INTERNATIONAL MONETARY FUND

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DEMOCRATIC REPUBLIC OF TIMOR-LESTE

May 2019

2019 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR THE DEMOCRATIC REPUBLIC OF TIMOR-LESTE

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 2019 Article IV consultation with the Democratic Republic of Timor-Leste, the following documents have been released and are included in this package:

- A **Press Release** summarizing the views of the Executive Board as expressed during its March 27, 2019 consideration of the staff report that concluded the Article IV consultation with the Democratic Republic of Timor-Leste.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on March 27, 2019, following discussions that ended on January 25, 2019, with the officials of the Democratic Republic of Timor-Leste on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on March 8, 2019.
- An **Informational Annex** prepared by the IMF staff.
- A **Debt Sustainability Analysis** prepared by the staffs of the IMF and the International Development Association (IDA).
- A **Statement by the Executive Director** for the Democratic Republic of Timor-Leste.

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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IMF Executive Board Concludes 2019 Article IV Consultation with the Democratic Republic of Timor-Leste

On March 27, 2019, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with the Democratic Republic of Timor-Leste.

Non-oil real GDP contracted sharply in 2017 by about 5 percent as public spending fell due to political and economic uncertainty. With a pick-up in public spending in Q4 2018, non-oil growth is expected to recover to around zero percent in 2018. Inflation remained low in 2017 at 0.8 percent (y/y), but rebounded to 2.1 percent (y/y) on the back of higher prices of rice and tobacco as well as an increase in education fees.

The overall fiscal deficit improved to 19 percent of GDP in 2017 from 35 percent in 2016, and is expected to further improve in 2018. As a result, excess withdrawals from the Petroleum Fund (PF) fell significantly. With petroleum revenue and investment returns exceeding total withdrawals, the PF balance increased in 2017 for the first time since 2014. However, tighter global financial market conditions at the end of 2018 caused the PF balance to fall to US$16 billion.

The external current account deficit was nearly halved to 10 percent of GDP in 2017 compared to the previous year, with reduced imports amid weaker public spending. A bad coffee harvest led to a decline in non-oil exports, but petroleum export receipts improved as oil prices rose. The current account deficit is expected to remain broadly unchanged in 2018. The real effective exchange rate depreciated in 2017, followed by an appreciation in 2018 on the back of higher domestic inflation.

Non-oil GDP growth is expected to rebound to 5 percent in 2019, as public spending recovers. Medium-term growth will broadly remain the same. Apart from a planned increase in petroleum production in 2019 – causing an increase in overall GDP growth in 2019—value added from the petroleum-sector will continue to decline until production ends in 2022, resulting in a sharp overall GDP contraction in 2023. Inflation is expected to rise, reaching 4 percent over the

[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.

medium term. Excess PF withdrawals will continue to finance fiscal deficits, and the CA will largely be driven by fluctuations in investment income from the PF.

Medium- and long-term risks are tied to progress on implementing fiscal and structural reforms. The key challenge facing Timor-Leste will be achieving greater economic diversification. Insufficient progress in reducing reliance on the public sector and generating more private sector jobs would put added pressure on public finances, risk long-run fiscal sustainability, and further deteriorate labor market outcomes. Over the long-term, development of the Greater Sunrise fields constitutes a significant upside risk, conditional on technical and economic viability and that proper safeguards are taken to minimize funding risks.

Executive Board Assessment[2]

Executive Directors commended the authorities for the impressive progress since independence in 2002 and noted the projected pick-up in near-term economic growth. However, significant challenges remain, and Directors highlighted the need to ensure long-run fiscal sustainability, strengthen institutional capacity, generate jobs for a young and rapidly-growing population, and continue to develop the financial system.

Directors recognized that the main challenge facing Timor-Leste is improving fiscal management. They underscored the need to adopt a credible fiscal strategy and protect the assets of the country's Petroleum Fund. Directors stressed the need to improve expenditure control, raise spending efficiency, and improve revenue mobilization. Moreover, Directors welcomed the authorities ongoing efforts to develop a government-led, donor-partnered, Public Financial Management strategy and strengthen the country's legal and institutional framework to combat corruption.

Directors emphasized the need to diversify the economy and enhance the business environment to facilitate private investment and business formation. While the development of the Greater Sunrise fields represents an important source of potential petroleum revenue, a more diverse economy is essential to create job opportunities for a rapidly-growing working-age population.

Directors stressed that investment in education and health will be essential to capture Timor-Leste's demographic dividend and ensure high, inclusive, and sustainable growth to help it achieve the Sustainable Development Goals. Improving both basic education and vocational education and training should help raise labor productivity and address existing and future skill shortages. Directors also emphasized the necessity to address both gender and rural-urban inequalities.

[2] At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: http://www.imf.org/external/np/sec/misc/qualifiers.htm.

Directors noted the soundness of the banking system and commended the authorities for improvements in the payment system. They underscored the importance of ensuring a strong and effective regulatory and supervisory framework as the financial sector develops. They also saw significant room to improve financial intermediation and were encouraged by their continued commitment to enhance financial inclusion. In this context, Directors welcomed the new Land Law and the development of a secured transaction framework for movable property.

Directors agreed that the use of the U.S. dollar as legal tender has served Timor-Leste well and emphasized the importance of increasing international competitiveness by maintaining low inflation and boosting labor productivity.

Directors called for continued efforts to improve statistical capacity and encouraged the authorities to further leverage technical assistance from the Fund and other development partners.

Timor-Leste: Selected Economic Indicators, 2015-24

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
				Est.			Proj.			
					(Annual percent change)					
Real sector										
Real total GDP	20.9	0.8	-4.5	-8.0	6.6	1.3	-12.3	-19.2	-2.0	4.8
Real oil GDP	46.5	-4.0	-4.4	-18.3	9.0	-3.7	-38.3	-81.3	-100.0	-
Real non-oil GDP	4.0	5.3	-4.6	0.8	5.0	4.8	4.8	4.8	4.8	4.8
CPI (annual average)	0.6	-1.5	0.5	2.3	2.5	3.2	3.7	3.9	4.0	4.0
CPI (end-period)	-0.6	0.0	0.6	2.1	2.8	3.5	3.8	4.0	4.0	4.0
					(In percent of non-oil GDP, unless otherwise indicated)					
Central government operations										
Revenue	64.1	54.2	49.3	49.7	40.9	34.6	30.3	26.3	23.2	21.9
Domestic revenue	10.6	11.6	11.3	10.4	9.8	9.0	8.4	7.7	7.1	7.4
Estimated Sustainable Income (ESI)	39.7	32.0	27.8	29.5	23.3	20.4	17.5	14.9	12.4	10.9
Grants	13.8	10.7	10.2	9.8	7.8	5.1	4.4	3.7	3.7	3.7
Expenditure	96.9	106.4	79.3	78.5	75.1	76.6	59.2	52.1	43.4	41.7
Recurrent	64.0	60.4	53.9	47.3	50.6	47.0	43.5	39.5	36.2	34.5
Net acquisition of nonfinancial assets	19.1	35.4	15.2	21.4	16.8	24.4	11.3	8.9	3.5	3.5
Donor project	13.8	10.7	10.2	9.8	7.8	5.1	4.4	3.7	3.7	3.7
Net lending/borrowing	-32.8	-52.2	-30.0	-28.7	-34.3	-42.0	-28.9	-25.8	-20.2	-19.8
					(Annual percent change, unless otherwise indicated)					
Money and credit										
Deposits	76.7	11.9	36.1	41.5	29.8	35.8	35.7	33.8	35.1	34.9
Credit to the private sector	10.5	-1.8	24.8	-3.8	13.0	10.3	10.9	12.8	13.3	9.1
Lending interest rate (percent, end-period)	13.5	14.0	13.3	13.5	...	...	...	...	...	...
					(In millions of U.S. dollars, unless otherwise indicated)					
Balance of payments										
Current account balance 1/	204	-544	-284	-279	56	-62	15	-329	-171	-295
(In percent of GDP)	6.6	-21.6	-10.2	-9.0	1.8	-1.8	0.5	-10.4	-4.9	-7.6
Trade balance	-635	-546	-615	-626	-652	-714	-694	-734	-717	-760
Exports 2/	18	20	17	22	26	30	36	43	50	60
Imports	653	567	631	648	678	744	730	777	768	820
Services (net)	-583	-569	-344	-398	-291	-397	-311	-389	-299	-271
Petroleum revenue	1,281	872	2,034	672	899	938	890	647	677	559
Overall balance	220	-157	263	26	103	79	79	18	41	51
Public foreign assets (end-period) 3/	16,655	16,125	17,344	16,374	16,262	15,865	15,667	15,194	14,870	14,396
(In months of imports)	153	160	195	172	182	151	159	138	144	130
Exchange rates										
NEER (2010=100, period average)	120.2	120.1	119.7	119.9	...	...	...	...	...	...
REER (2010=100, period average)	150.3	146.2	143.6	146.3	...	...	...	...	...	...
Memorandum items (in millions of U.S. dollars):										
GDP at current prices:	3,104	2,521	2,778	3,090	3,145	3,413	3,333	3,166	3,498	3,886
Non-oil GDP	1,609	1,702	1,730	1,863	2,086	2,342	2,643	3,035	3,498	3,886
Oil GDP	1,496	820	1,048	1,228	1,060	1,071	689	131	0	0
GDP per capita	2,620	2,080	2,240	2,435	2,422	2,569	2,453	2,279	2,463	2,677
(Annual percent change)	-25.0	-20.6	7.7	8.7	-0.5	6.1	-4.5	-7.1	8.1	8.7
Crude oil prices (U.S. dollars per barrel, WEO) 4/	51	43	53	68	54	55	56	57	57	58
Petroleum Fund balance (in millions of U.S. dollars) 5/	16,218	15,844	16,799	15,803	15,588	15,112	14,834	14,343	13,979	13,453
(In percent of non-oil GDP)	1,008	931	971	848	747	645	561	473	400	346
Public debt (in millions of U.S. dollars)	46	77	107	168	255	303	361	457	559	666
(In percent of GDP)	2.9	4.5	6.2	9.0	12.2	12.9	13.6	15.1	16.0	17.1
Population growth (annual percent change)	2.4	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2

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

1/ Excludes trade in goods and services of entities located in the Joint Petroleum Development Area, which are considered non-resident.

2/ Excludes petroleum exports, the income of which is recorded under the income account.

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

4/ Simple average of UK Brent, Dubai, and WTI crude oil prices based on July 2017 WEO assumptions.

5/ Closing balance.

INTERNATIONAL MONETARY FUND

DEMOCRATIC REPUBLIC OF TIMOR-LESTE

STAFF REPORT FOR THE 2019 ARTICLE IV CONSULTATION

March 8, 2019

Context: Notwithstanding impressive progress since independence in 2002, Timor-Leste remains a fragile post-conflict nation with weak human and institutional capacity and large infrastructure gaps. The main challenge facing Timor-Leste is to effectively manage its petroleum wealth to reduce public-sector dependence, diversify the non-oil economy, generate jobs for a young and rapidly-growing population, and raise living standards.

Recent developments and outlook: Political uncertainty constrained public spending in 2017-18, resulting in a sharp contraction of non-oil GDP in 2017 and flat growth in 2018. Snap elections in May 2018 ended the year-long political impasse and the economy is expected to gradually recover in 2019 as public spending regains momentum. Risks to the outlook are closely tied to the success of fiscal and structural reforms to maintain macroeconomic stability, ensure long-run fiscal sustainability, and facilitate economic diversification.

Policy Recommendations:

- *Fiscal policy*. A fiscal strategy should be pursued to improve expenditure control and efficiency, mobilize domestic revenue, and commit to protecting the wealth of the Petroleum Fund. Ongoing efforts to strengthen public financial management and promote good governance are crucial to ensure public investment efficiency and enhance the quality of public services.
- *Structural reforms*. Reforms to increase labor productivity and enable diversification will be key to generate much-needed job growth and private sector investment. Efforts should focus on improving quality of and access to education and healthcare, reduce skill gaps, encourage business formation, and promote private investment.
- *Financial sector development*. Continued efforts to develop the financial sector should help channel domestic savings to productive investments, while expanding access to financial services will be essential to facilitate diversification and promote inclusive growth. Ensuring a strong and effective regulatory and supervisory framework will be important to safeguard financial stability as the financial sector develops.
- *Capacity building*. Addressing capacity gaps in fiscal management, financial regulation and supervision, and statistics is crucial to support reform efforts.

Approved By
Paul Cashin (APD) and Edward Gemayel (SPR)

Discussions were held in Dili during January 14–25, 2019. The staff team comprised Niklas Westelius (Head), Naoya Adachi, and Gee Hee Hong (all APD). Anh Le and Nadine Dubost assisted from HQ. David Kloeden (PFTAC) and Pedro Martins (World Bank Group) participated in several mission meetings. Pedro Fachada (OEDBR) participated in the discussions.

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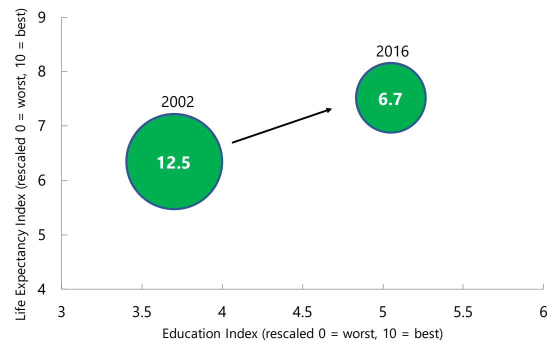
CONTEXT

1. **Timor-Leste has made significant progress since independence in 2002.** By the end of its 25-year-long resistance struggle, Timor-Leste had lost over 70 percent of its infrastructure, a large portion of its population, and was Asia's poorest nation.[1] Since then, Timor-Leste has laid the foundation for political stability, improved living standards, and implemented a strong institutional framework for managing its petroleum wealth (Annex I). A Strategic Development Plan (SDP) was developed in 2011, with the goal to reach upper-middle income status by 2030. The SDP has also been aligned with the United Nations Sustainable Development Goals (SDGs) (Table 6).

Human Development Progress since Independence
(Poverty gap at $1.90 a day (2011 PPP) as a percentage of the poverty line)



Source: UNDP, Timor-Leste State Budget Book 2018.

2. **Timor-Leste faces a challenging environment to achieve its development objectives**. Petroleum production from active fields is projected to end in 2022, but the economy still grapples with overreliance on public expenditure for growth and employment. Going forward, Timor-Leste will need to continue to carefully manage its accumulated wealth from past petroleum production to close remaining gaps in infrastructure, health, and education; strengthen institutional capacity; create jobs for a young and growing population; and foster a conducive environment for private sector diversification and inclusive growth.

RECENT DEVELOPMENTS, OUTLOOK, AND RISKS

3. **The recent breakdown of consensus politics has increased uncertainty and slowed reform efforts.** The minority government elected in 2017 failed to obtain parliamentary approval for its five-year Government Program and 2017 supplementary budget. The consequent political stalemate resulted in the sharpest economic downturn since 2006 and a halt to key economic reforms. Snap elections in May 2018 ended the political impasse after the Alliance for Change and Progress (AMP) coalition formed a majority government and put forth a new government program with a continued focus on the key pillars of the SDP. The political stalemate also compressed budget preparations, with the 2018 and 2019 budgets approved in September 2018 and February 2019, respectively.

4. **Political uncertainty adversely affected Timor-Leste's economic activity in 2017 and for most of 2018.** Real output in 2017 is estimated to have contracted by close to 5 percent as public expenditures fell by over one third. Most of the decline was related to capital spending, which contracted by close to 60 percent. Public spending continued to be restrained during most of 2018

[1] The Commission for Reception, Truth and Reconciliation in East Timor, CAVR, 2006.

due to the *duo-decimal regime*.[2] However, non-oil growth is expected to have recovered somewhat in 2018 as public spending picked up in Q4 2018 following the approval of the 2018 budget. Inflation remained low in 2017 at 0.8 percent, but reached 2.1 percent at the end of 2018, largely due to higher prices of rice and tobacco and an increase in education fees.[3]

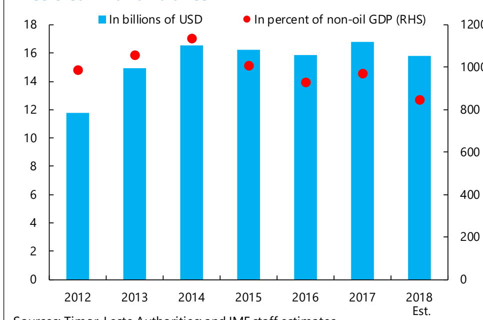
5. Lower public spending narrowed the fiscal deficit, improved the current account, and slowed credit growth.

- *Fiscal deficit and Petroleum Fund (PF) balance*.[4] The fiscal deficit improved from 35 to 19 percent of GDP in 2017 and is expected to have further improved in 2018. As a result, excess withdrawals from the PF fell significantly. With petroleum revenue and investment returns exceeding total withdrawals, the PF balance increased in 2017 for the first time since 2014. However, tighter global financial market conditions at the end of 2018, caused the PF balance to drop to US$16 billion.

- *Current account (CA)*. The current account improved in 2017 as imports fell amid weaker public spending. A bad coffee harvest led to a decline in non-oil exports, but petroleum export receipts improved as oil prices rose. The current account deficit is estimated to remain broadly unchanged in 2018. The real effective exchange rate depreciated in 2017, but appreciated in 2018 on the back of higher domestic inflation and a stronger US dollar.

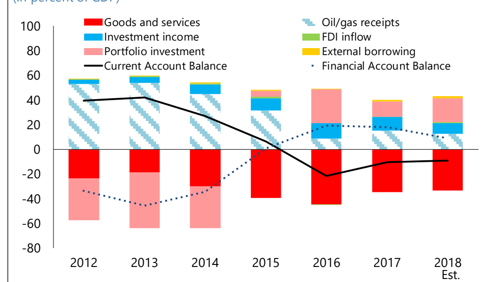
- *Financial sector*. After rising sharply in 2017, partly in anticipation of public investment spending, credit growth slowed significantly in 2018. Non-performing loans (NPLs) reached an all-time low in early 2018 due to the resolution of legacy NPLs. However, they started to rise in mid-2018 as firms faced delays in receiving government payments. Overall, the size of the financial sector remains small with the ratio of credit-to-non-oil GDP estimated at 13 percent in 2018.

Petroleum Fund Balance



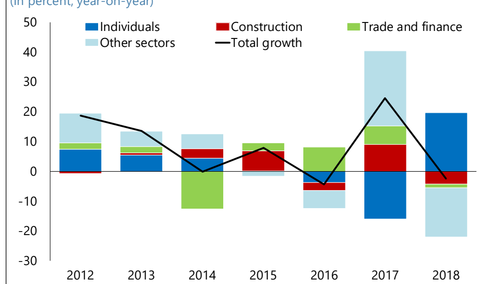
Sources: Timor-Leste Authorities; and IMF staff estimates.

Balance of Payments
(In percent of GDP)



Source: Timor-Leste Authorities.

Loans to Private Sector Contribution to Growth
(In percent, year-on-year)



Source: Central Bank of Timor-Leste.

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[2] The *duo decimal regime* allows public spending to continue without a budget in place. However, monthly spending is restricted to 1/12 of each budget line of the previous approved budget.

[3] The government's desired medium target for inflation is 4 percent.

[4] The PF (a type of sovereign wealth fund), which was created in 2005, provides budget financing through the Estimated Sustainable Income (ESI) rule—which is set at 3 percent of the petroleum wealth (i.e., a net present value of petroleum-related revenues)—and any excess withdrawals (which exceeds the ESI and are subject to parliamentary approval).

6. **Non-oil GDP growth is expected to rebound in 2019 as public spending recovers.** Non-oil growth is expected to increase to around 5 percent in 2019, as government spending regains momentum. Over the medium term, non-oil growth is projected to remain around 5 percent. Apart from a planned temporary increase in petroleum production in 2019—causing an increase in overall GDP growth in 2019—value added from the petroleum-sector will continue to steadily decline until production ends in 2022, resulting in a sharp overall GDP contraction in 2021-2023. Inflation is projected to rise, reaching 4 percent over the medium term. Excess PF withdrawals are expected to continue to finance fiscal deficits leading to a slow but gradual reduction in the PF balance. The CA balance will on average be negative over the medium term, but is expected to be substantially smaller than fiscal deficits due to investment income from the PF.

7. **Petroleum production from active fields is shrinking and will end in 2022, but a new maritime boundary treaty with Australia could open a pathway for future oil and gas revenues.** The treaty was signed on March 6, 2018, and includes a framework for the joint development of the Greater Sunrise fields. To secure the development of a downstream industry on the South Coast of Timor-Leste, the government is set to finalize acquisitions of shares from two joint venture partners for a total of US$650 million (Box 1).

8. **Risks to the outlook are broadly balanced** (Annex II)**.**

- *Near-term risks.* Elevated political risk could delay reform implementation and adversely affect public spending in the near-term. Inflationary pressure could also materialize if import prices rise sharply. Ad verse spillovers from global developments are likely to be marginal due to Timor-Leste's limited integration into global non-oil trade, but equity price volatility and rising U.S. interest rates could affect the PF balance and associated income flows. With most of the accumulated petroleum wealth already above ground, a sharp permanent decline in global oil prices would have minimal impact on fiscal revenues and the PF balance going forward (text table).

Impact on the ESI and PF Balance from a Permanent 50 Percent Decline in WEO Oil Price Projections starting in 2019
(In millions of USD)

	2018	2019	2020	2021	2022	2023
Estimated Sustainable income(i.e. revenue to budget)						
Baseline	550	507	491	479	468	449
Low oil price scenario	550	499	483	471	460	443
Loss of revenue	-	7	8	7	8	7
Petroleum Fund Balance						
Baseline	15,803	15,338	15,001	14,697	14,141	13,737
Low oil price scenario	15,803	15,310	14,924	14,553	13,955	13,543
Decline in PF balance	-	29	77	143	186	194

Source: IMF staff calculations.

- *Medium- and long-term risks.* Risks are tied to progress on fiscal and structural reforms. Insufficient progress to reduce public sector reliance and generate increased private-sector jobs would put added pressure on public finances, risk long-run fiscal sustainability due to large excess PF withdrawals, and further deteriorate labor market outcomes. Over the long run, development of the Greater Sunrise fields constitutes a significant upside risk, conditional on technical and economic viability and proper safeguards being taken to minimize funding risks.[5]

[5] Given the numerous uncertainties, revenues from the Greater Sunrise oil/gas fields are not reflected in staff's projections of the wealth of the PF, or in any macroeconomic projections.

Authorities' Views

9. The authorities recognized that the political impasse has had a significant impact on the economy. The authorities highlighted that the contraction of non-oil GDP in 2017 was driven in part by low public capital expenditure due to the *duo decimal regime*. However, the decline was mitigated by relatively robust household consumption— supported by government transfers—and an improved trade balance. The authorities estimated growth in 2018 to be slightly above zero, but emphasized that this will depend on the growth impact from increased public expenditure at the end of the year.

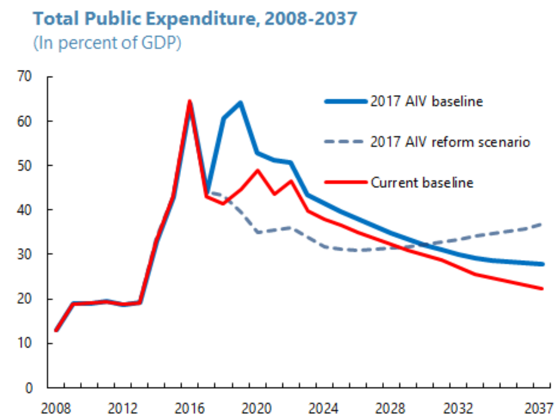
10. The authorities broadly agreed on the outlook and risks, but projected higher medium-term growth. The authorities projected medium-term growth at 7 percent compared to staff's 5 percent. The authorities highlighted that the main reason for the divergence was the inclusion of positive feedback effects from the development of the Greater Sunrise fields and associated capital investments, and they also expressed confidence that private sector investment will emerge as an important growth driver over time, partly due to large-scale projects (e.g., Tibar Bay Port, TL Cement, and Pelican resort) and ongoing structural and legal reforms to improve the overall business environment.

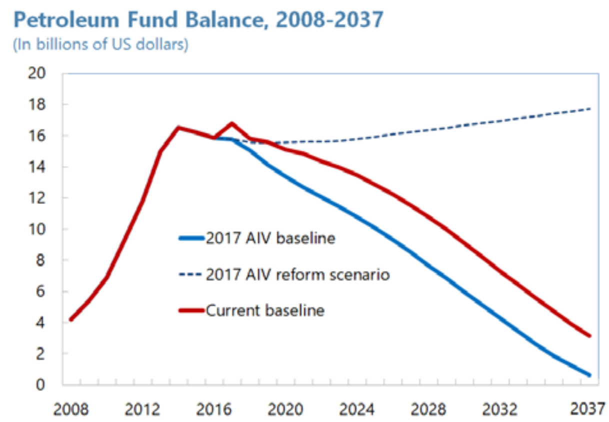
POLICY DISCUSSIONS

The ramping-up of public spending over the past decade has been warranted given post-conflict infrastructure gaps and drastic social development needs. But this has also led to public sector-driven growth with employment gains concentrated in construction and public services (Annex III). To achieve high, sustainable, and inclusive private sector growth, it will be crucial to (i) ensure fiscal sustainability and strengthen institutional capacity, (ii) capitalize on the demographic dividend and promote private sector investment, and (iii) strengthen financial intermediation and enhance financial inclusion.

A. Fiscal Sustainability and Institutional Capacity

11. In comparison with its predecessor, the 2019 budget envisions a modest frontloading of public spending and lower excess PF withdrawals. The medium-term expenditure plan (2019-23) shows a significant moderation in spending compared to the 2017 budget, and is more in line with staff's recommended fiscal reform plan laid out in the 2017 Article IV Staff Report. Nevertheless, under the current baseline, the PF balance will still gradually decline, leading to rising debt financing needs in the long-run (text table and DSA).





Source: IMF staff estimates.

12. Developing a credible fiscal strategy should help protect the PF balance and ensure long-run fiscal sustainability. Specifically, fiscal policy should be anchored in a stable real balance of the PF and long-run debt sustainability.

- *Improve expenditure control.* Capital investment should reflect targeted selection criteria based on a rigorous appraisal process while taking capacity constraints into account. Moreover, a comprehensive medium-term budgeting framework would improve policy predictability, ensure resource availability, and create a stronger link between budgets and medium-term goals. To this end, the costing of policy priorities in the SDP will be important. Limited use of supplementary budgets and the adoption of an expenditure rule should be considered to increase budget credibility and control.

- *Enhance spending efficiency and composition.* Improving capital spending efficiency should be a priority and will help close large infrastructure gaps while keeping overall capital spending under control. Adequate investment in human and social capital will be crucial given demographic trends and associated high potential growth returns (Annex IV).

- *Mobilize domestic revenue*. Introduction of a value-added tax (VAT) by 2022 accompanied by potential increases in excise duties and other taxes, and improved tax compliance should help raise non-oil revenues over the medium term.

- *Make effective use of concessional borrowing and commit to the ESI rule within a reasonable timeframe.* The use of concessional borrowing for specific projects reduces the need for excess PF withdrawals and generates knowledge transfers in project appraisal and implementation. Committing to the ESI rule by ending excess PF withdrawals by 2028 should further strengthen fiscal discipline.

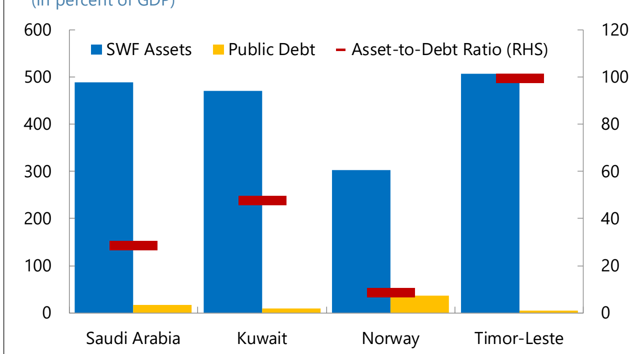
Timor-Leste: Illustrative Revenue and Expenditure Reform Strategy vs. Baseline Forecasts[1, 2]

	Baseline Scenario				Reform Scenario	
	2017	2018	2020-23	2024-38	2020-23	2024-38
			Proj.		Proj.	
Total revenue	30.7	30.0	24.0	16.6	26.0	22.5
Domestic revenue	7.0	6.3	6.8	10.4	8.7	15.1
Tax revenue	4.8	4.2	4.6	7.0	6.5	11.7
Direct tax	2.0	1.9	2.1	4.1	2.1	4.1
VAT	0.0	0.0	0.0	0.0	1.9	4.7
Other indirect tax	2.8	2.3	2.5	3.0	2.5	3.0
Estimated Sustainable Income	17.3	17.8	13.6	4.3	13.7	5.5
Total expenditure	49.4	47.3	48.2	30.8	48.2	30.8
Recurrent spending	33.5	28.5	35.2	25.8	35.2	25.8
Wages and salaries	7.1	6.5	7.2	7.6	7.2	7.6
Goods and services	11.8	11.5	15.8	10.3	15.8	10.3
Public transfers	14.6	10.5	11.7	7.3	11.7	7.3
Capital spending	9.5	12.9	9.4	3.1	9.4	3.1
Gross operating balance	-9.2	-4.4	-14.7	-11.2	-12.8	-5.3
Net borrowing and lending	-18.7	-17.3	-24.2	-14.2	-22.2	-8.3
Financing:						
PF excess withdrawal	21.5	14.0	21.9	11.6	20.0	3.3
Borrowing	1.1	2.0	2.3	2.6	2.3	6.7
Outstanding public debt	3.8	5.4	12.5	21.4	12.5	41.4
Petroleum Fund balance (in millions of US dollars)	16,799	15,803	14,567	8,116	14,724	13,269

[1] In percent of GDP, unless otherwise specified.
[2] The reform scenario assumes the following: (1) less ambitious front-loading of public spending, (2) VAT to be implemented starting 2022, which will generate revenue of about 3.75 percent of GDP over the medium term and of about 5 percent of GDP over the long-term and (3) no excess withdrawal from the Petroleum Fund beginning 2028.

13. **The debt sustainability analysis (DSA) suggests a low risk of debt distress**. This constitutes an improvement in the risk rating compared to the last assessment in 2017. The improvement reflects fuller considerations of country-specific factors and risk mitigating elements such as the existence of the Petroleum Fund, currently estimated at over 5 times the size of GDP (figure). Public external debt is projected to increase from 5 percent of GDP in 2018 to about 17 percent of GDP in the medium term.

Size of Timor-Leste's Petroleum Fund
(In percent of GDP)



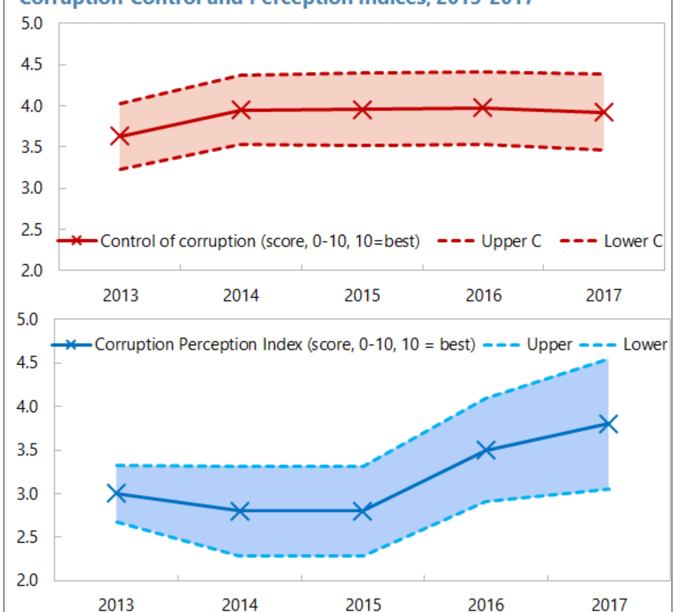
Sources: IMF Staff Reports; Saudi Arabia (2018); Kuwait (2017); Norway (2018).
Note: Saudi Arabia's assets include SAMA's net foreign assets and does not include the Public Investment Fund (PIF).

14. **A government-led, donor-partnered public financial management (PFM) reform strategy will be essential to generate sustained reform momentum** (Box 2). While important progress has been made in several PFM areas, efforts to address remaining weaknesses have stalled amid the political stalemate. Moreover, fragmented PFM support from multiple development partners has resulted in coordination issues within and outside the government.

However, a World Bank-led Public Expenditure and Financial Accountability (PEFA) exercise to assess PFM weaknesses is ongoing. The 2018 PEFA is jointly conducted with the government and is expected to feed into an updated and consolidated government-led PFM reform strategy, with the intent to improve donor coordination. The IMF-World Bank 2016 Public Investment Management Assessment (PIMA) will also be considered in the PEFA exercise. The IMF and Pacific Financial Technical Assistance Centre (PFTAC) stands ready to provide needed technical assistance (TA) in areas where the IMF has a comparative advantage.[6]

15. Improving public governance and combating corruption will help raise the quality of public services. The economic importance of public services and contracts in Timor-Leste makes it crucial to address vulnerabilities to rent-seeking. Governance in the petroleum sector is strong and steps have been taken to improve the institutional framework to combat corruption (e.g., the establishment of the Commission on Anti-Corruption, CAC). However, the institutional framework suffers from weak coordination and a deficit of technical, human, and financial resources. Moreover, the legal framework needs to be strengthened, the capacity of the court system raised, and corruption awareness enhanced. To this end, staff is encouraged by the government's intention to revitalize efforts to develop a National Anti-Corruption Strategy and update the anti-corruption law that has been pending in parliament since 2011. Strengthening public financial management, especially procurement, and reforming business regulation will also be key to reducing vulnerabilities to corruption**.**

Corruption Control and Perception Indices, 2013-2017[1]



[1] Upper and lower bounderies reflect one standard deviation.
Source: Worldwide Governance Indicators,Transparency International.

Authorities' Views

16. The authorities agreed that there is a need to improve spending efficiency and mobilize domestic revenue. They stressed that the scale-back of capital spending in the 2019 budget reflects a recognition of capacity constraints and efforts to rationalize and prioritize spending to ensure fiscal sustainability. They also noted that public spending on education, health, and agriculture continues to be a main priority. However, appropriate infrastructure is required to allow these sectors to grow. Moreover, the authorities are aiming to increase the ratio of domestic

[6] PFTAC participated in a PFM seminar hosted by the Timorese Fiscal Reform Commission titled "Strengthening the Expenditure Framework for Sustainable Growth and Development" in Dili on 14-15 February 2019.

revenue to non-oil GDP to around 15 percent by 2022 through improvements in tax compliance, implementation of a VAT, and diversification of revenues (such as fishery, mining, and forestry).

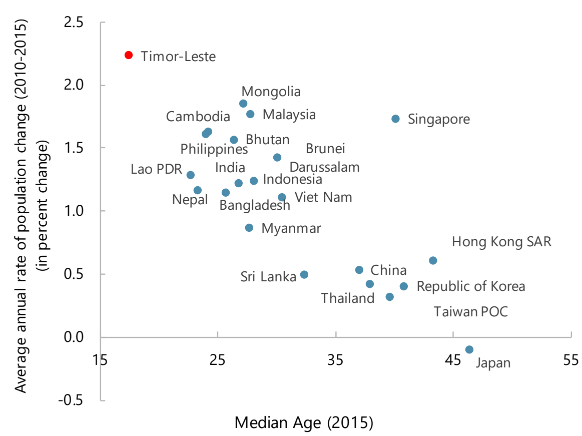
17. The authorities underscored that PFM reforms are now regaining momentum following commitments for improving public finance over the medium to long-term. The authorities highlighted that there are ongoing efforts to simplify and streamline program budgeting, Medium-Term Expenditure Framework (MTEF), and procurement processes by consolidating coordination mechanism, systems and legal framework. Moreover, they are piloting MTEF in the areas of health, education, and infrastructure.

18. The authorities expressed a strong determination to fight corruption and highlighted several ongoing efforts. They stressed that the five-year Government Program—approved by the parliament in 2018— contains a number of initiatives to address corruption, including investing in the capacity of oversight institutions and conducting anti-corruption campaigns to raise public awareness. The newly established Ministry of Legislative Reforms and Parliamentary Affairs will coordinate the initiative to develop a National Anti-Corruption Strategy and update the Anti-Corruption Law. Timor-Leste is in the process of implementing the second cycle of its UNCAC review.[7]

B. Private Sector Growth and Job Creation

19. The growing working-age population constitutes an important growth source, but efforts to capture the demographic dividend face significant challenges. Job creation is lagging the number of job market entrants, contributing to low labor force participation and high unemployment, particularly for youth and women. Less than a quarter of the labor force is formally employed, and rural-urban inequalities are large. Moreover, about four out of every ten jobs created over the past decade have been in the public sector. This reflects both a preference amongst job seekers for public employment as well as difficulties by the private sector to match public sector wages, working conditions, and job security. Staff analysis shows that non-oil growth could be raised by over 2.5 percentage points per year if labor productivity growth and job opportunities for the youth can reach average levels of middle-income countries by 2030 (Annex IV).

Selected Asian Economies: Median Age and Population Growth



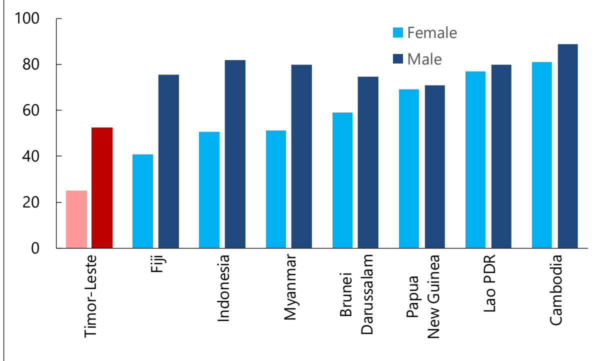
Source: UNDP.

20. A comprehensive action plan is needed to raise labor productivity and address labor market inequalities. Improving both the quality of and access to basic education and healthcare will be critical to increase the productivity of future cohorts and reduce gender and rural-urban

[7] UNCAC stands for the United Nations Convention Against Corruption.

inequalities. Meanwhile, strengthening technical and vocational education and training should help address existing and emerging skill shortages. Further exploring opportunities for Timorese workers to gain experience abroad (such as the recent decision to join Australia's Pacific Labor Scheme) should also help.[8] Moreover, coverage and enforcement of labor regulations should be enhanced to reduce vulnerable employment—the incidence of which is particularly high for women. Reviewing the minimum wage policy is also appropriate to help find the right balance between increasing formal employment of unskilled workers and ensuring a fair living wage. Finally, given the role of the public sector as a major employer, there is a need to assess the impact of public employment and wage setting on the private sector.

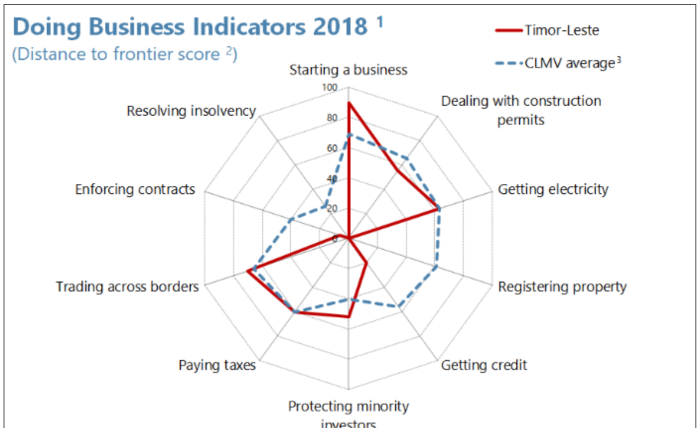
Labor Force Participation Rate [1]
(In percent of population ages 15+, 2017)



[1] ILO Estimates.

21. Improving the business environment should encourage business formation, promote private investment, and generate employment opportunities. Weak business regulation poses challenges for commercial activity and private investment. Private investment remains low, averaging about 3 percent of GDP between 2010 and 2016. Recent progress to address these barriers includes a new Land Law that clarifies the legal status of land ownership, and a private investment law that aims to align national legislation with the Global Investment Agreement of Asian countries and streamline investment licensing. Nevertheless, business regulations need to be better coordinated and harmonized to facilitate easy market entry for new firms. Moreover, the legal framework for establishing property rights and enforcing contracts should be strengthened to encourage business formation and improve access to finance. The capacity of the court system also needs to be enhanced to ensure effective and timely enforcement of laws and regulations. Importantly, a comprehensive and actionable strategy to boost domestic and foreign investment in productive economic sectors—based on Timor-Leste's comparative advantage—will be essential for sustainable diversification of the non-oil economy.

Doing Business Indicators 2018 [1]
(Distance to frontier score [2])



Source: World Bank.
[1] These indicators should be interpreted with caution due to a limited number of respondents, a limited geographical coverage, and standardized assumptions on business constraints and information availability.
[2] On a scale of 0 to 100; 100 is the frontier and 0 is the furthest from the frontier.
[3] CLMV countries are Cambodia, Lao PDR, Myanmar, Vietnam.

[8] The Pacific Labor Scheme officially commenced on 1 July 2018. The scheme is designed to help fill labor shortages in Australia while providing opportunities for workers from the Pacific to earn income and develop skills.

Authorities' Views

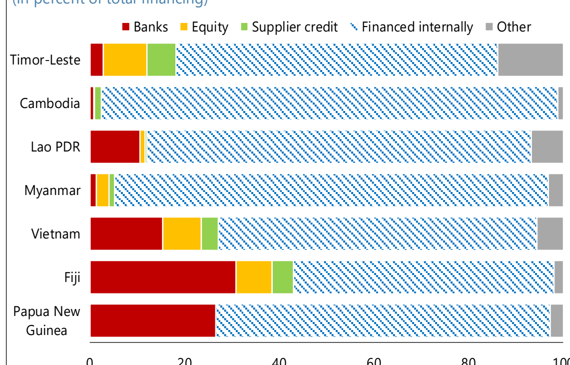
22. The authorities recognized the urgency to provide job opportunities for its young population and reduce vulnerable employment. The increase in public expenditures in 2019 for education and health is a continued commitment to raise labor productivity. Moreover, the authorities underscored that they are committed to the 2017 National Strategy for Employment, which lays out a blueprint for how to increase the labor supply and demand, as well as strengthen labor market institutions. In addition, efforts to provide job opportunities abroad have continued, including through the recent invitation to join Australia's Pacific Labor Scheme.

23. The authorities acknowledged that strengthening the business environment is important and highlighted significant progress in a number of areas. While recognizing that there is room for further streamlining of licensing and business regulations, the authorities pointed to significant improvements in the business environment over the past years. They stressed that there are plans to increase the number of centers for business registration and licensing in rural areas. The authorities also mentioned that an Insolvency and Bankruptcy Law is under considerations, and that the new Private Investment Law should help generate business formation and encourage investment. The authorities expect that improvements in the business environment will support diversification of the economy through development of tourism, agriculture, petroleum and manufacturing.

C. Financial Sector Development and Stability

24. Boosting financial intermediation is crucial to increase private investment and facilitate diversification. Despite an ample deposit base and a net interest margin of more than 10 percent, banks are reluctant to extend credit. Instead, banks primarily lend to government contractors and individuals with secure wages (e.g., public sector employees), and provide low-cost funding to international banks. Main obstacles to stronger financial intermediation include: (i) a weak collateral system; (ii) difficulty in assessing borrowers' credit risk; and (iii) a low level of financial literacy. While the new Land Law should help improve the collateral system, registering land ownership and settling land disputes is likely to be a multi-year process. The establishment of a secured transaction framework for movable property is in the process with the assistance of the Asian Development Bank, and progress has been made towards the implementations of the national credit guarantee system.

Sources of Financing for Investment
(In percent of total financing)



Sources: Enterprise Survery (Timor-Leste as of 2015; others latest available).

25. Significant progress has been achieved in terms of the development of the payments system and the implementation of the financial inclusion agenda. The central bank (BCTL) has developed a National Financial Inclusion Strategy (NFIS) 2017-22, with an action plan and timeline. Main components include measures to: (i) modernize the payment system; (ii) increase the availability of financial products and services in rural areas; and (iii) improve financial literacy and consumer protection frameworks. Important progress has been made in modernizing the payment system, including through the establishment of R-TIMOR, and the ongoing implementation of the National Switch. Increasing financial literacy will also be crucial to expand the use of financial services and access to credit.

26. A strong regulatory and supervisory framework should underpin financial sector development. Macro-financial risks appear modest given the small size of the financial system and banks' relatively conservative balance sheets (high liquidity and well-capitalized). However, the regulatory and supervisory framework for banks needs to be upgraded. The IMF/PFTAC are planning to assist BCTL in reviewing and revising the legal framework for banking regulation and supervision, developing a comprehensive credit risk management regulation, and strengthening banking supervision capacity.

Timor-Leste: Selected Financial Soundness Indicators (FSIs), 2015-18

(In percent)

	Dec-15	Dec-16	Dec-17	Dec-18
Asset Quality				
Capital adequacy ratio [1]	42.4	32.9	32.9	27.7
Non-performing loans to total gross loans	23.0	15.3	13.5	5.6
Provision for loan losses to total gross loans	29.8	21.9	16.7	8.1
Earnings and Profitability				
Return on assets	0.7	1.0	1.4	1.1
Return on equity [1]	3.5	6.6	13.9	6.8
Liquidity				
Liquid assets to total assets	83.6	84.5	80.5	80.5
Memorandum items (In millions of U.S. dollars):				
Total assets	928	1,149	1,170	1,240
Total loans	191	183	227	222

Source: Central Bank of Timor-Leste.

[1] Covers BNCTL only.

Authorities' Views

27. The authorities emphasized important progress in modernizing the payment system and enhancing financial inclusion. They noted that the weak collateral regime remains a significant obstacle to credit expansion, but that the implementation of the new Land Law and development of a secured transaction framework for movable property should help in this regard. Moreover, the BCTL is currently working with banks to review procedures and guidelines of the Credit Guarantee System before entering the implementation phase. The authorities also stressed that the modernization of the payment system is key to enhancing access to financial services and promoting a stable and competitive financial sector. In this regard, the launch of the National Switch in December 2018 was a major achievement. The system is expected to be integrated with other regional payment systems in the near future. The BCTL is also working closely together with the Ministry of Education in implementing financial literacy programs in elementary schools in order to enhance financial inclusion. Furthermore, the authorities underscored the importance of ongoing efforts to improve the regulatory and supervisory framework. In particular, the BCTL is in the process of implementing IFRS9 and is reviewing all prudential regulations to accommodate this change, including a review of the banking law.

D. External Sector Assessment and Competitiveness

28. The 2018 external sector position is assessed to be substantially weaker than suggested by medium-term fundamentals and desirable policies (Annex V). According to the CA-model and External Sustainability model, the 2018 CA-balance of negative 9 percent is substantially lower than the level assessed to be consistent with medium-term fundamentals and desirable policies**.** However, it is important to recognize that the assessment may not adequately account for ongoing structural changes in Timor-Leste (e.g., depletion of active oil fields), demographic trends, immature financial markets, and large infrastructure gaps. Unlike the CA-model, the REER-model suggests that the REER is broadly in line with fundamentals. In the medium-term, the external current account is expected to remain in deficit, financed by withdrawals from the PF. Despite its waning petroleum production, Timor-Leste's low debt burden and sizable public asset position make the country relatively resilient to external shocks.

29. Increasing international competitiveness will be crucial for the success of diversification efforts. Implementation of needed structural reforms of the non-oil economy should reduce import dependence and increase the export base. Maintaining low inflation and increasing labor productivity should also help increase competitiveness.

30. The U.S. dollar as legal tender continues to serve Timor-Leste well. Use of the U.S. dollar can reduce external competitiveness when domestic inflation increases, and the U.S. dollar appreciates against trading partners (e.g., in the presence of ongoing U.S. monetary policy normalization). However, dollarization remains appropriate given Timor-Leste's limited financial sector development, low institutional capacity, and its U.S. dollar-denominated major exports (coffee and petroleum).

Authorities' Views

31. The authorities acknowledge that addressing the weak external sector position will require improved international competitiveness and successful diversification. The authorities also emphasized that the current exchange rate regime has contributed to stabilize inflation expectations and price pressures. Nonetheless, they stressed the need to review, in depth, the advantages and disadvantages of maintaining the current regime.

E. Capacity Building and Statistics

32. Addressing capacity gaps will be key to support the implementation of needed policies and reforms. This is particularly true with respect to fiscal management, financial regulation and supervision, while strengthening compilation and dissemination of statistics will be essential to improve surveillance and inputs into policymaking. IMF/PFTAC is committed to provide capacity building assistance in close collaboration with development partners (text table and Box 3).

Authorities' Views

33. The authorities agreed on the assessment to strengthening statistics and expressed appreciation for ongoing IMF TA and training. The authorities appreciate the current TA support (mostly delivered by PFTAC, but also the Capacity Development Office in Thailand, CDOT, and IMF staff) and conveyed interest in continued TA, including in the areas of public financial management, tax policy, and statistics.

Timor-Leste: Integration Matrix of Surveillance Issues and Capacity Building

Surveillance Issues	IMF			World Bank		Other Development Partners	
	Past	2018	Planned/ ongoing	Past	Planned/ ongoing	Past	Planned/ ongoing
Fiscal Sector							
Public Financial Management	✓		✓	✓	✓	✓	✓
Expenditure framework	✓			✓	✓	✓	
Revenue framework	✓		✓				✓
Macro-Financial Issues							
Financial supervision and regulation	✓	✓	✓				
Financial market development						✓	✓
Macro-structural issues							
Environmental Sustainability						✓	
Infrastructure				✓	✓	✓	✓
Private sector development				✓	✓	✓	✓
Governance issues							✓
Poverty/Gender/ Inequality						✓	✓
Climate change	✓			✓	✓		
Statistics							
Data Enhancement	✓	✓	✓			✓	✓

Sources: IMF; World Bank; Asian Development Bank (ADB); Japan International Cooperation Agency (JICA); United Nation Development Programme (UNDP); Millenium Challenge Corporation Agency (MCC); Australian Department of Foreign Affairs and Trade (DFAT); Organization for Economic Co-operation and Development (OECD); European Union (EU).

STAFF APPRAISAL

34. Timor-Leste has made impressive strides since independence, but the country faces significant challenges to achieve its development objectives. The recent breakdown of consensus politics has increased uncertainty, slowed reform efforts, and weighed heavily on the non-oil economy in 2017-18. While non-oil growth is expected to regain momentum once government spending picks up, there is a pressing need to address medium-term challenges. With production from active petroleum fields ending in 2022, insufficient progress to strengthen public financial management, diversify the economy, create private-sector jobs, and increase private sector investment, would put growth at risk, worsen labor market outcomes, and jeopardize long-run fiscal sustainability.

35. A fiscal strategy is needed to ensure long-term fiscal sustainability and safeguard the assets of the Petroleum Fund. The strategy should focus on strengthening control and efficiency of spending, developing a comprehensive medium-term budgeting framework, mobilizing domestic revenue, making effective use of concessional borrowing, and committing to the ESI rule within a reasonable timeframe.

36. Strengthening institutional capacity will be critical to ensure the effective use of public resources. Developing a government-led, donor-partnered PFM reform strategy is key to raise institutional capacity and help close large infrastructure gaps while keeping overall capital spending under control. Ongoing efforts to develop a National Anti-Corruption Strategy, review the pending anti-corruption law, and raise the capacity of oversight institutions are crucial to combat corruption and raise the quality of public services.

37. Investing in a rapidly-growing workforce should provide needed growth dividends over the medium-term. A comprehensive action plan is needed to raise labor productivity and address labor market inequalities. To this end, it will be vital to improve quality of and access to education and healthcare, reduce existing and emerging skill-shortages, and address gender and rural-urban inequalities. Moreover, there is a need to review the minimum wage policy and assess the impact of public employment and wage setting on the private sector.

38. Enhancing the business environment will help raise private investment, and generate demand for labor. Business licensing processes and regulations need to be better coordinated and harmonized to facilitate easy market entry for new firms. The legal framework for establishing property rights and enforcing contracts should be strengthened, and the capacity of the court system needs to be enhanced. Importantly, a comprehensive and actionable strategy to boost domestic and foreign investment in productive economic sectors will be essential for sustainable diversification of the non-oil economy.

39. Recent improvements to the payments system and financial inclusion are impressive, but financial intermediation remains weak. Continued efforts to develop the financial sector should help channel domestic savings to productive investments, while expanding access to financial services will be essential to facilitate diversification and promote inclusive growth. Ensuring a strong and effective regulatory and supervisory framework will be important to safeguard financial stability as the financial sector develops

40. The 2018 external sector position is assessed to be substantially weaker than the level implied by fundamentals and desirable policies. While dollarization remains appropriate there is a need to increase international competitiveness. In this regard, maintaining low inflation, increasing labor productivity, and implementing needed structural reforms are essential.

41. Stregthening capacity will facilitate the implementation of needed policies and reforms. In particular, strengthening the compilation and dissemination of statistics is essential for surveillance. Priority should be given to shortening the lags in disseminating GDP data, removing inconsistencies between national accounts and balance of payments, and address weaknesses in the compilation and dissemination of government financial statistics. The IMF stands ready to provide further TA and training to assist the authorities.

42. It is recommended that the next Article IV consultation takes place on the standard 12-month cycle.

Box 1. The Future of Timor-Leste's Petroleum Industry[1]

The Greater Sunrise fields were discovered in 1974, but have remained undeveloped for over two decades. The fields (Sunrise and Troubadour) are positioned in the Timor sea. The initial joint venture partners were Woodside (the main operator, 33 percent), ConocoPhillips (30 percent), Royal Dutch Shell (27 percent), and Osaka Gas (10 percent). Estimates from Timor Gap suggest that Greater Sunrise holds 6.63 trillion cubic feet of gas and 273 million barrels of oil/condensate, estimated at a value of US$56 billion.[2, 3] While potential profits from the Greater Sunrise fields would depend on needed capital investment and operating cost, Timor Gap estimates that the fields could generate $22 billion in profit over multi-decade project life.

The recently signed maritime boundary treaty between Timor-Leste and Australia will pave the way for the future development of the Greater Sunrise fields. The development of Greater Sunrise has been hindered in part because of the maritime boundary dispute between Timor-Leste and Australia and the decision as to whether to process the extracted petroleum in Timor-Leste or Australia. On March 6, 2018, a maritime boundary treaty was signed between the countries and included an agreement on the joint development, exploitation, and management of petroleum from the Greater Sunrise fields. The treaty is to be ratified by the respective parties' parliaments.

The government has made clear its intention to develop a downstream refining industry on the south coast of Timor-Leste. The transformation of the south coast as a regional petroleum center— the Tasi Mane project—is a key part of the government's development strategy. To bring the pipeline from the Greater Sunrise to Timor-Leste, the government reached agreements with ConocoPhillips (Oct 2, 2018) and Shell Australia (Nov 21, 2018) to acquire their respective shares in the joint venture for a combined US$650 million. The purchase is to be financed by the Petroleum Fund. To facilitate the purchase, the Petroleum Activities Law was amended in January 2019 to allow the state to participate in a joint venture with a total share of 56.6 percent. When the upstream and downstream industry is developed, the government expects it to contribute more broadly to the development of the economy and the south coast, generating over 10,000 direct jobs and more than 50,000 indirect jobs.[4]

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[1] Prepared by Naoya Adachi (APD) and Gee Hee Hong (APD).

[2] See Strategic & Business Plan, 2016-2035, Timor Gap. The estimated value of the Greater Sunrise assumes an oil price of US$39/barrel.

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

[4] See the Program of the Eighth Constitutional Government of Timor-Leste, 2018

Box 2. Public Financial Management Reform in Timor-Leste[1]

Since independence, Timor-Leste has undertaken several PFM reform initiatives with the support of multiple development partners. Donor supported reforms include, an initial PFM capacity building program (2003-2008), a sector budget support program on PFM and fiscal reforms (2013-2017), a Planning and Financial Management Capacity Building Program (PFMCBP) (2006-2014), and more recently, a roadmap budget support program.[2] A major obstacle to these reform initiatives, however, has been the fragmented support from development partners, limited local implementation capacity, and the consequent low level of coordination within and outside government.

While PFM reforms in Timor-Leste have led to improvements in a number of areas, significant weaknesses still exist. Three Public Expenditure and Financial Accountability (PEFA) assessments have taken place (2007, 2010, 2013). The 2013 PEFA highlighted progress from previous PFM reforms, including (i) a transparent and sustainable framework for the governance of the petroleum sector, (ii) a relatively well-structured budget process, (iii) adequate reporting of donor-funded activities, (iv) use of a modern integrated financial management information system, and (v) a treasury single account. However, the PEFA also identified several weaknesses, including low budget credibility, weak procurement processes, and insufficient internal audit and non-payroll controls. A number of other diagnostic assessments have also been carried out, including a 2016 Public Investment Management Assessment (PIMA) by the IMF and the World Bank. The PIMA recommended a prioritized action plan, focusing on more rigorous appraisal processes, cost-benefit analysis, and risks assessments, as well as more competitive procurement processes.

A PEFA exercise is ongoing with the objective to assess PFM weaknesses and to feed into a government-led PFM reform strategy. The WB-led exercise is the first *joint* PEFA assessment with the government, and will benefit from inputs from other developments partners (including the IMF/PFTAC).[3] Apart from assessing PFM systems, the exercise is also intended to feed into an updated and consolidated government-led PFM reform strategy with improved coordination and alignment of existing and future PFM support initiatives. The PEFA is to be completed in the first half of 2019. There are tentative plans between the government and development partners to conduct a consultation exercise following the PEFA exercise. This should help apply a country-specific lens to the PEFA findings, and lead to greater prioritization and sequencing of critical PFM reform issues.

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[1] Prepared by Gee Hee Hong (APD), based on previous PEFA exercises and the concept note for the 2018 PEFA joint assessment.

[2] See "Budgeting for a sustainable future: Towards a Roadmap of Budgetary Governance Reform, OECD 2017.

[3] Other donors include Millennium Challenge Corporation (MCC); and European Union (EU).

Box 3. Integration of Surveillance and Capacity Building[1]

The IMF has provided capacity building assistance in Timor-Leste since end-1999—two and a half years prior to becoming an IMF member. Initial efforts primarily focused on helping establish core economic institutions in the fiscal and monetary areas, including tax revenue administration, monetary authorities, and Petroleum Fund. At one point, Timor-Leste was one of the largest recipients of IMF TA. However, gradually, capacity development efforts have transitioned into more traditional areas of IMF competency and became more integrated with policy advice in Article IV consultations:

- *Fiscal sector*: Fiscal sustainability has continued to be a key issue in surveillance. Capacity building efforts have focused on expenditure management, developing non-oil revenues, and ESI calculation. The latter is the largest revenue source in the budget, and IMF assistance has had an important role in maintaining the credibility of the fiscal rules-based approach. A public investment management assessment (PIMA) was conducted in 2016 with the aim to improve capital spending efficiency. Going forward, and in particularly, following the conclusion of the PEFA in mid-2019, the IMF/PFTAC continues to stand ready to provide TA in PFM related issues, as well in the implementation of a VAT.

- *Macro-financial issues*: Financial capacity building assistance has concentrated on strengthening financial stability as the financial sector develops. In 2013, an MCM TA mission to the BCTL assessed gaps in institutional capacity in key areas—banking supervision, crisis management, payments system, and research and analysis. This laid the basis for a multi-year TA work program. The IMF/PFTAC is in the process of helping BCTL in reviewing and revising the legal framework for banking regulation and supervision, developing a comprehensive credit risk management regulation, and strengthening banking supervision capacity.

- *Macro-structural Issues*: Economic diversification and improvement of the non-oil private sector have been increasingly covered by IMF surveillance. Capacity development related to such macro-structural reforms has traditionally been provided by other developing partners, given their expertise. In 2015, representatives from Timor-Leste participated in a high-level dialogue, hosted by the IMF and the government of Fiji, on strategies and policies to make the Pacific Islands more resilient to natural disasters.

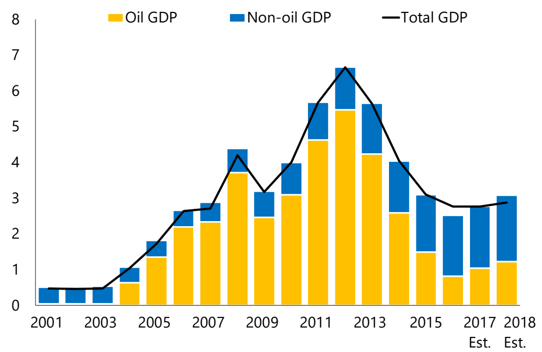
- *Statistics*: Weak compilation and dissemination of statistics are hampering surveillance. Areas of concern include, lagged dissemination of GDP data, inconsistency between national accounts and balance of payments on petroleum-related transactions, and weaknesses in compilation and dissemination of government financial statistics (GFS). STA/PFTAC/CDOT are currently providing technical assistance on GFS, national accounts, and external sector statistics. Timor-Leste has fully implemented e-GDDS by publishing the National Summary Data Page on February 15, 2019.

[1] Prepared by Naoya Adachi (APD).

Figure 1. Timor-Leste: Real Sector Developments

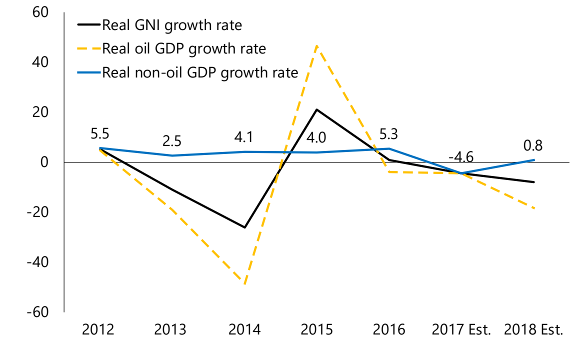
Petroleum production peaked in 2012 with oil output declining rapidly thereafter.

Nominal GDP: Total, Oil, and Non-Oil
(In billions of US dollars)



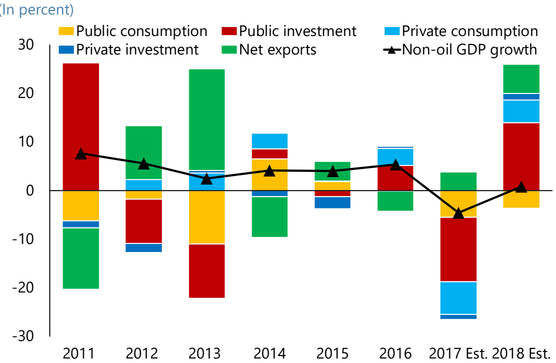
Non-oil GDP growth has been relatively favorable and stable until the political stalemate in 2017.

Real GDP: Total, Oil and Non-Oil
(Annual percentage change)



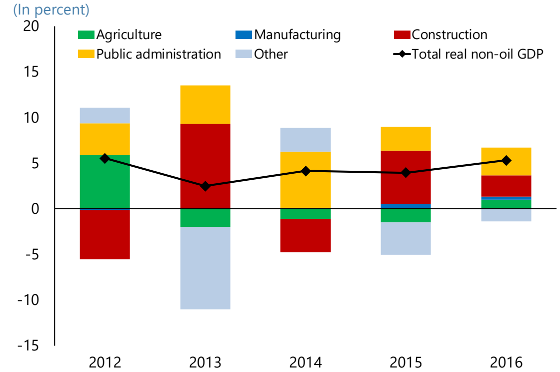
Non-oil GDP has been largely driven by government spending…

Real Non-Oil GDP Expenditure: Contributions to Growth
(In percent)



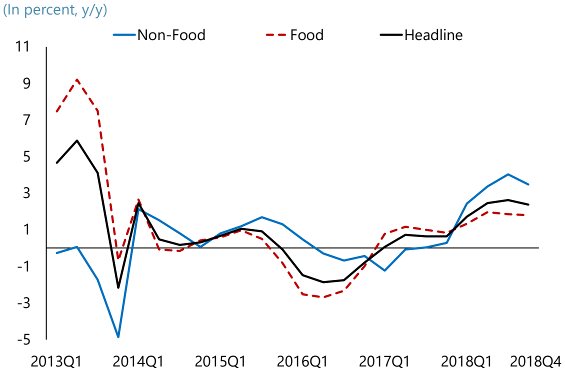
… and is for the most part underpinned by economic activities in construction and public administration.

Real Non-Oil GDP Production: Contribution to Growth
(In percent)



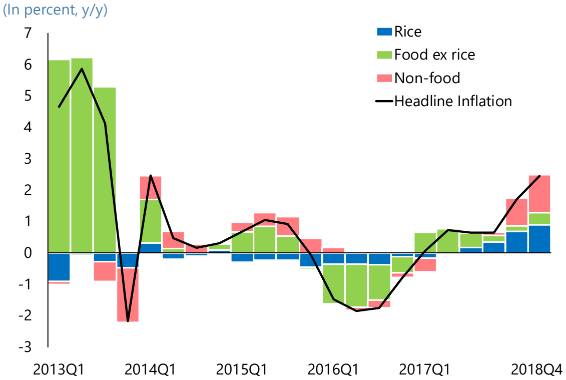
Inflation has remained low since early 2014, but has picked up in 2018…

Food and Non-food Prices
(In percent, y/y)



…reflecting higher non-food (education fees and tobacco prices) and rice prices.

Contribution to Headline Inflation
(In percent, y/y)

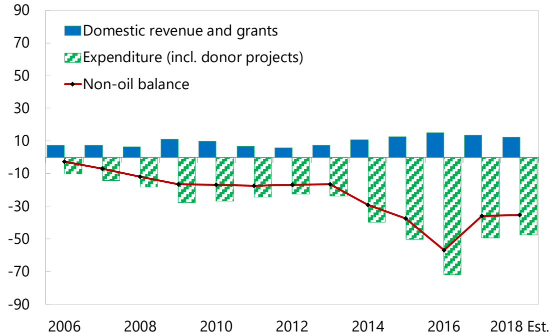


Sources: General Directorate of Statistics; and IMF staff estimates and projections.

Figure 2. Timor-Leste: Fiscal Developments

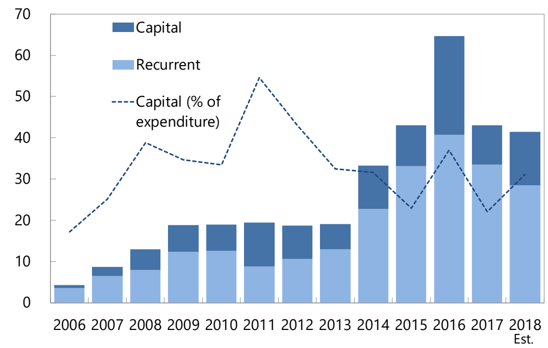
The rise in government expenditure since 2013 ended in 2017 ….

Non-Oil Balance
(In percent of GDP)



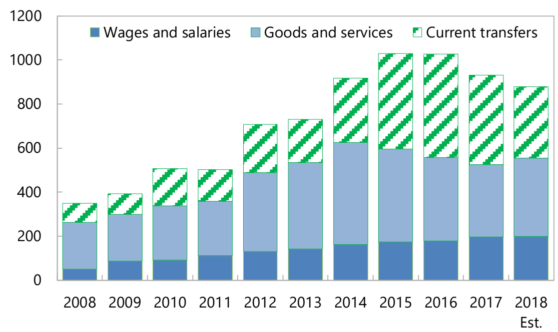
…as both capital and recurrent spending fell to levels similar to 2015.

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



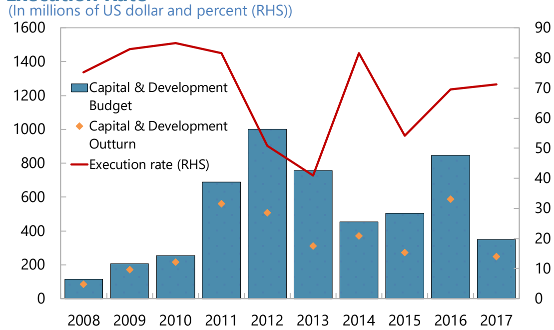
Transfers and purchases of goods and services resulted in lower recurrent spending despite higher public wages.

Recurrent Spending
(In million of US dollars)



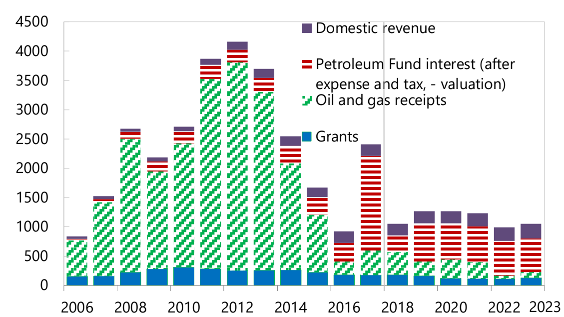
Meanwhile, the capital budget continues to be under executed due to capacity constraints.

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



With oil and gas receipts falling since 2012, there is a greater need to increase non-PF domestic revenues….

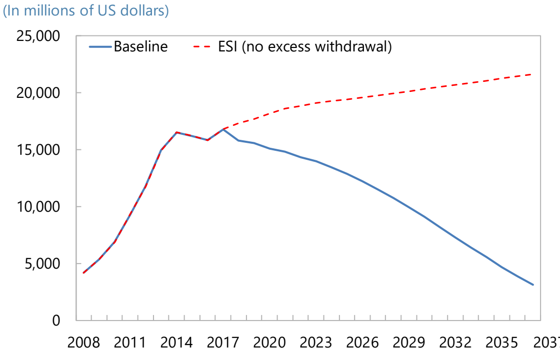
Revenue Sources
(In millions of USD)



Sources: Ministry of Finance and IMF staff calculations

…and to reduce excess withdrawals to meet growing financing needs.

Petroleum Fund Balance: Baseline vs. ESI Scenarios
(In millions of US dollars)

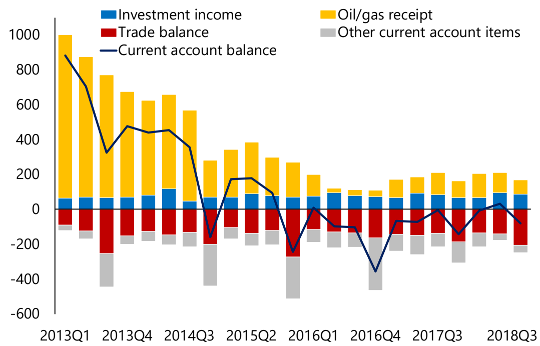


Sources: Ministry of Finance of Timor-Leste; IMF staff calculations and estimates.
Notes: ESI= Estimated Sustainable Income; PF= Petroleum Fund.

Figure 3. Timor-Leste: External Developments

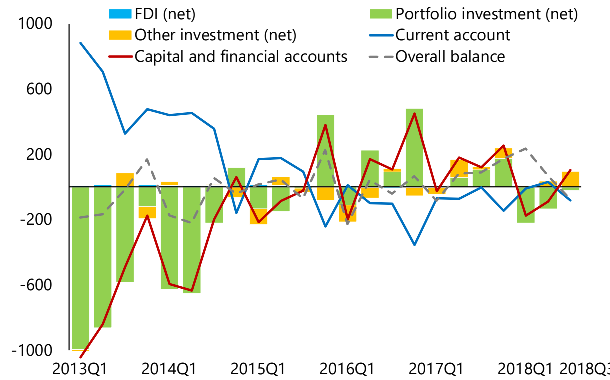
The current account improved in 2017 due in part to a lower trade deficit.

Current Account Balance
(In millions of USD)



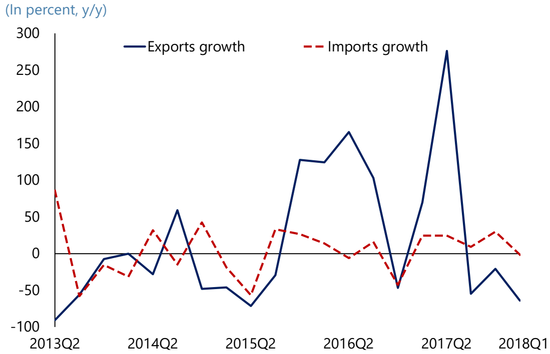
Current account deficit has largely been financed by divestment of the PF portfolio investment.

Financial Account Balance
(In millions of USD)



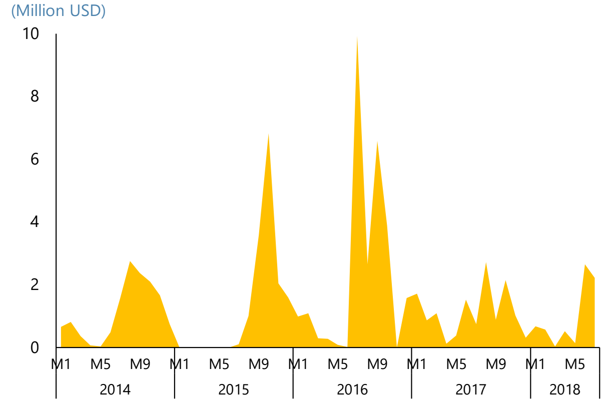
Non-oil exports fell in 2017 but remain volatile…

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



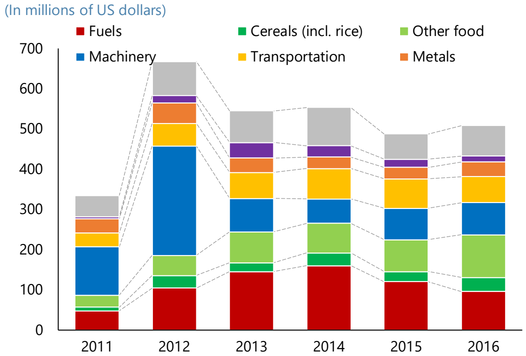
… reflecting fluctuations in coffee exports, the single-largest export item after oil/gas.

Coffee Exports Value
(Million USD)



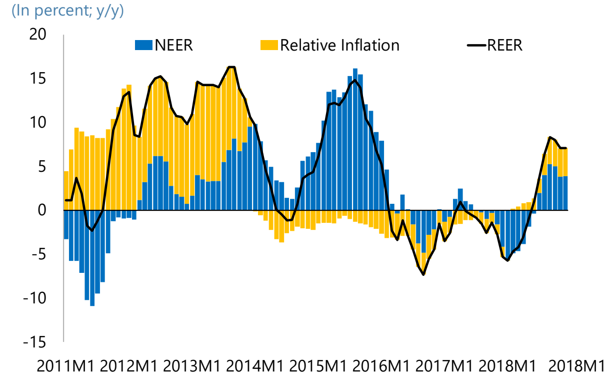
Fuel and food account for about one-half of total imports.

Goods Import
(In millions of US dollars)



The recent appreciation of REER reflects both increasing domestic inflation and U.S. dollar appreciation vis-a-vis trading partners.

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

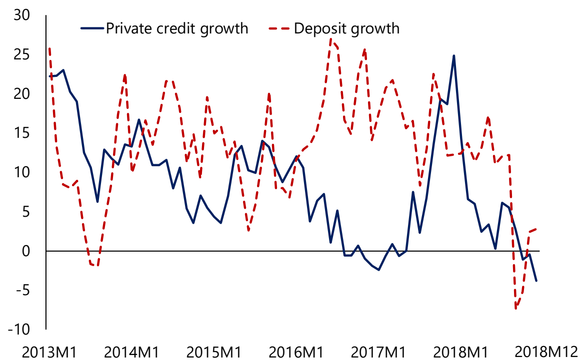


Sources: Central Bank of Timor-Leste; and IMF, Integrated Monetary Database.

Figure 4. Timor-Leste: Monetary and Financial Developments

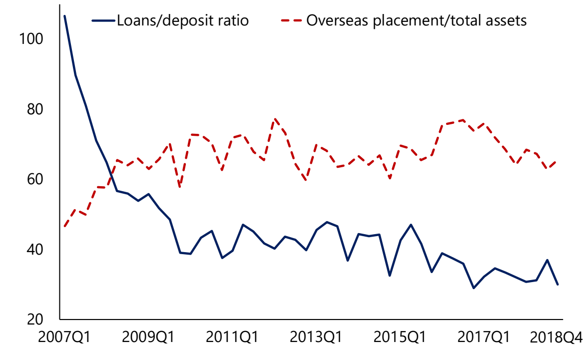
Private sector credit growth has dissipated in 2018 and deposit growth dipped into negative territory.

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



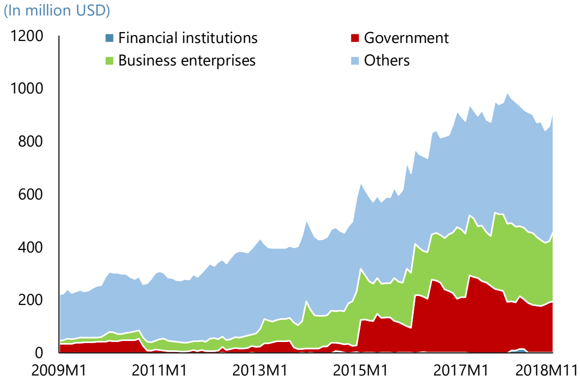
The banking sector is highly liquid with a large overseas placement of bank assets.

Liquidity Ratios
(In percent)



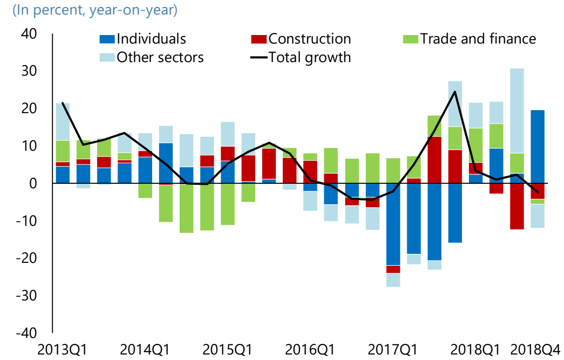
Declines in deposits have occurred across all types of deposits.

Deposits by Type of Depositors
(In million USD)



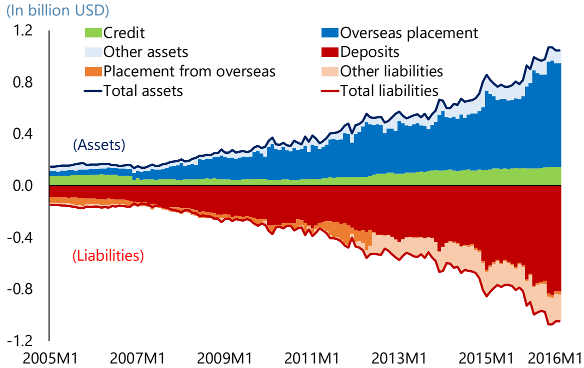
Recent private sector credit has been driven by loans to individuals, while construction loans have contracted.

Loans to Private Sector: Contribution to Growth
(In percent, year-on-year)



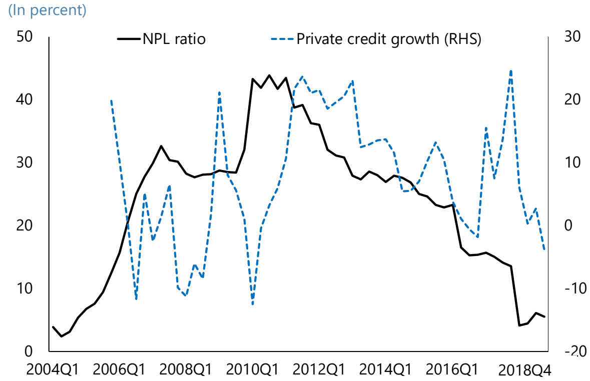
Overseas placement of assets constitutes a significant share of the assets of the banking sector.

Banking Sector Balance Sheet
(In billion USD)



From a long-term perspective, declining private sector credit growth has partly been due to the resolution of legacy NPLs.

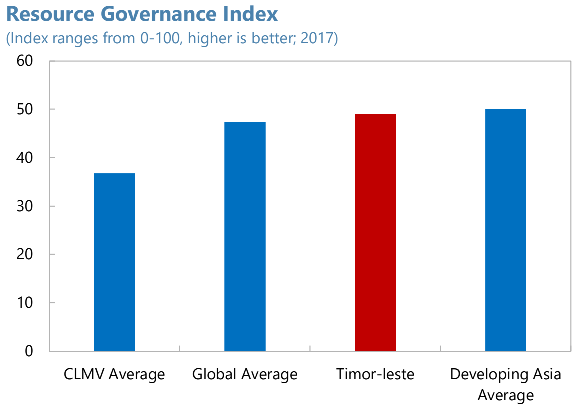
NPL Ratio and Private Sector Credit Growth
(In percent)



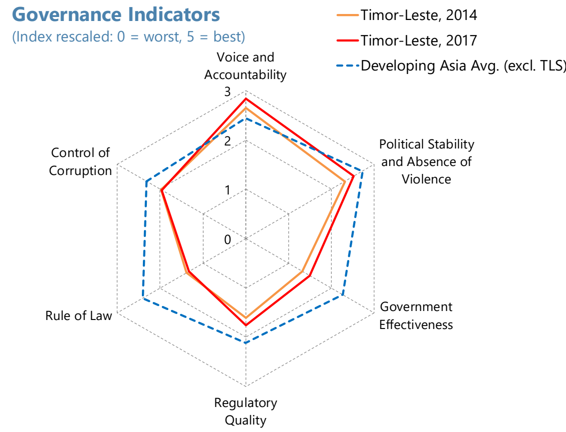
Sources: Central Bank of Timor-Leste; and IMF, Integrated Monetary Database.

Figure 5. Timor-Leste: Business Environment and Governance[1]

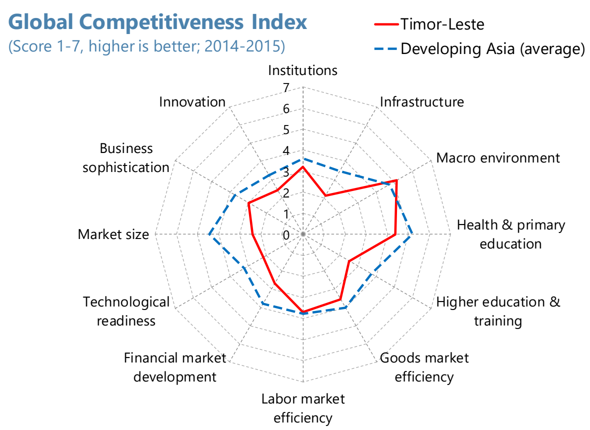
The governance of the Timor-Leste's Petroleum Fund is strong by international standards, and



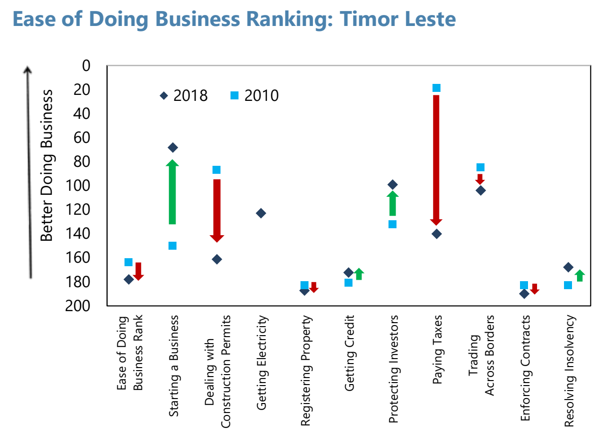
...the governance of the public sector is improving but lagging somewhat behind peers.



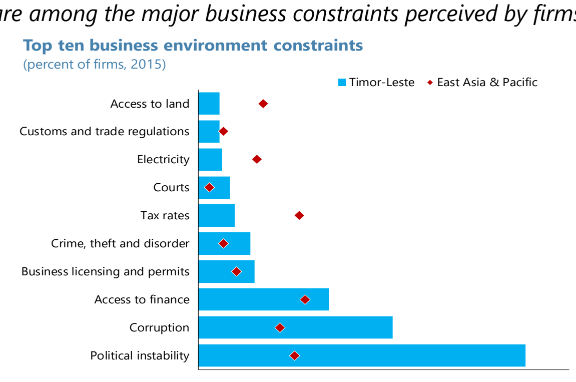
Competitiveness in most areas needs improvement...



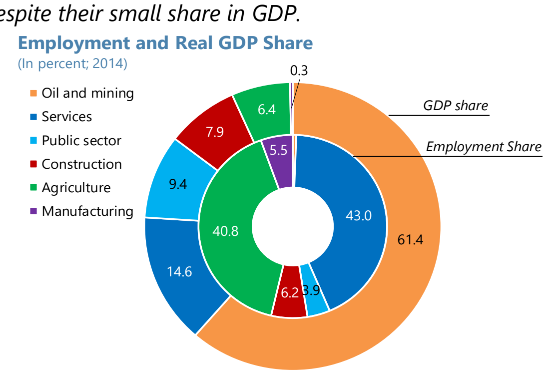
... together with further improvements in the ease of doing business.



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



Agriculture and services absorb most of the employment, despite their small share in GDP.



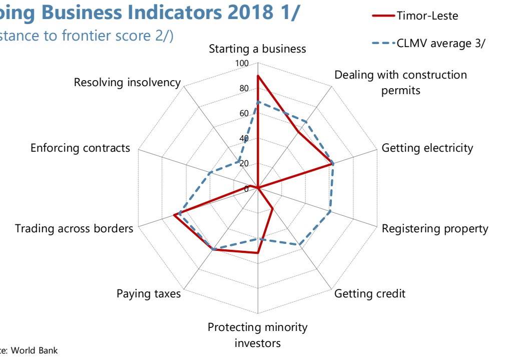
Sources: World Bank Doing Business 2019; Labor Market Survey, 2013; Worldwide Governance Index, 2016; Natural Resource Governance Institute, Resource Governance Index 2017; the World Economic Forum Global Competitiveness Index 2014-2015; World Bank Enterprise Survey, 2015 and World Bank Development Indicators, latest available data.

[1] Note that a certain degree of uncertainty exists around point estimates with respect to governance indicators.

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

Improvements in key constraints to doing business are needed …

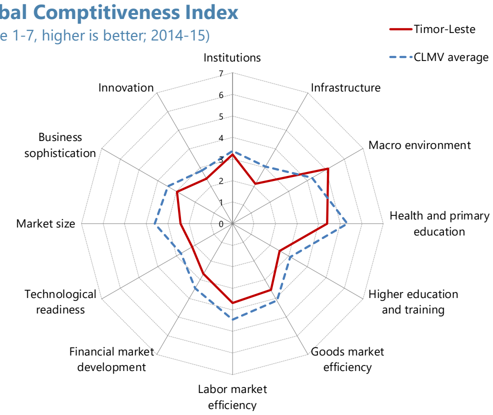
Doing Business Indicators 2018 1/
(Distance to frontier score 2/)



Source: World Bank
1/ These indicators should be interpreted with caution due to a limited number of respondents, a limited geographical coverage, and standardized assumptions on business constraints and information availability.
2/ On a scale of 0 to 100; 100 is the frontier and 0 is the furthest from the frontier.
3/ CLMV countries are Cambodia, Lao PDR, Myanmar, Vietnam.

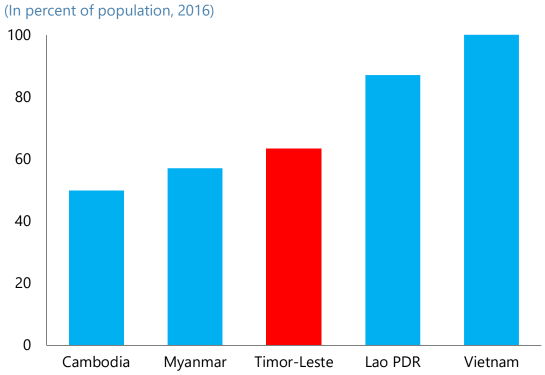
…as well as in infrastructure and human capital to improve competitiveness.

Global Comptitiveness Index
(Score 1-7, higher is better; 2014-15)



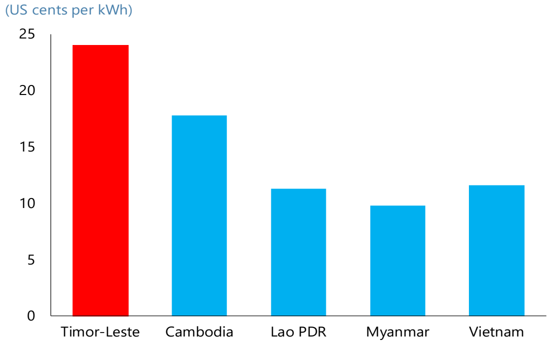
Infrastructure, such as access to electricity, is relatively low…

Access to Electricity
(In percent of population, 2016)



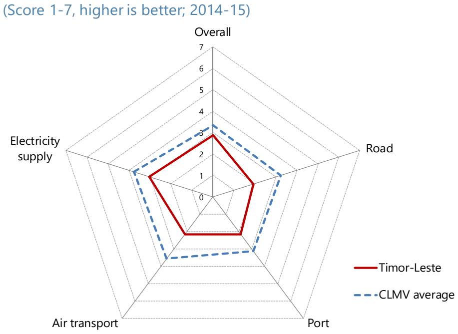
… and with relatively high prices.

Price of Electricity
(US cents per kWh)



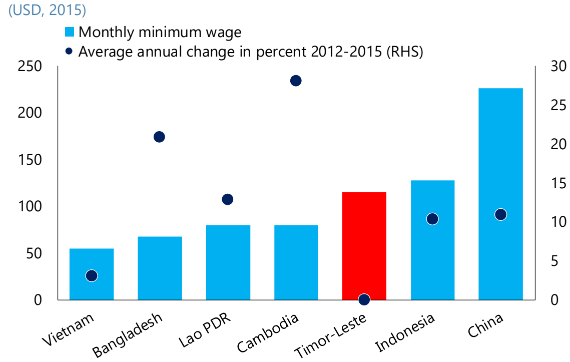
The perceived quality of infrastructure is lower than peers.

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



Improving wage competitiveness is another challenge given Timor-Leste's relatively high minimum wage level.

Monthly Minimum Wage
(USD, 2015)



Sources: Timor-Leste authorities; ILOSTAT; and IMF staff calculations.

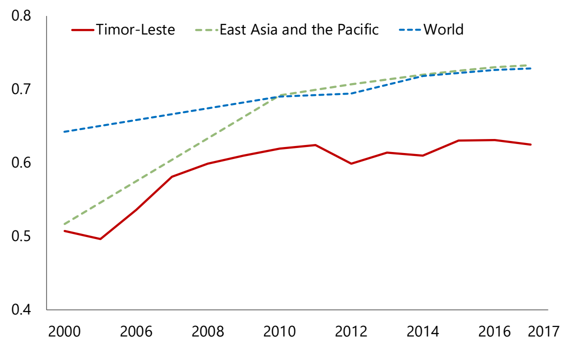
Sources: World Bank Development Indicators; World Bank Doing Business 2019; World Economic Forum Global Competitiveness Index 2014-2015; ILO STAT latest data available; and IMF staff calculations.
Note: CLMV denotes Cambodia, Lao PDR, Myanmar, and Vietnam.

Figure 7. Timor-Leste: Social and Economic Development

Timor-Leste's relative ranking of human development has improved steadily over the last decade…

Human Development Index (HDI)

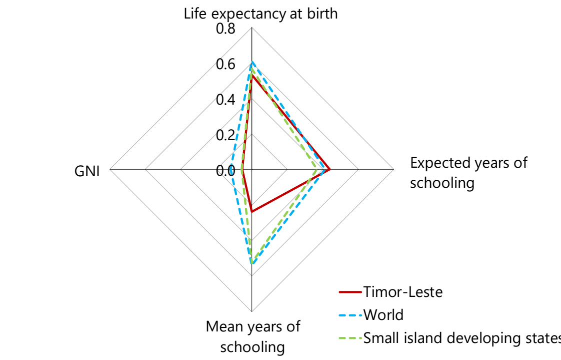
(Higher is better)



… yet lags peers in average years of schooling.

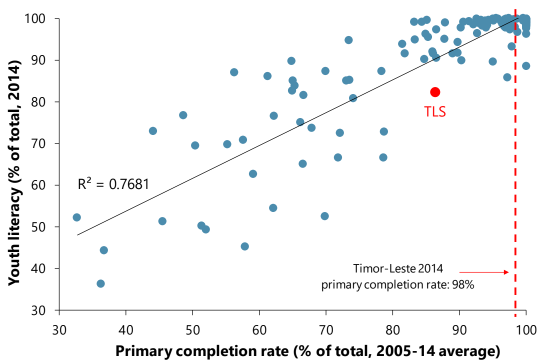
HDI Components

(Index rescaled; 0=worst, 1=best; 2017)



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

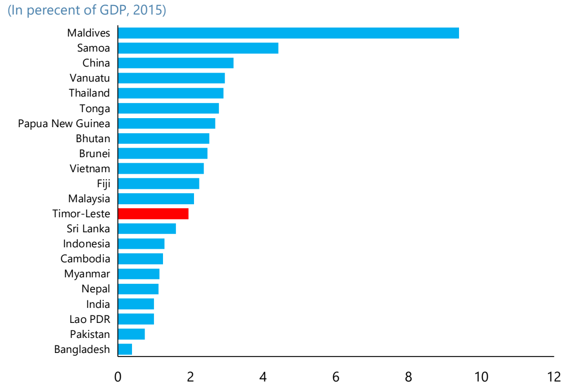
Human Capital: Youth Literacy



… and increasing the level and quality of public spending on health would help strengthen human capital.

Health Expenditure: Selected Developing Asian Economies

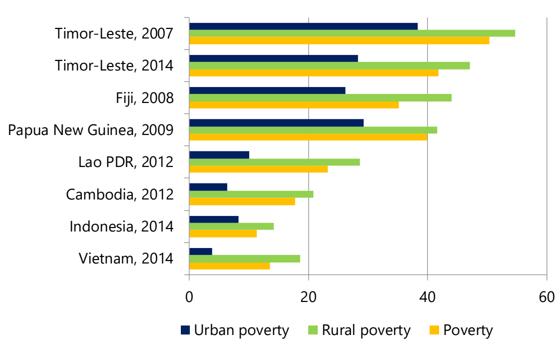
(In percent of GDP, 2015)



Poverty has declined in recent years…

Poverty Headcount Ratio: Selected Asian Countries

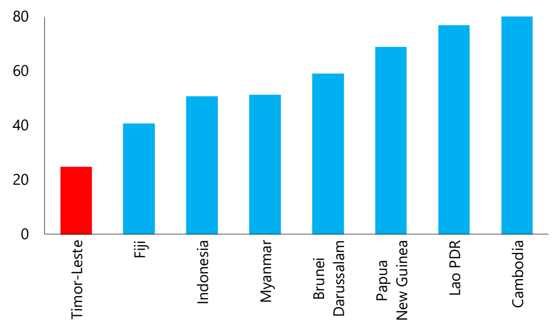
(National poverty line, in percent of population)



…while raising female participation in the labor market remains a challenge.

Female Labor Force Participation Rate 1/

(In percent of female population ages 15+, 2017)



1/ ILO Estimates.

Sources: Human Development Report, 2017; World Bank Development Indicators, latest available data; and IMF staff calculations.

Table 1. Timor-Leste: Selected Economic Indicators, 2015-24

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
			Est.				Proj.			
					(Annual percent change)					
Real sector										
Real total GDP	20.9	0.8	-4.5	-8.0	6.6	1.3	-12.3	-19.2	-2.0	4.8
Real oil GDP	46.5	-4.0	-4.4	-18.3	9.0	-3.7	-38.3	-81.3	-100.0	-
Real non-oil GDP	4.0	5.3	-4.6	0.8	5.0	4.8	4.8	4.8	4.8	4.8
CPI (annual average)	0.6	-1.5	0.5	2.3	2.5	3.2	3.7	3.9	4.0	4.0
CPI (end-period)	-0.6	0.0	0.6	2.1	2.8	3.5	3.8	4.0	4.0	4.0
					(In percent of total GDP, unless otherwise indicated)					
Central government operations										
Revenue	33.2	36.6	30.7	30.0	27.1	23.7	24.1	25.2	23.2	21.9
Domestic revenue	5.5	7.8	7.0	6.3	6.5	6.2	6.7	7.4	7.1	7.4
Estimated Sustainable Income (ESI)	20.6	21.6	17.3	17.8	15.5	14.0	13.8	14.3	12.4	10.9
Grants	7.2	7.2	6.4	5.9	5.2	3.5	3.5	3.5	3.7	3.7
Expenditure	50.2	71.8	49.4	47.3	49.8	52.6	47.0	49.9	43.4	41.7
Recurrent	33.2	40.8	33.5	28.5	33.5	32.3	34.5	37.8	36.2	34.5
Net acquisition of nonfinancial assets	9.9	23.9	9.5	12.9	11.1	16.7	9.0	8.6	3.5	3.5
Donor project	7.2	7.2	6.4	5.9	5.2	3.5	3.5	3.5	3.7	3.7
Net lending/borrowing	-17.0	-35.2	-18.7	-17.3	-22.7	-28.8	-22.9	-24.8	-20.2	-19.8
					(Annual percent change, unless otherwise indicated)					
Money and credit										
Deposits	76.7	11.9	12.9	2.9	9.3	8.4	6.8	8.2	7.8	7.6
Credit to the private sector	10.5	-1.8	24.8	-3.8	13.0	10.3	10.9	12.8	13.3	9.1
Lending interest rate (percent, period average)	13.5	14.0	13.3	13.5	…	…	…	…	…	…
					(In millions of U.S. dollars, unless otherwise indicated)					
Balance of payments										
Current account balance 1/	204	-544	-284	-279	56	-62	15	-329	-171	-295
(In percent of GDP)	6.6	-21.6	-10.2	-9.0	1.8	-1.8	0.5	-10.4	-4.9	-7.6
Trade balance	-635	-546	-615	-626	-652	-714	-694	-734	-717	-760
Exports 2/	18	20	17	22	26	30	36	43	50	60
Imports	653	567	631	648	678	744	730	777	768	820
Services (net)	-583	-569	-344	-398	-291	-397	-311	-389	-299	-271
Petroleum revenue	1,281	872	2,034	672	899	938	890	647	677	559
Overall balance	220	-157	263	26	103	79	79	18	41	51
Public foreign assets (end-period) 3/	16,655	16,125	17,344	16,374	16,262	15,865	15,667	15,194	14,870	14,396
(In months of imports)	153	160	195	172	182	151	159	138	144	130
Exchange rates										
NEER (2010=100, period average)	120.2	120.1	119.7	119.9	…	…	…	…	…	…
REER (2010=100, period average)	150.3	146.2	143.6	146.3	…	…	…	…	…	…
Memorandum items (in millions of U.S. dollars):										
GDP at current prices:	3,104	2,521	2,778	3,090	3,145	3,413	3,333	3,166	3,498	3,886
Non-oil GDP	1,609	1,702	1,730	1,863	2,086	2,342	2,643	3,035	3,498	3,886
Oil GDP	1,496	820	1,048	1,228	1,060	1,071	689	131	0	0
GDP per capita	2,620	2,080	2,240	2,435	2,422	2,569	2,453	2,279	2,463	2,677
(Annual percent change)	-25.0	-20.6	7.7	8.7	-0.5	6.1	-4.5	-7.1	8.1	8.7
Crude oil prices (U.S. dollars per barrel, WEO) 4/	51	43	53	69	59	59	56	57	57	58
Petroleum Fund balance (in millions of U.S. dollars) 5/	16,218	15,844	16,799	15,803	15,588	15,112	14,834	14,343	13,979	13,453
(In percent of non-oil GDP)	1,008	931	971	848	747	645	561	473	400	346
Public debt (in millions of U.S. dollars)	46	77	107	168	255	303	361	457	559	666
(In percent of GDP)	2.9	4.5	6.2	9.0	12.2	12.9	13.6	15.1	16.0	17.1
Population growth (annual percent change)	2.4	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2

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

1/ Excludes trade in goods and services of entities located in the Joint Petroleum Development Area, which are considered non-resident.

2/ Excludes petroleum exports, the income of which is recorded under the income account.

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

4/ Simple average of UK Brent, Dubai, and WTI crude oil prices based on Jan 2019 WEO assumptions.

5/ Closing balance.

Table 2. Timor-Leste: Summary of Central Government Operations, 2015–24 1/

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
			Est.		Proj.					
	(In millions of U.S. dollars)									
Revenue	**1,031.4**	**927.1**	**852.9**	**926.2**	**852.5**	**810.1**	**801.8**	**797.4**	**810.3**	**852.6**
Domestic revenue	170.2	201.0	194.6	194.1	203.9	211.9	222.9	234.3	246.7	286.4
Taxes	119.7	143.8	132.6	130.1	136.4	143.2	150.2	157.9	165.7	192.2
Of which: Taxes on income, profits, and capital gains	53.3	64.2	54.7	59.0	61.6	64.7	67.8	71.2	74.8	89.5
Taxes on goods and services	54.1	64.7	61.3	57.0	59.9	62.9	66.0	69.4	72.8	82.3
Taxes on international trade and transactions	12.1	14.2	15.3	13.6	14.3	15.0	15.8	16.6	17.4	19.7
Non-tax revenue	50.5	53.1	57.4	58.7	62.3	63.3	67.0	70.4	74.7	87.1
Estimated Sustainable Income	638.5	544.8	481.6	550.4	486.0	477.8	461.3	451.4	434.9	423.2
Donor Projects	222.7	181.3	176.7	181.7	162.6	120.4	117.6	111.7	128.7	143.0
Expenditure	**1,559.3**	**1,811.2**	**1,371.5**	**1,461.7**	**1,567.2**	**1,793.8**	**1,565.8**	**1,580.9**	**1,518.5**	**1,621.4**
Expenditure excluding donor projects	1,336.6	1,629.9	1,194.8	1,280.0	1,404.6	1,673.4	1,448.3	1,469.3	1,389.8	1,478.4
Expense	1,252.3	1,209.1	1,108.2	1,062.9	1,217.7	1,222.4	1,267.3	1,309.5	1,395.3	1,484.5
Recurrent	1,029.6	1,027.8	931.5	881.2	1,055.1	1,102.0	1,149.7	1,197.8	1,266.6	1,341.5
Compensation of employees	173.3	178.6	197.2	200.3	214.0	222.6	231.5	240.8	266.1	295.6
Goods and services	423.8	378.1	328.4	354.0	478.3	497.4	517.3	537.9	563.0	589.3
Current transfers	432.5	471.1	405.8	324.2	355.1	369.3	384.1	399.4	415.4	432.0
o/w ZEESM	133.4	217.9	171.8	129.7	142.0	147.7	153.6	159.8	166.2	172.8
Interest payment	0.0	0.0	0.1	2.7	7.7	12.7	16.9	19.7	22.1	24.6
Donor projects	222.7	181.3	176.7	181.7	162.6	120.4	117.6	111.7	128.7	143.0
Net acquisition of NFA	307.0	602.1	263.3	398.8	349.6	571.5	298.5	271.4	123.2	136.9
Gross operating balance	**-220.9**	**-282.0**	**-255.4**	**-136.7**	**-365.1**	**-412.3**	**-465.6**	**-512.1**	**-585.0**	**-631.9**
Net lending/borrowing	**-527.9**	**-884.1**	**-518.7**	**-535.5**	**-714.7**	**-983.7**	**-764.1**	**-783.6**	**-708.2**	**-768.8**
Statistical discrepancy	0.3	1.6	3.1	2.6	0.0	0.0	0.0	0.0	-1.0	-2.0
Net financial transactions	-528.2	-885.7	-521.7	-538.1	-714.7	-983.7	-764.1	-783.6	-707.2	-766.8
Net acquisition of FA	-504.0	-855.1	-491.6	-476.5	-627.7	-936.2	-706.2	-686.8	-604.7	-657.6
Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0
Domestic (net)	-504.0	-855.1	-491.6	-476.5	-627.7	-936.2	-706.2	-686.8	-605.7	-659.6
Equity	-640.0	-700.0	-597.2	-432.1	-627.7	-936.2	-706.2	-686.8	-606.7	-661.6
of which, Excess withdrawal from PF	-640.0	-700.0	-597.2	-432.1	-627.7	-936.2	-706.2	-686.8	-606.7	-661.6
Change in cash/deposit	136.0	-155.1	105.6	-44.4	0.0	0.0	0.0	0.0	0.0	0.0
Net incurrence of liabilities	24.2	30.6	30.1	61.6	87.0	47.5	57.9	96.7	102.6	109.2
Foreign	24.2	30.6	30.1	61.6	87.0	47.5	57.9	96.7	101.6	107.2
Domestic	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0
	(In percent of total GDP)									
Revenue	**33.2**	**36.8**	**30.7**	**30.0**	**27.1**	**23.7**	**24.1**	**25.2**	**23.2**	**21.9**
Domestic revenue	5.5	8.0	7.0	6.3	6.5	6.2	6.7	7.4	7.1	7.4
Taxes	3.9	5.7	4.8	4.2	4.3	4.2	4.5	5.0	4.7	4.9
Of which: Taxes on income, profits, and capital gains	1.7	2.5	2.0	1.9	2.0	1.9	2.0	2.2	2.1	2.3
Taxes on goods and services	1.7	2.6	2.2	1.8	1.9	1.8	2.0	2.2	2.1	2.1
Taxes on international trade and transactions	0.4	0.6	0.6	0.4	0.5	0.4	0.5	0.5	0.5	0.5
Non-tax revenue	1.6	2.1	2.1	1.9	2.0	1.9	2.0	2.2	2.1	2.2
Estimated Sustainable Income	20.6	21.6	17.3	17.8	15.5	14.0	13.8	14.3	12.4	10.9
Expenditure	**50.2**	**71.8**	**49.4**	**47.3**	**49.8**	**52.6**	**47.0**	**49.9**	**43.4**	**41.7**
Expenditure excluding donor projects	43.1	64.7	43.0	41.4	44.7	49.0	43.5	46.4	39.7	38.0
Expense	40.3	48.0	39.9	34.4	38.7	35.8	38.0	41.4	39.9	38.2
Recurrent	33.2	40.8	33.5	28.5	33.5	32.3	34.5	37.8	36.2	34.5
Compensation of employees	5.6	7.1	7.1	6.5	6.8	6.5	6.9	7.6	7.6	7.6
Goods and services	13.7	15.0	11.8	11.5	15.2	14.6	15.5	17.0	16.1	15.2
Current transfers	13.9	18.7	14.6	10.5	11.3	10.8	11.5	12.6	11.9	11.1
o/w ZEESM	4.3	8.6	6.2	4.2	4.5	4.3	4.6	5.0	4.7	4.4
Donor projects	7.2	7.2	6.4	5.9	5.2	3.5	3.5	3.5	3.7	3.7
Net acquisition of NFA	9.9	23.9	9.5	12.9	11.1	16.7	9.0	8.6	3.5	3.5
Gross operating balance	**-7.1**	**-11.2**	**-9.2**	**-4.4**	**-11.6**	**-12.1**	**-14.0**	**-16.2**	**-16.7**	**-16.3**
Net lending/borrowing	**-17.0**	**-35.1**	**-18.7**	**-17.3**	**-22.7**	**-28.8**	**-22.9**	**-24.8**	**-20.2**	**-19.8**
Statistical discrepancy	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	-0.1
Net financial transactions	-17.0	-35.1	-18.8	-17.4	-22.7	-28.8	-22.9	-24.8	-20.2	-19.7
Net acquisition of FA	-16.2	-33.9	-17.7	-15.4	-20.0	-27.4	-21.2	-21.7	-17.3	-16.9
Domestic (net)	-16.2	-33.9	-17.7	-15.4	-20.0	-27.4	-21.2	-21.7	-17.3	-17.0
Equity	-20.6	-27.8	-21.5	-14.0	-20.0	-27.4	-21.2	-21.7	-17.3	-17.0
of which, Excess withdrawal from PF	-20.6	-27.8	-21.5	-14.0	-20.0	-27.4	-21.2	-21.7	-17.3	-17.0
Change in cash/deposit	4.4	-6.2	3.8	-1.4	0.0	0.0	0.0	0.0	0.0	0.0
Net incurrence of liabilities	0.8	1.2	1.1	2.0	2.8	1.4	1.7	3.1	2.9	2.8
Memorandum item										
Nominal GDP	3,104.4	2,521.0	2,778.0	3,090.4	3,145.5	3,413.4	3,332.7	3,165.6	3,498.4	3,886.3
Nominal non-oil GDP	1,608.7	1,701.5	1,729.7	1,862.7	2,085.9	2,342.3	2,643.4	3,034.7	3,498.4	3,886.3
Petroleum Fund										
Opening balance	16,538.7	16,217.7	15,844.3	16,799.2	15,803.0	15,588.2	15,112.0	14,834.7	14,343.4	13,978.1
Comprehensive investment income	957.5	871.4	2,033.7	-13.7	898.9	937.9	890.1	647.0	676.2	557.4
Oil and gas receipts	978.9	223.9	421.4	389.4	243.7	321.5	282.1	57.6	98.7	0.0
Investment returns	326.7	340.9	340.0	282.8	655.2	616.3	607.9	589.4	578.5	559.4
Valuation gains/losses	-323.1	331.1	1,295.9	-685.9	0.0	0.0	0.0	0.0	0.0	0.0
(*Minus*) Expenses and withholding tax	25.0	24.4	23.7	0.0	0.0	0.0	0.0	0.0	1.0	2.0
Withdrawal	1,278.5	1,244.8	1,078.8	982.5	1,113.7	1,414.0	1,167.5	1,138.2	1,041.5	1,084.8
ESI	638.5	544.8	481.6	550.4	486.0	477.8	461.3	451.4	434.9	423.2
Excess withdrawal	640.0	700.0	597.2	432.1	627.7	936.2	706.2	686.8	606.7	661.6
Closing balance	16,217.7	15,844.3	16,799.2	15,803.0	15,588.2	15,112.0	14,834.7	14,343.4	13,978.1	13,450.6
(In percent of non-oil GDP)	1,008.1	931.2	971.2	848.4	747.3	645.2	561.2	472.6	399.6	346.1

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: Balance of Payments, 2015–24

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
				Est.			Proj.			
					(In millions of U.S. dollars)					
Current account balance 1/	204	-544	-284	-279	56	-62	15	-329	-171	-295
Trade balance	-635	-546	-615	-626	-652	-714	-694	-734	-717	-760
Exports 2/	18	20	17	22	26	30	36	43	50	60
of which: Coffee	17	19	15	20	22	25	28	32	37	42
Imports	-653	-567	-631	-648	-678	-744	-730	-777	-768	-820
Services (net)	-583	-569	-344	-398	-291	-397	-311	-389	-299	-271
Receipts	74	77	92	96	104	116	141	157	169	238
of which: Travel	51	58	73	77	82	91	102	110	113	161
Payments	-656	-645	-436	-494	-394	-513	-452	-546	-468	-510
Income (net)	1,297	544	735	657	895	931	884	640	673	556
of which: Investment income	311	320	312	266	649	607	600	581	573	554
Other primary income (oil/gas)	979	224	421	389	244	322	282	58	99	0
Current transfers (net)	125	26	-61	89	104	119	136	154	172	181
Capital and financial accounts	61	533	533	305	47	140	64	348	211	347
Official capital transfers	29	47	34	24	24	24	24	24	24	24
Financial account	32	485	499	281	24	117	40	324	188	323
Change in Portfolio Investment										
Assets (incl. Oil/gas savings)	151	690	340	593	870	1,092	885	1,081	943	1,085
FDI	30	-7	7	30	20	30	50	50	50	48
Inflow	43	5	7	30	20	30	50	50	50	50
External debt (net)	31	3	35	58	84	44	55	93	95	90
Errors and omissions (net)	-45	-145	15	0	0	0	0	0	0	0
Overall balance	220	-157	263	26	103	79	79	18	41	51
Financing										
Change in net foreign assets	-220	157	-263	-26	-103	-79	-79	-18	-41	-51
					(In percent of total GDP)					
Current account	6.6	-21.6	-10.2	-9.0	1.8	-1.8	0.5	-10.4	-5.4	-8.4
Trade balance	-20.5	-21.7	-22.1	-20.3	-20.7	-20.9	-20.8	-23.2	-22.7	-21.7
Exports	0.6	0.8	0.6	0.7	0.8	0.9	1.1	1.4	1.6	1.7
Imports	-21.0	-22.5	-22.7	-21.0	-21.5	-21.8	-21.9	-24.5	-24.3	-23.4
Services (net)	-18.8	-22.6	-12.4	-12.9	-9.2	-11.6	-9.3	-12.3	-9.4	-7.8
Income (net)	41.8	21.6	26.5	21.3	28.5	27.3	26.5	20.2	21.3	15.9
Current transfers (net)	4.0	1.0	-2.2	2.9	3.3	3.5	4.1	4.9	5.4	5.2
Capital and financial accounts	2.0	21.1	19.2	9.9	1.5	4.1	1.9	11.0	6.7	9.9
Overall balance	7.1	-6.2	9.5	0.9	3.3	2.3	2.4	0.6	1.3	1.5
					(In millions of U.S. dollars, unless otherwise indicated)					
Memorandum items:										
Public foreign assets (end-period)	16,655	16,125	17,344	16,374	16,262	15,865	15,667	15,194	14,870	14,396
(In months of imports of G&S)	153	160	195	172	182	151	159	138	144	130
(In percent of non-oil GDP)	1,035	948	1,003	879	780	677	593	501	490	412
of which: Central bank reserves	438	281	545	571	674	753	832	851	891	943
Petroleum Fund balance 3/	16,218	15,844	16,799	15,803	15,588	15,112	14,834	14,343	13,979	13,453
(In percent of non-oil GDP)	1,008	931	971	848	747	645	561	473	461	385

Sources: Data provided by the Timor-Leste authorities; and IMF staff estimates.
1/ Excludes trade in goods and services of entities located in the Joint Petroleum Development Area which are considered non-resident entities.
2/ Excludes petroleum exports, the income of which is recorded under the income account.
3/ Closing balance.

Table 4. Timor-Leste: Monetary Developments, 2015–19

	2015	2016	2017	2018	2019 Proj.
			(In millions of U.S. dollars)		
Banking system 1/					
Net foreign assets 2/	**1,016**	**1,096**	**1,251**	**1,412**	**1,441**
Gross reserves	435	278	541	671	674
Other foreign assets	661	876	783	823	825
Foreign liabilities	80	58	73	81	58
Net domestic assets	**-373**	**-362**	**-428**	**-563**	**-491**
Net credit to central government	-339	-420	-472	-531	-531
Net credit to state and local government	0	0	-12	-11	0
Net credit to public nonfinancial corporations	0	-1	-1	-50	0
Credit to private sector	212	208	260	250	282
Other items (net)	-246	-149	-202	-221	-242
Broad money	**642**	**734**	**823**	**849**	**950**
Narrow money	398	464	465	525	588
Currency in circulation 3/	12	15	15	18	20
Transferable deposits	386	450	450	507	568
Other deposits	245	270	358	323	362
Central Bank					
Net foreign assets 2/	**427**	**271**	**533**	**663**	**667**
Gross reserves	435	278	541	671	674
Foreign liabilities	8	8	8	8	8
Net domestic assets	**-214**	**-179**	**-359**	**-486**	**-486**
Net credit to central government	-238	-215	-279	-342	-342
Net credit to other depository corporations	75	90	12	17	17
Other items (net)	-50	-54	-92	-161	-161
Monetary Base	**213**	**91**	**174**	**177**	**181**
Currency in circulation	12	15	15	18	20
Other liabilities to depositary corporations	201	77	159	159	161
Others 3/	0	0	0	0	0
			(12-month percentage change)		
Broad money growth	7.1	14.3	12.1	3.1	12.0
Reserve money growth	45.4	-57.2	90.7	1.9	2.0
Credit to the private sector growth	10.482	-1.845	24.843	-3.759	13.0
Memorandum items			(In percent, unless otherwise indicated)		
Credit/non-oil GDP	13.2	12.2	15.0	13.4	13.5
Broad money/non-oil GDP	39.9	43.1	47.6	45.6	45.6
Credit/deposits 4/	33.6	28.9	35.5	31.7	32.0
Amounts of non-perfoming loans (in millions of U.S. dollars)	43.7	28.0	31.0	12.3	…
Non-performing loans/total loans	22.9	15.4	13.5	5.6	…
Loan rate 5/	13.5	14.0	13.3	13.5	…
Deposit rate 6/	1.0	1.0	0.7	0.6	…

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

1/ Includes the Central Bank, five commercial banks (including four 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 5. Timor-Leste: Medium-Term Scenario, 2015–24

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
			Est.		Proj.					
Real sector										
GDP at current prices (in millions of U.S. dollars)	3,104	2,521	2,778	3,090	3,145	3,413	3,333	3,166	3,498	3,886
Non-oil GDP	1,609	1,702	1,730	1,863	2,086	2,342	2,643	3,035	3,498	3,886
Oil GDP	1,496	820	1,048	1,228	1,060	1,071	689	131	0	0
Real non-oil GDP growth (percent change)	4.0	5.3	-4.6	0.8	5.0	4.8	4.8	4.8	4.8	4.8
CPI (percent change, period average)	0.6	-1.5	0.5	2.3	2.5	3.2	3.7	3.9	4.0	4.0
CPI (percent change, end-period)	-0.6	0.0	0.6	2.1	2.8	3.5	3.8	4.0	4.0	4.0
Private sector credit (annual percent change)	10.5	-1.8	24.8	-3.8	13.0	10.3	10.9	12.8	13.3	9.1
(In percent of total GDP)										
Central government operations										
Revenue	33.2	36.8	30.7	30.0	27.1	23.7	24.1	25.2	23.2	21.9
Domestic revenue	5.5	7.8	7.0	6.3	6.5	6.2	6.7	7.4	7.1	7.4
Estimated Sustainable Income (ESI)	20.6	21.6	17.3	17.8	14.0	13.8	14.3	12.4	10.9	9.3
Grants	7.2	7.2	6.4	5.9	5.2	3.5	3.5	3.5	3.7	3.7
Expenditure	50.2	71.8	49.4	47.3	49.8	52.6	47.0	49.9	43.4	41.7
Recurrent expenditure	33.2	40.8	33.5	28.5	33.5	32.3	34.5	37.8	36.2	34.5
Capital expenditure	9.9	23.9	9.5	12.9	11.1	16.7	9.0	8.6	3.5	3.5
Donor project	7.2	7.2	6.4	5.9	5.2	3.5	3.5	3.5	3.7	3.7
Net lending/borrowing	-17.0	-35.1	-18.7	-17.3	-22.7	-28.8	-22.9	-24.8	-20.2	-19.8
(In millions of U.S. dollars, unless otherwise indicated)										
Current account balance 1/	204	-544	-284	-279	56	-62	15	-329	-171	-295
Trade balance	-635	-546	-615	-626	-652	-714	-694	-734	-717	-760
Exports 2/	18	20	17	22	26	30	36	43	50	60
Imports	653	567	631	648	678	744	730	777	768	820
Services (net)	-583	-569	-344	-398	-291	-397	-311	-389	-299	-271
Petroleum revenue (incl. Petroleum Fund interest)	1,281	872	2,034	672	899	938	890	647	677	559
(In percent of total GDP, unless otherwise indicated)										
Current account balance 1/	6.6	-21.6	-10.2	-9.0	1.8	-1.8	0.5	-10.4	-4.9	-7.6
Trade balance	-20.5	-21.7	-22.1	-20.3	-20.7	-20.9	-20.8	-23.2	-20.5	-19.6
Exports 2/	0.6	0.8	0.6	0.7	0.8	0.9	1.1	1.4	1.4	1.5
Imports	21.0	22.5	22.7	21.0	21.5	21.8	21.9	24.5	21.9	21.1
Services (net)	-18.8	-22.6	-12.4	-12.9	-9.2	-11.6	-9.3	-12.3	-8.5	-7.0
Public external debt										
(In millions of U.S. dollars)	46	77	107	168	255	303	361	457	559	666
(In percent of total GDP)	1.5	3.1	3.8	5.4	8.1	8.9	10.8	14.4	16.0	17.1
Memorandum items:										
Petroleum Fund balance (in millions of U.S. dollars) 3/	16,218	15,844	16,799	15,803	15,588	15,112	14,834	14,343	13,979	13,453
(In months of imports)	149	157	189	166	175	144	151	130	136	121
(In percent of total GDP)	522	628	605	511	496	443	445	453	400	346
Crude oil prices (U.S. dollars per barrel, WEO) 4/	51	43	53	68	54	55	56	57	57	58

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

1/ Excludes trade in goods and services of entities located in the Joint Petroleum Development Area which are considered non-resident entities.

2/ Excludes petroleum exports, the income of which is recorded under the income account.

3/ Closing balance.

4/ Simple average of UK Brent, Dubai, and WTI crude oil prices; January 2019 WEO assumptions.

Table 6. Timor-Leste: Sustainable Development Goals Monitoring

Goals	2002	2007	2016
Poverty 1/			
Income share held by lowest 20%	7.3	9.5	9.4
Poverty gap at $1.90 a day (2011 PPP) (%)	13	12.5	6.7
Poverty headcount ratio at $1.90 a day (2011 PPP) (% of population)	42.5	47	30.3
Poverty headcount ratio at national poverty lines (% of population)	36.3	50.4	41.8
Hunger 2/			
Prevalence of overweight, weight for height (% of children under 5)	5.7	...	1.5
Prevalence of stunting, height for age (% of children under 5)	55.7	53.9	50.2
Prevalence of undernourishment (% of population)	32.2	32.9	27.4
Prevalence of underweight, weight for age (% of children under 5)	40.6	48.6	37.7
Prevalence of wasting, weight for height (% of children under 5)	13.7	24.5	11
Good Health and Well-being			
Births attended by skilled health staff (% of total)	24	...	...
Mortality rate, under-5 (per 1,000 live births)	97.6	72.9	49.7
Mortality rate, neonatal (per 1,000 live births)	34.8	27.8	21.6
Demand for family planning satisfied by modern methods (% of married women)	...	...	46.1
Adolescent fertility rate (births per 1,000 women ages 15-19)	70.1	65.8	45.6
Smoking prevalence, males (% of adults) 3/	92.6	...	78.1
Source data assessment of statistical capacity (scale 0 - 100)	...	50	70
Gender Equality 4/			
Proportion of women subjected to physical and/or sexual violence in the last 12 months (% of women age 15-49)	...	...	30.4
Women who were first married by age 15 (% of women ages 20-24)	...	...	3
Women who were first married by age 18 (% of women ages 20-24)	...	...	18.9
Clean Water and Sanitation 5/			
People using basic drinking water services (% of population)	52.0	58.9	70.2
People using basic sanitation services (% of population)	34.0	37.4	44.0
Affordable and Clean Energy			
Access to electricity (% of population)	25.0	36.6	63.4
Access to clean fuels and technologies for cooking (% of population)	2.5	3.6	6.9
Decent Work and Economic Growth			
Account ownership at a financial institution or with a mobile-money-service provider (% of population ages 15+)	...	...	13.4
Peace, Justice and Strong Institution 6/			
Completeness of birth registration (%)	53.0	...	55.2
Global Partnerships for the Sustainable Development			
Individuals using the Internet (% of population)	0.0	1.0	25.2

Source: UN SDG Indicators Global Database, Timor-Leste State Budget Book 2018.

1/ 2002 data as of 2001, 2016 data as of 2014

2/ 2016 data as of 2013

3/ 2002 data as of 2000

4/ 2016 data as of 2010

5/ 2016 data as of 2015

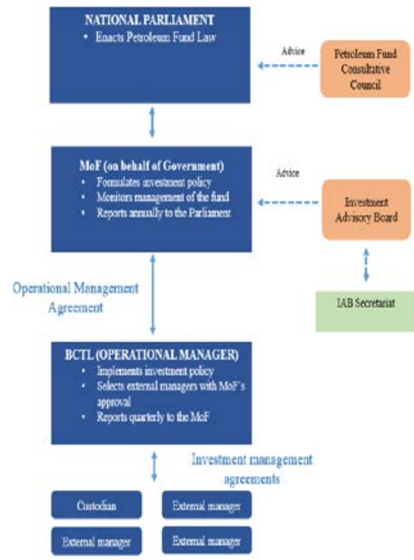
6/ 2002 data as of 2003, 2016 data as of 2010

Annex I. Governance of the Petroleum Fund of Timor-Leste[1]

The Petroleum Fund (PF) was established in 2005 to ensure a fair and equitable use of state-owned natural resources in accordance with the national interest, and that the income derived from the exploitation of these resources should lead to the establishment of a mandatory financial reserve.

1. Governance Structure. The PF Law defines the roles and responsibilities of various institutions involved (text figure) who are accountable to the government and overseen by the Ministry of Finance. The PF is formed as an account of the Ministry of Finance (MoF). The Banco Central de Timor-Leste (BCTL) is appointed as the operational manager of the PF by the MoF and holds the account. The Parliament sets broad objectives for the Fund, including asset allocation guidelines and risk limits. The MoF is responsible for the overall management of the PF. This includes setting the investment policy and strategy, guidelines for new investments as well as exercising oversight. In this process, it is mandatory that the Minister of Finance seek advice from and consult with the Investment Advisory Board (IAB) before making decisions on any matter relating to the investment strategy or management of the Fund. The operational management of the Fund is delegated to and carried out by the BCTL, who can directly and indirectly be involved with the investment. In this process, the BCTL is obliged to adhere to the guidelines established by the MoF. For indirect investment, the BCTL delegates investments to global investment management firms that it selects and monitors.

Petroleum Fund's Governance Structure



Source: Timor-Leste Petroleum Fund Report, 2017.

2. Transparency. The MoF prepares the Petroleum Fund's Annual Report and financial statements, as well as the General State Budget statement for the National Parliament, which includes the Estimated Sustainable Income (ESI) calculations. The BCTL provides quarterly reports to the Minister of Finance on the Fund's performance. For the audit process, an internationally recognized external auditor is appointed to issue and publish an audit report on the Fund's annual financial statements.

3. International Standards. Timor-Leste's management of the Petroleum Fund is assessed to be satisfactory, according to the 2018 report of the Extractive Industries Transparency Initiative (EITI). This report shows that the PF meets the international standards, not only in terms of the governance, but also in terms of the transparency of production and revenue schedules and allocation of revenue. In addition, the Petroleum Fund of Timor-Leste is an active member of the International Forum for Sovereign Wealth Funds (IFSWF). As of 2018, it has conducted a seventh annual self-assessment of the Petroleum Fund's adherence with the Santiago Principles to ensure that the Fund continues to exemplify international best practice with regards to fund governance.

[1] Prepared by Gee Hee Hong (APD).

Annex II. Risk Assessment Matrix[1]

Sources of Risks (Horizon)	**Relative Likelihood** (high, medium or low)	**Expected Impacts if Realized** (high, medium or low)	**Recommended Policy Responses**
1. Weaker-than-expected global growth (short and medium term)	**High/Medium** Euro: Adverse financial market reaction to debt sustainability concerns and/or disorderly Brexit cause market disruption and dampens growth. In the medium term, rising sovereign yields for high-debt countries could adversely impact confidence and growth. (High*).* *US*: The unwinding of the fiscal stimulus triggers a global growth slowdown (medium). *China:* Trade tensions and/or a housing market downturn prompt a slowdown, Insufficient progress in deleveraging and rebalancing reduces growth lead to negative spillovers on the global economy through trade volumes, commodity prices, and financial markets (medium)	**Medium/Low** The impact via lower commodity and oil prices is limited by the insulating role of the Petroleum Fund (PF) and low levels of non-oil trade and capital account integration. Nonetheless, weaker growth in Timor-Leste's trading partners may slow down the growth in tourism and FDI inflows, hampering economic diversification.	Government expenditure plans need to be scalable to mitigate sharp slow-downs in growth. Efforts to raise non-oil revenues need to be intensified and the PF should be maintained at an adequate level as an ongoing revenue source and to provide a fiscal buffer.
2. Sharp tightening of global financial conditions (Short-term)	**High/Medium** Sharp tightening of global financial conditions causing higher debt service and refinancing risks; stress on leveraged firms, households, and vulnerable sovereigns; capital account pressures; and a broad-based downturn.	**Medium/Low** Higher global interest rates would raise income from PF but also incur capital losses. Renewed global shocks that affect international banking operations could impact local liquidity conditions.	The BCTL's regulatory and supervisory framework and crisis management toolkit need to be enhanced. Address weak financial intermediation would reduce overseas placement of dollar-denominated deposits.
3. Large swings in energy prices (medium term)	**Low** Risks to prices are broadly balanced, but uncertainty surrounding shocks translates to elevated price volatility, complicating economic management and adversely affecting investment in the energy sector.	**Low** Lower and more volatile energy prices may delay investment decisions in new oil fields and reduce profit. The impact on PF saving is limited.	As for 1 above.
4.Higher domestic inflation (medium-term)	**Medium** Inability to moderate the scaling up of public expenditures raises inflation as the absorptive capacity of the economy is limited.	**Medium** High inflation adversely affects the poor and vulnerable. Fiscal pressure increases due to higher transfers and public-sector wages.	Fiscal policy needs to be adaptable to maintain macro-stability, preserve competitiveness and better protect the poor.
5.Over-investment in projects with low returns (medium-term)	**Medium** This could arise due to the implementation of capital-intensive projects with ambitious cost-benefit analyses.	**High** Capital-intensive projects with small economic linkages have a limited impact on job creation and poverty reduction while depleting PF and risk fiscal sustainability.	Projects should be subject to transparent and realistic cost benefit assessments and risk analysis, and only go ahead if the social returns are higher than the opportunity costs.
6.Failure to secure inclusive growth (medium-term)	**Low/Medium** Discontent could be triggered by the public perception of a low growth dividend, that oil wealth is not trickling down and not reducing poverty.	**High** Pressures to raise expenditures may lower the expected return and quality of public investments. Foreign investment, may be discouraged.	Sound policy frameworks and governance structures to be reinforced, especially through more transparency and accountability.
7. Development of Greater Sunrise or other oil fields (medium-term)	**Low** Upside risk if petroleum production from the Greater Sunrise fields come on line earlier than expected (i.e., within the medium-term horizon)	**High** Higher fiscal spending could be supported and to some extent, help enhance long-term growth prospects.	Ensure that the project is technical and economic viability and that proper safeguards are taken to minimize funding risks.

[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 of 30 percent or more). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities.

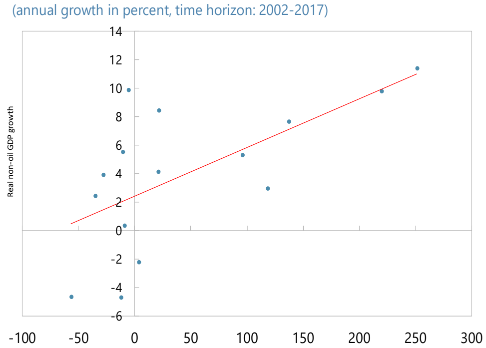
Annex III. Public Sector Dependency and Diversification[1]

Timor-Leste is one of the most natural resource-dependent countries in the world. As revenue from ongoing petroleum production has been declining, investment returns from the Petroleum Fund are gradually becoming the main source of finance for the government. The public sector, in turn, plays a dominant role in the economy – not only because of the scale of spending but also because of its role as a major employer. With oil and gas extraction from active fields projected to end in 2022, economic diversification is of the highest priority. Achieving high, sustainable and inclusive private sector growth will be crucial to improve living standards, mobilize domestic revenues for the government, and generate jobs for Timor-Leste's rapidly-growing population.

1. **The public sector is the main driver of non-oil growth**. Since 2011, public spending averaged 40 percent of GDP and 106 percent of non-oil GDP. A significant share of spending has been dedicated to investing in infrastructure (roads, ports, airports, and bridges) and public institutions—in part due to the destruction that occurred during the occupation years. This has been financed predominantly by revenues from resources, namely, oil and gas receipts. Petroleum revenue accounts for nearly 75 percent of total revenue and 40 percent of total GDP. This makes Timor-Leste one of the most natural resource-dependent countries in the world. Since 2015, the reliance on the Petroleum Fund as financing source has increased, as the total withdrawal from the Petroleum Fund has been considerably above the Estimated Sustainable Income (ESI),[2] where ESI is a measure of the level of resources that can be sustainably withdrawn every year.

Real non-oil GDP growth vs. Capital Expenditure growth

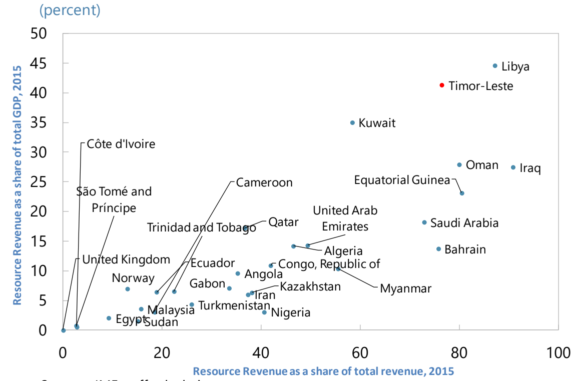
(annual growth in percent, time horizon: 2002-2017)



Sources: IMF staff calculations

Resource Revenue Dependence

(percent)



Sources: IMF staff calculations

2. **Public sector-driven activities are the dominant drivers of the Timor's economy, both in terms of value-added and employment.**

- *Gross-Value Added*. Diversification in Timor-Leste in value-added terms has mainly been driven by the expansion of public services and construction. In addition, the economic importance of agriculture in Timor-Leste has gradually fallen. To some extent, this is to be expected as the

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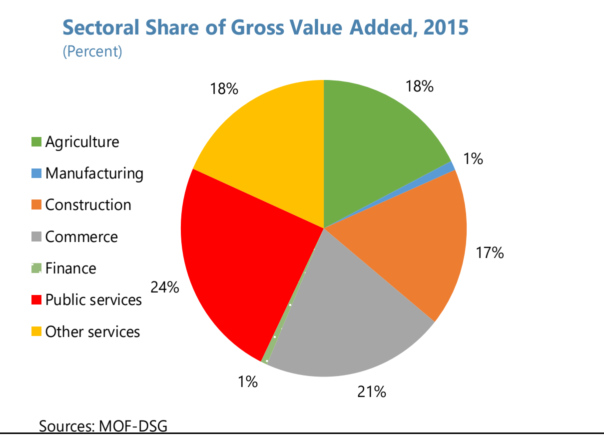
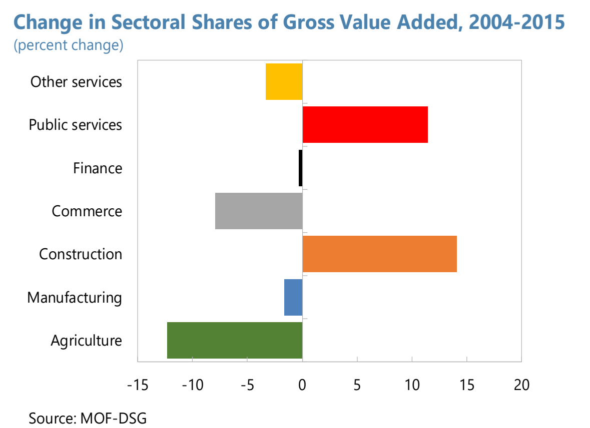
[1] Prepared by Gee Hee Hong (APD) and Pedro Miguel Gaspar Martins (World Bank).

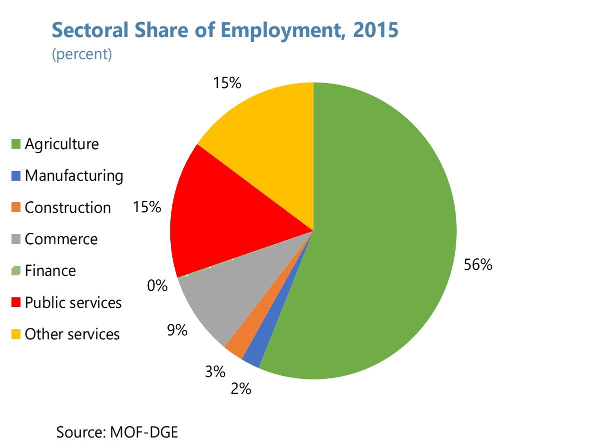
[2] The Estimated Sustainable Income (ESI) is calculated as 3 percent of the net present value of petroleum wealth.

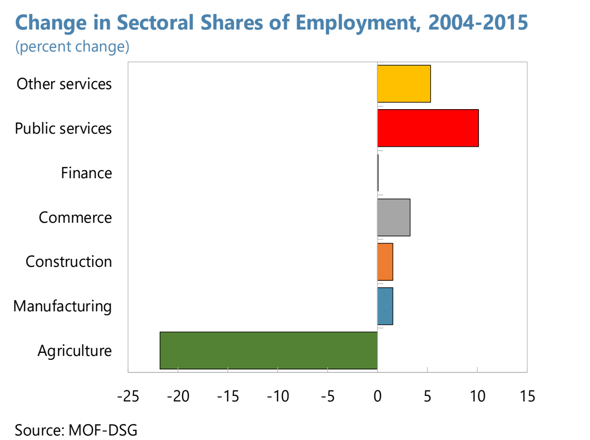
economy develops. However, in Timor-Leste, the reduced importance of agriculture has not been driven by growth in other private sectors, but rather by the increased importance of public services[3] and construction. Between 2004 and 2015, the share of gross value added by the agriculture sector fell from 30 to 18 percent while that of construction and public services rose from 16 to 42 percent. Today, the public service sector is the largest contributor to the non-oil economy, followed by commerce and construction.[4]

- *Employment*. While most workers continue to rely on subsistence agriculture, employment in agriculture has fallen since independence. Meanwhile, public sector employment has increased substantially over the same time period. The non-agricultural private sector is still relatively small, but employment in construction and manufacturing has shown impressive growth since 2004 (over 20 percent per year) – mainly because of low initial levels.









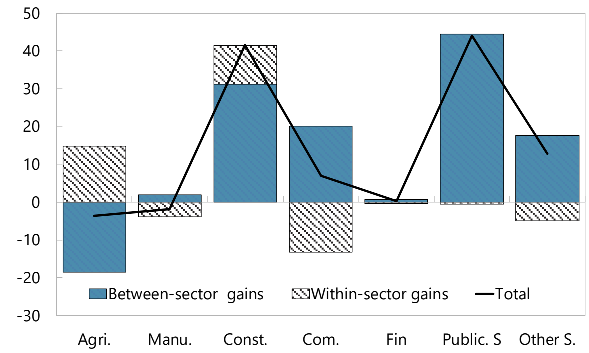
3. Sectoral shifts of labor have been the key driver of overall labor productivity, while within-sector productivity gains have been low. Overall labor productivity increased by approximately 60 percent between 2004 and 2015. The main driver of this growth was between-sector labor reallocation. That is, labor moved away from low-productivity sectors (e.g., agriculture)

[3] Public services comprise public administration & defense, education, health, and social work activities.

[4] Commerce includes wholesale & retail trade, transportation & storage, and accommodation & food services.

to higher productivity sectors (e.g., construction, commerce, and public services). Altogether, between-sector gains accounted for well over 90 percent of total labor productivity growth. Meanwhile, within-sector productivity growth has been disappointing. In fact, over the past decade, agriculture and construction are the only two sectors with positive labor productivity growth. The high productivity gains in the construction sector likely reflect the high capital-intensity of large public infrastructure projects.

Contribution to Labor Productivity Growth by Sector
(Percentage share of aggregate labor productivity growth, 2004-2015)



Sources: MoF-DSG and IMF Staff calculations

4. Waning petroleum production combined with a rapidly-growing working-age population highlight the urgent need for diversification. Continued excess withdrawals from the Petroleum Fund will eventually affect the capacity of the government to support growth through public spending. Mobilizing non-oil domestic revenue and limiting the excess withdrawals should, therefore, be a priority. Moreover, Timor-Leste is one of the youngest and fastest growing countries in Asia in terms of population. Nonetheless, job insecurity and unemployment are high, and labor force participation low—particularly among younger and female workers. Without private sector growth and successful economic diversification, a rising gap between a growing labor force and the availability of decent jobs risk creating social and economic challenges.

5. Economic diversification and reduced dependence on public spending will require three broad objectives.

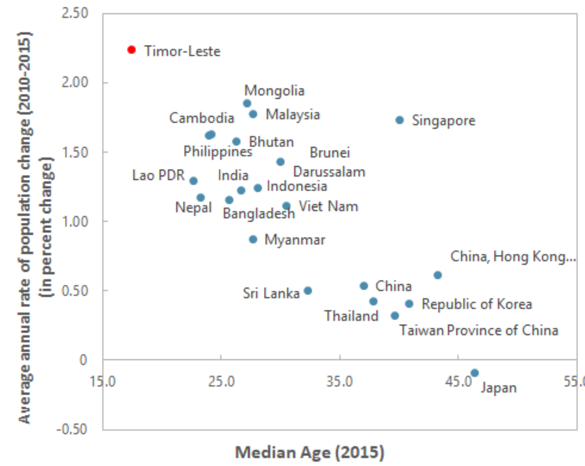
- *Macroeconomic stability*. Public confidence in government institutions is a prerequisite for stable economic development. This would entail ensuring long-term fiscal sustainability by mobilizing domestic revenue, strengthening public financial management, and combating corruption.
- *Private sector growth and job creation (Annex IV)*. Boosting investment in human capital (education, vocational training, nutrition) and improving and enforcing labor regulations will be key. In addition, strengthening business regulations and developing a private investment strategy should also help channel private investment into productive sectors where Timor-Leste has a comparative advantage.
- *Financial sector development*. Developing a financial system that is supportive of private sector growth is imperative –both by removing obstacles to financial intermediation (e.g., strengthening the collateral system), and enhancing financial inclusion (e.g., expand access to financial services and improve financial literacy).

Annex IV. Growth Dividend from Labor Market Reforms[1]

Timor-Leste's population is the youngest and fastest growing in Asia. With proper policies and reforms, the growing working-age population should generate significant growth dividends. Staff calculations suggest that if Timor-Leste can raise labor productivity and improve labor market outcomes for its youth, then non-oil growth could be raised to above 7 percent by 2030, more than 2 percent higher than under the current baseline scenario.

1. Timor-Leste's population is the youngest and fastest growing in Asia. Between 2010 and 2015 the population grew at an average annual rate of 2.2 percent – well above the regional average of 1.3 percent. Moreover, half the population in Timor-Leste is below the age of 18, while the average median age in Asia is about 30. Based on United Nation's World Population Prospects in 2017, the country's population is expected to continue to grow throughout the 21st century, with the share of working-age people (i.e., aged 15 to 64) rising until the 2060s.[2] Total population is projected to increase from 1.3 million in 2017 to 1.9 million by 2030.

Median Age and Population Growth



Source: United Nations.

2. Weak labor market outcomes and low productivity growth suggest difficulties to absorb job market entrants. The latest numbers from the 2013 Labor Force Survey show that the labor participation rate in Timor-Leste is about 30 percent, and the overall unemployment rate is around 11 percent. However, 26 percent of the working age population classifies as subsistence food producers and 93 percent of subsistence food producers are not counted in the labor force. The situation appears to be even more dire for female and young workers. Female labor force participation is as low as 21 percent and youth unemployment is as high as 22 percent. Moreover, over the last five years, labor productivity has grown at an annual average rate of by 2.0 percent, well below the average of lower middle-income countries (3.8 percent). Indeed, most of the productivity gains have come from labor shifting to high-productivity sectors, rather than from within-sector productivity (see Annex III).

3. To quantify the potential growth dividends from improving labor market outcomes and raising productivity four scenarios are considered.

[1] Prepared by Naoya Adachi (APD).

[2] United Nations, Department of Economic and Social Affairs, Population Division (2017). World Population Prospects: The 2017 Revision.

- *Baseline scenario*. The number of workers is assumed to grow by about 3.2 percent annually, on average. Moreover, the labor force participation and unemployment rates (for every five-year age cohort) remain constant, and labor productivity continues to grow at 2.0 percent. [3] [4]
- *More job opportunities for young workers*. This scenario assumes that the labor participation rate for those aged 20-24 increases (currently at 22 percent) to the average youth labor participation rate of a middle-income country (i.e., 46 percent) and the youth unemployment rate falls to the average of a middle-income country (i.e., 14 percent).[5,6]
- *Boosting labor productivity*. This scenario assumes that labor productivity increases to the average rate of a middle-income county (i.e., 4 percent)— holding both the labor participation rate and unemployment constant.
- *More job opportunities for young workers and higher productivity*. The final scenario combines the two previous scenarios.

Potential Growth Gains from Improving Labor Market Outcomes and Productivity

	Assumption (in 2030)			Projection	
	Youth labor participation	Youth unemployment	Labor productivity growth	Annual growth rate (%) 2021-25	2026-30
Baseline Scenario	14.2	21.9	2.0	4.9	4.8
Reform Scenarios					
More job opportunity for youth	45.8	13.7	2.0	5.6	5.7
Higher productivity	14.2	21.9	3.7	6.1	6.5
More job opportunity for youth and higher productivity	45.8	13.7	3.7	6.7	7.5

Source: IMF staff projections.

4. **The scenario analysis shows that if Timor-Leste can reach labor market outcomes similar to those in middle-income countries, non-oil growth could be increased from 5 to 7.5 percent per year.** Under the baseline, the non-oil economy will grow at around 4.8 percent. However, if the youth labor participation rate is gradually raised to from 22 to 45 percent, non-oil GDP growth would increase to about 5.7 percent by 2030. In addition, if labor productivity increases from 2 to 4 percent (third scenario), then annual real non-oil GDP growth would increase to about 7.5 percent by 2030.

[3] The labor participation rate and unemployment rate are available for every five-year age group and every ten-year age group, respectively.

[4] Under all the reform scenarios, linear changes for all variables are assumed. For example, when assuming the labor productivity will increase by 1.7% from 2015 to 2030, the changes are allocated equally over 15 years and the assumed change from 2015 to 2020 is 0.5.

[5] The labor participation rate for aged 15-20 is kept constant as the low rate partly reflects school attendance.

[6] Due to the data limitation, the average of youth labor participation rate of a middle-income country is from 2010, while that of the youth unemployment rate is from 2017.

5. To capture growth dividends from the rapidly-growing working population, labor market reforms should focus on the following areas:

- *Improve basic education outcomes*. Educational attainment remains low when compared with other countries in the region (e.g., Indonesia and Malaysia). Pre-school enrollment needs to be expanded, infrastructure improved (both in terms of quality and quantity of school facilities), teacher competence enhanced, and governance of the education system strengthened.[7]
- *Increase female labor force participation and job opportunities*. Important measures include, improving female educational attainment, promote access to the formal sector and enforcing existing labor regulations (only 26 percent of women have employment contracts compared with 74 percent for men), ensuring access to social protection, and eliminate discrimination in recruitment and promotion.
- *Address skilled labor shortages*: Expanding Technical and Vocational Education and Training (TVET) and ensuring close coordination between TVET systems and the private sector is crucial to align the supply of skilled labor with sectoral demand. Expand opportunities for Timorese worker to gain experience abroad should also help facilitate knowledge spillovers.
- *Strengthen implementation of labor regulations*. Strengthening capacity to enforce labor regulation should help improve job worker rights. Finally, establishing a minimum wage policy that strikes the right balance between reducing earnings inequality and increasing formal employment of unskilled workers should also be considered.

[7] See "Regaining Momentum," 2018, Timor-Leste Economic Report, World Bank.

Annex V. External Sector Assessment[1]

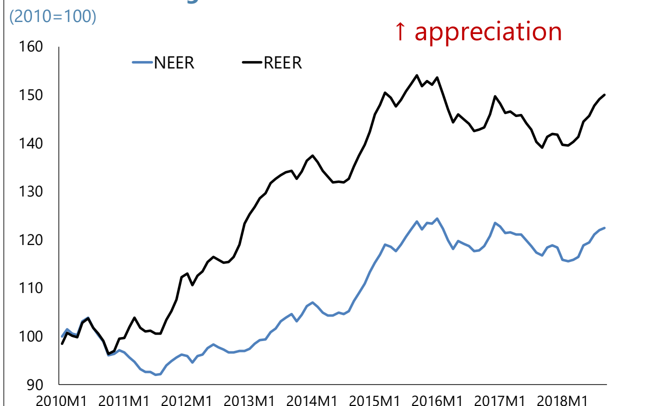
The external position of Timor-Leste in 2018 is substantially weaker than that consistent with medium-term fundamentals and desirable policy settings. The oil-dependent economy is facing a large structural change due to the expected depletion of the active oil and gas fields in 2022. The current account (CA) deficit narrowed in 2017-18, mainly due to lower imports along with fiscal consolidation and higher oil/gas prices. Improving external competitiveness is key to advancing economic diversification and promoting non-oil private sector development, warranting fiscal adjustment and steady implementation of structural reforms.

1. **The external CA deficit is projected to remain in the medium term.** The CA turned to a deficit in 2016, but improved in 2017-18 due to lower imports resulting from lower fiscal expenditure and higher oil and gas prices. The CA deficit is projected to remain in the medium term, averaging about 4 percent of GDP. The deficit will mainly be driven by higher imports related to capital spending, falling oil/gas receipts, and fluctuations in the PF's investment returns.

2. **The Petroleum Fund (PF) will work as a buffer and provide the lion's share of funding over the medium term**. Active oil/gas fields are expected to be depleted in 2022, but the PF will continue to provide investment returns in the medium term. The CA deficit will be financed largely by divestment from the PF, together with external borrowing and FDI inflows.

3. **The real effective exchange rate (REER) has appreciated since 2010.** The REER appreciated by about 7 percent annually during 2010-2015, resulting from Timor-Leste's high inflation differential with trading partners and an appreciation of the nominal effective exchange rate (NEER) due to a stronger U.S. dollar. The REER started to depreciate in 2016 due to a low domestic inflation, but started to appreciate again in 2018 as inflation picked up and the U.S dollar strengthened.

Effective Exchange Rates
(2010=100)



Sources: Country authorities; and IMF staff calculation.

4. **The revised EBA-Lite framework provides mixed results on the REER, but points to a current account level substantially weaker than the level implied by fundamentals and**

[1] Prepared by Naoya Adachi (APD)

desirable policies.[2] [3] This assessment is based on the IMF standard methodology using the CA model, the REER model, and External Sustainability approach (ES).[4]

- *CA-model*. The CA gap (i.e., the difference between CA-actual and the CA norm) suggests an external position that is substantially weaker than current fundamentals and desirable policy settings. However, most of the CA gap (23 percentage points) is unexplained by the model and the estimated policy gap is small. Compared to the assessment for 2016 (derived using the previous version of the EBA-Lite) the CA norm has changed substantially (from a deficit of 8 percent to a surplus of 13 percent). It is important to note that the regression database underpinning the CA-model does not include Timor-Leste and does not account for time-invariant country-fixed effects. Hence, the assessment may not adequately account for ongoing structural changes in Timor-Leste (e.g., depletion of active oil fields), immature financial markets, demographic trends, and large infrastructure gaps. Moreover, the results are sensitive to sample periods and underlying assumptions and does not take into account data limitations (e.g., difficulties in estimating output gap and cyclically adjusted fiscal balance due to the short period of available data).

2018 External Balance Assessment Results
(In percent of GDP, unless otherwise indicated)

	CA model [1]	REER model	ES model [2]
Actual CA	-9.0		
CA norm	13.4		
CA gap	**-22.4**		**-10.4**
Policy gap	0.9		
Unexplained	-23.3		
REER gap [3]	**62.0**	**2.9**	**72.4**
Policy gap		3.5	
Unexplained		-0.6	

[1] With team's desirable policy level.
[2] ES model used 2016 NFA data.
[3] Gap between ln(REER) Actual and ln(REER) Norm, implying over(+)/under(-) valuation.
Source: IMF staff estimates.

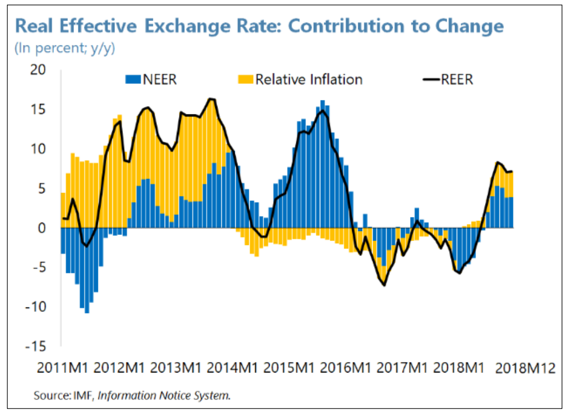
- *REER-model*. The REER model directly estimates the equilibrium REER based on variables that affect the REER through changes to the CA balance. The result from the REER-model suggests that Timor-Leste's REER is overvalued by 3 percent, indicating that it is broadly in line with fundamentals and desirable policies. Unlike the CA-model, the REER-gap is to a large extent explained by the policy gap, primarily reflecting too high real interest rate.

[2] The revision to the EBA-Lite CA model includes: (i) eliminating aid, aging speed, and remittances from explanatory variables and adding outward migrant shares; (ii) adding natural disasters and armed conflict dummies; (iii) incorporating social insurance policies; and (iv) separating cyclical factors from structural financial policies. Given Timor-Leste's young and fast-growing population, (i) makes large differences from the previous model, and as a result, CA norm turned from negative to positive.

[3] A similar revision was made to the EBA-Lite REER model: the addition of the public health policy, and the credit growth variables; the indicators for natural disasters and militarized conflicts; and the REER model uses the indicative policy norms for the credit-to-GDP ratio, credit growth, and public health policy. In contrast, the REER model keeps using aid and remittances as an explanatory variable.

[4] Since Timor-Leste is a large net creditor and does not appear to have external sustainability concerns, the focus is on the CA and REER models.

5. International reserves adequacy is met due to the significant buffers provided by the PF.[5] NIR is estimated at US$0.6 billion at end 2018, amounting to an import coverage of 6.4 months. Reserve adequacy metrics for credit-constrained LICs suggest that the optimal level of reserves for Timor-Leste is around 9.5 months of imports, much higher than the traditional metric of 3 months. The estimated adequacy threshold largely reflects the inflexibility of a dollarized economy in adjusting the exchange rate to absorb shocks. While a fully dollarized economy does not face exchange rate fluctuation risk, liquidity is needed to protect the financial system from liquidity shocks and as a fiscal buffer for the financing gap. In this context, the PF provides significant buffers, with foreign assets at US$16 billion (506 percent of GDP with the allocation of 40 percent in equities and the remaining in bonds) equivalent to 166 months of goods and services imports. In contrast, according to the latest numbers foreign liabilities remain relatively small, at 19.3 percent of GDP at end-2017, mostly consisting of FDI liabilities and external debt (12.2 percent and 3.8 percent of GDP, respectively).



6. Structural reforms remain crucial to improve external competitiveness and diversify the economy. Implementation of needed structural reforms of the non-oil economy should reduce import dependence and increase the export base. Maintaining low inflation and increasing labor productivity through investments in education and health should also help increase competitiveness.

[5] See IMF (2015), Assessing Reserve Adequacy – Specific Proposals.

INTERNATIONAL MONETARY FUND

DEMOCRATIC REPUBLIC OF TIMOR-LESTE

STAFF REPORT FOR THE 2019 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

March 8, 2019

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

CONTENTS

FUND RELATIONS

(As of February 28, 2019)

Membership Status
Joined: July 23, 2002; Article VIII

General Resources Account

	SDR Million	Percent Quota
Quota	25.60	100.00
Fund holdings of currency	21.25	83.01
Reserve position in Fund	4.35	17.00

SDR Department

	SDR Million	Percent Allocation
Net cumulative allocation	7.73	100.00
Holdings	3.39	43.92

Outstanding Purchases and Loans: None

Latest Financial Arrangements: None

Projected payments to Fund:
(SDR Million; based on existing use of resources and present holdings of SDRs)

	Forthcoming				
	2019	2020	2021	2022	2023
Principal					
Charges/Interest	0.04	0.05	0.05	0.05	0.05
Total	0.04	0.50	0.05	0.05	0.05

Exchange Rate Arrangements
The exchange rate arrangement (de jure and de facto) is an exchange arrangement with no separate legal tender. 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 restrictions on the making of payments and transfers for current international transactions.

Article IV Consultations

Timor-Leste is on a 12-month consultation cycle. The last Article IV consultation was concluded on January 25, 2019. The end-of-mission press release for the 2019 Article IV Consultation may be found at: https://www.imf.org/en/News/Articles/2019/01/25/pr1915-imf-staff-concludes-2019-article-iv-consultation-mission-to-timor-leste. The country report for the 2017 Article IV Consultation may be found at: https://www.imf.org/en/Publications/CR/Issues/2017/12/07/Democratic-Republic-of-Timor-Leste-2017-Article-IV-Consultation-Press-Release-and-Staff-45447.

Resident Representative

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

INFORMATION ON THE ACTIVITIES OF OTHER IFIS

Information on the activities of other IFIs 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 February 2019)

I. Assessment of Data Adequacy for Surveillance
General: Data provision to the Fund has serious shortcomings that significantly hamper surveillance. Areas of concern include, lagged dissemination of GDP data, inconsistency between national accounts and balance of payments on petroleum-related transactions, and weaknesses in compilation and dissemination of government financial statistics (GFS). The enhancement of the General Directorate of Statistics (GDS) within the Ministry of Finance is an ongoing priority.
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*. However, estimates are not timely. The oil sector presently accounts for up to 80 percent of total GDP, based on an assumption by the GDS that 90 percent of activity in the Joint Petroleum Production Area (JPDA) is resident in Timor-Leste. This conflicts with balance of payments estimates, including net exports and other income flows, produced by the Banco Central de Timor-Leste (BCTL), which assume all JPDA production is non-resident. IMF work to align these statistics by staff is underway and could result in significant, though likely largely offsetting revisions to GDP and GNI.
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 regions other than Dili and Baucau. Starting 2018 August, the basket weights were updated, and CPI was rebased with an August 2018 reference period (i.e., August 2018=100).
Government Finance Statistics: Annual Government Finance Statistics (GFS) is compiled and disseminated, with 2017 general government data submitted as the latest for the GFS database. Compilation and dissemination of quarterly GFS has been deferred due to data discrepancies and challenges in resolving the source of those discrepancies. The last publication of quarterly GFS data (covering the period April-June 2016) was undertaken in Quarter 3, 2016. There is an on-going technical assistance (TA) mission conducted by the PFTAC to assist the government of Timor-Leste in improving GFS compilation and dissemination practices including Public Sector Debt Statistics (PSDS). Timor-Leste does not report to the Quarterly Public Sector Debt database (QPSD), jointly developed by the World Bank and IMF.
Monetary and Financial Statistics: The Banco Central de Timor-Leste (BCTL) compiles monetary statistics generally following the methodology of the *Monetary and Financial Statistics Manual*. However, data are incomplete because of the absence of official data on public currency holdings—which are difficult to compile under the current currency regime—and of banks' positions with public nonfinancial corporations. The BCTL reports detailed monthly monetary data for the central bank and other depository corporations are using the standardized report forms (SRFs). Data for other financial corporations, mainly insurance companies, are not compiled. An integrated monetary database meeting the monetary data needs of BCTL, APD, and STA is in operation.

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. Financial soundness indicators are not reported to STA.

External Sector Statistics (ESS): 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 but there are significant gaps in the series for 2006 and 2007. Data on monthly merchandise exports and imports are based on the Automated System for Customs Data (ASYCUDA). Service transactions are largely estimated with data collection largely limited to the official and tourism sectors. Interest revenue from oil/gas is recorded as primary income.

Quarterly balance of payments and international investment position (IIP) data is available for 2006–Q3/2018. 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.

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 October 2015 ESS TA Mission found that important improvements have been made on the integrated IIP, namely the classification of components; the treatment of changes in prices and changes in exchange rates; and the treatment of positions of the Petroleum Fund and IMF-related accounts (reserve position in the IMF, SDR allocations, and SDR holdings). Progress was also verified on actions toward Timor-Leste's participation in IMF's Coordinated Direct Investment (CDIS). However, the recommendation on improving the coverage of the direct investment survey to include Joint Petroleum Development Area (JPDA) companies' equity valued at own funds at book value was not implemented. Also, the treatment in ESS of the JPDA companies' activities consistent with national accounts, is still pending. According to the BCTL officials, this is due to the difficulty of obtaining source data from the National Petroleum Authority (NPA).

II. Data Standards and Quality

Timor-Leste began participating in the IMF's General Data Dissemination System (now the enhanced GDDS) in 2012, marking a major step forward in the development of its statistical system. On February 15, 2019, Timor-Leste fully implemented e-GDDS by publishing the National Summary Data Page.

Table of Common Indicators Required for Surveillance
(As of Februrary 15, 2019)

	Date of latest observation	Date received	Frequency of Data[7]	Frequency of Reporting[7]	Frequency of Publication[7]
Exchange Rates	2/2019	2/2019	D	D	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	12/2018	1/2019	M	M	M
Reserve/Base Money	12/2018	1/2019	M	M	M
Broad Money	12/2018	1/2019	M	M	M
Central Bank Balance Sheet	12/2018	1/2019	M	M	M
Consolidated Balance Sheet of the Banking System	12/2018	1/2019	M	M	M
Interest Rates[2]	12/2018	1/2019	M	M	M
Consumer Price Index	12/2018	1/2019	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[3] – General Government[4]	2017	3/2018	A	A	A
Revenue, Expenditure, Balance and Composition of Financing[3]– Central Government	2017	3/2018	A	A	A
Central Government and Central Government-Guaranteed Debt[5]	2017	3/2018	A	A	A
External Current Account Balance	Q3/2018	1/2019	Q	Q	Q
Exports and Imports of Goods and Services	Q3/2018	1/2019	M	M	M
GDP/GNP	2016	12/2018	A	A	A
Gross External Debt	Q3/2018	1/2019	Q	Q	Q
International Investment Position[6]	Q3/2018	1/2019	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

March 8, 2019

STAFF REPORT FOR THE 2019 ARTICLE IV CONSULTATION—DEBT SUSTAINABILITY ANALYSIS[1]

Approved By
Paul Cashin (APD) and Lalita Moorty (IDA)

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

Risk of external debt distress	Low
Overall risk of debt distress	Low
Granularity in the risk rating	Substantial space to absorb shocks
Application of judgment	Yes, availability of large and liquid financial assets mitigate debt/debt service needs

Timor-Leste's risk of external debt distress is assessed as low, using judgment that takes account of the country's financial assets in the Petroleum Fund (PF). The assessed risk is improved from the previous DSA's finding of "moderate risk", reflecting fuller considerations of risk mitigating elements. Timor-Leste's Public and Publicly Guaranteed (PPG) external (and public) debt is small (5 percent of GDP in 2018), and debt indicators are projected to remain below their thresholds under the baseline scenario over the entire projection period through 2038. Standardized stress tests show that a shock to the primary balance is the most extreme shock to the debt trajectory, causing a short-lived and marginal breach of the threshold for the PV of PPG debt-to-exports ratio. However, the Petroleum Fund (PF)—estimated at 506 percent of GDP in 2018— is large relative to projected debt levels and debt service requirements; and its assets are liquid and accessible, prompting the use of judgment to upgrade the risk assessment. Beyond the 20-year projection horizon, debt is projected to rise quickly, creating risks to debt sustainability. The authorities should adopt prudent policies to address this risk. The DSA illustrates the benefits of such policies in an alternative scenario.

[1] This Debt Sustainability Analysis DSA was prepared jointly with the World Bank, in accordance with the revised Debt Sustainability Framework for low-income countries approved by the Executive Boards of the IMF and the IDA. Timor-Leste's Composite Indicator (CI) index indicates that the country's debt-carrying capacity is medium. Thresholds for external debt-burden indicators are set at levels compatible with the new framework: PV of debt-to-GDP ratio (40), PV of debt-to-exports ratio (180), debt service-to-exports ratio (15) and debt service-to-revenue ratio (18). According to the World Bank's operational policies, Timor-Leste is classified as a 'Blend' country, which means that it is IDA-eligible, but also creditworthy for some IBRD borrowing.

PUBLIC DEBT COVERAGE

1. The coverage of public sector debt used in this report is public and publicly guaranteed (PPG) debt. Timor-Leste's PPG external debt is held entirely by the central government. The coverage of public sector debt includes SOE debt. Under the Public Debt Regime Law, SOEs are not allowed to borrow for themselves and can only obtain financing via on-lending from the Ministry of Finance.[2] The public sector only borrows externally, given a lack of domestic financing sources. The Timorese private sector has negligible medium- and long-term external liabilities. The debt definition of the DSA is currency-based and the legal tender is the US dollar.

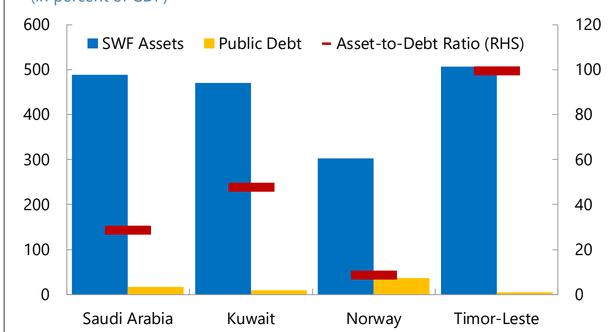
	Subsectors of the public sector	Check box
1	Central government	X
2	State and local government	
3	Other elements in the general government	
4	o/w: Social security fund	
5	o/w: Extra budgetary funds (EBFs)	
6	Guarantees (to other entities in the public and private sector, including to SOEs)	X
7	Central 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 the Petroleum Fund (PF).

- *Size of the PF*. The PF balance at end-2018 stood at US$15.8 billion (506 percent of total GDP and 848 percent of total non-oil GDP), covering more than 166 months of goods and services imports. This makes the PF one of the largest Sovereign Wealth Funds (as percent of GDP) in the world (see figure). The PF closing balance of 2017 improved compared to 2016 on the back of higher inflow of oil and gas receipts, favorable investment returns and valuation effects, and lower government spending due to a political impasse. However, heightened global financial market volatility in late-2018 led to negative valuation effects and a decline in the closing balance at end-2018.

Size of Timor-Leste's Petroleum Fund
(In percent of GDP)



Sources: IMF Staff Reports; Saudi Arabia (2018); Kuwait (2017); Norway (2018).
Note: Saudi Arabia's assets include SAMA's net foreign assets and does not include the Public Investment Fund (PIF).

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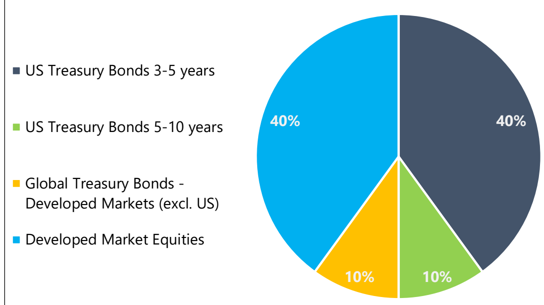
[2] According to the Public Debt Regime Law No. 13/2011, the Government of Timor-Leste (GoTL), in particular, the Ministry of Finance, is the only entity that may engage in borrowing, motivated by financing needs generated by the need to execute the State's priority tasks relating to the building of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

- *Liquidity*. The Petroleum Fund Law sets out eligible investments, guidelines for asset allocation, and risk limits for the PF. Given the annual withdrawals from the PF to the budget, the PF's targeted asset allocation reflects a preference for highly liquid assets (see figure). Currently, the targeted asset allocation is 60 percent in Treasury Bonds of developed countries and 40 percent in developed market equities.[3] Since its inception, the average return on PF assets has been around 4.4 percent (as of end-2017).[4]

Timor-Leste: Petroleum Targeted Asset Allocation, 2017
(In percent)



Source: Timor-Leste Petroleum Fund Annual Report (2017).

- *Accessibility*. The PF constitutes the main financing source for the budget. The amount is guided by the Estimated Sustainable Income (ESI), which is set at 3 percent of total Petroleum Wealth[5]. Withdrawals in excess of the ESI can be made, provided that the Parliament approves the government's explanation that this is made in the long-term interests of the country. Over the lifetime of the PF, the government has withdrawn a total of $9.6 billion (end-2017), with excess withdrawals accounting for about 63 percent of this amount. The parliament has yet to reject a request for excess withdrawals.[6]

3. **Outstanding public external debt is projected at US$157.7 million (5.1 percent of total GDP and 8.5 percent of total non-oil GDP) at end-2018.** External loans signed totaled US$355 million (12.8 percent of total GDP and 19 percent of total non-oil GDP) by end-2018, which constitutes twelve loans under eight packages and will be disbursed over the 4 years until 2022. Timor-Leste's external borrowings are from the Asian Development Bank, Japan International Cooperation Agency (JICA) and the World Bank Group. These loan packages are to support infrastructure projects, primarily assigned for rehabilitation and upgrading of national roads (Text

Text Table 1. Timor-Leste: External Public Debt Committed by Creditor Groups
(In millions of U.S. dollars)

	2016	2017	2018
Multilateral	271	355	355
Bilateral Non-Paris Club	50		
Total	321	355	355

Source: Timor-Leste Ministry of Finance.

[3] The 2011 Petroleum Fund Law specifies that no more than 5% of the Petroleum Fund should be invested in other eligible investments. The Council of Ministers recently approved a resolution to use these 5 percent to enable the purchase of the stakes of ConocoPhillips and Shell in the Greater Sunrise Joint Venture ($650m).

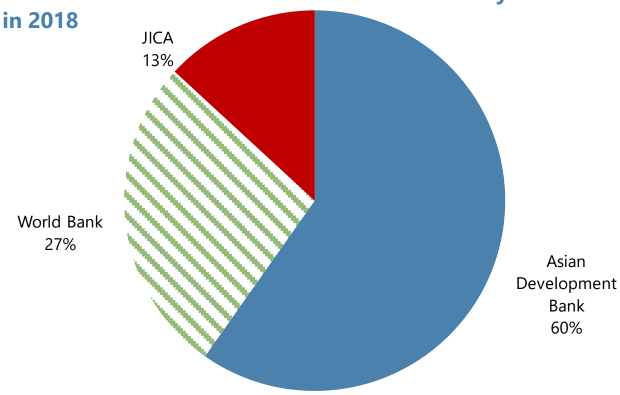
[4] Staff assumes a 3.9 percent return on assets when projecting the PF balance.

[5] Petroleum Wealth comprises the balance of the Petroleum Fund and the Net Present Value of expected future petroleum revenue

[6] According to the constitution, the President has the right to veto a budget that has been approved by the parliament. However, within 90 days, the Parliament can overrule the veto by an absolute majority of its members in full exercise of their functions (see Section 88, paragraph 2 of the Constitution of The Democratic Republic of Timor-Leste).

Table 1).[7] The Asian Development Bank has the largest share of total external debt, comprising nearly two-thirds of total external debt of Timor-Leste in 2018 (Chart below).

Timor-Leste: External Public Debt Committed by Creditors in 2018



Source: Timor-Leste Ministry of Finance.

BACKGROUND ON MACRO FORECASTS

4. This DSA is based on the macroeconomic projections underlying the 2019 Article IV consultation. To illustrate the impact of different policy options on debt sustainability, two scenarios—baseline and reform—are considered.

5. Compared to the previous DSA,[8] there have been some changes (in some cases, substantial) in assumptions underlying the current DSA, due to factors that altered staff's macroeconomic and fiscal assumptions. First, political impasse beginning mid-2017 prevented a supplementary budget for 2017 from passing and resulted in a delay of the 2018 budget approval process. As a result, capital spending envisaged for 2017 under the 2017 budget was not fully executed, leading to a contraction of real GDP in 2017. Second, under the 2018 and 2019 budgets, the medium-term trajectory of government spending is substantially lower than was laid out in the 2017 budget. In particular, a front-loading of capital expenditure with ambitious infrastructure project plans in the 2017 budget was significantly reduced. These factors explain deviations of the baseline assumptions on macroeconomic and fiscal assumptions from the previous DSA exercise (Table 1).

- **Real non-oil GDP** for 2017 is expected to have contracted significantly, due to lower government capital spending and failure to pass a supplementary budget. Political uncertainty faded in mid-2018, and growth is expected to rebound in 2018 to 0.8 percent. Over the long-term, growth is projected to stabilize at around about 5 percent, only marginally lower than in the previous DSA. Oil production from active fields is projected to cease in 2022.

[7] In December 2015, the loan agreement signed by the Government of Timor-Leste and China EXIM Bank did not obtain the approval of the Audit Court due to legality issues on the project for the upgrade of the drainage infrastructure in Dili.

[8] See Timor-Leste 2017 Article IV Staff Report, IMF Country Report No. 17/360.

- **Inflation** is expected to increase steadily to about 4 percent over the medium-term on account of higher global food and fuel prices and spillovers from public investment activity.

- **The current account balance** is projected to remain in deficit over the medium term. Declining income from oil and gas receipts contributes to the deficit. Overall, the current account balance deficit between 2018-2023 is projected to be less severe compared to the previous DSA. This is due to a lower public expenditure trajectory under the 2019 budget, which translates into lower demand for imports and an improved trade balance.

- **The primary fiscal balance** is projected to remain in deficit of about 13 percent of GDP in 2018. The primary deficit is projected to narrow gradually to about 11 percent on average over the long-term (2028-2038). Capital spending is projected to grow to fill the significant infrastructure gap.

- **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.

- **Fiscal financing** consists of (i) PF withdrawals in excess of ESI and (ii) external borrowing.

- **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.

Table 1. Timor-Leste: Key Macroeconomic and Fiscal Assumptions

	Current (2019 Article IV)				Previous (2017 Article IV)			
	2017	2018	2018-23	2024-38	2016	2017	2017-22	2023-37
Real GDP growth (in percent)	-4.5	-8.0	-5.6	4.8	-7.9	-8.0	-3.7	5.2
Real non-oil GDP growth (in percent)	-4.6	0.8	4.2	4.8	5.5	3.0	5.0	5.2
Inflation (CPI annual average, percent)	0.5	2.3	3.2	4.0	-1.3	1.0	3.2	4.0
Revenues (excluding grants, percent of GDP)	30.7	29.7	26.3	19.1	27.5	24.2	22.3	15.9
Current expenditure (percent of GDP)	33.5	28.2	35.8	24.6	36.3	33.4	35.1	23.1
Net acquisition of non-financial assets (percent	9.5	12.8	10.4	4.7	22.1	10.9	20.2	5.4
Net lending/borrowing (percent of GDP)	-18.7	-17.2	-24.3	-14.1	-30.8	-20.1	-33.3	-12.9
Net incurrence of liabilities (percent of GDP)	1.1	2.0	2.3	2.6	1.1	0.4	5.0	2.1
Exports of G&S (y/y growth)	12.6	8.4	12.5	17.5	5.7	-1.6	14.6	20.8
Imports of G&S (y/y growth)	-11.9	7.0	2.9	7.3	-11.1	-0.2	6.1	6.1
Current account balance (percent of GDP)	-10.2	-8.9	-4.1	-6.5	-18.9	-3.4	-15.9	-4.1

Box 1. Macroeconomic Assumptions Underlying the DSA Update

The macroeconomic assumptions underpinning the current DSA incorporate the economic impacts of the political stalemate beginning 2017, which led to a failure to pass a rectification budget for 2017 and a delay in the approval of the 2018 budget. As a result, the macroeconomic assumptions used for the current DSA exhibit significant deviations from those used for the previous DSA.

Macro Indicators	Last Historic Year (2017)	First Forecast Year (2018)	Medium- and Long-Term Averages
GDP growth	Real non-oil GDP growth for 2017 is estimated to be -4.6 percent. Public spending experienced an abrupt halt in the second half of the year, as the minority government failed to pass a rectification budget.	Growth is expected to recover mildly in 2018, as the political situation improved after the snap election in May. However, with a moderate spending envisioned for 2018 under the budget, the recovery is expected to be weak, at around 0.8 percent.	Over the long-term, growth is expected to stabilize at around 5 percent, slightly lower than in the previous DSA.
CPI Inflation (annual average, percent)	CPI inflation in 2017 was generally weak at 0.5 percent.	CPI inflation is expected to reach 2.3 percent in 2018, due to higher import prices.	CPI inflation is projected to stabilize at around 4 percent over the medium-term.
Current Account	The estimated current account balance for 2017 is revised downward from -3.4 percent in the 2017 DSA to -10.2 percent.	The current account deficit is expected to narrow in 2018.	The current account balance is expected to remain in deficit over the medium term with lower oil and gas receipts and imports of goods and services generated by demand from capital expenditure.
Fiscal Position	The primary deficit in 2017 is 7 percent of GDP, (33 percent in previous DSA). This reflects a much lower level of actual public spending executed for 2017 than the spending scheduler under the 2017 budget.	The primary deficit in 2018 is projected to be 13 percent of GDP.	The primary deficit is projected to narrow gradually to about 3 percent in the long-term.

6. **The new realism tools suggest that macroeconomic and fiscal assumptions are reasonable (Figure 4).** The three-year adjustment in the primary balance is expected to be a loosening of 5 percent of GDP, between 2017 and 2020. This represents significant stimulus to the economy, and lies near the bottom of the distribution of the realism tool. With regards to the realism tool on fiscal adjustment and growth, a high fiscal multiplier for 2019 partly shows the low base effect of growth in 2018. Lastly, we do

not have relevant data (stocks of government capital) to test other sets of realism tools, and efforts will be made to collect the data for the next DSA.

7. The reform scenario illustrates staff's proposed strategy to safeguard fiscal sustainability. The scenario is broadly similar to staff's recommendations in the 2016 and 2017 Article IV consultation Staff Reports (see section A in the Staff Report for more details). The reform scenario includes:

- *Less front-loading of public expenditure*. The less ambitious front-loading of capital investment as laid out in the 2019 budget is maintained.

- *Domestic revenue.* A value-added tax (VAT) is implemented by 2022. The VAT is estimated to generate revenue of about 3¾ percent of GDP based on a VAT rate of 10 percent in the medium term. VAT revenue increases to at least 5 percent of GDP in the long term.

- *Concessional borrowing and PF excess withdrawals*. PF withdrawals in excess of the ESI are not be permitted from 2028 and onwards. The resulting financing gap is met by external borrowing.

- Under this reform scenario, higher domestic revenue coupled with no excess withdrawal from 2028 reverse the decline in PF assets, with the PF balance increasing to close to US$13.5 billion (385 percent of total GDP) in 2023, and reaching around US$12.8 billion (75 percent of total GDP) in 2038.

- Overall, external borrowing under the reform scenario is higher than in the baseline in the long-term. In the medium-term (until 2028 when excess withdrawals are permitted), the financing gap under the reform scenario is smaller than the baseline scenario starting 2022, due to the revenue collected from VAT. As a result, the average excess withdrawals over the medium-term (2020-2027) are reduced from US$740.7 million (baseline) to US$618.3 million (reform scenario). From 2028, external borrowing under the reform scenario increases despite domestic revenue from VAT, as the excess withdrawals from the Petroleum Fund are no longer allowed. As a result, the average borrowing over the long-term (2028-2038) rises to US$805.6 million, higher than the projected borrowing of US$279 million under the baseline scenario (Table 3).

Table 2. Timor-Leste: Macroeconomic Assumptions: Baseline and Reform Scenarios

	Baseline Scenario				Reform Scenario			
	2017	2018	2018-23	2024-38	2017	2018	2018-23	2024-38
Revenues (percent of GDP)	30.7	29.7	25.9	16.6	30.7	29.7	27.1	22.5
Current expenditure (percent of GDP)	33.6	28.2	34.1	25.9	33.5	28.2	34.1	25.9
Net acquisition of non-financial assets (percent of GDP)	-17.7	-15.3	-20.6	-11.6	-17.7	-12.4	-25.7	-3.3
Net lending/borrowing (percent of GDP)	-18.7	-17.2	-22.9	-14.2	-18.7	-17.2	-21.6	-10.0
Net incurrence of liabilities (percent of GDP)	2.5	2.0	2.3	2.6	1.1	2.0	2.3	6.7
Borrowing (in millions of USD, period average)	70.0	61.6	75.5	237.2	30.1	61.6	52.0	516.5
Exports of G&S (y/y growth)	12.6	8.4	12.5	17.5	12.6	8.4	12.5	17.5
Imports of G&S (y/y growth)	-11.9	7.0	2.9	10.2	-11.9	7.0	2.9	10.2
Current account balance (percent of GDP)	-10.2	-11.2	-5.3	-15.2	-10.2	-11.2	-5.2	-13.0
External Debt (percent of GDP)	3.8	5.1	10.4	21.4	3.8	5.1	10.4	41.3
Petroleum Fund Balance (in millions of USD)	16,799	15,803	14,943	8,116	16,799	15,803	15,004	13,187

Table 3. Timor-Leste: Projected Medium-Term Fiscal Funding Gaps: Baseline and Reform Scenarios

(In millions of US Dollars)

	2018	2019	2020	2020-2027	2028-2038
Baseline Scenario					
Funding Gap	493.7	1344.1	982.7	839.9	1199.6
Excess Petroleum Fund withdrawal	432.1	1257.1	935.1	740.7	920.6
Borrowing	61.6	87.0	47.5	99.2	279.0
Reform Scenario					
Funding Gap	493.7	1344.1	982.7	715.0	805.6
Excess Petroleum Fund withdrawal	432.1	1257.1	935.1	618.3	0.0
Borrowing	61.6	87.0	47.5	96.7	805.6
Memorandum item					
2019 Budget Framework					
Funding Gap	493.7	1099.4	1451.0	n.a	n.a
Excess Petroleum Fund withdrawal	432.1	1012.4	1411.0	n.a	n.a
Borrowing	61.6	87.0	40.0	n.a	n.a

COUNTRY CLASSIFICATION AND DETERMINATION OF SCENARIO STRESS TESTS

8. **The country's debt-carrying capacity applied in the 2019 DSA is medium.** The Composite Indicator (CI) index, which has been calculated based on the October 2018 WEO and the 2017 Country Policy and Institutional Assessment (CPIA), is 2.72, indicating that the country's debt-carrying capacity is medium. Prior to this update, the thresholds for previous DSAs were based on the CPIA index, where Timor-Leste was classified as "weak" in terms of policy performance.

9. **Given the heavy reliance of oil and gas exports in Timor-Leste's total exports, commodity price shocks are introduced in a tailored stress test.** Lack of export diversification and weak external competitiveness results in excessive reliance of Timor-Leste's external position on petroleum and gas receipts. In 2018, oil and gas exports comprised of 77 percent of total exports of goods and services. No adjustments have been made to the default settings regarding the scenario stress testing.

Calculation of the CI Index

Components	Coefficients (A)	10-year average values (B)	CI Score components (A*B) = (C)	Contribution of components
CPIA	0.385	2.921	1.12	41%
Real growth rate (in percent)	2.719	3.151	0.09	3%
Import coverage of reserves (in percent)	4.052	49.189	1.99	73%
Import coverage of reserves^2 (in percent)	-3.990	24.196	-0.97	-35%
Remittances (in percent)	2.022	0.011	0.00	0%
World economic growth (in percent)	13.520	3.579	0.48	18%
CI Score			2.72	100%
CI rating			Medium	

DEBT SUSTAINABILITY

A. External Debt Sustainability Analysis

10. Under the baseline scenario, all external PPG debt indicators remain below the policy relevant thresholds for the next twenty years (Figure 1). Given that fiscal sustainability concerns can arise well-beyond the standard ten-year DSA horizon, debt dynamics for each scenario are presented over the next twenty years. The PV of the PPG debt-to-GDP ratio is expected to increase gradually from 4.3 percent in 2018 to 8.8 percent in 2025 due mainly to new disbursements of loans for key infrastructure projects, and thereafter decline gradually to reach 4.6 percent by 2038. The residual in debt-creating flows is financed through excess withdrawals from the PF (Figure 3). As shown in Table 1, there is no breach for any debt indicators under the baseline scenario over the 20-year projection horizon.

11. The size of the export shock was customized to account for the structural production cycle, and that oil and gas exports will end in 2022. Petroleum production rose sharply between 2005 and 2012, only to fall between 2012 and 2018 as petroleum deposits were gradually declining. To prevent this structural production cycle from inflating the export shock and to account for the fact that petroleum production will cease in 2022, the export stress test was customized.[9]

12. Another issue affecting the export revenue shock is the existence of the PF. By law, all petroleum income is required to initially enter the PF, which is then invested in foreign assets. Hence, a negative shock to petroleum export revenue (price or quantity) automatically leads to a reduced accumulation of foreign assets and not an increase in additional external borrowing as assumed by the DSF under the stress scenario. However, to maintain evenhandedness of the DSF, the customized export stress test was kept and no adjustment was made to account for these PF rules.

13. Standardized stress tests show that a shock to the primary balance is the most extreme shock to the debt trajectory, causing a short-lived and marginal breach of the threshold for the PV of PPG debt-to-exports ratio. This reflects a highly volatile historical path of the primary balance, generating a large shock. The breaches are short-lived and marginal. The first breach occurs in 2022 (202 vs. threshold value of 180), while debt burden indicator returns to below threshold by 2023. The breach re-occurs for the second and the last time in 2024 (210 vs. threshold value of 180). The stress scenario assumes that public external debt would increase by US$183 million per year in 2019-20 to cover the financing gap. However, historically, the government has typically not resorted to debt financing, but

[9] Paragraph 66 of the *Guidance Note on the Bank-Fund Debt Sustainability Framework for Low Income Countries* (2017) specifies that "…under some exceptional circumstances, default stress parameters may not be appropriate as they may fail to capture structural breaks or idiosyncratic features in the country. In such circumstances the size of the shock and the interactions among the main variables can be customized." The export shock for Timor-Leste was customized as follows: (i) the historical standard deviation of petroleum exports was scaled by a factor equal to the ratio of future average petroleum exports (2019-2022) and past average petroleum exports (2008-2018); (ii) the standard deviation of non-oil export was not scaled; and (iii) the average of the two standard deviations was weighted by the average share of petroleum exports in 2019 and 2020 (the two years for which the shock applies). The customization implied that the initial standard deviation of 50.3 was scaled down to 10.3.

instead relied on excess withdrawals from the PF (see paragraph 2). Between 2012-2017, excess withdrawals averaged US$478 million per year, which is well above the funds needed to cover the financing gap under the stress scenario.

B. Public Debt Sustainability Analysis

14. Under the baseline scenario, the PV of total PPG debt-to-GDP ratio remains below the threshold level for the next twenty years (Figure 2). Under the 2019 budget, the PV of the debt-to-GDP remains well below the benchmark. The standardized sensitivity analysis shows that the largest shock is a commodity price shock, which leads to a sustained breach with the highest debt-to-GDP figures in 2034. However, as previously mentioned in paragraph 12, a fall in petroleum export revenue only results in a reduced accumulation of foreign assets of the PF and does not directly impact the primary fiscal balance (which is a main channel for the assumed shock in the public DSA).[10] Second, petroleum production from active fields is projected to end in 2022. Hence, as shown in the Staff Report (paragraph 8), even an oil price shock larger and more permanent than assumed in the DSF has only a marginal impact on the PF balance, and hence the ESI.[11]

C. External and Public Debt Sustainability Analysis under the Reform Scenario

15. The reform scenario does not lead to substantial changes in the results of debt sustainability analysis. The ending of excess withdrawals from the PF in 2028 leads to higher external borrowing. While the introduction of a VAT improves debt dynamics over the medium- and long-term by filling the financing gap from 2022 onwards, the net effect is an increase in the debt level over time. It is therefore relevant to conduct a debt analysis on the reform scenario as well. The result shows that the reform scenario does not fundamentally alter the debt analysis as debt levels remain contained. Importantly, under the reform scenario, the PF balance will not continue to fall but broadly stabilize (see Table 2).

RISK RATING AND VULNERABILITIES

16. While the DSA assigns Timor-Leste a mechanical rating of "moderate" debt distress risk, judgment is applied to improve the rating to "low". The judgement reflects the country's large, liquid, and accessible net foreign assets, serving as a strong mitigating factor in Timor-Leste's ability to carry and service debt. The less ambitious frontload of public spending in the 2019 budget also improves the debt sustainability outlook.

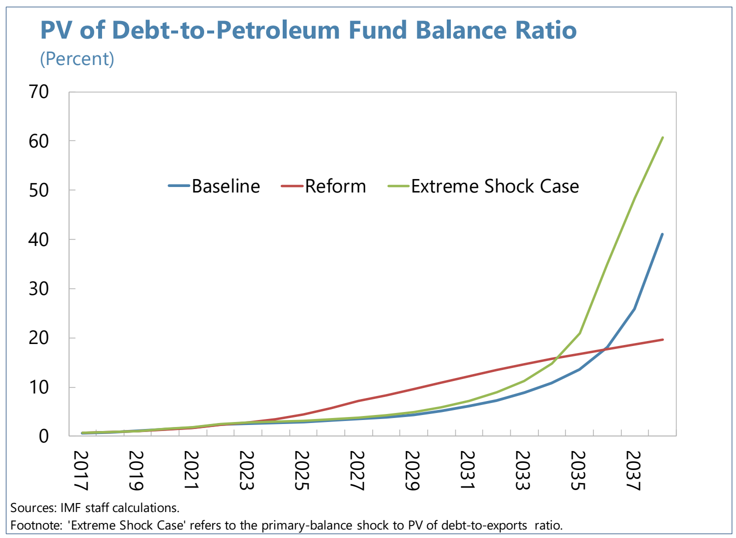
[10] The only channel through which reduced oil prices affects budget revenue is through the ESI – which is calculated based on the total petroleum wealth, which consists of the PF balance and the projected net present value of future petroleum revenue.

[11] Moreover, the DSF assumes that the persistence of the commodity price shock is 6 years, which is well beyond the assumed end of petroleum production (i.e., 2022).

- *External debt*. Under the baseline, both solvency ratios (i.e., PV of PPG debt-to-GDP ratio and PV of PPG debt-to-exports) remain low and well below the DSA thresholds over the twenty-year projection horizon. The PV of debt is projected to climb from 6 percent of total non-oil GDP in 2017 to 24 percent in 2038. However, the PV of debt-to-exports exhibits a short-lived and marginal breach of the benchmark under extreme shock scenario (primary balance shock)—generating a mechanical debt distress rating of "moderate."

- *Public debt*. Under the baseline, both solvency ratios (i.e., PV of PPG debt-to-GDP ratio and PV of PPG debt-to-revenue) remain low and well below the DSA benchmark over the twenty-year projection horizon. As discussed above, while an extended breach of the debt-to-GDP benchmark occurs under the extreme commodity price shock scenario, the PF will insulate the budget from commodity price volatility. Also, petroleum production is projected to cease in 2022..

- *Availability of the Petroleum Fund as a buffer*. Timor-Leste has a large stock of liquid assets that should be taken into account as a buffer for the country's debt sustainability (see paragraph 2). The PF has assets at 848 percent of total non-oil GDP in 2018 and is estimated to be of a high multiple of the present and projected debt. Moreover, the PF is highly liquid with 50 percent of its assets invested in U.S. Treasuries. The recent history of annual excess withdrawals for budget financing (in accordance with the Petroleum Fund Law) indicates that these funds would be readily available to service debt if needed (see paragraph 2).[12] Indeed, the PV of debt does not exceed more than one third of the projected value of the PF over the next 20 years under the baseline scenario (see figure).[13] Under the scenario of the most extreme shock case where the PV of debt-to-exports breaches the threshold, the PV of debt-to-Petroleum Fund assets remains stable, reaching close to 60 percent only towards the end of the projection periods.



- *Overall low risk of debt distress*. With this, risk of debt distress is assessed as low, which is an improvement from the previous rating of "moderate" risk. The change reflects fuller consideration of risk mitigating elements, in line with the use of judgment in the revised LIC DSF methodology.

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[12] The Petroleum Fund Law allows withdrawals in excess of the ESI provided that the Parliament approves the Government's explanation that this is made in the long-term interests of the country. The law does not impose a limit on the size of the withdrawals.

[13] The value of the PF excludes the US$650 million that are planned to be used to buy-out shares from joint venture partners in the Greater Sunrise.

17. Towards the end of and beyond the 20-year horizon, the coverage of the PF deteriorates, highlighting the need to develop a fiscal strategy to ensure long-term fiscal sustainability and safeguard the assets of the Petroleum Fund. Under current policies, the PF will deplete beyond the 20-year horizon, as the revenue base is low and capital spending is expected to increase to fill the country's much-needed infrastructure gap. Depletion of highly liquid financial assets reinforces the need for a reform strategy, which entails improving expenditure control and efficiency, mobilizing domestic revenue, and committing to protecting the wealth of the Petroleum Fund.

AUTHORITIES' VIEWS

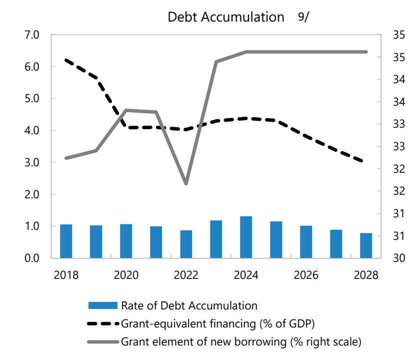
18. The authorities concurred with the overall rating of low risk of external debt distress. They welcomed the improved rating on external debt, highlighting the low level of external borrowing and the availability of the Petroleum Fund as a buffer. Furthermore, the authorities are committed to the mobilization of domestic revenues in order to protect the Petroleum Fund balance and ensure long-term debt sustainability.

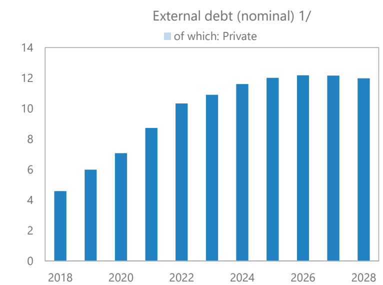
Table 4. Timor-Leste: External Debt Sustainability Framework, Baseline Scenario, 2015-2038

(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 8/	
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2028	2038	Historical	Projections
External debt (nominal) 1/	**1.5**	**3.1**	**3.8**	**4.6**	**6.0**	**7.1**	**8.7**	**10.3**	**10.9**	**12.0**	**6.8**	**0.9**	**9.8**
of which: public and publicly guaranteed (PPG)	**1.5**	**3.1**	**3.8**	**4.6**	**6.0**	**7.1**	**8.7**	**10.3**	**10.9**	**12.0**	**6.8**	**0.9**	**9.8**
Change in external debt	0.9	1.6	0.8	0.7	1.4	1.1	1.7	1.6	0.6	-0.2	-0.6		
Identified net debt-creating flows	**-7.4**	**22.2**	**9.7**	**8.2**	**-2.4**	**0.9**	**-1.0**	**10.7**	**4.0**	**-0.9**	**-0.3**	**-9.3**	**1.3**
Non-interest current account deficit	**-6.6**	**21.6**	**10.2**	**8.9**	**-1.6**	**1.7**	**-0.5**	**10.2**	**4.9**	**-0.3**	**-0.2**	**-24.6**	**2.0**
Deficit in balance of goods and services	7.5	35.3	19.3	20.3	22.2	23.7	22.3	33.9	26.2	18.8	16.9	**-11.5**	**23.7**
Exports	34.7	12.7	19.1	16.3	11.9	14.0	14.2	8.2	9.1	11.2	14.2		
Imports	42.2	48.1	38.4	36.6	34.1	37.7	36.4	42.1	35.3	30.0	31.1		
Net current transfers (negative = inflow)	-4.0	-1.0	2.2	-2.8	-3.3	-3.6	-4.2	-4.9	-4.9	-3.5	-1.7	**-6.2**	**-4.0**
of which: official	-7.2	-7.2	-6.4	-5.8	-5.2	-4.9	-5.0	-5.2	-4.6	-2.7	-1.0		
Other current account flows (negative = net inflow)	-10.1	-12.7	-11.3	-8.6	-20.6	-18.4	-18.6	-18.8	-16.4	-15.6	-15.4	**-7.0**	**-17.7**
Net FDI (negative = inflow)	**-1.0**	**0.3**	**-0.2**	**-1.0**	**-0.6**	**-0.9**	**-1.5**	**-1.6**	**-1.4**	**-0.3**	**0.0**	**-0.7**	**-1.0**
Endogenous debt dynamics 2/	**0.2**	**0.3**	**-0.3**	**0.3**	**-0.1**	**0.1**	**1.1**	**2.1**	**0.5**	**-0.2**	**-0.2**		
Contribution from nominal interest rate	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.4	0.4	0.3	0.2		
Contribution from real GDP growth	-0.1	0.0	0.1	0.3	-0.3	-0.1	0.9	1.7	0.2	-0.5	-0.3		
Contribution from price and exchange rate changes	0.3	0.4	-0.4	...	...	...	...	...	...	...	...		
Residual 3/	**8.3**	**-20.7**	**-8.9**	**-7.5**	**3.8**	**0.2**	**2.6**	**-9.1**	**-3.4**	**0.7**	**-0.2**	**10.0**	**-0.6**
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	**...**	**...**	**3.4**	**4.0**	**5.0**	**5.7**	**6.9**	**8.0**	**8.2**	**8.6**	**4.6**		
PV of PPG external debt-to-exports ratio	**...**	**...**	**17.8**	**24.4**	**41.7**	**40.4**	**48.4**	**97.6**	**90.4**	**76.4**	**32.6**		
PPG debt service-to-exports ratio	**0.0**	**0.0**	**0.5**	**0.0**	**1.3**	**1.3**	**1.7**	**4.3**	**3.9**	**4.3**	**2.8**		
PPG debt service-to-revenue ratio	**0.0**	**0.0**	**0.4**	**0.0**	**0.7**	**0.9**	**1.1**	**1.6**	**1.8**	**3.3**	**2.8**		
Gross external financing need (Million of U.S. dollars)	-233.9	551.7	280.1	248.6	-66.2	31.6	-60.0	283.2	134.1	-9.8	38.1		
Key macroeconomic assumptions													
Real GDP growth (in percent)	20.9	0.8	-4.5	-8.0	6.6	1.3	-12.3	-19.2	-2.0	4.8	4.8	**0.0**	**-0.9**
GDP deflator in US dollar terms (change in percent)	-36.5	-19.5	15.4	22.1	-5.6	4.8	11.0	19.9	13.5	6.0	6.0	**3.3**	**8.7**
Effective interest rate (percent) 4/	0.0	0.0	0.2	0.0	3.5	3.2	3.3	3.9	3.8	2.8	2.4	**0.0**	**3.0**
Growth of exports of G&S (US dollar terms, in percent)	-43.5	-70.2	65.5	-4.4	-26.5	25.3	-1.7	-44.1	23.8	16.6	11.8	**3.8**	**5.0**
Growth of imports of G&S (US dollar terms, in percent)	1.8	-7.5	-11.9	7.0	-6.2	17.3	-6.0	11.9	-6.6	7.6	14.4	**13.9**	**5.0**
Grant element of new public sector borrowing (in percent)	...	...	...	32.2	32.4	33.3	33.3	31.7	34.4	34.6	34.6	**...**	**33.7**
Government revenues (excluding grants, in percent of GDP)	26.1	29.6	24.3	23.8	22.6	20.7	21.1	21.8	19.4	14.5	14.4	**18.2**	**19.1**
Aid flows (in Million of US dollars) 5/	222.7	181.3	176.7	184.2	175.1	134.9	131.6	121.9	140.1	176.3	121.1		
Grant-equivalent financing (in percent of GDP) 6/	...	...	...	6.2	5.6	4.1	4.1	4.0	4.3	3.0	0.7	**...**	**4.3**
Grant-equivalent financing (in percent of external financing) 6/	...	...	...	88.7	85.2	81.1	80.8	81.8	80.2	79.1	72.2	**...**	**81.3**
Nominal GDP (Million of US dollars)	3,104	2,521	2,778	3,122	3,143	3,335	3,246	3,144	3,498	5,918	16,939		
Nominal dollar GDP growth	-23.3	-18.8	10.2	12.4	0.7	6.1	-2.7	-3.1	11.3	11.1	11.1	**3.4**	**7.3**
Memorandum items:													
PV of external debt 7/	...	...	3.4	4.0	5.0	5.7	6.9	8.0	8.2	8.6	4.6		
In percent of exports	...	...	17.8	24.4	41.7	40.4	48.4	97.6	90.4	76.4	32.6		
Total external debt service-to-exports ratio	0.0	0.0	0.5	0.0	1.3	1.3	1.7	4.3	3.9	4.3	2.8		
PV of PPG external debt (in Million of US dollars)			94.3	123.6	155.6	189.1	222.4	250.7	287.8	506.7	784.0		
(PVt-PVt-1)/GDPt-1 (in percent)				1.1	1.0	1.1	1.0	0.9	1.2	0.8	0.1		
Non-interest current account deficit that stabilizes debt ratio	-7.5	20.0	9.5	8.2	-3.0	0.6	-2.2	8.6	4.3	-0.1	0.4		

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/ 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.

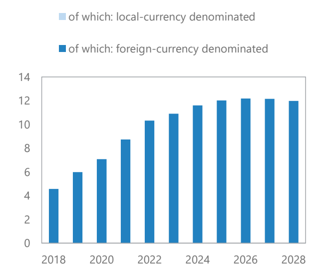
Table 5. Timor-Leste: Public Sector Debt Sustainability Framework, Baseline Scenario, 2015-2038

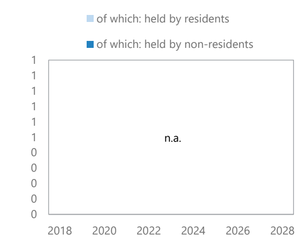
(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 6/	
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2028	2038	Historical	Projections
Public sector debt 1/	**1.5**	**3.1**	**3.8**	**4.6**	**6.0**	**7.1**	**8.7**	**10.3**	**10.9**	**12.0**	**6.8**	**0.9**	**9.8**
of which: external debt	**1.5**	**3.1**	**3.8**	**4.6**	**6.0**	**7.1**	**8.7**	**10.3**	**10.9**	**12.0**	**6.8**	**0.9**	**9.8**
Change in public sector debt	0.9	1.6	0.8	0.7	1.4	1.1	1.7	1.6	0.6	-0.2	-0.6		
Identified debt-creating flows	**0.1**	**4.3**	**2.6**	**-1.9**	**5.9**	**8.6**	**11.1**	**13.3**	**12.4**	**10.8**	**3.6**	**-0.8**	**9.6**
Primary deficit	**-0.1**	**4.0**	**2.8**	**-1.4**	**5.8**	**8.7**	**10.7**	**12.7**	**13.1**	**11.7**	**4.2**	**-4.9**	**10.0**
Revenue and grants	33.2	36.8	30.7	29.7	27.8	24.3	24.7	25.4	23.2	17.1	14.9	**24.4**	**22.9**
of which: grants	7.2	7.2	6.4	5.8	5.2	3.6	3.6	3.6	3.7	2.6	0.6		
Primary (noninterest) expenditure	33.2	40.8	33.5	28.2	33.6	33.0	35.4	38.1	36.3	28.8	19.2	**19.5**	**33.0**
Automatic debt dynamics	**0.2**	**0.3**	**-0.3**	**-0.4**	**0.1**	**-0.2**	**0.4**	**0.6**	**-0.7**	**-0.9**	**-0.6**		
Contribution from interest rate/growth differential	-0.1	0.0	0.1	0.3	-0.2	0.0	1.1	2.3	0.4	-0.5	-0.3		
of which: contribution from average real interest rate	0.0	0.0	0.0	-0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.0		
of which: contribution from real GDP growth	-0.1	0.0	0.1	0.3	-0.3	-0.1	1.0	2.1	0.2	-0.6	-0.3		
Contribution from real exchange rate depreciation	0.3	0.4	-0.4	...	...	...	...	...	...	...	...		
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	**0.8**	**-2.8**	**-1.8**	**1.9**	**-4.2**	**-7.6**	**-10.1**	**-13.3**	**-12.9**	**-11.4**	**-4.5**	**1.5**	**-9.4**
Sustainability indicators													
PV of public debt-to-GDP ratio 2/	**...**	**...**	**3.4**	**4.0**	**5.0**	**5.7**	**6.9**	**8.0**	**8.2**	**8.6**	**4.6**		
PV of public debt-to-revenue and grants ratio	**...**	**...**	**11.1**	**13.3**	**17.8**	**23.3**	**27.7**	**31.4**	**35.5**	**50.1**	**31.0**		
Debt service-to-revenue and grants ratio 3/	**0.0**	**0.0**	**0.3**	**0.0**	**0.6**	**0.7**	**1.0**	**1.4**	**1.5**	**2.8**	**2.7**		
Gross financing need 4/	-0.1	4.0	2.9	-1.4	5.9	8.9	10.9	13.0	13.5	12.1	4.6		
Key macroeconomic and fiscal assumptions													
Real GDP growth (in percent)	20.9	0.8	-4.5	-8.0	6.6	1.3	-12.3	-19.2	-2.0	4.8	4.8	**0.0**	**-0.9**
Average nominal interest rate on external debt (in percent)	0.0	0.0	0.2	0.0	3.5	3.2	3.3	3.9	3.8	2.8	2.4	**0.0**	**3.0**
Average real interest rate on domestic debt (in percent)	57.5	24.2	-13.2	-18.1	9.6	-1.5	-6.9	-13.3	-8.5	-3.0	-3.4	**15.4**	**-4.8**
Real exchange rate depreciation (in percent, + indicates depreciation)	60.3	25.5	-12.2	...	...	...	...	...	...	...	...	**4.2**	**...**
Inflation rate (GDP deflator, in percent)	-36.5	-19.5	15.4	22.1	-5.6	4.8	11.0	19.9	13.5	6.0	6.0	**3.3**	**8.7**
Growth of real primary spending (deflated by GDP deflator, in percent)	76.6	23.9	-21.5	-22.5	26.9	-0.3	-6.0	-13.1	-6.7	0.2	0.8	**20.2**	**-2.0**
Primary deficit that stabilizes the debt-to-GDP ratio 5/	-1.0	2.4	2.1	-2.2	4.4	7.6	9.0	11.1	12.5	11.8	4.8	**1.2**	**9.3**
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. Definition of external debt is Currency-based.

2/ 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.

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

4/ 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.

5/ 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.

6/ 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 6. Timor-Leste: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2018-2028

(In percent)

					Projections 1/						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
PV of debt-to GDP ratio											
Baseline	4	5	6	7	8	8	9	9	9	9	9
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2018-2038 2/	4	-11	-28	-43	-65	-85	-100	-116	-131	-145	-159
B. Bound Tests											
B1. Real GDP growth	4	7	10	12	14	15	15	16	16	16	15
B2. Primary balance	4	9	13	15	17	16	16	16	15	15	14
B3. Exports	4	6	9	10	12	12	12	12	12	11	11
B4. Other flows 3/	4	8	13	14	16	16	16	15	15	14	13
B5. Depreciation	4	6	0	1	2	3	4	4	5	6	6
B6. Combination of B1-B5	4	10	6	7	9	10	10	10	11	11	11
C. Tailored Tests											
C1. Combined contingent liabilities	4	8	9	10	12	12	12	12	12	11	11
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	4	7	10	11	11	10	9	7	6	5	4
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.
Threshold	40	40	40	40	40	40	40	40	40	40	40
PV of debt-to-exports ratio											
Baseline	24	42	40	48	98	90	112	98	89	82	76
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2018-2038 2/	24	-90	-197	-301	-799	-929	-1309	-1300	-1322	-1360	-1416
B. Bound Tests											
B1. Real GDP growth	24	42	40	48	98	90	112	98	89	82	76
B2. Primary balance	24	73	93	105	**202**	178	**210**	177	154	137	125
B3. Exports	24	59	79	91	178	161	**193**	165	145	130	119
B4. Other flows 3/	24	71	91	102	**196**	174	**205**	171	147	129	116
B5. Depreciation	24	42	-1	5	17	22	36	37	40	42	43
B6. Combination of B1-B5	24	71	28	40	82	79	100	88	82	77	73
C. Tailored Tests											
C1. Combined contingent liabilities	24	70	64	73	144	130	156	134	119	108	99
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	24	80	85	89	163	120	121	89	67	51	39
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.
Threshold	180	180	180	180	180	180	180	180	180	180	180
Debt service-to-exports ratio											
Baseline	0	1	1	2	4	4	5	5	5	4	4
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2018-2038 2/	0	1	-2	-5	-12	-17	-26	-36	-46	-54	-65
B. Bound Tests											
B1. Real GDP growth	0	1	1	2	4	4	5	5	5	4	4
B2. Primary balance	0	1	2	3	7	6	8	9	10	9	8
B3. Exports	0	2	2	3	7	6	8	8	9	8	7
B4. Other flows 3/	0	1	2	3	7	6	7	9	10	9	8
B5. Depreciation	0	1	1	1	2	2	3	3	1	1	1
B6. Combination of B1-B5	0	1	2	2	4	4	5	7	4	4	4
C. Tailored Tests											
C1. Combined contingent liabilities	0	1	2	2	5	5	6	6	5	5	5
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	0	2	2	3	7	5	6	7	7	6	5
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.
Threshold	15	15	15	15	15	15	15	15	15	15	15
Debt service-to-revenue ratio											
Baseline	0	1	1	1	2	2	2	3	3	3	3
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2018-2038 2/	0	1	-1	-3	-5	-8	-11	-19	-28	-38	-50
B. Bound Tests											
B1. Real GDP growth	0	1	2	2	3	3	4	5	5	6	6
B2. Primary balance	0	1	1	2	3	3	3	5	6	6	6
B3. Exports	0	1	1	2	2	2	3	3	4	5	5
B4. Other flows 3/	0	1	1	2	3	3	3	5	6	6	6
B5. Depreciation	0	1	1	0	1	1	2	2	0	1	1
B6. Combination of B1-B5	0	1	2	1	2	2	3	5	3	4	4
C. Tailored Tests											
C1. Combined contingent liabilities	0	1	1	2	2	2	3	3	3	4	4
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	0	1	1	2	2	2	3	3	4	4	3
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.
Threshold	18	18	18	18	18	18	18	18	18	18	18

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 7. Timor-Leste: Sensitivity Analysis for Key Indicators of Public Debt, 2018-2028

(In percent)

						Projections 1/					
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
						PV of Debt-to-GDP Ratio					
Baseline	4	5	6	7	8	8	9	9	9	9	9
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2018-2038 2/	4	-2	-11	-20	-31	-42	-53	-65	-78	-91	-105
B. Bound Tests											
B1. Real GDP growth	4	13	29	43	**59**	**67**	**74**	**80**	**84**	**87**	**90**
B2. Primary balance	4	9	13	15	17	16	16	16	15	15	14
B3. Exports	4	6	9	10	12	12	12	12	11	11	11
B4. Other flows 3/	4	8	13	14	16	16	16	15	15	14	13
B5. Depreciation	4	5	4	4	4	3	3	2	2	1	1
B6. Combination of B1-B5	4	8	8	12	13	13	13	13	13	13	13
C. Tailored Tests											
C1. Combined contingent liabilities	4	8	9	10	12	12	12	12	12	11	11
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	4	16	37	**62**	**90**	**105**	**116**	**123**	**128**	**132**	**135**
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	55	55	55	55	55	55	55	55	55	55	55
						PV of Debt-to-Revenue Ratio					
Baseline	13	18	23	28	31	36	39	42	46	48	50
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2018-2038 2/	13	-8	-44	-82	-122	-182	-243	-310	-392	-482	-580
B. Bound Tests											
B1. Real GDP growth	13	44	106	158	210	258	299	338	384	428	469
B2. Primary balance	13	31	54	60	65	70	74	76	79	81	82
B3. Exports	13	22	36	41	45	50	53	56	59	61	62
B4. Other flows 3/	13	30	52	58	63	68	72	74	75	76	76
B5. Depreciation	13	18	18	17	15	14	12	10	8	6	3
B6. Combination of B1-B5	13	27	32	47	51	56	60	63	67	70	73
C. Tailored Tests											
C1. Combined contingent liabilities	13	30	37	42	46	51	55	58	61	63	65
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	13	64	166	272	368	454	514	557	625	689	748
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	0.0	0.6	0.7	1.0	1.4	1.5	1.8	2.1	2.4	2.6	2.8
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2018-2038 2/	0.0	0.6	0.0	-0.8	-1.6	-2.8	-4.0	-7.3	-11.6	-16.7	-22.4
B. Bound Tests											
B1. Real GDP growth	0.0	0.7	1.9	3.5	5.3	6.6	7.9	10.9	14.8	18.4	21.8
B2. Primary balance	0.0	0.6	1.1	1.8	2.3	2.4	2.6	3.8	5.1	5.2	5.3
B3. Exports	0.0	0.6	0.9	1.3	1.7	1.9	2.1	2.7	3.5	3.7	3.8
B4. Other flows 3/	0.0	0.6	1.1	1.8	2.2	2.4	2.6	3.7	4.9	5.0	5.1
B5. Depreciation	0.0	0.6	0.8	0.9	1.2	1.2	1.4	1.2	1.0	0.7	0.5
B6. Combination of B1-B5	0.0	0.6	0.8	1.1	1.6	1.8	2.0	2.4	2.7	3.0	3.2
C. Tailored Tests											
C1. Combined contingent liabilities	0.0	0.6	1.1	1.4	1.8	1.9	2.2	2.4	2.7	3.0	3.1
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	0.0	0.6	2.4	5.4	8.5	10.8	12.5	17.3	24.5	30.8	36.1
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.

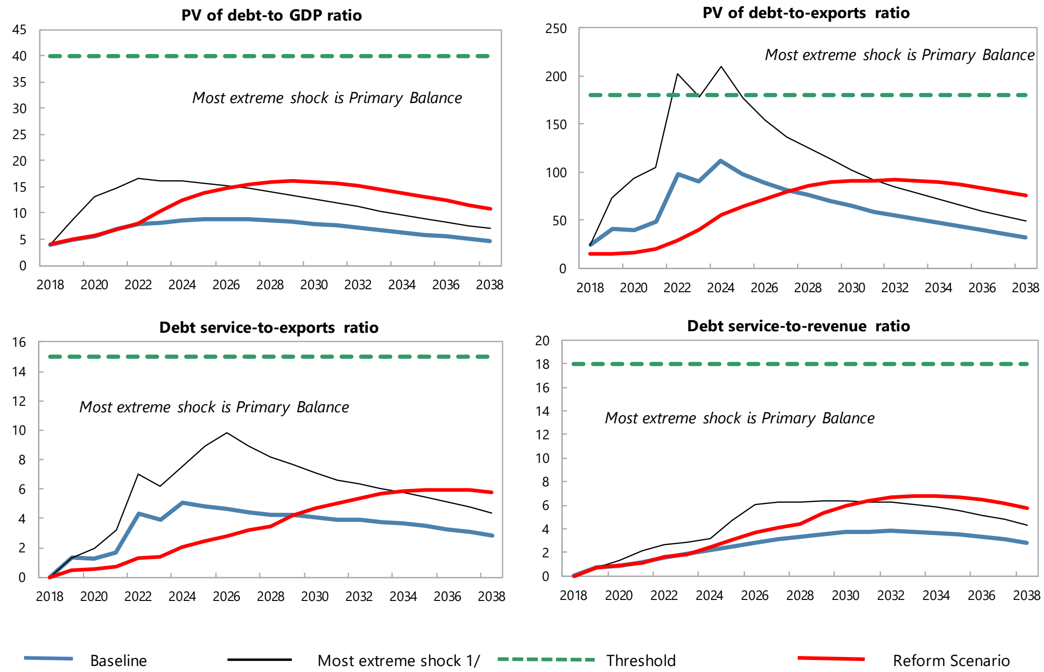
Sources: Country authorities; and staff estimates and projections.

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, 2018-2038



Customization of Default Settings		
	Size	Interactions
Tailored Tests		
Combined CLs	Yes	
Natural Disasters	n.a.	n.a.
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	1.9%	1.9%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	26	26
Avg. grace period	5	5

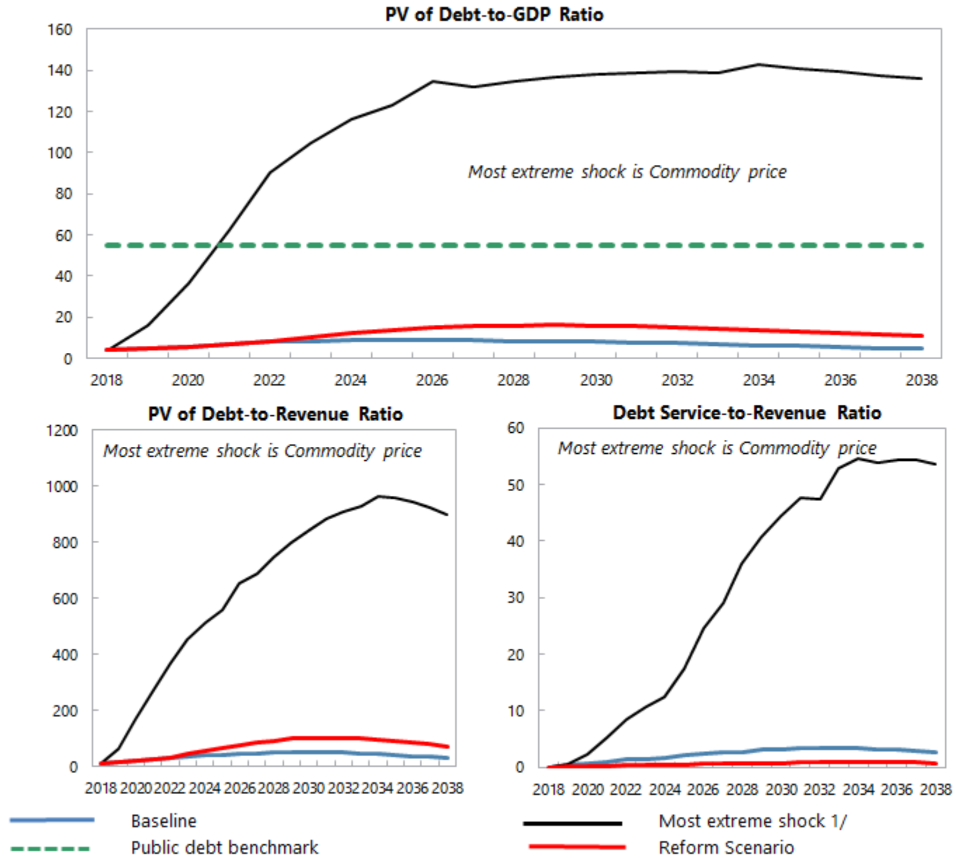
* Note: All the additional financing needs generated by the shocks under the stress tests are assumed to be covered by PPG external MLT debt in the external DSA. Default terms of marginal debt are based on baseline 10-year projections.

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 2028. 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, 2018-2038



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	1.9%	1.9%
Avg. maturity (incl. grace period)	26	26
Avg. grace period	5	5
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.

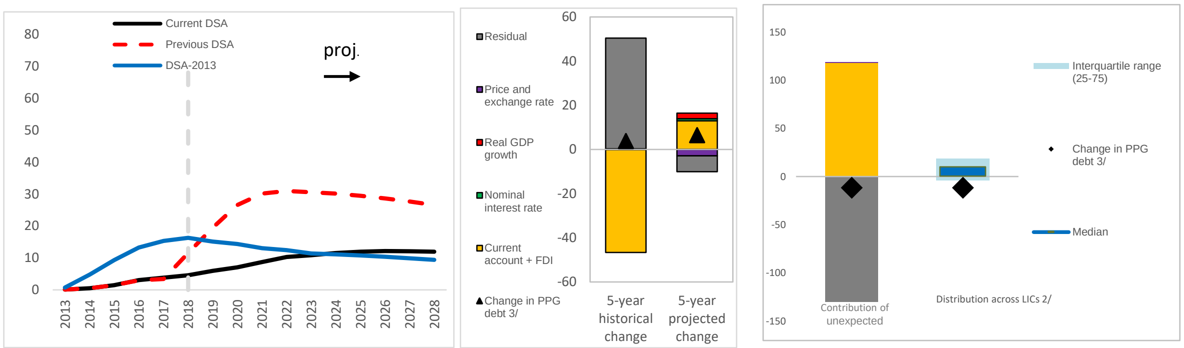
Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2028. 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

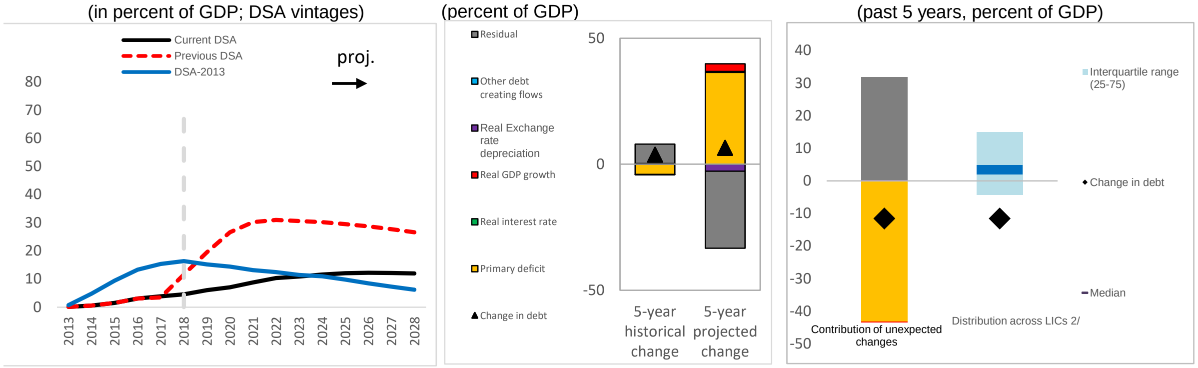
External Debt

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)



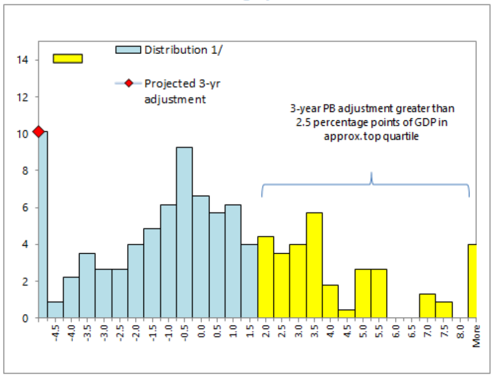
1/ Difference between anticipated and actual contributions on debt ratios.

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.

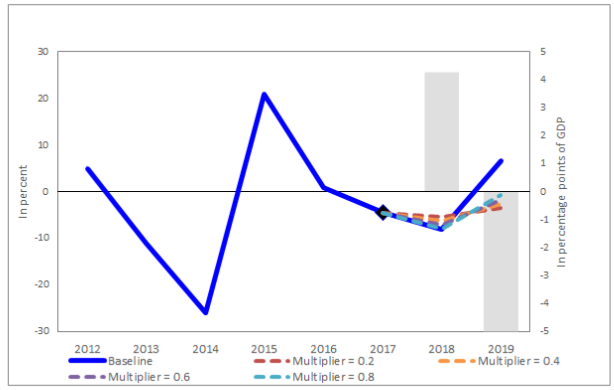
Figure 4. Timor-Leste: Realism Tools 1/

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



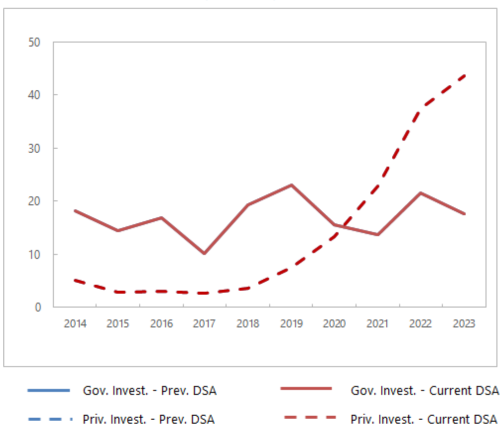
1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

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)



1/ The data needed to conduct the investment growth realism tool is not available for the current DSA exercise. Efforts will be made to collect the data for the next DSA.

Statement by Alexandre Tombini, Executive Director for Timor-Leste and Pedro Fachada, Alternate Executive Director
March 27, 2019

1. On behalf of our Timorese authorities, we thank the new mission chief and his team for the constructive engagement and policy advice during this year's Article IV consultation. Our authorities also thank the IMF for the valuable technical assistance that Timor-Leste has received through the years.

2. Timor-Leste is one of the youngest countries in the world and has made impressive progress in state-building and human development since its independence seventeen years ago. In this relatively short period, the country has consolidated a pluralist democratic society, based on transparent elections, broad representation, separation of powers and rule of law. Legislative elections were held in July 2017, but no coalition managed to achieve a clear majority. The political impasse triggered new elections in May 2018, this time leading to the formation of a majority government.

3. The new administration inaugurated in mid-2018 is committed to the priorities established in the Strategic Development Plan 2011-2030, which envisages the transformation of Timor-Leste into a medium-high income country by the end of the next decade. In order to fulfil that objective, the authorities acknowledge that the need to diversify the economy and to improve infrastructure and human capital. Accordingly, they intend to implement public policies and promote structural reforms to provide better education, health and quality of life to the Timorese population, and create a positive and prosperous business environment.

Medium-Term Economic Prospects

4. The temporary political impasse of 2017/2018 took a toll on the economy, as lack of agreement prevented the adoption of a supplementary budget in 2017 and delayed the approval of the 2018 budget. This forced the government to operate for most of that year on the duodecimal regime (that is, monthly spending was restricted to 1/12 of the budget line of the previous year). The impasse also postponed political decisions associated with the development of the oil industry and the medium-term public capital spending program. Data released after the finalization of the staff report indicates that non-oil GDP contracted by 3.5 percent in 2017. With the composition of the new government in mid-2018, the economy started a promising recovery.

5. The current oil fields are expected to be depleted by 2022. Nevertheless, the prospects for the economy of Timor-Leste were brightened with the signing in March 2018 of the comprehensive agreement on a maritime border with Australia. This agreement laid the foundation for the development of the Greater Sunrise fields in the Timor Sea. Their potential is substantial, even under conservative oil price assumptions. The government is

determined to seize this opportunity to develop the oil and gas industry in the south of the country.

6. The authorities project medium-term non-oil GDP growth of 7 percent per annum compared to staff's estimation of 5 percent. This difference is explained by the authorities' expectation of positive spillovers from the development of the Greater Sunrise fields and public capital spending on the broader economy. The authorities also believe that private sector activity will gradually emerge as an important growth engine due not only to the Greater Sunrise project but also other large-scale investments in basic infrastructure, manufacturing and tourism.

Fiscal Policy and Debt Sustainability

7. Throughout the years, the Timorese authorities have shown a strong track-record of responsible use of the oil wealth. They remain committed to a prudent fiscal stance that seeks to preserve the resources accumulated in the Petroleum Fund, while addressing the development needs of the country. At end-January 2019, the Petroleum Fund had a balance of US$16.4 billion, or about 530 percent of estimated 2018 GDP. As staff points out, this makes the Petroleum Fund one of the largest sovereign wealth funds relative to GDP in the world, a testament to the fiscal responsibility of the Timorese authorities.

8. The authorities remain committed to public financial management (PFM) reforms to improve budget execution and fiscal outturns. They have been conducting, with the support of the World Bank, a Public Expenditure and Financial Accountability (PEFA) assessment that will lead to greater prioritization and sequencing of PFM reforms. The authorities are also engaged in simplifying and streamlining budgeting and procurement processes and improving the Medium-Term Expenditure Framework. On the revenue side, they agree with staff on the need to increase domestic non-oil revenue mobilization. In this regard, they continue to improve tax compliance and increase the efficiency of tax administration. Over the medium-term, a value-added tax (VAT) is expected to be introduced.

9. The authorities appreciate staff's revised assessment of risk of debt distress, which has been improved from moderate to low. This brings the risk of debt distress back to the prevailing level prior to the 2016 Article IV. In hindsight, the 2016 deteriorated rating raised an unnecessary false alarm. At the time, our chair stated that the worsening was unjustified in light of Timor-Leste's very low gross public and external debts and comfortable assets position of the public sector. We are pleased that the new Debt Sustainability Analysis (DSA) framework has recognized the importance of country-specific circumstances and has given more latitude to country teams to make the proper judgement about risks.

Monetary Regime and Financial Sector Development

10. Timor-Leste is a dollarized economy. The authorities agree with staff that the monetary regime continues to serve the country well. In recent years, domestic inflation has

been low and close to trading partners inflation, and inflation expectations are well anchored. The authorities continue to carefully assess the merits of maintaining the current monetary system.

11. The authorities are committed to further develop Timor-Leste's financial system. The banking system is well-capitalized, but credit remains relatively low for international standards. Whilst they acknowledge that the weak collateral regime remains an obstacle to credit expansion, they believe that progress can be achieved with the new Land Law and development of a secured transaction framework for movable property. The authorities agree with staff that a strong regulatory and supervisory framework should complement financial sector development. They also trust that the ongoing modernization of the payment system will facilitate access to financial services and stimulate competition in the financial sector. Accordingly, the Central Bank of Timor-Leste (BCTL) has recently launched a real time transfer network (R-Timor) and the National Switch system, which will soon be integrated with other regional payment systems. The BCTL is also working diligently to foster financial education.

Social Development

12. Timor-Leste's population is growing fast and remains remarkably young. While several countries in the Asia-Pacific region are having to deal with the constraints of rapidly aging populations, Timor-Leste will profit from a demographic dividend over the next decades. The challenge ahead is to successfully integrate this young population into a modern, dynamic and internationally connected economy, in order to unleash the full potential of this favorable demographics.

13. Staff's recommendations to capture the growth dividends from the rapidly-growing working population are greatly appreciated and will be duly considered. Providing high quality education and technical training in order to address skilled labor shortages and enhance productivity is paramount. Reducing gender inequalities in the labor market can also have a positive and long-lasting impact on economic growth and development. Finally, the authorities see the promotion of regional and local development initiatives as great opportunities, since the largest part of the Timorese population is still in the rural areas, where productivity is low, and infrastructure is lacking.

14. The Timorese authorities remain committed to advance their structural reforms agenda and efforts are being made to attract foreign investment and foster private-sector job creation. Improving basic infrastructure is fundamental to promote economic opportunities, attract private sector investment, and improve the living standards of the Timorese people. In this area, the authorities have made substantial progress to achieve the 2030 Sustainable Development Goals, as attested by staff. Investing in human capital will provide opportunities to the new generations of Timorese people to fulfill their potential.