expected to increase. Imports will be supported by growing domestic demand. A new package of economic relief measures will provide some support to households and businesses, but economic activity is still predicted to growth modestly in the short-term.

Table 1. Economic Forecasts

	2017	2018	2019	2020(e)	2021(f)	2022(f)	2023(f)
GDP growth (%)	-4.1	-1.1	1.8	-7.3	1.8	3.7	4.3
Private Consumption	3.1	1.7	3.6	-3.8	1.5	2.9	3.5
Government Consumption	-5.8	-0.3	3.2	-1.7	2.2	-0.2	0.3
Gross Fixed Capital Investment	-16.7	-1.5	-17.2	-46.5	22.1	31.8	19.3
Exports, Goods and Services	-39.1	16.6	-17.2	-50.8	12.9	11.7	13.8
Imports, Goods and Services	-8.7	2.8	-6.5	-19.1	9.1	8.8	6.1
Inflation (Consumer Price Index)	0.6	2.2	0.9	0.5	1.6	2.1	2.5
Fiscal balance (% of GDP)	-33.6	-29.1	-30.5	-25.9	-30.8	-37.1	-42.8

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

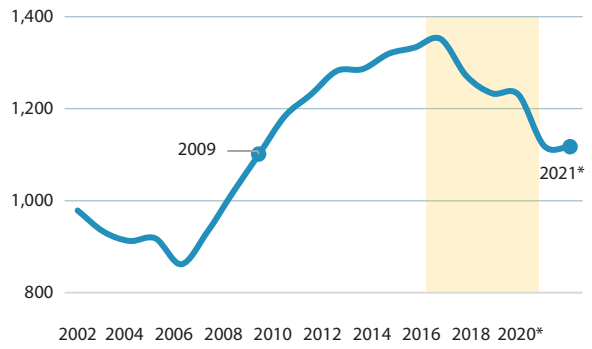
[41] This is lower than the 3.1 percent projected in October 2020. However, this prediction is highly uncertain, since it depends on the epidemiological evolution of COVID-19 and the associated (duration and scope of the) public health response – even if compliance appears to be relatively weak. Moreover, the economic impact of recent flash floods is still uncertain. It is assumed that the vaccination campaign will progress at a good pace and that stringent public health measures can be gradually lifted as the number of cases starts to decline.

[42] The revised budget of $2.2 billion is equivalent to about 133 percent of GDP. Excluding the budgets of the RAEOA-ZEESM and the Social Security leads to a budget of $1.9 billion for the central administration (120 percent of GDP).

The economy is expected to recover in the medium-term, but structural constraints will remain an impediment to faster growth. GDP is projected to increase by 3.7 percent in 2022, before accelerating to 4.3 percent in 2023. However, this is still significantly below the Government target of 7 percent for the period 2018-2023. Potential growth will continue to be hampered by an incipient private sector, limited productive capabilities, and the lasting effects of recent economic recessions.[43] Fiscal policy remains the key driver of economic activity, but its inability to ease structural constraints has led to a steady growth deceleration since 2008. Domestic production has struggled to absorb additional demand, which has mainly leaked into imports. Private investment is also low, at about 4 percent of GDP. A more favourable growth outlook will require better (rather than more) public spending, and the adoption of critical reforms to boost productivity and competitiveness.

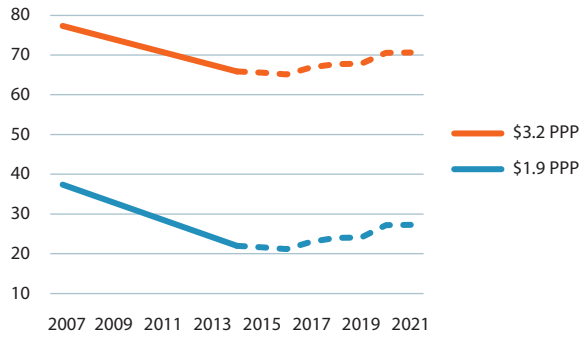
GDP per capita is forecast to decline further in 2021, bringing it to levels comparable to 2009. The economy has experienced three recessions in the past four years – 2017, 2018 and 2020. Although GDP growth is still projected to be positive in 2021, GDP per capita is expected to decline – since the population is growing at about 2 percent per year. This implies that GDP per capita will fall for a fifth consecutive year (Figure 32). Political uncertainty (2017-2018 and 2020), a global health emergency (2020-2021), and a natural disaster (2021) have taken a heavy toll on a fragile economy that is largely reliant on the public sector. The headcount poverty rate is estimated to have increased by 5 percentage points between 2014 and 2020 – to 27 percent – based on the $1.90 international poverty line (Figure 33).

Figure 32. GDP per capita (USD, constant prices)



Source: Ministry of Finance and World Bank staff projections.

Figure 33. Headcount income poverty (%)



Source: Ministry of Finance and World Bank staff projections.

COVID-19 remains the key risk to the outlook, as it may require prolonged containment measures to avoid large human losses. The TLER October 2020 stated that a second (and larger) wave of COVID-19 infections was a key risk to the outlook. This premonition has regrettably materialised, despite tighter restrictions on the land border with Indonesia.[44] There is now evidence of community transmission, which compromises the ability of expanded testing and contact tracing to curb the virus. A swift vaccination rollout is more critical than ever, especially in the absence of effective treatment and as the death toll gradually increases. However, there are concerns over the international supply of vaccines (e.g. slower production, hoarding, and export bans) and potential virus variants that are more infectious and harmful. The trade-off between easing restrictions (that affect economic activity) and protecting lives remains a predicament for policymakers. Greater preparedness remains critical to minimise the impacts of COVID-19 and future pandemics – see Special Focus.

[43] Consecutive domestic and external shocks have produced three recessions in four years, which will have a lasting impact on the economy. For instance, COVID-19 is leading to irreversible income losses, unemployment, firm closures, loss of learning (due to school closures and drop-outs), and lower use of health services – which have a strong effect on long-term productivity and thus cause permanent economic scarring.

[44] These were aimed to stem the spread of the virus into Timor-Leste, as the situation deteriorated considerably in West Timor between November 2020 and January 2021.

Construction of Tibar Port reaches 50%
Credit: Timor-Leste Ministry of Finance

Natural disasters also present a significant risk, since they often have considerable impacts on economic activity. The economy remains vulnerable to climate shocks, as floods in March 2020 and April 2021 demonstrate. The TLER October 2020 stated that La Niña was expected to create adverse weather conditions in late 2020 and early 2021. In April 2021, Cyclone Seroja produced flash floods and landslides that caused significant loss of life and economic damage to public infrastructure, private homes, and businesses. A lack of preparedness for climate shocks – such as floods, earthquakes, and tsunamis – can undermine human development.[45] Extreme weather events, such as heavy rains and droughts, often impact on agricultural yields (and thus living standards), dwellings and sanitation (potentially leading to cholera outbreaks), and connective infrastructure (by damaging roads and bridges). Enhancing preparedness – through investments in early-warning systems and climate-resilient infrastructure (including urban drainage) – is crucial to improve resilience.

The immediate policy focus should be on providing economic relief to households and businesses, while accelerating vaccination efforts. Fiscal support should be tailored to the specific needs of the economy – which include relief, recovery, and growth. Given the public health measures to contain the virus and the impact of the floods, it is vital to protect vulnerable households, avoid job losses, and prevent firm closures. This will require the implementation of critical economic relief measures, some of which were already adopted in 2020 and advocated in the TLER April 2020. Meanwhile, vaccinating the adult population will not only avert illness and death, but will also enable the economy to move to the next phase – i.e. recovery.[46] The national vaccination plan aims to vaccinate the population in three phases: (i) frontline workers and some people with co-morbidities (8 percent of the population); (ii) population over 60 years old and other priority groups (12 percent); and (iii) the rest of the population (80 percent). The second phase is scheduled to start in June 2021 and the third phase in September 2021. Although these are ambitious plans, the timely sourcing and administration of vaccines will be key to tackle the pandemic and ease the economic burden on the population.

[45] Timor-Leste has been classified at high risk for urban flood, coastal flood, earthquake, landslide, cyclone, and wildfire; and medium risk for river flood, tsunami, and extreme heat. See thinkhazard.org.

[46] An economic recovery plan was finalised in August 2020 and has partly influenced the 2021 budget – see TLER October 2020, Box 3.

Accelerating economic growth will require addressing key structural constraints that hinder private sector development. The need to create jobs and diversify the economy is more pressing than ever. Moreover, enhancing firm productivity is key to improve the competitiveness of the economy. When compared to firms in the East Asia and Pacific (EAP) region, the average firm in Timor-Leste is younger, smaller (in terms of the number of employees), less capital intensive, and has lower labour (and total-factor) productivity levels. Lack of access to finance, poor electricity and water services, cumbersome import and business regulations, corruption and bribe requests, and low workforce skills and education levels have all been associated with weaker firm performance – see TLER October 2019. In this context, there should be a policy emphasis on enhancing firm access to finance, skills and affordable inputs, as well as reducing regulatory uncertainty.

A sustained economic recovery requires political stability, especially as presidential and parliamentary elections are scheduled for 2022-2023. Intermittent political uncertainty in 2017-2020 was a key factor behind recent economic recessions – by delaying budget approvals, stalling decision making, and undermining the confidence of economic agents.[47] There have been four different 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 pursuing critical policy and regulatory reforms to support the economic recovery. However, emerging tensions within the coalition government could undermine budget implementation and agreement on much-needed reforms. Meanwhile, presidential elections are scheduled for mid-2022 and parliamentary elections are due in mid-2023. Remerging political uncertainty would pose a substantial threat to an already precarious economic outlook.

Enhancing the quality of public spending is essential to improve the impact of fiscal policy on economic activity. The forthcoming World Bank Public Expenditure Review (PER) provides strong evidence to suggest that large increases in public spending have had a limited impact on medium-term economic growth. Low economic and social returns raise efficiency and effectiveness concerns. The composition of spending can be considerably improved by shifting the focus from large-scale infrastructure projects towards human capital (namely, education and health) and the productive sectors – such as agriculture and tourism. Investing in socio-economic infrastructure – especially schools, health facilities, and water & sanitation – will yield considerable benefits in the near term. Improvements are also needed in terms of public investment management, by ensuring that (robust) cost-benefit analyses are undertaken before large financial commitments are made. Moreover, curbing the very large recurrent budget – especially for goods & services and public transfers – would release additional resources for growth-enhancing expenditures and support fiscal sustainability.[48]

Devising a sustainable fiscal path is crucial to avert a painful adjustment with large socio-economic consequences. Public expenditure levels have been among the highest in the world, averaging 86 percent of GDP in 2008-2020. The Petroleum Fund is used to bridge the large financing gap that arises from very high spending levels and low domestic revenue collection. The ESI, as a fiscal rule, has been consistently breached over the past 10 years. With the exhaustion of offshore petroleum reserves and uncertainty over future petroleum developments, the Petroleum Fund is expected to rapidly deteriorate in the medium-term. This could lead to a sudden fiscal adjustment with significant social consequences and impact upon service delivery and human development.[49] Securing fiscal

[47] The (minority) government elected in mid-2017 was unable to pass the 2018 budget, which led to fresh elections in mid-2018. A political coalition won a majority of seats in Parliament, but several ministers were not sworn in by the President. In early 2020, a key party in the governing coalition (CNRT) abstained in a parliamentary vote that contributed to defeat the 2020 budget proposal. A new government coalition was formed in mid-2020.

[48] Untargeted and inefficient public transfers are a concern, especially as they have grown considerably through time. In particular, it will be important to enhance selectivity and transparency of public grants and ensure the sustainability of the social protection system.

[49] Large trade deficits have also been financed by withdrawals from the Petroleum Fund – through divestments in foreign assets – but external balances will be in jeopardy when the Petroleum Fund is exhausted.

sustainability will require containing public spending and strengthening domestic revenue mobilisation.[50] A prudent management of the Petroleum Fund – by gradually reducing withdrawals beyond the ESI – is vital to secure fiscal sustainability and ensure that future generations can benefit from these savings.

[50] Measures to enhance revenue collection could include raising excise tax rates (e.g. on alcohol and tobacco) and introducing a sugar tax – both of which would also help improve health outcomes – as well as establishing a value-added tax (VAT). Strengthening revenue administration – by modernising the tax system and investing in capacity – could also yield significant benefits.

11 Ambulances were purchased through the World Bank Timor-Leste Covid-19 Emergency Support Project
Credit: World Bank

PART 3.

SPECIAL FOCUS: BUILDING A STRONGER HEALTH SYSTEM

Timor-Leste will need to make concerted efforts to invest in and build resilience of its health system, to improve health outcomes, and develop its human capital. Timor-Leste has made significant progress in rebuilding its health system and improving related outcomes since independence. However, many challenges remain, including a high rate of childhood stunting and a rising burden of noncommunicable diseases – in the context of low and uneven access to health and nutrition services, and poor quality of care. COVID-19 and recent floods have led to significant disruptions in the delivery of essential health and nutrition services, internal displacement, and deaths. Underlying weaknesses in the health system made it difficult to respond to these crises effectively and revealed inadequacies in the country's preparedness for responding to health emergencies.

There is significant work to be done to address both persistent and evolving health needs. First, addressing stunting will require government-wide multi-sectoral action as well as a concerted effort to improve nutrition-specific interventions in the health sector. Second, improving the efficiency and effectiveness of public expenditure will be crucial to improving the provision of health and nutrition services, both in terms of coverage and quality. Increasing investments in primary health care would help to respond to the health needs of the population, while refocusing the health workforce policy – away from increasing staff numbers, towards more appropriate skills-mix and improved competencies – would get better value from the already relatively high spending on wages and salaries. Third, investing in emergency preparedness will enable more effective management and response to emergencies in the future. Finally, institutional arrangements will need to be reviewed, particularly given the ongoing decentralisation process and the proliferation of autonomous agencies.

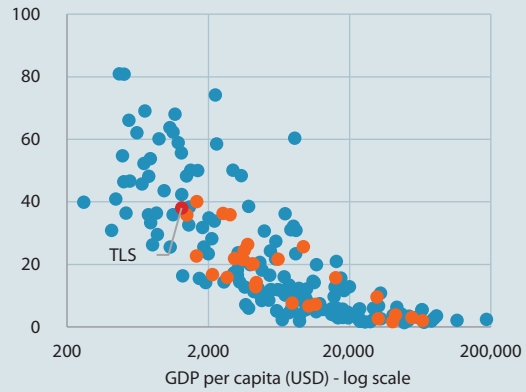
HEALTH SECTOR OVERVIEW

The COVID-19 pandemic and natural disasters have revealed underlying weaknesses in the health system. While there has been significant progress on key health outcomes since independence (Box 1), the recent crises have both highlighted and exacerbated key gaps in the health system. Shortages in medical equipment, supplies (e.g. personal protective equipment and other medical consumables), and medicines are a perennial challenge and even more so in a pandemic. Recent flooding has exacerbated these challenges, with concerns of increased transmission of infectious diseases (e.g. dengue, water-borne diseases) and higher incidence of respiratory infections, among others. In addition, challenges with public financial management and procurement have delayed plans to rehabilitate and fit existing infrastructure to serve as quarantine and isolation facilities.

Box 1: Key Health Outcomes

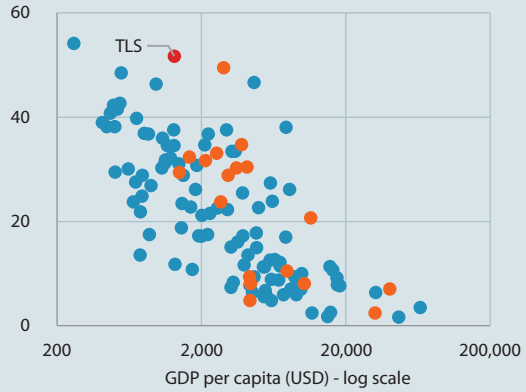
There has been progress on key health outcomes since independence, especially on life expectancy and mortality. Life expectancy at birth has steadily increased from 61 years in 2002 to 69 years in 2018. The maternal mortality ratio (MMR) has declined from 668 per 100,000 live births in 2002 to 195 per 100,000 live births in 2016. Infant mortality has halved since 2002, down to 38 per 1,000 live births in 2019 (Figure 34). The under-five mortality rate has declined from 97 per 1,000 live births in 2002 to 44 per 1,000 births in 2019. These improvements may be attributed to investments in antenatal care and an increase in the proportion of births attended by skilled health personnel, as well as investments in the health workforce and health system strengthening. The reduction of malaria incidence has also been impressive. Prevalence of HIV is also low, at less than 1 percent of the population.

Figure 34. Infant mortality (per 1,000 live births)



Note: Orange dots represent countries in the EAP region.
Source: World Bank.

Figure 35. Child stunting prevalence (%)



Note: Orange dots represent countries in the EAP region.
Source: World Bank.

Despite good progress on many health indicators, there remain significant health challenges. The incidence of tuberculosis is very high, at 498 per 100,000 population, and is one of the main causes of hospital deaths in the country. At the same time, the share of non-communicable diseases (NCDs) in the overall burden of disease has increased from 29 percent in 2002 to 55 percent in 2019.[51] Stroke, heart and lung diseases, and diabetes are now among the top 10 diseases and have been contributing increasingly to death, illness, and disability. The rise in NCDs is a result of changes in several sociodemographic and lifestyle factors.[52] Tobacco use is rising and constitutes one of the most significant public health threats. Finally, there are large disparities in health outcomes observed across geographies and socioeconomic strata.

Chronic malnutrition is a severe problem. Almost half of all Timorese children under five are stunted – the second highest rate in the world (Figure 35). Stunting affects cognitive and physical development, which adversely impacts educational outcomes and employment prospects. Poor nutritional outcomes are a result of a variety of factors, including lack of access to adequate health and nutrition services, food insecurity, behavioural aspects, and childcare practices. Environmental factors such as access to improved water and sanitation also play a critical role. In 2016, only 80 percent of households had access to safe drinking water and 54 percent had access to improved sanitation, which has a severe impact on child health and growth. Widespread stunting also reflects a persistent gender gap: there is low access to health and nutrition services for women and girls, particularly on reproductive health and nutrition and counselling on gender-based violence.

There are large disparities in health outcomes observed across geographies and socioeconomic strata. For example, the under-five mortality rate is 44 per 1,000 live births on average, with a threefold difference across municipalities. Moreover, it is double among households in the poorest quintile compared to those in the richest quintile. Similarly, the rate of childhood stunting is 60 percent in Ainaro, but only 29 percent in Ermera. The prevalence of severe stunting is lowest among the wealthiest households (15 percent), but it is notable that the prevalence of moderate stunting is similar across all income levels.

[51] Nonetheless, the share of communicable diseases remains high by regional and income standards.

[52] Key risk factors include low birth weight and short gestation, particulate matter pollution, high systolic blood pressure, high fasting plasma glucose, smoking, and child growth failure.

Timor-Leste is also not sufficiently prepared to respond to pandemics and other health emergencies. The 2018 Joint External Evaluation (JEE) of International Health Regulation Core Capacities highlighted the need to develop comprehensive multisectoral emergency response plans for all public health hazards, and to identify options for accessing surge capacity. It also recommended conducting a public risk assessment and resource mapping for all public health hazards. On response capacities, there is a need to strengthen emergency response coordination mechanisms, develop a program of exercises and after-action reviews across all hazards, and strengthen laboratory capacity. These capabilities were tested during COVID-19 and were found to be insufficient and not able to meet the challenge.

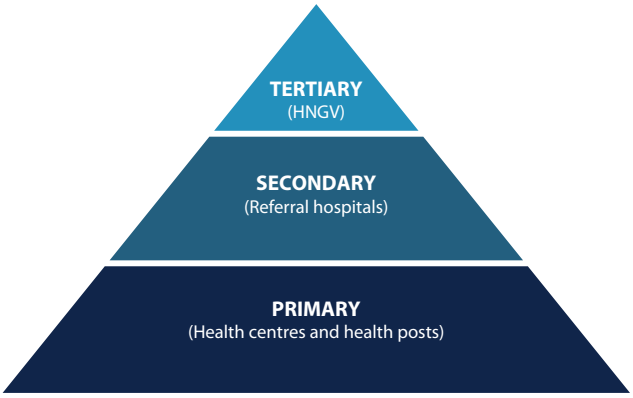
Looking ahead, the challenge will be to tackle multiple agendas simultaneously. The country faces the task of making progress towards the Sustainable Development Goals (SDG) agenda (including on maternal and child health, and communicable diseases), a growing burden of NCDs, and emerging public health challenges. The COVID-19 global pandemic has presented a significant public health challenge that Timor-Leste will need to manage in coming years. The recent floods have also added new constraints to an already struggling public health system. The challenge going forward will be to tackle multiple agendas simultaneously. This will require substantive reforms in how resources in the health sector are used, with a view to improving key health outcomes while ensuring sustainability.

HEALTH SERVICE DELIVERY SYSTEM

HEALTH SYSTEM ORGANISATION

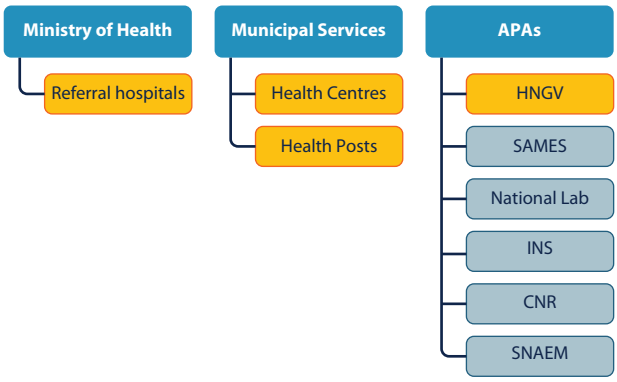
The health service delivery system is organised in three main tiers, with a range of services provided by different types of facilities. Primary health care is provided through health posts – located in most villages ('*sucos*') – and community health centres (CHCs) (Figure 36). Moreover, outreach services are run through the Integrated Community Health Services (SISCa) program. The 'Saúde na Família' initiative, which was launched in 2015, complements these services by bringing primary health care to the home and taking a person-centred approach to health and well-being. Secondary care is provided through five referral hospitals, which are located in Ainaro, Baucau, Bobonaro, Covalima, and Oecusse. Tertiary care is only available at the National Hospital Guido Valadares (HNGV) in Dili. Ancillary services, such as laboratory functions and supply chain for medicines, are managed by autonomous entities at the central level. Private providers predominantly operate in Dili, while non-governmental organisations (NGOs) support service delivery in some municipalities – typically financed by external sources of funds.

Figure 36. Health system tiers



Source: World Bank staff.

Figure 37. Public institutions in the health sector



Note: Orange denotes service delivery units.
Source: World Bank staff.

Recent reforms of decentralisation and the establishment of autonomous public agencies (APAs) have altered the governance of the health sector. The Ministry of Health (MoH) remains the main institution for governance and stewardship of the health sector. Decentralisation has been a policy priority from very early on – as stated in the 2004 Health System Law. In 2016, an administrative contract laid out a joint agreement between the MoH and the Ministry of State Administration (MSA) on the delegation of powers in the health sector. This agreement lists the responsibilities that are transferred to municipal administrations: management of human resources, assets, and organisation and delivery of primary health care services. There has been an increasing number of APAs in the health sector, mostly on ancillary services (Figure 37). [53]

Institutional reforms were aimed to provide greater independence and flexibility, but there have been challenges. Decentralisation and greater autonomy intended to grant operational and financial independence to municipalities and public agencies, but in practice this has been challenging. Revenues only cover a small proportion of expenditures of the main autonomous agencies, which means that they continue to depend on budget transfers from the MoF and MoH to cover most costs. For health services at the municipal level and below, health administrators receive funds from MoH for program costs and from MoF for other operating costs. Budget implementation has been variable, with management capacity as a key constraint. Institutional fragmentation has affected the planning, allocation, and execution of budgets. For instance, SAMES relies on MoH's quantification process to determine the volume of orders for their annual procurement, which poses coordination challenges. The process of gathering information on stock levels from each municipality, via MoH, is often delayed. Inadequate and late quantification leads to a mismatch between initial budget estimates and the eventual budget received. In turn, this affects service delivery on the ground, impacting stock levels at health facilities.

Effective coordination across health sector entities is particularly important given the growing organisational complexity. While the National Health Sector Strategic Plan (NHSSP) for 2011-2030 lays out a long-term vision for the sector, developing shorter term operational plans would help to improve cohesiveness across functions and activities. Currently, each organisation draws up its budget proposal and annual implementation plan independently of one another, which contributes to poor coordination and allocative inefficiency. The creation of a Health Sector Working Group, already planned as part of the Health Financing Strategy (2019-2023), can play a key role in coordination and the development of joint budget and implementation plans.

HEALTH SERVICE DELIVERY OUTPUTS

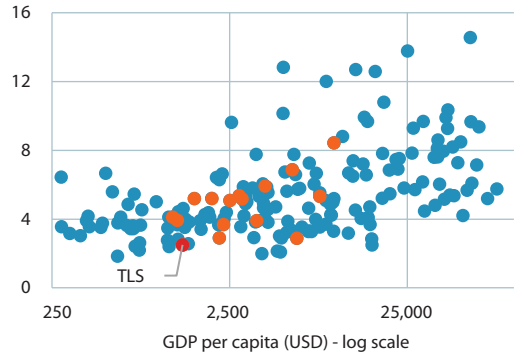
There has been variable progress in the coverage of essential health services over the past decade. Several maternal and child health services have improved significantly, such as antenatal care coverage rates (4+ visits) – which increased from 55 percent in 2009 to 77 percent in 2016. Institutional deliveries and the use of skilled birth attendants also increased considerably in the same period. However, the proportion of children receiving DPT3 immunisation declined, while coverage of other critical services has not changed significantly – such as modern contraceptive use and measles vaccination.[54]

Health service utilisation remains relatively low. In 2017, the outpatient utilisation rate was approximately 2.5 visits per person per year, significantly lower than most countries in the East Asia & Pacific region (Figure 38). In addition, access to care is unequal across municipalities. There is significant variation in the share of the population that has ever sought care – either outpatient or inpatient (Figure 39). Hospital beds are heavily utilised, but this seems to respond more to low availability that cannot even cover low utilisation – 2 hospital admissions per 100 people – than to highly efficient utilisation.

[53] These include the National Hospital Guido Valadares (HNGV), the Autonomous Drug and Medical Equipment Service (SAMES), the National Laboratory, the National Health Institute (INS), the National Rehabilitation Centre (CNR), and the National Ambulance and Medical Emergency Service (SNAEM).

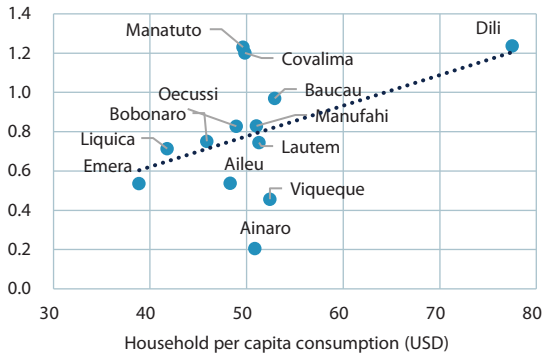
[54] DTP3 stands for diphtheria tetanus toxoid and pertussis immunisation.

Figure 38. Outpatient contact rate



Note: Orange dots represent countries in the EAP region. Sample excludes countries with outpatient visits above 15 per capita.
Source: IHME (2020) and MoH (2018).

Figure 39. Access to inpatient care (%)



Note: Population ever inpatient in past 12 months (%).
Source: TL-SLS 2014.

Rural and poor households are likely to receive lower quality care, especially in the outpatient setting. On average, wealthier households access care more frequently than less well-off households. Compared to urban residents and those from higher socioeconomic strata, rural residents and poorer households are more likely to seek health care in a primary care facility than in a hospital. This is unsurprising, as people are more likely to seek care at facilities close to home. However, coupled with evidence of poor service readiness and inadequate quality of care at CHCs and health posts, it is likely that rural and poor households receive poorer quality care. Inequitable access to care reinforces a vicious cycle of ill-health and poverty.

The COVID-19 pandemic has highlighted and exacerbated gaps in the health system. Timor-Leste acted quickly in response to the pandemic by putting in place a system of health controls to keep the disease at bay and making use of its Petroleum Fund to mitigate the socioeconomic impacts of the crisis. However, a shortage of facilities, supplies, and weak protocols for infection prevention and control have hindered responses at municipal and community-level facilities. Dissemination of information has also been difficult due to challenges with transportation to reach communities in remote areas. While additional budget has been allocated to the health sector for COVID-19, bottlenecks in public financial management, procurement, and supply chain have hindered a faster response.

Recent natural disasters have compounded the impact of COVID-19. Cyclone Seroja affected 13 municipalities in early April while the country was in COVID-19 lockdown, causing severe floods and leaving at least 42 dead and 28,734 households displaced and 4546 houses destroyed. Dili was severely impacted, with several essential COVID-19 infrastructure services affected, including the National Laboratory and SAMES warehouse, destroying crucial COVID-19 medical supplies. Flooding cut power to some COVID-19 treatment centres and placed extra pressure on an already stretched health system.

Disruptions to health and nutrition services arising from COVID-19 and the torrential floods have adversely affected access to routine and essential care. Disruptions have been reported to seven key services: antenatal care, emergency obstetric care, regular obstetric care, post-natal care, essential new-born care, immunisation, and wellness checks for children and adults (growth monitoring, routine visits). In most of these cases, there has been a 10 to 25 percent decline in utilisation rates, from already low levels. There are also potential costs to nutrition outcomes due to heightened food insecurity arising from reduced access to markets. The economic impact from COVID-19 and recent floods will lead to a further reduction in the diversity of diet and lower food intake.

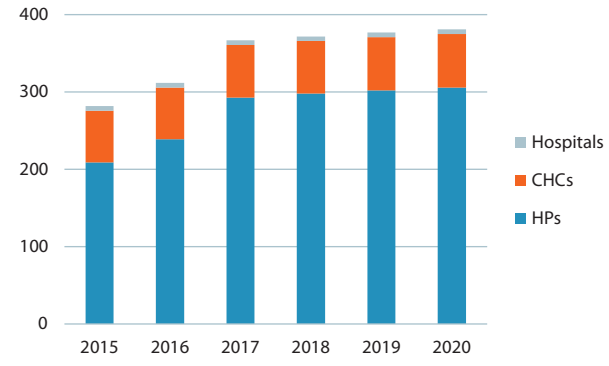
Mental health is also an increasing concern. The compounding effects of recent crises have elevated the mental health challenge through increased levels of anxiety, loss, stress, and depression. A recent pulse survey identified that many citizens felt increased levels of stress and negative impacts towards their jobs (52 percent) and their household income (50 percent).[55] Young people were less positive about their physical health, personal relationships, spending time with family, feeling part of the community, and ability to deal with everyday challenges. The adequacy of mental health and psychosocial support services will be an emerging need as COVID-19 case numbers continue to rise.

In the long run, these crises may set back improvements in health and nutrition outcomes. Globally, the full impacts of the COVID-19 pandemic are not clear yet. As countries continue to tackle successive waves of infections, it remains unclear how long disruptions to essential services will last and their consequences, and how these impacts are distributed among subsets of the population.[56] The situation in Timor-Leste likewise remains fluid as the number of COVID-19 cases continues to rise. As attention is turned towards coping with COVID-19 and flood recovery, it will be important to ensure that non-COVID-19 health needs are not neglected. Extended disruptions to essential services will, in the long run, lead to higher morbidity, contribute to higher costs in the health system, and set back progress on key health outcomes.

PHYSICAL RESOURCES

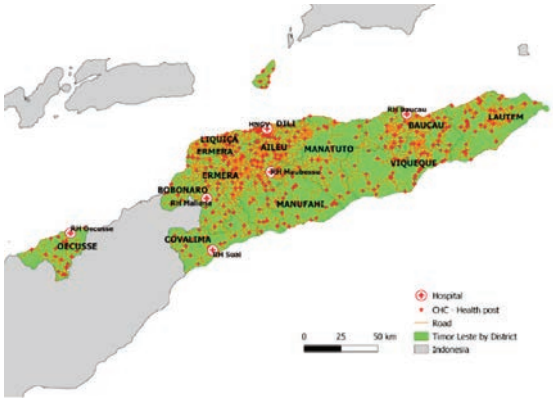
The number of health facilities has increased over the past decade, but quality is a concern. Many outpatient facilities have been built in recent years, with a significant increase in the number of health posts. There are currently 306 health posts, compared to 209 in 2015 (Figure 40). There are also 69 (public) CHCs and an additional 20-30 health centres established by the private sector. However, the number of hospitals (which provide inpatient care) has not changed over the past decade, with a national hospital in Dili and five referral hospitals. There are about 0.37 hospital beds per 1,000 population, which is lower than the averages for East Asia & Pacific (3.2) and low-middle income countries (1.9). Moreover, there are concerns regarding the quality of infrastructure, especially regarding their condition (requiring maintenance and repair), as well as lack of electricity and water & sanitation in some facilities.

Figure 40. Number of health facilities



Source: Ministry of Health (2021).

Figure 41. Distribution of health facilities



Source: WHO (2011).

The distribution of health facilities is uneven, with significant variations across municipalities. There are significant differences in the facility-to-population ratio across municipalities (Figure 41). For instance, the ratio ranges from one health post per 1,700 residents in Viqueque, to one health post for approximately 4,400 to 4,900 residents in Baucau, Bobonaro, Covalima, Ermera, and Oecusse. The proportion of women reporting challenges in accessing a

[55] See The Asia Foundation's COVID-19 surveys.

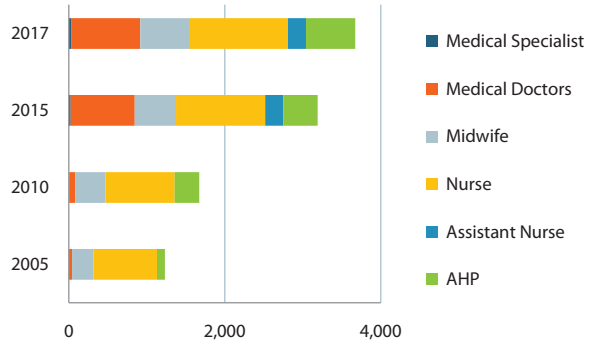
[56] Center for Global Development, "What Do We Really Know About COVID-19's Impact on Essential Health Services?".

health facility declined from 53 percent in 2009 to 46 percent in 2016.[57] This value was 20 percent in Dili, but much higher in other municipalities. Rural households report greater challenges in access, as do households in the poorest wealth quintiles. Improving access to health facilities is a key medium-term goal of the health sector.

Effective coverage of health services depends on infrastructure, other inputs, and care processes. A 2015 facility survey shows that hospitals are mostly equipped with a set of basic supply items, but CHCs and health posts often lack basic items. This affects the ability of health workers to provide adequate services to those who seek care at their facilities. The relationship between health facility density and health outcomes is not clear. For instance, there is a weak correlation between the number of health facilities per 10,000 population and the under-five mortality rate in municipalities. This suggests that effective coverage of essential health services depends not just on the availability of infrastructure (i.e. a health facility), but also on the availability and quality of other inputs – such as health workers and supplies – as well as care processes (e.g. treatment protocols, competencies of health workers, etc.).

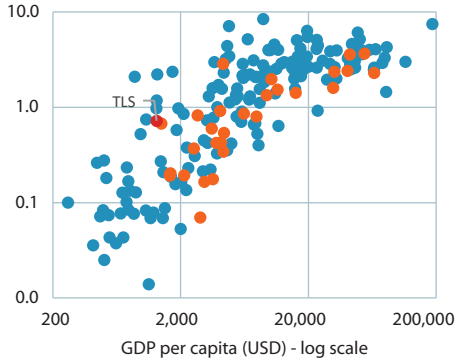
The number of health workers has increased considerably – especially doctors – and is relatively high by international standards. Between 2010 and 2015, the number of medical doctors grew more than ten-fold (Figure 42). A large portion of this increase is explained by the return of Cuban-trained doctors.[58] The number of nurses, allied health professionals, and midwives has also risen significantly. The training of health workers in Timor-Leste is mainly the responsibility of the National University of Timor-Leste (UNTL). UNTL produces about 120 new doctors annually, of which only 30 are absorbed into the public sector. There are some concerns that there has been a strong focus on quantity to the detriment of quality. The number of physicians (i.e. generalist and specialist medical practitioners) increased from 0.08 per 1,000 population in 2010 to 0.72 per 1,000 in 2018 (Figure 43). This ratio is higher than many countries with similar income levels.

Figure 42. Health workers (special grades)



Note: AHP = allied health professionals
Source: Bertone et al (2018).

Figure 43. Physicians (per 1,000 people)



Note: Orange dots represent countries in the EAP region.
Source: World Bank.

The distribution of health workers across the country remains a challenge, with significant variation across municipalities. The distribution of health workers across municipalities is highly unequal, with urban areas attracting a substantially higher number of workers than rural areas, and with significant disparities across municipalities. For example, the number of health workers per 10,000 population in Ermera (9) is significantly lower than in Baucau, Covalima, Manututo, and Viqueque – all above 20 (Figure 44). Ensuring an adequate staff mix is important to deliver services effectively.

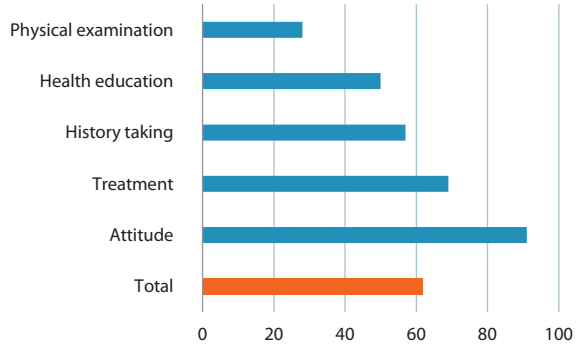
[57] "Percentage of women who reported they have big problems in the distance to health facility for treatment for themselves when they are sick" (DHS)

[58] In 2005, there was a mass enrolment for medical education by the Cuban Medical Brigade (about 500 general medicine students). Currently, about 30 Timorese students receive specialised training in Cuba per year.

Figure 44. Health workers (per 10,000 population)

Source: MOH (2018b).

Figure 45. Clinical performance scores (%)



Note: Scores measured by the combined score of direct clinical observation and vignette.
Source: Hou et al (2016).

Overall, increases in the quantity of physical resources have not translated into greater availability and quality of services. Some health care facilities do not have any examination beds, blood pressure monitors or thermometers, making it difficult to perform complete physical examinations. Hence, investments in one part of the health system (e.g. health workers) have not been sufficiently complemented by investments in other areas (e.g. medical equipment, supplies, and commodities). The mal-distribution of health workers also suggests that the reverse could be true – that is, some facilities may have supplies, but few health workers or poor skills to effectively use those supplies. This is potentially inefficient, as existing resources are insufficiently utilised due to shortages of other necessary inputs.

Quality of care can be improved substantially, especially through better training. A 2016 study found that the performance of general practitioners was very good in terms of attitude (91 percent), but only moderate in health education, history taking, and treatment accuracy – with values ranging from 50 to 69 percent. More importantly, the average physical examination performance score was low, at 28 percent (Figure 45). A lack of clinical knowledge was significantly associated with lack of performance, suggesting that the quality of both pre- and in-service training for health workers needs to be improved. Pre-service training, mainly at UNTL, lacks resources such as adequate library facilities, laboratories, and practice sites. Core competency frameworks and competency-based curricula have also not been introduced, which leaves many graduates without suitable skills and competencies when they enter the workforce. In-service training at the National Health Institute (INS) is highly dependent on donor resources, and training programs are poorly coordinated with MoH service delivery priorities. This leads to a disconnect between training and staffing needs on the ground.

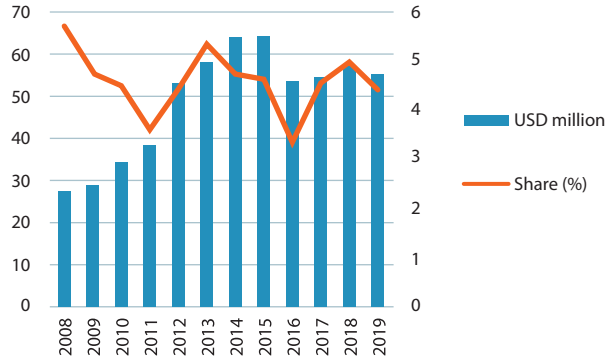
Despite the amount of data that is collected, there seems to be limited usage for policy making and service planning. Timely and accurate information is important to enable better decision-making, as well as improve planning and budgeting of resources. However, data are often collected without being analysed critically or turned into information that can be used for daily management or longer-term planning. The Health Management Information System (HMIS) and geographic information system (GIS) data are also relatively weak: there is no up-to-date data on infrastructure conditions and status of service readiness at each health facility, making it difficult for policy makers and managers to understand where key resource gaps are and plan accordingly. Meanwhile, health workers are overburdened by excessive data and reporting demands from multiple and poorly coordinated sub-systems.

HEALTH FINANCING

Total health spending is broadly comparable with regional and income peer countries. The health sector is typically financed by a combination of three primary sources: public, household out-of-pocket (OOP), and external. Health financing is a critical input to the health system. Hence, it is important to assess whether the level of spending is adequate to support improvements on key health outcomes, as well as examine the outlook for health financing. Total health spending was about $94 per capita in 2018, equivalent to 7.6 percent of GDP.[59] This level of health spending is comparable to other countries at a similar level of income.

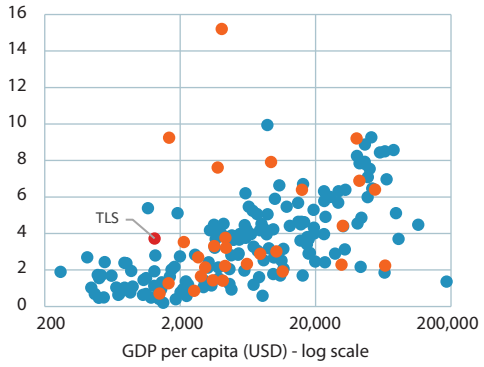
Public spending on health, which comprises the majority of health spending, increased considerably until 2015, but has been subdued since then. In nominal terms, Government health spending has increased substantially from approximately $28 million in 2008 to $65 million in 2015. However, spending during 2016-2019 was lower than in the previous period (Figure 46). This has led to a significant decrease in spending per capita – from $55 in 2014 to $43 in 2019. Government expenditure on health was equivalent to 3.7 percent of GDP in 2018, which is relatively high when compared to regional and income peers (Figure 47).

Figure 46. Spending on health (USD million and %)



Source: Ministry of Finance.

Figure 47. Spending on health (% GDP)



Note: Orange dots represent countries in the EAP region.
Source: WHO (2018).

Health spending has not been significantly prioritised within the Government budget. The share of health in total public expenditure has fluctuated through time, ranging from 3 to 6 percent (Figure 46). This variability is in part due to the volatility and unpredictability in aggregate public spending – e.g. high total spending in 2016. Two expenditure components observed sharp declines in 2016: capital spending (from $5.2 million to $0.3 million) and transfers (from $10 million to $7.8 million). Compared to regional and income peers, the share of public spending on health suggests a low level of prioritisation of the sector within the government budget.

In response to COVID-19, there has been an increase in health spending in the short term. In April 2020, an autonomous COVID-19 Fund was established to finance both health and economic measures. The Fund was endowed with $220 million from the Petroleum Fund. The public health sector response to COVID-19 was costed at approximately $50 million, channelled through MoH. As of the end of 2020, $19.4 million of this allocation had been spent. The 2021 budget allocated $121.5 million to the health sector, equivalent to 6.2 percent of the total budget – a significant increase from the $43 million of the 2020 budget.[60] The Integrated Crisis Management Centre

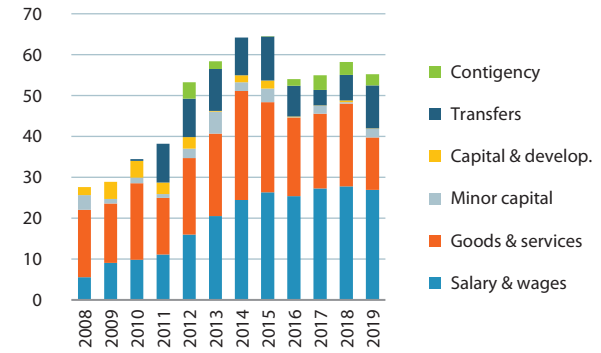
[59] Global Health Expenditure Database, WHO 2019

[60] The initial budget allocated $86 million to the health sector. On 23 April 2021, the National Parliament approved a revised budget to further prevent and combat the pandemic with an additional $34.5 million for the MoH for testing, vaccines, and personal protective equipment.

was allocated $16.7 million for mitigation and prevention of COVID-19. While the increase in budget allocation in the short term is significant and necessary, effectiveness of the response will depend on the ability to spend these funds in a timely and efficient manner. Addressing bottlenecks in public financial management – a perennial challenge in Timor-Leste – will be key to an effective COVID-19 response.

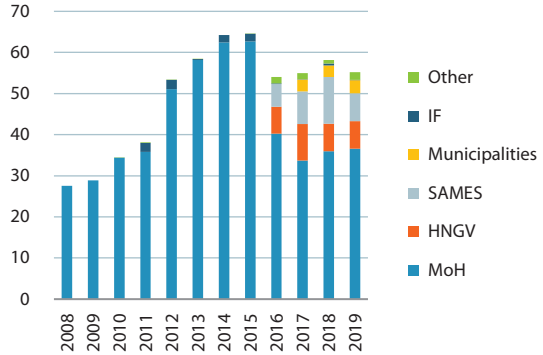
The composition of public spending on health has changed significantly, with wages & salaries growing in importance. The most significant change in the composition of public spending on health over the past decade has been the sharp increase in wages & salaries (Figure 48). Its share increased from about 20 percent in 2008 to 49 percent in 2019, and can be mainly attributed to the increase in health staff. This is concerning since there is limited evidence of an increase in service utilisation. Conversely, the share of goods & services declined from 60 percent in 2008 to 23 percent in 2019. The absolute decline in spending on goods & services may have had an impact on supply-side readiness.[61] Total capital spending – which comprises capital & development and minor capital – has also declined significantly, from 20 percent in 2008 to about 4 percent in 2019.

Figure 48. Spending on health (economic classification) (USD million)



Source: Ministry of Finance.

Figure 49. Spending on health (by agencies) (USD million)



Source: Ministry of Finance.

The composition of spending also changed with the establishment of autonomous agencies and the decentralisation process. Until 2015, the vast majority of the Government health budget was channelled through the MoH (Figure 49). Autonomous agencies have had their own budget since 2016, and municipalities since 2017. In 2019, the MoH accounted for about two-thirds of public spending on health, while SAMES and the National Hospital (HNGV) accounted for 12 percent each. Other public entities (e.g. National Laboratory, INS, and CNR) were collectively responsible for 3 percent, and municipalities for 6 percent. Municipal health authorities are meant to manage minor equipment and construction, maintenance, repair and management of CHCs, and operating costs for health posts and outreach (SISCa) activities. With decentralisation and the establishment of APAs, the financial relationship between the MoH and health sector entities has changed, with less funding to municipalities and APAs coming directly from the MoH.[62]

The execution rate of the health budget has been relatively high, but there are concerns in some categories. The execution rate of the health budget has been consistently above 90 percent. This can be partly explained by the large weight of wages & salaries, which typically have high execution rates. Goods & services have exhibited higher variability, with the execution rate ranging between 80 and 89 percent in 4 out of the past 5 years. This may be the result of public financial management constraints and uncertainty for service delivery units. Consistent under-spending suggests that funds allocated to the health sector were not spent on necessary inputs – e.g. medicines

[61] This trend was largely due to a fall in operational materials & supplies – which comprises purchases of medicines, medical equipment, and other supplies.

[62] In 2017, the MoH only distributed 55 percent of the government budget for health, with direct budget transfers from the MoF serving as another key source of funds to municipalities and autonomous agencies.

and supplies, other operating costs – which may negatively affect the ability of health facilities to effectively deliver services and contribute to improve health outcomes.

Poor budget execution in certain categories is symptomatic of broader challenges in the public financial management system. Existing PFM practices are a key underlying bottleneck for effective planning, budgeting, execution, and monitoring. For example, budget allocations rely on an annual incremental approach and the use of evidence is limited, which perpetuates mismatches between budget allocations and spending needs. Delayed budget approval and disbursements are common, which also impacts execution. Financial reporting is also onerous, as municipal administrators report to MoH, municipal authorities, and UPMA separately. Reporting formats combine paper-based and electronic versions, which increase the likelihood of error. Furthermore, the introduction of program budgeting has resulted in the production of very detailed budgets and reports that may hinder rather than incentivise management autonomy.

Looking ahead, improving planning and budgeting will depend on a more general concerted effort to improve fiscal discipline. Fiscal discipline is currently weak. The lack of credibility of the budget process and reliability of initial allocations result in significant adjustments made through the year. There is weak control over spending during the budget execution phase, and many line ministries and spending units face substantial pressure to spend resources without the necessary safeguards on the quality of spending decisions. Changing this situation will require the development of a comprehensive medium-term budget planning framework, including: (i) in-built feedback mechanisms between sectoral needs and budget allocation considerations; (ii) improvements in the predictability and timeliness of the budget process; and (iii) the introduction and enforcement of accountability mechanisms for spending decisions which are linked to sectoral objectives and outcomes.

Development assistance is an important source of health funding, although it has been declining over time. In 2018, $33 million were disbursed by development partners for health-related activities, comprising 27 percent of total (current) health spending. External financing has been declining as a share of total health spending over the years, but it remains relatively high – especially when compared to other lower-middle-income countries. However, the sustainability of donor-financed programs and activities is a key issue on the horizon. The Global Fund, GAVI, and Australia have been the largest external sources of finance for the sector, while the World Health Organization (WHO) has been a long-standing partner, providing thought leadership and technical support on a range of topics in the health sector – including the COVID-19 pandemic.

Development assistance continues to be the dominant source of funding for selected activities. Dependence on donor funding raises concerns over the sustainability of programs and activities that have been predominantly or solely financed by external sources – especially as donor financing declines. For example, Government financing accounts for just over 1 percent of all resources for nutrition.[63] The disproportionate reliance upon donor financing for essential nutrition services raises questions related to the ability of government to meet its priorities and sustainability of nutrition financing. Likewise, in-service training at INS and local training of national specialists is predominantly financed through external sources, as are several disease-specific programs. Sustaining these programs and activities will require more than just additional domestic financing. It will be important to integrate the delivery of these services into the overall health system. Key elements of this transition include ensuring overall preparedness to provide services (including functions such as procurement and supply chain, health workforce competencies), sensitivity to and inclusion of at-risk groups and specific target populations, and developing financing mechanisms to incentivise effective and wide reach of services.

[63] Provo, Atwood, Sullivan and Mbuya (2017). Malnutrition in Timor-Leste: a review of the burden, drivers, and potential response (English). Washington, D.C.: World Bank Group.

IMPROVING HEALTH OUTCOMES WHILE ENSURING FISCAL SUSTAINABILITY

ADDRESSING CHANGING HEALTH NEEDS IN A TIGHT FISCAL CONTEXT

The health system will have to adapt to meet changing needs arising from demographic and epidemiological trends. The total fertility rate has declined but is still one of the highest in the region. While the population growth rate has declined over the past few decades, it is still growing at more than 2 percent per year. By 2030, the population is expected to reach 1.57 million – a 21 percent increase from today – which will increase demand for health services. Furthermore, the population is still relatively young. The share of population aged 65 and above is relatively low and will not increase significantly until 2050. There is a window of opportunity to reap a 'demographic dividend', but only if the population is healthy and educated.[64] Improving the quality of care will be critical to make progress on key maternal and child health indicators, which in turn will lead to a more productive workforce and thus support economic growth. At the same time, a rising burden of NCDs means that the health sector will need to adjust and offer NCD prevention and treatment. This will require new competencies and services – all of which require significant investments and robust implementation plans. Preparing for pandemics and other health emergencies has also become a 'new normal' for all health systems, given the experience over the past year of COVID-19 (and compounded by natural disasters).

The availability of domestic and external resources for health is uncertain. While health spending in 2020 and 2021 will be higher than in preceding years due to domestic and external resources for the COVID-19 emergency response, future resource availability is uncertain. A 'health financing transition' is currently underway, as development assistance to the sector has been dwindling and will need to be compensated by domestic sources of finance. One viable source of revenue is taxes on goods that are harmful to health. For example, higher excise tax rates on tobacco products and alcoholic beverages could help address emerging health concerns such as tobacco use (direct impact to reduce smoking prevalence) and NCDs, while also raising revenue. Increasing public resources to the health sector would ensure that spending per capita does not decline, which would otherwise jeopardise recent gains in several areas. However, efficiency considerations are also crucial, especially given the gradual depletion of the Petroleum Fund. A re-prioritisation of the overall state budget could yield larger resources for the health sector without impacting fiscal sustainability.

Some degree of rationalisation of health spending will be needed to ensure sustainability. There has been an overall increase in health spending over the past decade, although this has plateaued in recent years. A rising wage bill for health workers has placed upward pressure on health spending. Moreover, persistent coordination challenges in budgeting and planning – as well as complexities arising from growing autonomy and decentralisation – have undermined effective service delivery. There are also ongoing challenges of low service utilisation and inadequacies in supply-side readiness and quality of care, particularly at the primary care level. This brings into question whether 'business as usual' will be enough to bring about continued improvements in health outcomes.

IMPROVING HEALTH SYSTEM EFFICIENCY

The performance of the health system can be improved by tackling existing sources of inefficiency. There is scope for efficiency improvements in all health systems, with an estimated 20 to 40 percent of health expenditure spent inefficiently at the global level.[65] Moreover, identifying sources of inefficiency is also important to ensure that additional resources are not wasted. Increasing the budget envelope without addressing underlying efficiency issues may mean that additional funds will not necessarily yield correspondingly higher outputs or better health outcomes.

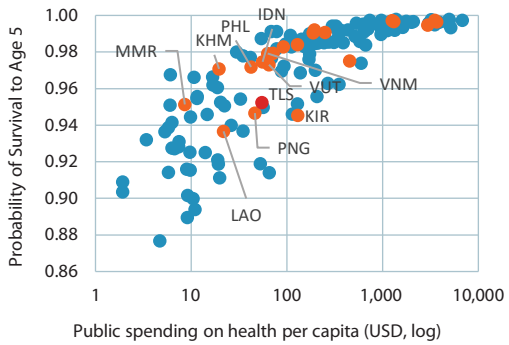
[64] Demographic dividend refers to the growth in an economy that is the result of a change in the age structure of a country's population. Demographic dividends are occurrences in a country that enjoys accelerated economic growth that stems from the decline in fertility and mortality rates.

[65] Chisholm and Evans, 2010

Identifying key sources of inefficiency and scope for improvement would enable the government to get better value-for-money. In particular, there are potential allocative inefficiencies with regard to primary health care and human resources.

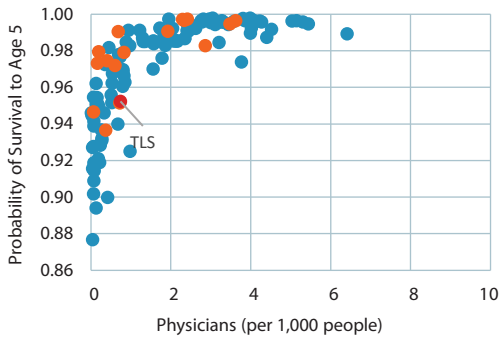
Analysis suggests that there are both input and output inefficiencies that should be addressed. A well-functioning health system should translate inputs into outputs (and outcomes) in an efficient manner – thus ensuring good value-for-money. The analysis suggests that the level of public spending per capita and the number of doctors per 1,000 people could be better employed to achieve improved outcomes. For instance, public spending on health per capita is similar to the levels observed in Indonesia, Philippines and Vietnam, but child survival is lower (Figure 50). Conversely, Myanmar has a similar health outcome even if it is spending significantly less than Timor-Leste. Using the number of doctors per 1,000 people – instead of public spending – leads to similar conclusions (Figure 51). The results for life expectancy also highlight existing technical inefficiencies, albeit weaker.

Figure 50. Spending and child survival



Note: Orange dots represent countries in the EAP region.
Source: World Bank.

Figure 51. Physicians and child survival



Note: Orange dots represent countries in the EAP region.
Source: World Bank

Underinvestment in primary health care has been found to be a key source of inefficiency in health systems. In many countries, health expenditure is concentrated in high-cost low-value interventions, as well as tertiary care in hospital settings. Conversely, many countries underinvest in the delivery of essential health services at the primary health care (PHC) level – even though investments in PHC are known to be allocatively efficient and contribute significantly to improving health outcomes. Estimates suggest that government expenditure per capita on primary health care at $26.[66] A recent costing study calculated that the cost to effectively deliver Timor-Leste's revised comprehensive Essential Service Package (ESP) ranges from $48 to $57 per capita.[67]

There is significant scope to improve service readiness and quality of care, thereby improving technical efficiency. CHCs and health posts have lower availability of essential items when compared to hospitals, and generally low levels of competencies among health workers for basic tasks such as conducting physical examinations. A useful first step towards improving service readiness and quality of care is to introduce standards for how health services should be delivered, and gradually work towards 'raising the bar' towards these standards. At primary health care facilities, this could include both clinical standards and standards for non-clinical operations (e.g. checklists for essential commodities, infection control standards, administrative and management guidelines). On the clinical side, the ESP serves as an explicitly defined benefit package which can be referenced to national clinical guidelines, with care protocols modified to be appropriate for the PHC setting as needed. This could help to standardise care practices, reducing variations in standards of practice and case management which currently contribute to inefficiency of service delivery.

[66] Different costing methods and data sources have yielded varying amounts of how much Timor-Leste currently spends on primary health care, ranging from $10 to $47 per capita.

[67] WHO 2019

The agenda of reducing childhood stunting will require multisectoral efforts, as well as improvements in service availability and readiness in the health sector. Reducing chronic malnutrition requires the convergence of interventions in households with pregnant women and young children so that the prevention of stunting is a priority across the whole of government. As recently approved by the Council of Ministers, the Consolidated National Action Plan for Nutrition and Food Security (CNAP-NFS) is intended to be the way forward for multi-sector nutrition programming in Timor-Leste. The process of finalisation, monitoring, and reporting on the CNAP-NFS will be guided by the global Scaling Up Nutrition (SUN) Movement principles.[68] Reducing fragmentation in the efforts on nutrition can improve both efficiency and effectiveness of interventions therein. To this end, a SUN Secretariat under the Office of the Prime Minister will aim to unite the nutrition community, ensure that the country's efforts on nutrition engage the whole of government, coordinate external support, and ensure that improving nutrition and food security remain at the forefront of the national development agenda. In addition to this coordinated effort, health sector interventions that directly impact stunting will also need to be improved. These include childcare and feeding practices, women's reproductive health, paediatric and neonatal health care, appropriate immunisation and nutrition counselling, and growth monitoring and growth promotion.

Greater emphasis is required on the prevention, early detection, and treatment of non-communicable diseases. Care for non-communicable diseases (NCD) is relatively underdeveloped. For example, only 1 percent of women aged 30-49 years have ever had a screening test for cervical cancer, while 97 percent of people found to have high blood pressure were not on medication. Investing in systems and capabilities for NCD care at the PHC level is efficient as it reduces the need for more expensive urgent care when patient conditions become more complex and difficult to treat. Investing in NCD care domestically is also expected to reduce the need for referrals abroad. Improving NCD care will require additional resources, the most critical of which would be to train health workers to detect, diagnose, and manage NCDs.[69]

Another key source of inefficiency in health systems pertains to human resources for health. The health workforce has increased significantly, but this has not led to a concomitant increase in health service utilisation – when using the outpatient utilisation rate as a proxy indicator.[70] Greater efficiency will require shifting away from a focus on headcount to a focus on appropriate skills-mix, equitable distribution, and enhanced competencies. For instance, the composition of the health workforce could be improved by increasing the number of midwives and nurses, while holding constant the number of doctors. There is also scope to improve the spatial distribution of health workers across facilities, which is currently skewed towards urban areas and contributing to inequities in access to care. Finally, it is crucial to improve competencies to meet emerging health needs (such as NCDs) and to raise overall quality of care – especially though good quality pre- and in-service training. Some of these factors affect productivity and performance, which in turn impact overall health system objectives.

[68] Timor-Leste officially became the 62nd member country of the SUN Movement in September 2020.

[69] A survey of health workers found that the proportion of doctors that received training on hypertension and diabetes was only 11 and 7 percent, respectively – far lower than the share who had been trained in communicable diseases and maternal and child health.

[70] Nonetheless, there are other factors that may affect utilisation rates, such as shortages of materials and supplies and limited competencies in certain types of care.

CONCLUSION AND RECOMMENDATIONS

As a young nation, Timor-Leste has come a long way in rebuilding its health system and improving health outcomes. Significant strides have been made in re-equipping the public health service delivery network – through the reconstruction of basic health infrastructure and increases of the health workforce. There has been progress on key health outcomes – especially on life expectancy and mortality – but others have lagged, such as child stunting. Looking ahead, the challenge will be to tackle multiple agendas simultaneously. These include the need to continue making progress on infectious diseases, maternal and child health, and nutritional outcomes, while tackling a shifting burden of disease towards NCDs, as well as ensuring adequate preparedness against public health threats such as COVID-19 and natural disasters.

Higher spending on health has not translated into markedly better service availability and quality. Government expenditure on health was equivalent to 3.7 percent of GDP in 2018, which is somewhat higher than many regional and income peers. However, health service utilisation remains relatively low, with just 2.5 outpatient visits per person per year. Uneven access to care across geographic areas and by socioeconomic strata implies inequities in health service utilisation patterns, with rural and poor households receiving poorer quality care at CHCs and health posts as compared to urban and better-off households. COVID-19 is likely to exacerbate these inequities through various channels. These include disruptions to essential health and nutrition services – such as critical outreach services to hard-to-reach communities – and a disproportionate impact on the livelihoods of poor households due to movement restrictions and a slowdown in economic activity.

Within the health sector, there will be a need to significantly rethink decisions on the use of resources. Primary health care and human resources are two areas that would benefit from a review of key policy directions. The prevention, early detection, and treatment of NCDs is an emerging and growing need.[71] One option for improvement of the availability and quality of essential health services at the primary health care level is to introduce an Essential Service Package with standardised guidelines and care protocols. Benchmarking the performance of primary health care facilities against these guidelines and checklists would help to assure a minimum service standard and raise the quality of care across the board. Rationalising human resources for health would also contribute significantly to improving care. The development of the health workforce would benefit from shifting away from a focus on increasing headcount, toward ensuring an appropriate skills-mix, equitable distribution, and improving competencies. This would include revisiting staffing levels and skills composition, especially in hard-to-reach areas that are currently underserved.

Additional challenges which are not limited to the health sector – such as childhood stunting and emergency preparedness – will also need to be prioritised. The high rate of childhood stunting is currently an impediment to human capital development which, if reduced, will positively contribute to economic growth. Key interventions that can positively impact stunting rates include multi-sector coordination and policy reforms; improvements to nutrition-specific services in the health sector such as maternal and child health services, immunisation, and nutrition counselling; and behaviour change communication to encourage better feeding practices. The country's ability to prepare for and respond to emergencies (including pandemics such as COVID-19 as well as natural disasters such as the recent floods) will likewise need to be strengthened through investments in surveillance and surge capacity, comprehensive risk assessments, and effective coordination mechanisms, among others.

[71] Adequate funding for NCD care will be critical – not just in terms of funding for equipment and supplies to deliver such services, but also further 'upstream' by way of pre- and in-service training for health workers who are currently not sufficiently equipped with the necessary competencies to diagnose and treat such conditions

Institutional arrangements need to be reviewed to improve responsiveness, accountability, and coordination. Municipalities are entrusted with the responsibility of delivering health services to their population, but only have partial autonomy. In addition, they have to manage multiple revenue flows while continuing to depend on the central government to fund for inputs. To improve this situation, one option would be to establish financial rules and regulations that strike a balance between control and flexibility over spending decisions that are made at the municipal level. This could take the form of revised resource allocation criteria for fiscal transfers to municipalities that are based on planned needs, rather than on an incremental or historical basis. This would better align resources to needs on the ground. Within spending cycles, municipal authorities could be empowered to reallocate funds as needs change without having to request approval for small virements, and they could be allowed to carry over any efficiency gains to be re-invested in programs across spending cycles. This will have to be backed by robust accountability mechanisms, such as linking performance indicators to decisions on inter-fiscal transfers.

Persistent challenges in the public financial management system will need to be addressed. PFM bottlenecks affect all government organisations, including those in the health sector. Key issues exist at all stages of the budget cycle, including at the formulation stage (mismatches between budget allocation and spending needs), budget execution stage (delayed approval and disbursement of funds), and in monitoring (onerous financial reporting requirements). Improving planning, budgeting, and execution in the health sector will partly depend on a concerted government-wide effort. Some measures that can be considered include: (i) developing a medium-term budgeting and expenditure framework; (ii) establishing and enforcing a budget calendar to improve the predictability and timeliness of the budget process; and (iii) introducing accountability mechanisms for spending decisions, linked to sectoral objectives and outcomes.

Finally, investing in the health information system and encouraging the use of data for decision making will be a critical underlying element to all the reforms mentioned above. There is currently limited information on the quality of relevant infrastructure and service availability. Multiple administrative systems and reporting requirements run in parallel and are not able to provide up-to-date and reliable information on critical inputs (e.g. medicine stock levels) and outputs (e.g. service utilisation and coverage rates). Consolidating health information systems and their data will be a useful step towards acquiring a better perspective on the performance of the health sector. This would enable policymakers to collect, review, and use data effectively to inform both day-to-day management and longer-term planning, thereby becoming more responsive and effective in delivering health services to the population.

Together, these reforms will help to put Timor-Leste's health system back on track after the significant disruptions caused by COVID-19 and recent flooding. Recovery in the short term will depend at least in part on the ability of the health system to support effective containment measures and care (e.g. vaccinations), with a view to reopening the economy as soon as possible. In the long term, key reforms will be necessary to improve the efficiency, effectiveness, and sustainability of the health system, with a view to making steady progress on health outcomes and human capital development. Timor-Leste will only be able to build back better with a healthy population that can contribute productively to economic recovery and growth.

ANNEX 1: KEY INDICATORS

Table 2. Economic Indicators

	2016	2017	2018	2019	2020
Real sector			(annual percentage change, constant)		
Gross domestic product (non-oil)	3.4	-4.1	-1.1	1.8	-7.3
Final consumption expenditure	1.7	-1.2	0.8	3.4	-2.8
Gross fixed capital formation	15.3	-16.7	-1.5	-17.2	-46.5
Consumer price index, period average	-1.5	0.5	2.3	0.9	0.5
Fiscal sector			(percentage of non-oil GDP)		
Total Revenue	45	42	48	43	46
Domestic revenue	12	12	12	11	12
Estimated Sustainable Income	33	30	35	32	35
Total expenditure	99	76	77	74	72
Recurrent expenditure	62	59	52	55	62
Capital expenditure	36	16	25	19	10
Fiscal balance	-54	-34	-29	-31	-26
Monetary and Financial sector			(as stated)		
Credit to the private sector (% growth)	-5.3	24.5	-2.4	4.3	11.2
Lending interest rate (%)	14.5	12.1	11.9	12.0	11.3
Nominal effective exchange rate (index)	94.4	94.8	96.3	97.4	98.7
Real effective exchange rate (index)	110.9	109.0	111.2	112.0	113.2
External sector			(percentage of non-oil GDP)		
Current account	-33	-18	-12	8	-19
Goods and services	-68	-60	-60	-55	-50
Primary income	33	46	54	67	39
Secondary income	2	-4	-6	-4	-9
Capital account	3	2	3	2	1
Financial account	29	31	16	-1	17
Direct investment	0	0	3	4	-40
Portfolio investment	42	21	13	-16	58
Other investment	-12	9	0	10	-2
Net errors and omissions	-9	1	1	-9	2
Change in reserves	9	-16	-8	1	0
Memorandum items			(as stated)		
Oil production (million BOE)	47	42	39	38	36
Petroleum Fund, closing balance (USD million)	15,844	16,799	15,804	17,692	18,991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