INTERNATIONAL MONETARY FUND

IMF Country Report No. 22/307

DEMOCRATIC REPUBLIC OF TIMOR-LESTE

2022 ARTICLE IV CONSULTATION—PRESS RELEASE; AND STAFF REPORT

September 2022

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2022 Article IV consultation with Timor-Leste, the following documents have been released and are included in this package:

- A **Press Release**
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on a lapse-of-time basis, following discussions that ended on June 23, 2022, with the officials of Timor-Leste on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on July 28, 2022.
- An **Informational Annex** prepared by the IMF staff.
- A **Debt Sustainability Analysis** prepared by the staffs of the IMF and the World Bank.

The document listed below will be separately released.

Selected Issues

The IMF's transparency policy allows for the deletion of market-sensitive information and premature disclosure of the authorities' policy intentions in published staff reports and other documents.

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International Monetary Fund
Washington, D.C.

IMF Executive Board Concludes 2022 Article IV Consultation with Timor-Leste

FOR IMMEDIATE RELEASE

Washington, DC – **September 22, 2022:** The Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with Timor-Leste on August 24, 2022 and endorsed the staff appraisal without a meeting on a lapse-of-time basis.[2]

Timor-Leste is slowly emerging from several waves of COVID-19 outbreaks and from severe floods following cyclone Seroja in April 2021. Steady progress with vaccination has allowed the authorities to lift strict containment and travel restrictions. After a sharp contraction in growth in 2020, there was a moderate rebound in 2021. Inflation has been rising steadily since early 2021 driven by higher food and oil prices while non-tradable inflation remains muted.

Real non-oil GDP growth in 2022 is projected at 3.3 percent, underpinned by strong government support, a rebound in private consumption, and the reopening of borders. Inflation is projected to pick up, reflecting the increase in food and energy prices. A gradual recovery of private consumption and investment will underpin GDP growth at around 3 percent in the medium term.

Executive Board Assessment

In concluding the 2022 Article IV consultation with Timor-Leste, Executive Directors endorsed the staff's appraisal, as follows:

Timor-Leste's strong progress with vaccination has allowed for the lifting of strict containment restrictions, and the economy is expected to continue its recovery. Non-oil real GDP is projected to grow at 3.3 percent in 2022, after an estimated growth of 1.5 percent in 2021, supported by public spending and rebounding private consumption.

Large downside risks remain. An important near-term downside risk is a re-intensification of a health crisis. Ongoing geopolitical tensions pose additional risks through more prolonged and/or heightened high oil and food prices. Domestic political instability could stall reforms, and natural disasters could further slow the recovery.

Fiscal consolidation and structural reforms are needed to secure fiscal sustainability, strengthen the external sector position, and support a smoother transition to a private sector-led economy. The external sector position in 2021 was substantially weaker than implied by fundamentals and desirable policy settings. Active oil fields are drying up, with oil revenues expected to cease in 2023. The 2022 budget envisages large fiscal imbalances in

[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

[2] The Executive Board takes decisions under its lapse-of-time procedure when the Board agrees that a proposal can be considered without convening formal discussions.

the medium term that would deplete the Petroleum Fund in the long term, leading to a fiscal cliff. Domestic revenue mobilization and government expenditure rationalization are needed in future budgets to underpin fiscal consolidation. Government spending should prioritize investment projects to enhance the productive capacity of the economy and programs to protect the poor.

Addressing public financial management (PFM) weaknesses is essential for strengthening fiscal management and improving the quality of government spending. High priority areas of PFM reforms include budget credibility, public investment management, procurement performance and monitoring, and fragmentation caused by the proliferation of autonomous agencies. The authorities have adopted some PFM reforms and are committed to continuing their reform efforts with technical support from the Fund and other development partners. The introduction of a Fiscal Responsibility Law (FRL) can also help improve fiscal discipline by requiring the government to commit to a monitorable fiscal policy objective and to lay out a strategy to achieve that objective.

A significant number of structural barriers need to be lifted to facilitate diversification and generate inclusive and resilient growth. These include transforming the predominantly subsistence-oriented agricultural sector into a commercially viable sector, raising productivity, and enhancing food security. Improving the business environment and strengthening AML/CFT and anti-corruption effectiveness will foster private investment. So far, progress in private sector development and job creation has been tepid, as reforms have been slow and limited. Investing in climate-resilient infrastructure is key to building resilience to natural disasters, however, adaptation plans have not been integrated into the budgetary planning, and coordination amongst various public stakeholders and capacity constraints to access external grant-financing remain key challenges.

Table 1. Timor-Leste: Selected Economic and Financial Indicators, 2018–23

Non-oil GDP at current prices (2020): US$1.595 billion
Population (2020): 1.318 million
Non-oil GDP per capita (2020): US$1,210
Quota: SDR 25.6 million

	2018	2019	2020	2021	2022	2023
				Est.	Proj.	Proj.
	(Annual percent change)					
Real sector						
Real Non-oil GDP	-0.7	2.1	-8.6	1.5	3.3	4.2
CPI (annual average)	2.3	0.9	0.5	3.8	7.0	4.0
CPI (end-period)	2.1	0.3	1.2	5.3	7.0	4.0
	(In percent of Non-oil GDP, unless otherwise indicated)					
Central government operations						
Revenue	57.6	51.6	57.0	54.1	51.9	46.9
Domestic revenue	12.0	11.0	11.4	9.6	9.6	9.6
Estimated Sustainable Income (ESI)	34.8	31.0	34.1	33.0	30.8	25.8
Grants	10.8	9.5	11.5	11.5	11.5	11.5
Expenditure	84.0	81.9	82.6	97.2	106.8	114.4
Recurrent	51.8	54.0	61.1	77.5	79.0	62.4
Net acquisition of nonfinancial assets	21.4	18.4	10.0	8.3	16.3	40.6
Donor project	10.8	9.5	11.5	11.5	11.5	11.5
Net lending/borrowing	-26.4	-30.3	-25.6	-43.2	-54.9	-67.6
	(Annual percent change, unless otherwise indicated)					
Money and credit						
Deposits	2.8	-7.5	10.1	29.3	10.5	9.9
Credit to the private sector	-3.8	5.5	10.1	4.6	8.9	5.8
Lending interest rate (percent, end of period)	14.5	16.3	11.3	11.3	11.3	11.3
	(In millions of U.S. dollars, unless otherwise indicated)					
Balance of payments						
Current account balance	-191	133	-308	43	-284	-821
(In percent of Non-oil GDP)	-12	8	-19	3	-15	-40
Trade of Goods	-589	-566	-510	-569	-647	-726
Exports of goods	25	26	17	32	35	39
Imports of goods	613	592	527	601	682	765
Trade of Services	-349	-357	-275	-244	-279	-316
Primary Income	843	1,126	620	925	718	305
of which: other primary income (oil/gas) 1/	510	756	324	720	634	46
Secondary Income	-96	-70	-143	-70	-77	-84
Overall balance	129	-18	0.2	278	62	153
Public foreign assets (end-period) 2/	16,477	18,348	18,946	19,884	18,442	17,654
(In months of imports)	187	212	270	275	218	181
Exchange rates						
NEER (2010=100, period average)	130.9	134.1	135.8	131.9	…	…
REER (2010=100, period average)	142.0	143.8	143.8	137.8	…	…
Memorandum items						
Nominal Non-oil GDP (in millions of U.S. dollars)	1,584	1,704	1,595	1,681	1,858	2,043
Nominal Non-oil GDP per capita (in U.S. dollars)	1,249	1,318	1,210	1,251	1,357	1,464
(Annual percent change)	-3.9	5.5	-8.2	3.4	8.5	7.9
Crude oil prices (U.S. dollars per barrel, WEO) 3/	68	61	41	69	106	95
Petroleum Fund balance (in millions of U.S. dollars) 4/	15,803	17,692	18,289	18,949	17,446	16,504
(In percent of Non-oil GDP)	998	1,038	1,146	1,127	939	808
Public debt (in millions of U.S. dollars)	145	193	218	237	274	321
(In percent of Non-oil GDP)	9.1	11.3	13.7	14.1	14.7	15.7
Population growth (annual percent change)	2.0	2.0	2.0	1.9	1.9	1.9

Sources: Timor-Leste authorities; and IMF staff estimates and projections.
1/ Oil sector activities are considered non-resident activities in balance of payments statistics.
2/ Includes Petroleum Fund balance and the central bank's official reserves.
3/ Simple average of UK Brent, Dubai, and WTI crude oil prices based on April 2022 WEO assumptions.
4/ Closing balance.

INTERNATIONAL MONETARY FUND

DEMOCRATIC REPUBLIC OF TIMOR-LESTE

July 28, 2022

STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION

KEY ISSUES

Context. Timor-Leste has made impressive strides in economic development and institution building. Yet, it is a low-income and fragile country with pressing development needs. A large fraction of the population faces chronic food insecurity, and significant gaps exist in health, education, and infrastructure. With active oil fields nearly depleted, little progress has been made in diversification while fiscal sustainability is at high risk. Higher food and oil prices are fueling higher inflation, exacerbated by political spending pressures ahead of the general elections in 2023.

Recent developments and outlook. Timor-Leste is slowly emerging from several waves of COVID-19 outbreaks and from severe floods following cyclone Seroja in April 2021. A well-progressing vaccination campaign has allowed the authorities to gradually lift COVID-19 related restrictions since November 2021. The economy is expected to continue its recovery amid a decline of COVID-19 infections and strong fiscal support.

Themes of the Article IV. Against this background, the discussions focused on the need to put the fiscal position on a more sustainable footing and on reforms to generate jobs and achieve a more diversified and resilient economy.

Policy recommendations. Fiscal sustainability is at high risk in the long term so the level of government spending should be reduced while protecting the most vulnerable, sustaining vaccination efforts, and safeguarding investment crucial to development. Expenditure rationalization and revenue mobilization should underpin fiscal reforms. Amid this backdrop, improving the quality of spending to improve the productive capacity of the economy and strengthening social safety nets for the most vulnerable are crucial. Structural reform priorities to support private sector development include improving agricultural productivity, enhancing the business environment, strengthening governance, tackling youth unemployment, facilitating financial deepening, and investing in climate-resilient infrastructure.

Approved By
APD (Ranil Salgado) and SPR (Eugenio Cerutti)

Discussions took place in Dili during June 13–23, 2022. The staff team comprised Pablo Lopez Murphy (Head), Wenjie Chen, Purva Khera, and Masakazu Kumakura (all APD). The team met with the Minister of Finance Rui Gomes, the Deputy Governors of the Central Bank Nur Aini Djafar Alkatiri and Venancio Alves Maria, the Coordinating Minister of Economic Affairs Joaquim Amaral, the Minister of Petroleum and Minerals Victor da Conceicao Soares, other senior officials, development partners, civil society, and private sector representatives. Bernard Harborne and Alief Rezza (World Bank) participated in several meetings. Bruno Saraiva (OED) participated in policy discussions. Ricardo Davico and Nadine Dubost assisted in the preparation of this report.

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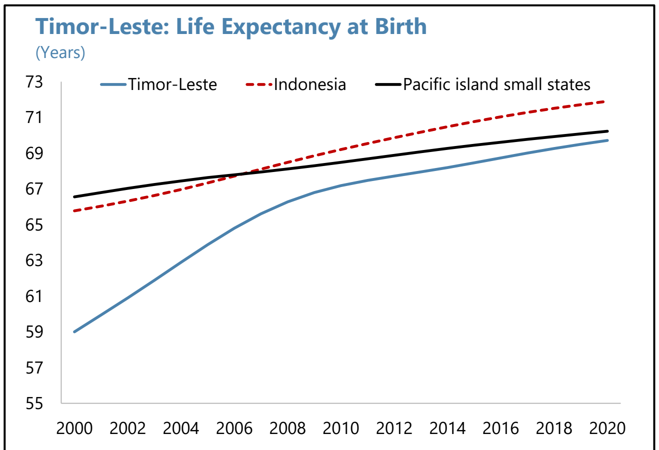
ANNEXES

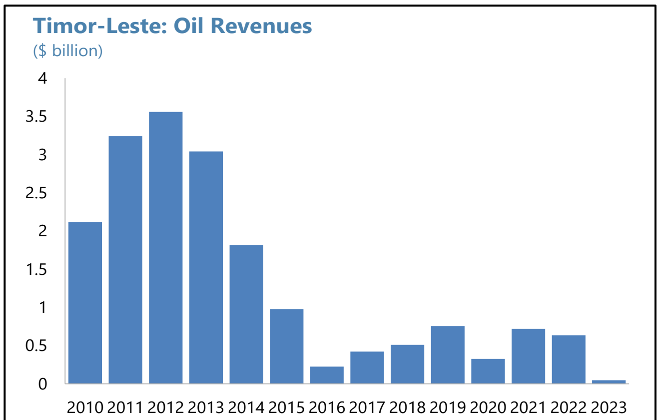
CONTEXT

1. **Timor-Leste has made impressive strides in economic development and institution building.** In the wake of the 1999 referendum, the economy and the institutional structure of the country were completely disrupted. Major economic functions came to a halt or were dismantled, including the banking and payments system, and the tax and customs administrations, while most of the basic services such as schools, electricity, water supply, and roads were destroyed. Since its independence in 2002, Timor-Leste has had several democratic elections, made progress in human development indicators, rebuilt its infrastructure and government institutions, and reduced conflict and violence.



Source: World Development Indicators, World Bank.

2. **Fiscal sustainability remains a key challenge amidst depleting oil revenues, large development needs, and high vulnerability to natural disasters.** Active oil fields are drying up and oil revenues—the main funding source for public spending—are expected to cease in 2023. The non-oil private sector economy remains underdeveloped, with informal and low-productivity employment. Significant gaps exist in health and education, and the lack of formal jobs and high youth unemployment are serious concerns. Moreover, Timor-Leste's high vulnerability to natural disasters poses a fiscal risk. Amid Parliamentary elections in 2023, reaching political consensus on how to respond to these challenges is very important. The response to Fund's past advice has been mixed with slow progress in some areas (Annex VII).

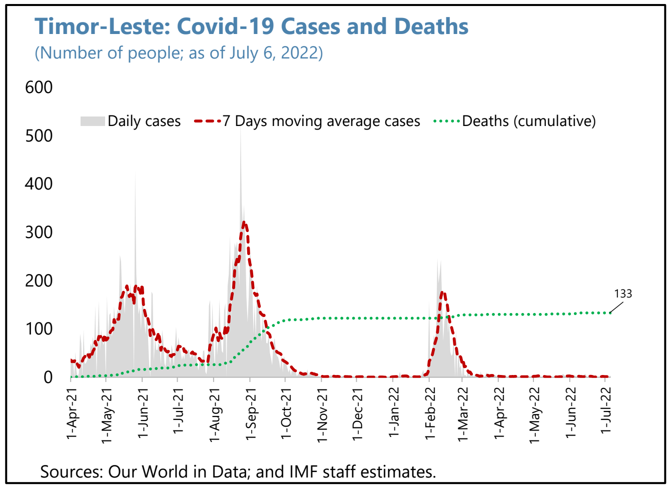


Sources: Central Bank of Timor-Leste; and IMF staff estimates.

RECENT DEVELOPMENTS

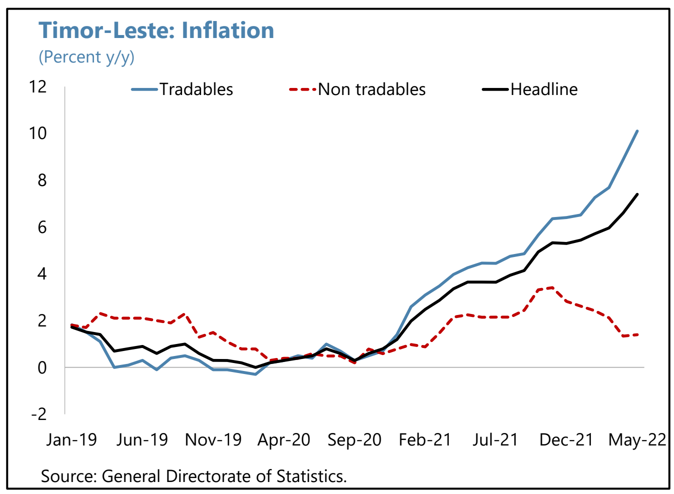
3. **Timor-Leste's strong progress with vaccination has allowed the authorities to lift strict containment and travel restrictions.** As of June 21, 2022, close to 72 percent of the adult population are fully vaccinated while 85 percent have received at least one dose. As daily infections

have fallen sharply, the authorities lifted the national state of emergency on November 30, and all COVID-related international travel restrictions in March 2022.



4. After a sharp contraction in 2020, there was a moderate economic rebound in 2021. Although COVID-19 outbreaks and massive floods slowed the recovery, non-oil real GDP is estimated to have grown by 1.5 percent in 2021, after a contraction of -8.6 percent in 2020.

5. The 2021 fiscal deficit expanded sharply. It increased from 30 percent of non-oil GDP in 2019 to 43 percent in 2021 due to a significant increase in recurrent expenditure and lower domestic revenue, while partly offset by much lower capital spending (Table 2). COVID-19-related spending explains about half of the increase in current spending in 2021 compared to 2019.



6. Price pressures are building. Inflation has been rising steadily since early 2021 mainly driven by higher food and oil prices while non-tradable inflation remains muted. The war in Ukraine exacerbated those pressures, and headline inflation reached 7.4 percent y/y in May 2022, the highest since 2012. Against this backdrop, the government adopted a fuel subsidy in April 2022.

7. The external sector position in 2021 is estimated to be substantially weaker than warranted by medium-term fundamentals and desirable policies. The underlying non-oil current account deficit is estimated at 42.7 percent of non-oil GDP in 2021, about 8.3 percent of non-oil GDP above the "norm" backed out from setting consumption as an annuity of total wealth (Annex I).

8. International reserves are at historically high levels. The 2021 SDR allocation supplemented existing reserve assets, which together account for more than 11 months of prospective imports in 2022. The authorities reported no intention to use the SDR funds.

9. Banks remained supportive. At 5.8 percent y/y in 2021, private sector credit growth was mainly driven by lending to households with historically low credit risk. The credit moratorium scheme, implemented in response to the floods in April 2021, was widely availed by individual borrowers, and ended in March 2022. Financial stability has been maintained—capital adequacy and liquidity ratios remain comfortably above the regulatory thresholds, and nonperforming loan ratios remain low at 2.5 percent in end-2021.

Timor-Leste: Selected Financial Soundness Indicators, 2018-21
(In percent)

	Dec-18	Dec-19	Dec-20	Dec-21
Asset Quality				
Capital adequacy ratio [1]	27.7	28.6	27.9	27.9
Non-performing loans to total gross loans	5.6	5.6	2.0	2.5
Provision for loan losses to total gross loans	8.1	6.4	2.1	2.4
Earnings and Profitability				
Return on assets	1.1	1.7	2.3	0.8
Return on equity [1]	6.8	5.1	4.3	8.7
Liquidity				
Liquid assets to total assets	80.5	91.1	79.5	79.0
Memorandum items (In millions of U.S. dollars):				
Total assets	1,240	1,384	1,474	1,831
Total loans	204	250	257	272

Source: Central Bank of Timor-Leste.
[1] Covers BNCTL only.

OUTLOOK AND RISKS

A. Outlook

10. In the baseline projections, the economy is expected to continue its recovery amid a decline of COVID infections and strong fiscal support. The war in Ukraine and the associated higher commodity and food prices will affect inflation, the fiscal and external accounts, and food security (paragraph 23). Trade linkages with Russia and Ukraine are insignificant.

- Staff projects non-oil real GDP to grow 3.3 percent in 2022, supported by public spending and rebounding private consumption on the back of steady progress with vaccination and reopening of the borders. A gradual recovery of private consumption and investment will underpin GDP growth at around 3 percent in the medium term.

- Oil revenues from active oil fields are projected to cease in 2023. The development of Greater Sunrise fields, which could generate significant oil revenues, is excluded from baseline projections because there are no approved development plans yet.

- The fiscal deficit will remain broadly constant at 43 percent of non-oil GDP in 2022 and increase sharply in 2023–24 driven by a front loading of public spending in line with the medium-term fiscal plans laid out in the 2022 budget.

- The current account balance will shift back to deficit in 2022 and in the medium term, reflecting lower oil revenues and higher imports of goods and services generated by higher commodity prices and public investment. As a dollarized economy, the appreciation of the US dollar would worsen competitiveness.
- While the recently implemented fuel subsidy will help stem inflationary pressures from the increase in global energy prices, inflation is projected at 7 percent in 2022, reflecting higher food prices.[1]
- Fiscal and external sustainability are at high risk in the long term. Under current policies, the Petroleum Fund, which is the main source of financing of fiscal and current account deficits, is depleted in the long term.

B. Risks

11. Risks are tilted to the downside (Annex II). The main near-term downside risks threatening the recovery are a re-intensification of a health crisis including the pandemic, both domestically and globally, that could lead to reinstatement of COVID-19-related restrictions. Ongoing geopolitical tensions pose additional risks through more prolonged and/or heightened high oil and food prices. Persistent high inflation in advanced economies could tighten global financial conditions that could adversely impact the Petroleum Fund balance. Domestic political instability could stall reforms, and natural disasters could further slow the recovery.

Authorities' Views

12. The authorities broadly agreed with staff's outlook and risks. They project real non-oil GDP growth at 2.9 percent in 2022 and 3.1 percent in 2023 driven by government spending and the recovery of private spending and international travel post-COVID. They project inflation at 6.7 percent in 2022 driven by food prices and they expect it to decline to 3 percent in 2023. The authorities are intensifying their efforts to develop the Greater Sunrise fields including through discussions with the Australian authorities and oil companies, but significant uncertainties remain. They see a protracted war in Ukraine, natural disasters, and weak government spending execution as downside risks to the outlook.

POLICY DISCUSSIONS

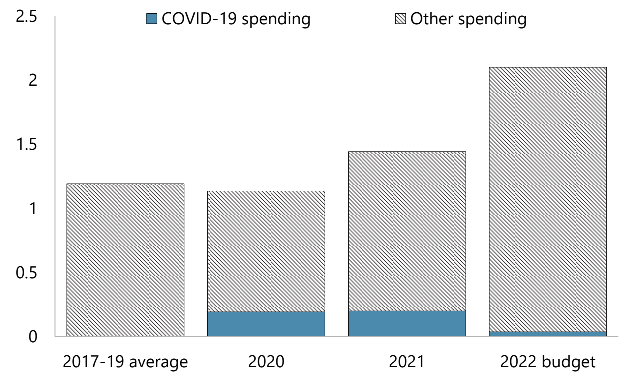
Discussions focused on the need to pursue fiscal consolidation to secure fiscal sustainability while protecting the most vulnerable, and on reforms needed to achieve a more diversified, private sector-led, and resilient economy.

[1] Subsidies for fuels to road, air, and maritime transport operators and companies in the agriculture and fishing sectors were adopted in April 2022 until end July 2022. The government will pay the difference between the price of a liter of gasoline or diesel in December 2021 and the current price.

A. Securing Fiscal Sustainability While Protecting the Vulnerable

13. A lower budget deficit in 2022, along with better targeting to the most vulnerable, would have improved fiscal sustainability. The expenditure ceiling is $2.1 billion, 75 percent higher than average actual spending in 2017–2019 and three times larger than the estimated sustainable sources of revenue of $705 million. Moreover, the decision to create a Fund worth $1 billion for the Veterans from the Petroleum Fund reduces the sources of financing of the government. Although COVID-19-spending is much lower than in 2020–21 as the pandemic situation has improved, the budget includes a remarkable increase in government transfers that are not targeted to the most vulnerable and do not increase the productive capacity of the economy. Vaccination efforts should be sustained to mitigate the impact of potential COVID-19 outbreaks.

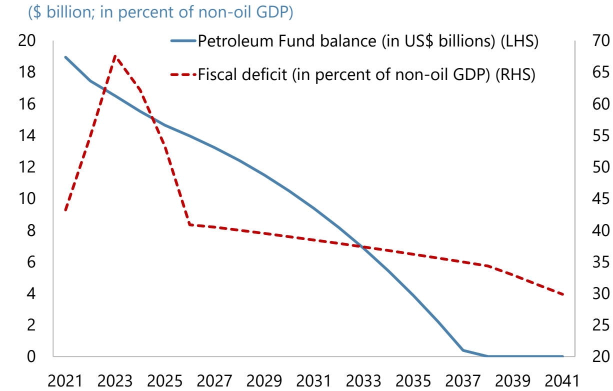
Timor-Leste: Central Goverment Expenditure
($ billion)



Sources: Ministry of Finance; and IMF staff estimates.

14. The medium-term fiscal plans in the 2022 budget envisage persistent fiscal deficits that would lead to the depletion of the Petroleum Fund over the long term. The ambitious investment plans will yield only modest growth dividends given that they are not subject to rigorous cost-benefit analysis (¶19 and Annex IV).[2] Without major expenditure and revenue reforms, the fiscal deficit is projected to hover between 30 and 68 percent of non-oil GDP during 2022–41, mainly financed by the Petroleum Fund which is declining steadily with moderate risks of debt distress in the long term (Debt Sustainability Analysis).[3] The depletion of the Petroleum Fund by 2038 leads to a fiscal cliff that may force an abrupt reduction of the fiscal deficit by more than 30 percent of non-oil GDP, and hence stop the provision of basic public services.[4]

Timor-Leste: Petroleum Fund Balance and Fiscal Deficit
($ billion; in percent of non-oil GDP)



Source: IMF staff estimates.

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[2] See Public Expenditure Review, World Bank (2021).

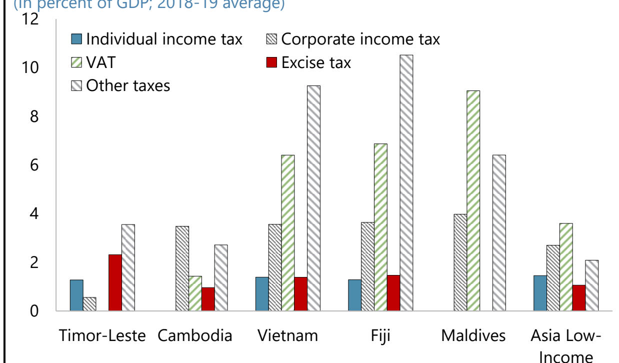
[3] The rating is unchanged from the Debt Sustainability Analysis of the 2021 Article IV. The present value of the external debt-to-exports ratio and the debt service-to-exports ratio under the baseline are projected to breach their respective indicative thresholds in the medium-term.

[4] The depletion of the Petroleum Fund by 2038 is assuming an annual investment return on the Petroleum Fund of 5 percent, in line with historical average annual returns. If the investment return is 3 percent, then the Petroleum Fund is depleted in 2034.

15. Fiscal consolidation and structural reforms are warranted to secure fiscal sustainability and support a smoother transition to a private sector-led economy. A sustainable fiscal position is achieved when the size of the withdrawals from the Petroleum Fund to finance government spending are equal to 3 percent of resource wealth, consisting of the Petroleum Fund balance and the projected net present value of petroleum revenues with approved development plans. Staff's reform scenario illustrates a transition to a sustainable fiscal position in a 10-year period. Given the current magnitude of the fiscal deficit, fiscal consolidation should be gradual to balance the tradeoff between fiscal sustainability and the growth costs from fiscal consolidation. This tradeoff could be improved by accompanying fiscal consolidation with structural reforms to enhance private sector development. The Petroleum Fund balance in this scenario is higher than under the baseline, averaging $17.8 billion in 2028–42, thus, generating more sustainable sources of revenue both in the medium and long term to support government expenditures, and putting the fiscal position on a solid footing. The reduction in the fiscal deficit is supported by revenue mobilization (¶16) and expenditure moderation (¶17):

- *Domestic revenues* reach 12 percent of non-oil GDP by 2027 and average close to 15 percent in 2028–42. This is in line with the actual increases in tax revenues among peer countries—where ratios of tax-to-GDP rose by more than a half over a decade—that introduced tax policy and tax administration reforms.[5]

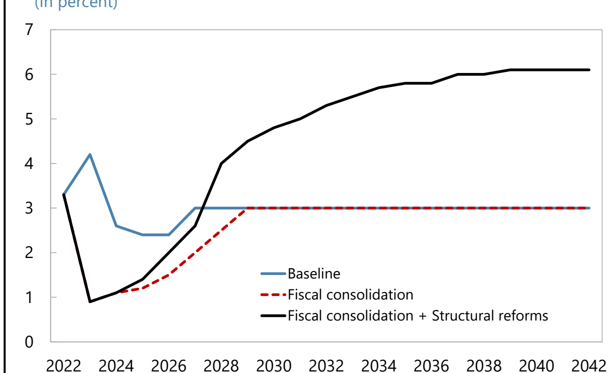
Timor-Leste: Tax Revenue Collection by Type
(In percent of GDP; 2018-19 average)



Sources: CIAT; IMF; IOTA; OECD (2021), 2020 International Survey on Revenue Administration; and Timor-Leste authorities data.

- *Government expenditure* declines gradually to the 2019 level in the medium term and remains broadly at that level until 2033 when excess withdrawals from the Petroleum Fund are eliminated. It averages 63 percent of non-oil GDP in 2023–27 and 29 percent of non-oil GDP in 2028–42, close to 21 percentage points lower than in the baseline. Public investment averages 16 percent of non-oil GDP in 2022–27, requiring a better selection of investment projects than in the baseline.

Timor-Leste: Real Non-oil GDP Growth
(In percent)



Source: IMF staff calculations.

- *Real non-oil GDP growth* is lower than the baseline, averaging 1.6 percent over the

[5] See IMF Working Paper WP/20/143.

medium term (2023–27), owing to the output costs of fiscal consolidation.[6] This is mitigated by the positive impact of reprioritization (towards growth-enhancing sectors such as health, education, agriculture, tourism, and digitalization), better selection of investment projects (¶19 and Annex IV), and structural reforms.[7] With sustained improvement in productivity and competitiveness, the economic impact of structural reforms is higher over the long term (2028–2042), where growth is projected to hover around 5-6 percent, significantly higher than under the baseline, driven by higher private investment and the development of the non-oil private sector, reduced import dependence, and a larger export base.

Timor-Leste: Reform Scenario vs. Baseline Scenario

	Reform Scenario				Baseline Scenario			
	2021	2022	2023-27	2028-42	2021	2022	2023-27	2028-42
Real non-oil GDP growth (in percent)	1.5	3.3	1.6	5.5	1.5	3.3	3.0	3.0
Revenue (excl. grants, percent of non-oil GDP)	42.6	40.4	33.6	25.7	42.6	40.4	31.8	15.3
Domestic revenue	9.6	9.6	10.7	14.8	9.6	9.6	9.7	10.5
Estimated Sustainable Income	33.0	30.8	22.9	10.9	33.0	30.8	22.1	4.8
Government expenditure (percent of non-oil GDP)	85.8	95.3	62.5	29.1	85.8	95.3	85.0	50.8
Recurrent	77.5	79.0	46.9	21.9	77.5	79.0	62.3	43.7
Capital	8.3	16.3	15.6	7.3	8.3	16.3	22.6	7.1
Net lending/ borrowing (percent of non-oil GDP)	-43.2	-54.9	-28.9	-3.5	-43.2	-54.9	-53.2	-35.5
Financing (percent of non-oil GDP)								
PF excess withdrawals	35.3	52.9	26.7	3.0	35.3	52.9	51.1	25.0
Net incurrence of liabilities	1.1	2.0	2.2	0.5	1.1	2.0	2.1	10.5
Petroleum Fund balance ($ million)	18,949	17,446	16,553	17,768	18,949	17,446	15,217	4,707
Current account balance (percent of non-oil GDP)	2.5	-15.3	-31.6	-9.8	2.5	-15.3	-37.0	-39.9

16. Domestic revenue mobilization should underpin fiscal consolidation. This includes identifying measures to expand the tax base and improve compliance. Domestic revenues are low compared to other countries, averaging 11 percent of non-oil GDP during 2015–21. Tax revenues are also low, hovering around 8 percent since 2011. In line with previous technical assistance recommendations from the IMF, the authorities should: (i) introduce a value-added tax; (ii) increase corporate income tax rates to levels more in line with regional peers; and (iii) adopt a property tax once the land registry is complete. Tax policy measures should be complemented by administrative reforms such as improving taxpayer registration and declaration filing, strengthening accountability and transparency, building human capacity, and upgrading the tax procedure code.

17. The level of government expenditure should be reduced, and the quality of spending improved to enhance the productive capacity of the economy and to protect the poor. In line with recommendations from the Public Expenditure Review from the World Bank, this can be achieved by: (i) prioritizing spending on human capital (health and education) and strengthening

[6] Timor-Leste's fiscal multiplier, measured by the change in the real non-oil GDP growth rate induced by a unit change in the primary balance (% GDP), is estimated to be close to 0.1-0.15. This is in line with other estimates in the literature which estimate it to be in the range of 0.08-0.17. Low multipliers indicate that much of the spending leaks into imports and/or is low quality reflecting supply side constraints.

[7] The positive impact of structural reforms often take time to materialize and could even entail short-term costs (e.g., labor and product market reforms). This is consistent with the macroeconomic impact of structural reforms seen across various IMF-supported programs (see Andritzky et al. (2021)). Structural reforms are estimated to have a positive impact on real GDP growth of around 0.3 percentage points in the medium-term, and 2.5 percentage points over the long run.

social safety nets to protect the most vulnerable; (ii) containing the rise in the wage bill by restraining public employment; (iii) curbing the budget for goods and services by improving procurement; (iv) cutting public transfers that do not safeguard the poor; and (v) enhancing the selection of investment projects with robust cost-benefit analysis.

18. The introduction of a Fiscal Responsibility Law (FRL) could be a catalyst to much needed improvements in fiscal discipline. The current fiscal framework has failed to put the fiscal position on a sustainable footing. Although the Petroleum Fund Law provides a sound benchmark for sustainable government spending, spending exceeding that benchmark has been the norm. The discussion of a FRL in Parliament would help raise awareness about the urgent need to address fiscal sustainability challenges. The adoption of a well-designed FRL, with technical support from the IMF, could help improve fiscal discipline by requiring the government to commit to a monitorable fiscal policy objective (i.e., achieve a sustainable fiscal position at a specified point of time) and to lay out a strategy to achieve that objective (Annex III). The annual fiscal strategy would provide details of fiscal developments, fiscal measures, and fiscal projections consistent with fiscal targets. It would also require the government to report and explain fiscal outcomes and strategy changes on a regular basis. The Minister of Finance would have to present a written report to justify changes in fiscal targets or any temporary suspension of them when escape clauses are invoked, including planned corrective actions and a timeline to return to targets.

19. Addressing public financial management (PFM) weaknesses is essential for strengthening fiscal management and improving the quality of government spending. Timor-Leste has adopted several PFM reforms since its independence and recent achievements include program budgeting and a new PFM law providing a structure for a more disciplined budget. The Ministry of Finance recently prepared an action plan for PFM reforms to pursue over the next four years. Higher priority areas include budget execution closer to budget plans, public investment management, procurement performance and monitoring, and fragmentation caused by the proliferation of autonomous agencies (Annex IV). COVID-19-spending in 2021–22 should be reported in a full and timely manner, including the online publication of its ongoing audit on a specified and easily accessible website.

Authorities Views’

20. The authorities are responding to the spillovers from the war in Ukraine. Timor-Leste is especially affected by the increase in the price of rice since 40 percent of rice consumed in Timor-Leste is imported and by the increase in the price of cooking oil which is imported and used extensively for cooking many meals. The revised 2022 budget adopted in May included a fuel subsidy for road, air, and maritime transport operators and for agricultural and fishing activities, a one-off universal family subsidy of $200 per household, expanded social protection payments for expectant mothers and children, more support for housing improvements, expanded scholarships for all levels of education, and more agriculture subsidies to promote national production and reduce the reliance on imports.

21. Although they agreed with staff on the need to put fiscal policy on a more sustainable footing, they noted difficulties in reaching political consensus to do that. The 2022 budget and the Major Planning Options Law include a baseline macroeconomic scenario in which the Petroleum Fund is depleted around 2035, leading to a fiscal cliff. The 2022 budget proposal made by the Ministry of Finance had an expenditure ceiling that was 25 percent lower than the approved budget, but the ceiling was increased during Parliament discussions. The fact that there is still significant time until the Petroleum Fund is depleted makes getting political consensus for fiscal consolidation more difficult. In addition, a significant fraction of government spending is rigid and driven by legal obligations. They plan to explore how the adoption of a FRL could help to achieve more fiscal discipline, with technical support from the IMF.

22. They underscored ongoing efforts to improve PFM aiming to make government spending more efficient. The adoption of the Major Planning Options Law as specified in the new basic PFM law should bring more predictability to the budget process. The adoption of program budgeting should help prioritize government spending. The approval of the new procurement law, effective January 2023, consolidates all previous legislation aiming to increase transparency and simplify the procurement process. They launched the National Single Window of ASYCUDA World with support from UNCTAD. This will not only improve revenue collection, but it will also create an improved economic environment for more foreign investment. COVID-19-spending for 2021–22 will be published as soon as the reports are approved by Parliament.

B. Reforms for a Diversified and Resilient Economy

Several structural barriers need to be lifted to facilitate the expansion of the private sector and generate inclusive and resilient growth.

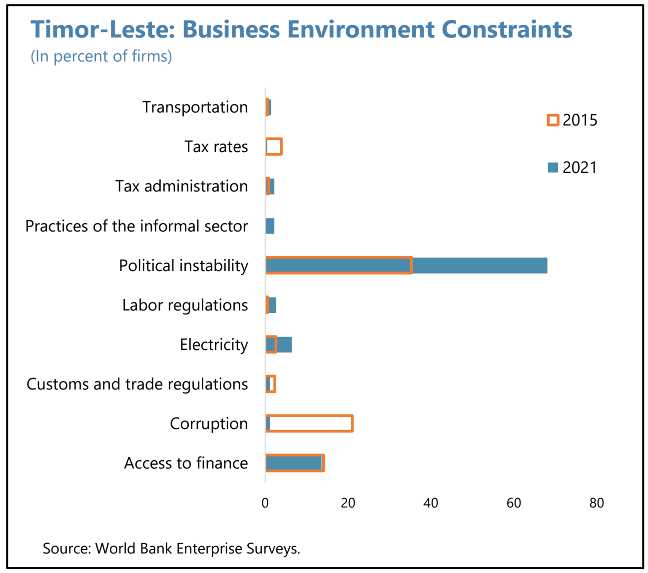
23. The agricultural sector employs 60 percent of the labor force, while productivity is very low (Figure 5) and is highly vulnerable to climate change. Food has a weight of 54 percent in the consumer price index and accounts for one third of merchandise imports. Only 25 percent of the population is considered food secure with 36 percent of the population suffering from chronic food insecurity (IPC Report). Upgrading basic rural infrastructure including the construction of roads that connect villages, promoting the formation of farmer groups, and easing market and financial access will help incentivize private sector investment, raise the sector's productivity, and mitigate food security vulnerabilities.

Timor-Leste: Food Insecurity

Level 4	176000 (15 percent) People at Severe Level
Level 3	254000 (21 percent) People at Moderate Level
Level 2	461000 (39 percent) People at Mild Level
Level 1	301000 (25 percent) People at Minimum Level

Source: Integrated Food Security Phase Classification.

24. Improving the business environment and strengthening governance is essential to foster private investment. Firm-level data from the World Bank's Enterprise Survey suggest that political instability, access to finance (¶25), and electricity services are the top business environment



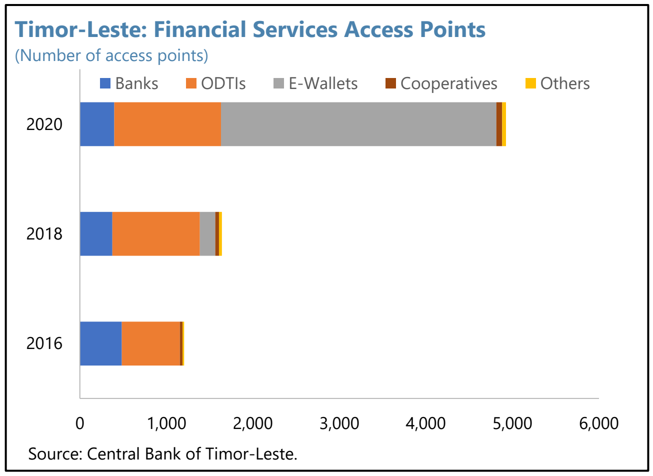
constraints. Although there were some improvements in the governance weaknesses discussed in the 2021 Article IV consultation, including procurement (¶22) and land registration (¶35), progress in other areas such as licensing requirements, property rights, contract enforcement, insolvency frameworks, and well-trained lawyers and judges is lacking. There is scope for improving the AML/CFT framework by bringing laws in line with FATF standards and strengthening the Financial Intelligence Unit's operational arrangements with technical support from the Fund. Lack of progress on AML/CFT effectiveness could have a negative impact on correspondent banking relationships. The recently adopted anti-corruption law makes it difficult to enhance transparency and to encourage accountability as it fosters secrecy of asset declarations of public officials, and even punishes staff of the competent authority that intentionally or negligently disclose information contained in the asset declarations. The Anti-Corruption Commission should seek to improve transparency and accountability while implementing the new law with technical support from the Fund.

25. Broadening access to formal credit will support private sector development. The private sector credit-to-GDP ratio remains significantly lower compared to peer countries with bank loan-to-deposit ratios of close to 20 percent by end-2021 (Figure 5). Banks remain reluctant to lend to businesses because property cannot be used as collateral with land registry still underdeveloped, most businesses do not have financial statements, and the ability to enforce contracts in the courts is very limited. To address these issues, a credit guarantee scheme for micro, small and medium-sized enterprises (MSMEs) was launched in 2019–20 where the government shares 70 percent of the credit risk. Banks have been reluctant to participate in the scheme because of regulatory uncertainty on the distribution of credit risk. In November 2021, the central bank introduced a requirement for all banks to gradually increase their share of loans to MSMEs or their loan-to-deposit ratio (LDR) to a minimum of 35 percent by December 2023.[8] However, unless the abovementioned structural impediments are addressed, this measure is unlikely to prove successful. The authorities should continue to work with the World Bank to strengthen land registry, contract enforcement issues, and financial reporting by businesses to facilitate financial development.

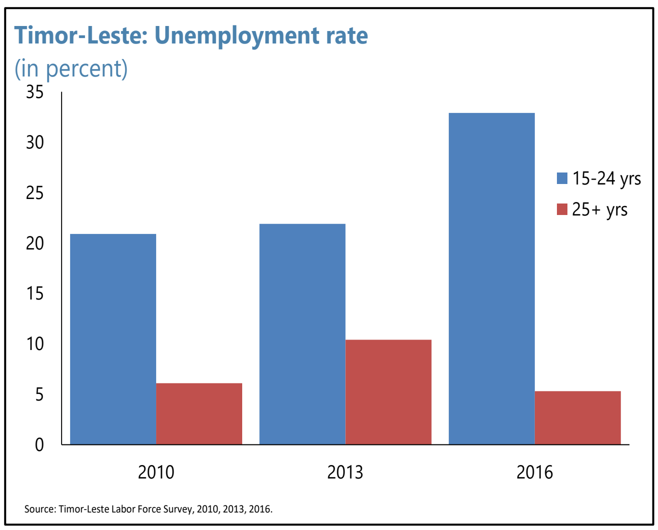
26. Digitalization of the payments system is helping expand financial inclusion and could be further harnessed to facilitate lending. The authorization of two e-wallet services in 2018–19 have helped expand access to financial services and contributed to a substantial improvement in

[8] If the banks are unable to fulfill this requirement, the gap between the required and the actual LDR is then deposited as reserves at the central bank at zero percent renumeration.

financial inclusion—the share of population excluded from financial services has decreased from close to 40 percent in 2018 to 16 percent in 2020, with 13 percent now using electronic payment services. Going forward, digitalization could further help generate alternative information to assess borrowers' creditworthiness and help expand credit to those with no collateral or limited credit history.



27. However, this has increased the urgency of strengthening the financial sector regulatory and supervisory framework and expanding digital financial literacy. Implementing regulations related to cybersecurity and consumer and data protection are crucial to expand the safe use of financial services, which continues to remain low, and reduce the risk of excessive lending. Expanding access to digital infrastructure such as fast speed internet is also needed. Moreover, prudential standards and risk assessment methodologies are still basic. The central bank recently issued instructions on the adoption of IFRS 9 and Basel III regulations, including credit risk classification, management, and regulatory provisions, and this work should continue with support from the IMF.



28. Addressing Timor's high youth unemployment will be key to unlock the demographic dividend. With almost 1 out of 3 Timorese aged 15-24 out of a job, the youth bear a disproportionate share of the unemployment burden. Around 30,000 young Timorese join the workforce every year, but there were only 53,000 formal jobs in 2018, with only a fraction of that number being added as new jobs each year.[9] Moreover, employers have found youth job seekers to be lacking in soft skills such as communication.[10] Thus, available jobs tend to be largely informal with unstable earnings and low productivity. The expansion of the private sector, including in agriculture, will be key to create the missing employment opportunities for the young. Moreover, building on the successful programs that train youth workers to go work abroad is the most promising policy to generate employment opportunities. Enhancing the quality and increasing private sector participation in the vocational training system will also help to lessen skill mismatches. Facilitating better matches

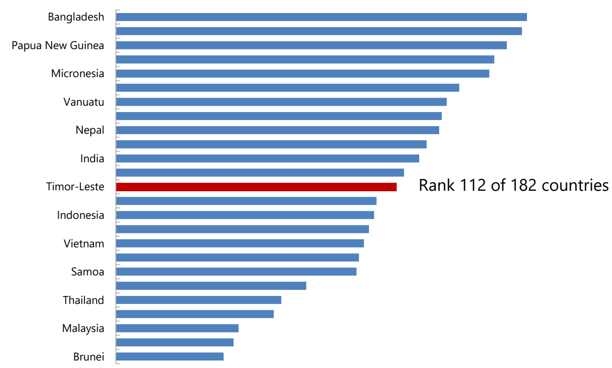
[9] See Inder, Qu, and Elizario (2021).

[10] See Labor Market Outlook Timor-Leste, Edition 8, November 2018.

between employers and qualified young workers through employment matching services could reduce potential inefficiencies in hiring, promote higher female labor force participation, and help close remaining gaps in the labor market (Figure 7).

29. Building resilience to natural disasters by investing in climate-resilient infrastructure is a key priority for sustainable growth. Floods are the most frequent natural disaster, but Timor-Leste is also vulnerable to landslides, tropical cyclones, droughts, earthquakes, and tsunamis. The damages to agriculture, infrastructure, and housing from the floods and landslides caused by Tropical Cyclone Seroja in April 2021 are estimated at 14.5 percent of non-oil GDP. Although adaptation priorities have been outlined in the National Adaptation Plan, including building climate-proof infrastructure, specific actions needed to achieve these have not yet been integrated into the budgetary planning, and coordination amongst various public stakeholders and human capacity constraints remain key challenges. Staff analysis illustrates that investing in climate adaptative infrastructure (such as climate-proof roads and bridges, coastal systems, water supply and sanitation) will significantly help mitigate the negative impact of natural disasters on growth and debt sustainability (Selected Issues Paper).[11] Given that the cost of building such infrastructure is substantially higher than standard infrastructure and the urgent need to reduce fiscal imbalances, the authorities should tap grant- financing sources based in partnership with other development partners to help improve resilience to natural disasters.

Timor-Leste:Ranking of ND-GAIN Index (2019)
(Lower rank indicates higher vulnerability to climate change)



Source: Notre Dame Global Adaptation Initiative (ND-GAIN Index).

30. The U.S. dollar as the legal tender improved macroeconomic stability for Timor-Leste. It allowed to eliminate the inefficiencies from the use of multiple currencies at the time of independence and has contributed to achieve price stability. While the introduction of a national currency at the current juncture is too premature, there are benefits in laying the groundwork towards a more independent monetary policy framework, including building capacity and expertise (Annex V). Putting the fiscal position on a stronger position would help for a smoother adoption of a national currency.

31. Further efforts are required to enhance statistical capacity including macroeconomic analysis skills. Staff considers that data provision to the IMF is broadly adequate for surveillance. Yet, efforts to strengthen statistics should continue. The main areas of concern include incomplete incorporation of the petroleum-related transactions in the compilation of balance of payments statistics following the new Maritime Boundary Treaty, inconsistencies between national accounts

[11] This assumes that building climate-resilient infrastructure is 30 percent more expensive and has a return 2.5 times larger compared to standard infrastructure.

and balance of payments on petroleum-related transactions, unreliability of trade statistics, weaknesses in compilation and dissemination of government financial statistics, and no public reporting of quarterly financial soundness indicators data. It is important to develop stronger analytical skills and coherent macroeconomic forecasting and reflect them into the policy making process. The IMF has already provided technical assistances and stands ready to continue support.

Authorities' Views

32. **The authorities agreed that structural reforms and fiscal consolidation are needed to strengthen the external sector position.** They considered that the agricultural sector is crucial to increase exports and reduce imports. They remarked that while designated as a key productive sector where efforts have been made to increase its productivity for more than a decade, progress has been very slow. Going forward, the authorities are planning on investing more into the sector to address the structural issues, including road connectivity, technology, and marketing of the products. The authorities see the promotion of national agricultural production through the food basket distribution program as an important tool to increase domestic output. In their view, a strong agricultural sector will be the key to improving food security and protecting the economy from future crises.

33. **They are making progress in the fight against corruption**. The involvement of the community is much stronger than in the past and many people send anonymous letters to the Anti-Corruption Commission motivated by the anti-corruption campaigns. Although the Anti-Corruption Commission has been growing, human and financial resource constraints continue to be a constraint for effective oversight and enforcement. The second cycle of the United Nations Convention Against Corruption (UNCAC) is almost complete as there is a draft document ready to be shared with the UN in coming weeks. The Anti-Corruption Commission is required by the penal procedure code to seek the approval of the Office of the Prosecutor General to start investigations. A higher number of prosecutors would help expedite the process. The Anti-Corruption Commission requested technical assistance from the Fund to support implementation of their new anti-corruption law.

34. **The central bank is focused on promoting digitization and improving access to finance**. They view the implementation of the interbank electronic system, P24, and the approval of the e-wallet operators as a game changer for financial inclusion and are pleased with the Digital Village Program that was launched in November 2020 to improve financial digital literacy. They acknowledged that the credit guarantee scheme has not been successful and consider the lack of awareness amongst borrowers as the underlying cause. In their view, banks should relax their requirements for lending and believe that the new minimum bank LDR requirement will help facilitate credit access. IFRS 9 adoption by banks is expected to be completed by end-2022 and plans to move from Basel I to Basel III are progressing. They confirmed that Timor-Leste did not face any correspondent banking relationship pressures.

35. **They shared staff's view on the importance of providing good quality jobs to the large and growing youth population**. The authorities have set up vocational training centers that have contributed greatly to improving young people's skills. Efforts for youth workers to acquire work

experience abroad has been scaled up and has become an important employment strategy and source of remittances. At the same time, the authorities noted that creating long-term jobs requires improving the quality of education and providing an enabling environment for entrepreneurship and the private sector to grow. The authorities expressed confidence that a new land registry reform, scheduled to come into effect next year, is expected to ease one of the main bottlenecks to access to finance for businesses.

36. The authorities stressed that more support from the international donor community for climate change adaptation is needed in the form of grants. Due to limited capacity, fulfilling the requirements to access such funds is a challenge. They welcomed staff's recommendation to build expertise and set-up a dedicated unit to tap external climate grant-based financing.

37. They concurred that official dollarization has contributed to macroeconomic stability for Timor-Leste. In their view the advantages for the dollarization are stabilizing inflation expectations, the absence of exchange rate risk, and potential benefits for importers in case of U.S. dollar appreciation. The authorities also view dollarization in Timor-Leste having promoted fiscal discipline, as there is no deficit financing from the central bank. On the other hand, they agreed that it would be beneficial to consider the option of de-dollarization. They noted the disadvantages of dollarization which include the lack of monetary policy, the loss of seigniorage, and the high lending rates despite using the U.S. dollar as the official currency.

STAFF APPRAISAL

38. Timor-Leste's strong progress with vaccination has allowed for the lifting of strict containment restrictions, and the economy is expected to continue its recovery. Non-oil real GDP is projected to grow at 3.3 percent in 2022, after an estimated growth of 1.5 percent in 2021, supported by public spending and rebounding private consumption.

39. Large downside risks remain. An important near-term downside risk is a re-intensification of a health crisis. Ongoing geopolitical tensions pose additional risks through more prolonged and/or heightened high oil and food prices. Domestic political instability could stall reforms, and natural disasters could further slow the recovery.

40. Fiscal consolidation and structural reforms are needed to secure fiscal sustainability, strengthen the external sector position, and support a smoother transition to a private sector-led economy. The external sector position in 2021 was substantially weaker than implied by fundamentals and desirable policy settings. Active oil fields are drying up, with oil revenues expected to cease in 2023. The 2022 budget envisages large fiscal imbalances in the medium term that would deplete the Petroleum Fund in the long term, leading to a fiscal cliff. Domestic revenue mobilization and government expenditure rationalization are needed in future budgets to underpin fiscal consolidation. Government spending should prioritize investment projects to enhance the productive capacity of the economy and programs to protect the poor.

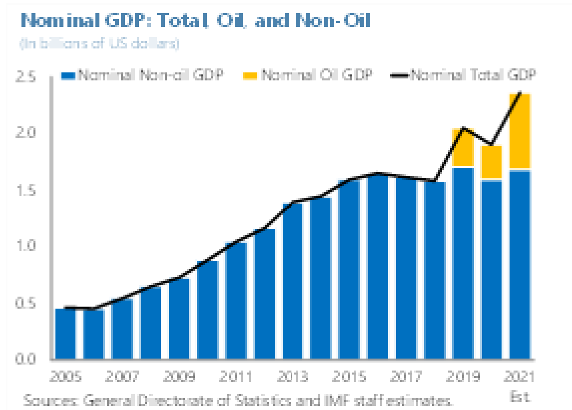
41. Addressing public financial management (PFM) weaknesses is essential for strengthening fiscal management and improving the quality of government spending. High priority areas of PFM reforms include budget credibility, public investment management, procurement performance and monitoring, and fragmentation caused by the proliferation of autonomous agencies. The authorities have adopted some PFM reforms and are committed to continuing their reform efforts with technical support from the Fund and other development partners. The introduction of a Fiscal Responsibility Law (FRL) can also help improve fiscal discipline by requiring the government to commit to a monitorable fiscal policy objective and to lay out a strategy to achieve that objective.

42. A significant number of structural barriers need to be lifted to facilitate diversification and generate inclusive and resilient growth. These include transforming the predominantly subsistence-oriented agricultural sector into a commercially viable sector, raising productivity, and enhancing food security. Improving the business environment and strengthening AML/CFT and anti-corruption effectiveness will foster private investment. So far, progress in private sector development and job creation has been tepid, as reforms have been slow and limited. Investing in climate-resilient infrastructure is key to building resilience to natural disasters, however, adaptation plans have not been integrated into the budgetary planning, and coordination amongst various public stakeholders and capacity constraints to access external grant-financing remain key challenges.

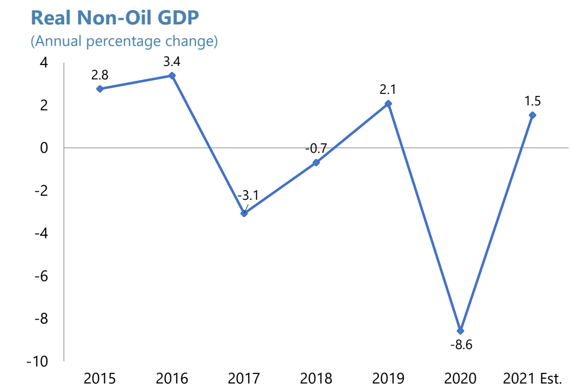
43. It is proposed that the next Article IV consultation with Timor-Leste takes place on the standard 12-month cycle.

Figure 1. Timor-Leste: Real Sector Developments

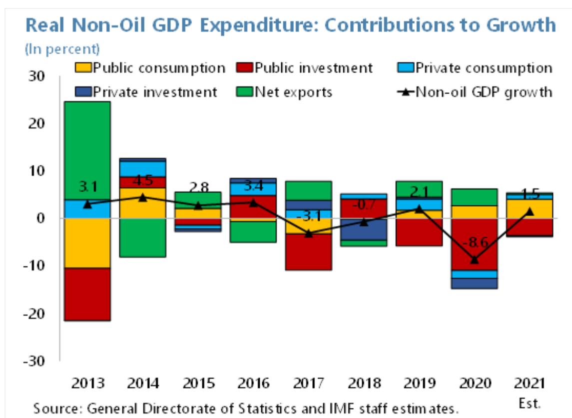
Oil production is part of GDP since September 2019, post the treaty on maritime boundaries with Australia.



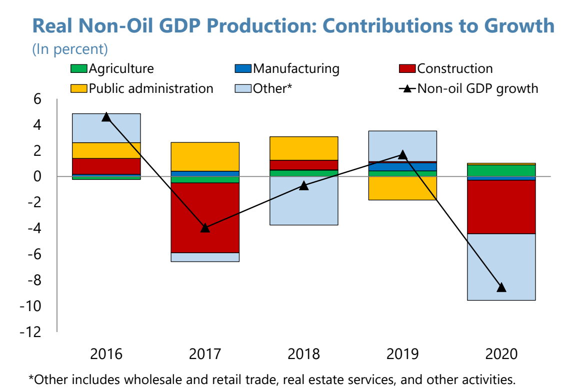
The economy is showing signs of moderate recovery from the dual COVID-19 and natural disaster shocks in 2021.



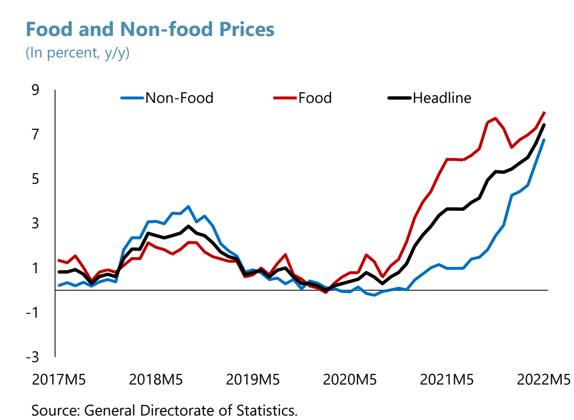
Non-oil GDP has been largely driven by government spending on the demand side…



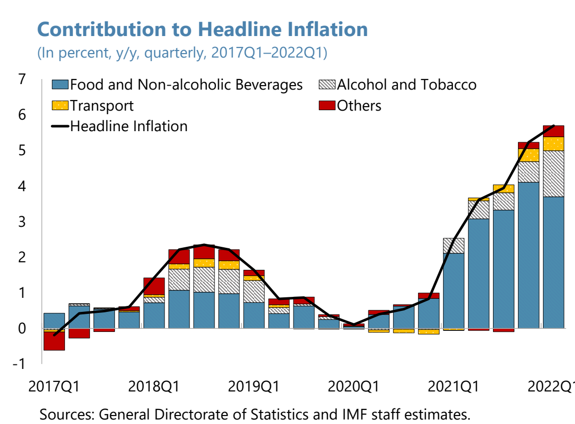
…and by construction and public administration on the supply side.



After remaining mute for several years, inflationary pressures have risen sharply in recent months…



…reflecting increases in both domestic and international food and oil prices.

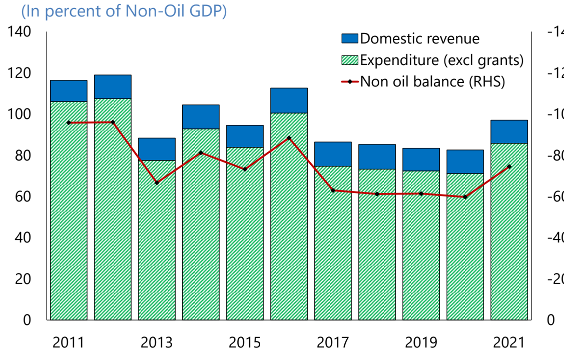


Sources: General Directorate of Statistics; and IMF staff estimates.

Figure 2. Timor-Leste: Fiscal Sector Developments

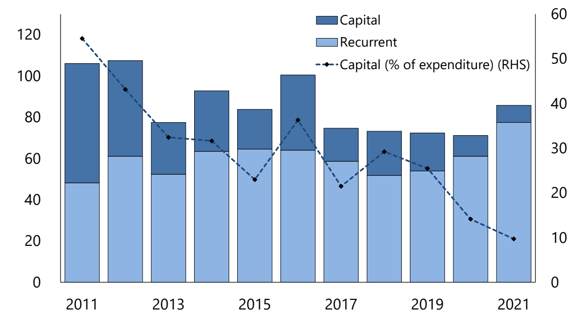
Non-oil domestic revenue has been financing a small fraction of government spending.

Non-Oil Balance
(In percent of Non-Oil GDP)



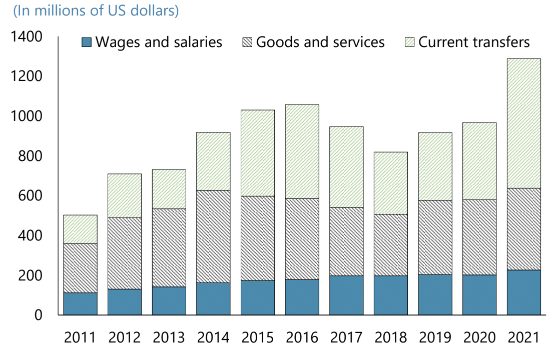
While the share of capital spending has continued to fall, partly driven by low budget execution…

Expenditure Shares
(In percent of Non-Oil GDP, excl. donor projects)



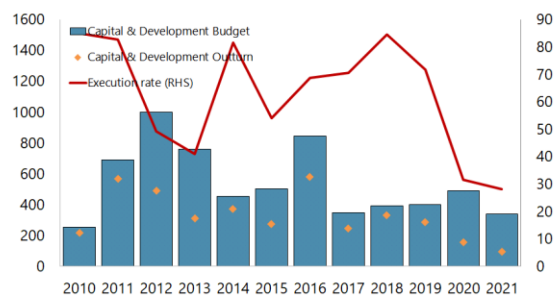
…recurrent spending has been increasing steadily since 2018 and jumped in 2021, driven by higher spending on transfers.

Recurrent Spending
(In millions of US dollars)



The execution rate for capital spending fell significantly in 2020-21 due to the pandemic and flood related disruptions.

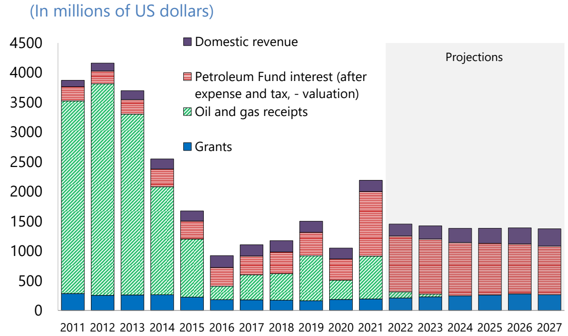
Capital and Development Expenditure: Budget and Execution Rate
(In millions of US dollars (LHS) and percent (RHS))



Sources: Ministry of Finance of Timor-Leste; IMF staff calculations and estimates.

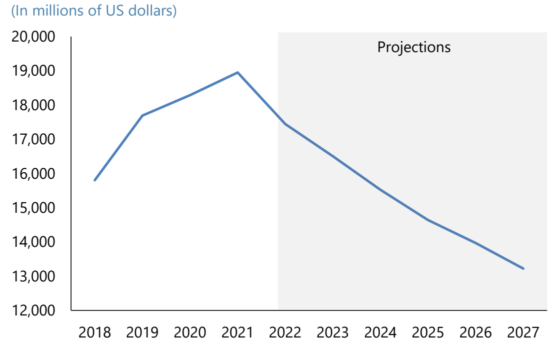
With oil and gas receipts depleting in 2023, there is an urgent need to increase domestic revenues…

Revenue Sources
(In millions of US dollars)



…and pursue expenditure rationalization and prioritization to reduce excess withdrawals and avoid depleting the PF.

Petroleum Fund Balance
(In millions of US dollars)



Sources: Ministry of Finance of Timor-Leste; IMF staff calculations and estimates.

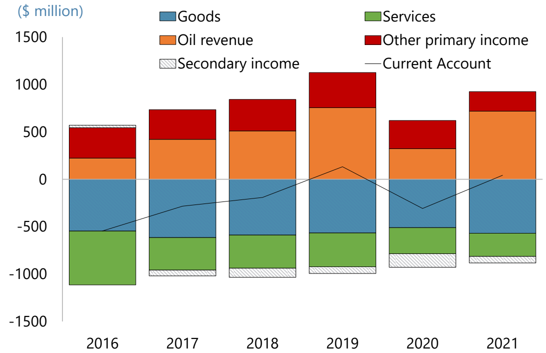
Sources: Ministry of Finance of Timor-Leste; and IMF staff estimates.
Notes: ESI= Estimated Sustainable Income; PF= Petroleum Fund.

Figure 3. Timor-Leste: External Sector Developments

The current account deficit narrowed in 2021 due to higher-than-anticipated oil revenues.

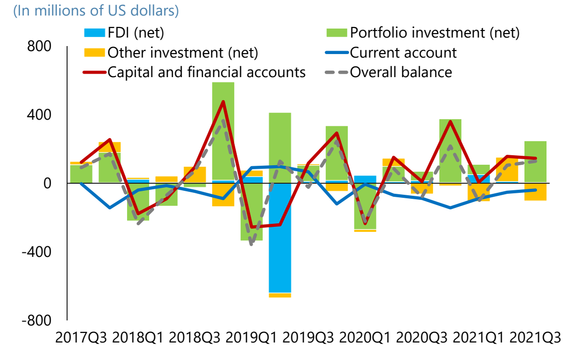
Current account deficits have largely been financed by withdrawals from the PF (portfolio investment).

Current Account Balance
($ million)



Sources: Central Bank of Timor-Leste and IMF staff estimates.

Financial Account Balance
(In millions of US dollars)

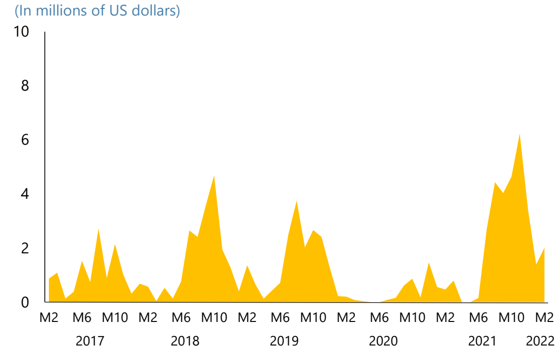


Non-oil exports rebounded in 2021 but remain volatile…

…reflecting fluctuations in coffee exports, the single-largest export item after oil/gas.

Goods Exports and Imports Growth
(In percent, y/y)

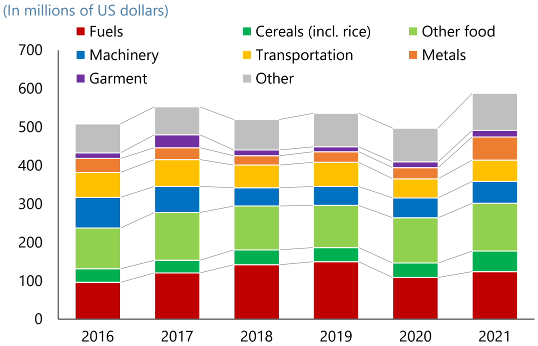
Coffee Exports Value
(In millions of US dollars)



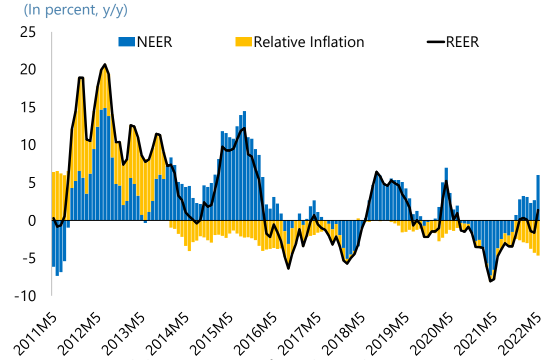
Fuel and food account for more than one-half of merchandise imports.

The REER had been appreciating since 2021H2 as the U.S. dollar strengthened vis-à-vis trading partners.

Goods Imports
(In millions of US dollars)



Real Effective Exchange Rate: Contribution to Change
(In percent, y/y)



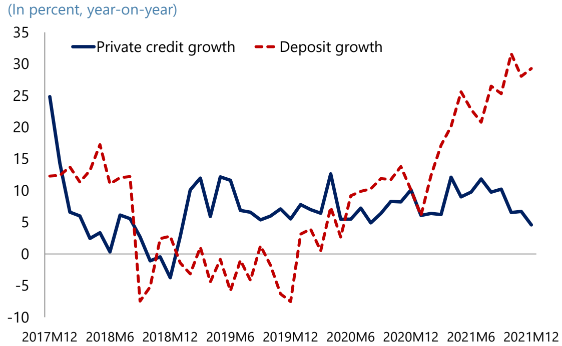
Source: IMF Statistics Department, Information Notice System (INS).

Sources: Central Bank of Timor-Leste; General Directorate of Statistics; and IMF staff estimates.

Figure 4. Timor-Leste: Monetary and Financial Sector Developments

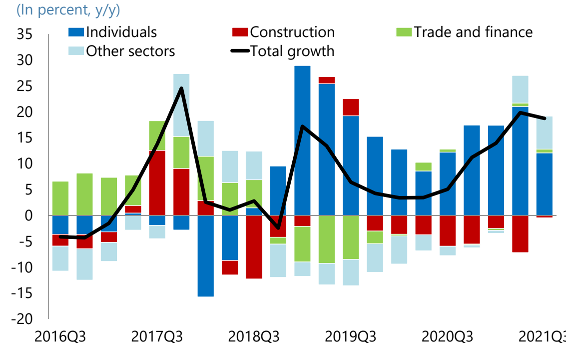
Both deposit and private sector credit growth remained strong…

Credit and Deposit Growth
(In percent, year-on-year)



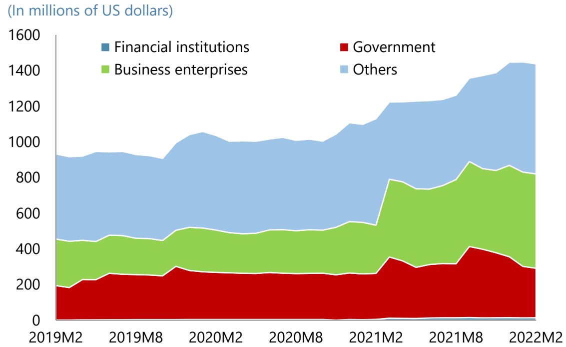
…with the latter mainly driven by lending to individuals in public administration jobs.

Loans to Private Sector: Contribution to Growth
(In percent, y/y)



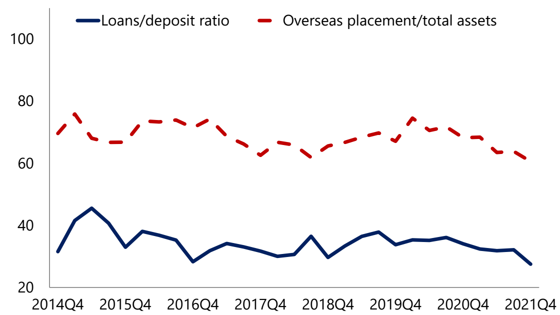
Precautionary savings by the private sector in response to the pandemic has led to an increase in deposits.

Deposits by Type of Depositors
(In millions of US dollars)



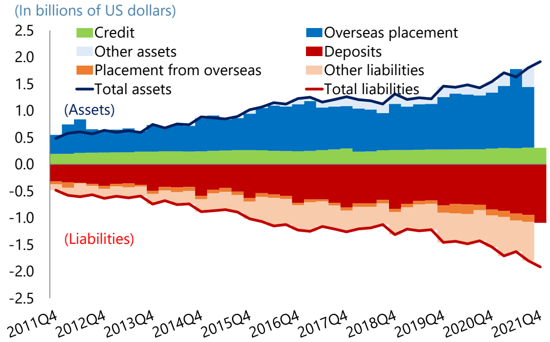
The banking sector is highly liquid with a large overseas placement of bank assets…

Liquidity Ratios
(In percent)



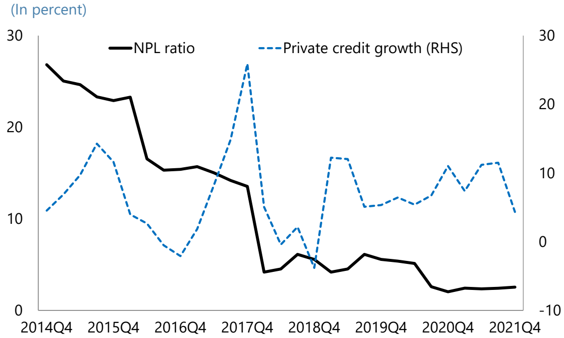
…where the latter constitutes a significant share of the assets of the banking sector.

Banking Sector Balance Sheet
(In billions of US dollars)



NPLs continue to remain low.

NPL Ratio and Private Sector Credit Growth
(In percent)

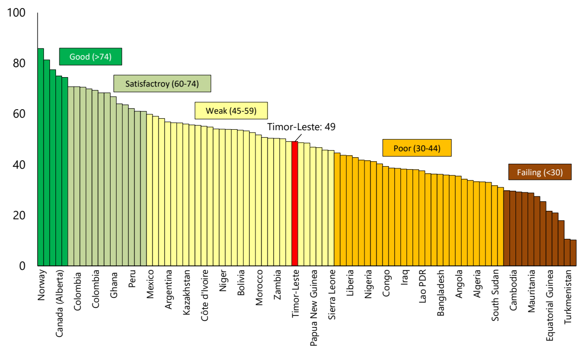


Sources: Central Bank of Timor-Leste; General Directorate of Statistics; and IMF staff estimates.

Figure 5. Timor-Leste: Business Environment and Governance

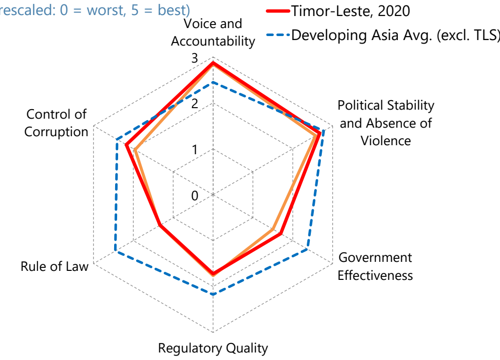
The governance of the Timor-Leste's Petroleum Fund is satisfactory by international standards, and…

Resource Governance Index
(Index ranges from 0-100, higher is better, 2017)



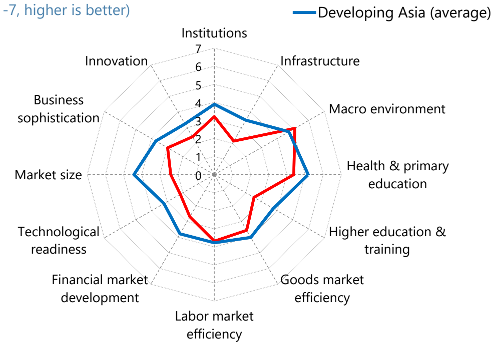
…the perceived governance of the public sector is improving but lagging somewhat behind peers, with some vital areas of weaknesses.

Governance Indicators
(Index rescaled: 0 = worst, 5 = best)



Education and infrastructure gaps undermine competitiveness.

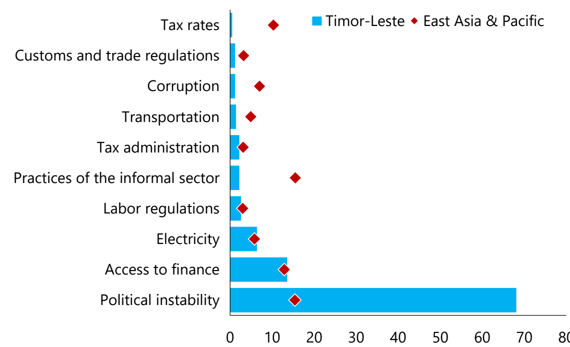
Global Competitiveness Index
(Score 1-7, higher is better)



Note: Timor-Leste for 2014-15 (data unavailable for 2017-18); Developing Asia for 2017-18.

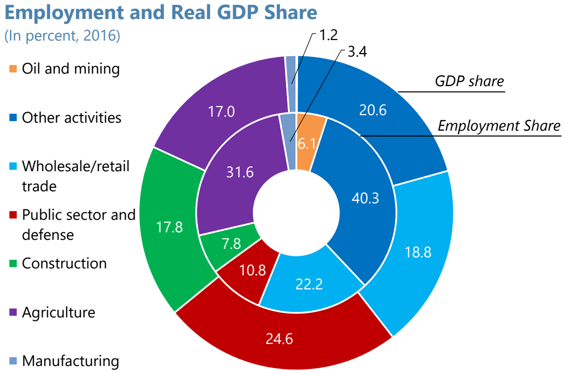
Political instability and limited financial access are among the major business constraints perceived by firms.

Top ten business environment constraints
(percent of firms choosing as their biggest obstacles, 2021)



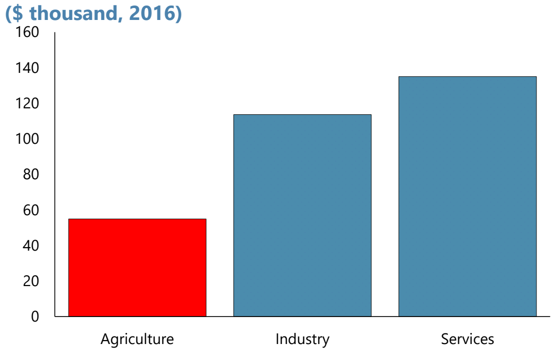
Despite a large share of the population employed in the agriculture and services sectors, their share in GDP remains small…

Employment and Real GDP Share
(In percent, 2016)



…driven by very low labor productivity.

Labor Productivity
($ thousand, 2016)

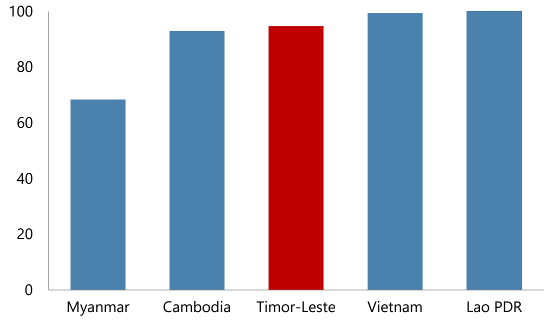


Sources: Labor Market Survey, 2016; Worldwide Governance Index, 2019; Natural Resource Governance Institute, Resource Governance Index 2017; the World Economic Forum Global Competitiveness Index 2014-2015 and 2017-18; World Bank Enterprise Survey, 2021; World Bank Development Indicators, latest available data. In line with the Use of Third-Party Indicators in Fund Reports, we present scores for several indicators in a cross-country context. Please note that the accuracy of perception-based indexes can be biased by experts' views rather than facts.

Figure 6. Timor-Leste: Challenges to Growth—Comparison with Regional Peers

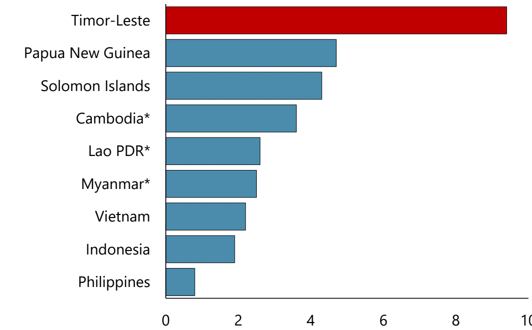
Access to electricity improved considerably and electricity tariffs are largely subsidized…

Access to Electricity
(In percent of population, 2019)



…but the losses due to electrical outages are high.

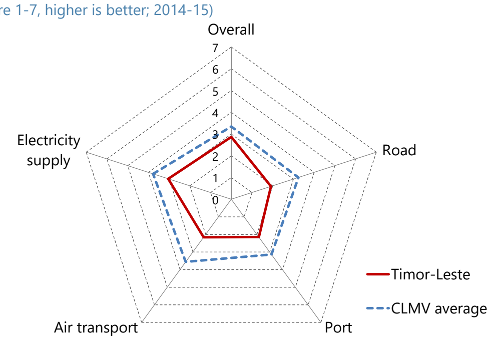
Value of Loss due to Electrical Outages
(In percent of sales of affected firms, 2015)



* 2016 data for Cambodia, Lao PDR, and Myanmar.

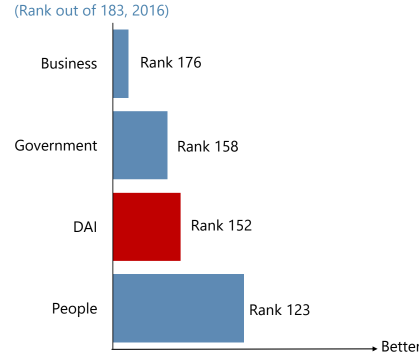
The perceived quality of infrastructure is lower than regional peers.

Quality of Infrastructure
(Score 1-7, higher is better; 2014-15)



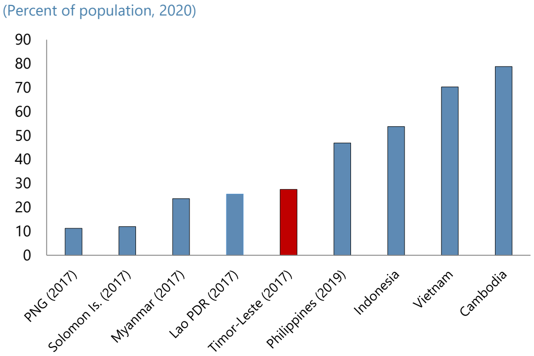
Mobile penetration is high but digital adoption in business is at a low level.

Digital Adoption Index
(Rank out of 183, 2016)



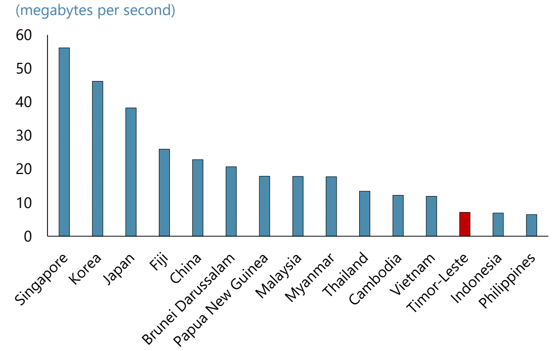
Access to the internet is low…

Individuals using the Internet
(Percent of population, 2020)



…and the service has poor quality.

Southeast Asia: Average Internet Speeds in 2020
(megabytes per second)

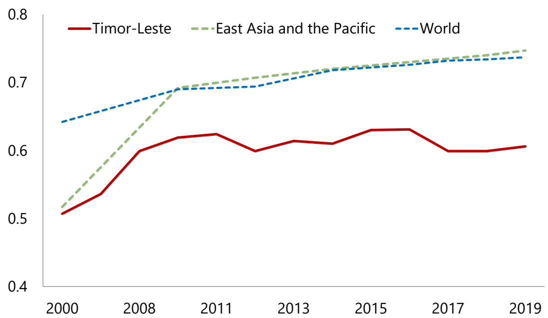


Sources: World Bank Development Indicators; World Economic Forum Global Competitiveness Index 2014-2015; ILO STAT latest data available; and IMF staff calculations. In line with the Use of Third-Party Indicators in Fund Reports, we present scores for several indicators in a cross-country context. Please note that the accuracy of perception-based indexes can be biased by experts' views rather than facts.
Note: CLMV denotes Cambodia, Lao PDR, Myanmar, and Vietnam.

Figure 7. Timor-Leste: Social Economic Development

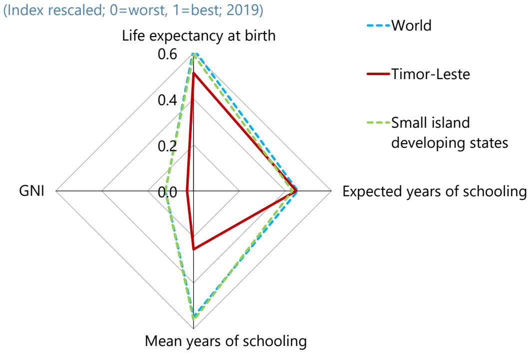
Timor-Leste's human development had improved steadily until mid-2010s but has been stagnating recently…

Human Development Index (HDI)
(Higher is better)



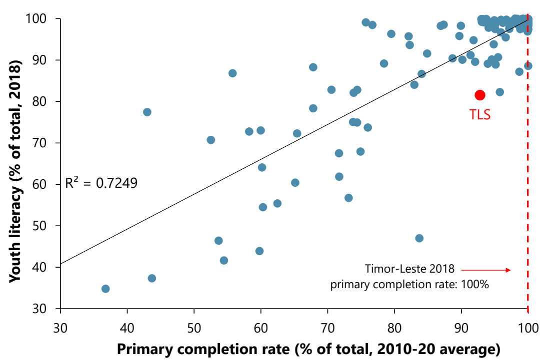
…reflecting lags among peers in average years of schooling.

HDI Components
(Index rescaled; 0=worst, 1=best; 2019)



Improved completion rates of basic education achieved in recent years will help to raise the literacy rate…

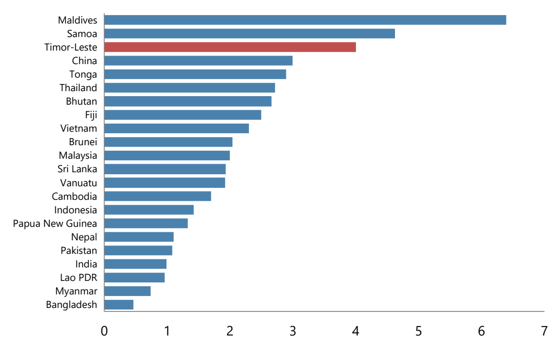
Human Capital: Youth Literacy



Source: World Bank, World Development Indicators.

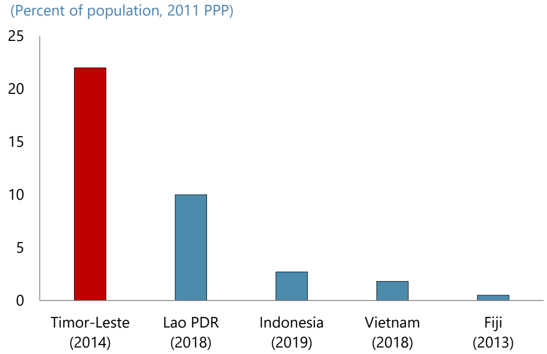
…and improving the quality and efficiency of public spending on health would help strengthen human capital.

Health Expenditure: Selected Developing Asian Economies
(In percent of GDP, 2019)



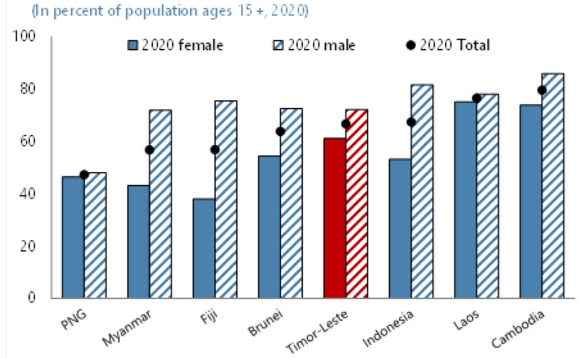
Poverty levels are among the highest in the region.

Poverty Headcount Ratio at $1.90 a Day
(Percent of population, 2011 PPP)



While labor force participation has increased over the years, there is significant scope for further improvements.

Labor Force Participation Rate
(In percent of population ages 15+, 2020)



Source: World Bank, World Development Indicators.

Sources: United Nations, Human Development Report, 2020, and World Bank, World Development Report, 2020.

Table 1. Timor-Leste: Selected Economic and Financial Indicators, 2018–23

Non-oil GDP at current prices (2020): US$1.595 billion
Population (2020): 1.318 million
Non-oil GDP per capita (2020): US$1,210
Quota: SDR 25.6 million

	2018	2019	2020	2021	2022	2023
				Est.	Proj.	Proj.
	(Annual percent change)					
Real sector						
Real Non-oil GDP	-0.7	2.1	-8.6	1.5	3.3	4.2
CPI (annual average)	2.3	0.9	0.5	3.8	7.0	4.0
CPI (end-period)	2.1	0.3	1.2	5.3	7.0	4.0
	(In percent of Non-oil GDP, unless otherwise indicated)					
Central government operations						
Revenue	57.6	51.6	57.0	54.1	51.9	46.9
Domestic revenue	12.0	11.0	11.4	9.6	9.6	9.6
Estimated Sustainable Income (ESI)	34.8	31.0	34.1	33.0	30.8	25.8
Grants	10.8	9.5	11.5	11.5	11.5	11.5
Expenditure	84.0	81.9	82.6	97.2	106.8	114.4
Recurrent	51.8	54.0	61.1	77.5	79.0	62.4
Net acquisition of nonfinancial assets	21.4	18.4	10.0	8.3	16.3	40.6
Donor project	10.8	9.5	11.5	11.5	11.5	11.5
Net lending/borrowing	-26.4	-30.3	-25.6	-43.2	-54.9	-67.6
	(Annual percent change, unless otherwise indicated)					
Money and credit						
Deposits	2.8	-7.5	10.1	29.3	10.5	9.9
Credit to the private sector	-3.8	5.5	10.1	4.6	8.9	5.8
Lending interest rate (percent, end of period)	14.5	16.3	11.3	11.3	11.3	11.3
	(In millions of U.S. dollars, unless otherwise indicated)					
Balance of payments						
Current account balance	-191	133	-308	43	-284	-821
(In percent of Non-oil GDP)	-12	8	-19	3	-15	-40
Trade of Goods	-589	-566	-510	-569	-647	-726
Exports of goods	25	26	17	32	35	39
Imports of goods	613	592	527	601	682	765
Trade of Services	-349	-357	-275	-244	-279	-316
Primary Income	843	1,126	620	925	718	305
of which: other primary income (oil/gas) 1/	510	756	324	720	634	46
Secondary Income	-96	-70	-143	-70	-77	-84
Overall balance	129	-18	0.2	278	62	153
Public foreign assets (end-period) 2/	16,477	18,348	18,946	19,884	18,442	17,654
(In months of imports)	187	212	270	275	218	181
Exchange rates						
NEER (2010=100, period average)	130.9	134.1	135.8	131.9	…	…
REER (2010=100, period average)	142.0	143.8	143.8	137.8	…	…
Memorandum items						
Nominal Non-oil GDP (in millions of U.S. dollars)	1,584	1,704	1,595	1,681	1,858	2,043
Nominal Non-oil GDP per capita (in U.S. dollars)	1,249	1,318	1,210	1,251	1,357	1,464
(Annual percent change)	-3.9	5.5	-8.2	3.4	8.5	7.9
Crude oil prices (U.S. dollars per barrel, WEO) 3/	68	61	41	69	106	95
Petroleum Fund balance (in millions of U.S. dollars) 4/	15,803	17,692	18,289	18,949	17,446	16,504
(In percent of Non-oil GDP)	998	1,038	1,146	1,127	939	808
Public debt (in millions of U.S. dollars)	145	193	218	237	274	321
(In percent of Non-oil GDP)	9.1	11.3	13.7	14.1	14.7	15.7
Population growth (annual percent change)	2.0	2.0	2.0	1.9	1.9	1.9

Sources: Timor-Leste authorities; and IMF staff estimates and projections.

1/ Oil sector activities are considered non-resident activities in balance of payments statistics.

2/ Includes Petroleum Fund balance and the central bank's official reserves.

3/ Simple average of UK Brent, Dubai, and WTI crude oil prices based on April 2022 WEO assumptions.

4/ Closing balance.

Table 2. Timor-Leste: Summary Operations of the Central Government, 2018–27 1/

	2018	2019	2020	2021 Est.	2022 Proj.	2023 Proj.	2024 Proj.	2025 Proj.	2026 Proj.	2027 Proj.
				(In millions of U.S. dollars)						
Revenue	**912**	**879**	**910**	**909**	**964**	**958**	**958**	**959**	**965**	**948**
Domestic revenue	191	188	182	161	178	197	211	225	241	258
Taxes	128	122	119	119	134	148	159	169	181	194
Non-tax revenue	63	65	63	43	44	49	52	56	60	64
Estimated Sustainable Income	550	529	544	555	573	527	495	466	439	419
Donor Projects	171	162	183	193	213	234	251	268	285	271
Expenditure	**1,331**	**1,396**	**1,318**	**1,635**	**1,984**	**2,338**	**2,320**	**2,200**	**1,979**	**2,025**
Expenditure excluding donor projects	1,160	1,234	1,135	1,442	1,771	2,103	2,068	1,933	1,694	1,754
Expense	992	1,081	1,158	1,495	1,682	1,509	1,577	1,640	1,713	1,753
Recurrent	821	920	975	1,302	1,469	1,274	1,325	1,373	1,428	1,482
Compensation of employees	197	203	202	226	245	255	265	275	286	296
Goods and services	309	374	378	411	463	411	427	441	459	475
Current transfers	312	339	387	651	756	603	627	649	675	701
Interest payment	2	3	2	4	5	6	6	8	8	9
Donor projects	171	162	183	193	213	234	251	268	285	271
Net acquisition of NFA	339	314	160	140	302	829	743	560	267	272
Gross operating balance	**-80**	**-203**	**-249**	**-586**	**-718**	**-551**	**-619**	**-682**	**-748**	**-805**
Net lending/borrowing	**-419**	**-517**	**-409**	**-726**	**-1,020**	**-1,380**	**-1,362**	**-1,242**	**-1,015**	**-1,077**
Statistical discrepancy	-6	-170	-76	-192	0	0	0	0	0	0
Net financial transactions	-412	-347	-333	-534	-1,020	-1,380	-1,362	-1,242	-1,015	-1,077
Net acquisition of FA	-373	-299	-308	-516	-983	-1,333	-1,310	-1,195	-966	-1,024
Foreign	0	0	0	0	0	0	0	0	0	0
Domestic (net)	-373	-299	-308	-516	-983	-1,333	-1,310	-1,195	-966	-1,024
Equity	-432	-440	-342	-594	-983	-1,333	-1,310	-1,195	-966	-1,024
of which, Excess withdrawal from PF	-432	-440	-342	-594	-983	-1,333	-1,310	-1,195	-966	-1,024
Change in cash/deposit	59	141	34	78	0	0	0	0	0	0
Net incurrence of liabilities	39	48	25	18	37	47	52	46	49	53
Foreign	39	52	29	26	51	64	69	65	68	72
Domestic	0	0	0	0	0	0	0	0	0	0
Amortization		3.3	3.9	7.9	13.4	16.2	17.3	18.5	18.7	18.9
				(in percent of nominal non-oil GDP)						
Revenue	**57.6**	**51.6**	**57.0**	**54.1**	**51.9**	**46.9**	**43.7**	**41.1**	**38.8**	**35.6**
Domestic revenue	12.0	11.0	11.4	9.6	9.6	9.6	9.6	9.7	9.7	9.7
Taxes	8.1	7.2	7.4	7.1	7.2	7.2	7.3	7.3	7.3	7.3
Non-tax revenue	4.0	3.8	4.0	2.5	2.4	2.4	2.4	2.4	2.4	2.4
Estimated Sustainable Income	34.8	31.0	34.1	33.0	30.8	25.8	22.6	20.0	17.7	15.7
Expenditure	**84.0**	**81.9**	**82.6**	**97.2**	**106.8**	**114.4**	**105.9**	**94.3**	**79.7**	**76.1**
Expenditure excluding donor projects	73.2	72.4	71.2	85.8	95.3	103.0	94.4	82.9	68.2	65.9
Expense	62.6	63.4	72.6	88.9	90.5	73.9	72.0	70.3	69.0	65.9
Recurrent	51.8	54.0	61.1	77.5	79.0	62.4	60.5	58.9	57.5	55.7
Compensation of employees	12.4	11.9	12.6	13.5	13.2	12.5	12.1	11.8	11.5	11.1
Goods and services	19.5	21.9	23.7	24.4	24.9	20.1	19.5	18.9	18.5	17.9
Current transfers	19.7	19.9	24.3	38.7	40.7	29.5	28.6	27.8	27.2	26.3
Donor projects	10.8	9.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	10.2
Net acquisition of NFA	21.4	18.4	10.0	8.3	16.3	40.6	33.9	24.0	10.7	10.2
Gross operating balance	**-5.0**	**-11.9**	**-15.6**	**-34.9**	**-38.6**	**-27.0**	**-28.3**	**-29.2**	**-30.1**	**-30.3**
Net lending/borrowing	**-26.4**	**-30.3**	**-25.6**	**-43.2**	**-54.9**	**-67.6**	**-62.2**	**-53.2**	**-40.9**	**-40.5**
Statistical discrepancy	-0.4	-10.0	-4.7	-11.4	0.0	0.0	0.0	0.0	0.0	0.0
Net financial transactions	-26.0	-20.4	-20.9	-31.8	-54.9	-67.6	-62.2	-53.2	-40.9	-40.5
Net acquisition of FA	-23.6	-17.5	-19.3	-30.7	-52.9	-65.3	-59.8	-51.3	-38.9	-38.5
Domestic (net)	-23.6	-17.5	-19.3	-30.7	-52.9	-65.3	-59.8	-51.3	-38.9	-38.5
Equity	-27.3	-25.8	-21.4	-35.3	-52.9	-65.3	-59.8	-51.3	-38.9	-38.5
of which, Excess withdrawal from PF	-27.3	-25.8	-21.4	-35.3	-52.9	-65.3	-59.8	-51.3	-38.9	-38.5
Change in cash/deposit	3.7	8.3	2.1	4.7	0.0	0.0	0.0	0.0	0.0	0.0
Net incurrence of liabilities	2.5	2.8	1.6	1.1	2.0	2.3	2.4	2.0	2.0	2.0
Memorandum item										
Nominal Non-oil GDP	1,584	1,704	1,595	1,681	1,858	2,043	2,190	2,332	2,484	2,661
Petroleum Fund										
Opening balance	16,799	15,803	17,692	18,289	18,949	17,446	16,505	15,525	14,640	13,967
Comprehensive investment income	-13	2,858	2,185	1,808	1,051	918	825	776	732	698
Oil and gas receipts	447	756	326	720	635	46	0	0	0	0
Investment returns incl. valuation gain/ loss	-435	2,102	1,859	1,089	417	872	825	776	732	698
(*Minus*) Expenses and withholding tax	25	0	0	0	0	0	0	0	0	0
Withdrawal	983	969	886	1,149	1,555	1,859	1,805	1,661	1,405	1,443
ESI	550	529	544	555	573	527	495	466	439	419
Excess withdrawal	432	440	342	594	983	1,333	1,310	1,195	966	1,024
Closing balance	15,803	17,692	18,289	18,949	17,446	16,505	15,525	14,640	13,967	13,222
(In percent of non-oil GDP)	998	1,038	1,146	1,127	939	808	709	628	562	497

Sources: Timor-Leste authorities; IMF staff calculations.

1/This table is in accordance with the GFS format, with some modifications, to facilitate policy discussion and analysis.

Table 3. Timor-Leste: Monetary Developments, 2017–23

	2017	2018	2019	2020	2021	2022	2023
						Proj.	Proj.
			(In millions of U.S. dollars)				
Banking system 1/							
Net foreign assets 2/	**1,251**	**1,412**	**1,542**	**1,574**	**1,928**	**1,920**	**2,227**
Gross reserves	544	674	656	657	935	996	1,150
Other foreign assets	783	823	980	1,045	1,185	1,115	1,268
Foreign liabilities	76	84	94	127	191	191	191
Net domestic assets	**-428**	**-563**	**-754**	**-705**	**-810**	**-656**	**-799**
Net credit to central government	-472	-531	-672	-707	-785	-785	-785
Net credit to state and local government	-12	-11	-1	-1	-9	0	0
Net credit to public nonfinancial corporations	-1	-50	-51	-51	-52	0	0
Credit to private sector	260	250	264	290	304	331	358
Other items (net)	-202	-221	-293	-236	-268	-202	-372
Broad money	**823**	**849**	**788**	**869**	**1,119**	**1,264**	**1,428**
Narrow money	465	525	432	496	619	699	790
Currency in circulation 3/	15	18	20	23	26	29	33
Transferable deposits	450	507	411	473	593	671	758
Other deposits	358	323	357	373	500	565	638
Central Bank							
Net foreign assets 2/	**533**	**663**	**646**	**645**	**890**	**951**	**1,105**
Gross reserves	544	674	656	657	935	996	1,150
Foreign liabilities	11	11	11	11	45	45	45
Net domestic assets	**-359**	**-486**	**-516**	**-494**	**-572**	**-478**	**-478**
Net credit to central government	-279	-342	-397	-446	-443	-443	-443
Net credit to other depository corporations	12	17	15	86	21	53	53
Other items (net)	-92	-161	-134	-135	-150	-87	-87
Monetary Base	**174**	**177**	**130**	**151**	**318**	**474**	**627**
Currency in circulation	15	18	20	23	26	29	33
Other liabilities to depositary corporations	159	159	109	128	292	445	595
Others 3/	0	0	0	0	0	0	0
Commercial banks 4/							
Net foreign assets	**717**	**749**	**897**	**928**	**1,039**	**969**	**1,122**
Foreign assets	783	823	980	1,045	1,185	1,115	1,268
Foreign liabilities	65	74	84	116	146	146	146
Net domestic assets	**91**	**82**	**-130**	**-83**	**54**	**-179**	**-321**
Net credit to central government	-193	-190	-275	-261	-342	-342	-342
Net credit to public nonfinancial corporations	0	0	0	0	0	0	0
Credit to private sector	256	246	259	288	300	331	358
Capital accounts	93	102	129	144	155	155	155
Other items (net)	121	127	14	34	251	251	251
Deposits	**808**	**830**	**768**	**845**	**1,093**	**1,208**	**1,328**
Transferable deposits	450	507	411	473	593	656	721
Other deposits	358	323	357	373	500	552	607
			(12-month percentage change)				
Broad money growth	12.1	3.1	-7.1	10.2	28.7	13.0	13.0
Reserve money growth	90.7	1.9	-26.9	16.6	110.3	49.1	32.4
Credit to the private sector growth	24.8	-3.8	5.5	10.1	4.6	8.9	8.4
Memorandum items			(In percent, unless otherwise indicated)				
Credit/GDP	16.1	15.8	15.5	18.2	18.1	17.8	17.5
Broad money/GDP	50.9	53.6	46.3	54.5	66.5	68.0	69.9
Credit/deposits 4/	32.1	30.1	34.3	34.3	27.8	27.4	27.0
Amounts of non-perfoming loans (in millions of U.S. dollars)	31.0	12.3	...	...	...	...	...
Non-performing loans/total loans	13.5	5.6	...	...	...	...	...
Loan rate 5/	12.5	14.5	16.3	11.3	11.3	11.3	11.3
Deposit rate 6/	0.6	0.6	0.7	0.6	0.6	0.6	0.6

Sources: Central Bank of Timor-Leste; and IMF staff estimates.

1/ Includes the Central Bank, four commercial banks (including three branches of foreign banks).

2/ An oil fund was created in September 2005 and the deposits were moved off-shore and onto the Government balance sheet.

3/ Includes only coinage issued by the Central Bank. No data is available for notes due to dollarization of the financial system.

4/ Excludes government deposits.

5/ Rate charged by other depository corporations on loans in U.S. dollars. The rate is weighted by loan amounts.

6/ Rate offered by other depository corporations on three-month time deposits in U.S. dollars. The rate is weighted by deposit amounts.

Table 4. Timor-Leste: Balance of Payments, 2018–27

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
				Est.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.
(In millions of U.S. dollars)										
Current account balance	-191	133	-308	43	-284	-821	-942	-984	-996	-1,103
Trade of Goods	-589	-566	-510	-569	-647	-726	-758	-777	-789	-835
Exports of goods	25	26	17	32	35	39	44	50	57	65
of which: Coffee	23	25	17	25	28	31	35	40	45	52
Imports of goods	-613	-592	-527	-601	-682	-765	-802	-827	-846	-900
Trade of Services	-349	-357	-275	-244	-279	-316	-327	-321	-294	-319
Receipts	97	91	40	24	55	91	100	110	120	133
of which: Travel	78	70	26	15	42	70	78	85	93	103
Payments	-447	-448	-315	-268	-334	-407	-428	-431	-415	-451
Primary Income	843	1,126	620	925	718	305	234	211	190	173
of which: Investment income	330	372	292	202	87	263	238	215	194	179
of which: Other primary income (oil/gas) 1/	510	756	324	720	634	46	0	0	0	0
Secondary Income	-96	-70	-143	-70	-77	-84	-91	-96	-103	-122
Capital and financial accounts	301	-90	284	236	346	975	998	1,013	998	1,192
Official capital transfers	52	26	12	10	27	25	20	19	20	22
Financial account	249	-116	272	226	319	949	978	994	978	1,170
Direct investment	48	-575	72	67	69	71	74	76	78	80
Portfolio investment	196	490	244	190	262	881	903	922	900	1,085
Other investment	6	-30	-45	-32	-13	-3	2	-4	0	5
Assets	-32	-150	-46	-50	-50	-50	-50	-50	-49	-48
Liabilities	38	120	1	18	37	47	52	46	49	53
Government Debt	37	116	-3	18	37	47	52	46	49	53
Errors and omissions (net)	20	-61	24	0	0	0	0	0	0	0
Overall balance	129	-18	0.2	278	62	153	57	28	2	89
Financing										
Change in net foreign assets	-129	18	-0.2	-278	-62	-153	-57	-28	-2	-89
(In percent of Non-oil GDP)										
Current account balance	-12.1	7.8	-19.3	2.5	-15.3	-40.2	-43.0	-42.2	-40.1	-41.5
Trade of Goods	-37.2	-33.2	-32.0	-33.9	-34.8	-35.6	-34.6	-33.3	-31.8	-31.4
Exports of goods	1.6	1.5	1.1	1.9	1.9	1.9	2.0	2.1	2.3	2.4
Imports of goods	-38.7	-34.8	-33.1	-35.8	-36.7	-37.4	-36.6	-35.5	-34.0	-33.8
Trade of Services	-22.1	-20.9	-17.3	-14.5	-15.0	-15.5	-14.9	-13.8	-11.9	-12.0
Primary Income	53.2	66.1	38.9	55.0	38.7	15.0	10.7	9.0	7.6	6.5
Secondary Income	-6.1	-4.1	-9.0	-4.1	-4.1	-4.1	-4.1	-4.1	-4.1	-4.6
Capital and financial accounts	19.0	-5.3	17.8	14.0	18.6	47.7	45.6	43.4	40.2	44.8
Overall balance	8.2	-1.0	0.02	16.5	3.3	7.5	2.6	1.2	0.1	3.3
(In millions of U.S. dollars, unless otherwise indicated)										
Memorandum items:										
Public foreign assets (end-period)	16,477	18,348	18,946	19,884	18,442	17,654	16,731	15,875	15,204	14,548
(In months of imports of G&S)	187	212	270	275	218	181	163	151	145	129
(In percent of Non-oil GDP)	1,040	1,077	1,188	1,183	993	864	764	681	612	547
of which: Central bank reserves	674	656	657	935	996	1,150	1,206	1,235	1,237	1,326
Petroleum Fund balance 2/	15,803	17,692	18,289	18,949	17,446	16,504	15,525	14,640	13,967	13,222
(In percent of Non-oil GDP)	998	1,038	1,146	1,127	939	808	709	628	562	497
NIIP	16,879	17,536	18,834	19,816	18,442	17,654	16,731	15,875	15,204	14,548
(In percent of Non-oil GDP)	1,066	1,029	1,180	1,179	993	864	764	681	612	547
Nominal Non-oil GDP	1,584	1,704	1,595	1,681	1,858	2,043	2,190	2,332	2,484	2,661
Nominal Total GDP	1,584	2,048	1,902	2,358	2,455	2,085	2,190	2,332	2,484	2,661

Sources: Data provided by the Timor-Leste authorities; and IMF staff estimates.

1/ Oil sector activities are considered non-resident activities in balance of payments statistics.

2/ Closing balance.

Table 5. Timor-Leste: Medium-Term Scenario, 2018–27

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Non-oil GDP per capita (2020): US$1,210				Est.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.
Real sector										
Nominal Non-oil GDP (in millions of U.S. dollars)	1,584	1,704	1,595	1,681	1,858	2,043	2,190	2,332	2,484	2,661
Nominal Oil GDP (in millions of U.S. dollars)	0	344	307	677	597	43	0	0	0	0
Nominal Total GDP (in millions of U.S. dollars)	1,584	2,048	1,902	2,358	2,455	2,085	2,190	2,332	2,484	2,661
Real Non-oil GDP growth (percent change)	-0.7	2.1	-8.6	1.5	3.3	4.2	2.6	2.4	2.4	3.0
CPI (percent change, period average)	2.3	0.9	0.5	3.8	7.0	4.0	2.5	2.0	2.0	2.0
CPI (percent change, end-period)	2.1	0.3	1.2	5.3	7.0	4.0	2.5	2.0	2.0	2.0
Money and credit										
Private sector credit (annual percent change)	-3.8	5.5	10.1	4.6	8.9	5.8	…	…	…	…
(In percent of Non-oil GDP)										
Central government operations										
Revenue	57.6	51.6	57.0	54.1	51.9	46.9	43.7	41.1	38.8	35.6
Domestic revenue	12.0	11.0	11.4	9.6	9.6	9.6	9.6	9.7	9.7	9.7
Estimated Sustainable Income (ESI)	34.8	31.0	34.1	33.0	30.8	25.8	22.6	20.0	17.7	15.7
Grants	10.8	9.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	10.2
Expenditure	84.0	81.9	82.6	97.2	106.8	114.4	105.9	94.3	79.7	76.1
Recurrent expenditure	51.8	54.0	61.1	77.5	79.0	62.4	60.5	58.9	57.5	55.7
Capital expenditure	21.4	18.4	10.0	8.3	16.3	40.6	33.9	24.0	10.7	10.2
Donor project	10.8	9.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	10.2
Net lending/borrowing	-26.4	-30.3	-25.6	-43.2	-54.9	-67.6	-62.2	-53.2	-40.9	-40.5
(In millions of U.S. dollars, unless otherwise indicated)										
Balance of payments										
Current account balance	-191	133	-308	43	-284	-821	-942	-984	-996	-1,103
Trade of Goods	-589	-566	-510	-569	-647	-726	-758	-777	-789	-835
Exports of goods	25	26	17	32	35	39	44	50	57	65
Imports of goods	613	592	527	601	682	765	802	827	846	900
Trade of Services	-349	-357	-275	-244	-279	-316	-327	-321	-294	-319
Primary Income	843	1,126	620	925	718	305	234	211	190	173
of which: other primary income (oil/gas) 1/	510	756	324	720	634	46	0	0	0	0
Secondary Income	-96	-70	-143	-70	-77	-84	-91	-96	-103	-122
(In percent of Non-oil GDP, unless otherwise indicated)										
Memorandum items										
Current account balance	-12.1	7.8	-19.3	2.5	-15.3	-40.2	-43.0	-42.2	-40.1	-41.5
Trade of Goods	-37.2	-33.2	-32.0	-33.9	-34.8	-35.6	-34.6	-33.3	-31.8	-31.4
Exports of goods	1.6	1.5	1.1	1.9	1.9	1.9	2.0	2.1	2.3	2.4
Imports of goods	38.7	34.8	33.1	35.8	36.7	37.4	36.6	35.5	34.0	33.8
Trade of Services	-22.1	-20.9	-17.3	-14.5	-15.0	-15.5	-14.9	-13.8	-11.9	-12.0
Primary Income	53.2	66.1	38.9	55.0	38.7	15.0	10.7	9.0	7.6	6.5
Secondary Income	-6.1	-4.1	-9.0	-4.1	-4.1	-4.1	-4.1	-4.1	-4.1	-4.6
Public external debt										
(In millions of U.S. dollars)	145	193	218	237	274	321	373	419	469	521
(In percent of Non-oil GDP)	9.1	11.3	13.7	14.1	14.7	15.7	17.0	18.0	18.9	19.6
Petroleum Fund balance (in millions of U.S. dollars) 2/	15,803	17,692	18,289	18,949	17,446	16,504	15,525	14,640	13,967	13,222
(In months of imports)	179	204	261	262	206	169	152	140	133	117
(In percent of Non-oil GDP)	998	1038	1146	1127	939	808	709	628	562	497
Crude oil prices (U.S. dollars per barrel, WEO) 3/	68	61	41	69	106	95	84	77	72	72

Sources: Timor-Leste authorities; and IMF staff estimates and projections.

1/ Oil sector activities are considered non-resident activities in balance of payments statistics.

2/ Closing balance.

3/ Simple average of UK Brent, Dubai, and WTI crude oil prices; April 2022 WEO assumptions.

Table 6. Timor-Leste: Sustainable Development Goals Monitoring

Goals	2013	2014	2015	2016	2017	2018	2019	2020
Poverty								
Income share held by lowest 20%	-	9.4	-	-	-	-	-	-
Poverty gap at $1.90 a day (2011 PPP) (%)	-	4.4	-	-	-	-	-	-
Poverty headcount ratio at $1.90 a day (2011 PPP) (% of population)	-	22.0	-	-	-	-	-	-
Poverty headcount ratio at national poverty lines (% of population)	-	41.8	-	-	-	-	-	-
Hunger								
Prevalence of overweight, weight for height (% of children under 5)	1.6	-	-	-	-	-	-	-
Prevalence of stunting, height for age (% of children under 5)	51.7	-	-	-	-	-	-	-
Prevalence of undernourishment (% of population)	31.0	30.8	30.3	30.2	30.7	30.9	-	-
Prevalence of underweight, weight for age (% of children under 5)	37.5	-	-	-	-	-	-	-
Prevalence of wasting, weight for height (% of children under 5)	9.9	-	-	-	-	-	-	-
Good Health and Well-being								
Births attended by skilled health staff (% of total)	-	-	-	56.7	-	-	-	-
Mortality rate, under-5 (per 1,000 live births)	54.2	52.1	50.2	48.4	46.8	45.1	43.7	42.3
Mortality rate, neonatal (per 1,000 live births)	22.9	22.4	21.9	21.4	20.9	20.4	19.9	19.4
Demand for family planning satisfied by modern methods (% of married women with demand for family planning)	-	-	-	-	-	-	-	-
Adolescent fertility rate (births per 1,000 women ages 15-19)	37.8	36.8	35.8	34.8	33.8	32.4	30.9	29.5
Smoking prevalence, males (% of adults)	-	-	72.3	-	-	69.1	68.4	67.6
Source data assessment of statistical capacity (scale 0 - 100)	70.0	60.0	60.0	70.0	70.0	60.0	60.0	60.0
Gender Equity								
Proportion of women subjected to physical and/or sexual violence in the last 12 months (% of women age 15-49)	-	-	-	34.6	-	-	-	-
Women who were first married by age 15 (% of women ages 20-24)	-	-	-	2.6	-	-	-	-
Women who were first married by age 18 (% of women ages 20-24)	-	-	-	14.9	-	-	-	-
Clean Water and Sanitation								
People using at least basic drinking water services (% of population)	70.8	73.0	75.3	77.5	79.8	82.1	83.8	85.5
People using at least basic sanitation services (% of population)	49.2	50.2	51.3	52.4	53.5	54.6	55.7	56.8
Affortable and Clean Energy								
Access to electricity (% of population)	59.2	62.4	67.3	76.5	79.8	85.4	90.8	96.1
Access to clean fuels and technologies for cooking (% of population)	6.8	7.7	8.5	9.5	10.3	11.5	12.5	13.6
Decent Work and Economic Growth 1/								
Unemployment rate (% of total labor force)	4.0	4.2	4.5	4.7	4.6	4.5	4.4	5.1
Peace, Justice and Strong Institutions 1/								
Corruption Perception Index (worst 0-100 best)	30	28	28	35	38	35	38	40
Global Partnerships for the Sustainable Development								
Individuals using the Internet (% of population)	11.0	17.5	18.6	21.2	24.2	27.6	29.0	29.1

Source: World Bank's World Development Indicators
1/ Source: Sachs, J., Kroll, C., Lafortune, G., Fuller, G., Woelm, F. (2021). The Decade of Action for the Sustainable Development Goals: Sustainable Development Report 2021. Cambridge: Cambridge University Press.

Annex I. External Sector Assessment

Overall Assessment: *The external position of Timor-Leste in 2021 was substantially weaker than the level implied by fundamentals and desirable policies. This weak external sector position reflects large fiscal imbalances and the underdevelopment of the non-oil economy. The prospect of large and persistent current account deficits put external sustainability at risk.*

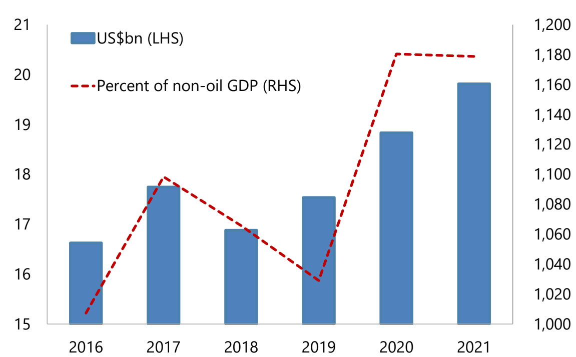
Potential Policy Responses: *Fiscal consolidation and structural reforms to promote private sector development and the diversification of the economy should help external rebalancing and reduce the current account gap.*

Foreign Assets and Liabilities: Position and Trajectory

Background. The net international investment position was $19.8 billion (1,179 percent of non-oil GDP) by end-2021, $1.0 billion higher than by end-2020.[1] External assets and liabilities were $21.1 billion (1,258 percent of non-oil GDP) and $1.3 billion (79 percent of non-oil GDP), respectively. External assets mainly consist of portfolio investment for $19.0 billion (1,131 percent of non-oil GDP) and direct investment for $0.06 billion (3 percent of non-oil GDP) held by the Petroleum Fund, but they also include currency and deposits for $1.1 billion (67 percent of non-oil GDP) and foreign reserves held by the central bank for $0.9 billion (56 percent of non-oil GDP). Foreign direct investment liabilities were $0.9 billion (55 percent of non-oil GDP), loans were $0.26 billion (15 percent of non-oil GDP), and other liabilities (9 percent of non-oil GDP). About 30 percent of the financial market investment of the Petroleum Fund assets are in stocks, 64 percent in bonds, and 6 percent in U.S. dollar cash. The net international investment position increased by $3.2 billion during 2016–21, explained by $1.1 billion flows from the financial account and $2.1 billion from valuation effects.

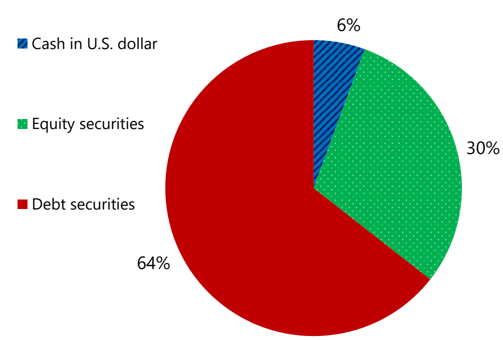
Assessment. The net international investment position is projected to decline in 2022 and in the medium term under current policies as large and persistent current account deficits will steadily erode the net international investment position.

Timor-Leste: Net International Investment Position



Source: Central Bank of Timor-Leste.

Timor-Leste: Petroleum Fund Asset Composition
End-2021; percent of total assets in financial market)

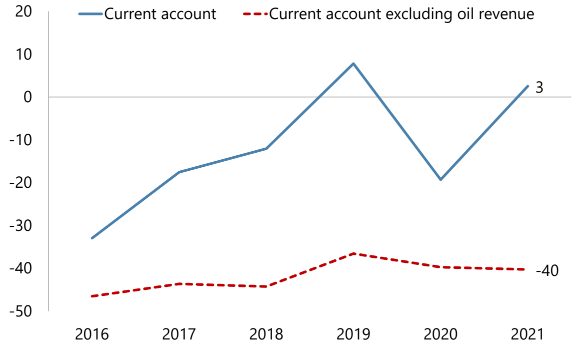


Source: Central Bank of Timor-Leste.

Current Account

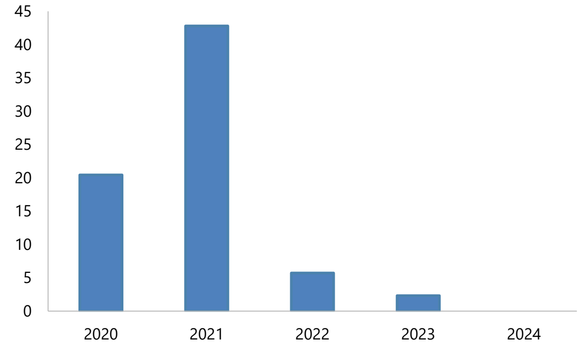
Background. The current account balance improved steadily from -33 percent of non-oil GDP in 2016 to 8 percent in 2019 driven by growing oil revenues but declined to -19 percent of non-oil GDP in 2020 amid significantly lower oil revenues. In contrast, the current account balance excluding oil revenues was more stable, averaging -42.1 percent of non-oil GDP during 2016–20. The current account balance recorded a surplus of 2.5 percent on non-oil GDP in 2021 driven by higher-than-expected oil revenues. The current account excluding oil revenues was -40.3 percent of non-oil GDP in 2021, around 1.8 percentage points higher than the 2016–20 average of -42.1 percent of non-oil GDP. Oil revenues from active fields are expected to decline fast in coming years before vanishing in 2023.

Timor-Leste: External Accounts
(Percent of non-oil GDP)



Source: Central Bank of Timor-Leste.

Timor-Leste: Oil Revenue
(Percent of non-oil GDP)



Sources: Central Bank of Timor-Leste; and IMF staff estimates.

Assessment. The current account gap in 2021 was estimated at -8.3 percent of non-oil GDP. This suggests that the external sector position was substantially weaker than fundamentals and desirable settings. The current account gap is the difference between the underlying current account and the current account norm. This weak external sector position reflects large fiscal imbalances and the limited development of the non-oil economy. Fiscal consolidation and structural reforms to promote private sector development and the diversification of the economy should help improve competitiveness and reduce the current account gap.

- Due to the very large sovereign wealth holdings that are not well captured by EBA-Lite's regression model, this (preferred) estimate of the current account norm was backed out from setting a norm for consumption as an annuity of total wealth. In turn, total wealth was equal to the sum of net foreign assets (above-ground wealth) and the present value of oil revenues (below-ground wealth).
- Net foreign assets by end-2020 were $18.8 billion, and the present value of oil revenues by end-2020 was $0.5 billion. Hence, total wealth was $19.3 billion. Assuming that the implicit real return on total wealth is 3 percent, then the current account deficit (excluding oil revenues) norm in 2021 was around $579 million (34.4 percent of non-oil GDP). The actual current account deficit excluding oil revenues in 2021 was 40.3 percent of non-oil GDP but this was lower than in more normal circumstances because of subdued economic activity due to the pandemic and floods. The underlying current account deficit excluding oil revenues in 2021 is estimated at about 42.7 percent of non-oil GDP and it is equal to the actual current account deficit excluding oil revenues (40.3 percent of non-oil GDP) plus the deviation from recent trends (-2.5 percent of non-oil GDP).
- The current account gap estimated using the EBA-Lite regression model also suggests that the external sector position was substantially weaker than fundamentals and desirable policy settings. The current account gap was estimated at -29.8 percent of non-oil GDP, the current account norm at 28.0 percent of non-oil GDP, and the policy gap at -12.0 percent of non-oil GDP. But the EBA-Lite regression does not provide a good fit of the current account in Timor-Leste as can be seen from the large unexplained residual equal to 17.8 percent of non-oil GDP. Given its residual mean squared error from the regression during 2008–21 of 195 percent, the 90-percent confidence band around EBA-Lite's current account norm of 28.0 percent of non-oil GDP encompasses the preferred estimate of a current account norm of 8.4 percent of non-oil GDP. Note that a current account norm of 8.4 percent of non-oil GDP is equal to the

current account deficit norm excluding oil revenues of 34.4 percent of non-oil GDP plus oil revenues of 42.8 percent of non-oil GDP.

Timor-Leste: EBA-lite Model Results, 2021

	CA model 1/	**REER model** 1/
	(In percent of GDP)	
CA-Actual	**2.5**	
Cyclical contributions (from model) (-)	0.6	
COVID-19 adjustor (-) 2/	1.0	
Natural disasters and conflicts (-)	2.8	
Adjusted CA	**-1.8**	
CA Norm (from model) 3/	**28.0**	
Adjusted CA Norm	**28.0**	
CA Gap	**-29.8**	**-4.0**
o/w Relative policy gap	-12.0	
Elasticity	-0.17	
REER Gap (in percent)	**171.8**	**23.2**

1/ Based on the EBA-lite 3.0 methodology

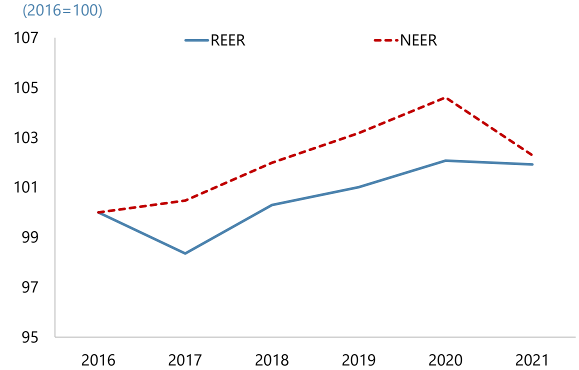
2/ Additional cyclical adjustment to account for the temporary impact of the pandemic on tourism (-0.4 percent of GDP) and remittances (-0.5 percent of GDP).

3/ Cyclically adjusted, including multilateral consistency adjustments.

Real Exchange Rate

Background. The real effective exchange rate (REER) appreciated by about 2 percent during 2016–20 amid an appreciation of about 5 percent in the nominal effective exchange rate. Consumer price index inflation in Timor-Leste was lower relative to its trading partners, compensating for appreciation pressures of the REER coming from a stronger U.S. dollar. Small movements in the REER since 2016 were in line with the relatively stable current account balance excluding oil revenues. The REER depreciated 0.1 percent year over year and the nominal effective exchange rate appreciated 2.2 percent year over year in 2021.

Timor-Leste: Effective Exchange Rates
(2016=100)



Sources: Central Bank of Timor-Leste; and IMF staff estimates.

Assessment. Using a standard trade elasticity of -0.17, a current account gap at -8 percent of GDP is equivalent to a REER gap of about 48 percent.

Capital and Financial Accounts: Flows and Policy Measures

Background. Portfolio inflows have been the main source of financing of current account deficits since 2016. They consist of withdrawals from the Petroleum Fund. FDI inflows since 2016 have been small (excluding 2019 when there was a one-off big outflow), averaging 2 percent of non-oil GDP.

Assessment. No major vulnerabilities exist related to capital flows in the short and medium term, given the large size of the Petroleum Fund. Nonetheless, the current account deficit projected under the baseline is unsustainable in the long term.

FX Intervention and Reserves Level

Background. Reserves were at $935 million at end-2021, amounting to about 12 months of imports of goods and services, 84 percent of broad money, 395 percent of external debt, and 56 percent of non-oil GDP.

Assessment. According to the template to Assess Reserve Adequacy in Credit-Constrained Economies, the optimal level of reserves for Timor-Leste is around 12 months of imports, much higher than the traditional metric of 3 months of imports. The benefits from holding reserves in the template are a function, among other variables, of the fiscal deficit, which for Timor-Leste is very large. However, the template neglects that Timor-Leste has a Petroleum Fund worth 240 months of imports.

[1] Non-oil GDP is estimated at about $1.7 billion in 2021.

Annex II. Risk Assessment Matrix[1]

Source of Risk	Likelihood	Impact Direction (Degree)	Main Impacts → Recommended Policy Actions (Short-term = ST, Medium-term = MT)
External Risks			
Outbreaks of lethal and highly contagious COVID-19 variants	Medium	↓ (Large)	ST/MT: Rapidly increasing hospitalizations and deaths force lockdowns and restrict mobility and economic activity, leading to lower growth. → Intensify public health measures and cushion the economic impact by providing relief to vulnerable households.
Rising and volatile food and energy prices	High	↓↑ (Moderate)	ST/MT: Rising commodity prices could reduce households' purchasing power and increase food insecurity, while rising oil prices could contribute to an increase in the government's oil revenues. Production from active oil fields is projected to dry up by 2023. The magnitude of potential oil revenues from untapped oil fields will depend on future oil prices. → Support vulnerable households with targeted transfers to offset rising consumer prices. To create fiscal space, contain government spending pressures, mobilize domestic revenue, and align spending with sustainable revenues.
Geopolitical tensions and deglobalization	High	↓ (Moderate)	ST/MT: Intensified geopolitical tensions could generate trade-related supply chains disruptions and commodity price shocks, giving rise to inflationary pressures and a weaker external sector position. → Promote private sector development and the diversification of the economy.
Persistent inflation in advanced economies and tighter financial conditions	Medium	↓ (Moderate)	ST/MT: Although the investment portfolio of the Petroleum Fund is well diversified, a decline in risk asset prices caused by a reassessment of market fundamentals (e.g., pandemic developments, war in Ukraine, and global financial tightening) could result in big losses. → Mobilize domestic revenue to reduce the reliance on the PF to finance government spending.
Domestic Risks			
Political fragmentation	High	↓ (Moderate)	ST/MT: Amid the near-term parliamentary elections, lack of political consensus could impede reforms warranted to strengthen medium-term growth prospects. → Prioritize fiscal consolidation and reforms to improve the business environment and help diversify the economy.
Development of Greater Sunrise or other oil fields	Low Medium	↓↑ (Large)	MT: Significant oil revenues could support higher social spending and inclusive growth. Large public investment could deplete the PF more quickly. → Carefully assess benefits, costs, and risks from various development options before making investment decisions.
Over investment in projects with low returns	Medium	↓ (Large)	ST/MT: Large capital-intensive projects could yield low economic and social benefits and have large opportunity costs. → Strengthen project appraisal by developing a standard methodology and verifying that it is consistently applied across line ministries.
Natural disasters related to climate change	Medium	↓ (Moderate)	MT: Floods have resulted in lower agricultural production, damage to roads, and displacement of communities. → Continue to invest in infrastructure helping to limit the adverse impact of floods, establish contingency plans and early warnings systems.

[1] The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of IMF staff). The relative likelihood of risks listed is the staff's subjective assessment of the risks surrounding the baseline ("Low" is meant to indicate a probability below 10 percent, "Medium" a probability between 10 and 30 percent, and "High" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly. The PF denotes the Petroleum Fund.

Annex III. Adopting a Fiscal Responsibility Law

The introduction of a Fiscal Responsibility Law (FRL) could provide a catalyst for much needed improvements in fiscal discipline and help the country to get back on a sustainable debt path. A principles-based approach—relying on numerical fiscal targets, accompanied by strong accountability requirements—would provide the authorities with the flexibility to respond to adverse macroeconomic developments while protecting the credibility of the fiscal framework. However, a host of other conditions are required for the FRL to succeed including broad support for fiscal prudence, stronger PFM systems, and effective enforcement mechanisms, among others.

1. **FRLs aim to improve fiscal discipline by requiring governments to declare and commit to a monitorable fiscal policy objective and strategy.** A frequent reason to establish FRLs is the desire to make fiscal policies more predictable and credible. FRLs often outline rules and procedures the government must follow in the design and implementation of fiscal policy and provide transparent mechanisms by which the government's compliance with established goals and priorities can be judged.[1]

2. **FRLs can be broadly classified into those that emphasize a principles-based—procedural and transparency—approach versus others that focus on numerical fiscal rules**. Procedural rules define the attributes and interaction of participants in the budget process. FRLs with procedural and transparency emphasis typically require the government to commit up-front to a monitorable fiscal policy strategy and to report fiscal outcomes and strategy changes on a routine basis. In contrast, numerical fiscal rules pose a permanent constraint on fiscal policy, generally defined in terms of an indicator of overall fiscal performance. Numerical fiscal rules often relate to public debt, the fiscal balance, and fiscal risks.

3. **There are both advantages and disadvantages to a principles-based approach and numerical fiscal rules in FRLs.** Principles-based rules can be instrumental in improving fiscal management by making the budget process more "hierarchical," concentrating power in the hands of those who have incentives to deliver fiscal discipline, identifying weaknesses in fiscal institutions and procedures, and limiting agency problems by increasing accountability to voters. The advantages of numerical fiscal rules include the power to limit deficit and expenditure biases, address problems of time inconsistency, reduce the procyclicality of fiscal policy, and pose as a useful market signal in countries vulnerable to contagion and sudden shifts in investor confidence. However, potential disadvantages of numerical fiscal rules include lack of flexibility in fiscal policy and incentives to rely on low-quality measures to meet the targets. Recent FRL proposals have recommended to adopt a principles-based framework that sets quantified key fiscal objectives ("targets") that provide the authorities with more flexibility to respond to adverse macroeconomic developments.[2]

[1] See Corbacho and Schwartz (2007), "Fiscal Responsibility Laws" in "Promoting Fiscal Discipline" edited by Kumar and Ter-Minassian.

[2] See a blueprint in "Maldives: Technical Assistance Report- Revisiting the Fiscal Responsibility Act", IMF Country Report 22/10.

4. A principles-based FRL in Timor-Leste could be supported by a Charter of Fiscal Responsibility and by an annual fiscal strategy included in the budget. The Charter would be a new fiscal document that would be prepared by each incoming government and would specify the governments' key fiscal targets, consistent with the principle of fiscal sustainability at a specified point of time underscored in the FRL. It would include medium- term targets for the fiscal balance, public debt, and Petroleum Fund withdrawals for the end of the government five-year term. The annual fiscal strategy would provide details of fiscal developments, fiscal measures, and fiscal projections consistent with the five-year anchors of the Charter and should be part of the budget documents. The difference from the "rules-based" approach is that numerical fiscal rules are not included in a law but rather in government documents that are endorsed by the Parliament.

5. The principles-based FRL should be underpinned by strong accountability provisions. The Minister of Finance should explain to Parliament any updates to the Charter and any changes in fiscal targets. The Minister would have to present a written report to justify changes in fiscal targets or any temporary suspension of them when escape clauses are invoked, including planned corrective actions and a timeline to return to targets. The Minister would also have to explain to Parliament the drivers behind the deviations of budget outturns from budget projections.

6. Although FRLs can potentially serve as a catalyst for meaningful reforms promoting fiscal prudence, there are other conditions that are needed to ensure their success. These include—but are not limited to—the following:

i. ***Broad support for fiscal prudence.*** Political consensus will be needed in designing an FRL, as it should be geared toward addressing country-specific weaknesses in fiscal management that lie at the root of poor fiscal outcomes. This will generally require improving fiscal transparency and fiscal management and providing the right incentives for the different actors involved in designing and implementing fiscal policy.

ii. ***Strong Public Financial Management (PFM) systems and budget procedures.*** Countries with weak PFM systems and budget procedures are unlikely to be able to monitor and effectively control a fiscal target.

iii. ***Good practices in transparency and accountability***. Clear and open budget formulation and execution procedures, an independent audit mechanism and institution, and transparent oversight are highly desirable.

iv. ***Broad coverage of all relevant fiscal (and quasi-fiscal) operations of the public sector.*** The application of a consistent fiscal framework to all levels of government and to public entities and public enterprises that are engaged in significant fiscal activities limits the scope for shifting fiscal policy implementation "off budget."

v. ***Effective enforcement mechanisms.*** In countries with a long history of noncompliance with budget targets, mechanisms to enforce fiscal discipline include institutional sanctions for noncomplying jurisdictions, or personal sanctions for noncomplying public officials that should be applied automatically when fiscal targets are missed and/or budget procedures are not followed.

7. Finally, FRL provisions should, over time, be integrated with public finance legislation. More specifically, a case can be made for consolidating all or some of FRL provisions into umbrella budget or public finance laws, since FRLs are, for the most part, a response to shortcomings of such laws. Incorporating the procedural rules of an FRL into a budget or public finance law certainly would be a step in the direction of streamlining and simplifying legislation, constituting good transparency practice.

Annex IV. Public Financial Management Reform Priorities

Public Financial Management systems have multiple dimensions, and Timor-Leste has room for improvement in each dimension. Against this backdrop, it is important to prioritize reform efforts given limited absorptive capacity and technical assistance resources.

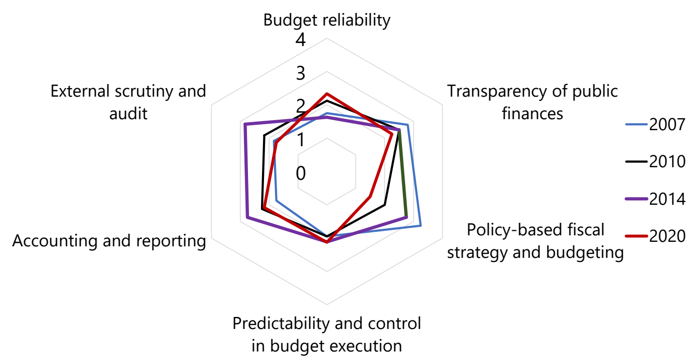
The Public Expenditure and Financial Accountability assessment (PEFA) is a thorough evaluation that has been conducted several times. The latest assessment from 2020 showed that the overall performance has stalled and even deteriorated in specific areas.[1]

Some outstanding issues include:

1. Large discrepancies between budget plans and budget execution. The aggregate spending outturn is usually well below the aggregate spending planned in the budget. Moreover, the composition of government spending outturns also deviates from budget plans because of budget rectifications and virements.[2] These discrepancies undermine the reliability of the budget as a policy instrument.

Timor-Leste: Public Financial Management Performance

(Indicator scores, 4=highest and 1=lowest)



Source: Public Expenditure and Financial Accountability (PEFA) Report.
Note: The 2020 assessment is based on the 2016 PEFA framework. The 2007, 2010, and 2014 assessments are based on the 2011 PEFA framework.

2. Weak appraisal of public investment projects. Many projects are not subject to cost-benefit analyses, leading to low returns from public investment. The budget for public investment projects is prepared by the Ministry of Planning while the budget for recurrent spending is prepared by the Ministry of Finance. This separation leads to unfunded recurrent costs (e.g., operations and maintenance) of public investment projects.

3. Deficiencies in procurement management. About 40 percent of government spending comprises goods, services, and capital goods and is done via procurement. An e-procurement portal has been in place since 2011 to increase access to procurement information and promote transparency. But the portal does not provide a complete and reliable record in real time of the contracts awarded. Upgrading the e-procurement portal is warranted for more efficient procurement.[3]

[1] See more details in "Timor-Leste Public Expenditure and Financial Accountability (PEFA) Assessment."

[2] See Figure 2, middle-right.

[3] See Annex V in the 2021 Article IV Staff Report.

4. Proliferation of autonomous agencies. Since 2015, several autonomous agencies were created to support line ministries aiming to make public services delivery more efficient. The resources transferred to those agencies are not scrutinized with the same degree of detail and their spending is not subject to the same reporting requirements as are line ministries, undermining governance and accountability.

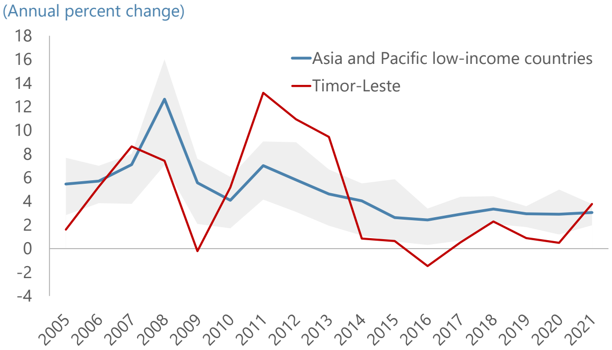
Annex V. Assessment of the Exchange Rate Regime

Timor-Leste's adoption of the US dollar as legal tender has served it well over the last 20 years as it eliminated exchange rate volatility, facilitated trade, and supported macroeconomic stability. Dollarization, however, also has disadvantages including the inability to use monetary and exchange rate policy. While it would be premature for Timor-Leste to adopt a national currency, there are potentially merits to exploring the necessary steps.

1. **Timor-Leste adopted the US dollar as legal tender to eliminate the inefficiencies and distortions from the use of multiple currencies.** After the independence referendum in 1999, there were at least three currencies in circulation: the Australian dollar, the US dollar, and the Indonesian rupee. Under the UN Transitional Administration—and following advice from the IMF—it was decided to adopt a full dollarization regime. The US dollar as a legal tender had at least three advantages: i) stable value, ii) wide international use, and iii) facilitator of trade in an economy in which the export base is concentrated in a few volatile commodities, including oil and coffee, that are priced in US dollars.[1]

2. **Dollarization helped achieve price stability and eliminated exchange rate volatility and risks of any sudden, sharp devaluation of the country's exchange rate**. Average annual inflation during 2001–21 was 4.5 percent. The real effective exchange rate has been relatively stable over the past few years (as the value of the US dollar against other major currencies and oil prices are negatively correlated) and domestic inflation has been low.

Timor-Leste: Consumer Prices
(Annual percent change)



Source: World Economic Outlook, IMF.
Note: Blue solid line is the median CPI among low-income countries in Asia and Pacific, and shaded area shows the interquartile range.

3. **The use of the U.S. dollar as legal tender, however, has some disadvantages.** The first is the absence of monetary policy as an instrument for macroeconomic stabilization, leaving fiscal policy as the only instrument. The second is the seigniorage revenue forgone from the monopoly power to print money. Developing countries in East Asia and the Pacific region that rely on monetary policy to respond to shocks and restore equilibrium in the domestic economy usually collect seigniorage revenues of about 1-2 percent of GDP.[2] And the third is the inability to rely on exchange rate policy to mitigate the adverse impact from external shocks (e.g., higher food prices) to facilitate the adjustment of the real exchange rate and restore external equilibrium without causing domestic deflation.

[1] See details in de Brouwer (2001), "Currency and Monetary Arrangements for East Timor."

[2] See details in Combes et al. (2015), "Deforestation and Seigniorage in Developing Countries: A Tradeoff?"

4. There are merits in laying the groundwork towards the adoption of a national currency with the potential to improve capacity building. Setting up a monetary policy framework can be a powerful way for a country to gain knowledge about the legal basis as well as the design, implementation, and communication practices of monetary policy. There is a need to develop data and analytics for implementing monetary policy. For instance, exploring and setting up the technical framework to conduct interest rate policy would induce a significant learning curve and capacity building. Strengthening expertise and capacity at the central bank to conduct independent monetary policy effectively is needed. At the same time, however, it would be beneficial for Timor-Leste to get its fiscal position back on a sustainable footing before adopting a national currency. Otherwise, an unsustainable fiscal stance would make it very challenging for the central bank to manage monetary policy in a way that is consistent with price stability.

5. The central bank could start developing a strategy—such as in the form of a White Paper—to explore the necessary steps to introduce a national currency and raise awareness. There are many transition challenges that are involved in the introduction of a national currency, many of which need careful planning and communication. Then the country has to make decisions about the production of a new national currency, including the design, choice of printer and its location, initial value of the currency, and the denomination of the bank notes.[3] Finally, Timor-Leste has to set the course of various conversion metrics that include the choice of date to begin circulation of the new currency, the conversion period, how to deal with potential speculative inflows and limits on the conversion of bank notes, and the operations of the foreign exchange market.

[3] See a detailed description of the operational challenges of introducing a national currency in Abrams and others (1993).

Annex VI. Integration of Capacity Development and Surveillance

Area	Surveillance Recommendations	Capacity Development Recent Actions/Plans
Tax Policy	Adopt a single rate VAT (paragraph 16).	The Fund is ready to provide technical assistance through the Pacific Financial Technical Assistance Center (PFTAC).
Tax Administration	Strengthen tax administration to improve tax compliance (paragraph 16).	The Fund provided a diagnostic review of tax administration in November 2021 and is following up with short-term expert assistance.
Fiscal Responsibility Legislation	Adopt a well-designed Fiscal Responsibility Law to improve fiscal discipline (paragraph 18).	The Fund is ready to provide technical assistance through the Fiscal Affairs Department.
Public Financial Management (PFM)	Address PFM weaknesses to improve the quality of government spending (paragraph 19).	The Fund provided technical assistance through the Fiscal Affairs Department and PFTAC in April 2022 to finalize a Public Financial Management Strategy and Action Plan.
Governance in AML/CFT	Strengthen the AML/CFT regime (paragraph 24).	The Fund is providing technical assistance through the Legal Department.
Banking Sector Regulation and Financial Supervision	Enhance prudential standards and risk assessment methodologies to capture emerging risks in the financial sector (paragraph 27).	The Fund is ready to provide technical assistance through PFTAC.
Statistics for BOP and GFS	Improve the quality of external sector statistics and government finance statistics (paragraph 31).	The Fund provided technical assistance on external sector statistics in May–June 2021 and June 2022 and on government finance statistics in March–April 2022 through the Statistics Department.
Financial Soundness Indicators (FSI)	Release FSI data without delay (paragraph 31).	The Fund is ready to provide technical support through the Statistics Department.
Macroeconomic Analysis	Develop stronger analytical skills and better macroeconomic forecasting and policy analysis (paragraph 31).	The Fund's Institute for Capacity Development (ICD) is providing technical assistance through the Singapore Training Institute and PFTAC to build a Financial Programing model for own use by the authorities.

Annex VII. Responses to Past Fund Advice

Fund Recommendation	Policy Actions
Fiscal Policy	
• Fiscal consolidation and gradual exit from Petroleum Fund (PF) excess withdrawals	The medium-term fiscal plans in the 2022 budget continue to envisage persistent fiscal deficits financed by large PF excess withdrawals
• Revenue mobilization and expenditure rationalization	Raised taxes on alcohol and tobacco. Launched the National Single Window of ASYCUDA World to improve revenue collection. Working on a VAT draft legislation and a new tax procedure code. The 2022 budget includes a large increase in public transfers that are not targeted to the most vulnerable and do not increase the productive capacity of the economy. Implemented a new PFM law and program budgeting.
• Strengthen public financial management (PFM)	Adopted the Major Planning Options Law to help bring more predictability to the budget process. A new Procurement and Public Contract Law, effective January 2023, aims to increase transparency and simplify the procurement process.
Financial Policies	
• Upgrade the financial sector regulatory and supervisory framework	IFRS 9 implementation is expected to be completed by end-2022. Progress is being made to switch from Basel I to Basel III regulatory framework.
• Facilitate access to finance for businesses	Credit guarantee scheme implemented in 2019-20 has been ineffective. The central bank implemented a minimum loan-to-deposit ratio requirement of 35 percent by end-2023 for all financial institutions.
• Strengthen digital literacy, cybersecurity, and data/ consumer protection and privacy	Launched the Digital Village Program to improve financial digital literacy. No progress on cybersecurity, consumer protection, and data privacy legislation.
Structural Reforms	
• Investment in human capital, raise productivity in the agriculture sector, conducive business environment including simplified licensing requirements and land registration, stronger governance, better enforcement of legal contracts, labor market reforms, investment in digital infrastructure.	A new anti-corruption law is in place. A new land registry reform is scheduled to come into effect in 2023. Other reform areas lack progress.
Statistics	
• Improve the quality of data for informed policy making.	Progress remains slow and incomplete. No quarterly public reporting of financial soundness indictors. Interagency coordination and data sharing remain weak.

INTERNATIONAL MONETARY FUND

DEMOCRATIC REPUBLIC OF TIMOR-LESTE

STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

July 28, 2022

Prepared By	Asia and Pacific Department (In consultation with other departments)

CONTENTS

FUND RELATIONS

(As of June 30, 2022)

Membership Status: Joined July 23, 2002; Article VIII.

General Resources Account:

	SDR Million	% Quota
Quota	25.60	100.00
IMF Holdings of Currency (Holdings rate)	21.25	83.01
Reserve Tranche Position	4.35	17.00

SDR Department:

	SDR Million	% Allocation
Net Cumulative Allocation	32.26	100.00
Holdings	27.93	86.55

Outstanding Purchases and Loans: None

Latest Financial Commitments: None

Projected Payments to Fund:

(SDR Million; based on existing use of resources and present holdings of SDRs)

	Forthcoming				
	2022	2023	2024	2025	2026
Principal					
Charges/Interest	0.02	0.04	0.04	0.04	0.04
Total	0.02	0.04	0.04	0.04	0.04

Exchange Rate Arrangements:

The exchange rate arrangement is an exchange arrangement with no separate legal tender. The U.S. dollar is legal tender and circulates freely. On January 24, 2000, the U.S. dollar was adopted as the official currency of then East Timor by the United Nations Transitional Administration in East Timor (UNTAET). This arrangement has been maintained after Timor-Leste's independence on May 20, 2002. At present, the monetary authority does not undertake foreign exchange transactions; they are handled by commercial banks on the basis of rates quoted in the international markets. Timor-Leste has accepted the obligations under Article VIII, Sections 2(a), 3 and 4, and maintains an exchange system that is free of multiple currency practices and restrictions on the making of payments and transfers for current international transactions.

Article IV Consultations:
The last Article IV consultation was concluded on July 9, 2021. The associated Executive Board assessment is available at https://www.imf.org/en/News/Articles/2021/07/14/pr21215-timor-leste-imf-executive-board-concludes-2021-article-iv-consultation-with-timor-leste and the staff report at https://www.imf.org/en/Publications/CR/Issues/2021/07/14/Timor-Leste-2021-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-462155. Timor-Leste is on the standard 12-month consultation cycle.

Resident Representative:
The resident representative office in Dili, established in August 2000, closed at end-June 2009.

INFORMATION ON THE ACTIVITIES OF OTHER INTERNATIONAL FINANCIAL INSTITUTIONS

Information on the activities of other international financial institutions in Timor-Leste can be found at:

- World Bank: http://www.worldbank.org/en/country/timor-leste
- Asian Development Bank: https://www.adb.org/countries/timor-leste/main

STATISTICAL ISSUES

(As of June 2022)

I. Assessment of Data Adequacy for Surveillance
General: Data provision to the IMF is broadly adequate for surveillance. Areas of concern include incomplete incorporation of the petroleum-related transactions in the balance of payments compilation following the new Maritime Boundary Treaty, weaknesses in compilation and dissemination of government finance statistics, and no public reporting of financial soundness indicators. The plan to change the General Directorate of Statistics, which is currently under the Ministry of Finance, into a public institute with autonomy is a good enhancement.
National Accounts: GDP is compiled annually by production, expenditure and income using a contemporary base period (2015) and using methods that are reasonably consistent with the *2008 System of National Accounts*. There was significant improvement in shortening the time lag for publishing national accounts—the 2019 national accounts were published in October 2020 and the first preliminary 2020 GDP estimates were published timely in April 2021. Further, the preliminary 2021 GDP estimates were published timelier in March 2022. The national accounts assume that oil production at the Joint Petroleum Development Area (JPDA) is resident in Timor-Leste since September 2019 as a result of the Maritime Boundary Treaty signed in August 2019 between Timor-Leste and Australia.
Price Statistics: The monthly, national CPI uses expenditure weights derived from 2014–15 Living Standard Survey. Data are also released monthly for Dili, Baucau, and other regions. Since August 2018, the basket weights were updated, and the CPI was rebased with an August 2018 reference period (i.e., August 2018 = 100).
Government Finance Statistics: Annual Government Finance Statistics (GFS) has not been compiled and disseminated, with 2019 central government data submitted as the latest for the GFS database. A GFS technical assistance mission in March-April 2022 assisted the compilers to address capacity gaps with a view to resume regular reporting of GFS. Compilation and dissemination of quarterly Government Finance Statistics has been deferred due to data discrepancies and challenges in resolving the source of those discrepancies. The last publication of quarterly GFS data was undertaken in Q3/2016. Timor-Leste does not report to the Quarterly Public Sector Debt database, jointly developed by the World Bank and IMF.
Monetary and Financial Statistics: The central bank compiles monetary and financial statistics generally following the methodology of the *Monetary and Financial Statistics Manual and Compilation Guide*. The central bank reports detailed monthly monetary data for the central bank and other depository corporations using the standardized report forms in a timely manner. Timor-Leste uses the U.S. dollar as the official currency, and official data on currency holdings are difficult to compile under the current currency regime. Data for other financial corporations, mainly insurance companies, are not compiled. The central bank reports data on some series and indicators of the Financial Access Survey, including mobile money and the two indicators

(commercial bank branches per 100,000 adults and ATMs per 100,000 adults) adopted by the United Nations to monitor Target 8.10 of the Sustainable Development Goals (SDGs).

Financial Sector Surveillance: Only basic market-based indicators are available, and their coverage, valuation and timeliness vary across such indicators. Data are not sufficiently available to conduct stress tests of the banking system or Balance Sheet Approach analysis. Cross border exposure data for financial corporations are not available.

External Sector Statistics: Upon the External Sector Statistics (ESS) TA mission in May–June 2021, the central bank newly published the balance of payments data of until Q4/2021 reflecting the new treatment of the JPDA companies' activities and the Greater Sunrise project that ensure methodological soundness and conformity with the new Maritime Boundary Treaty. For example, oil exports from JPDA starts to be recorded as Timor-Leste's merchandise exports. However, it appears that they are incomplete and do not properly incorporate full impacts of the new treaty—i.e., only including one part of the framework (exports of oil) without compiling the contra entries on imports of goods and services, direct investment income payments, and direct investment. Data sharing on oil and gas related international transactions is challenging, and further information is needed on the ownership of the natural gas sent to Darwin for processing into LNG. Also, while progress has been made, measuring non-Petroleum Fund-related current account transactions accurately remains a work in progress. Monthly merchandise trade data are now published regularly. Data on monthly merchandise exports and imports are based on the Automated System for Customs Data. Service transactions are largely estimated with data collection limited to the official and tourism sectors.

Quarterly balance of payments and international investment position data compiled by the central bank is available for 2006–Q1/2022 and 2008–Q1/2022, respectively, according to the *Balance of Payments and International Investment Position manual*, sixth edition. While methodology to produce basic annual estimates of the balance of payments statistics are in place, further development is needed to address limitations of existing data sources, in particular, merchandise trade statistics and service transactions. This includes work to ensure consistency between current account data and the new national accounts statistics, particularly related to the exports of commodities and imports of services as well as to ensure consistency between the balance of payments and the international investment position.

Currently, publicly available information on remittances from Timorese working abroad is limited and improvement in the estimation and compilation procedures of such remittances should be pursued. The TA mission by CDOT in June 2019 provided some guidance to fine-tuning estimation models for remittances and collecting data from the money transfers operators.

II. Data Standards and Quality

Timor-Leste is a participant in the IMF's Enhanced General Data Dissemination System (e-GDDS) and disseminated key economic data, albeit with delays and limited coverage, through the National Summary Data Page launched in February 2019.

Table of Common Indicators Required for Surveillance

(As of June 28, 2022)

	Date of latest observation	Date received	Frequency of Data[7]	Frequency of Reporting[7]	Frequency of Publication[7]
Exchange Rates	06/27/2022	06/27/2022	D	D	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	05/2022	06/2022	M	M	M
Reserve/Base Money	05/2022	06/2022	M	M	M
Broad Money	05/2022	06/2022	M	M	M
Central Bank Balance Sheet	05/2022	06/2022	M	M	M
Consolidated Balance Sheet of the Banking System	05/2022	06/2022	M	M	M
Interest Rates[2]	05/2022	06/2022	M	M	M
Consumer Price Index	05/2022	06/2022	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[3] – General Government[4]	2021	01/2022	A	A	A
Revenue, Expenditure, Balance and Composition of Financing[3]– Central Government	2021	01/2022	A	A	A
Central Government and Central Government-Guaranteed Debt[5]	2021	01/2022	A	A	A
External Current Account Balance	Q1/2022	06/2022	Q	Q	Q
Exports and Imports of Goods and Services	Q1/2022	06/2022	Q	Q	Q
GDP/GNP	2020	09/2021	A	A	A
Gross External Debt	Q1/2022	06/2022	Q	Q	Q
International Investment Position[6]	Q1/2022	06/2022	Q	Q	Q

[1] Any reserve assets that are pledged or otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.
[2] Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.
[3] Foreign, domestic banks, and domestic nonbank financing.
[4] The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.
[5] Includes only goods. There are significant gaps in the series. No information on services is available.
[6] Includes external gross financial asset and liability positions vis-à-vis nonresidents.
[7] Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A); NA: Not Available.

DEMOCRATIC REPUBLIC OF TIMOR-LESTE

July 28, 2022

STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION—DEBT SUSTAINABILITY ANALYSIS

Approved By
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Prepared by Staff of the International Monetary Fund and the International Development Association

Timor-Leste: Joint Bank-Fund Debt Sustainability Analysis	
Risk of external debt distress	Moderate
Overall risk of debt distress	Moderate
Granularity in the risk rating	Limited space to absorb shocks
Application of judgement	Yes. Petroleum sovereign wealth fund is a strong mitigating factor for the country's debt sustainability in the next 10 years.

Timor-Leste remains at moderate risk of overall and external debt distress, with application of judgement, unchanged from the 2021 Article IV debt sustainability analysis. The present value of external debt-to-exports ratio and the debt service-to-exports ratio under the baseline are projected to breach their respective indicative thresholds in the medium-term, triggering a high-risk mechanical rating for external and overall debt. In the medium-term, however, the Petroleum Fund is large relative to projected debt levels and debt service requirements, and its assets are liquid and accessible, thus acting as a mitigating factor, prompting the use of judgement to upgrade the risk assessment. Long-term risks to debt sustainability have increased compared to the 2021 Article IV debt sustainability analysis, reflecting higher projected fiscal deficits and a faster depletion of the Petroleum Fund. Staff projects that the Petroleum Fund, which is the main source of funding of fiscal deficits, will be depleted in 2038, triggering a breach of all debt indicators towards the end of the twenty-year projection horizon. However, there is time to adopt necessary policy adjustments—staff's alternative scenario illustrates how fiscal consolidation and structural reforms can ensure both fiscal and debt sustainability in the long term.

PUBLIC DEBT COVERAGE

1. **The coverage of public sector debt used in this report is public and publicly guaranteed debt.** Timor-Leste's public and publicly guaranteed external debt is held entirely by the central government. The coverage of public sector debt includes state-owned enterprise debt. Under the Public Debt Regime Law, state-owned enterprises are not allowed to borrow for themselves and can only obtain financing via on-lending from the Ministry of Finance.[1] The public sector only borrows externally, given a lack of domestic financing sources. The debt definition of the debt sustainability analysis is currency-based, and the legal tender is the U.S. dollar.

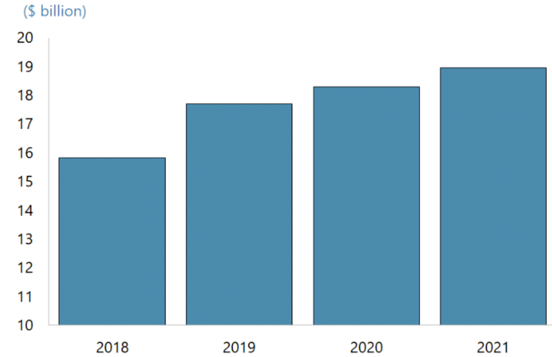
Text Table 1. Timor-Leste's Coverage of Public Debt

	Subsectors of the public sector	Check box
1	Central government	X
2	State and local government	
3	Other elements in the general government	
4	o/w: Social security fund	
5	o/w: Extra budgetary funds (EBFs)	
6	Guarantees (to other entities in the public and private sector, including to SOEs)	X
7	Central bank (borrowed on behalf of the government)	
8	Non-guaranteed SOE debt	

BACKGROUND ON DEBT

2. **Timor-Leste's net public asset position is currently strong due to oil-related savings accumulated in Petroleum Fund assets and low levels of public debt**.

Text Figure 1. Petroleum Fund Balance
($ billion)



Source: Central Bank of Timor-Leste.

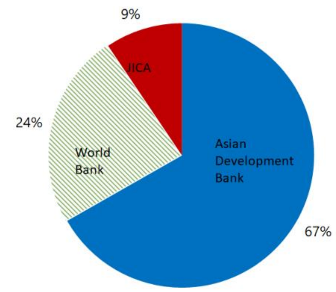
- The Petroleum Fund balance at end-2021 stood at $18.9 billion (1,127 percent of non-oil GDP), covering 240 months of prospective goods and services imports. The Petroleum Fund balance increased by $0.7 billion in 2021 as investment income ($1.1 billion) and oil revenues ($0.7 billion) more than compensated for transfers to the budget ($1.2 billion).[2] The average nominal return on Petroleum Fund assets during 2017–21 was 7.4 percent.

[1]According to the Public Debt Regime Law No. 13/2011, the Government of Timor-Leste, in particular the Ministry of Finance, is the only entity that may engage in borrowing, motivated by financing needs generated by the need to execute the State's priority tasks relating to the building of strategic infrastructure for the country's development.

[2] The Petroleum Fund constitutes the main financing source for the budget. The amount is guided by the estimated sustainable income, which is set at 3 percent of total petroleum wealth (sum of the Petroleum Fund balance and the net present value of expected future petroleum revenue). Withdrawals in excess of the estimated sustainable income can be made with the approval of Parliament. According to the Constitution, the President has the right to veto a budget that has been approved by the Parliament.

- The fiscal deficit increased from 26 percent of non-oil GDP in 2020 to 43 percent in 2021 due to significantly higher recurrent spending and lower revenues. Outstanding public external debt increased by $18 million and reached 14 percent of non-oil GDP ($237 million) in 2021. External loans signed since 2012 to 2021 totaled $708 million—all consisting of concessional loans from the Asian Development Bank, the World Bank Group, and Japan International Cooperation Agency to finance mainly road infrastructure projects, water supply and sanitation, and for development of the airport. The Asian Development Bank has the largest share of total external debt, comprising nearly 67 percent of total external debt agreements till date. The average maturity of the existing loans is 25.5 years, with grace periods ranging from 5 to 10 years. Debt service payments on existing debt averages $20 million (close to 1.2 percent of non-oil GDP) per annum in the medium term, and declines thereafter.

Text Figure 2. External Debt by Creditors, 2012-21



Source: Ministry of Finance.

BACKGROUND ON MACRO FORECASTS

3. **Timor-Leste faces large and pressing development challenges**. Despite notable socio-economic achievements since gaining independence in 2002, Timor-Leste remains a fragile post-conflict nation with weak human and institutional capacity, large infrastructure gaps, and high dependence on petroleum revenues. GNI per capita in current USD in 2020 was $1,990, much lower than the threshold of at least $4,096 to be an upper-middle income country. While poverty rate (at the national poverty line) declined from 50.4 percent in 2007 to 41.8 percent in 2014, it remains among the highest in the region.

4. **This debt sustainability analysis is based on the macroeconomic projections underlying the 2022 Article IV consultation.** To illustrate the impact of different policy options on debt sustainability, two scenarios—baseline and reform—are considered.

Text Table 2. Macroeconomic and Fiscal Assumptions: Current and 2021 Article IV

	Current (2022 Article IV)				Previous (2021 Article IV)			
	2021	2022	2023-27	2028-42	2020	2021	2022-26	2027-41
Real non-oil GDP growth (in percent)	1.5	3.3	2.9	3.0	-7.6	1.8	2.8	3.0
CPI inflation	5.3	7.0	2.5	2.0	1.2	2.0	2.3	2.0
Revenue (excl. grants, percent of non-oil GDP)	42.6	40.4	30.0	15.3	46.4	47.1	39.3	22.1
Government expenditure (percent of non-oil GDP)	85.8	95.3	82.9	50.8	72.5	93.1	81.6	53.2
Recurrent	77.5	79.0	59.0	43.7	62.3	74.6	57.4	42.5
Capital	8.3	16.3	23.9	7.1	10.2	18.6	24.2	10.8
Net lending/ borrowing (percent of non-oil GDP)	-43.2	-54.9	-52.9	-35.5	-26.1	-46.1	-42.3	-31.2
Net incurrence of liabilities (percent of non-oil GDP)	1.1	2.0	2.1	10.5	1.6	3.8	2.8	0.5
Petroleum Fund balance ($ million)	18,949	17,446	14,771	4,707	18,991	18,785	17,553	10,415
Current account balance (percent of non-oil GDP)	2.5	-15.3	-41.4	-39.9	-19.3	-31.6	-39.4	-32.2

Text Table 3. Main Macroeconomic Projections, 2018-27

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
			Est.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.
Real sector										
Nominal Non-oil GDP (in millions of U.S. dollars)	1,584	1,704	1,595	1,681	1,858	2,043	2,190	2,332	2,484	2,661
Real Non-oil GDP growth (percent change)	-0.7	2.1	-8.6	1.5	3.3	4.2	2.6	2.4	2.4	3.0
CPI (percent change, period average)	2.3	0.9	0.5	3.8	7.0	4.0	2.5	2.0	2.0	2.0
Non-oil GDP deflator growth (percent change)	-1.3	5.4	2.4	3.8	7.0	5.5	4.5	4.0	4.0	4.0
Central government operations	(In percent of Non-oil GDP)									
Revenue	57.6	51.6	57.0	54.1	51.9	46.9	43.7	41.1	38.8	35.6
Domestic revenue	12.0	11.0	11.4	9.6	9.6	9.6	9.6	9.7	9.7	9.7
Estimated Sustainable Income (ESI)	34.8	31.0	34.1	33.0	30.8	25.8	22.6	20.0	17.7	15.7
Grants	10.8	9.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	10.2
Expenditure	84.0	81.9	82.6	97.2	106.8	114.4	105.9	94.3	79.7	76.1
Recurrent expenditure	51.8	54.0	61.1	77.5	79.0	62.4	60.5	58.9	57.5	55.7
Capital expenditure	21.4	18.4	10.0	8.3	16.3	40.6	33.9	24.0	10.7	10.2
Donor project	10.8	9.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	10.2
Net lending/borrowing	-26.4	-30.3	-25.6	-43.2	-54.9	-67.6	-62.2	-53.2	-40.9	-40.5
	(In millions of U.S. dollars, unless otherwise indicated)									
Balance of payments										
Current account balance	-191	133	-308	43	-284	-821	-942	-984	-996	-1,103
Trade balance	-589	-566	-510	-569	-647	-726	-758	-777	-789	-835
Exports	25	26	17	32	35	39	44	50	57	65
Imports	613	592	527	601	682	765	802	827	846	900
Services (net)	-349	-357	-275	-244	-279	-316	-327	-321	-294	-319
Primary Income 1/	843	1,126	620	925	718	305	234	211	190	173
Secondary Income	-96	-70	-143	-70	-77	-84	-91	-96	-103	-122
Balance of payments	(In percent of Non-oil GDP, unless otherwise indicated)									
Current account balance	-12.1	7.8	-19.3	2.5	-15.3	-40.2	-43.0	-42.2	-40.1	-41.5
Trade balance	-37.2	-33.2	-32.0	-33.9	-34.8	-35.6	-34.6	-33.3	-31.8	-31.4
Exports	1.6	1.5	1.1	1.9	1.9	1.9	2.0	2.1	2.3	2.4
Imports	38.7	34.8	33.1	35.8	36.7	37.4	36.6	35.5	34.0	33.8
Services (net)	-22.1	-20.9	-17.3	-14.5	-15.0	-15.5	-14.9	-13.8	-11.9	-12.0
Primary Income 1/	53.2	66.1	38.9	55.0	38.7	15.0	10.7	9.0	7.6	6.5
Secondary Income	-6.1	-4.1	-9.0	-4.1	-4.1	-4.1	-4.1	-4.1	-4.1	-4.6
Memorandum items										
Public external debt (In millions of U.S. dollars)	145	193	218	237	274	321	373	419	469	521
(In percent of Non-oil GDP)	9.1	11.3	13.7	14.1	14.7	15.7	17.0	18.0	18.9	19.6
Petroleum Fund balance (in millions of U.S. dollars) 2/	15,803	17,692	18,289	18,949	17,446	16,504	15,525	14,640	13,967	13,222
(In months of imports)	179	204	261	262	206	169	152	140	133	117
(In percent of Non-oil GDP)	998	1038	1146	1127	939	808	709	628	562	497
Crude oil prices (U.S. dollars per barrel, WEO) 3/	68	61	41	69	106	95	84	77	72	72

Sources: Timor-Leste authorities; and IMF staff estimates and projections.

1/ Oil sector activities are considered non-resident activities in balance of payments statistics.

2/ Closing balance.

3/ Simple average of UK Brent, Dubai, and WTI crude oil prices; April 2021 WEO assumptions.

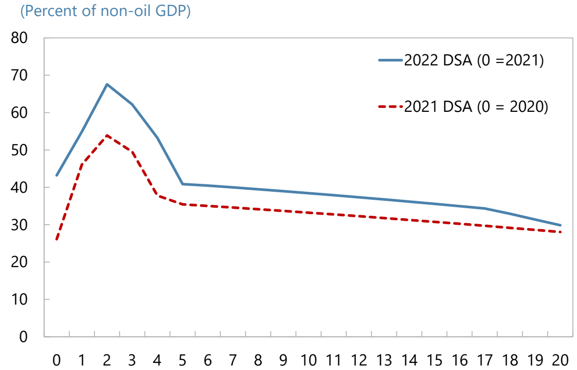
5. **The macro-fiscal outlook has worsened significantly compared to the 2021 Article IV debt sustainability analysis**. The following revisions were made to reflect recent developments and the latest data. First, the Petroleum Fund's outstanding balance at end-2020 was lowered by about USD$701 million (close to 4 percent of the Petroleum Fund balance) as the investment in the Greater Sunrise oil fields by Timor-Gap (the national oil company) financed by the Petroleum Fund

was written down to zero.[3] Second, the 2022 budget envisages much larger fiscal deficits in the medium term in comparison to the previous debt sustainability analysis, mainly financed by withdrawals from the Petroleum Fund. Moreover, in May 2022, the government approved the creation of the National Liberation Combatants Fund worth $1 billion with a transfer from the Petroleum Fund to finance support programs for war veterans.

Macroeconomic Assumptions:

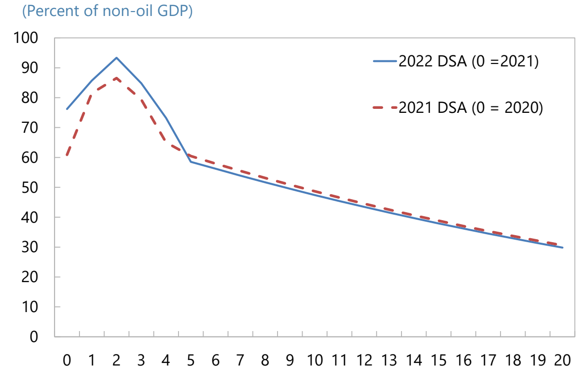
- **Real non-oil GDP** is projected to grow by 3.3 percent in 2022, underpinned by a significant increase in public spending, and rebounding private consumption at the back of steady progress with vaccination and reopening of the borders. Growth is projected to hover in the range of 2.4–4.2 percent in the medium term (2022–27) mainly driven by the changes in government spending. Over the long term (2028–2042), growth is projected to stabilize at around 3 percent, driven by the private sector and closer to the historical growth performance. Oil production from active fields is projected to decline sharply in 2022 and cease in 2023.[4]

Text Figure 3. Fiscal Deficit
(Percent of non-oil GDP)



Source: IMF staff estimates.

Text Figure 4. Non-oil Fiscal Deficit
(Percent of non-oil GDP)



Source: IMF staff estimates.

- **Inflation** has increased to 5.3 percent y/y on by end-2021, mostly driven by imported food prices. It is expected to pick up further in 2022–23 with strong fiscal stimulus and higher global food and fuel prices, significantly higher compared to the previous debt sustainability analysis, and then converge to 2 percent over the medium and long term.

- **The fiscal balance** is projected to remain in deficit of about 53 percent over 2023–27, reflecting continued plans for high public spending according to the 2022 budget, at a level significantly higher than the previous debt sustainability analysis. The fiscal deficit is projected to significantly increase from 43 percent of non-oil GDP in 2021 to 55 percent in 2022, driven by an increase in both recurrent and capital spending. Over 40 percent of the total budget is for government

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[3] The audited financial statements for Timor-Gap in 2020 wrote down the investment in Greater Sunrise triggered by uncertainty of the fiscal and regulatory regime of the Greater Sunrise field.

[4] The baseline does not include the development of the Greater Sunrise fields as they do not have approved development plans yet.

transfers. The fiscal deficit is projected to narrow gradually to about 35 percent on average over 2028–42.

- **The current account balance** is expected to shift back to a deficit in 2022 and in the medium term, reflecting lower oil and gas receipts, higher imports of goods and services generated by higher public investment, and limited exports. In the long term, the current account deficit gradually declines as the domestic production of tradeable goods expands and public investment becomes less important. Remittances are assumed to grow in line with non-oil GDP.

- **External financing** consists of concessional loans from official creditors. Private external borrowing is assumed to remain negligible. Timor-Leste does not have exceptional financing such as accumulation of arrears. There is no domestic financing.

- **The grant element of loans** is assumed to decline moderately over the medium term as the economy develops. Other assumptions include that no off-budget debt is accumulated including by state-owned enterprises in line with existing legislation.

6. The baseline fiscal scenario assumes lower spending than planned under the 2022 budget, reflecting historical execution rates. Capital and recurrent spending in 2022–26 are assumed to be on average close to 70 percent and 85 percent of the planned amount in the 2022 budget, respectively, in line with historical execution rates. An annual nominal investment return on the Petroleum Fund of around 5 percent is assumed, in line with the average returns since its inception.

- Government revenues are projected to decline from 43 percent of non-oil GDP in 2021 to about 30 percent on average over 2023–27 term and to 15 percent on average over 2028–42. Under current policies, domestic revenues which are currently at 10 percent of non-oil GDP are assumed to grow broadly in line with nominal non-oil GDP. The decline in government revenues is driven by erosion of the Petroleum Fund which in turn reduces the estimated sustainable income. The government has signaled its intention to raise non-oil revenues to around 15 percent of non-oil GDP in the medium term.[5]

- Recurrent spending in the long-term is projected to increase by 3.8 percent each year, broadly in line with historical trends and in line with the previous debt sustainability analysis. Capital spending in the long term is projected to increase in line with inflation, similar to the previous debt sustainability analysis.

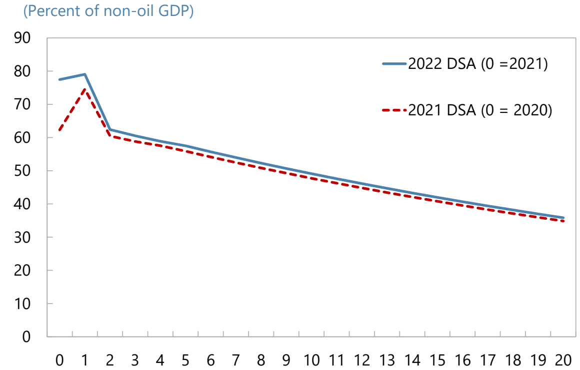
- As the government relies on Petroleum Fund withdrawals to meet its financing needs, the Petroleum Fund falls to $13.2 billion by 2027, a faster rate of depletion than the previous debt sustainability analysis. Moreover, it is completely depleted by 2038, after which it is assumed

[5] The authorities are working on further upgrading their tax collection system, including moving to electronic tax services, however the underlying law changes essential for the upgraded systems to be functional have not yet been undertaken. Draft laws for a value-added tax (VAT) and a new Tax Procedure Code were prepared some years ago, however, there is no firm timetable for their adoption.

that the government relies on external debt to finance fiscal deficits (see bullet below). In the previous debt sustainability analysis, the Petroleum Fund was not depleted during the 20-year projection horizon.

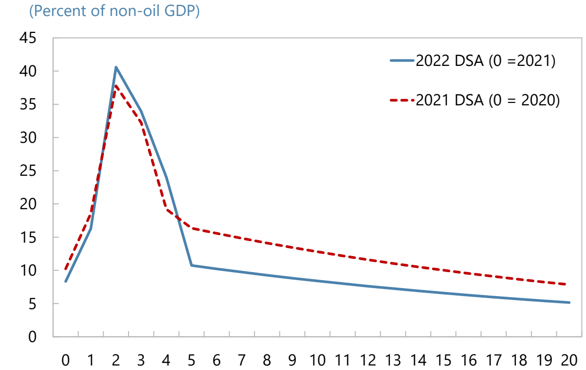
- Net external borrowing is projected at about 2.1 percent of non-oil GDP during 2023–27 broadly in line with recent trends and with updated borrowing plans shared by the authorities. As a result, outstanding external debt is projected to increase from 14 percent of non-oil GDP in 2020 to 20 percent in 2027. However, once the Petroleum Fund depletes in 2038, external borrowing is assumed to be the main source of financing of the fiscal deficit and increases to 140 percent of non-oil GDP by 2042 to finance fiscal plans under the baseline.

Text Figure 5. Recurrent spending
(Percent of non-oil GDP)



Source: IMF staff estimates.

Text Figure 6. Capital Spending
(Percent of non-oil GDP)



Source: IMF staff estimates.

7. The realism tools suggest that macroeconomic and fiscal assumptions are reasonable. A smaller primary deficit in 2016–21 than projected under the previous vintage debt sustainability analysis largely explains the unexpected changes in debt (Figure 3).[6] The three-year primary balance adjustment (between 2021 and 2024) is projected to be 19 percent: this represents continuation of fiscal stimulus and lies near the bottom of the distribution of projections across regional peers. Sluggish execution of capital spending in 2021 led to a significant drop in public investment, which is projected to pick up in line with reopening of the economy and borders and the 2022 budget plans. The contribution to growth from public investment is expected to be lower than the previous DSA, due to lower projected investment spending, however, the overall growth outturn is similar due to higher contribution from higher government consumption.

[6] The residual in debt-creating flows is financed through excess withdrawals from the Petroleum Fund.

Text Table 4. Macroeconomic Assumptions: Baseline and Reform Scenarios

	Reform Scenario				Baseline Scenario			
	2021	2022	2023-27	2028-42	2021	2022	2023-27	2028-42
Real non-oil GDP growth (in percent)	1.5	3.3	1.6	5.5	1.5	3.3	3.0	3.0
Revenue (excl. grants, percent of non-oil GDP)	42.6	40.4	33.6	25.7	42.6	40.4	31.8	15.3
Domestic revenue	9.6	9.6	10.7	14.8	9.6	9.6	9.7	10.5
Estimated Sustainable Income	33.0	30.8	22.9	10.9	33.0	30.8	22.1	4.8
Government expenditure (percent of non-oil GDP)	85.8	95.3	62.5	29.1	85.8	95.3	85.0	50.8
Recurrent	77.5	79.0	46.9	21.9	77.5	79.0	62.3	43.7
Capital	8.3	16.3	15.6	7.3	8.3	16.3	22.6	7.1
Net lending/ borrowing (percent of non-oil GDP)	-43.2	-54.9	-28.9	-3.5	-43.2	-54.9	-53.2	-35.5
Financing (percent of non-oil GDP)								
PF excess withdrawals	35.3	52.9	26.7	3.0	35.3	52.9	51.1	25.0
Net incurrence of liabilities	1.1	2.0	2.2	0.5	1.1	2.0	2.1	10.5
Petroleum Fund balance ($ million)	18,949	17,446	16,553	17,768	18,949	17,446	15,217	4,707
Current account balance (percent of non-oil GDP)	2.5	-15.3	-31.6	-9.8	2.5	-15.3	-37.0	-39.9

8. As highlighted in the 2021 DSA, under staff's reform scenario, policy actions are adopted to safeguard long-term fiscal sustainability.

- **Domestic revenue mobilization**: A VAT is adopted by 2023 to generate additional revenue of about 3 percent of GDP over the medium term, reaching 13 percent of non-oil GDP by 2028. Strengthening tax compliance through tax administration reforms and further tax policy measures (e.g., revision of excise tax rates, increase in statutory income tax rate, adopting a property tax) are warranted in the long term to increase domestic revenue to about 17 percent of non-oil GDP.[7]

- **Expenditure moderation:** Government expenditure declines gradually to the 2019 level in the medium term and remains broadly at that level until 2033 when excess withdrawals from the Petroleum Fund are eliminated.. The quality of government spending is improved by curbing the growth in more rigid expenditures (salaries, pensions, etc.), allocating more spending towards human capital development, strengthening social safety nets, and improving the growth dividend from capital spending through rigorous cost-benefit analysis.[8]

- **A target to achieve a sustainable fiscal position by 2033:** More moderate levels of spending coupled with higher domestic revenue should help gradually unwind fiscal imbalances and the excessive reliance on Petroleum Fund withdrawals to secure fiscal sustainability and preserve Petroleum Fund assets.[9] The Petroleum Fund balance will gradually increase to close to $20 billion in the long run, and the estimated sustainable income will decline more slowly in percent

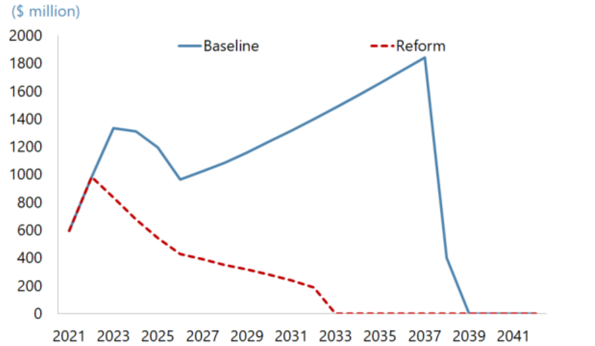
[7] In this regard, the authorities raised excise taxes on alcohol and tobacco since January 2022, which is a welcome step.

[8] The revised Budgetary Framework and Public Financial Management Law, passed in February 2022 will help enhance the efficiency and quality of government spending. However, for it to be effective, a concrete action plan of PFM reforms with technical support from the Fund should be laid out and implemented swiftly with help from other development partners.

[9] The Petroleum Fund is preserved only when a sustainable fiscal position is achieved. During the transition to fiscal balance the Petroleum Fund is eroded because the withdrawals to finance fiscal deficits are larger than what they should be to preserve the Petroleum Fund.

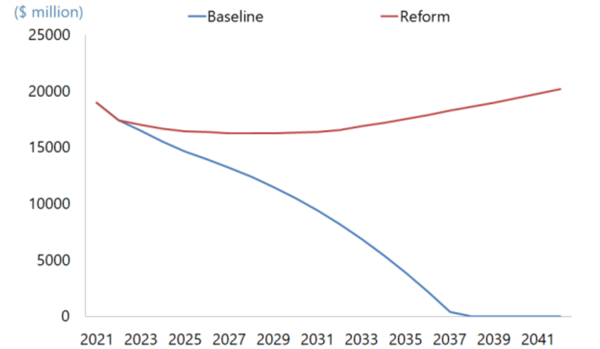
of non-oil GDP.[10] Fiscal deficits over the medium-term (2023–27) would average 30 percent of non-oil GDP, instead of 53 percent of non-oil GDP under the baseline. Overall, in the reform scenario the Petroleum Fund is preserved from 2033 onwards and generates a permanent level of investment income to support government expenditures, thus putting fiscal and debt sustainability on a solid footing.

Text Figure 7. Petroleum Fund Excess Withdrawals: Baseline vs. Reform Scenario



Source: IMF staff calculations.

Text Figure 8. Petroleum Fund Balance: Baseline vs. Reform Scenario



Source: IMF staff calculations.

- The government's strategy of increasing public external borrowing via concessional loans to finance public investment in infrastructure projects and to preserve the Petroleum Fund wealth continues to hold. Overall, external borrowing under the reform scenario is projected to be the same as the baseline scenario up until 2037, but is significantly lower in 2028–42 as the Petroleum Fund is preserved and public spending increases in line with higher sustainable sources of revenue.

9. At the same time, structural reforms are implemented to improve the business environment, raise productivity, and promote private sector development.[11] These include progress in facilitating the ease of doing business, shifting from subsistence to commercial agriculture, addressing digital infrastructure and connectivity bottlenecks, increasing financial access, building human capacity, closing labor skill gaps, and strengthening the justice sector to improve governance and reduce corruption vulnerabilities. The authorities laid out medium-term measures in the Economic Recovery Plan 2020–23, focusing on the abovementioned priorities, to address pre-existing structural weaknesses for long-term growth. However, no concrete actions have been taken yet.

10. The macro-fiscal and external sector outlook is significantly stronger under the reform scenario:

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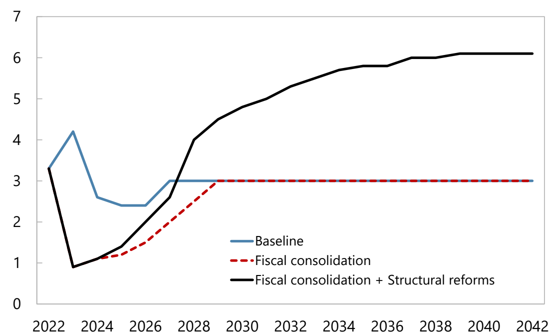
[10] The dynamic of the Petroleum Fund is such that a lower Petroleum Fund balance will reduce the level of estimated sustainable income, resulting in higher excess withdrawals to close a given financing gap, highlighting the need to curb the rapid loss in Petroleum Fund wealth.

[11] Staff estimates suggest the external sector position in 2020 was substantially weaker than implied by medium-term fundamentals and desirable policy settings.

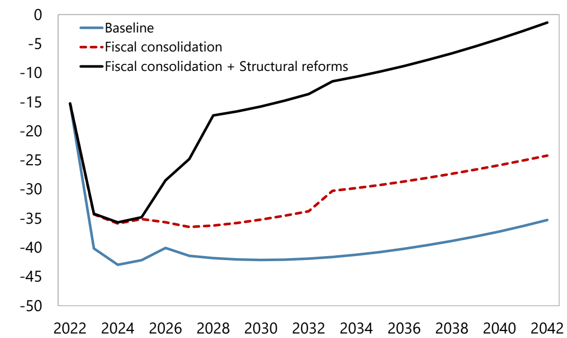
- **Real non-oil GDP** is lower than the baseline, averaging 1.6 percent over the medium term (2023–27), owing to the output costs of fiscal consolidation.[12] These are mitigated by the positive impact of reprioritization (towards growth-enhancing sectors such as health, education, agriculture, tourism, digitalization), by the improvement in the quality of public spending, and by structural reforms to promote the expansion of the private sector.[13] With sustained improvement in productivity and competitiveness, the economic impact of structural reforms is higher over the long term (2028–2042), where growth is projected to hover around 5-6 percent, significantly higher than under the baseline, driven by higher private investment and the development of the non-oil private sector, reduced import dependence, and a larger export base (Text Figure 9).

Text Figure 9. Real Non-oil GDP Growth
(In percent)



Source: IMF staff calculations.

Text Figure 10. Current Account Balance
(Percent of non-oil GDP)



Source: IMF staff calculations.

- **The current account balance deficit** over the medium and long term is projected to be considerably smaller in comparison to the baseline scenario, reflecting both higher exports (economic diversification and exports of high value-added agricultural exports) and lower imports of goods and services (in line with lower fiscal spending and lower reliance on food imports) (Text Figure 10).

COUNTRY CLASSIFICATION AND DETERMINATION OF SCENARIO STRESS TESTS

11. **The debt-carrying capacity is assessed to be weak (Text Table 5).** Timor-Leste's debt carrying capacity is assessed to be weak according to the Composite Indicator index of 2.69, which is

[12] Timor-Leste's fiscal multiplier, measured by the change in real non-oil GDP growth rate induced by a unit change in the primary balance (% GDP), is estimated to be close to 0.1-0.15. This is in line with other estimates in the literature which estimate it to be in the range of 0.08-0.17. Low multipliers indicate that much of the spending leaks into imports and/or is low quality reflecting supply-side constraints. The long-run multiplier is assumed to be 0.

[13] The positive impact of structural reforms often take time to materialize and could even entail short-term costs (e.g., labor and product market reforms). This is consistent with the macroeconomic impact of structural reforms seen across various IMF-supported programs (see Andritzky et al. (2021)). Structural reforms are estimated to have a positive impact on real GDP growth of around 0.3 percentage points in the medium-term, and 2.5 percentage points over the long run.

calculated based on the April 2022 World Economic Outlook and the 2020 Country Policy and Institutional Assessment. The Composite Indicator is based on a weighted average of the country's real GDP growth, remittances, international reserves, world growth, and the Country Policy and Institutional Assessment score.[14] Accordingly, debt sustainability analysis thresholds applicable for Timor-Leste are: 30 percent for the present value of external debt-to-GDP ratio, 140 percent for the present value of external debt-to-exports ratio, 10 percent for the external debt service to-exports ratio, 14 percent for the external debt service-to-revenue ratio, and 35 percent for the present value of public debt-to-GDP ratio.

Text Table 5. Timor-Leste Debt Carrying Capacity and Thresholds

Debt Carrying Capacity and Thresholds

Country	Timor-Leste
Country Code	537
Debt Carrying Capacity	Weak

Final	Classification based on current vintage	Classification based on the previous vintage	Classification based on the two previous vintage
Weak	Weak 2.69	Medium 2.71	Weak 2.67

APPLICABLE THRESHOLDS	
EXTERNAL debt burden thresholds	
PV of debt in % of	
Exports	140
GDP	30
Debt service in % of	
Exports	10
Revenue	14

APPLICABLE THRESHOLDS	
TOTAL public debt benchmark	
PV of total public debt in percent of GDP	35

12. The size of the shock to non-debt creating flows (foreign direct investment)-to-GDP ratio, and net current transfers-to-GDP and -to-exports was customized to account for one-off and structural factors. First, there is a large outflow in foreign direct investment equivalent to $575 million in 2019 due to Petroleum Fund's investment in Timor-Gap to purchase the 56 percent stake in the Greater Sunrise joint venture.[15] To prevent this one-off deviation in foreign direct investment flows from inflating the foreign direct investment-to-GDP ratio shock, the historical

[14] The calculation is based on 10-year averages of the variables, across 5 years of historical data and 5 years of projections, and the corresponding Country Policy and Institutional Assessment.

[15] Timor Gap is an autonomous government agency with the mandate to conduct oil and gas business on behalf of the Timor-Leste Government.

average and the standard deviation corresponds to 2011–21 (excluding 2019).[16] Second, to prevent the structural oil production cycle from inflating the export shock and to account for the fact that petroleum production will cease in 2023, the export stress test was customized in line with the 2021 Article IV consultation debt sustainability analysis. Third, the increase in Timorese workers' remittance outflows abroad has resulted in a shift from net current transfers inflows to net outflows in the last 5 years which is projected to continue until the end of the projection horizon. To take into account this shift, the historical average and the standard deviation of the current transfers-to-GDP shock corresponds to 2017–21.

13. The contingent liability stress test settings were also customized (Text Table 6). The default shock to contingent liabilities from state-owned enterprises debt and Public Private Partnerships is reduced to zero. This is because the former is already included in the baseline public debt, and the latter is negligible (see paragraph 1).

14. The commodity price shocks were introduced in a tailored stress test, with adjustments made to the default settings. Lack of export diversification has resulted in excessive reliance of Timor-Leste's external position on petroleum and gas receipts—the share of commodity exports in Timor-Leste's total exports is 92 percent on average over 2019–21. However, this is projected to decline to close to 70 percent on average over 2022–24, as the petroleum production from active fields comes to an end in 2023. Hence, the commodity price shock is tailored by adjusting the share of fuel in total exports of goods and services to match the latter.

15. A tailored stress test on natural disasters is added to the sensitivity analysis given that Timor-Leste is prone to natural disasters. The default setting (10 percent of GDP increase in debt stock, 1.5 percent decline in real GDP growth, and 3 percent decline in exports growth) was modified so that the stress test captures Timor-Leste's most recent experience with the cyclone and floods in April 2021.[17] The tailored stress test assumes that a natural disaster occurs in 2023 and that new debt is contracted to finance damages, increasing the public debt-to-GDP ratio by 14 percent in 2023, which is equivalent to the estimated damages from the April 2021 floods.[18] Real GDP and exports growth decline by 2 percent and 4 percent in FY2023, respectively, relative to the baseline.[19]

[16] The customization implied that: (i) the historical average of the net non-debt creating flows (foreign direct investment)-to-GDP ratio is revised up from -1.5 to 2.8 and the standard deviation is reduced from 13.5 to 2.2; (ii) the initial standard deviation of 56.5 of the export shock was scaled down to 11.3; and (iii) the historical average of the current official transfers-to-GDP ratio is revised from 3.9 to -5.4 and the standard deviation is reduced from 13.7 to 2.2

[17] See Selected Issues Paper.

[18] See World Bank (2021) report on "Learning from Tropical Cyclone Seroja: Building Disaster and Climate Resilience in Timor-Leste.

[19] The damages from Tropical Cyclone Seroja in April 2021 are estimated at US$245 million, which is historically the highest available estimates for economic damages. According to the International Disaster Database, the economic damages from previous natural disasters range from US$4 million to US$20 million.

Text Table 6: Coverage of Public Debt and Design of Contingent Liabilities (tailored) Stress Tests

1	The country's coverage of public debt	The central government, government-guaranteed debt		
		Default	Used for the analysis	Reasons for deviations from the default settings
2	Other elements of the general government not captured in 1.	0 percent of GDP	0	
3	SoE's debt (guaranteed and not guaranteed by the government) 1/	2 percent of GDP	0	Included in the baseline public debt
4	PPP	35 percent of PPP stock	0.00	Negligible PPP stock
5	Financial market (the default value of 5 percent of GDP is the minimum value)	5 percent of GDP	5	
	Total (2+3+4+5) (in percent of GDP)		5.0	

1/ The default shock of 2% of GDP will be triggered for countries whose government-guaranteed debt is not fully captured under the country's public debt definition (1.). If it is already included in the government debt (1.) and risks associated with SoE's debt not guaranteed by the government is assessed to be negligible, a country team may reduce this to 0%.

ASSESSMENT

External Debt Sustainability Analysis

16. **Under the baseline scenario, two of Timor-Leste's external debt indicators breach their respective debt sustainability analysis thresholds in the medium-term (Figure 1)**. First, the present value of external debt in percent of exports breaches the indicative threshold of 140 percent between 2024 and 2032. Second, the debt service to exports ratio also breaches the indicative threshold of 10 percent between 2023–29 (Figure 1). All the other indicators remain well below their relevant thresholds for the next fifteen years. Debt dynamics reflect the following: (i) increase in debt service payments as grace periods on existing loans come to an end; and (ii) government's strategy of increasing public external borrowing via concessional loans to reduce the need of tapping the Petroleum Fund from the projected expansion of public investment in infrastructure projects. Over the medium term, the present value of external debt is projected to increase gradually from 10 percent of non-oil GDP in 2021 to 13 percent in 2032.

17. **Debt dynamics show vulnerability to shocks to primary balance, natural disasters, exports, contingent liabilities and commodity prices.** Standardized stress tests show that a shock to the primary balance and exports are the most extreme shocks to the debt trajectory, also causing a breach of the debt service-to-exports, and the present value of debt-to-exports thresholds. Timor-Leste's high vulnerability to shocks is a reflection of its very small exports and revenue bases, and, therefore, its exposure to high debt services payment risks if its positive Petroleum Fund assets position is not taken into account. While, historically, the government has typically not resorted to debt financing, but instead relied on excess withdrawals from the Petroleum Fund, further use of the Petroleum Fund to meet Timor-Leste's debt servicing needs would fasten the Petroleum Fund depletion even further.

Public Debt Sustainability Analysis

18. **Under the baseline scenario, the present value of total public and publicly guaranteed debt-to-GDP ratio remains below the threshold level for the next fifteen years (Figure 2).** However, this indicator is vulnerable to the commodity price shocks and is expected to breach the threshold under the stress scenario starting in 2024. The Petroleum Fund is depleted towards the end of the twenty-year projection horizon, leading to all debt indicators breaching their respective

debt sustainability analysis thresholds (Figure 1). This is projected to lead to a substantial jump in external borrowing resulting in a breach of all debt thresholds beyond 2038.

Reform Scenario

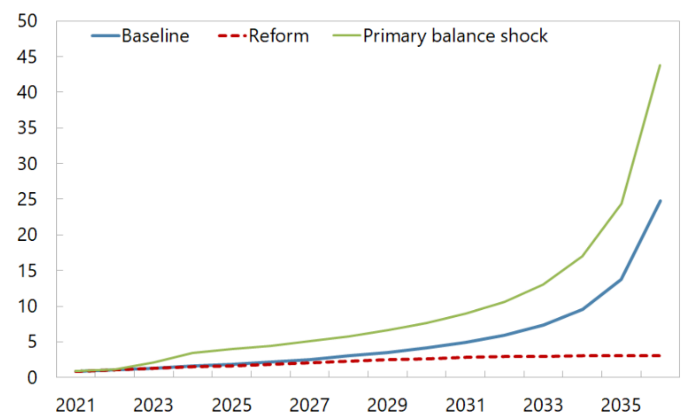
19. Staff's reform scenario illustrates how fiscal consolidation coupled with structural reforms can ensure long-term fiscal and debt sustainability. External concessional loans under the reform scenario are projected to be broadly in line with the baseline. The introduction of reforms significantly improves debt dynamics—the paths of debt burden indicators are better—over the twenty years. The duration of the breach of the present value of external debt in percent of exports and the debt service-to-exports ratio in the medium-term is also smaller compared to the baseline. Importantly, the Petroleum Fund is eventually preserved.

RISK RATING AND VULNERABILITIES

20. While the debt sustainability analysis assigns Timor-Leste a mechanical rating of "high" debt distress risk, judgement is applied to upgrade the rating to "moderate". Under the baseline scenario, the present value of debt-to-exports and debt service-to-exports breach the benchmark over the next 10 years (2023-33)—generating a mechanical debt distress rating of "high". The judgement reflects the country's large, liquid, and accessible net foreign assets in the form of the Petroleum Fund which serves as a strong mitigating factor in Timor-Leste's ability to carry and service debt until 2036, even under the scenario of the most extreme shock case (i.e., the primary balance shock).[20] The present value of debt does not exceed more than 25 percent of the projected value of the Petroleum Fund until 2036 under the baseline (Text Figure 11). Under the scenario of the most extreme shock case (i.e., primary balance shock), the present value of debt-to-Petroleum Fund assets reaches close to 44 percent by 2036. Although the long-term risks to debt sustainability have increased compared to the 2021 Article IV debt sustainability analysis because the Petroleum Fund is projected to be depleted faster, there is still time for the authorities to undertake the necessary policy adjustment (see paragraph 21). Conditional on the implementation of these reforms (paragraph 22), the debt is sustainable. With this, the risk of debt distress is assessed as "moderate" with limited space to absorb shocks (see Figure 5), which is unchanged from the previous 2021 DSA rating.

Text Figure 11. Petroleum Fund Buffer

(Present Value of Public External Debt-to-Petroleum Fund balance ratio, in percent)



Source: IMF staff calculations.

[20] The stock of outstanding public debt was 1 percent of the Petroleum Fund balance by end-2021.

21. The projected depletion of the Petroleum Fund within the 20-year horizon under current policies makes the case for fiscal consolidation more urgent than before. Although the Petroleum Fund is projected to be depleted by 2038 under the baseline, it could be depleted much faster—for instance, with a nominal investment return of 3 percent, it would be depleted by 2034. Fiscal consolidation aiming to achieve a sustainable fiscal position in a 10-year horizon, supported by expenditure rationalization and domestic revenue mobilization, would allow decreasing withdrawals from the Petroleum Fund until they reach a level consistent with preserving the Petroleum Fund. This process should go hand in hand with structural reforms to improve the business environment and governance, enhance competitiveness, and strengthen the external sector position. The analysis also highlights the importance of enhancing the resilience to natural disasters and climate change, including by prioritizing climate adaptation investment. Lack of political consensus is a risk that could impede the reforms that are warranted to put the fiscal position on a sustainable footing and strengthen medium-term growth prospects. Although that risk has a high probability of materializing, the implementation of the reforms has higher probability. The development of the Greater Sunrise fields is highly uncertain and the difficulties in finding a commercially viable option that is acceptable to the Timorese authorities.

22. The IMF and the World Bank stand ready to support the authorities in their efforts to ensure fiscal and debt sustainability. The authorities are aware of the challenge and requested extensive technical assistance from the IMF for ambitious fiscal reforms aiming to secure fiscal sustainability. Ongoing technical assistance on public financial management reforms by the IMF Fiscal Affairs Department, on revenue administration by the IMF Pacific Financial Technical Assistance Center, and on governance in anti-money laundering by the IMF Legal Department will support the authorities in ensuring fiscal and debt sustainability. The adoption of the Major Planning Options Law as specified in the new basic PFM law aims to bring more predictability to the budget process. The approval of a new procurement law, effective January 2023, is intended to increase transparency and simplify the procurement process. The authorities also welcomed Fund assistance on a Fiscal Responsibility Law to help improve fiscal discipline. Moreover, the World Bank and the International Finance Corporation (IFC) have plans to provide technical assistance to improve the prospects for private sector development including ease of doing business, agriculture, and tourism.

23. At the same time, public debt management needs to be strengthened.[21] External borrowing should be embedded in a suitable institutional framework, supported by best practice debt management policies and procedures. Strengthening the organization and capacity of the debt management unit, including preparing a medium-term debt management strategy (MTDS), and upgrading debt recording software are key areas for capacity building. However, in the near term, there is a need to produce comprehensive and realistic debt servicing projections for the existing debt. The monitoring and reporting of fiscal risks—such as contingent liabilities related to credit guarantees, pensions, public corporations, and public-private partnerships—should also be improved.

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[21] There have not been any noteworthy improvements in data coverage and public debt management since the 2019 Article IV.

AUTHORITIES' VIEWS

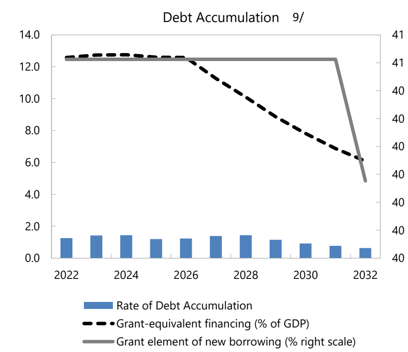
24. The authorities recognize the risk of depleting the Petroleum Fund and are committed to implementing reforms to ensure long-term fiscal sustainability. They acknowledged that the Petroleum Fund should be preserved to avoid the risk of a fiscal cliff and ensure intergenerational equity. While they are still evaluating options for developing the Greater Sunrise fields, they highlighted the uncertainty around it with potential revenues from the project at least a decade away. They agreed with staff's call for fiscal consolidation but noted difficulties in reaching political consensus to do that. They underscored ongoing efforts to improve public financial management aiming to make government spending more efficient. Domestic revenue reform plans in the pipeline—which include the introduction of the value-added tax (VAT) and a revised tax procedures code—are expected to gradually boost domestic revenue. They shared staff's view on the urgent need for diversification.

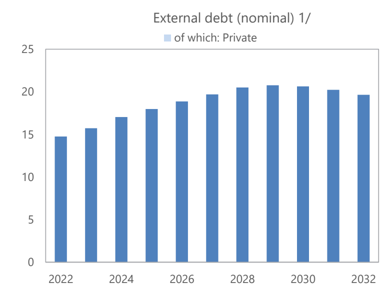
Table 1. Timor-Leste: External Debt Sustainability Framework, Baseline Scenario, 2019-2042

(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 8/	
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2032	2042	Historical	Projections
External debt (nominal) 1/	11.3	13.7	14.1	14.7	15.7	17.0	18.0	18.9	19.7	19.7	142.1	6.4	18.7
of which: public and publicly guaranteed (PPG)	11.3	13.7	14.1	14.7	15.7	17.0	18.0	18.9	19.7	19.7	142.1	6.4	18.7
Change in external debt	2.1	2.4	0.4	0.7	1.0	1.3	0.9	0.9	0.8	-0.6	20.3		
Identified net debt-creating flows	25.3	15.5	-7.2	11.1	36.1	39.2	38.5	36.5	37.9	38.9	30.2	0.1	35.7
Non-interest current account deficit	-8.0	19.1	-2.8	15.0	39.9	42.7	41.9	39.8	41.1	41.6	33.4	-42.0	39.0
Deficit in balance of goods and services	9.8	28.9	5.6	15.6	48.7	49.5	47.1	43.6	43.3	38.4	28.4	-18.7	40.9
Exports	51.2	23.9	46.1	39.0	8.6	6.6	6.9	7.1	7.4	9.1	13.9		
Imports	61.0	52.8	51.7	54.6	57.3	56.1	53.9	50.7	50.8	47.5	42.3		
Net current transfers (negative = inflow)	4.1	9.0	4.1	4.1	4.1	4.1	4.1	4.1	4.6	5.4	3.5	-3.9	4.7
of which: official	-9.5	-11.5	-11.5	-11.5	-11.5	-11.5	-11.5	-11.5	-10.2	-5.6	-1.7		
Other current account flows (negative = net inflow)	-22.0	-18.8	-12.5	-4.8	-12.9	-10.9	-9.3	-7.9	-6.8	-2.2	1.6	-19.4	-6.6
Net FDI (negative = inflow)	33.8	-4.5	-4.0	-3.7	-3.5	-3.4	-3.2	-3.1	-3.0	-2.5	-1.7	1.3	-3.0
Endogenous debt dynamics 2/	-0.4	1.0	-0.4	-0.2	-0.3	-0.1	-0.1	-0.1	-0.2	-0.3	-1.6		
Contribution from nominal interest rate	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	1.8		
Contribution from real GDP growth	-0.2	1.0	-0.2	-0.4	-0.6	-0.4	-0.4	-0.4	-0.5	-0.6	-3.4		
Contribution from price and exchange rate changes	-0.5	-0.3	-0.5	...	...	...	...	...	...	...	...		
Residual 3/	-23.2	-13.1	7.6	-10.4	-35.1	-37.9	-37.6	-35.6	-37.0	-39.4	-9.9	1.7	-35.2
of which: exceptional financing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Sustainability indicators													
PV of PPG external debt-to-GDP ratio	...	...	10.2	10.3	10.7	11.3	11.8	12.2	12.7	12.9	89.9		
PV of PPG external debt-to-exports ratio	...	...	22.1	26.5	124.4	171.4	171.4	171.1	171.0	141.9	646.6		
PPG debt service-to-exports ratio	0.8	2.1	1.6	2.4	12.0	15.7	15.4	14.4	11.9	8.6	17.1		
PPG debt service-to-revenue ratio	1.0	1.1	1.7	2.3	2.9	3.2	3.6	3.8	3.5	4.4	21.1		
Gross external financing need (Million of U.S. dollars)	445.7	239.6	-101.9	227.7	765.3	884.7	926.4	936.2	1037.6	1497.6	2548.6		
Key macroeconomic assumptions													
Real GDP growth (in percent)	2.1	-8.6	1.5	3.3	4.2	2.6	2.4	2.4	3.0	3.0	3.0	1.0	3.0
GDP deflator in US dollar terms (change in percent)	5.4	2.4	3.8	7.0	5.5	4.5	4.0	4.0	4.0	4.0	4.0	3.9	4.5
Effective interest rate (percent) 4/	2.7	2.0	2.0	1.8	1.8	1.7	1.7	1.6	1.6	1.5	1.6	2.2	1.6
Growth of exports of G&S (US dollar terms, in percent)	38.2	-56.4	103.7	-6.6	-75.7	-17.7	10.6	10.6	11.4	11.6	12.0	1.2	-0.9
Growth of imports of G&S (US dollar terms, in percent)	-1.9	-19.0	3.2	16.8	15.4	4.9	2.4	0.1	7.2	5.7	6.0	-6.7	6.8
Grant element of new public sector borrowing (in percent)	...	...	...	40.5	40.5	40.5	40.5	40.5	40.5	40.1	39.8	...	40.5
Government revenues (excluding grants, in percent of GDP)	42.0	45.5	42.6	40.4	35.4	32.3	29.6	27.4	25.4	17.7	11.3	50.2	26.7
Aid flows (in Million of US dollars) 5/	161.8	183.1	192.9	231.0	256.6	275.5	290.3	308.8	295.8	224.6	772.8		
Grant-equivalent financing (in percent of GDP) 6/	...	...	...	12.6	12.7	12.8	12.6	12.6	11.3	6.1	13.2	...	10.4
Grant-equivalent financing (in percent of external financing) 6/	...	...	...	88.6	87.3	87.2	88.4	88.6	87.6	89.0	43.1	...	88.0
Nominal GDP (Million of US dollars)	1,704	1,595	1,681	1,858	2,043	2,190	2,332	2,484	2,661	3,753	7,465		
Nominal dollar GDP growth	7.6	-6.4	5.4	10.5	9.9	7.2	6.5	6.5	7.1	7.1	7.1	5.0	7.6
Memorandum items:													
PV of external debt 7/	...	...	10.2	10.3	10.7	11.3	11.8	12.2	12.7	12.9	89.9		
In percent of exports	...	...	22.1	26.5	124.4	171.4	171.4	171.1	171.0	141.9	646.6		
Total external debt service-to-exports ratio	0.8	2.1	1.6	2.4	12.0	15.7	15.4	14.4	11.9	8.6	17.1		
PV of PPG external debt (in Million of US dollars)			171.1	192.3	218.6	247.9	274.1	302.7	337.0	483.0	6714.3		
(PVt-PVt-1)/GDPt-1 (in percent)				1.3	1.4	1.4	1.2	1.2	1.4	0.6	19.9		
Non-interest current account deficit that stabilizes debt ratio	-10.1	16.6	-3.2	14.4	39.0	41.4	41.0	38.9	40.3	42.2	13.2		

Definition of external/domestic debt	Currency-based
Is there a material difference between the two criteria?	No





Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as [r - g - ρ(1+g)]/(1+g+ρ+gρ) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and ρ = growth rate of GDP deflator in U.S. dollar terms.

3/ The residual in debt-creating flows is financed through excess withdrawals from the Petroleum Fund. Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.

4/ Current-year interest payments divided by previous period debt stock.

5/ Defined as grants, concessional loans, and debt relief.

6/ Grant-equivalent financing includes grants provided directly to the government and through new borrowing (difference between the face value and the PV of new debt).

7/ Assumes that PV of private sector debt is equivalent to its face value.

8/ Historical averages are generally derived over the past 10 years, subject to data availability, whereas projections averages are over the first year of projection and the next 10 years.

9/ The grant element may be overestimated due to debt projections.

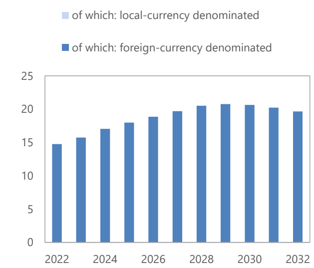
Table 2. Timor-Leste: Public Sector Debt Sustainability Framework, Baseline Scenario, 2019-2042

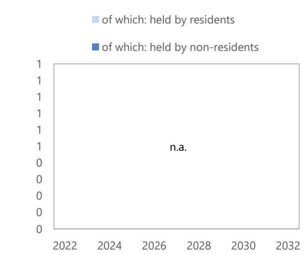
(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 7/	
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2032	2042	Historical	Projections
Public sector debt 1/	11.3	13.7	14.1	14.7	15.7	17.0	18.0	18.9	19.7	19.7	142.1	6.4	18.7
of which: external debt	11.3	13.7	14.1	14.7	15.7	17.0	18.0	18.9	19.7	19.7	142.1	6.4	18.7
Change in public sector debt	2.1	2.4	0.4	0.7	1.0	1.3	0.9	0.9	0.8	-0.6	20.3		
Identified debt-creating flows	29.7	26.4	42.5	53.5	66.2	61.1	52.1	39.7	39.1	36.5	19.8	35.4	45.4
Primary deficit	30.2	25.4	42.9	54.6	67.3	61.9	52.9	40.5	40.1	37.5	26.1	33.6	46.4
Revenue and grants	51.5	57.0	54.1	51.9	46.9	43.7	41.1	38.8	35.6	23.3	12.9	64.0	36.1
of which: grants	9.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	10.2	5.6	1.7		
Primary (noninterest) expenditure	81.7	82.4	97.0	106.5	114.2	105.6	94.0	79.4	75.7	60.8	39.0	97.6	82.5
Automatic debt dynamics	-0.4	1.0	-0.4	-1.1	-1.1	-0.8	-0.8	-0.8	-1.0	-1.1	-6.3		
Contribution from interest rate/growth differential	-0.1	1.2	-0.5	-1.0	-0.8	-0.5	-0.5	-0.5	-0.6	-0.7	-4.0		
of which: contribution from average real interest rate	0.1	0.1	-0.3	-0.6	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.4		
of which: contribution from real GDP growth	-0.2	1.1	-0.2	-0.4	-0.6	-0.4	-0.4	-0.4	-0.5	-0.6	-3.5		
Contribution from real exchange rate depreciation	-0.3	-0.1	0.0	...	...	...	...	...	...	...	...		
Other identified debt-creating flows	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Privatization receipts (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Recognition of contingent liabilities (e.g., bank recapitalization)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Debt relief (HIPC and other)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Other debt creating or reducing flow (please specify)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Residual 2/	-27.7	-24.0	-42.1	-52.9	-65.6	-60.1	-51.5	-39.2	-38.7	-37.4	-1.9	-33.7	-45.2
Sustainability indicators													
PV of public debt-to-GDP ratio 3/	...	...	10.2	10.3	10.7	11.3	11.8	12.2	12.7	12.9	89.9		
PV of public debt-to-revenue and grants ratio	...	...	18.8	19.9	22.8	25.9	28.6	31.4	35.6	55.3	695.0		
Debt service-to-revenue and grants ratio 4/	0.8	0.9	1.4	1.8	2.2	2.4	2.6	2.6	2.5	3.3	18.3		
Gross financing need 5/	30.3	25.6	43.7	55.6	68.3	62.9	54.0	41.5	41.0	38.3	28.5		
Key macroeconomic and fiscal assumptions													
Real GDP growth (in percent)	2.1	-8.6	1.5	3.3	4.2	2.6	2.4	2.4	3.0	3.0	3.0	1.0	3.0
Average nominal interest rate on external debt (in percent)	2.7	2.0	2.0	1.8	1.8	1.7	1.7	1.6	1.6	1.5	1.6	2.2	1.6
Average real interest rate on domestic debt (in percent)	-2.6	-0.4	-1.7	-4.9	-3.6	-2.7	-2.3	-2.3	-2.3	-2.4	-2.3	0.1	-2.7
Real exchange rate depreciation (in percent, + indicates depreciation)	-3.4	-1.2	0.4	...	...	...	...	...	...	...	...	-1.7	...
Inflation rate (GDP deflator, in percent)	5.4	2.4	3.8	7.0	5.5	4.5	4.0	4.0	4.0	4.0	4.0	3.9	4.5
Growth of real primary spending (deflated by GDP deflator, in percent)	-0.5	-7.8	19.6	13.5	11.7	-5.1	-8.8	-13.6	-1.7	-1.3	-2.0	-0.7	-1.0
Primary deficit that stabilizes the debt-to-GDP ratio 6/	28.1	23.0	42.5	54.0	66.3	60.6	52.0	39.6	39.3	38.1	5.8	31.2	45.9
PV of contingent liabilities (not included in public sector debt)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

Definition of external/domestic debt	**Currency-based**
Is there a material difference between the two criteria?	**No**

Public sector debt 1/





Sources: Country authorities; and staff estimates and projections.

1/ Coverage of debt: The central government, government-guaranteed debt. Definition of external debt is Currency-based.

2/ The residual in debt-creating flows is financed through excess withdrawals from the Petroleum Fund.

3/ The underlying PV of external debt-to-GDP ratio under the public DSA differs from the external DSA with the size of differences depending on exchange rates projections.

4/ Debt service is defined as the sum of interest and amortization of medium and long-term, and short-term debt.

5/ Gross financing need is defined as the primary deficit plus debt service plus the stock of short-term debt at the end of the last period and other debt creating/reducing flows.

6/ Defined as a primary deficit minus a change in the public debt-to-GDP ratio ((-): a primary surplus), which would stabilizes the debt ratio only in the year in question.

7/ Historical averages are generally derived over the past 10 years, subject to data availability, whereas projections averages are over the first year of projection and the next 10 years.

Table 3. Timor-Leste: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2022-2042

(In percent)

	Projections 1/																				
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
PV of debt-to GDP ratio																					
Baseline	10	11	11	12	12	13	13	13	13	13	13	12	12	12	11	10	26	45	61	76	90
A. Alternative Scenarios																					
A1. Key variables at their historical averages in 2022-2042 2/	10	-39	-89	-139	-187	-235	-283	-332	-378	-421	-461	-499	-534	-567	-596	-624	-632	-635	-637	-637	-636
B. Bound Tests																					
B1. Real GDP growth	10	12	14	14	15	16	16	16	16	16	16	15	15	14	14	13	32	55	76	94	111
B2. Primary balance	10	18	25	25	25	25	25	25	25	24	23	22	21	20	19	18	34	52	68	83	96
B3. Exports	10	18	22	22	23	23	24	24	23	23	22	21	20	19	18	17	38	64	86	107	125
B4. Other flows 3/	10	15	19	19	19	20	20	20	20	19	18	17	16	16	15	14	29	47	64	79	92
B5. Depreciation	10	13	5	6	7	7	8	9	9	9	10	10	10	9	9	9	29	52	74	93	110
B6. Combination of B1-B5	10	19	8	9	10	11	12	12	12	12	12	12	12	12	11	11	34	60	84	105	124
C. Tailored Tests																					
C1. Combined contingent liabilities	10	14	14	15	15	15	16	16	16	16	15	15	14	14	13	12	28	47	63	78	92
C2. Natural disaster	10	20	21	22	23	23	24	24	24	24	24	24	23	23	22	21	37	56	73	89	103
C3. Commodity price	10	12	14	13	10	7	5	1	-2	-5	-8	-11	-14	-16	-18	-20	-3	17	35	52	67
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
PV of debt-to-exports ratio																					
Baseline	27	124	171	171	171	171	171	166	159	151	142	132	122	112	102	93	224	366	482	574	647
A. Alternative Scenarios																					
A1. Key variables at their historical averages in 2022-2042 2/	27	-450	-1348	-2023	-2623	-3174	-3676	-4134	-4518	-4833	-5084	-5278	-5419	-5513	-5564	-5577	-5416	-5210	-4999	-4785	-4569
B. Bound Tests																					
B1. Real GDP growth	27	124	171	171	171	171	171	166	159	151	142	132	122	112	102	93	224	366	482	574	647
B2. Primary balance	27	204	375	363	351	339	328	313	295	275	255	236	217	198	181	165	290	426	536	624	691
B3. Exports	27	286	522	513	504	495	486	469	444	414	384	354	324	294	267	241	520	824	1070	1267	1420
B4. Other flows 3/	27	169	286	279	272	266	259	249	234	217	200	183	167	151	137	123	250	389	501	591	661
B5. Depreciation	27	124	61	68	73	80	86	87	85	86	84	81	77	73	68	63	198	344	463	558	632
B6. Combination of B1-B5	27	207	89	131	137	144	150	150	143	141	136	130	123	115	106	98	286	488	653	786	889
C. Tailored Tests																					
C1. Combined contingent liabilities	27	160	216	214	211	208	206	199	190	179	168	157	145	134	122	112	242	383	497	588	660
C2. Natural disaster	27	274	373	372	370	366	362	352	339	324	307	290	272	255	238	221	373	538	671	777	859
C3. Commodity price	27	180	282	222	164	109	62	19	-21	-59	-92	-120	-144	-163	-178	-189	-30	144	288	406	502
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140
Debt service-to-exports ratio																					
Baseline	2	12	16	15	14	12	11	10	10	9	9	8	8	8	8	7	7	10	13	15	17
A. Alternative Scenarios																					
A1. Key variables at their historical averages in 2022-2042 2/	2	13	-1	-19	-34	-50	-63	-73	-112	-149	-179	-204	-225	-244	-259	-272	-282	-286	-288	-288	-287
B. Bound Tests																					
B1. Real GDP growth	2	12	16	15	14	12	11	10	10	9	9	8	8	8	8	7	7	10	13	15	17
B2. Primary balance	2	12	18	20	19	16	14	13	16	18	17	16	15	14	14	13	12	14	17	19	21
B3. Exports	2	22	36	37	34	29	26	24	26	26	25	24	23	22	21	19	18	24	30	35	39
B4. Other flows 3/	2	12	17	18	17	14	13	12	14	14	13	13	12	11	11	10	9	12	15	17	19
B5. Depreciation	2	12	16	13	12	10	9	8	8	4	4	4	5	5	5	5	4	8	11	13	15
B6. Combination of B1-B5	2	16	24	19	18	14	13	12	14	7	7	7	8	8	8	7	7	11	16	19	22
C. Tailored Tests																					
C1. Combined contingent liabilities	2	12	17	16	15	13	11	11	10	9	9	9	9	8	8	8	7	10	13	15	17
C2. Natural disaster	2	14	23	22	21	18	16	15	15	13	13	13	12	12	11	11	10	13	17	20	22
C3. Commodity price	2	16	22	21	18	13	10	9	8	7	5	3	1	-1	-3	-4	-5	-2	1	4	6
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Debt service-to-revenue ratio																					
Baseline	2	3	3	4	4	3	3	4	4	4	4	5	5	6	6	7	7	11	15	18	21
A. Alternative Scenarios																					
A1. Key variables at their historical averages in 2022-2042 2/	2	3	0	-4	-9	-15	-20	-27	-46	-68	-92	-118	-146	-179	-215	-255	-299	-320	-332	-344	-355
B. Bound Tests																					
B1. Real GDP growth	2	3	4	4	5	4	4	5	5	5	5	6	7	7	8	8	9	13	18	22	26
B2. Primary balance	2	3	4	5	5	5	5	5	7	8	9	9	10	11	11	12	13	16	20	23	26
B3. Exports	2	4	5	5	6	5	5	6	7	7	8	9	9	10	11	11	12	17	22	27	31
B4. Other flows 3/	2	3	4	4	4	4	4	4	6	6	7	7	8	8	9	9	10	13	17	20	23
B5. Depreciation	2	4	4	4	4	4	4	4	4	2	2	3	4	4	5	5	6	11	16	20	24
B6. Combination of B1-B5	2	4	5	4	5	4	4	4	6	3	4	4	5	6	6	7	7	13	18	23	28
C. Tailored Tests																					
C1. Combined contingent liabilities	2	3	3	4	4	4	4	4	4	4	5	5	6	6	7	7	8	11	15	18	21
C2. Natural disaster	2	3	4	4	5	4	4	5	5	5	6	6	7	7	8	8	9	13	16	20	23
C3. Commodity price	2	3	4	5	5	4	3	3	3	3	2	1	0	-1	-2	-4	-5	-3	1	4	7
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14

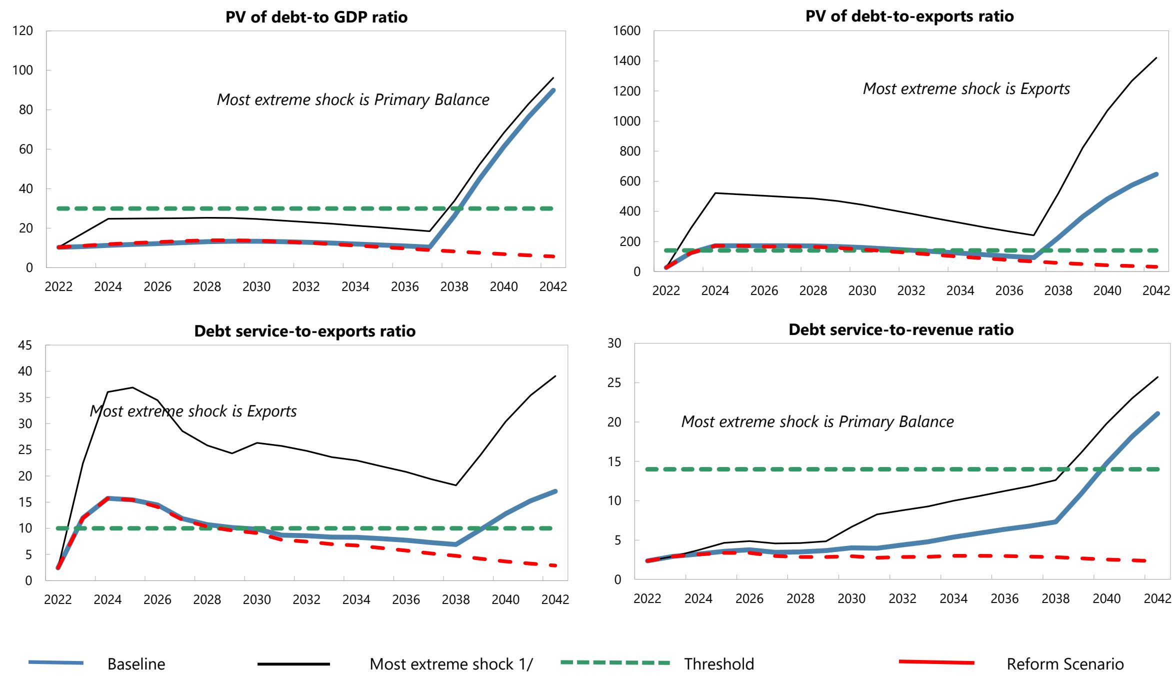
Sources: Country authorities; and staff estimates and projections.
1/ A bold value indicates a breach of the threshold.
2/ Variables include real GDP growth, GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.
3/ Includes official and private transfers and FDI.

Table 4. Timor-Leste: Sensitivity Analysis for Key Indicators of Public Debt, 2022-2032
(In percent)

	Projections 1/										
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
PV of Debt-to-GDP Ratio											
Baseline	10	11	11	12	12	13	13	13	13	13	13
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2042 2/	10	-11	-30	-44	-49	-55	-61	-67	-73	-79	-85
B. Bound Tests											
B1. Real GDP growth	10	15	21	26	30	34	**37**	**40**	**42**	**44**	**45**
B2. Primary balance	10	18	25	25	25	25	25	25	25	24	23
B3. Exports	10	13	16	16	17	17	17	17	17	17	16
B4. Other flows 3/	10	15	19	19	19	20	20	20	20	19	18
B5. Depreciation	10	12	11	9	8	7	7	6	5	4	3
B6. Combination of B1-B5	10	16	14	14	14	15	15	15	15	15	14
C. Tailored Tests											
C1. Combined contingent liabilities	10	14	14	15	15	15	16	16	16	16	15
C2. Natural disaster	10	20	21	22	23	23	24	24	24	24	24
C3. Commodity price	10	20	**36**	**49**	**60**	**68**	**75**	**80**	**84**	**88**	**90**
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public debt benchmark	35	35	35	35	35	35	35	35	35	35	35
PV of Debt-to-Revenue Ratio											
Baseline	20	23	26	29	31	36	40	44	48	52	55
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2042 2/	20	-24	-68	-104	-123	-149	-178	-213	-252	-296	-346
B. Bound Tests											
B1. Real GDP growth	20	30	46	59	73	89	107	126	145	164	184
B2. Primary balance	20	37	57	61	64	71	77	83	89	94	99
B3. Exports	20	28	36	39	43	47	53	58	62	66	69
B4. Other flows 3/	20	31	43	47	50	55	61	66	71	75	78
B5. Depreciation	20	26	25	23	22	21	21	20	18	17	15
B6. Combination of B1-B5	20	33	33	33	36	40	45	49	53	57	61
C. Tailored Tests											
C1. Combined contingent liabilities	20	29	33	36	39	43	48	53	57	62	66
C2. Natural disaster	20	43	48	53	58	65	73	80	87	95	102
C3. Commodity price	20	47	89	129	161	195	228	258	296	335	377
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Debt Service-to-Revenue Ratio											
Baseline	1.8	2.2	2.4	2.6	2.6	2.5	2.5	2.7	3.0	3.0	3.3
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2042 2/	1.8	2.3	1.3	0.3	-0.5	-1.3	-1.8	-2.4	-6.8	-11.7	-15.8
B. Bound Tests											
B1. Real GDP growth	1.8	2.4	2.9	3.4	3.7	3.8	4.1	4.6	5.7	6.8	8.4
B2. Primary balance	1.8	2.2	2.7	3.3	3.4	3.3	3.4	3.6	5.0	6.2	6.7
B3. Exports	1.8	2.2	2.5	2.8	2.9	2.7	2.8	3.0	3.7	4.1	4.5
B4. Other flows 3/	1.8	2.2	2.6	3.0	3.1	2.9	3.0	3.2	4.1	4.8	5.2
B5. Depreciation	1.8	2.5	3.1	3.2	3.2	2.9	2.8	2.9	2.8	2.3	2.3
B6. Combination of B1-B5	1.8	2.2	2.5	2.7	2.7	2.6	2.6	2.8	3.1	3.1	3.5
C. Tailored Tests											
C1. Combined contingent liabilities	1.8	2.2	2.5	2.7	2.8	2.6	2.7	2.9	3.2	3.2	3.5
C2. Natural disaster	1.8	2.2	2.9	3.2	3.3	3.1	3.3	3.5	3.8	3.9	4.3
C3. Commodity price	1.8	2.4	3.3	4.5	5.4	5.9	6.5	7.3	9.8	13.3	17.0
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Sources: Country authorities; and staff estimates and projections.
1/ A bold value indicates a breach of the benchmark.
2/ Variables include real GDP growth, GDP deflator and primary deficit in percent of GDP.
3/ Includes official and private transfers and FDI.

Figure 1. Timor-Leste: Indicators of Public and Publicly Guaranteed External Debt under Alternative Scenarios, 2022-2042



Customization of Default Settings	Size	Interactions
Tailored Tests		
Combined CLs	Yes	
Natural Disasters	Yes	Yes
Commodity Prices 2/	No	No
Market Financing	n.a.	n.a.

Note: "Yes" indicates any change to the size or interactions of the default settings for the stress tests. "n.a." indicates that the stress test does not apply.

Borrowing Assumptions for Stress Tests*	Default	User defined
Shares of marginal debt		
External PPG MLT debt	100%	
Terms of marginal debt		
Avg. nominal interest rate on new borrowing in USD	1.6%	1.6%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	29	29
Avg. grace period	6	6

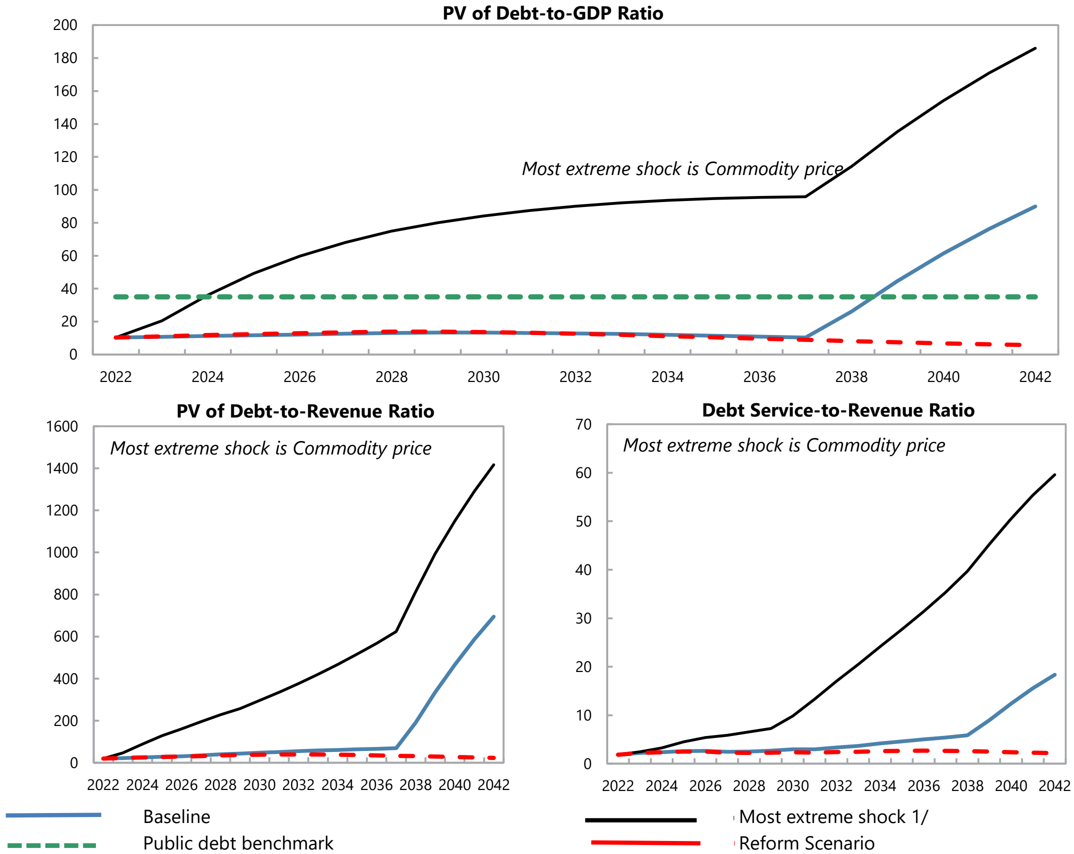
* Note: All the additional financing needs generated by the shocks under the stress tests are assumed to be covered by PPG external MLT debt in the external DSA. Default terms of marginal debt are based on baseline 10-year projections.

Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2032. Stress tests with one-off breaches are also presented (if any), while these one-off breaches are deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most exterme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

2/ The magnitude of shocks used for the commodity price shock stress test are based on the commodity prices outlook prepared by the IMF research department.

Figure 2. Timor-Leste: Indicators of Public Debt under Alternative Scenarios, 2022-2042



Borrowing Assumptions for Stress Tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	100%	100%
Domestic medium and long-term	0%	0%
Domestic short-term	0%	0%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	1.6%	1.6%
Avg. maturity (incl. grace period)	29	29
Avg. grace period	6	6
Domestic MLT debt		
Avg. real interest rate on new borrowing	0.0%	0.0%
Avg. maturity (incl. grace period)	1	1
Avg. grace period	0	0
Domestic short-term debt		
Avg. real interest rate	0%	0.0%

* Note: The public DSA allows for domestic financing to cover the additional financing needs generated by the shocks under the stress tests in the public DSA. Default terms of marginal debt are based on baseline 10-year projections.

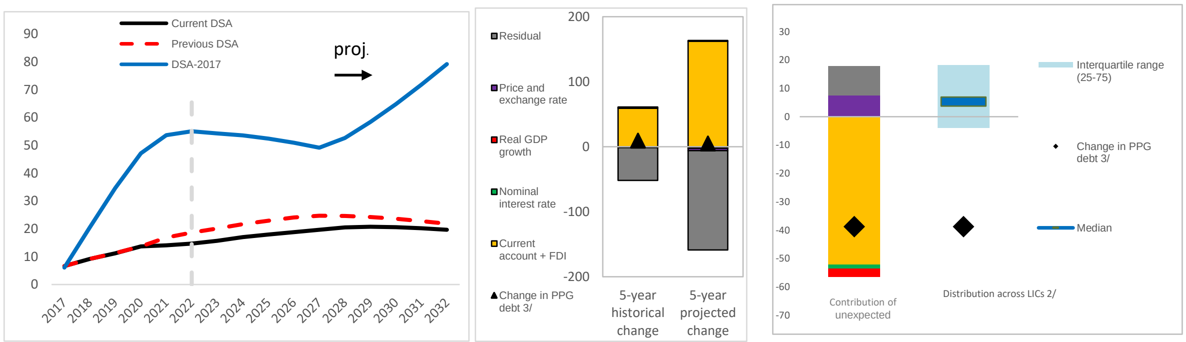
Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2032. The stress test with a one-off breach is also presented (if any), while the one-off breach is deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most exterme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

Figure 3. Timor-Leste: Drivers of Debt Dynamics – Baseline Scenario

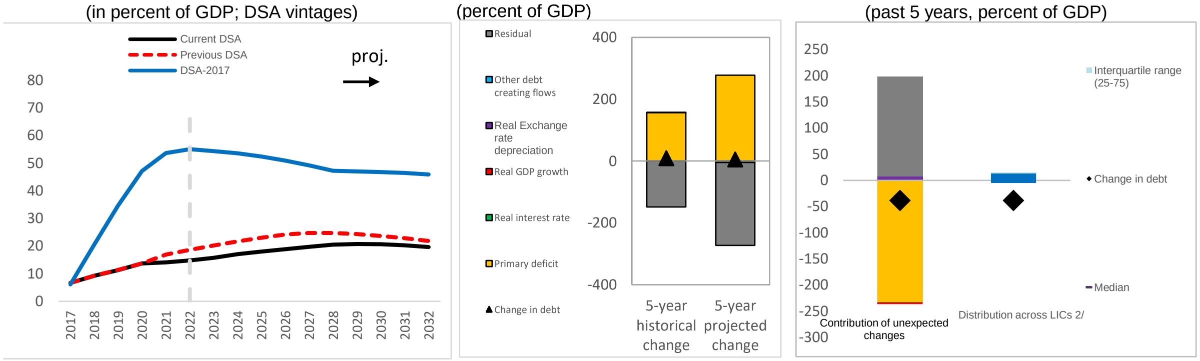
External debt

Gross Nominal PPG External Debt (in percent of GDP; DSA vintages) | Debt-creating flows (percent of GDP) | Unexpected Changes in Debt 1/ (past 5 years, percent of GDP)



Public debt

Gross Nominal Public Debt (in percent of GDP; DSA vintages) | Debt-creating flows (percent of GDP) | Unexpected Changes in Debt 1/ (past 5 years, percent of GDP)



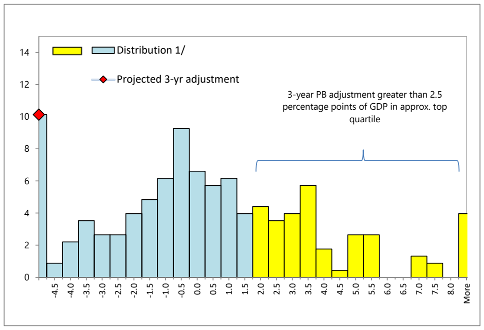
1/ Difference between anticipated and actual contributions on debt ratios.

2/ Distribution across LICs for which LIC DSAs were produced.

3/ Given the relatively low private external debt for average low-income countries, a ppt change in PPG external debt should be largely explained by the drivers of the external debt dynamics equation.

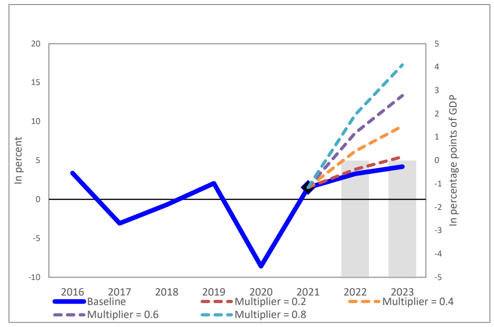
Figure 4. Timor-Leste: Realism Tools

3-Year Adjustment in Primary Balance
(Percentage points of GDP)



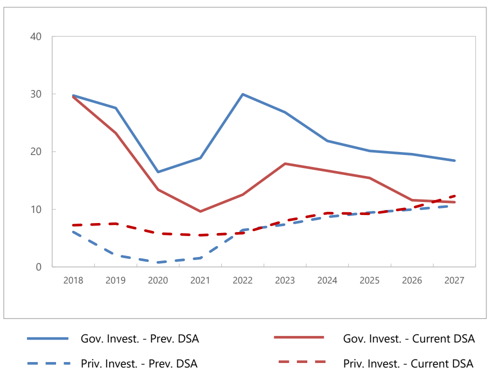
1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

Fiscal Adjustment and Possible Growth Paths 1/



1/ Bars refer to annual projected fiscal adjustment (right-hand side scale) and lines show possible real GDP growth paths under different fiscal multipliers (left-hand side scale).

Public and Private Investment Rates
(% of GDP)



Contribution to Real GDP Growth
(percent, 5 year average)

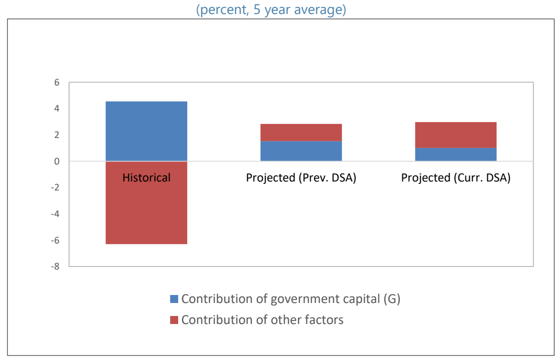


Figure 5. Timor-Leste: Qualifications of the Moderate Category, 2022-2032 1/

Sources: Country authorities; and staff estimates and projections.
1/ For the PV debt/GDP and PV debt/exports thresholds, x is 20 percent and y is 40 percent. For debt service/Exports and debt service/revenue thresholds, x is 12 percent and y is 35 percent.