INTERNATIONAL MONETARY FUND

IMF Country Report No. 23/267

TUVALU

July 2023

2023 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR TUVALU

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 2023 Article IV consultation with Tuvalu, 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 July 10, 2023, consideration of the staff report that concluded the Article IV consultation with Tuvalu.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on July 10, 2023, following discussions that ended on April 25, 2023, with the officials of Tuvalu on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on June 23, 2023.
- An **Informational Annex** prepared by the IMF staff.
- A **Debt Sustainability Analysis** prepared by the staffs of the IMF and the World Bank.
- A **Statement by the Executive Director** for Tuvalu.

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.

Copies of this report are available to the public from

International Monetary Fund • Publication Services
PO Box 92780 • Washington, D.C. 20090
Telephone: (202) 623-7430 • Fax: (202) 623-7201
E-mail: publications@imf.org Web: http://www.imf.org

International Monetary Fund
Washington, D.C.

IMF Executive Board Concludes 2023 Article IV Consultation with Tuvalu

FOR IMMEDIATE RELEASE

Washington, DC – **July 21, 2023:** On July 10, 2023, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with Tuvalu.

A successful vaccination strategy allowed Tuvalu to lift COVID containment measures at the end of 2022, but the economic cost of the pandemic has been significant. Real GDP growth was -4.3 percent in 2020, with at-the-border containment measures leading to delays in much-needed infrastructure projects. Activity has not fully recovered to its pre-pandemic level, with growth in 2021 at 1.8 percent and estimated at 0.7 percent for 2022. Headline inflation rose to 11.5 percent in 2022 in the context of higher global inflationary pressures, an increase in transportation costs around the world, and the increase in global food prices in the wake of Russia's invasion of Ukraine. Fiscal savings from the pandemic-related reduction in public investment were partly offset by elevated spending on non-capital items.

Growth is expected to accelerate as the lifting of COVID restrictions leads to the resumption of construction activity, shipping bottlenecks ease and the trade and hospitality sectors recover. Growth is projected at 3.9 percent in 2023. Inflation is expected to decline but remain elevated at 5.9 percent in 2023, on the back of still-high global inflation and the effects of the drought on domestically produced food. The fiscal balance is expected to deteriorate starting in 2023. Large increases in current expenditures in the 2023 budget and the resumption of infrastructure projects are expected to reduce the fiscal surplus to 1.1 percent of GDP, from 8.8 percent in 2022. Fiscal spending is supported by strong grant flows, including additional one-off flows, which are estimated at 40 percent of GDP in 2023.

Downside risks to the outlook are high. Delays in donor grants pose large risks to the fiscal outlook, and therefore also to the economy. As in other small economies, a loss of correspondent banking relationships would create severe balance of payments problems. The lack of effective financial supervision creates contingent risks for the government via the financial sector. Higher global commodity prices could result in higher inflation that leads to greater fiscal expenditure pressures. Natural disasters and climate change remain latent threats to the economy—including through their possible impact on fishing license revenues, potential human and physical capital losses and food and water security.

---

[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staf 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.

Executive Board Assessment[2]

Executive Directors broadly agreed with the staff appraisal. They commended the Tuvaluan authorities' effective containment policy and successful vaccine rollout which prevented significant negative health outcomes and supported reopening. They noted, however, that the economic cost of the pandemic has been high with growth significantly weaker than expected in the 2021 Article IV and those challenges compounded by inflationary pressures. Directors observed that risks to the outlook are high, with very high dependency on grants, weak financial supervision, fragile correspondent banking relationships, and vulnerability to climate change.

Directors noted that a gradual fiscal consolidation will be necessary to ensure sustainability as well as to build buffers against the many downside risks. They noted that the high risk of debt distress rating in the Debt Sustainability Analysis supports such a policy. Directors considered that consolidation can be achieved through rationalizing expenditures and mobilizing domestic revenues, while continued Public Financial Management reforms would support easier access to climate finance.

Directors encouraged measures to strengthen the financial sector. They stressed the importance of reforms to strengthen financial regulation and supervision and to support Tuvalu's connectivity to the global payments system. Directors are supportive of the authorities' plan to join the Asia-Pacific Group on Money Laundering and encourage the authorities to further implement AML/CFT reforms, including through technical assistance support. Directors noted that plans to digitalize the nation should be pursued in a way that does not exacerbate correspondent banking relationship pressures.

Directors noted the importance of structural reforms that would help diversify the economy, promote growth, and improve disaster resilience. They noted the importance of measures to increase trade integration to support the expansion of exports and increase diversification, while commending the authorities on the ratification of the PACER Plus agreement. Directors were encouraged by the authorities' plans to revamp the Disaster Risk Management Act and enforce building codes to enhance disaster resilience. Directors noted that a comprehensive strategy to ensure overseas scholarships align with domestic needs would promote human capital development.

Directors highlighted that strengthening capacity, including through technical assistance and training from the Fund and other international partners, would aid in implementing the necessary policy reforms. In this context, they emphasized the importance of initiatives to improve data collection and statistical capabilities.

It is expected that the next Article IV consultation with Tuvalu will be held on the current 24-month cycle.

[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.

Table 1. Tuvalu: Selected Social and Economic Indicators, 2018-2028

Population (2021 est.): 11,204
Per capita GDP (2021 est.): AU$7,152
Main export: Fish
Key export markets: Australia, Fiji, and New Zealand

Poverty rate (2017): 26 percent
Life expectancy (2021): 64 years
Primary school enrollment (2021, gross): 92 percent
Secondary school enrollment (2021, gross): 74 percent

	2019	2020	2021	2022 Est.	2023 Proj.	2024	2025	2026	2027	2028
	(Percent change)									
Real sector										
Real GDP growth	13.8	-4.3	1.8	0.7	3.9	3.5	2.4	2.2	2.1	2.0
Consumer price inflation (period average)	3.5	1.9	6.2	11.5	5.9	3.7	3.4	3.2	2.9	2.8
	(In percent of GDP)									
Government finance										
Revenue and grants	111.8	129.4	102.6	119.8	110.5	107.0	101.4	100.5	100.2	99.8
Revenue	82.9	95.6	86.4	89.0	67.9	72.9	71.0	71.1	71.2	71.2
of which: Fishing license fees	49.0	58.8	49.2	45.6	38.6	43.6	41.7	41.8	41.9	42.0
Grants	28.9	33.7	16.2	30.7	42.6	34.2	30.4	29.4	28.9	28.6
Total expenditure	112.9	121.2	116.5	111.0	109.3	105.9	104.7	104.3	104.6	104.7
Current expenditure	70.8	78.6	93.3	98.2	98.2	94.7	93.1	92.4	92.4	92.4
Capital expenditure 1/	42.1	46.1	30.1	20.9	24.0	26.1	26.1	26.0	25.9	25.7
Overall balance	-1.1	8.2	-13.8	8.8	1.1	1.1	-3.3	-3.8	-4.4	-4.9
Overall balance (excl. grants)	-30.0	-25.6	-30.1	-22.0	-41.4	-33.0	-33.7	-33.2	-33.3	-33.5
Domestic Current balance 2/	-36.9	-32.6	-60.8	-58.9	-56.0	-50.6	-49.3	-49.0	-49.3	-49.7
Financing	1.1	-8.2	13.8	-8.8	-1.1	-1.1	3.3	3.8	4.4	4.9
Foreign (net)	0.9	1.2	0.4	0.4	0.9	0.6	0.5	3.8	4.4	4.9
Consolidated Investment Fund (net, -=increase)	-2.0	7.0	-14.2	8.4	0.3	0.6	-3.8	0.0	0.0	0.0
Tuvalu Trust Fund (in percent of GDP)	237.3	243.7	258.7	224.5	214.8	206.1	199.5	193.7	188.8	184.3
Consolidated Investment Fund (in percent of GDP)	47.4	51.4	46.3	43.5	39.8	37.6	31.5	29.8	28.3	26.9
Tuvalu Survival Fund (in percent of GDP)	6.4	6.6	6.2	5.9	6.4	5.9	5.6	5.3	5.0	4.8
Monetary Sector										
Credit growth (percent change) 3/	-6.8	4.5	8.7	14.2	6.6	4.8	3.7	3.4	3.2	3.1
	(In percent of GDP, unless otherwise indicated)									
Balance of payments (in percent of GDP)										
Current account balance	-22.2	16.3	24.1	4.6	2.3	-1.3	-4.3	-4.8	-5.3	-4.8
Goods and services balance	-118.7	-104.1	-101.7	-93.4	-108.3	-105.3	-103.4	-102.8	-102.9	-101.9
Capital and financial account balance	44.7	20.3	32.5	30.1	32.7	29.2	19.4	15.5	25.5	24.8
Overall balance	31.9	22.7	26.7	43.1	-9.7	-3.6	-5.1	-6.8	-3.7	-4.2
Gross reserves 4/										
In $A million	88.2	98.0	126.3	114.2	119.3	129.5	121.2	123.3	122.5	124.4
In months of prospective imports of goods and services	13	14	18	12	12	12	11	10	10	9
	(In percent of GDP, unless otherwise indicated)									
Debt indicators										
Gross public debt	11.5	12.3	11.5	10.1	8.0	6.8	5.8	9.3	13.2	17.4
External	9.4	9.2	8.0	6.9	5.3	4.4	3.6	7.4	11.4	15.8
Domestic SOE debt	2.2	3.1	3.5	3.2	2.7	2.4	2.2	2.0	1.8	1.6
Nominal GDP (In $A million)	77.9	75.2	80.1	85.2	93.8	100.9	107.4	113.5	119.6	125.6

Sources: Tuvalu authorities; PFTAC; SPC; ADB; World Bank; 2018 IMF's BOP TA; and IMF staff estimates and projections.

1/ Includes Special Development Expenditures (SDEs) and infrastructure investment
2/ Domestic current balance excludes fishing revenue, grants, and capital expenditure.
3/ Banks' and pension fund lending to non-government domestic sector.
4/ The sum of liquid assets of the National Bank of Tuvalu, Consolidated Investment Fund, and SDR holdings.

INTERNATIONAL MONETARY FUND

TUVALU

STAFF REPORT FOR THE 2023 ARTICLE IV CONSULTATION

June 23, 2023

KEY ISSUES

Context. A successful vaccination strategy allowed Tuvalu to lift COVID containment measures with limited negative health consequences. However, the economic fallout from the pandemic has been significant as containment measures led to delays in much-needed climate adaptation projects and an increase in current spending has eroded fiscal sustainability. Growth stagnated following the initial contraction at the onset of the pandemic, and global inflationary pressures and climate events have led to soaring inflation and exposed food and water security risks. Tuvalu is among the countries most vulnerable to the effects of climate change; its remote economy is dominated by the public sector; and its revenue base is narrow, with reliance on donor commitments further complicating fiscal planning. The economic setback due to the pandemic makes addressing these significant structural challenges more difficult.

Policies. A comprehensive set of policies can help manage uncertainty amidst large downside risks:

- Promoting fiscal sustainability and building buffers by mobilizing revenues and rationalizing current expenditures.
- Continuing public financial management reforms to unlock access to climate finance in view of the very large climate adaptation investment needs.
- Pursuing financial sector reforms to strengthen regulation and supervision and increase resilience of the connectivity to the global payments system.
- Introducing structural reforms to strengthen climate and disaster resilience, deepen trade integration, and enhance human capital.

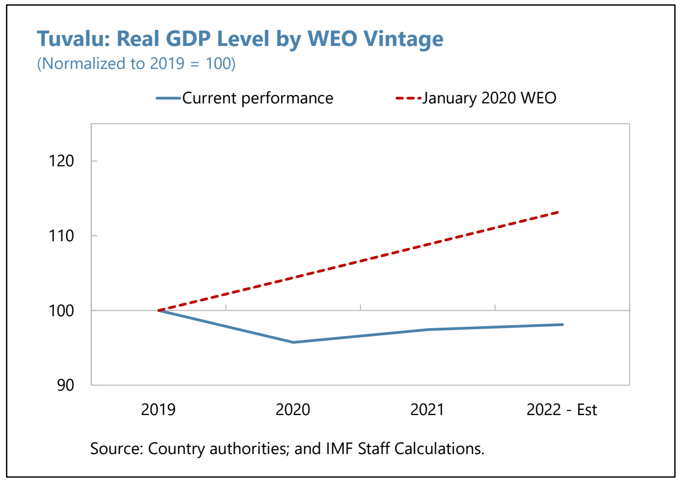
Approved By
Nada Choueiri and Fabián Valencia

The discussions took place in Funafuti between April 17-25, 2023. The staff team comprised Diego A. Cerdeiro (head), Chris Redl, Roman D. Merga, and Seron Shivanjali (all APD). Chris Becker (OED), Niuatui Niuatui (World Bank OED) and Tuimasi R. Ulu (World Bank) also attended the meetings. Heena Gupta and Richard Berkhout (both LEG) attended some meetings. Annia Bowen and Ruihua Yang (both APD) supported the mission.

CONTENTS

CONTEXT

1. A successful vaccination strategy allowed Tuvalu to lift COVID containment measures with limited negative health consequences—but the economic fallout from the pandemic has been significant. The swift implementation of COVID containment measures at the onset of the pandemic helped Tuvalu maintain community transmission of the virus at zero for nearly three years.[1] Thanks to a successful vaccination campaign that led to 98 percent of the eligible population being fully vaccinated, the first COVID outbreak that took place in November 2022 had only a limited impact. Consequently, the authorities lifted containment measures in December 2022. At the same time, the economic costs of the pandemic have been significant, including due to at-the-border containment measures that led to delays in much-needed infrastructure projects.

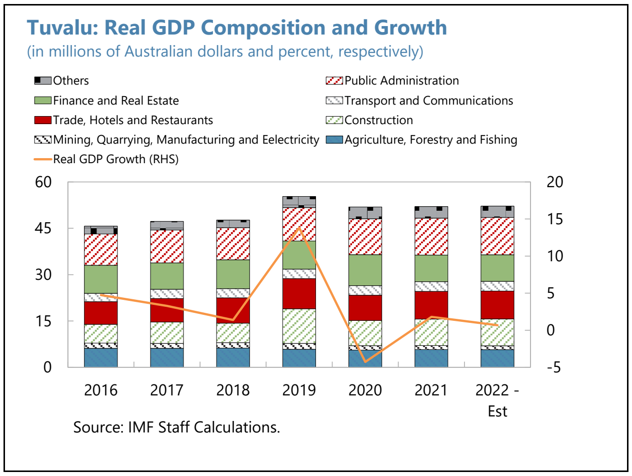


2. The economic setback makes addressing the country's significant structural challenges more difficult. Tuvalu's small size, remote location, and sparseness between islands already implies a high cost of doing business. Against this backdrop, the economy faces additional structural challenges that further beset the economy with downside risks, making private sector activity even more challenging in the currently state-dominated economy. *Climate change* presents an extraordinary challenge for Tuvalu, with its very small and low-lying territory exposing it to severe risks that global warming is only expected to exacerbate (see Appendix I). While the government is exploring all options, including potentially creating a digital copy of the nation as it charts possible relocation plans, mitigation of these risks requires investments in adaptation that are enormous relative to GDP. For such large investments Tuvalu must rely on donors—with grants already making up around one-fifth of revenues on average. Yet volatility in grants generates *fiscal revenue uncertainty*, with a single large grant able to shift sustainable fiscal balances into deep deficit. Weather patterns that may become more volatile due to global warming can further worsen revenue volatility by creating risks for tuna stocks, on which fishing license revenues (which represent around half of revenues) depend. *Expenditure pressures* put further strains on macro-fiscal sustainability, with current expenditures (i.e. excluding capital investments), at 98 percent of GDP, significantly larger than current revenues (revenues excluding grants, fishing license revenues, and capital revenues), at 42 percent of GDP.

[1] After the first cases of COVID-19 were confirmed in March 2020 in Fiji—the travel gateway to Tuvalu—the authorities declared a State of Emergency, banning all travel except for the delivery of essential items and repatriation flights (subject to a mandatory two-week quarantine). See 2021 Article IV Staff Report.

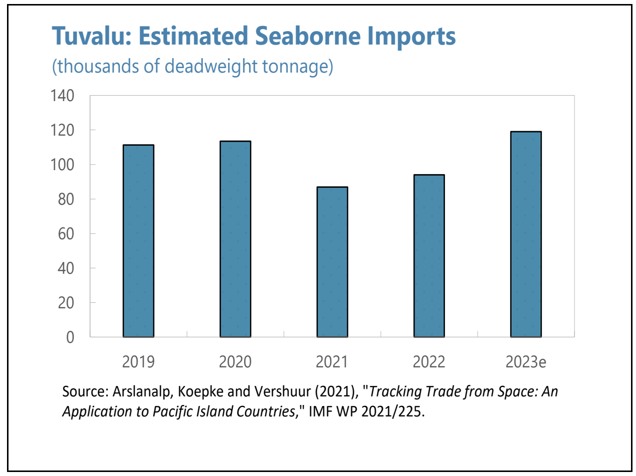
DEVELOPMENTS

3. Growth stagnated following the contraction at the onset of the pandemic. Real GDP growth was -4.3 percent in 2020 as the construction, trade and hospitality sectors suffered deep contractions. While these sectors partly bounced back, activity did not fully recover, with growth in 2021 at 1.8 percent. Based on fiscal and trade data, together with seaborne trade estimates (text figure, and Appendix II), staff currently estimate 2022 growth at just 0.7 percent.



Tuvalu: Real GDP Composition and Growth
(in millions of Australian dollars and percent, respectively)

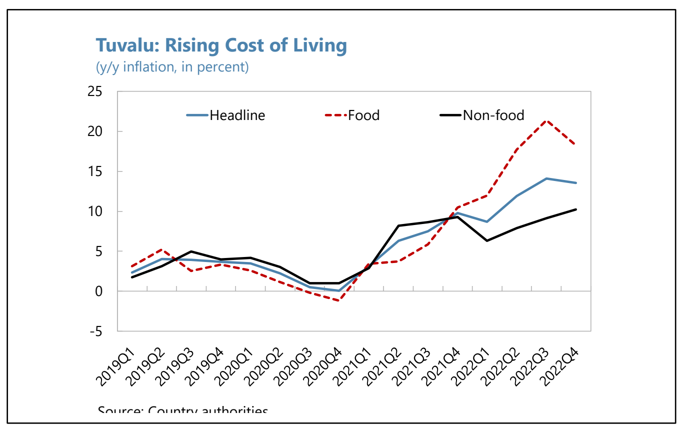
Source: IMF Staff Calculations.



Tuvalu: Estimated Seaborne Imports
(thousands of deadweight tonnage)

Source: Arslanalp, Koepke and Vershuur (2021), "*Tracking Trade from Space: An Application to Pacific Island Countries*," IMF WP 2021/225.

4. Rising transportation costs, Russia's invasion of Ukraine, and a drought have led to soaring inflation and exposed food—*and water*—security risks. Average headline inflation rose from 1.9 percent in 2020 to 11.5 percent in 2022. Inflation was initially driven in 2021 by higher non-food prices in the context of higher global inflationary pressures, and also as the increase in transportation costs around the world affected remote island countries the most.[1] Headline CPI soared even further in 2022 on the back of rising global food prices, especially in the wake of Russia's invasion of Ukraine (food imports represent 19 percent of GDP, while agriculture makes up for only 10 percent of GDP). A drought, which led the authorities to declare a national state of emergency in November 2022, exacerbated food security risks from rising prices and—by exhausting rainwater supplies—exposed climate-related water-security risks. The authorities responded to rising inflation through untargeted "inflation mitigation payouts" (totaling AUD 400,000 or AUD 40 dollars per eligible household) and by expanding a list of products under price controls.



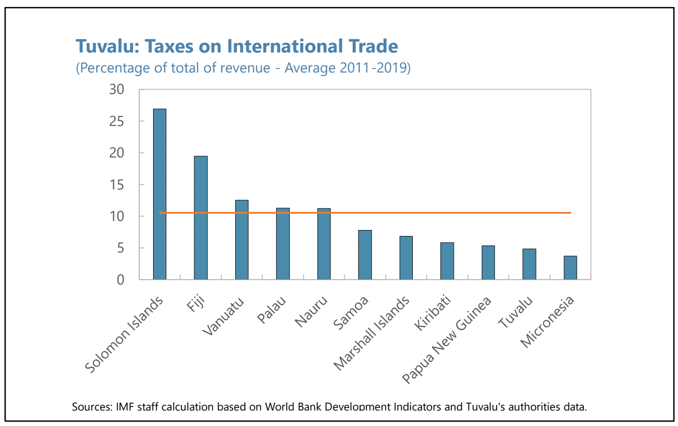
Tuvalu: Rising Cost of Living
(y/y inflation, in percent)

Source: Country authorities

[1] See Carrière-Swallow and others (2023), "*Shipping costs and inflation*," Journal of International Money and Finance.

5. The delay of investment projects led to only modest headline fiscal savings, while the domestic current balance has deteriorated sharply. Estimated at 21 percent of GDP for 2022, public *capital expenditures* halved from their 2019 levels. Despite these forced savings, the overall fiscal balance had a surplus over 2020-2022 of only around 3 percent.[2] The main reason is a sharp increase in *current expenditures* as purchases of goods and services rose by nearly 90 percent y/y in nominal terms in 2021, but are estimated to have only slightly declined in 2022 as a percent of GDP (by 0.5 percentage points). The rise has in part been driven by once-in-50-years land-lease renegotiations with landowners where public buildings are located. Expenditures related to the Tuvalu Overseas Medical Referral Scheme (TOMRS) and scholarships are also estimated to have crept up to 16.6 percent of GDP in 2022, from 12.6 percent before the pandemic. Subsidies rose to 16 percent of GDP in 2022, from 11 percent in 2021, on the back of higher electricity subsidies.[3] On the *revenue side*, after a strong 2020 at 59 percent of GDP, fishing license revenues are estimated to have steadily declined to 46 percent of GDP in 2022. Tax revenues have remained broadly stable due to increased excise tax revenues following the implementation of a new information management system, offsetting weakness in personal income tax revenues. On the back of stable revenues but increasing expenditure pressures, the *domestic current balance* (excluding fishing license fees and grants, and capital expenditures) is estimated to have deteriorated to -59 percent of GDP.

6. The external position for 2022 is estimated to have been broadly in line with the level implied by medium-term fundamentals and desirable policies. Tuvalu's goods and services balance is structurally negative with a very small export base (of around 1 percent of GDP for goods, less than 20 percent for services) far outweighed by imports (goods and services imports combined can exceed GDP in some years), with the shortfall financed by primary (fishing licenses) and secondary (grants) income. COVID containment measures and their impact on income and on import-intensive infrastructure projects led to a sharp increase in the current account balance, which is estimated at 4.7 percent of GDP for 2022 (and 12.3 percent on average over 2020-2022). The 2022 outturn would have been higher had fishing license fees not fallen by 3.6 percentage points of GDP. The external position assessment for 2022 is largely driven by the temporary increase in the fiscal balance (see Appendix III). Tuvalu ratified the



[2] A large negative balance in 2021 (-14 percent of GDP) followed by a large positive balance in 2022 (+9 percent of GDP) is primarily explained by the delay of a World Bank grant (of 13 percent of 2021 GDP) that was scheduled for 2021 but was disbursed in 2022, underscoring risks from volatility in donor financing. Moreover, the 2021 and 2022 outturns are influenced by the sale of a vessel, classified as capital revenues in 2022 (i.e. above the line) following the authorities' GFS 1986 recording convention.

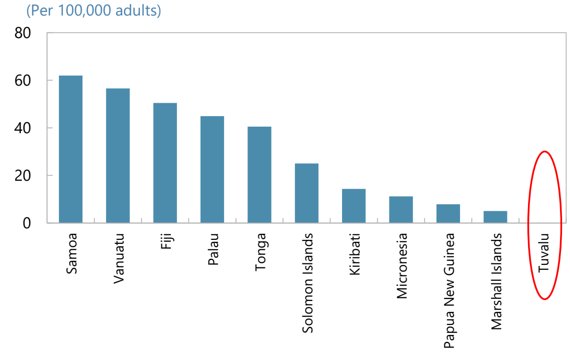
[3] The electricity tariff structure is from 2008, based on a cost of fuel that is half the current cost. Tariff changes under consideration are, moreover, highly regressive. The tariff is split into three bands based on the amount consumed, with higher marginal rates for higher consumption. The proposed tariff increase assumed a fixed 56c increase across all bands, creating very large percentage increases for lower-income consumers who are likely to consume less and have lower incomes.

Pacific Agreement on Closer Economic Relations (PACER) Plus in January 2022. The agreement will reduce to zero existing import tariffs for all countries in the agreement[4] and contemplates additional actions to reduce trade barriers, including simplifying and harmonizing customs procedures, clarifying and harmonizing rules of origin, eliminating restrictions to services trade, and improving labor mobility schemes.

7. **Connectivity to the global payments system remains limited**. High transaction and compliance costs relative to the overall volume of transactions continue to make Tuvalu vulnerable to the loss of correspondent banking relations (CBRs). After losing a CBR in 2020 due to a regional de-risking strategy of the previous correspondent bank, the National Bank of Tuvalu (NBT) currently maintains three CBRs for payments in a basket of currencies (FJD, AUD, NZD, EUR, USD). The authorities are undertaking efforts to build an effective AML/CFT framework including through a 2022-2025 Policy Reform Matrix (PRM) that lays out several milestones to be reached through 2025. These include the establishment of the already-operational dedicated Anti-Money Laundering Coordination Committee (AMLCC), plans to join the Asia Pacific Group (APG; Tuvalu is currently an Observer), and undertaking measures to improve the legal framework. These measures will support building resilience in the financial and external sectors.

8. **The authorities have announced plans to modernize financial services.**[5] NBT has announced plans to establish ATMs and start to provide online banking services (by early 2024) and roll out the use of point-of-service debit and credit cards (by mid-2024). At the same time, interest rates in Tuvalu are mostly fixed and there continue to be no prudential standards. This, in turn, also limits the authorities' ability to assess risks objectively and take supervisory actions. Capacity development efforts, including through Fund technical assistance, became more challenging while delivered virtually through end 2022, compounding difficulties to attract and retain qualified staff.

Tuvalu: ATM Access, 2021
(Per 100,000 adults)



Notes: 2013 data for Kiribati, 2017 for Palau, 2018 for Tonga, and 2020 for Solomon Islands.
Source: World Development Indicators.

Authorities' Views

9. **The authorities broadly agreed with staff's assessment, stressing the effect of external factors in driving macroeconomic outcomes.** They agreed that the pandemic's economic fallout has been significant, delaying infrastructure projects and impacting the trade and hospitality sectors particularly hard. This in turn led to a decline in the level of imports, as a result of supply bottlenecks as well as due to rising prices. The authorities also noted that Russia's invasion of Ukraine and the

[4] Total import duties (from all partners) currently represent 2.5 percent of GDP, although the 10-year phase-in period for tariff reductions implies that the agreement should have relatively little effect on revenues through the medium term.

[5] Access to credit in Tuvalu remains limited; see also *Tuvalu 2021 Article IV Staff Report*.

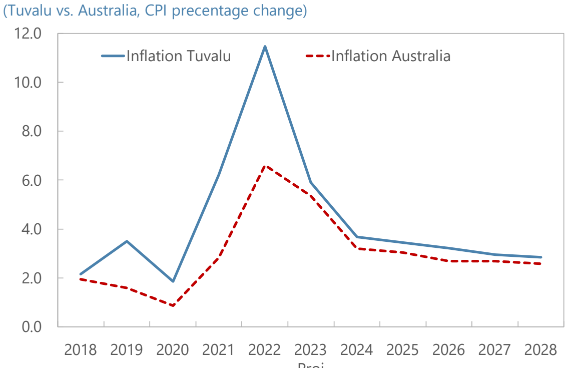
drought at the end of last year further aggravated inflation, largely reflected in higher fuel and food prices. The authorities stressed that these external factors led to increased fiscal pressures, including related to higher spending on medical treatments due to the pandemic and the weakness in personal income tax revenues as a result of the economic slowdown. Against this difficult backdrop, they highlighted the benefits from the new information management system in bolstering excise tax revenues.

10. **The authorities highlighted their efforts to build external sector resilience.** They noted how the ratification of PACER Plus will help further integrate Tuvalu into the Asia-Pacific region, with associated reforms (including on the revenue collection front) bringing substantial benefits to the country. They agreed with staff's assessment that connectivity to the global payments system remains limited and noted the importance of their planned reform efforts on this front, including joining the Asia Pacific Group on Money Laundering, setting up the AML Coordination Committee, and updating the AML/CFT legal framework. They also noted that they have been continuously working toward timely responses to any information requests from their correspondent banks that arise in relation to know-your-customer tasks. The authorities agreed on the scope for improving the risk-assessment capacity of the financial supervisor, including through increased staffing.

OUTLOOK AND RISKS

11. **Growth is expected to pick up in 2023 and moderate going into the medium term**. Growth is projected at 3.9 percent in 2023 as the lifting of COVID restrictions gradually leads to the resumption of construction activity and the trade and small hospitality sectors recover. Because the effects of reopening are assumed to gradually kick in as logistics bottlenecks ease, growth is expected at 3.5 percent in 2024 despite the moderation in fiscal spending. In the medium to long term, growth is projected to decline to below 2 percent, primarily driven by capital investment and sluggish TFP growth—remaining relatively low given the dominance of inefficient public enterprises, weak competitiveness, migration pressures, and an increased incidence of adverse climate events. Inflation is expected to decline but remain elevated at 5.9 percent in 2023, on the back of still-high global inflation, and slowly converge to 2 percent in the long run, broadly consistent with the medium-term inflation path of Australia, and thus also consistent with a stable real effective exchange rate.

Tuvalu: Projected inflation
(Tuvalu vs. Australia, CPI precentage change)



Source: IMF staff estimates.

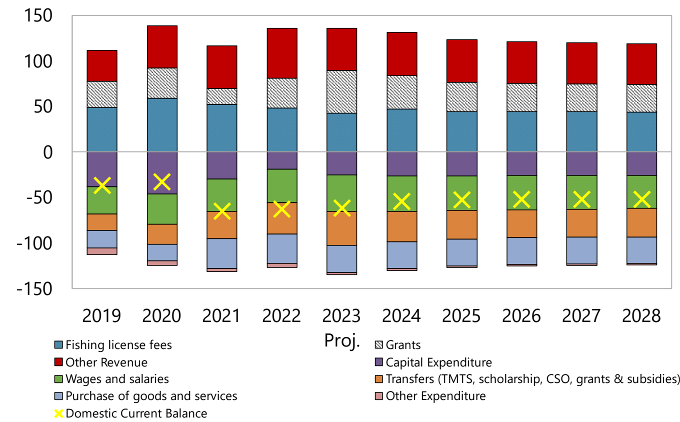
12. **The fiscal balance is expected to deteriorate starting in 2023.** Large increases in current expenditures in the 2023 budget and the resumption of infrastructure projects are expected to reduce the fiscal surplus to 1.1 percent of GDP, from 8.8 percent in 2022. The domestic current balance is expected to improve marginally to -56 percent in ratio to GDP. Overall, elevated current

spending plans pose a significant challenge to the goal of ensuring sustainability, with the overall balance looser than warranted given the economic boost from reopening.

- *Current expenditures* are envisaged to increase by 10 percent y/y in 2023. This is largely driven by a large rise in wages and salaries of 17 percent y/y that, according to the budget, aims to "address staff shortages, improve productivity and moderate the impact of inflation." Subsidies are expected to decline only modestly in 2023 to 15 percent of GDP, from 16 percent of GDP in 2022. Expenditures in goods and services are projected to remain at a similar level to 2022.[6]

Tuvalu: Fiscal Balance

(In percent of GDP)



Sources: Country Authorities; and IMF Staff Calculations.

- *Capital expenditures* are expected to increase by 26.4 percent y/y in 2023 as the reopening enables the resumption of infrastructure projects. The Tuvalu Development Fund (TDF), which is the primary source of the recovery in capital spending, has a budget of A$31 million for 2023 and is expected to support A$12 million worth of capital projects in 2023. These projects include climate mitigation and adaptation projects such as the Climate Information and Early Warning system (Green Climate Fund and UN supported) as well as projects supporting broader developmental goals, such as building airstrips to connect the islands, amongst others. Bottlenecks related to shipping materials to the outer islands are expected to fade starting mid-year when a new barge and tugboat begin operating.

- Non-capital *revenues* are expected to weaken in 2023 in ratio to GDP, driven by weaker nontax revenues (primarily fishing licenses) while tax revenues remain broadly flat.

13. The fiscal balance will shift into deficit by the medium term. Even with a significant reduction in on-budget infrastructure spending and with total capital expenditures expected to return to their pre-pandemic levels in the medium term, the elevated levels of current expenditures combined with the narrow domestic revenue base imply that the fiscal accounts are projected to remain in deficit from 2025 onward. Grants are expected to grow more slowly than nominal GDP as large adaptation projects are completed over the next decade. The overall deficit is expected to hover around 7 percent of GDP, while the domestic current deficit is projected to be around 50 percent of GDP. The expected outturn for the overall balance is still predicated on the strong assumptions that (a) grants decrease only very gradually toward 28 percent of GDP by the end of

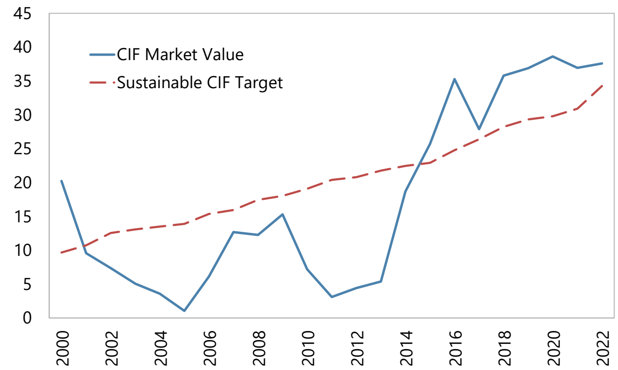
[6] A new national airline plans to start operating a 16-passenger plane at the end of 2023, with a task force in the process of preparing an analysis on costs and risks before then.

this decade and 22 percent by 2043, and (b) fishing license revenues keep up with the pace of GDP growth, remaining at around 42 percent by 2028.

14. Foreign financing will be required to finance the deficit, including because of the expected inability to draw from the Tuvalu Trust Fund (TTF). The TTF grew by 12.2 percent in 2021 but declined by 7 percent in 2022 as global capital markets declined, which left the TTF's market value at A$191 million.[7] Since the market value grew by less than the maintained value of the TTF, no distribution from the TTF into the Consolidated Investment Fund (CIF) is permitted. The CIF balance, in turn, stood at A$37.6 million at the end of 2022, or 18 percent of the market value of the TTF. The government's target for the CIF is 16 percent of the maintained value of the TTF, leaving minimal fiscal space going forward. The projections therefore assume net foreign financing of 4 percent of GDP starting in 2026, then hovering around an average of 6 percent of GDP. Under these projections, Tuvalu is assessed to remain at a high risk of debt distress (see DSA).

Tuvalu: Consolidated Investment Fund Performance

(In millions of Australian dollars)



Sources: Country authorities; and IMF staff calculations.

15. The current account is expected to turn negative by 2024. Higher growth combined with the resumption of import-intensive construction projects are expected to lead to a current account deficit from 2024 as the goods and services deficit starts to widen again in 2023. The projected deficit is expected to be larger than the estimated current account norm, with the expected gap to a large extent driven by the projected large and persistent fiscal deficits (see Appendix III). Reserve coverage was at 12.5 months of next year estimated imports as of end 2022 and is expected to fall to 9.4 months by 2028, increasing Tuvalu's vulnerability to international shocks.

16. Downside risks to the outlook are high (see Appendix IV). Delays in donor grants pose large risks to the fiscal outlook, and therefore also to the economy. A loss of Tuvalu's CBRs would create severe balance of payments problems. The lack of timely data on SOE performance and of effective financial supervision creates contingent risks for the government. Higher global commodity prices could result in higher inflation that leads to greater fiscal expenditure pressures. Natural disasters and climate change remain latent threats to the economy (Appendix I) —including through

[7] The TTF is administered by a Board consisting of representatives from Tuvalu, Australia, and New Zealand, and is not fully sovereign (see also DSA annex below and Appendix V in Tuvalu's 2021 Article IV Staff Report). Transparent rules govern the availability of these funds: when the market value of TTF exceeds its "maintained value" (indexed to the Australian CPI), the Board can decide to transfer the excess to the Consolidated Investment Fund (CIF). The authorities deposit fishing revenues that exceed the past three-year average into the CIF. The CIF is controlled by the Tuvaluan authorities and is used as a cash buffer to finance fiscal expenditures.

their possible impact on fishing license revenues, potential human and physical capital losses, and food and water security.[8]

Authorities' Views

17. While sharing staff's views on medium-term growth and risks around the outlook, the authorities conveyed a more conservative view on the economic rebound from reopening. The authorities project lower real GDP growth for 2023 and 2024 of around 2 percent each year. They noted that while the reopening is expected to lift economic activity, they are wary of potential setbacks, including larger-than-expected shipping bottlenecks to outer islands as well as new COVID variants that may lead to renewed disruptions. The authorities agreed with staff that inflation will continue to ease but remain elevated due to the global inflationary environment and the ongoing effects of the drought. The authorities concurred with the main risks outlined by staff, particularly downside risks to the economic outlook; contingent liabilities from loss-making SOEs; renewed global inflationary pressures that might create project funding gaps; as well as the continued threats from climate change and potential volatility in revenue from fishing licenses.

18. The authorities acknowledged that current expenditure pressures have increased but noted the beneficial effects from additional grants. The newly agreed increase in the recurring grant from the main bilateral donor will fund this year's fiscal deficit while the additional one-off grant increase will be spent primarily on addressing bottlenecks to reopening, including overdue repairs to the government shipping fleet servicing outer islands, and arrears relating to the TOMRS and the Tuvalu Electricity Corporation. They noted that pandemic-related increases in goods and services expenditures in 2021 and public sector salaries this year are one-off events and do not represent expectations for growth in these items going forward. The public wage bill increase, in particular, is aimed at addressing long-standing issues related to civil service salaries to address the retention of key specialists (especially in health and other professions) and ensuring a limit to loss in human capital. The authorities acknowledged that continued poor returns from the TTF might pose some challenges to maintaining a healthy buffer account or cash reserves for the government in the future.

[8] Underscoring the potential damage from natural disasters, reconstruction after the 2015 cyclone Pam cost over 30 percent of GDP. As for fishing license revenues, by some estimates the warming of the ocean under the high greenhouse gas emission scenario UN RCP 8.5 could lead to a decline in tuna catch of 23.4 percent in Tuvalu's waters, translating into a decline in government revenue of 12.6 percent by 2050 (Bell, J.D. and others, 2021, "*Pathways to sustaining tuna-dependent Pacific Island economies during climate change*.", Nature Sustainability).

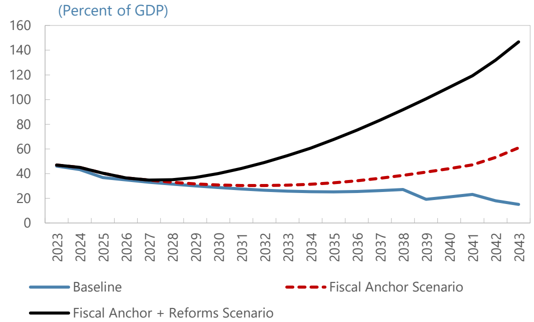
POLICIES TO REDUCE UNCERTAINTY AND ACHIEVE SUSTAINABLE GROWTH

A. Fiscal Policies for Increased Resilience

19. Fiscal policy needs to serve the dual goals of ensuring sustainability while meeting climate adaptation needs. Fiscal consolidation will be necessary to ensure sustainability as well as to build buffers against the many downside risks. At the same time, the narrow domestic revenue base as well as lack of access to local and international debt markets make necessary climate-adaptation investments impossible without significant donor support. That support will benefit from continued reforms to facilitate easier access to climate funds while also helping to improve macro-fiscal sustainability. Mitigating risks, both macro-fiscal and climate-related, would in turn help create a more conducive environment for private sector activity.

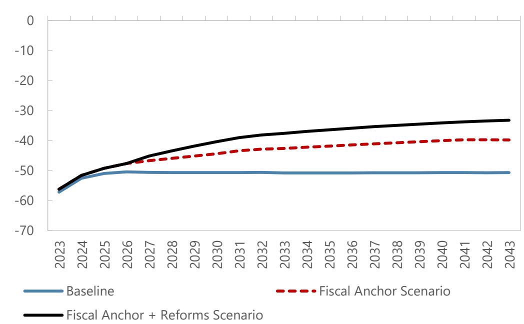
20. Medium term macro-fiscal sustainability will require reducing reliance on volatile revenue sources and consolidation in current expenditures. Given the exogenous and volatile nature of fishing license fees and grants and the longer-term nature of capital expenditures, the domestic current fiscal balance would provide an appropriate anchor. In line with the assessment of

Tuvalu: Governments Fiscal Buffers Under Alternative Scenarios
(Percent of GDP)



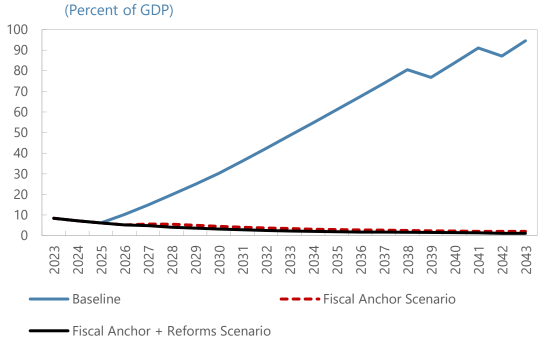
Source: Tuvalu authorities and IMF Staff calculations. Fiscal buffers defined as stock of TTF and TSF.

Tuvalu: Current Balance Under Alternative Scenarios
(Percent of GDP)



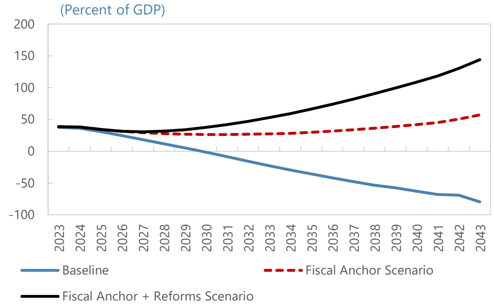
Source: Tuvalu authorities and IMF Staff calculations. Current balance defined as fiscal balance excluding fishing license fees and grants, and capital expenditure.

Tuvalu: Debt-to-GDP Under Alternative Scenarios
(Percent of GDP)



Source: Tuvalu authorities and IMF Staff calculations.

Tuvalu: Governments Net Financial Worth Under Alternative Scenarios
(Percent of GDP)



Source: Tuvalu authorities and IMF Staff calculations. Net worth defined as stock of TTF and TSF less debt.

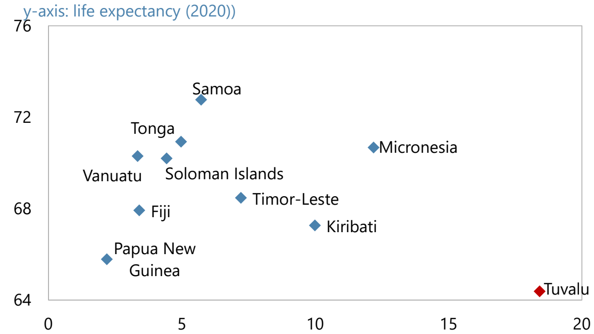
the 2023 overall balance and the need to ensure sustainability, a gradual adjustment commencing in 2023 with a consolidation of 1 percent of GDP relative to the baseline and achieving a domestic current deficit of 48 percent by 2026 and 40 percent of GDP by 2039 would raise fiscal buffers, defined as the combined value of the Tuvalu Survival Fund and the CIF, to close to 60 percent of GDP and stabilize debt. The domestic current balance's endpoint in this gradual consolidation path is similar to the pre-pandemic level of 37 percent of GDP. Such buffers would be sufficient to cover most shocks, including a sharp fall in fishing revenues and a natural disaster. Structural reforms that would raise medium-term growth by 1 percentage point would allow for a quicker attainment of the deficit target.

21. Consolidation can be achieved through a combination of expenditure and revenue measures:

- *Rationalizing expenditure* can be achieved through: (i) linking the wage bill with inflation and performance; (ii) gradually unwinding the sharp increase in goods and services spending; (iii) rationalizing spending on the TOMRS, where spending doubled the budgeted amount in 2022 (e.g. by exploring options to reduce the costs of overseas treatments, minimizing patient wait times abroad, improving preventive programs, tracking expenditures, strengthening supply chain management, and planning procurement for key pharmaceuticals and medical supplies); (iv) rationalizing overseas scholarships, and enforcing the conditions of medical scholarships to ensure the return of health professionals to the country; and (v) reviewing all subsidies, replacing untargeted ones with means-tested transfers while phasing out price controls.

Pacific Island Countries: Health Expenditure and Life Expectancy

(x-axis: current health expenditure as percent of GDP (2015-2019 average); y-axis: life expectancy (2020))

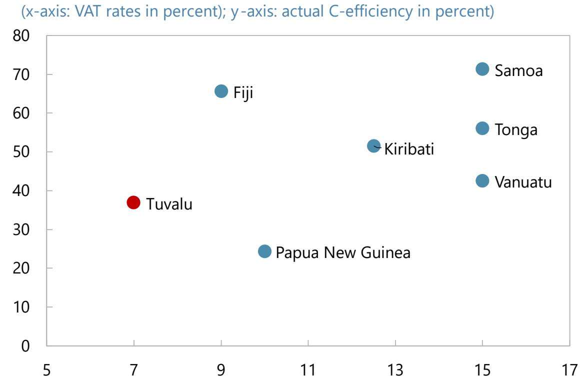


Sources: World Bank Development Indicators.

- *Mobilizing revenues* by: (i) increasing the VAT statutory rate in line with peers ; (ii) pushing ahead with plans to increase tax compliance, especially among large taxpayers, and ensuring an adequately-staffed tax authority; (iii) improving corporate income tax efficiency by updating the taxpayer registry, enforcing on-time filing, tax awareness activities, assistance and education, reminder notices, developing indicators to monitor performance, and rolling out e-payment and filing; (iv) including tax expenditures in budget documents and targeted and

Pacific Island Countries with VAT

(x-axis: VAT rates in percent); y-axis: actual C-efficiency in percent)



Sources: Sy et al. (2022); and IMF staff calculations.

cost-effective phasing out of tax exemptions; (v) enforcing timely corporate reporting and audits of financial statements of SOEs to improve tax payments.

22. Further reforms on Public Financial Management (PFM) would support easier access to climate finance. In 2022 the authorities improved the integration of their new Financial Management Information System (FMIS) to include an accounts receivable module, supported by Fund technical assistance, thus extending the coverage of the FMIS to more transactions and employing the FMIS for bank reconciliation. Building on this progress, further reforms that strengthen the integration of climate and disaster resilience in the PFM system and use of climate tagging in the budget can facilitate easier access to climate finance (Appendix V). These include, inter alia, improvements in financial reporting, budget credibility, audit controls, and—in line with the authorities' plans—introducing climate budget tagging. Public Investment Management (PIM) practices, which are closely integrated with PFM practices, would also benefit from potential improvements, especially around capital budgeting and project reporting as well as development of project proposals.

Authorities' Views

23. The authorities agreed with the importance of ensuring fiscal sustainability and put emphasis on plans to increase tax compliance. They noted that fiscal sustainability is one of the primary goals of the government. On revenue mobilization, the authorities expressed that at this time they do not see scope for measures that could burden consumers given the current inflationary environment, and noted that given that most goods, and especially almost all food items, are imported, citizens already face a significant burden via global inflation pressures and import duties. The authorities highlighted the exceptional nature of the increase in some current expenditures, such as the land-lease renegotiation and restructuring of public sector wages and noted that they expect lower expenditure growth going forward. The government instead plans to focus on tax efficiency, auditing, and compliance, especially for large taxpayers. At the same time, the authorities noted that firms in Tuvalu are affected by several fees and administrative burdens, and that they plan to conduct an exhaustive review of these costs with a view to improving the business environment. The authorities agreed on the benefits from continued PFM reforms, including because they can facilitate access to external funding sources.

B. Financial Sector Reforms

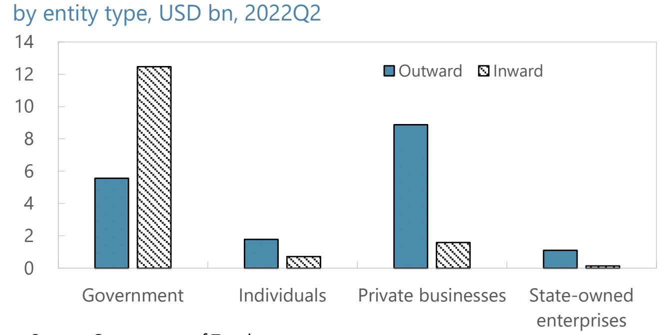
24. Efforts to deepen and modernize financial services would need to be accompanied by strengthened regulation and supervision. The authorities' initiatives are welcome to modernize financial intermediation, including because of the potential to bring in efficiency gains. At the same time, pursuing the modernization safely also requires urgent measures to strengthen regulation and supervision. While financial stability risks remain currently contained given banks' high capital adequacy ratios and levels of provisioning (Table 5), acceleration in the expansion of credit could pose significant risks given the weak monitoring capacity. Regulation and supervision should be strengthened along the following lines:

- Improving the regulatory framework to encourage loan pricing that is a function of borrowers' credit risk and the economic cycle, the upgrading of all three of Tuvalu's financial institutions' credit assessment capacity through the creation of a digitalized centralized credit registry, and the introduction of a resolution regime for non-performing loans to facilitate NPL's collections and to reduce borrowers' incentive to default. Improving financial literacy, both for private firms to better present financial information and for the financial sector to produce timely and accurate financial reports, would also help increase credit allocation and facilitate financial supervision.

- Supervision should be strengthened by ensuring that the perimeter of the supervisory framework covers not only banks but also Tuvalu's National Pension Fund (TNPF) due to its role in extending credit and strengthening the ability to conduct off-site supervision based on standardized, timely reporting and analysis that—together with on-site supervision—would enable supervisory ratings. To enhance the effectiveness of Technical Assistance and the supervision capacity the authorities should urgently ensure that the supervisory authority is adequately staffed.

25. The authorities should press ahead with plans to improve the resilience of Tuvalu's connectivity to the global payments system. Staff supports the authorities' plan to join the APG (a FATF-style regional body). Obtaining APG membership has the potential to unlock additional technical assistance, in turn supporting the ongoing work of the AMLCC, including to update the legal framework and implementation of the authorities' policy reform matrix. These efforts can further contribute to strengthening correspondent banking relationships. Staff encourages the authorities to engage in regional cooperation efforts and to use the APG platform to address issues of common concern, and to also seek additional technical assistance support, as needed. Continuing efforts to develop and expand the current CBR relationship should reduce the cost of doing business and the risk of disconnection from the global payment system. Plans to digitalize the nation should be pursued in a way that does not exacerbate correspondent banking relationships pressures. Any plans to introduce digital services should be carefully evaluated considering AML/CFT risk assessments, FATF standards, and consideration of supervisory capacities, including to avoid exacerbating to CBR pressures.[9]

Tuvalu: Cross-Border Payments
by entity type, USD bn, 2022Q2



Source: Government of Tuvalu.

[9] See also Zhou and others (2023) *"Rise of Digital Money: Implications for Pacific Island Countries,"* IMF Working Paper (forthcoming).

Authorities' Views

26. The authorities underscored the benefits from the modernization of financial services, while agreeing that financial risks need to be closely monitored. The authorities highlighted the large efficiency gains from providing basic modern financial services, such as debit cards and ATMs, as they move away from an entirely cash-based economy. They also agreed on the need to take further steps to safely increase financial intermediation and are taking these into consideration while planning modernization. They noted the constraints on credit growth from the currently high probability of loans ending up not performing, and from the inability of many businesses to provide relevant financial information. Against this backdrop, they agreed on the need to address understaffing issues at the supervisory authority to be able to provide feedback and guidance to all three financial institutions' risk-management practices.

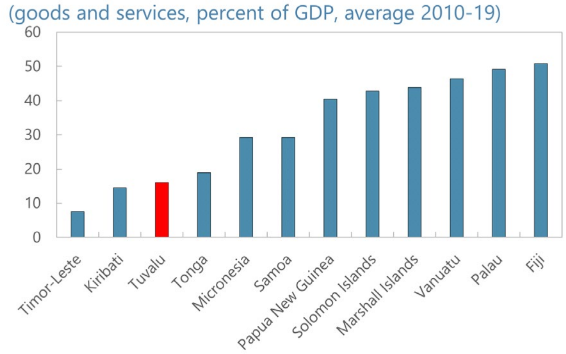
27. The authorities stressed their commitment to implementing planned reforms to further strengthen their AML/CFT framework. The authorities noted how their planned reforms are guided by the recommendations stemming from a gaps' analysis done by APG. They are looking forward to joining APG, including because it will help them unlock necessary technical assistance to strengthen their AML/CFT framework. They highlighted that these measures would be consistent with supporting correspondent banking relationships.

C. Structural Reforms

28. Additional reforms would help diversify the economy and promote growth. With climate resilience, fiscal sustainability, and a safe expansion of credit providing an enabling environment, additional structural reforms would help promote private sector activity. A more diversified economy that succeeds in building resilience to climate change should also help incentivize Tuvaluans to deploy their human capital in the country, thus reducing migration pressures.

- *Increasing trade integration and reducing external vulnerabilities*. The ratification of PACER Plus presents opportunities to explore the expansion of exports. Further diversification could be pursued through the development of niche tourism markets and expanding the country's participation in the fishing value chain. Supporting small-scale food production, such as in the coconut industry, and enhancing the resilience of coastal fisheries can help reduce food security risks while also helping to promote health.

Tuvalu: Exports in Regional Comparison
(goods and services, percent of GDP, average 2010-19)



Sources: IMF staff calculations

- *Strengthening disaster resilience.* Additional policies can complement the efforts of the major adaptation projects to enhance resilience, reduce uncertainty and thus help further spur private sector activity. These measures include strengthening disaster risk preparedness policies, including by enforcing building codes across all nine islands, addressing climate risk in spatial planning and through the development of risk maps (location specific analysis of hazards to infrastructure) that further incentivize and guide investments in resilient infrastructure. Complementary measures include revamping the Disaster Risk Management Act to modernize the preparedness and response to a disaster, adopting nature-based solutions to address coastal erosion, and implementing water use efficiency and enhancing water security.

- *Enhancing human capital.* Tuvalu would benefit from adopting a comprehensive strategy across ministries on overseas scholarships to ensure alignment with Tuvalu's needs; strengthening the legal framework on patient privacy to connect health data with personal characteristics for better prevention, identification, and treatment, and deepening recent measures against tobacco, salt, and sugar through possible risk control actions; and adopting legislation to support remotely delivered health services from offshore sources.

29. Given the substantial role of the public sector in the economy, reforms to improve SOE performance and delivery are important. Subsidies to SOEs currently stand at 1.5 percent of GDP but a significant increase is expected for the Tuvalu Electricity Corporation to address arrears and help cover the gap between the tariff and costs of fuel. As subsidies rise, so does the urgency of SOE reforms. Staff recommends: (i) aligning prices with recovery levels by phasing out Community Service Obligations (and replacing them with targeted subsidies where needed); (ii) enhancing performance-based management; (iii) improving fiscal risk management by producing a plan to address loss-making SOEs through strengthening their commercial orientation, (iv) close monitoring of losses from fishing joint ventures, and (v) making realistic budgetary provisions for the planned national airline, and ensuring high governance standards.[10]

Authorities' Views

30. The authorities broadly agreed with staff's structural reform recommendations. They agreed that increased international trade *integration* carries large potential benefits and stressed the importance of the ratification of PACER Plus to achieve this. They also highlighted the development of innovative agricultural practices to increase yield and reduce dependence on imported food as well as increased production of local food and handicrafts for export. The authorities noted that *disaster management* is a priority for the government, as reflected in their goal to amend the Disaster Risk Management Act to empower the National Disaster Management Office (NDMO) to act as the national coordinating and monitoring body for disaster risk management by April 2023. Similarly, they noted that full application of the National Building Code to all new government buildings is expected by August 2024. The authorities also agreed with the need to enhance *human capital*. While seasonal worker schemes have benefited Tuvaluans through employment opportunities and remittances, they have at times also led to domestic labor shortages and they saw

[10] See also Appendix VI in the 2021 Tuvalu Article IV Staff Report.

potential benefits from trying to attract talent back after human-capital-building experiences abroad. The authorities agreed that aligning scholarships to skill gaps would also help address these staff shortages, especially in the public sector. They agreed that tele-medicine was a useful tool during the initial stages of the pandemic and continues to be used to consult specialists abroad. In their view, development of legislation to govern the use of tele-medicine will help enhance networking with overseas hospitals. The authorities also agreed with the need to monitor risks around state-owned enterprises and were still exploring approaches to ensure best practices in the management of the national airline.

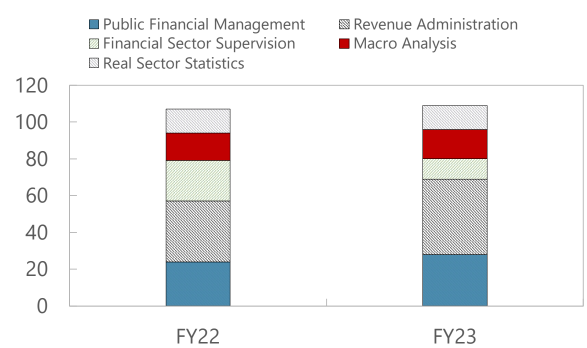
D. Capacity Development

31. Continued efforts to enhance statistical capacity are needed. Data shortcomings are prevalent, requiring IMF TA to play a supplementary role. The virtual nature of missions in 2021 and 2022 has led to less-effective assistance, with both authorities and technical assistance partners looking forward to a swift resumption of in-person missions in 2023—including to more effectively implement partners' advice (see Appendix VI). Strengthening institutional capacity through hiring essential statistical personnel, ensuring their training, and succession planning aiming to reduce high turnover and its impact over the workload are important. Allowing the statistical department to use and publish preliminary figures data based on unaudited results can help reduce bottlenecks in data publication.

Authorities' Views

32. The authorities view technical assistance from partners as key to addressing data gaps and improving public financial management. The authorities consider essential the continued assistance in the production of GDP and BOP statistics. Additionally, the authorities are planning to develop demand-side GDP statistics (with the assistance of the ADB). The high turnover of statistical personnel was acknowledged as a problem, which the authorities expected to partly be addressed by the new public wage scheme. Continuing the high-quality assistance from IMF PFTAC and other development partners in PFM, including greater use of the new FMIS system, would be beneficial.

Tuvalu: PFTAC Capacity Development
(TA days by fiscal year)



Source: PFTAC.

STAFF APPRAISAL

33. A successful vaccination strategy allowed Tuvalu to lift COVID containment measures at the end of 2022, but the economic cost of the pandemic has been significant. Activity has not fully recovered to its pre-pandemic level, although growth is expected to pick up in 2023 due to reopening. Headline inflation rose in the context of higher global inflationary pressures, an increase in transportation costs around the world, and the increase in global food prices in the wake of Russia's invasion of Ukraine. The external position temporarily strengthened, bringing the current account balance for 2022 to a level broadly in line with that implied by fundamentals and desirable policy settings. Fiscal savings from pandemic-related reduced capital spending were partly offset by elevated current spending. Current expenditures have risen. While tax revenues remained broadly stable, weaker nontax revenues overall led to a widening of the deficit on the domestic current balance to 59 percent of GDP in 2022, up from 37 percent pre-pandemic.

34. Downside risks to the outlook are high. Delays in donor grants pose large risks to the fiscal outlook, and therefore also to the economy. As in other small economies, a loss of correspondent banking relationships would create severe balance of payments problems. The lack of effective financial supervision creates contingent risks for the government via the financial sector. Higher global commodity prices could result in higher inflation that leads to greater fiscal expenditure pressures. Natural disasters and climate change remain latent threats to the economy.

35. Gradual fiscal consolidation and fiscal reforms would support the dual goals of ensuring sustainability while meeting climate adaptation needs. Elevated current spending plans pose a significant challenge to the goal of ensuring sustainability, with the overall balance looser than warranted given the economic boost from reopening. Fiscal consolidation will be necessary to ensure sustainability as well as to build buffers against the many downside risks. At the same time, the narrow domestic revenue base and lack of access to local and international debt markets make necessary climate-adaptation investments impossible without significant donor support. That support will benefit from continued public financial management reforms to facilitate easier access to climate funds. Reduced risks, both macro-fiscal and climate-related, would in turn help create a more conducive environment for private sector activity.

36. Financial sector reforms should focus on strengthening regulation and supervision and support Tuvalu's connectivity to the global payments system. Financial stability risks remain currently contained, but an acceleration in expansion of credit could pose significant risks given the weak monitoring capacity. Staff advise implementing regulatory measures to: (i) encourage loan pricing that is a function of borrowers' credit risk, (ii) upgrade financial institutions' credit assessment capacity, and (iii) introduce a resolution regime for non-performing loans. For these efforts to succeed, it will be critical that the understaffing of the supervisor is urgently addressed. Staff supports the authorities' plan to join the Asia-Pacific Group on Money Laundering and encourages the authorities to further implement AML/CFT reforms through technical assistance support. Plans to digitalize the nation should be pursued in a way that do not interfere with policy reform actions geared toward building resilient correspondent banking relationships

37. Structural reforms would help diversify the economy and promote growth. Further diversification could be pursued through the development of niche tourism markets and expanding the country's participation in the fishing value chain. Disaster resilience can be strengthened by enforcing building codes, developing risk maps that further incentivize and guide investments in resilient infrastructure, and revamping the Disaster Risk Management Act to modernize preparedness and response. Human capital can be enhanced by adopting a comprehensive strategy on overseas scholarships to ensure alignment with Tuvalu's needs, strengthening the legal framework on patient privacy to connect health data with personal characteristics for better prevention, identification, and treatment, and deepening recent measures against tobacco, salt, and sugar; and adopting legislation and improving connectivity to support remotely delivered health services from offshore sources. Given the substantial role of the public sector in the economy, reforms to improve SOE performance and delivery are important.

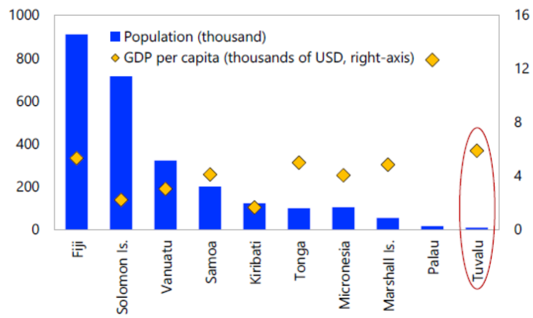
38. Continued efforts to enhance statistical capacity are needed. Strengthening institutional capacity through hiring of essential statistical personnel, ensuring their training, and succession planning given frequent turnover is needed to improve the quality of data used in surveillance. Continued close cooperation with PFTAC and other agencies providing technical assistance will be essential in this regard.

39. It is recommended that the next Article IV consultation take place on the current 24-month cycle.

Figure 1. Tuvalu: The Setting in a Cross-Country Context

Tuvalu is among the least populated countries in the world.

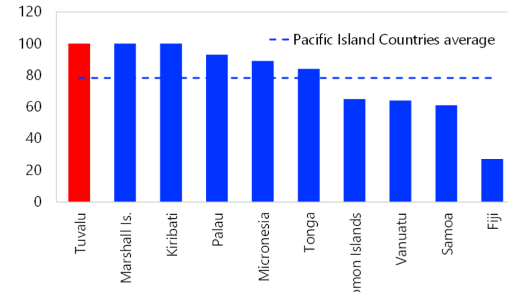
Population and GDP Per Capita, 2022



Sources: IMF, *World Economic Outlook.*

Its population is entirely located in coastal areas, and therefore vulnerable to climate change, …

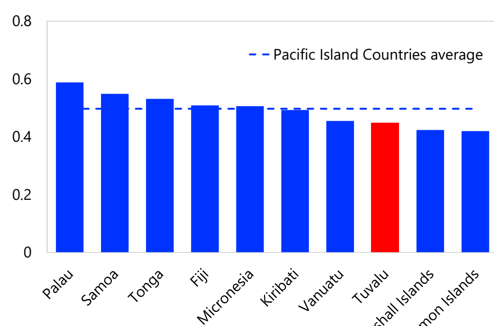
Population Living Within 1km of a Coast
(In percent of total population)



Note: Population as per most recent census
Sources: Andrew et al. (2019), IMF staff estimates

… and is characterized by relatively low human capital.

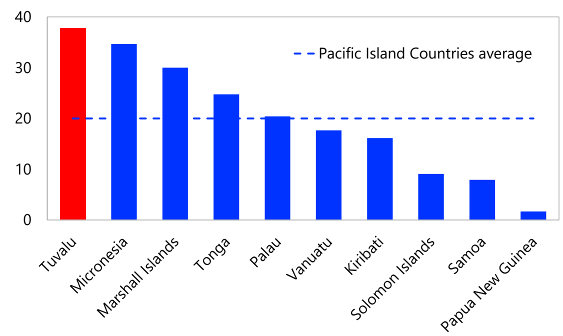
Human Capital Index, 2020
(Scale 0-1)



Source: World Bank.

The country relies heavily on grants from development partners, which are high even compared to regional peers.

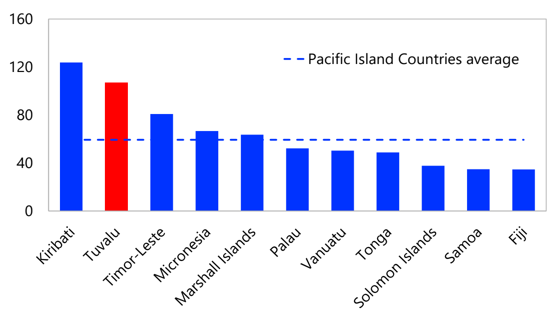
Grants, 2022
(In percent of GDP)



Sources: Country authorities; and IMF, *World Economic Outlook.*

The public sector is large and dominates the economy…

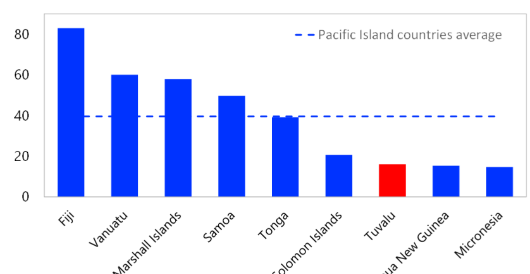
Government Expenditure, 2022
(In percent of GDP)



Sources: Country authorities; and IMF, *World Economic Outlook.*

… while a low level of credit to the private sector reflects limited private sector activity.

Credit to Private Sector, 2020
(In percent of GDP)

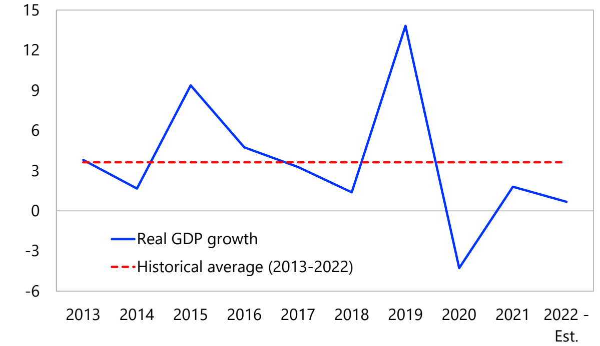


Note: 2016 data for Micronesia.
Sources: Country authorities; IMF, *International Financial Statistics (IFS)*, and staff estimates.

Figure 2. Tuvalu: Economic Developments

After the significant drop in 2020, growth remained relatively low…

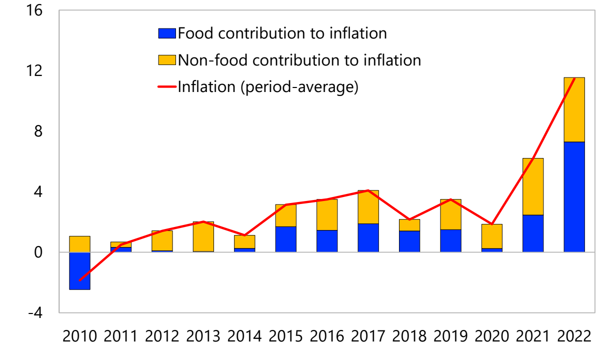
Real GDP Growth
(In percent)



Sources: Country authorities; PFTAC; and IMF staff estimates.

… while inflation has soared.

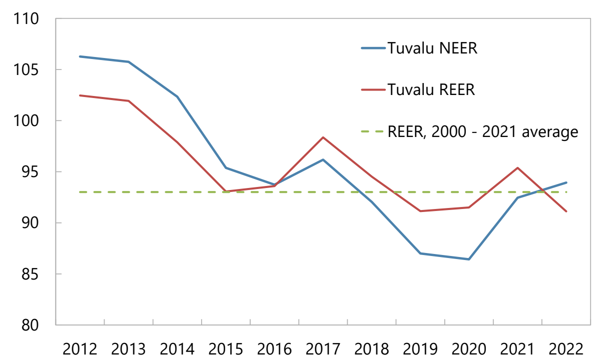
Contributions to Inflation
(In percent, year-on-year)



Sources: Country authorities; and IMF staff calculations.

The REER returned to its long-term average as the NEER appreciated.

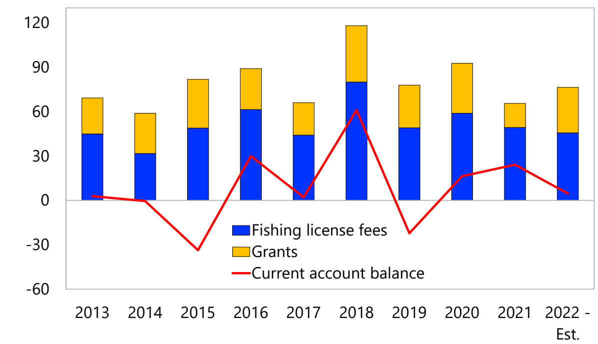
Real and Nominal Effective Exchange Rates
(Index 2010 = 100)



Sources: Country authorities; and IMF staff calculations.

The current account remained in surplus during the implementation of strict COVID containment measures.

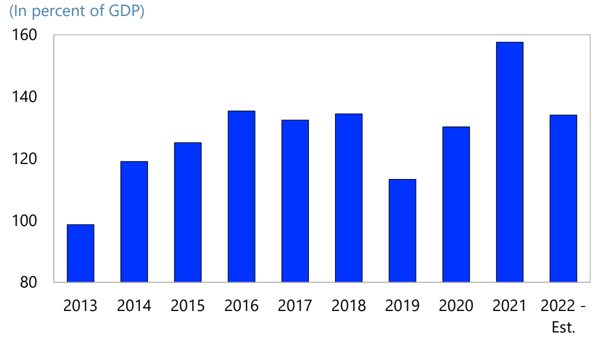
Main Balance of Payments Receipts
(In percent of GDP)



Sources: Country authorities; and IMF staff estimates.

Gross reserves remained adequate as of end 2022.

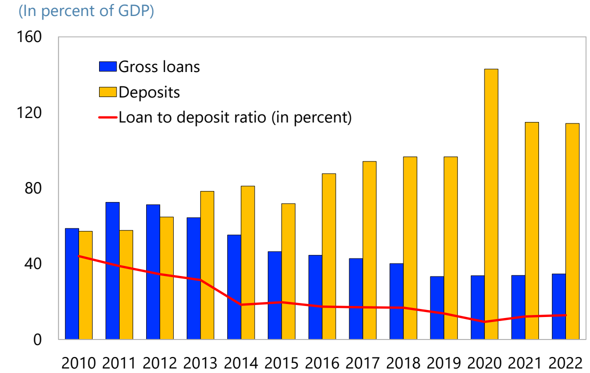
Gross Reserves 1/
(In percent of GDP)



Sources: Country authorities; and IMF staff estimates.
1/ Defined as the sum of foreign assets of the National Bank of Tuvalu, Consolidated Investment Fund, and SDR holdings.

Despite an increase in liquidity in the financial system, lending growth continued to slow.

Banks' Assets and Liabilities
(In percent of GDP)

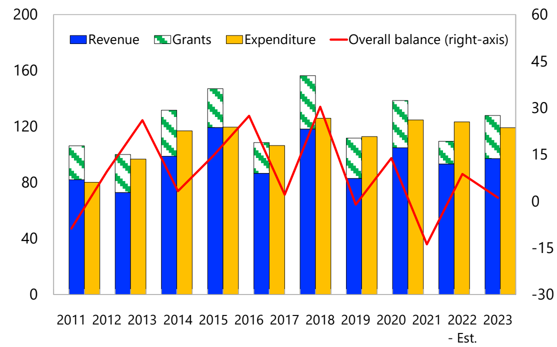


Sources: Country authorities; and IMF staff calculations.

Figure 3. Tuvalu: Fiscal Developments

The fiscal balance is heavily dependent on grants.

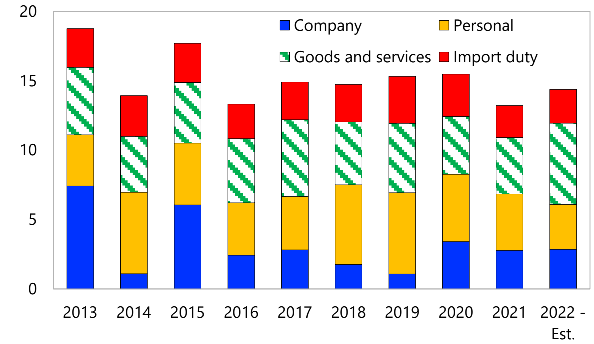
Fiscal Balance
(In percent of GDP)



Sources: Country authorities; and IMF staff calculations.

Domestic tax revenues declined during lockdown, driven by lower corporate and personal income taxes.

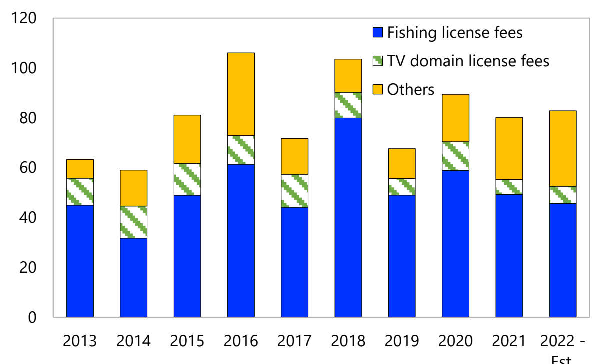
Tax Revenue
(In percent of GDP)



Sources: Country authorities; and IMF staff calculations.

Fishing license revenues have declined during the pandemic and reached a 5 year low in 2022.

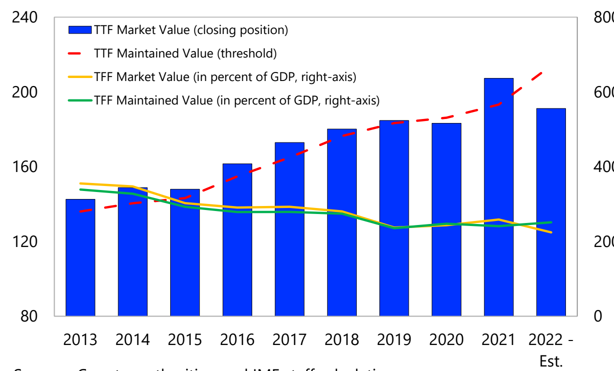
Non-tax Revenue
(In percent of GDP)



Sources: Country authorities; and IMF staff estimates.

Good performance of the TTF in 2021 allowed a disbursement to the CIF in 2022…

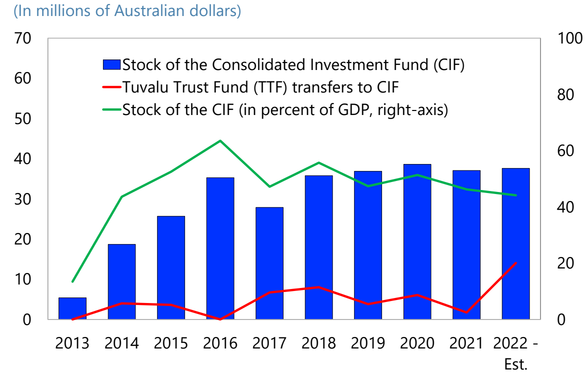
Tuvalu Trust Fund
(As of September of each year; in millions of Australian dollars)



Sources: Country authorities; and IMF staff calculations.

… however, the weaker TTF performance in 2022 entails no distribution for 2023.

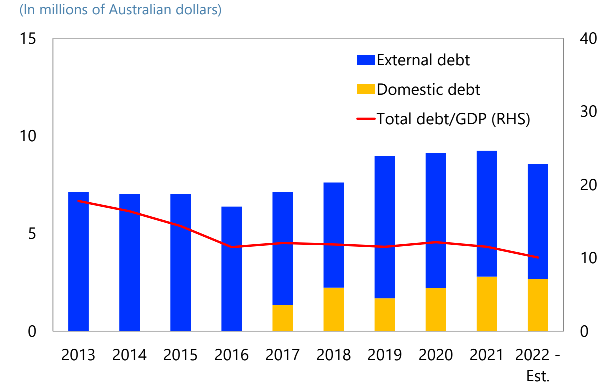
Consolidated Investment Fund
(In millions of Australian dollars)



Source: Country authorities.

There has been no new public debt since 2019, and debt levels remain low.

Public Debt
(In millions of Australian dollars)



Sources: Authorities data; and IMF staff calculations.

Table 1. Tuvalu: Selected Social and Economic Indicators, 2018–2028

Population (2021 est.): 11,204											Poverty rate (2017): 26 percent
Per capita GDP (2021 est.): AU$7,152											Life expectancy (2021): 64 years
Main export: Fish											Primary school enrollment (2021, gross): 92 percent
Key export markets: Australia, Fiji, and New Zealand											Secondary school enrollment (2021, gross): 74 percent

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
					Est.	Proj.					
					(Percent change)						
Real sector											
Real GDP growth	1.4	13.8	-4.3	1.8	0.7	3.9	3.5	2.4	2.2	2.1	2.0
Consumer price inflation (period average)	2.2	3.5	1.9	6.2	11.5	5.9	3.7	3.4	3.2	2.9	2.8
Government finance				(In percent of GDP)							
Revenue and grants	156.4	111.8	129.4	102.6	119.8	110.5	107.0	101.4	100.5	100.2	99.8
Revenue	118.3	82.9	95.6	86.4	89.0	67.9	72.9	71.0	71.1	71.2	71.2
of which: Fishing license fees	80.0	49.0	58.8	49.2	45.6	38.6	43.6	41.7	41.8	41.9	42.0
Grants	38.1	28.9	33.7	16.2	30.7	42.6	34.2	30.4	29.4	28.9	28.6
Total expenditure	126.0	112.9	121.2	116.5	111.0	109.3	105.9	104.7	104.3	104.6	104.7
Current expenditure	82.0	70.8	78.6	93.3	98.2	98.2	94.7	93.1	92.4	92.4	92.4
Capital expenditure 1/	44.0	42.1	46.1	30.1	20.9	24.0	26.1	26.1	26.0	25.9	25.7
Overall balance	30.4	-1.1	8.2	-13.8	8.8	1.1	1.1	-3.3	-3.8	-4.4	-4.9
Overall balance (excl. grants)	-7.7	-30.0	-25.6	-30.1	-22.0	-41.4	-33.0	-33.7	-33.2	-33.3	-33.5
Domestic Current balance 2/	-43.7	-36.9	-32.6	-60.8	-58.9	-56.0	-50.6	-49.3	-49.0	-49.3	-49.7
Financing	-30.4	1.1	-8.2	13.8	-8.8	-1.1	-1.1	3.3	3.8	4.4	4.9
Foreign (net)	1.0	0.9	1.2	0.4	0.4	0.9	0.6	0.5	3.8	4.4	4.9
Consolidated Investment Fund (net, -=increase)	29.4	-2.0	7.0	-14.2	8.4	0.3	0.6	-3.8	0.0	0.0	0.0
Tuvalu Trust Fund (in percent of GDP)	280.4	237.3	243.7	258.7	224.5	214.8	206.1	199.5	193.7	188.8	184.3
Consolidated Investment Fund (in percent of GDP)	55.7	47.4	51.4	46.3	43.5	39.8	37.6	31.5	29.8	28.3	26.9
Tuvalu Survival Fund (in percent of GDP)	7.8	6.4	6.6	6.2	5.9	6.4	5.9	5.6	5.3	5.0	4.8
Monetary Sector											
Credit growth (percent change) 3/	13.3	-6.8	4.5	8.7	14.2	6.6	4.8	3.7	3.4	3.2	3.1
					(In percent of GDP, unless otherwise indicated)						
Balance of payments (in percent of GDP)											
Current account balance	60.9	-22.2	16.3	24.1	4.6	2.3	-1.3	-4.3	-4.8	-5.3	-4.8
Goods and services balance	-99.4	-118.7	-104.1	-101.7	-93.4	-108.3	-105.3	-103.4	-102.8	-102.9	-101.9
Capital and financial account balance	116.3	44.7	20.3	32.5	30.1	32.7	29.2	19.4	15.5	25.5	24.8
Overall balance	46.6	31.9	22.7	26.7	43.1	-9.7	-3.6	-5.1	-6.8	-3.7	-4.2
Gross reserves 4/											
In $A million	86.4	88.2	98.0	126.3	114.2	119.3	129.5	121.2	123.3	122.5	124.4
In months of prospective imports of goods and services	10	13	14	18	12	12	12	11	10	10	9
					(In percent of GDP, unless otherwise indicated)						
Debt indicators											
Gross public debt	11.9	11.5	12.3	11.5	10.1	8.0	6.8	5.8	9.3	13.2	17.4
External	8.4	9.4	9.2	8.0	6.9	5.3	4.4	3.6	7.4	11.4	15.8
Domestic SOE debt	3.5	2.2	3.1	3.5	3.2	2.7	2.4	2.2	2.0	1.8	1.6
Nominal GDP (In $A million)	64.3	77.9	75.2	80.1	85.2	93.8	100.9	107.4	113.5	119.6	125.6

Sources: Tuvalu authorities; PFTAC; SPC; ADB; World Bank; 2018 IMF's BOP TA; and IMF staff estimates and projections.

1/ Includes Special Development Expenditures (SDEs) and infrastructure investment
2/ Domestic current balance excludes fishing revenue, grants, and capital expenditure.
3/ Banks' and pension fund lending to non-government domestic sector.
4/ The sum of liquid assets of the National Bank of Tuvalu, Consolidated Investment Fund, and SDR

Table 2. Tuvalu: Medium–Term Baseline Scenario, 2018-2028

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
					Est.	Proj.					
					(Percent change)						
Growth and inflation											
Real GDP growth	1.4	13.8	-4.3	1.8	0.7	3.9	3.5	2.4	2.2	2.1	2.0
CPI inflation (period average)	2.2	3.5	1.9	6.2	11.5	5.9	3.7	3.4	3.2	2.9	2.8
					(In percent of GDP)						
Fiscal accounts											
Total revenue and grants	156.4	111.8	129.4	102.6	119.8	110.5	107.0	101.4	100.5	100.2	99.8
Revenue	118.3	82.9	95.6	86.4	89.0	67.9	72.9	71.0	71.1	71.2	71.2
Grants	38.1	28.9	33.7	16.2	30.7	42.6	34.2	30.4	29.4	28.9	28.6
Total expenditure	126.0	112.9	121.2	116.5	111.0	109.3	105.9	104.7	104.3	104.6	104.7
Overall balance (including grants)	30.4	-1.1	8.2	-13.8	8.8	1.1	1.1	-3.3	-3.8	-4.4	-4.9
					(In percent of GDP)						
Balance of payments											
Current account	60.9	-22.2	16.3	24.1	4.6	2.3	-1.3	-4.3	-4.8	-5.3	-4.8
Exports	0.5	0.9	0.3	0.9	0.3	0.4	0.6	0.7	0.8	0.9	0.9
Imports	33.3	58.7	52.5	53.9	41.0	52.0	52.5	50.4	49.9	49.8	49.3
Capital and financial account	116.3	44.7	20.3	32.5	30.1	32.7	29.2	19.4	15.5	25.5	24.8
Overall balance	46.6	31.9	22.7	26.7	43.1	-9.7	-3.6	-5.1	-6.8	-3.7	-4.2
Memorandum items											
Gross external public debt (percent of GDP)	8.4	9.4	9.2	8.0	6.9	5.3	4.4	3.6	7.4	11.4	15.8
External debt service (percent of GDP)	1.1	1.1	1.2	1.1	1.1	0.9	0.6	0.6	0.5	0.6	0.6
Gross reserves ($A million) 1/	86.4	88.2	98.0	126.3	114.2	119.3	129.5	121.2	123.3	122.5	124.4
(In months of prospective imports)	9.7	12.8	13.8	18.3	12.5	11.8	12.0	10.6	10.2	9.7	9.4
Tuvalu Trust Fund (percent of GDP)	280.4	237.3	243.7	258.7	224.5	214.8	206.1	199.5	193.7	188.8	184.3
Consolidated Investment Fund (percent of GDP)	55.7	47.4	51.4	46.3	43.5	39.8	37.6	31.5	29.8	28.3	26.9
Credit growth (y/y percent change) 2/	13.3	-6.8	4.5	8.7	14.2	6.6	4.8	3.7	3.4	3.2	3.1

Sources: Data provided by the Tuvalu authorities and IMF staff estimates and projections.

1/ Defined as the sum of foreign assets of the National Bank of Tuvalu, Consolidated Investment Fund, and SDR holdings.

2/ Banks' and pension fund lending to non-government domestic sector.

Table 3. Tuvalu: Summary Operations of the General Government, 2018-2028

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
						Proj.					
					(In millions of Australian dollars)						
Total revenue and grants	100.5	87.1	97.3	82.2	102.0	103.6	108.0	108.9	114.1	119.8	125.4
Revenue	76.0	64.6	71.9	69.2	75.8	63.7	73.5	76.2	80.7	85.2	89.5
Tax revenue	9.5	11.9	11.6	10.6	12.2	12.9	13.8	14.7	15.6	16.5	17.3
of which: Personal income tax	3.7	4.6	3.6	3.2	2.8	2.6	2.8	2.9	3.1	3.3	3.5
of which: Corporate income tax	1.1	0.8	2.6	2.2	2.4	2.6	2.7	2.9	3.1	3.3	3.4
of which: Consumption tax	1.8	1.9	2.1	1.9	2.8	2.5	2.6	2.8	2.9	3.1	3.3
Nontax revenue	66.6	52.6	60.3	49.4	53.2	50.8	59.7	61.5	65.1	68.7	72.2
of which: Fishing license fees	51.4	38.1	44.2	39.4	38.9	36.2	44.0	44.8	47.5	50.1	52.7
of which: License fees for .TV domain 1/	6.6	5.2	8.7	4.8	5.9	6.5	7.0	7.4	7.8	8.3	8.6
Capital revenue	0.0	0.0	0.0	9.3	10.4	0.0	0.0	0.0	0.0	0.0	0.0
Grants 2/	24.5	22.5	25.4	13.0	26.2	39.9	34.5	32.7	33.4	34.6	35.9
Total expenditure and net lending	81.0	87.9	91.1	93.3	94.5	102.5	106.8	112.4	118.5	125.1	131.6
Current expenditure	52.7	55.1	59.1	74.8	83.7	92.0	95.5	99.9	105.0	110.5	116.2
of which: Wages and salaries	21.5	23.3	25.0	26.8	29.5	34.5	36.5	38.4	40.3	42.0	43.8
of which: Goods and service purchases	15.2	14.9	13.3	24.8	26.0	25.8	27.7	29.5	31.3	33.0	34.6
of which: TOMRS	4.9	5.3	6.8	7.0	8.7	10.7	10.4	10.1	10.7	11.3	11.8
of which: Scholarship programs	4.7	4.5	6.2	6.4	5.4	7.8	7.6	7.3	7.0	7.4	7.8
Capital expenditure	28.3	32.7	34.7	24.1	17.8	22.5	26.3	28.0	29.5	31.0	32.3
Infrastructure	17.3	18.0	7.6	16.6	8.1	9.2	9.8	11.0	11.9	12.8	13.6
Special development expenditure	10.3	11.6	24.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Others	0.7	3.1	0.0	2.0	2.8	1.3	1.4	1.5	1.6	1.7	1.8
Tuvalu Development Fund (off-budget) 3/	0.0	0.0	2.7	5.5	6.9	12.0	15.1	15.6	16.0	16.5	16.9
Overall balance (incl. grants)	19.5	-0.8	6.2	-11.1	7.5	1.1	1.2	-3.5	-4.4	-5.2	-6.2
Overall balance (excl. grants)	-5.0	-23.3	-19.2	-24.1	-18.7	-38.8	-33.3	-36.2	-37.7	-39.9	-42.1
Domestic current balance 4/	-28.1	-28.7	-24.5	-48.7	-50.2	-52.5	-51.0	-53.0	-55.7	-59.0	-62.5
Financing	19.5	-0.8	6.2	-11.1	7.5	1.1	1.2	-3.5	4.4	5.2	6.2
Foreign (net)	0.7	0.7	0.9	0.3	0.3	0.8	0.6	0.6	4.4	5.2	6.2
Domestic (net)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIF (net, -=increase)	18.9	-1.6	5.3	-11.4	7.2	0.3	0.6	-4.1	0.0	0.0	0.0
					(In percent of GDP)						
Total revenue and grants	156.4	111.8	129.4	102.6	119.8	110.5	107.0	101.4	100.5	100.2	99.8
Revenue	118.3	82.9	95.6	86.4	89.0	67.9	72.9	71.0	71.1	71.2	71.2
Tax revenue	14.7	15.3	15.5	13.2	14.4	13.8	13.7	13.7	13.7	13.8	13.8
of which: Personal income tax	5.7	5.8	4.9	4.1	3.2	2.7	2.7	2.7	2.7	2.8	2.8
of which: Corporate income tax	1.8	1.1	3.4	2.8	2.9	2.8	2.7	2.7	2.7	2.7	2.7
of which: Consumption tax	2.8	2.5	2.7	2.4	3.3	2.6	2.6	2.6	2.6	2.6	2.6
Nontax revenue	103.6	67.6	80.2	61.6	62.4	54.1	59.2	57.3	57.4	57.5	57.4
of which: Fishing license fees	80.0	49.0	58.8	49.2	45.6	38.6	43.6	41.7	41.8	41.9	42.0
of which: License fees for .TV domain 1/	10.3	6.7	11.6	6.0	6.9	6.9	6.9	6.9	6.9	6.9	6.8
Capital revenue	0.0	0.0	0.0	11.6	12.2	0.0	0.0	0.0	0.0	0.0	0.0
Grants	38.1	28.9	33.7	16.2	30.7	42.6	34.2	30.4	29.4	28.9	28.6
Total expenditure	126.0	112.9	121.2	116.5	111.0	109.3	105.9	104.7	104.3	104.6	104.7
Current expenditure	82.0	70.8	78.6	93.3	98.2	98.2	94.7	93.1	92.4	92.4	92.4
of which: Wages and salaries	33.5	30.0	33.3	33.5	34.7	36.8	36.2	35.8	35.5	35.2	34.9
of which: Goods and service purchases	23.6	19.2	17.7	31.0	30.5	27.6	27.5	27.5	27.6	27.6	27.5
of which: TOMRS	7.7	6.8	9.0	8.8	10.2	11.4	10.3	9.4	9.4	9.4	9.4
of which: Scholarship programs	7.3	5.8	8.2	8.0	6.4	8.3	7.5	6.8	6.2	6.2	6.2
Capital expenditure	44.0	42.1	46.1	30.1	20.9	24.0	26.1	26.1	26.0	25.9	25.7
Infrastructure	26.9	23.1	10.1	20.7	9.5	9.8	9.7	10.2	10.5	10.7	10.9
Special development expenditure	16.0	14.9	32.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overall balance (incl. grants)	30.4	-1.1	8.2	-13.8	8.8	1.1	1.1	-3.3	-3.8	-4.4	-4.9
Overall balance (excl. grants)	-7.7	-30.0	-25.6	-30.1	-22.0	-41.4	-33.0	-33.7	-33.2	-33.3	-33.5
Domestic current balance 2/	-43.7	-36.9	-32.6	-60.8	-58.9	-56.0	-50.6	-49.3	-49.0	-49.3	-49.7
Financing	30.4	-1.1	8.2	-13.8	8.8	1.1	1.1	-3.3	3.8	4.4	4.9
Foreign (net)	1.0	0.9	1.2	0.4	0.4	0.9	0.6	0.5	3.8	4.4	4.9
Domestic (net)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CIF (net, -=increase)	29.4	-2.0	7.0	-14.2	8.4	0.3	0.6	-3.8	0.0	0.0	0.0
Memorandum items:											
External public debt (in percent of GDP)	8.4	9.4	9.2	8.0	6.9	5.3	4.4	3.6	7.4	11.4	15.8
Domestic SOE debt (in percent of GDP)	3.5	2.2	3.1	3.5	3.2	2.7	2.4	2.2	2.0	1.8	1.6
TTF market value (in percent of GDP)	280.4	237.3	243.7	258.7	224.5	214.8	206.1	199.5	193.7	188.8	184.3
Stock of CIF (in percent of GDP) 3/	55.7	47.4	51.4	46.3	43.5	39.8	37.6	31.5	29.8	28.3	26.9
Stock of TSF (in percent of GDP)	7.8	6.4	6.6	6.2	5.9	6.4	5.9	5.6	5.3	5.0	4.8
Nominal GDP ($A million)	64.3	77.9	75.2	80.1	85.2	93.8	100.9	107.4	113.5	119.6	125.6

Sources: Tuvalu authorities; and IMF staff estimates and projections.

1/ .TV is an internet domain.

2/ Based on GFS 1986.

3/ Off-budget grants are collected in the Tuvalu Development Trus and a majority of those fund infrastructure. Not included in other fiscal ratios.

4/ Excludes fishing license fees and grants, and capital expenditure.

Table 4. Tuvalu: Balance of Payments, 2018-2028

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
					Est.	Proj.					
					(in percent of GDP)						
Current account balance											
including official grants	60.9	-22.2	16.3	24.1	4.6	2.4	-1.2	-4.3	-4.8	-5.3	-4.8
excluding official grants	7.2	-58.2	-22.6	-25.1	-24.4	-48.0	-43.2	-43.1	-42.5	-42.6	-41.8
Goods and services balance	-99.4	-118.7	-104.1	-101.7	-93.4	-108.3	-105.3	-103.4	-102.8	-102.9	-101.9
Goods balance	-32.9	-57.8	-52.2	-53.0	-40.7	-51.6	-51.9	-49.7	-49.1	-48.9	-48.4
Exports of goods, f.o.b.	0.5	0.9	0.3	0.9	0.3	0.4	0.6	0.7	0.8	0.9	0.9
Imports of goods, f.o.b.	33.3	58.7	52.5	53.9	41.0	52.0	52.5	50.4	49.9	49.8	49.3
Services balance	-66.5	-60.9	-51.9	-48.7	-52.7	-56.7	-53.4	-53.7	-53.7	-54.0	-53.5
Exports of services	17.3	18.1	5.6	3.7	3.5	8.5	14.5	16.1	17.1	17.1	17.1
Imports of services	83.8	79.0	57.5	52.4	56.1	65.3	67.9	69.8	70.9	71.1	70.7
Primary income balance	108.1	62.0	83.2	79.7	71.2	62.3	63.9	62.0	61.9	61.8	61.5
Inflows	108.7	62.5	83.9	80.3	71.8	62.8	64.3	62.4	62.3	62.2	62.1
Fishing license fees	80.0	49.0	58.8	49.2	45.6	38.6	43.6	41.7	41.8	41.9	42.0
Compensation of employees	5.3	4.2	4.0	4.5	3.9	4.4	4.9	5.1	5.1	5.1	5.1
Investment income	14.3	12.8	11.9	14.2	16.4	12.8	8.9	8.7	8.5	8.3	8.2
Outflows	0.6	0.5	0.7	0.6	0.5	0.5	0.5	0.5	0.4	0.5	0.5
Secondary income balance	52.2	34.5	37.2	46.1	26.7	48.4	40.2	37.1	36.1	35.8	35.6
Inflows	56.6	40.1	43.4	53.4	31.3	52.7	44.3	41.0	40.0	39.5	39.2
Official	56.2	39.8	43.1	53.0	30.9	52.3	43.9	40.7	39.6	39.2	38.8
of which: grants on budget	39.7	28.9	33.9	43.2	22.4	42.6	34.2	30.4	29.4	29.0	28.6
Private	0.4	0.3	0.3	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4
of which: remittances	0.3	0.2	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4
Outflows 1/	4.4	5.6	6.1	7.3	4.6	4.3	4.1	4.0	3.9	3.7	3.6
Capital account balance	28.2	36.3	8.9	19.7	8.5	18.5	20.0	9.9	11.1	15.1	15.5
Net lending/borrowing (Current+Capital accounts)	89.1	14.1	25.3	43.8	13.1	20.8	18.8	5.6	6.3	9.7	10.7
Financial account balance (assets - liabilities)	88.1	8.4	11.3	12.8	21.6	14.3	9.2	9.5	4.4	10.4	9.2
Errors and omissions	12.8	-28.5	-0.9	-2.8	-5.7	0.0	0.0	0.0	0.0	0.0	0.0
Memorandum items:											
Gross official reserves 2/	86.4	88.2	98.0	126.3	114.2	119.3	129.5	121.2	123.4	122.6	124.4
(in months of imports of goods and services)	9.7	12.8	13.8	18.3	12.5	11.8	12.0	10.6	10.2	9.8	9.4

Sources: Tuvalu authorities, PFTAC, and IMF staff estimates.
1/ Includes government's overseas contributions.
2/ Defined as sum of foreign assets of the National Bank of Tuvalu, the Consolidated Investment Fund, and SDR holdings.

Table 5. Tuvalu: Financial Soundness Indicators, 2018-2028

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
					Est.	Proj.					
Capital Adequacy 1/											
Capital to Risk Weighted Assets (CAR) 2/	159.3	246.5	249.4	121.8	173.6	158.6	161.9	144.3	138.6	131.1	127.3
Capital to Deposits	24.5	33.5	18.7	17.7	21.6	22.4	23.0	22.9	22.9	22.9	22.9
Capital to Total Assets	19.4	24.9	15.6	14.1	17.0	17.7	18.1	18.0	18.0	18.0	18.0
Asset Quality											
Gross NPLs to Gross Loans 3/	25.1	27.9	25.5	19.4	15.9	17.0	18.2	19.7	21.3	21.3	21.3
Provisions to NPLs 3/	157.0	173.5	195.1	219.6	212.3	198.4	185.4	171.7	158.9	158.9	158.9
Provisions to Gross Loans	36.6	44.8	46.2	40.9	32.9	28.1	28.4	28.5	28.7	28.8	28.9
Earnings & Profitability 3/											
Return on Equity (ROE)	13.9	16.1	19.9	23.0	16.7	15.1	14.0	15.5	15.0	14.8	14.7
Return on Assets (ROA)	2.6	3.9	3.0	3.2	2.8	2.6	2.5	2.8	2.7	2.6	2.6
Interest margin to gross income	21.8	22.3	19.5	14.5	20.4	20.9	21.2	21.2	21.2	21.2	21.2
Non-interest expenses to gross income	44.0	42.6	40.5	28.9	31.0	31.7	32.1	32.1	32.1	32.1	32.1
Liquidity 1/											
Liquid Assets to Total Assets	81.3	81.5	88.2	69.6	83.2	78.6	78.4	71.3	68.6	64.7	62.5
Liquid Assets to Total Deposits	102.4	109.8	105.3	87.7	106.0	99.4	99.6	90.7	87.2	82.2	79.4
Total Loans to Total Deposits	21.0	19.5	10.9	14.6	15.1	12.9	13.6	14.0	14.1	14.3	14.3
Credit 4/											
annual growth rate	13.3	(6.8)	4.5	8.7	14.2	6.6	4.8	3.7	3.4	3.2	3.1
in percent of GDP	36.9	28.4	30.7	31.3	33.6	32.6	31.7	30.9	30.2	29.6	29.1

Sources: Financial statements of NBT, DBT and TNPF.

1/ Based on NBT and DBT data only.

2/ IMF Staff calculations based on capital to net loans ratio and 20 percent of other assets.

3/ Based on NBT data only.

4/ Includes lending by TNPF.

Appendix I. Climate Change Vulnerabilities and Adaptation Needs[1]

The Expected Impact of Climate Change on Tuvalu

1. **Tuvalu is a remote nation with a small and low-lying territory**. Tuvalu is a volcanic archipelago comprising three reef islands (Nanumaga, Niutao, Niulakita) and six atolls (Funafuti, Nanumea, Nui, Nukufetau, Nukulaelae and Vaitupu). Its total land area of approximately 26km^2 is the fourth smallest in the world. It is also very remote, lying halfway between Australia and Hawai'i and 1,000 km northeast of Fiji. Being small and remote makes the cost of doing business with the rest of the world high. Connectivity within Tuvalu is challenging as the islands are spread out over a range, with the distance between the two furthest-apart islands (Nanumea to Niulakita) at nearly 700 km. Crucially, the entire territory of Tuvalu lies below 5 meters above sea level (UN, 2013).[2]

2. **As a result, Tuvalu is poised to experience the most severe consequences of global warming**. Tuvalu is considered one of the most exposed countries in the world to the adverse effects of climate change. Major climate-related damages have already been felt in Tuvalu and are expected to become more frequent and severe. These include seawater flooding, coastal erosion, destruction of social and economic infrastructure and cultural assets, contamination of water supplies, threats to food security and energy supply, and migration pressure.[3] According to a UNU survey report, migration within Tuvalu due to climate change is projected to rise by 70 percent and international trips to double by 2055.[4] Internal migration primarily to Funafuti could overwhelm resources and worsen environmental conditions, while higher emigration could result in an acute shortage of skilled labor.

3. **Climate change is projected to lead to air and sea surface temperature increases and more frequent extreme rainfall events in Tuvalu**. Temperature is predicted to rise by less than 1°C by 2030, and to increase more than 2.5°C by 2090 under a high-emission scenario (UNDP, 2020). Extreme heat can lead to a spike in health-related illnesses and disproportionately affect those with the least coping mechanism such as the elderly, children and disabled. This in turn will put more pressure on Tuvalu's limited health facilities. Additionally, rising sea surface temperatures raises the risk of coral bleaching and harms the marine resources, particularly fish stocks which Tuvaluans are heavily dependent on. While the incidence of droughts is projected to decrease, rainfalls in Tuvalu are projected to rise over this century including the intensity and frequency of extreme rainfall days.[5]

---

[1] Prepared by Kalolaini Ranadi.

[2] UN (2013*), "Small Island Developing States in Numbers."*

[3] UNDP (2016), "*Tuvalu Coastal Adaptation Project: Green Climate Fund Funding Proposal*."

[4] During 2005-2015, climate-related migration in Tuvalu is both internal (12% percent of the population) and international (15 percent of the population), while 8 percent of people were unable to migrate due to financial constraints (see UNU Survey Report, "*Climate Change and Migration in the Pacific*").

[5] UNDP (2020), "*Tuvalu Coastal Adaptation Project: Environmental and Social Impact Assessment.*"

Extreme rainfall, expected to occur on average four-to-five times per 20-year period by 2055 in a low-emission scenario, could rise to as much as six-to-seven times per 20-year period by 2090 in a high-emission scenario. Extreme rainfall which compounds the risk of flooding and saline intrusion can cause severe problems for Tuvalu. These include contamination of water supplies[6] and the potential outbreak of waterborne illnesses, and lower agricultural production due to soil erosion and limited availability of fertile land.

4. **Rising sea levels will further aggravate the impact of storm surges and coastal inundation**. Under a high-emissions scenario (Representative Concentration Pathway 8.5), sea levels around Tuvalu would rise by 40 centimeters by 2050 and by one meter by 2100. As a result, daily tidal waters could eventually cover a significant fraction of the land area of the main Funafuti atoll. As much as one-half of Funafuti's land area would be covered by daily tidal waters by 2050, and 95 percent by 2100 (Figure 1).

Figure 1. Tuvalu: Projected Tidal Inundation in Funafuti Under RCP8.5 with Existing Infrastructure

Notes: The left panel shows the capital of Tuvalu in Funafuti as of today. The middle panel shows the one-half of land area expected to be flooded from daily tidal waters by 2050 under the high-emissions scenario RCP8.5. The right panel shows the 95- percent of land area expected to be flooded from daily tidal waters by 2100 under the high-emissions scenario RCP8.5.

Source: UNDP, *Te Lafiga o Tuvalu* ("Tuvalu's Refuge") - Tuvalu's Long Term Adaptation Plan.

Climate Adaptation Plans

5. **Tuvalu's Long Term Adaptation Plan (L-TAP), *Te Lafiga o Tuvalu* ("Tuvalu's Refuge"), is intended to address the risk of climate-change-induced seal-level rise and provide a safe home for Tuvaluans beyond 2100**. L-TAP integrates sustainable adaptation actions to achieve the following goals: (i) raised, safe land with staged relocation of people and infrastructure over time; (ii) safe drinking water supply; (iii) renewable energy supply; (iv) climate-resilient infrastructure; (v) space for expanding civic and commercial areas; and (vi) improved food security.

[6] Rainwater is the primary source of fresh water supply in Tuvalu with limited availability of groundwater resources (see IFRC, 2021, "Emergency Plan of Action, Tuvalu Impending Drought").

6. **The Tuvalu Coastal Adaptation Project (TCAP) was developed in response to the urgent national priority of building coastal resilience**.[7] TCAP will provide robust coastal protection infrastructure to the high-value[8] vulnerable coastlines of Nanumaga, Nanumea and Funafuti.[9] The land reclamation on the Fogafale lagoon shore of Funafuti is designed to be 710 meters long, extend 100 meters seaward, and require approximately 250,000m^3 of suitable fill material to a height at least two meters above the highest measured sea level. This will offer safe, flood-free raised land and additional space to ease existing overcrowding in concentrated settlements. The project will include the construction of a small boat harbor to enable all-tide access for local fishing vessels. Apart from these new protection measures, the project will also contribute to strengthening the capacity and awareness of institutions and local communities towards climate-resilient coastal management and long-term adaptation solutions.

7. **TCAP complements several earlier initiatives designed to assist in reducing the coastal vulnerability of the country**. These are:

- ***Increasing Resilience of Coastal Areas and Community Settlements to Climate Change*** – the project aimed to build the resilience of coastal communities in all inhabited islands of Tuvalu, including by increasing public awareness and adopting community-based adaptation measures such as scaling up gardening activities. This was accompanied by a preliminary assessment conducted for Nukufetau and Nanumea which identified coastal defense options such as geo-textile revetments and coastal vegetation. The project was completed in 2016.

- ***Effective and responsive island-level governance*** is a four-year project (2014–2019) designed to secure and diversify climate resilient marine-based coastal livelihoods and enhance climate hazards response capacity. At least 400 households benefited from community-based adaptation (near-shore cage farming, aquaculture in 18 villages); evacuation sites were equipped with robust communication facilities and early warning systems; and trainings were conducted for disaster management.

- ***Implementing a 'Ridge to Reef' approach (R2R Tuvalu)*** – the project aims to protect biodiversity and ecosystem functions, sustain livelihoods, and improve resilience in Tuvalu. To achieve this, the project contains four main components: (i) augmenting and strengthening conservation and protected areas; (ii) rehabilitating forests and landscapes; (iii) enhancing governance and institutional capacities; and (iv) improving data and information systems to

[7] The project is in line with the national priorities: Tuvalu National Development Strategy (*Te Kete* 2021-2030); Tuvalu Climate Change Policy (*Te Kaniva* 2012-2021); Tuvalu National Strategic Action Plan for Climate Change; Disaster Risk Management (2012-2016); and Tuvalu National Adaptation Programme of Action (2007).

[8] Refers to areas with high concentration of economic, political, institutional, and social assets such as schools, hospitals, and dwellings.

[9] TCAP is expected to strengthen the resilience of 35 percent high-value vulnerable coastline (2.7km in length) against the effects of sea-level rise. It is estimated that 3,100 people or 29 percent of Tuvalu's population will directly benefit from the project (see Walker and Dumaru (2020), "Environmental and Social Impact Assessment: Funafuti, Tuvalu Coastal Adaptation Project").

support evidence-based planning, decision making and management of natural resources.[10] The project was expected to be completed by December 2020.

8. **TCAP alone requires an investment of 64 percent of 2022 GDP**. The project is funded by the Green Climate Fund grant of US$36m and co-financed by the Government of Tuvalu (US$2.9m), with the total cost representing 63.8 percent of 2022 GDP. The project is being executed by the United Nations Development Program in close collaboration with the Government of Tuvalu. Currently it is expected to be finalized by 2024.

9. **A potential Phase II of L-TAP would likely require substantially more resources**. Tuvalu's L-TAP incorporates a Phase II design but is contingent on the need and science of the day. Its implementation will become feasible once all existing communities and assets have been safely relocated to Phase I. Under Phase II, the original island platform would be raised to a suitable height to act as a buffer against storm waves and rising sea levels.

10. **In anticipation for a worst-case climate scenario, the authorities are also exploring the possibility of digitalizing the nation**. To this end, the "Future Now Project" is being developed. The goal is to try to preserve the territory, sovereignty and culture of the country using technology, covering three broad initiatives: digitalizing government services; establishing digital archives of historical documents and cultural practices; and pursuing domestic, and regional and international legal avenues to ensure the permanency of Tuvalu's statehood and existing maritime boundaries should the nation's territory become fully submerged, making relocation necessary.

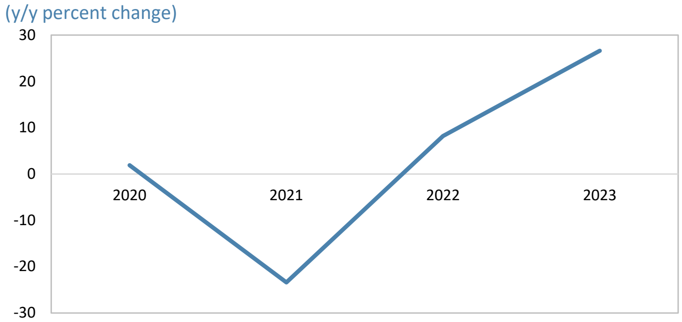
[10] UNESCAP (2018), "Implementing a "Ridge to Reef" Approach to Protect Biodiversity and Ecosystem Functions in Tuvalu (R2R Tuvalu)."

Appendix II. Estimating Trade Using Real-Time Satellite Data[1]

1. Ships' radio messages include information that can be used to monitor trade activity. Radio messages that ships emit for navigational safety purposes, known as Automatic Identification System (AIS) messages, include three main types of information: *voyage-related* information (speed, course, heading, rate of turn, destination, draft, and estimated arrival time), *static* information (ship identifier, ship type, ship size and dimensions), and *dynamic* information such as the positional aspects (latitude and longitude). Trade volumes can be estimated based on an innovative algorithm developed by Arslanalp et al. (2021) which tracks trade flows for Pacific Island countries.[2] As in Arslanalp et al. (2019) and Verschuur et al. (2020), the algorithm implements filtering criteria to extract port calls that contribute to trade. Next, vessel-specific information from the AIS and the ship registry databases from FleetMon and IHS Markit are combined to estimate the payload (or utilization rate) of the vessel when entering and leaving the port boundary.[3] Trade flows are then derived from the differences in the utilization rate when entering or leaving a port. A validation of monthly trade flows for seven Pacific Islands shows that the trade indicator derived explains 89 percent of the variation in available official statistics.

2. The import estimates for Tuvalu point to a decline in activity through 2022, with a rebound observed in early 2023. After a tepid 2020, estimated import volumes shrank by more than 23 percent in 2021 compared with 2020, also in conjunction with the global increase in shipping costs. In 2022, estimated imports started recovering gradually, yet they remained well below their pre-pandemic levels. Very early and preliminary estimates based on data for January-February suggest that imports will bounce back in 2023, reaching the highest level observed in the past five years.[4]

Tuvalu: Estimated Seaborne Import Growth
(y/y percent change)



Source: Arslanalp, Koepke and Verschuur (2021), *"Tracking Trade from Space: An Application to Pacific Island Countries,"* IMF WP 2021/225.

[1] Prepared by Parisa Kamali.

[2] Arslanalp, Koepke and Verschuur, 2021, "Tracking Trade from Space: An Application to Pacific Island Countries," IMF Working Paper No. 21/225.

[3] Arslanalp, Marini and Tumbarello, 2019, "Big Data on Vessel Traffic: Nowcasting Trade Flows in Real Time," IMF Working Paper No. 19/275. Verschuur, Koks and Hall, 2020, "Port Disruptions due to Natural Disasters: Insights into Port and Logistics Resilience" Transportation Research D. 85, 102393.

[4] The estimates can also be used for real-time monitoring of high-frequency events, such as the impact of natural disasters. A forthcoming online platform aims to monitor trade disruptions from natural disasters and assess their regional and global spillovers through port-to-port linkages.

Appendix III. External Sector Assessment[1]

Overall Assessment: *The external position of Tuvalu in 2022 was broadly in line with the level implied by medium term fundamentals and desirable policies. The result is mainly explained by the temporary modest fiscal savings due to the government inability to execute infrastructure projects. The current account (CA) is expected to turn into deficit as the economy reopens and the fiscal balance deteriorates going forward. Reserves remain adequate but are expected to decline over time, breaching the indicative threshold by 2028. There remains substantial uncertainty around the assessment due to severe data limitations and the volatile nature of the balance of payment flows.*

Potential Policy Responses: *Fiscal consolidation will be needed starting in 2023 to increase net external savings. Continuing to pursue grant financing and highly concessional loans will reduce pressures on debt accumulation. Economic policies should focus on improving the structural problems reducing international competitiveness and reducing the dependency on inflows from grants and fishing licenses.*

Foreign Assets and Liabilities: Position and Trajectory

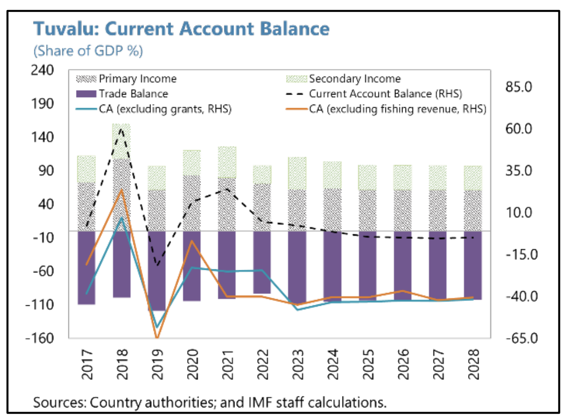
Background. The net international investment position of Tuvalu is estimated at 467 percent of GDP, with the Tuvalu Trust Fund representing 224.5 percent of GDP.

Assessment. Despite the high net creditor position, the NIIP is expected to decline over time, as the TTF is expected to lose relevance over total GDP, and reserves are also expected to decline as a share of GDP, driven by large CA deficits.

2022 (% GDP)	NIIP: 467%	Gross Assets: 484%	Debt Assets: 1.9%	Gross Liab.: 16.6%	Debt Liab.: 16.6%

Current Account

Background. Staff estimates that the current account recorded a surplus of 4.6 percent of GDP in 2022 as the trade deficit was offset by inflows from grants, fishing revenues and returns of the Consolidated Investment Fund (CIF). The savings of the economy were mainly driven by the government surplus of 11.3 percent of GDP in 2022, as government could not execute planned infrastructure projects due to COVID containment measures. In 2023, the CA balance is projected to deteriorate to a 3.8 percent of GDP deficit as the projected trade deficit will increase with government infrastructure resuming. Looking forward, staff projects that the continued fiscal deficits will lead to sustained CA deficits.



Assessment. The revised EBA-lite CA model points to an adjusted CA norm of 4.3 percent of GDP, with the caveats that Tuvalu is not part of the estimation sample (and therefore fitness of the model cannot be assessed) and that many of the model's explanatory variables need to be imputed given significant data gaps. Despite the large infrastructure needs for the country, Tuvalu faces several climate and economic risks, for which the country should build fiscal and external buffers to draw on when these risks materialize1/. The CA GAP is estimated to be

[1] Prepared by Roman D. Merga.

0.6 percent of GDP, resulting from an adjusted CA of 4.9 percent of GDP. As a result, the 2022 external position is assessed as broadly in line with fundamentals. Nonetheless, under the current baseline this assessment is expected to hold only temporarily, as it is mainly driven by a large fiscal surplus that will turn into persistent deficits. Assuming a similar CA norm for 2023, on a preliminary basis the external position would expect to become weak in that year. Addressing this expected gap will require fiscal consolidation.

Tuvalu: EBA-lite Model Results, 2022

	CA model 1/	**REER model** 1/
	(In percent of GDP)	
CA-Actual	**4.6**	
Cyclical contributions (from model) (-)	0.2	
Natural disasters and conflicts (-)	-0.5	
Adjusted CA	**4.9**	
CA Norm (from model) 2/	**4.3**	
Adjusted CA Norm	**4.3**	
CA Gap	**0.6**	**21.6**
o/w Relative policy gap	4.6	
Elasticity	-0.4	
REER Gap (in percent)	**-1.5**	**-57.7**

1/ Based on the EBA-lite 3.0 methodology

2/ Cyclically adjusted, including multilateral consistency adjustments.

Real Exchange Rate

Background. The REER appreciated around 4.5 percent in 2022, despite the 1.6 percent depreciation of the NEER, and is now 3 percent below its 20-year average. As the main determinants of the CA in real terms (grants, revenues from fishing licenses and trade deficits) are inelastic to REER, the model predicts a CA elasticity to REER of -0.4 implying little relevance for expected movements in the Australian dollar to close the gap. Because of this low elasticity and the exogeneity of the NEER, fiscal policy and structural reforms are the main instruments to adjust external imbalances, in the short and long-term respectively.

Assessment. The EBA-lite CA model indicates that the REER is depreciated by 1.5 percent relative to the exchange rate that would close its current account gap. The situation is expected to be temporary as the projected fiscal expansion in the following years is expected to push Tuvalu's inflation to higher levels relative to its trading partners, requiring a depreciation to close the current account gap.

Capital and Financial Accounts: Flows and Policy Measures

Background. Capital flows are mainly determined by contributions to the Tuvalu Trust Fund and government grants. During 2022, the capital account was driven by transfers to develop climate resilience infrastructure projects, an inflow of AU$4.26 million. The financial account posted a surplus of AU$18.4 million, mainly driven by portfolio investment (19.8 percent of GDP). Tuvalu receives virtually no FDI inflows or outflows.

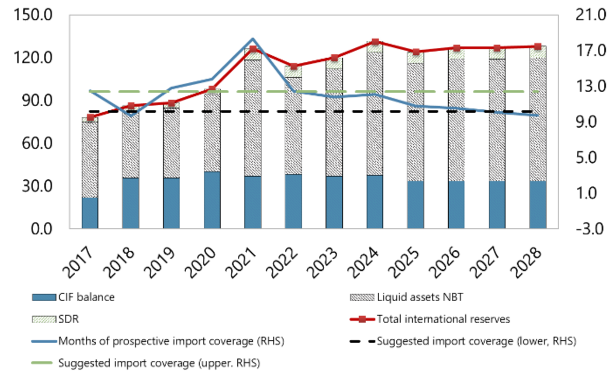
Assessment. Financial flows can be volatile as swings in international financial markets can significantly affect the performance of the TTF. However, the large financing needs, driven by the widening CA deficit, due to the expected fiscal deficits will require an increase in external debt. Continuing to pursue grant financing and highly concessional loans can lessen the debt burden, while fiscal consolidation together with structural reforms can help reduce the CA deficit in the first place. Structural reforms that develop the private sector facilitating FDI can also bring new sources of external flows.

FX Intervention and Reserves Level

Background. Tuvalu is a fully dollarized economy and does not have its own currency or central bank; they use the Australian dollar as currency. Gross official reserves decreased to US$79.33 million in 2022 from their previous level of US$94.97 million in 2021, due to valuation changes as the AUD depreciated by 8.2 percent relative to the US$, and the 9.6 percent decrease of foreign reserves denominated in AUD. By end 2022, gross official reserves were equivalent to 12.5 months of prospective imports.

Tuvalu: International Reserves

(In millions of Australian dollars)



Sources: Country authorities; and IMF staff calculations.

Assessment. Tuvalu's ability to adopt an independent currency remains limited, and the Australian dollar provides a strong nominal anchor. Reserve coverage was sufficient in 2022, as it remained above the adequate level for a fragile, small economy, assessed to be between 10.2 and 12.4 months of imports[2]/. While the coverage remains within the adequacy range, the government needs to maintain an adequate import coverage to have space to implement countercyclical macroeconomic policies when required, and to absorb international shocks. The reserve coverage is projected to decline below the minimum recommended level by 2028 reaching 9.7 months of prospective imports. Structural reforms to increase CA inflows and fiscal consolidation will help to contain the expected decline in reserve coverage. Additionally, implementing institutional changes to reduce macroeconomic risks and executing infrastructure projects to build resilience to climate, will reduce the need of holding high levels of international reserves.

Notes:

[1]/ See Das and others (2019), Review of the EBA-Lite methodology, ¶37.

[2]/ Despite the infrastructure needs of the country, given the elevated downside risks for the economy, we assume that opportunity cost of holding foreign reserves lie between 0.7 and 1 percent resulting in the above-mentioned range.

Appendix IV. Fiscal Reforms to Unlock Enhanced Access to Climate Finance[1]

Tuvalu's future hinges on its ability to adapt to and mitigate the impact of climate change. The infrastructure investments required outstrip the country's domestic fiscal space and, given a lack of access to domestic debt markets, require substantial external finance. This annex outlines the key Public Financial Management (PFM) and Public Investment Management (PIM) reforms required to unlock easier access to external climate finance.

1. **With a narrow domestic revenue base and no local debt markets, Tuvalu must secure external financing to address its significant adaptation needs**. As highlighted in Appendix I Tuvalu's climate mitigation and adaptation needs are large. Tuvalu lacks the fiscal space to finance these necessary climate projects. The domestic current balance i.e. fiscal revenues net of expenditures, fishing license revenues, grants and capital expenditures, is expected to remain negative and large as a ratio to GDP. A number of climate related funds exist for these needs, the largest and most active being the Green Climate Fund (GCF) administered by the United Nations Framework Convention on Climate Change. However, a major impediment to unlocking these funds for Pacific Island Countries is building capacity in the areas of PFM and PIM via reforms.[2]

2. **The key PFM requirements for access to the GCF center on effective corporate governance, budget credibility and transparent and accountable procurement**. The GCF, as the largest financing source for climate projects in the region, provides a useful benchmark for key PFM capacities to improve access to climate finance (see Table 1).

Table 1. Tuvalu: Summary of Basic-PFM Related Standards Required for Access to the GCF

Corporate Governance	Clear and formal governance structure of the entity exists which describes the entity's key area of responsibility, authority, and reporting lines. Organization objectives are set, measured, monitored, and reported against.
Financial Reporting	A financial management and accounting system that follows international good practice (including the Generally Accepted Accounting Principles) and a track record of financial statements.
Budget Credibility	Track record of transparent business plans, financial projections and budget preparation and execution, and ability to continuously monitor performance and expenditure against these budgets and plans.
Internal & External Audit	Procedures in place for internal and external audits, including: a fully functional audit committee (or comparable body); an internal audit function and an independent external audit function.
Robust Internal Controls	Internal financial controls to ensure that financial risks are properly managed
Procurement	Formal procurement standards, guidelines, and systems in place to ensure fair and, transparent procurement processes.
Transparency and Accountability	A range of transparency and accountability provisions, but those that relate specifically to PFM include: a policy for disclosure of conflicts of interest; demonstrated capacity to prevent fraud, financial mismanagement, and other forms of malpractice; and an independent investigation function for investigating allegations of fraud and corruption.

Source: Fouad and others (2021).

3. **Tuvalu has made significant progress in PFM reforms, in line with the *Te Kete* 2021-30 national strategy for sustainable development**. During 2022 the authorities improved the

[1] Prepared by Chris Redl.

[2] Fouad and others (2021)," Unlocking *Access to Climate Finance for Pacific Island Countries*," IMF Departmental Paper No 2021/020

integration of their new Financial Management Information System to include an accounts receivable module, thus extending the coverage of the FMIS to a broader set of transactions. Financial reporting has been improved to include a monthly dashboard for expenditure and receipts as well as monthly, quarterly and annual financial and budget reporting data being available in the FMIS system. This has been supported by remote IMF PFTAC TA missions in 2021-22 covering cash management and forecasting, budget execution and financial reporting.

4. Notwithstanding this progress, further reforms would not only enhance policy-making but also support increased access to climate finance. Drawing on the experience of IMF PFTAC TA and the key PFM requirements of the Green Climate Fund (GCF) the below outlines key areas of PFM development to improve access to climate finance. The enhanced access that these reforms could deliver should be complemented through continuous collaboration to gain access to climate funds through donors

- *Financial reporting standards should be elevated which would improve transparency and accountability.* Regular in-year budget execution reporting has been suspended for a number of years. Establishing a plan for the re-introduction of monthly budget execution reporting would aid transparency. Key to publication would be resolving data quality issues that were an issue in the past. The new Chart of Accounts (CoA) that details the mapping of the Natural Accounts to the relevant GFS economic classification should be employed to allow the publication of fiscal data in line with GFS requirements.
- *Budget credibility should be enhanced, and implementation strengthened* through improved cash flow forecasting, which will aid budget control and execution at the transaction level. Effective cash forecasting is key to providing accurate information to set correct quarterly warrants (expenditure limits). [3]
- *Internal and external audit* should be strengthened and the backlog of bank reconciliations from 2016 resolved. Employing the FMIS system to preform bank reconciliation should be a priority
- *Robust internal controls should be developed* by ensuring the use of a Treasury Single Account, hence eliminating special accounts that have been used, for example, in the case of carryover funds from the previous year's budget. The employment of the commitment control module in the FMIS should be adopted as a single Excel-based commitment register has been in operation in the past which only included procurement-based expenditures, Non-procurement expenditures such as payroll, subsidies, utilities, medical treatment, are controlled only at the invoicing/voucher (Accounts Payable) or payment stage (like payroll).

5. Sufficient PFM reforms are a pre-condition to climate finance, but the implementation phase of these investments also requires appropriate Public Investment Management (PIM). Tuvalu last undertook a Public Expenditure and Financial Accountability (PEFA) assessment in 2011 to measure the strengths and weaknesses of its PFM; a PEFA assessment mission from PFTAC is planned

[3] Cooper, Julie (2022), *Cash Management and Cash Flow Forecasting*, IMF PFTAC Report.

for June 2023. No Public Investment Management Assessment (PIMA) has ever been carried out. The GCF identifies three key requirements for PIM for successful project implementation:[4]

- *Project identification, preparation, and appraisal*. A track record of capability and experience (including appropriate tendering procedures for project proposals) in the identification and design of projects or programs. Capacity to clearly state project objectives and outcomes in preparing funding proposals. Ability to examine and incorporate technical, financial, economic, and legal aspects as well as possible environmental, social and climate change aspects into the funding proposal at the appraisal stage. The appropriate oversight procedures are in place to guide the appraisal process and ensure its quality and monitoring of follow-up actions during implementation.
- *Project oversight and control*. Operational systems, procedures and overall capacity to consistently prepare project implementation plans, including project budgets, reporting guidelines. Operational capacity and organizational arrangements to continuously oversee the implementation of the approved funding proposal in order to regularly assess project expenditure against project budget. Appropriate reporting capabilities and capacities to appropriately publish implementation reports.
- *Monitoring and evaluation*. Monitoring function detects, assesses, and provides management information about risks relating to projects, particularly those deemed to be at risk. The evaluation function assesses the extent to which projects, programs, strategies, policies, sectors or other activities achieve their objectives and contribute to the initial results areas of the Fund. The goal of evaluation is to provide an objective basis for assessing results, to provide accountability in the achievement of objectives, and to learn from experience (and to detect any deviation from project planning in the early stages).

6. The authorities highlighted PIM capacity development needs around project proposal, project oversight and data gathering; as well as constraints to monitoring and evaluation. Currently the Ministry of Finance and Economic Development has Direct Access to the GCF, meaning that it is able to directly apply for funding, but is not an Accredited Entity – the accreditation needed to manage those projects if a proposal is successful. PFM and PIM reforms are key to achieving this status. Lacking accreditation reduces the agency of the country in pursuing its climate adaption agenda since external partners manage and implement projects and can make significant adjustments to implementation such as shortening project horizons or outsourcing work to private firms – reducing the scope and raising the cost of the projects. Co-ordination across government to support climate projects is needed, budget support to facilitate meeting reporting requirements, e.g., purchasing equipment needed to document project progress; as well as resources to fill key project positions. Transport challenges between Funafuti and the outer islands have made data collection difficult and poor internet connectivity makes online surveys of residents on the outer islands infeasible.

[4] Requirements are taken from Fouad and others (2021), Annex 6.

Appendix V. Risk Assessment Matrix[1]

Source of Risks	Relative Likelihood	Expected Impact on Economy	Policy Response
		Global Risks	
Intensification of Regional Conflict(s).	**High** Escalation of Russia's war in Ukraine or other regional conflicts and resulting economic sanctions disrupt trade (e.g., energy, food, tourism, and/or critical supply chain components), remittances, refugee flows, FDI and financial flows, and payment systems.	**High** Further increases in food and energy prices would worsen food security, which has already deteriorated due to high inflation. High fuel cost would weaken post-lockdown recovery in 2023.	▪ Supporting small-scale domestic food production, such as in the coconut industry, and enhancing the resilience of coastal fisheries. ▪ Targeted support for vulnerable groups instead of general subsidies.
Social Discontent.	**High** Supply shocks, high inflation, real wage drops, and spillovers from crises in other countries worsen inequality, trigger social unrest, and give rise to financing pressures and damaging populist policies with possible spillovers to other EMDEs. This exacerbates imbalances, slows growth, and triggers market repricing.	**Low** As a small, isolated island of 11,000 people with a large public sector, social cohesion is relatively high and social unrests risks low.	▪ Targeted support for vulnerable groups in lieu of general subsidies, in the case of elevated food prices.
Abrupt Global Slowdown or Recession.	**Medium** Global and idiosyncratic risk factors combine to cause a synchronized sharp growth downturn, with recessions in some countries, adverse spillovers through trade and financial channels, and markets fragmentation. **EMDEs:** A new bout of global financial tightening, possibly combined with volatile commodity prices, leads to spiking risk premia, debt distress, widening of external imbalances, fiscal pressures, and sudden stops.	**Medium** Exports are minimal and main spillover may be through reduced grant flows and poor returns from the TTF. An abrupt market adjustment could reduce the net asset value and returns of TTF thereby reducing CIF transfers to the government.	▪ Increase buffers by saving the transfers from TTF to CIF. ▪ Ensure that the minimum balance target of the CIF is maintained. ▪ Increase expenditure efficiency by identifying areas where savings could be achieved while maintaining capital expenditures. ▪ Review riskiness of foreign investments.
Commodity Price Volatility	**Medium** A succession of supply disruptions (e.g., due to conflicts and export restrictions) and demand fluctuations (e.g., reflecting China reopening) causes recurrent commodity price volatility, external and fiscal pressures, and social and economic instability.	**High.** As noted above, further increases in food and energy prices would worsen food security, which has already deteriorated due to high inflation. High fuel cost would weaken post-lockdown recovery in 2023.	▪ Supporting small-scale food production, such as in the coconut industry, and enhancing the resilience of coastal fisheries. ▪ Targeted support for vulnerable groups in lieu of general subsidies.

[1] Prepared by Chris Redl.

Source of Risks	Relative Likelihood	Expected Impact on Economy	Policy Response
Monetary Policy Miscalibration.	**Medium** Amid high economic uncertainty and volatility, major central banks slow monetary policy tightening or pivot to loosen monetary policy stance prematurely, de-anchoring inflation expectations and triggering a wage-price spiral in tight labor markets.	**Medium** Higher global inflation primarily affects the country via good prices rather than services, higher global interest rates would affect the value of the TTF and thus fiscal buffers	▪ Increase expenditure efficiency by identifying areas where savings could be achieved while maintaining capital expenditures. ▪ Review risk profile of foreign investments. ▪ Should imported inflation spike, target support to vulnerable groups.
Systemic Financial Instability	**Medium** Sharp swings in real interest rates, risk premia, and assets repricing amid economic slowdowns and policy shifts trigger insolvencies in countries with weak banks or non-bank financial institutions, causing markets dislocations and adverse cross-border spillovers	**Medium** Primary channel would be weakness in TTF returns. An abrupt market adjustment could reduce the net asset value and returns of TTF thereby reducing CIF transfers to the government.	▪ Increase buffers by saving the transfers from TTF to CIF. ▪ Ensure that the minimum balance target of the CIF is maintained. ▪ Increase expenditure efficiency by identifying areas where savings could be achieved while maintaining capital expenditures. ▪ Review risk profile of foreign investments.
Deepening Geo-Economic Fragmentation.	**High** Broader and deeper conflict(s) and weakened international cooperation lead to a more rapid reconfiguration of trade and FDI, supply disruptions, technological and payments systems fragmentation, rising input costs, financial instability, a fracturing of international monetary and financial systems, and lower potential growth.	**Medium** Given Tuvalu's narrow domestic production base and reliance on imports, trade disruptions and FX volatility would impact inflation and growth.	▪ Seek to diversify the economy ▪ Prudent management of tuna resources ▪ Support the small-scale domestic food production, such as the coconut industry, and enhancing the resilience of coastal fisheries.
Extreme Climate Events.	**Medium** Extreme climate events cause more severe than expected damage to infrastructure (especially in smaller vulnerable economies) and loss of human lives and livelihoods, amplifying supply chain disruptions and inflationary pressures, causing water and food shortages, and reducing growth.	**High** Increased incidence of natural disasters with large fiscal costs for recovery efforts would put pressure on the fiscal balance leading to depletion of reserves and lowering of potential output. The cost of recovery after cyclone Pam was estimated at above 30 percent of GDP in 2015.	▪ Strengthen fiscal buffers. ▪ Increase infrastructure investment that bolsters resistance to rising sea levels and cyclones. ▪ Build institutional capacity and strengthen the PFM framework.

Source of Risks	Relative Likelihood	Expected Impact on Economy	Policy Response
Domestic Risks			
Loss of Correspondent Banking Relationships.	**High** With only few banks providing CBRs for the country and with the temporary loss of the CBR in 2022, risks to CBR are high. Loss of CBR could exclude Tuvalu from the global banking system.	**High** Loss of CBRs would end international payments and receipts and create a balance of payments crisis	▪ Seek an expansion of CBRs leveraging the assistance of development partners. ▪ Contingency planning in case CBRs are lost.
Heavy Fiscal Reliance on Volatile Fishing Revenues and uncertain grant flows	**High** Fishing license fees—the main source of government revenues—are volatile, and vulnerable to changes in climate patterns Similarly, volatility in grants creates large swings in the fiscal balance.	**High**: Protracted decline in fishing revenues would endanger long-run fiscal sustainability. Fiscal buffers could mitigate the shock, if the decline is temporary. Delayed or cancelled grants could create significant fiscal pressures.	▪ Continue implementation of the medium-term fiscal framework and save excess fishing revenue. ▪ Broaden revenue base and conduct fiscal consolidation.
Poor Performance of State-Owned Banks and Non-Financial Enterprises	**High** Poor governance of SOE governance, lack of effective bank supervision would lead to a high NPLs constraining banks' lending capacity and increasing reliance on government support.	**High.** The constrained bank lending capacity would hinder financial inclusion, hurting potential growth. Weak financial performance of SOEs creates contingent liabilities to the government.	▪ Introduce contingencies for continued subsidies. Implement regulation and supervision of banks. ▪ Advance SOE reforms.

[*] 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 is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly. "Short term" and "medium term" are meant to indicate that the risk could materialize within one year and three years, respectively.

Appendix VI. Integration of Capacity Development and Surveillance

Surveillance topic	Surveillance recommendations	Broad surveillance topic covered by technical assistance?							
		ADB		European Union		IMF - PFTAC		World Bank	
		FY 2022	Planned/ Ongoing	FY 2022	Planned/ Ongoing	FY 2022	Planned/ Ongoing	FY 2022	Planned/ Ongoing
Fiscal Sector									
Public Financial Management	▪ Improve financial reporting, budget credibility, audit, and controls (paragraph 22). ▪ Introduce climate budget tagging (paragraph 22). ▪ Improve capital budgeting, project reporting and development of projects proposals (paragraph 22).		Yes			Yes	Yes		Yes
Expenditure Framework	▪ Link wage bill with inflation and performance (paragraph 21). ▪ Unwind increase in goods and services spending of 2021 (paragraph 21). ▪ Rationalize spending on TOMRS (paragraph 21). ▪ Rationalize overseas scholarships (paragraph 21). ▪ Review all subsidies. Replace untargeted ones with mean-tested transfers while phasing out price controls (paragraph 21).					Yes	Yes		Yes
Revenue Framework	▪ Increase VAT statutory rate in line with peers (paragraph 21). ▪ Continue plans to increase tax compliance (paragraph 21). ▪ Ensure adequately staffed authority (paragraph 21). ▪ Improve corporate income tax efficiency (paragraph 21). ▪ Include tax expenditures in budget documents (paragraph 21). ▪ Enforce timely corporate reporting and audits of financial statements of SOE's (paragraph 21).					Yes	Yes		
Macro-Financial Issues									
Financial Supervision and Regulation	▪ Supervisory framework should cover Tuvalu' banks and National Pension Fund (paragraph 25). ▪ Supervisory authority should be adequately staffed (paragraph 25).					Yes	Yes		
Financial Market Development	▪ Improve regulatory framework to encourage loan pricing depending on borrowers' credit risk and the economic cycle (paragraph 25). ▪ Create a digitalized credit registry (paragraph 25). ▪ Introduce a resolution regime for non-performing loans to facilitate NPL's collections (paragraph 25).								
AML/CFT	▪ Continue updating the legal framework and implementing authorities' policy reform matrix regarding AML/CFT. Tailor reforms according to Tuvalu's development needs, and the FATF standards (paragraph 25). ▪ Introduction of new digital services should be evaluated considering AML/CFT regulations and Tuvalu's legal frameworks and supervisory capacities (paragraph 25).								
Corresponding Banking	▪ Continue efforts to develop and expand the current CBR relationship (paragraph 25).								
Macro-Structural issues									
Infrastructure			Yes						
Trade Integration	▪ Pursue diversification through development of new activities as niche tourism and by increasing integration to fisheries value chain (paragraph 29).								Yes
Human Capital	▪ Ensure that overseas scholarships are aligned with Tuvalu's' needs (paragraph 29). ▪ Enforce medical scholarships conditions to ensure return of health professional (paragraph 29). ▪ Strengthen legal frameworks on patient privacy to facilitate access to health and personal characteristics information to improving prevention, identification, and treatment (paragraph 29). ▪ Increase measures against Tobacco, salt, and sugar through risk control actions (paragraph 29). ▪ Adopt legislation to support remotely delivered health services (paragraph 29).								

Surveillance topic	Surveillance recommendations	Broad surveillance topic covered by technical assistance? ADB		European Union		IMF - PFTAC		World Bank	
		FY 2022	Planned/ Ongoing	FY 2022	Planned/ Ongoing	FY 2022	Planned/ Ongoing	FY 2022	Planned/ Ongoing
Surveillance topic	**Surveillance recommendations**								
Private Sector Development	▪ Support small scale production and enhance resilience of coastal fisheries (paragraph 29).	Yes			Yes				
Governance Issues	▪ Align SOEs prices with recovery levels by phasing out Community Service Obligations (paragraph 30). ▪ Enhance SOEs performance-based management (paragraph 30). ▪ Improve fiscal risk management by a plan to address loss making SOEs (paragraph 30). ▪ Improve monitoring of losses from fishing joint ventures (paragraph 30). ▪ Make proper budgetary provisions for the planned national airlines, and limit potential public liability (paragraph 30).								
Climate Change and Environment	▪ Adopt natural-based solutions to costal erosion (paragraph 29). ▪ Implement water use efficiency and enhance water security (paragraph 29).		Yes	Yes					Yes
Natural Disaster Management	▪ Address climate risk in spatial planning and develop risks maps (paragraph 29). ▪ Revamp the Disaster Risk Management Act to modernize preparedness and response to disaster (paragraph 29). ▪ Enforce building codes (paragraph 29).								Yes
Financial Inclusion	▪ Improve financial literacy for private firms aiming to improve collection and presentation of financial information (paragraph 25).								
Statistics									
Data enhancement	▪ Adopt a personnel strategy to reduce high turnover and its impact over workload (paragraph 32). ▪ Allow statistical department to use and publish preliminary figures based on unaudited results (paragraph 32).					Yes	Yes		

Note: The third to tenth columns denotes indicate the technical assistance provided or that is planned to be provided by organization for each broad surveillance issue. They do not necessarily imply that the TA is aiming to accomplish the Staff surveillance recommendation (column 2).
Sources: Asian Development Bank (ADB); European Union; IMF; United Nations Development Program (UNDP); and World Bank.

Appendix VII. Implementation of Recommendations from the 2021 Article IV Consultation

2021 Article IV Consultation Recommendations	Actions Since the 2021 Article IV Consultation
Fiscal	
Once the economy fully recovers, implement reforms to (i) achieve gradual fiscal consolidation to preserve fiscal buffers needed to guard against future shocks, especially natural disasters; and (ii) fund climate adaptation and infrastructure maintenance needs.	The resumption of the coastal adaptation project was announced in December 2022. The authorities updated their building regulations and building codes for new public buildings. The authorities amended the Disaster Risk Management Act, empowering the National Disaster Management Office (NDMO) to act as the coordinating and monitoring unit for disaster risk management. Going forward, gradual fiscal consolidation would be important to ensure sustainability and build buffers.
Review public sector wage bill, establishing clear criteria linking wage increases to performance, fiscal revenues, and inflation.	Public wage bill has been updated, restructuring it to try to address retention issues with key specialists and aim to retain skilled workers, and raising the public sector wage bill by 17 percent in 2023. Clear criteria linking wage increases to performance and inflation would enhance efficiency and provide predictability.
Lower spending on Tuvalu Medical Treatment Scheme (TMTS). Rationalizing spending on overseas scholarships. Improve cost effectiveness and control of the government's travel budget. Conduct an analysis of the commercial viability of the planned new airline, make realistic budgetary provisions for investment and maintenance, and establish a legal framework to limit public liability and ensure high governance standards.	The TMTS was reviewed and revised in 2021 to Tuvalu Overseas Medical Referral Scheme (TOMRS). Rationalizing spending on overseas scholarships, improving cost effectiveness of the government's travel budget, and the recommended actions regarding the planned new airline would foster sustainability and help minimize risks.
Eliminate tax exemptions, including those for projects financed by development partners. Improve tax compliance, especially among the corporates. Improve taxpayer services.	The World Bank assisted the authorities with the review of the tax system. The authorities have implemented ASYCUDA in December-2021 to automate the customs management system. There remains room to improve tax compliance and taxpayer services.
Strengthen revenue administration by implementing effective risk management practices.	The authorities have taken technical assistance from PFTAC to improve public financial management; there is scope for further improvement (see Appendix V).
Comprehensive review of the taxation system considering PACER PLUS agreement.	The authorities have asked for a tax policy mission to review the revenue implications and options from PACER Plus within the Revenue Administration Program carried by PFTAC. During FY 2022 4 missions were held and four more are expected during 2023.

2021 Article IV Consultation Recommendations	Actions Since the 2021 Article IV Consultation
Structural	
Develop effective prudential regulation and supervision of the financial system to promote health of the financial institutions and improve financial intermediation.	The authorities have taken technical assistance from PFTAC to improve supervision of the financial system. PFTAC conducted three virtual missions, two in FY 2022 and another in FY 2023 to develop a regulatory framework for banks and provide training in financial risk analysis. There is scope for significant improvements in supervision and regulation.
Continue the efforts to modernize the financial system by providing online banking services.	The authorities have announced plans to modernize their financial system. NBT is finishing the implementation of a new system which will allow them to establish ATMs and start to provide online banking services by end 2023 and roll out the use of point-of-service debit and credit cards by 2024.
Finalize SOE reforms to improve performance: (i) Complete corporate plans for all SOEs, (ii) Review the structure of electricity tariffs to cover production cost, (ii) Enforced timeliness of corporate reports and audits of financial statement. Clarify relationship of SOEs with the public sector: Adopt a rules-based system Community Service Obligations (CSOs) to compensate SOEs for losses incurred from prices set below cost recovery levels.	The authorities have received TA from Elemental Group Limited to assist them to update the electricity tariff's structure, although preliminary plans suggest the draft change in tariffs may be regressive. Corporate plans for all SOEs, the enforcement of timely reports and audits, and the implementation of a rules-based system for Community Service Obligations would help minimize risks from contingent liabilities.
Continue implementation of structural reforms to encourage diversification away from the public sector and improve access to credit.	The ratification of the PACER PLUS agreement is expected to help sector developments by increasing international trade integration.
Capacity Development	
Strengthen the institutional capacity of domestic institutions to produce high-quality statistics to improve the policy making process.	The authorities have taken technical assistance from STA to improve institutional capacity and enhance the quality of data while also minimizing reporting lags. It is expected that TA from the Fund will still be needed to help compile the data.

TUVALU

June 23, 2023

STAFF REPORT FOR THE 2023 ARTICLE IV CONSULTATION—DEBT SUSTAINABILITY ANALYSIS

Approved By
Nada Choueiri (IMF) and Manuela Francisco and Hassan Zaman (IDA)

Prepared jointly by the staffs of the International Monetary Fund (IMF) and the International Development Association (IDA).[1]

Tuvalu: Joint Bank-Fund Debt Sustainability Analysis	
Risk of External Debt Distress:	High
Overall Risk of Debt Distress:	High
Granularity in the Risk Rating:	Sustainable
Application of Judgement:	Yes. The projection horizon was extended to 20 years to capture the impact of natural disasters and climate change on debt dynamics.

Tuvalu remains at a high risk of debt distress, unchanged from the 2021 Debt Sustainability Analysis (DSA). Consistent with the previous DSA, judgment was applied to extend the projection horizon to 20 years as opposed to the standard 10 years. This is to adequately capture Tuvalu's vulnerability to natural disasters and the effects of climate change on debt dynamics. While the government's fiscal position remained favorable in 2022, under current policies Tuvalu is projected to face persistent fiscal deficits going forward and high levels of debt relative to the 2021 DSA. The mechanical external and overall risk rating is moderate based on the first 11 years of projections since none of the debt burden indicators breach their thresholds[2] under the baseline, and the Present Value (PV) of external and public debt-to-GDP ratio breach their thresholds under the stress tests. However, these ratios are projected to breach indicative thresholds under the baseline scenario in the long run triggering a final external and overall high risk of debt distress. Despite upward trending debt burden indicators, Tuvalu's debt is assessed as sustainable. This assessment assumes a

[1] This DSA has been prepared jointly by the IMF and World Bank, following the Guidance Note on the Bank-Fund Debt Sustainability Framework for Low Income Countries (2018).

[2] Tuvalu's Composite Indicator (CI) index indicates that the country's debt-carrying capacity remains weak (2.58) based on the IMF's April 2023 World Economic Outlook (WEO) and the 2021 World Bank Country Policy and Institutional Assessment (CPIA).

continued access to external budget support on concessional terms from the development partners, low debt service ratios throughout the projection horizon, and limited cash buffers in the Consolidated Investment Fund (CIF) to finance deficits. Risks to debt sustainability remain high due to elevated current spending, high reliance on volatile fishing revenues and grants, and risks of natural disasters. This underscores the importance of reining in fiscal deficits, improving public financial management and implementing structural reforms to ensure sustainable, inclusive, and resilient growth, also ensuring good cooperation with donors and securing grants needed to fulfill the country's large development needs and climate adaptation efforts.

PUBLIC DEBT COVERAGE

1. **Tuvalu's liabilities covered in this Debt Sustainability Analysis comprise concessional and commercial debt of the central government** (Text Table 1). There is no sub-national government structure in Tuvalu, no central bank and no domestic debt is issued by the government. Public debt bulletins are currently not publishing SOE debt that is implicitly guaranteed by the government. This debt, in the form of lines from credit extended to Tuvalu's non-financial SOEs by the National Bank of Tuvalu (NBT), stood at 3.5 percent of GDP in 2021.[3] While SOE loans do not carry an explicit government guarantee, the authorities may be asked to step in and cover these obligations if an SOE were unable to fulfill it, given that the corporations are wholly owned by the government. Thus, this debt is included in the baseline definition of public debt. The definition of external and domestic debt is based on residency. Bilateral donors provide only grant assistance, while multilateral development institutions (like ADB) provide both grants and concessional lending. All external debt is on a concessional basis.

2. **Substantial progress has been achieved in debt reporting and transparency, but recent reporting has been delayed by the pandemic.** The World Bank January 2022 Debt Reporting and Transparency Heat Map rated Tuvalu with the highest mark ("Green") for four indicators, compared to none in the previous report. The update reflected improvements in data accessibility and breadth with the publication of the inaugural annual public debt bulletin in September 2021. However, the 2023 heatmap rendered Tuvalu "Red" on most indicators as preparation of the second public debt bulletin was considerably delayed due to the pandemic. SOE debt publication has been hindered by pandemic related delays in audits, which have now been completed.

3. **The DSA includes a combined contingent liabilities stress test aimed at capturing the public sector's exposure to a financial market shock (Text Table 2).** The justification of the calibration of the contingent liability shock is as follows. The SoE's debt shock has been reduced to 0 percent of GDP because the government-guaranteed and non-guaranteed debt is captured in the baseline under the country's public debt definition. The Public Private Partnerships (PPPs) shock is set to zero as there are no PPPs in Tuvalu. Thus, the contingent liabilities stress test is based on the default values for the financial market component (5 percent of GDP) because the financial sector in Tuvalu is very limited, comprising two banks and the public sector pension fund, where both the largest bank and the pension are relatively well capitalized based on the latest data (2021).

Text Table 1. Tuvalu: Debt Coverage

	Subsectors of the public sector	Sub-sectors covered
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	X

[3] Publication of SOE debt was included in Debt bulletins since 2020.

Text Table 2. Tuvalu: Contingent Liabilities Stress Test

1	**The country's coverage of public debt**	The central government, government-guaranteed debt, non-guaranteed SOE debt			
		Default		**Used for the analysis**	**Reasons for deviations from the default settings**
2	Other elements of the general government not captured in 1.	0	percent of GDP	0.0	
3	SoE's debt (guaranteed and not guaranteed by the government) 1/	2	percent of GDP	0.0	Included in baseline
4	PPP	35	percent of PPP stock	0.0	No PPP present.
5	Financial market (the default value of 5 percent of GDP is the minimum value)	5	percent of GDP	5.0	
	Total (2+3+4+5) (in percent of GDP)			5.0	

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

BACKGROUND ON DEBT

4. Tuvalu is one of the smallest, most remote, and climate change-vulnerable countries in the world, and is categorized as an FCS country. Tuvalu had a GDP of US$60 million in 2022 and a population of 11,792 in 2020. It has underdeveloped structural economic conditions and is heavily dependent on international grants and the donor-financed Tuvalu Trust Fund (TTF) reserves to absorb shocks. Income derives primarily from fishing license fees, .tv internet domain licenses, trust fund investments, foreign aid, and remittances. The public sector dominates the economy. Use of the Australian dollar as legal tender and a very small financial sector make fiscal policy critical. Tuvalu is one of the most vulnerable climate-change exposed countries in the world. Natural disasters disrupt fiscal planning and substantially alter budgeted outcomes.

5. Total public debt as of end-2022 stood at 10.1 percent of GDP (Text Table 2), up by 2.8 percentage points since the 2021 DSA. Debt incurred by public entities that has been explicitly guaranteed by the government has been repaid in full in 2018. There are no sub-government structures in Tuvalu. Bilateral donors provide only grant assistance, while multilateral development institutions (like ADB) provide both grants and concessional lending. Future lending is assumed to be concessional, and equally split between the ADB and other multilateral institutions, in line with the authorities' intention to adhere to IDA's requirement of zero non-concessional ceiling on contracting new external debt. Tuvalu's debt is long-term: the International Cooperation Development Fund (ICDF - from Taiwan Province of China) loan has a 10-year maturity while the ADB loans are projected to mature by 2037. The ICDF loan is included in the DSA as external debt, in contrast to the 2021 DSA – without this definitional change the debt level would be *lower* by 0.2 percentage points relative to the previous DSA[4]. External debt levels have been on a downward trajectory in the past decade from a high of 21 percent of GDP in 2010 to 10.1 percent as of end-

[4] The ICDF debt was excluded from the 2021 DSA since a Memorandum of Understanding (MoU) between Taiwan Province of China and the government of Tuvalu includes a grant which covers part of the repayment of the debt. However, this is added back in the current DSA because treating the ICDF debt as external debt and recording the grant inclusive of the portion intended to cover this repayment in government revenue, is considered more transparent and is a more robust way to capture any change in the MoU between the countries."

2022. This has been enabled by building up the value of the CIF and its use to fund deficit spending. Debt levels are expected to rise faster than the 2021 DSA (Figure 3) due to weaker real GDP growth and a 12 percent of GDP drop in the stock of the CIF in 2023. This permitted a six-year period of drawdowns of the CIF in the previous projections before hitting the government's maintenance threshold, whereas the current level of the CIF only permits a single year of drawdown in 2025 in the current projections. Promoting fiscal sustainability in the medium term will require and building buffers by mobilizing revenues and rationalizing current expenditures.

Text Box 1. The Structure of Tuvalu's Trust Funds

Tuvalu Trust Fund (TTF) is a sovereign wealth fund that is owned by Tuvalu but is administered by an international Board and the government of Tuvalu. When TTF's value exceeds its "maintained value", linked to the Australian CPI, the excess funds are transferred to the Consolidated Investment Fund (CIF, below), and can be freely drawn upon by the Tuvalu's government to finance budgetary expenditures. Any additional transfers from TTF to CIF can only be done with the agreement of the two-thirds of the TTF's Board.

The Consolidated Investment Fund (CIF) is a buffer fund under a full control of the Tuvaluan government. It serves as a repository of TTF's automatic distributions. The government targets a CIF balance of a minimum of 16 percent of TTF maintained value as a precaution against sustained downturns that can lower TTF's market value.

Tuvalu Survival Fund (TSF) is a climate adaptation fund. It was established in 2015 by Tuvalu's government to finance recovery and rehabilitation from natural disasters as well as investments in mitigation and adaptation projects. The TSF is to be used to augment multilateral funding for climate change investments and environmental protection, e.g. the GCF, Adaptation Fund (AF), or the Global Environment Fund (GEF).

The Tuvalu Development Fund (TDF) is a fund under the management of the Ministry of Finance and Economic Development to collect donor funds that are earmarked for off-budget projects, primarily infrastructure. The allocation is motivated by the fact the not all these funds are spent in a given fiscal year.

6. Tuvalu's external assets remain sizable but are not fully available to meet fiscal needs. The market value of the Tuvalu Trust Fund (TTF) rose in 2021 by 12 percent to the highest level on record (261 percent of GDP). However, following the downturn in global equity markets in 2022, the TTF's value ended 2022 down by 7 percent y/y. By end 2022 the CIF stood at 42.6 percent of GDP. The downturn in the TTF's value in 2022 entails that no distribution to the CIF (which can be used for fiscal space) can be made this year, similar constraints are binding should returns remain below their maintenance level (see text box 1).

BACKGROUND ON MACRO ASSUMPTIONS

Text Table 3. Tuvalu: Public and Publicly Guaranteed Debt

Public Debt						
	2020	**2021**	**2022**	**2020**	**2021**	**2022**
Lender	(In millions of AUD)			(Percent of GDP)		
ADB	4.1	3.8	3.4	5.4	4.7	4.0
ICDF	2.8	2.7	2.5	3.7	3.4	2.9
Loan currency	(In millions of AUD)			(Percent of GDP)		
USD	3.7	3.4	3.0	5.0	4.2	3.5
SDR	3.2	3.1	2.9	4.2	3.8	3.4
Total	6.9	6.4	5.9	9.2	8.0	6.9
Publicly Guaranteed Debt						
	(In millions of AUD)			(Percent of GDP)		
Tuvalu Electric Corporation	0.9	1.1	1.1	1.2	1.4	1.3
Tuvalu Telecom Corporation	1.3	1.6	1.6	1.8	2.0	1.8
Tuvalu Broadcasting	0.0	0.0	0.0	0.0	0.0	0.0
Tuvalu Philatelic	0.0	0.0	0.0	0.0	0.0	0.0
	2.3	2.8	2.7	3.1	3.5	3.1
Total Debt	9.1	9.2	8.6	12.2	11.5	10.1

Sources: Tuvaluan authorities; and IMF staff estimates.

7. **The baseline assumptions underpinning the DSA are as follows:**

- **Economic growth**. After a pandemic-induced slowdown in growth in 2020 (-4.3 percent) and weak recovery in 2021 (1.8 percent) and 2022 (0.7 percent) a more significant rebound is expected in 2023 (3.9 percent) and 2024 (3.5 percent). A gradual return to trend growth takes place after 2025, as the re-opening dividend fades. The recovery in 2023 is premised on the reopening of the island in December 2022, elevated current spending, a resumption of infrastructure projects that were paused due to COVID-19 and full disbursement of donor funding. Longer term growth is expected to fall below 2 percent, primarily driven by capital investment and sluggish TFP growth, remaining relatively low given the dominance of inefficient public enterprises, capacity constraints, outward migration and weak competitiveness. Growth projections of slightly below 2 percent are considered to be consistent with a cost of natural disasters and climate change, at 0.8 percent of GDP on average.

- **Inflation**. CPI Inflation rose sharply in 2022 to 11.5 percent on the back of elevated imported food inflation with global food prices and a weaker Australian dollar. GDP deflator inflation also rose in 2022 to a more moderate 5.5 percent, in part due to the substantial share of imported goods in CPI inflation. The GDP deflator is expected to rise in 2023 to 6 percent due to the high public sector wage growth. CPI Inflation is expected to moderate to 3.7 percent by 2024 as global inflation pressures subside and is projected to moderate to 2 percent in the medium term similar to the 2021 DSA assumption. The GDP deflator is also expected to settle close to 2 percent in the medium term. Both CPI and the GDP deflator medium term values are assumed to converge to Australian inflation, given the country is dollarized.

- **Balance of payments**. After large surpluses during the pandemic lockdown, the current account (CA) surplus is projected to decline to 3.0 percent of GDP in 2023 as infrastructure projects restart. Fishing license revenues are expected to recover only slowly from the pandemic, primarily in 2024. As noted above the TTF performance has been qualitatively in line with global stock markets, generating a 12 percent return in 2021 but a 7 percent decline in 2022. Over the medium term, the current account turns into deficit, in line with developments in the fiscal balance (see below). Imports are projected to fall from their peak in 2024 but remain elevated due to the ongoing infrastructure investment. Exports of goods and services (including fishing licenses) are projected to remain at around 58 percent of GDP in the medium and long term. Foreign direct investment is projected to remain limited.

- **Fiscal balance**. The primary fiscal balance improved to a surplus of 9.1 percent of GDP in 2022 due to a large World Bank grant expected in 2021, arriving in early 2022.[5] A small primary fiscal surplus of 1.2 percent is expected in 2023 as new grants from Taiwan Province of China and Australia[6] offset current expenditures that became elevated during the pandemic and remain high. The elevated current expenditures in 2023 are driven by high public sector wage growth as well as the Tuvalu Overseas Medical Referral Scheme (TOMRS). In the medium term, fishing license revenues are projected to plateau at 42 percent of GDP, in line with uncertain weather patterns and the already-high price of fishing licenses that make large future increases unlikely. Fees from the .tv license are projected to fall to 5 percent of GDP given the increasing use of other internet domains. Foreign grants are projected to decline to around 22 percent of GDP (currently exceptionally high at 43 percent, due in part to large one-off grant from Australia) due to the conclusion of the existing investment projects and uncertainty surrounding long-term donor commitments. With falling revenues, total expenditures would gradually decline from around 115 percent of GDP (five-year average) to around 103 percent of GDP. Spending on public sector wages, Tuvalu Overseas Medical Referral Scheme (TOMRS), and scholarship programs is projected to stay elevated, crowding out infrastructure investment, and leading to widening of the general government deficit to just under 10 percent of GDP by 2043.

[5] Without which it would have been a deficit of 4.3 percent of GDP.

[6] The current account has also improved in line with the improved fiscal balance, driven by these two large grants (from Australia, which is once-off, and Taiwan, which is recurring).

- **Government borrowing**. The government is projected to fund fiscal deficits with transfers from the CIF first, subject to the existing rule of leaving at least 16 percent of the TTF maintained value in the CIF. When CIF transfers are insufficient to fund the deficit, the authorities are projected to borrow externally on concessional terms. The Government is adhering to a zero non-concessional borrowing, as per IDA Sustainable Development Financing Policy (SDFP).

8. Realism tools suggests that projections are reasonable (Figures 3 and 4). The paths for public and external debt are projected to rise faster than in the 2021 DSA due to weaker economic growth assumptions as well as well as a lower stock of fiscal buffers when deficits start in 2025(see Text Table 3) The current account, which is highly volatile in a small, fragile economy like Tuvalu, is the main component behind unexpected changes in external debt dynamics. Note that new BOP data have been issued by the authorities covering the years 2013 to present which also accounts for differences from the 2021 DSA (when those data were estimated). A volatile current account was also the most significant driver behind unexpected changes in debt levels in the 2021 DSA. Large residuals are explained by historic financing of the deficit by the CIF. Staff baseline macroeconomic projections incorporate only a brief period of rebound in growth following the re-opening in 2023 and then assume growth returns to potential of just below 2 percent thereafter. This assumption is based on significant structural challenges such as remoteness raising the costs of doing business/trading with the rest of the world, low access to credit, the dominance of the public sector and weak private sector growth. The paths for fiscal adjustment and growth use the last year of data, 2022, where growth was still very weak due to the pandemic and assume a persistence parameter of 0.6. This helps keep the baseline growth response to fiscal expansion in 2023 relatively muted (see figure 4). Capital investment projects are assumed to be supported by donor financing, through the Tuvalu Development Fund (TDF, see Text Box 1) reducing the burden on government revenues.[7] Capital expenditures are expected to remain close to 25 percent in the long term, supporting development goals and climate change adaptation.

[7] Capital expenditures are defined as infrastructure projects that are financed by the TDF given the significant scale of these investments. We project steady-state capital expenditures of 25 percent of GDP. The 2021 DSA did not include TDF projects in capital expenditure. The 2021 DSA projected capital expenditures to fall from 41 percent in 2021 to only 14 percent in 2041.

Text Table 4. Tuvalu: Baseline Macroeconomic Assumptions

(In percent of GDP)

Current DSA	2020	2021	2022	2023	2024	2025	2026	2027	2028	2011-21 Historical Average	2022-2032 Average
Real GDP (in Percent)	-4.3	1.8	0.7	3.9	3.5	2.4	2.2	2.1	2.0	3.7	2.2
GDP Deflator, (percent)	0.2	14.0	-2.4	5.7	3.2	3.1	2.5	3.2	3.0	1.5	2.6
Current Account Balance (in percent of GDP)	16.3	24.1	4.6	2.3	-1.3	-4.3	-4.8	-5.3	-4.8	-3.4	-2.8
Total Revenue (in percent of GDP)	5	-11	7	0	1	-4	0	0	0	6	0
Total Expenditure (in percent of GDP)	12	6	7	7	7	7	7	7	7	10	7
Domestic Current Balance*	0.0	2.5	3.3	1.4	1.4	1.4	1.4	1.4	1.4	0.6	1.6
Exports incl. Fishing licenses (in percent of GDP)	64.8	53.8	49.4	47.5	58.7	58.5	59.8	59.9	60.0	31.1	58.2
Imports (in percent of GDP)	110.0	106.3	97.2	117.2	120.4	120.2	120.8	121.0	120.0	129.4	117.8
Primary Fiscal Balance	8.3	-13.5	9.1	1.2	1.2	-3.2	-3.8	-4.3	-4.8	9.2	-2.5
Fiscal Balance	10.1	20.7	9.5	9.8	9.7	10.2	10.5	10.7	10.9	7.3	10.5
Previous DSA											
Real GDP (in Percent)	1.0	2.5	3.5	3.8	4.0	3.8	3.7	3.5	3.2	4.2	3.3
GDP Deflator, (percent)	0.4	14.2	3.6	3.4	3.2	3.3	3.1	3.1	3.0	2.5	2.9
Current Account Balance	3.8	-4.2	-4.1	-3.3	-3.3	-3.1	-3.0	-2.8	-1.0	-12.4	-2.2
Total Revenue (in percent of GDP)	121	122	107	107	106	105	103	102	101	115	99
Total Expenditure (in percent of GDP)	117	129	110	110	109	109	108	107	107	105	107
Domestic Current Balance*	-41.0	-55.6	-55.6	-55.3	-55.2	-55.0	-54.5	-54.4	-54.2	-42.0	-54.5
Exports incl. Fishing licenses (in percent of GDP)	66.3	54.2	55.3	53.8	53.8	53.8	53.8	53.8	53.8	60.4	53.9
Imports (in percent of GDP)	126.0	116.4	115.2	114.8	114.6	113.0	111.0	108.9	105.5	140.1	108.3
Primary Fiscal Balance	5.0	-6.9	-2.7	-2.6	-3.2	-4.0	-4.5	-5.2	-5.4	8.5	-4.6
Fiscal Balance	5.0	-7.0	-2.8	-2.6	-3.2	-4.1	-4.5	-5.2	-5.4	9.2	-4.7

Source: Country Authorities, IMF Staff estimates

*The fiscal balance excluding fishing license fees and grants, and capital revenues and expenditures.

COUNTRY CLASSIFICATION AND DETERMINATION OF SCENARIO STRESS TESTS

9. **Tuvalu's debt-carrying capacity is classified as weak (Text Table 5)**. The rating is based on the Composite Indicator (CI) index, calculated using the April 2023 WEO data and the World Bank's 2021 Country Policy and Institutional Assessment (CPIA). The CI stands at 2.59, indicating that the country's debt-carrying capacity is weak in the LIC-DSA framework. The CI index in the 2021 DSA was 2.62, also consistent with a weak rating.

Text Table 5. Tuvalu: Country Policy and Institutional Assessment Rating

Components	Coefficients (A)	10-year average values (B)	CI Score components (A*B) = (C)	Contribution of components
CPIA	0.385	2.861	1.10	43%
Real growth rate (in percent)	2.719	2.808	0.08	3%
Import coverage of reserves (in percent)	4.052	57.963	2.35	91%
Import coverage of reserves^2 (in percent)	-3.990	33.597	-1.34	-52%
Remittances (in percent)	2.022	0.794	0.02	1%
World economic growth (in percent)	13.520	2.856	0.39	15%
CI Score			2.59	100%
CI rating			Weak	

10. Based on the CI rating, Tuvalu's debt is assessed against the lowest threshold designated in the context of the LIC DSA (Text Table 6). With "weak" rating, Tuvalu is assessed against a threshold of 35 percent for the PV of total public debt-to-GDP ratio. The other two indicators, the PV of PPG external debt-to-exports ratio and the PPG external debt service-to-exports ratio remain well below their respective threshold values due to the combination of concessional debt, and thus lower debt service costs, and the inclusion of fishing license revenues in the definition of exports. The latter is done to in order to better represent foreign exchange earnings to meet external debt obligations and is consistent with the definition of exports in the 2021 DSA.

Text Table 6. Tuvalu: Debt Thresholds

Debt carrying capacity (CI classification)	PV of PPG external debt in percent of		PPG external debt service in percent of		PV of total public debt
	GDP	Exports	Exports	Revenue	GDP
Weak	30	140	10	14	35
Medium	40	180	15	18	55
Strong	55	240	21	23	70

11. Besides the six standardized stress tests, the analysis incorporates three tailored stress tests and three customized scenarios. They include the contingent liabilities, natural disasters and commodity price. The combined contingent liabilities stress test is described in paragraph 3 above. A natural disaster stress test was also applied, calibrated at a one-time 30 percent of GDP shock to the external debt-to-GDP ratio, a one-off 2 percentage points decline in real GDP growth and the standard 3.5 percentage points shock on exports growth. This tailored stress test was customized in line with the impact of Cyclone Pam in 2015. In addition, the commodity price shock is triggered since commodity exports equal 30 percent of total exports over the previous three-year period. The calibration of the commodity price shock corresponds to default values generated by the DSA template because Tuvalu has limited ability to insure against these price swings (and would thus face the full extent of a one standard deviation shock from current price levels) In addition, three customized scenarios were implemented: a fiscal adjustment scenario, a fishing license revenues shock, and a scenario with strong TTF returns. These are described in paragraph 15 below.

DEBT SUSTAINABILITY

A. Baseline Scenario

12. Tuvalu's risk ratings for both external and public debt indicate a high probability of debt distress in the long-term. Although, the mechanical external and overall risk rating is moderate based on the first 11 years of projections,[8] the final external and overall risk of debt

[8] In the first 11 years of the projection horizon none of the debt burden indicators breach their thresholds under the baseline, and the PV of external and public debt-to-GDP ratio breach their thresholds under the stress tests.

distress is assessed to be high given that the PV of both public and external debt-to-GDP ratios breach their respective thresholds from 2036 onwards. The projection horizons have been extended to 20 years -beyond the standard ten-years- To account for Tuvalu's vulnerability to natural disasters and the effects of climate change on debt dynamics.

13. Under the baseline scenario, the PV of both the external and public debt breach their indicative debt-to-GDP thresholds. Public and external debt is projected to breach the relevant threshold by 2036. The debt trajectory shows steady increases that reflect persistent deficits due to elevated current spending and the need for external funding for infrastructure projects amid declining revenues. Staff assume that the authorities maintain the minimum buffer of 16 percent of the TTF value in the CIF account, and any funds above that threshold are used to finance deficits. All borrowing is external, given limited small size and persistently low asset quality of the domestic banking system. Borrowing is assumed to be conducted on concessional terms over the entire forecast horizon. As a result, the debt service-to-revenue ratio remains very low, peaking at 3 percent, well below the 14 percent of the revenues-to-GDP threshold.

14. Stress tests to both external and public sector debt indicate that debt ratios are highly sensitive to exports, natural disaster and commodity price shocks. We customize the natural disaster shock to be 30 percent of GDP, in line with the impact of Cyclone Pam in 2015. This would result in the present value of Debt-to-GDP rising above the threshold of 30 percent by 2028 and remaining above that level for the remainder of the projection period, however debt service levels would remain well below the 14 percent threshold due to current low debt levels and concessional terms for new debt. A standard export shock results in a very large increase in debt-to-exports and debt service-to-exports crossing the relevant thresholds in 2024 and 2025, respectively. The definition of exports in the DSA includes fishing license revenues, thus the exports shock implies a large drop in this key revenue source and abrupt and large increases in debt. A standard commodity price shock would lead public debt-to-GDP to rise above 30 percent by 2026 due to the high dependence on imported fuel. However, debt service levels remain below the 14 percent threshold under a commodity price shock.

B. Alternative Scenarios

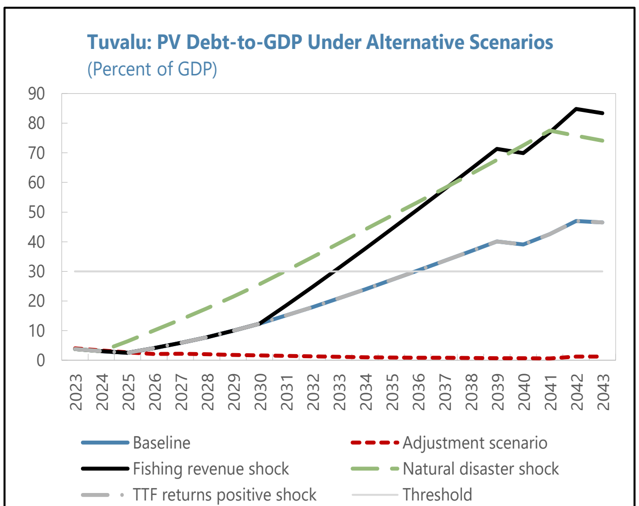
15. Alternative scenarios are also considered to examine the impact of potential upside and downside risks on Tuvalu's debt profile. They reflect a combination of tailored stress tests and fully customized scenarios:

- **Adjustment scenario**. Authorities pursue a fiscal anchor of 40 percent deficit for the domestic current balance through the unwinding of the sharp increase in goods and services spending of 2021; reducing spending on the TOMRS rationalizing overseas scholarships; reviewing all subsidies, replacing untargeted ones with means-tested transfers while phasing out price controls. This would raise domestic buffers to 60 percent of GDP by 2043. Such buffers would be sufficient to cover most shocks, including a sharp fall in fishing revenues and a natural disaster shock.

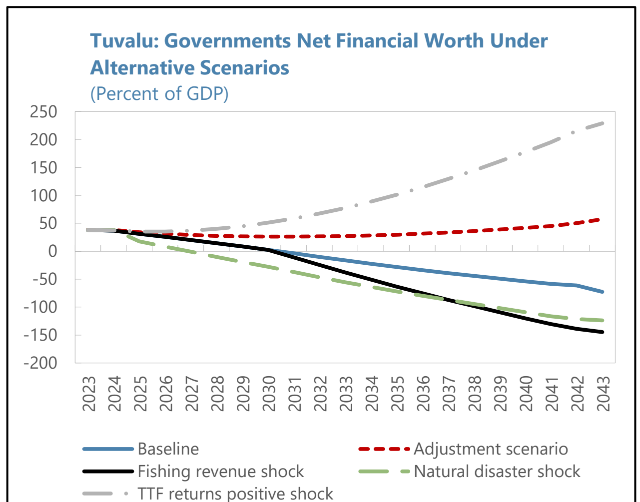
- **Fishing licenses revenue shock**. Fishing licenses revenue falls to 35 percent of GDP (from 42 percent) after 2031 to reflect climate shocks that could affect tuna stocks. This shock would widen the deficit by 7.3 percent of GDP in 2031 and push the deficit to 18 percent by 2043.

- **Natural disaster.** We consider a natural disaster shock based on a cyclone similar in scale to the 2015 Cyclone Pam hitting the island in 2024, causing a damage of 30 percent of GDP[9]. Recovery and rehabilitation programs are projected to take five years, widening the fiscal deficit to 9.5 percent of GDP in 2029, (compared to 5 percent of GDP in the baseline) and add around 3 percent to the deficit in 2032-36. The higher fiscal deficits would accelerate the depletion of fiscal buffers, causing the present value of debt-to-GDP to breach its threshold by 2031 resulting in a high mechanical risk of debt distress.

- **Strong TTF returns**. Baseline projections assume performance of the TTF is in line with Australian CPI. This scenario supposes that TTF returns exceed that inflation benchmark by 1 percent. This creates additional fiscal space through transfers to the CIF and reduces debt to below 1 percent by 2032. The TTF and CIF are 186 and 99 percent of GDP, respectively, by 2035 (versus 164 and 21.5 percent in the baseline). Thus, strong returns in the TTF translate into a large sovereign fund (CIF), creating significant fiscal space.



Source: Tuvalu authorities and IMF Staff calculations.



Source: Tuvalu authorities and IMF Staff calculations.

RISK RATING AND VULNERABILITIES

16. Tuvalu remains at high risk of debt distress, similar to the conclusion of the 2021 DSA. Under the baseline scenario, Tuvalu would face persistent budget deficits due to elevated current

[9] The GDP estimate for this shock taken from the 2021 Tuvalu Article IV and is consistent with estimates published by the World Bank (https://www.worldbank.org/en/news/press-release/2015/09/15/tuvalu-gets-continued-support-for-cyclone-pam-recovery).

spending and the need to maintain infrastructure spending while fishing revenues and grants do not grow fast enough to offset growth in expenditures. Due to the weak performance of the TTF in 2022, no deposit could be made into the CIF and projected deficits would entail an increase in concessional debt as soon as 2026. The debt trajectory highlights the importance of raising the domestic current balance (revenues less expenditures excluding grants, fishing revenues and capital expenditures) to lower the risk of debt distress while creating fiscal space to maintain buffers and allow for climate adaptation efforts.[10] Two prominent climate adaption projects are the Tuvalu Coastal Adaptation Project (TCAP), financed by the Green Climate Fund and currently underway, which is a land reclamation project and raised sea wall; the Long Term Adaption Plan (L-TAP) is aims to create raised, safe land, provide safe drinking water and renewable energy[11]. Higher spending efficiency and domestic revenue mobilization efforts would help.

17. Despite the risk rating, debt is assessed as sustainable, given concessional sources and low debt service burden. Despite remaining in permanent breach of the debt-to-GDP threshold after 2035, debt is assessed as sustainable primarily because all debt is on concessional terms, and debt service indicators remain well below their relevant thresholds. Indeed, the debt-to-GDP threshold is only breached after 13 years. Projections for a 20-year period are inherently uncertain especially so in the case where data quality is low, suggesting further down weighting is appropriate for far off horizons when assessing sustainability.

A. Authorities' Views

18. The authorities agreed with the DSA assessment. The long run risks associated with climate change pose significant risks to debt sustainability as do large natural disasters. However, no new debt has been taken on since 2019 and overall external debt has been decreasing in recent years. The elevated domestic current deficit has been driven by exceptional items such as the once-in-50-year land-lease renegotiation as well as the restructuring of the public sector pay in 2023. Going forward current expenditure is expected to moderate and support macro-fiscal sustainability.

19. The authorities noted that, to mitigate risks, they do not plan to incur any new non-concessional debt over short- to medium-term in line with the IDA SDFP for FY2023. To promote transparency on contingent liabilities, the authorities have institutionalized, in April 2023, the annual disclosure of fiscal risks – the second FY23 Performance and Policy Action under SDFP.[12]

[10] The Government of Tuvalu's Policy Reform Matrix May 2023 aims to pilot climate tagging for select ministries/departments for the 2024 budget and follow a phased approach for full implementation, with a goal to increase budget programs linked to Government's climate change priorities in the medium term. However, a large proportion of climate adaption expenditure is donor funded and is off-budget - funded by the TDF -estimated between 25-50 percent of capital expenditures in a given year.

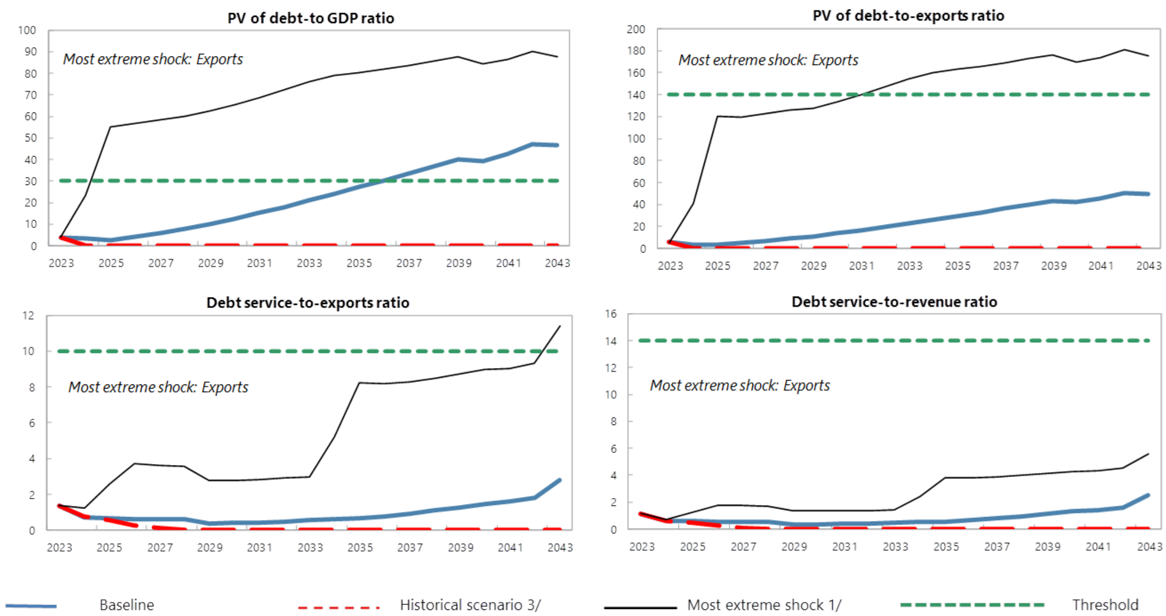
[11] Greater details on the TCAP and L-TAP can be found in the 2023 IMF Article IV, appendix I.

[12] While the authorities have completed the FY23 PPAs, the Bank's implementation assessment has not been completed yet.

The fiscal risk reports will be prepared using an incremental coverage approach,[13] and published as a stand-alone report on the Ministry of Finance's (MOF) website. The authorities plan to rely on grants from development partners to fund infrastructure projects, which would help contain fiscal risks. Planned reforms to the budget formulation, execution, and reporting processes should help improve fiscal planning and ensure that expenditures are kept within the planned budgetary allocations.

[13] Considering low capacity and assuming continued training of relevant staff, the first fiscal risk report will analyze debt-related risks and contingent liabilities of two SOEs. The authorities are expected to achieve full coverage for the report by 2027.

Figure 1. Tuvalu: Indicators of Public and Publicly Guaranteed External Debt under Alternative Scenarios, 2023-2043



Customization of Default Settings	Size	Interactions
Standardized Tests	Yes	
Tailored Stress		
Combined CL	Yes	
Natural disaster	Yes	Yes
Commodity price 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 on additional financing needs resulting from the 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	1.1%	1.1%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	36	36
Avg. grace period	9	9

* 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.

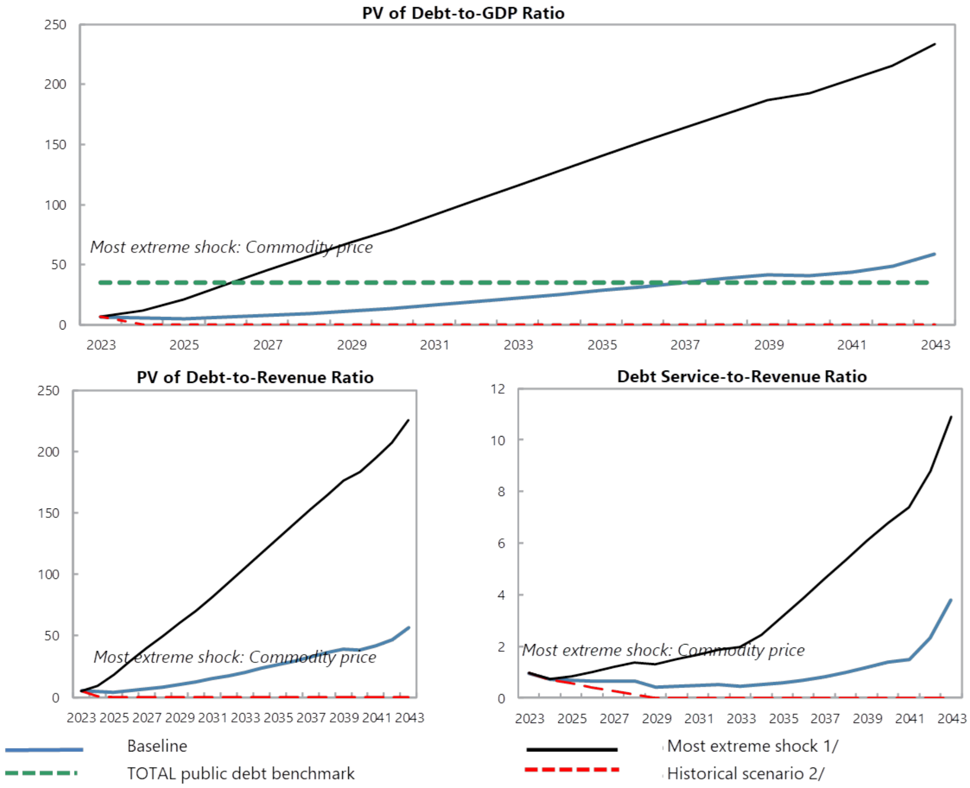
Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2033. 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.

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.

3/ Because of Tuvalu's strong surpluses in the past and the current account is projected to deteriorate, the historical scenario does not produce meaningful results to asses risk of debt distress and therefore its results have been truncated at zero.

Figure 2. Tuvalu: Indicators of Public Debt Under Alternative Scenarios, 2023-2043



Borrowing assumptions on additional financing needs resulting from the stress tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	99%	99%
Domestic medium and long-term	1%	1%
Domestic short-term	0%	0%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	1.1%	1.1%
Avg. maturity (incl. grace period)	36	36
Avg. grace period	9	9
Domestic MLT debt		
Avg. real interest rate on new borrowing	-2.5%	-2.5%
Avg. maturity (incl. grace period)	12	12
Avg. grace period	0	0
Domestic short-term debt		
Avg. real interest rate	0.0%	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.

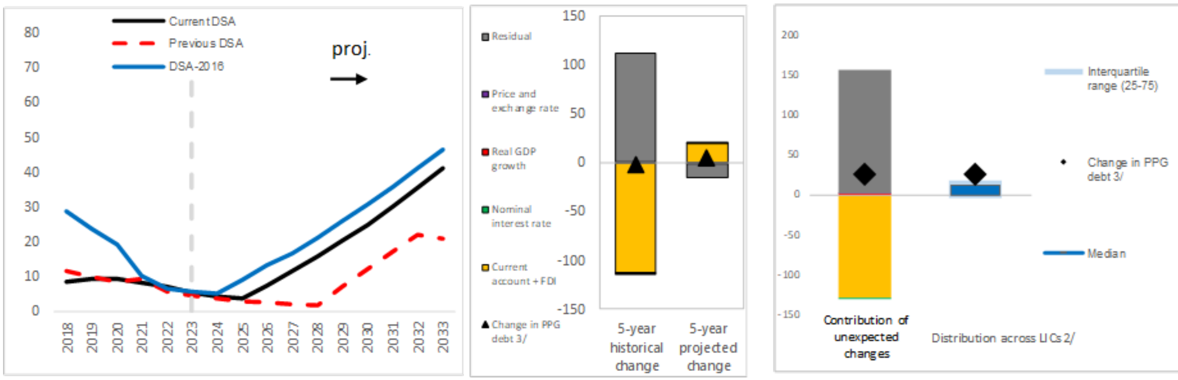
1/ The most extreme stress test is the test that yields the highest ratio in or before 2033. The stress test with a one-off breach is also presented (if any), while the one-off breach is deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most exterme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

2/ Because of Tuvalu's strong surpluses in the past and the fiscal balance is projected to deteriorate, the historical scenario does not produce menaningful results to assess risk of debt distress and therefore its results have been truncated at zero.

Figure 3. Tuvalu: Drivers of Debt Dynamics: External Scenario

External Debt

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

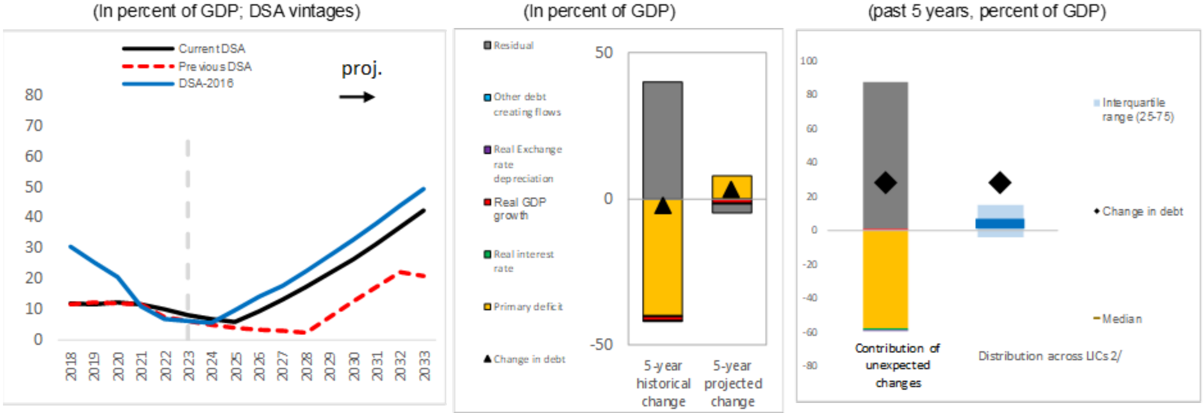
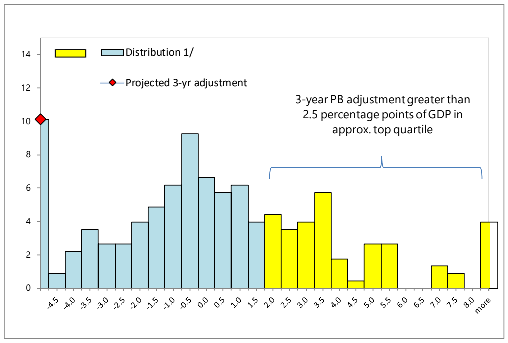


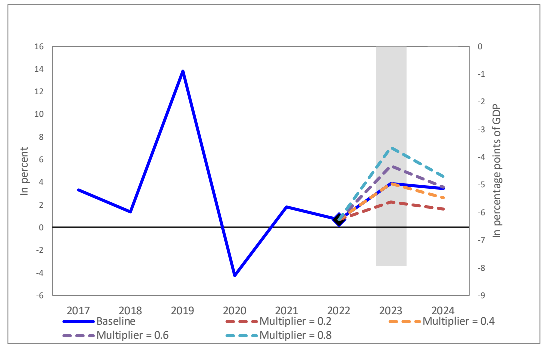
Figure 4. Tuvalu: Realism Tools

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



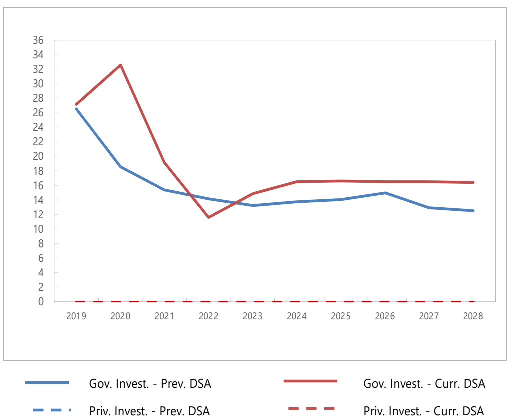
1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

Fiscal Adjustment and Possible Growth Paths 1/



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

Public and Private Investment Rates
(percent of GDP)



Contribution to Real GDP growth
(percent, 5-year average)

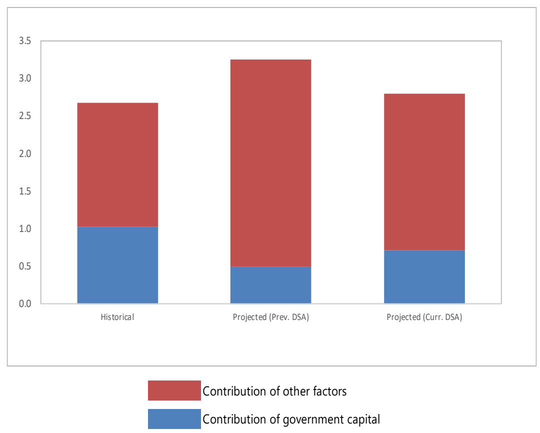
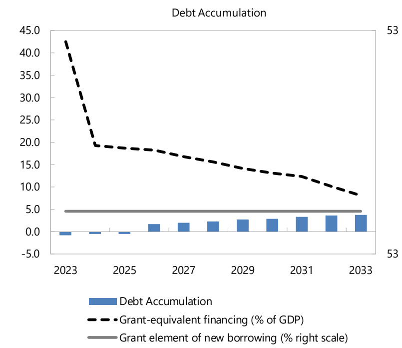


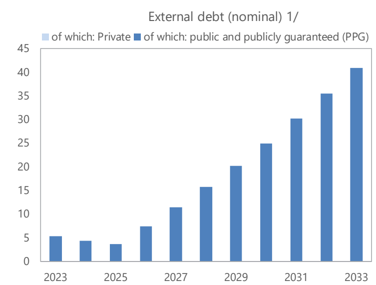
Table 1. Tuvalu: External Debt Sustainability Framework, Baseline Scenario, 2020-2043
(In percent of GDP, unless otherwise indicated)

(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 8/	
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2033	2043	Historical	Projections
External debt (nominal) 1/	**9.2**	**8.0**	**6.9**	**5.3**	**4.4**	**3.6**	**7.4**	**11.4**	**15.8**	**40.9**	**81.4**	**11.2**	**18.1**
of which: public and publicly guaranteed (PPG)	**9.2**	**8.0**	**6.9**	**5.3**	**4.4**	**3.6**	**7.4**	**11.4**	**15.8**	**40.9**	**81.4**	**11.2**	**18.1**
Change in external debt	-0.2	-1.2	-1.1	-1.6	-0.9	-0.8	3.8	4.1	4.3	5.5	-3.0		
Identified net debt-creating flows	**-23.4**	**-35.4**	**-6.5**	**-4.5**	**0.6**	**6.7**	**7.0**	**7.5**	**6.7**	**6.2**	**8.5**	**-12.4**	**4.6**
Non-interest current account deficit	**-23.9**	**-34.2**	**-6.7**	**-4.4**	**0.7**	**6.8**	**7.0**	**7.6**	**6.8**	**6.5**	**9.0**	**-12.2**	**4.8**
Deficit in balance of goods and services	-17.8	0.1	-12.0	6.1	-8.9	-10.7	-14.2	-14.8	-15.7	-19.1	-20.5	**-20.5**	**-13.9**
Exports	93.9	71.5	71.1	68.9	86.0	86.4	89.1	89.6	90.0	92.7	94.1		
Imports	76.1	71.7	59.1	75.0	77.1	75.7	74.9	74.8	74.3	73.6	73.6		
Net current transfers (negative = inflow)	-53.9	-61.4	-38.5	-71.7	-61.5	-57.1	-55.9	-55.6	-55.4	-53.3	-47.3	**-51.9**	**-57.1**
of which: official	-56.5	-65.5	-41.7	-74.6	-64.1	-59.5	-58.2	-57.7	-57.4	-54.8	-48.1		
Other current account flows (negative = net inflow)	47.7	27.0	43.8	61.2	71.1	74.5	77.1	77.9	77.8	78.9	76.9	**60.2**	**75.7**
Net FDI (negative = inflow)	**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**
Endogenous debt dynamics 2/	**0.5**	**-1.2**	**0.2**	**-0.2**	**-0.1**	**-0.1**	**0.0**	**-0.1**	**-0.1**	**-0.3**	**-0.5**		
Contribution from nominal interest rate	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.4	0.9		
Contribution from real GDP growth	0.4	-0.1	-0.1	-0.2	-0.2	-0.1	-0.1	-0.1	-0.2	-0.6	-1.4		
Contribution from price and exchange rate changes	0.0	-1.1	0.2	...	...	...	...	...	...	...	...		
Residual 3/	**23.3**	**34.2**	**5.3**	**2.9**	**-1.5**	**-7.5**	**-3.2**	**-3.4**	**-2.3**	**-0.7**	**-11.6**	**11.2**	**-1.5**
of which: exceptional financing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.3		
Sustainability indicators													
PV of PPG external debt-to-GDP ratio	**...**	**...**	**4.9**	**3.8**	**3.1**	**2.5**	**4.1**	**5.8**	**7.8**	**20.9**	**46.5**		
PV of PPG external debt-to-exports ratio	**...**	**...**	**6.9**	**5.5**	**3.6**	**2.9**	**4.6**	**6.5**	**8.6**	**22.5**	**49.4**		
PPG debt service-to-exports ratio	**1.4**	**1.4**	**1.4**	**1.3**	**0.7**	**0.7**	**0.6**	**0.6**	**0.6**	**0.5**	**2.7**		
PPG debt service-to-revenue ratio	**1.3**	**1.1**	**1.1**	**1.1**	**0.6**	**0.6**	**0.5**	**0.5**	**0.6**	**0.5**	**2.5**		
Gross external financing need (Million of U.S. dollars)	-11.7	-20.0	-3.4	-2.2	0.9	5.4	5.8	6.6	6.2	7.3	19.1		
Key macroeconomic assumptions													
Real GDP growth (in percent)	-4.3	1.8	0.7	3.9	3.5	2.4	2.2	2.1	2.0	1.8	1.8	**3.6**	**2.3**
GDP deflator in US dollar terms (change in percent)	0.2	14.0	-2.4	5.7	3.2	3.1	2.5	3.2	3.0	2.1	2.3	**1.0**	**3.0**
Effective interest rate (percent) 4/	0.8	1.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	**1.5**	**1.0**
Growth of exports of G&S (US dollar terms, in percent)	-7.9	-11.5	-2.4	6.4	33.3	6.1	8.1	5.9	5.5	4.1	4.2	**18.6**	**8.2**
Growth of imports of G&S (US dollar terms, in percent)	-13.5	9.3	-19.1	39.4	9.7	3.8	3.6	5.1	4.4	4.0	4.1	**16.9**	**7.9**
Grant element of new public sector borrowing (in percent)	...	...	...	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	**...**	**52.6**
Government revenues (excluding grants, in percent of GDP)	104.9	93.6	97.5	81.1	102.9	97.5	99.0	99.9	100.7	104.9	102.3	**95.7**	**99.4**
Aid flows (in Million of US dollars) 5/	17.5	9.8	18.2	27.7	13.4	13.6	15.6	15.4	15.3	12.0	3.0		
Grant-equivalent financing (in percent of GDP) 6/	...	...	...	42.6	19.3	18.6	18.2	16.8	15.5	8.2	1.6	**...**	**17.2**
Grant-equivalent financing (in percent of external financing) 6/	...	...	...	100.0	100.0	100.0	89.7	87.9	86.0	71.3	84.4	**...**	**87.3**
Nominal GDP (Million of US dollars)	52	60	59	65	69	73	77	81	85	105	156		
Nominal dollar GDP growth	-4.1	16.0	-1.8	9.8	6.7	5.6	4.8	5.3	5.1	4.0	4.1	**4.5**	**5.4**
Memorandum items:													
PV of external debt 7/	...	...	4.9	3.8	3.1	2.5	4.1	5.8	7.8	20.9	46.5		
In percent of exports	...	...	6.9	5.5	3.6	2.9	4.6	6.5	8.6	22.5	49.4		
Total external debt service-to-exports ratio	1.4	1.4	1.4	1.3	0.7	0.7	0.6	0.6	0.6	0.5	2.7		
PV of PPG external debt (in Million of US dollars)			2.9	2.5	2.2	1.8	3.1	4.7	6.6	21.9	72.7		
(PVt-PVt-1)/GDPt-1 (in percent)				-0.8	-0.5	-0.5	1.7	2.1	2.3	3.8	1.3		
Non-interest current account deficit that stabilizes debt ratio	-23.7	-33.1	-5.6	-2.7	1.6	7.5	3.3	3.5	2.4	1.0	12.1		

Definition of external/domestic debt	**Residency-based**
Is there a material difference between the two criteria?	**Yes**





Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as $[r - g - \rho(1+g) + \varepsilon\alpha(1+r)]/(1+g+\rho+g\rho)$ times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, ρ = growth rate of GDP deflator in U.S. dollar terms, Ɛ=nominal appreciation of the local currency, and α= share of local currency-denominated external debt in total external debt.

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.

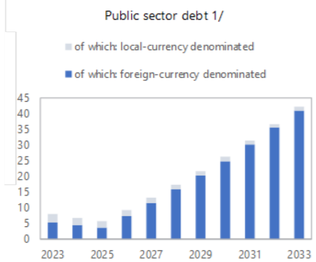
8/ Historical averages are generally derived over the past 10 years, subject to data availability, whereas projections averages are over the first year of projection and the next 10 years.

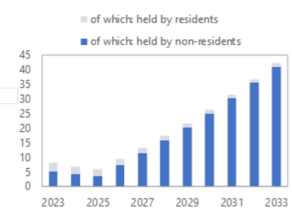
Table 2. Tuvalu: Public Sector Debt Sustainability Framework, Baseline Scenario, 2020-2043
(In percent of GDP, unless otherwise indicated)

(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 6/	
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2033	2043	Historical	Projections
Public sector debt 1/	12.2	11.5	10.1	8.0	6.8	5.8	9.3	13.2	17.4	42.2	93.3	12.9	19.9
of which: external debt	9.2	8.0	6.9	5.3	4.4	3.6	7.4	11.4	15.8	40.9	81.4	11.2	18.1
Change in public sector debt	0.6	-0.6	-1.5	-2.1	-1.2	-1.0	3.5	3.9	4.2	5.5	7.6		
Identified debt-creating flows	-14.3	13.1	-9.4	-1.9	-1.7	2.8	3.5	3.9	4.3	5.5	7.9	-11.7	3.3
Primary deficit	-14.0	13.2	-9.4	-1.5	-1.4	3.0	3.6	4.1	4.6	6.5	8.8	-11.5	3.7
Revenue and grants	138.6	109.9	128.2	123.6	122.2	116.2	114.8	114.1	113.4	109.4	103.6	123.9	114.4
of which: grants	33.7	16.2	30.7	42.6	19.3	18.6	15.9	14.2	12.7	4.5	1.3		
Primary (noninterest) expenditure	124.7	123.0	118.8	122.2	120.8	119.2	118.4	118.3	118.1	115.9	112.4	112.4	118.2
Automatic debt dynamics	-0.4	0.0	0.0	-0.5	-0.3	-0.2	-0.1	-0.2	-0.3	-1.0	-0.9		
Contribution from interest rate/growth differential	0.5	-0.2	-0.2	-0.5	-0.3	-0.2	-0.1	-0.2	-0.3	-1.0	-0.9		
of which: contribution from average real interest rate	-0.1	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	-0.1	-0.3	0.5		
of which: contribution from real GDP growth	0.5	-0.2	-0.1	-0.4	-0.3	-0.2	-0.1	-0.2	-0.3	-0.7	-1.5		
Contribution from real exchange rate depreciation	-0.8	0.2	0.2	...	...	...	...	...	...	...	...		
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	14.9	-13.7	7.9	-0.1	0.5	-3.9	0.1	0.0	-0.1	0.0	-0.2	10.7	-0.3
Sustainability indicators													
PV of public debt-to-GDP ratio 2/	...	...	8.2	6.5	5.5	4.7	6.0	7.6	9.4	22.2	58.5		
PV of public debt-to-revenue and grants ratio	...	...	6.4	5.3	4.5	4.0	5.2	6.6	8.3	20.3	56.5		
Debt service-to-revenue and grants ratio 3/	1.0	1.2	1.0	1.0	0.7	0.7	0.6	0.6	0.6	0.5	3.8		
Gross financing need 4/	-12.6	14.5	-8.1	-0.3	-0.6	3.8	4.3	4.9	5.4	7.1	12.7		
Key macroeconomic and fiscal assumptions													
Real GDP growth (in percent)	-4.3	1.8	0.7	3.9	3.5	2.4	2.2	2.1	2.0	1.8	1.8	3.6	2.3
Average nominal interest rate on external debt (in percent)	0.8	1.1	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.5	1.0
Average real interest rate on domestic debt (in percent)	-0.9	1.5	-0.7	-1.2	0.8	0.8	1.3	1.5	1.7	-2.1	105.4	-2.7	0.9
Real exchange rate depreciation (in percent, + indicates depreciation)	-8.3	2.3	2.2	...	...	...	...	...	...	...	...	1.6	...
Inflation rate (GDP deflator, in percent)	0.9	4.7	5.5	6.0	4.0	3.9	3.5	3.2	3.0	2.1	2.3	4.9	3.2
Growth of real primary spending (deflated by GDP deflator, in percent)	5.9	0.4	-2.7	6.8	2.3	1.0	1.6	1.9	1.9	1.6	1.5	8.8	2.1
Primary deficit that stabilizes the debt-to-GDP ratio 5/	-14.6	13.8	-7.9	0.6	-0.2	4.0	0.1	0.3	0.4	1.0	1.1	-2.9	0.8
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	**Residency-based**
Is there a material difference between the two criteria?	**Yes**





Sources: Country authorities; and staff estimates and projections.
1/ Coverage of debt: The central government, government-guaranteed debt, non-guaranteed SOE debt . Definition of external debt is Residency-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 3. Tuvalu: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2023-2043

(In percent of GDP, unless otherwise indicated)

	Projections 1/																				
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
PV of debt-to GDP ratio																					
Baseline	4	3	3	4	6	8	10	12	15	18	21	24	27	**30**	**33**	**37**	**40**	**39**	**43**	**47**	**46**
A. Alternative Scenarios																					
A1. Key variables at their historical averages in 2023-2033 2/	4	-3	-13	-21	-28	-35	-41	-47	-53	-58	-64	-70	-75	-79	-84	-88	-91	-99	-102	-104	-111
B. Bound Tests																					
B1. Real GDP growth	4	3	3	5	7	9	12	14	18	21	24	28	**32**	**35**	**39**	**43**	**47**	**46**	**50**	**55**	**54**
B2. Primary balance	4	10	16	17	19	21	23	25	28	**31**	**34**	**37**	**39**	**42**	**45**	**48**	**51**	**50**	**53**	**57**	**57**
B3. Exports	4	24	**56**	**57**	**59**	**61**	**63**	**66**	**69**	**73**	**77**	**79**	**81**	**83**	**84**	**86**	**88**	**85**	**87**	**91**	**88**
B4. Other flows 3/	4	15	24	25	27	29	**31**	**33**	**36**	**38**	**41**	**44**	**46**	**48**	**51**	**53**	**55**	**53**	**56**	**60**	**58**
B5. Depreciation	4	3	3	5	6	9	11	14	17	20	23	27	**30**	**34**	**37**	**41**	**45**	**43**	**47**	**52**	**52**
B6. Combination of B1-B5	4	25	**34**	**36**	**37**	**39**	**41**	**44**	**47**	**50**	**53**	**56**	**58**	**60**	**62**	**64**	**66**	**64**	**66**	**70**	**68**
C. Tailored Tests																					
C1. Combined contingent liabilities	4	6	5	6	8	10	12	15	17	20	23	26	29	**33**	**36**	**39**	**42**	**41**	**45**	**49**	**49**
C2. Natural disaster	4	19	19	21	24	26	30	**33**	**37**	**41**	**45**	**49**	**53**	**57**	**62**	**66**	**70**	**70**	**75**	**81**	**81**
C3. Commodity price	4	7	11	13	16	19	22	25	29	**33**	**37**	**41**	**44**	**48**	**52**	**56**	**60**	**59**	**63**	**68**	**68**
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
PV of debt-to-exports ratio																					
Baseline	5	4	3	5	6	9	11	13	16	19	23	26	29	33	36	39	43	42	45	50	49
A. Alternative Scenarios																					
A1. Key variables at their historical averages in 2023-2033 2/	5	-4	-15	-23	-32	-39	-45	-51	-57	-63	-69	-75	-80	-85	-90	-94	-98	-106	-109	-111	-118
B. Bound Tests																					
B1. Real GDP growth	5	4	3	5	6	9	11	13	16	19	23	26	29	33	36	39	43	42	45	50	49
B2. Primary balance	5	11	18	20	21	23	25	27	30	33	36	40	42	46	49	52	55	53	57	61	60
B3. Exports	5	41	121	120	123	126	128	133	**140**	**147**	**155**	**160**	**163**	**166**	**169**	**172**	**176**	**169**	**173**	**180**	**175**
B4. Other flows 3/	5	18	28	29	30	32	33	36	39	42	45	47	50	52	54	57	59	57	60	63	62
B5. Depreciation	5	4	3	5	6	9	11	13	16	19	23	26	29	33	36	39	43	42	45	50	49
B6. Combination of B1-B5	5	38	36	54	56	58	60	63	68	72	77	80	83	86	88	92	95	91	95	100	97
C. Tailored Tests																					
C1. Combined contingent liabilities	5	6	6	7	9	11	13	16	19	22	25	28	32	35	38	42	45	44	48	53	52
C2. Natural disaster	5	22	22	24	27	30	32	36	40	44	48	53	57	62	66	71	76	76	80	86	87
C3. Commodity price	5	9	14	16	18	21	24	28	32	36	40	44	48	53	57	61	65	64	68	74	73
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140
Debt service-to-exports ratio																					
Baseline	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	2	2	3
A. Alternative Scenarios																					
A1. Key variables at their historical averages in 2023-2033 2/	1	1	1	0	0	0	-1	-1	-1	-1	-1	-1	-2	-3	-3	-3	-4	-4	-4	-4	-4
B. Bound Tests																					
B1. Real GDP growth	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	2	2	3
B2. Primary balance	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	3	3
B3. Exports	1	1	3	4	4	4	3	3	3	3	3	5	8	8	8	9	9	9	9	9	**11**
B4. Other flows 3/	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	3	3	3	3	4
B5. Depreciation	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	2	2	3
B6. Combination of B1-B5	1	1	2	2	2	2	1	1	1	1	2	3	4	4	4	4	4	5	5	5	6
C. Tailored Tests																					
C1. Combined contingent liabilities	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	2	2	3
C2. Natural disaster	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	3
C3. Commodity price	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	3	3	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.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Debt service-to-revenue ratio																					
Baseline	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1	1	1	1	2	3
A. Alternative Scenarios																					
A1. Key variables at their historical averages in 2023-2033 2/	1	1	0	0	0	0	-1	-1	-1	-1	-1	-1	-2	-2	-3	-3	-3	-3	-4	-4	-4
B. Bound Tests																					
B1. Real GDP growth	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	2	2	2	3
B2. Primary balance	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	3
B3. Exports	1	1	1	2	2	2	1	1	1	1	1	2	4	4	4	4	4	4	4	5	6
B4. Other flows 3/	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	3	4
B5. Depreciation	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	2	2	3
B6. Combination of B1-B5	1	1	1	1	1	1	1	1	1	1	1	2	2	2	3	3	3	3	3	3	4
C. Tailored Tests																					
C1. Combined contingent liabilities	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	2	3
C2. Natural disaster	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	3
C3. Commodity price	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	3	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.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14

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

INTERNATIONAL MONETARY FUND

TUVALU

June 23, 2023

STAFF REPORT FOR THE 2023 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

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

CONTENTS

FUND RELATIONS

(As of April 30, 2023)

Membership Status
Joined June 24, 2010; Article VIII

General Resource Account

	SDR Million	% Quota
Quota	2.50	100.00
Fund holdings of currency (Exchange Rate)	1.89	75.60
Reserve Tranche Position	0.61	24.40

SDR Department

	SDR Million	% Allocation
Net cumulative allocation	4.08	100.00
Holdings	3.48	0.85

Outstanding Purchases and Loans: None

Financial Arrangements: None

Projected Payments to the Fund: None

Exchange Arrangements
Tuvalu's legal tender is the Australian dollar. There is no central monetary institution. The National Bank of Tuvalu (NBT) is the only commercial bank in Tuvalu handling foreign exchange transactions. Tuvalu is an Article VIII member and does not maintain exchange restrictions or multiple currency practices subject to Fund approval under Article VIII, Sections 2(a) and 3, respectively.

Article IV Consultation
The previous Article IV consultation discussions were held virtually in April 2021.The staff report (IMF Country Report No. 2021/176) was discussed by the Executive Board on July 19, 2021. Tuvalu is on a 24-month consultation cycle.

Technical Assistance
Pacific Financial Technical Assistance Centre (PFTAC) has provided assistance on tax policy and administration (2007, 2008, 2010, 2016, 2017, 2019-2022); financial sector supervision (2008, 2016, 2017, 2019, 2020, 2022); and balance of payments and national accounts statistics (2006, 2008-10, 2012-22).

Resident Representative
The Regional Resident Representative Office for Pacific Islands is based in Suva, Fiji and was opened on September 13, 2010. The office covers Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu. Mr. Neil Saker is the current resident representative.

RELATIONS WITH OTHER INTERNATIONAL FINANCIAL INSTITUTIONS

World Bank Group:

http://projects.worldbank.org/search?lang=en&searchTerm=&countrycode_exact=TV

Asian Development Bank: https://www.adb.org/countries/tuvalu/main

Pacific Financial Technical Assistance Center:
https://www.pftac.org/content/PFTAC/en1/reports11.html#tab_5

RELATIONS WITH PACIFIC FINANCIAL TECHNICAL ASSISTANCE CENTRE (PFTAC)

(As of May 2023)

Technical assistance is provided by the Pacific Financial Technical Assistance Center (PFTAC). Given its small size and limited absorptive capacity, Tuvalu has been a moderate recipient of technical assistance, but the numbers of days provided by PFTAC rose from 61 days in FY2018 to 96 days in FY2019 and has remained broadly at the same level in subsequent years. PFTAC has recently provided assistance on Macroeconomic Programming and Analysis, Real Sector and Finance Statistics, Public Financial Management and Revenue Administration, and Financial Sector Supervision.

Technical assistance was delivered throughout the COVID-19 pandemic. All PFTAC operations in Tuvalu have been conducted remotely between FY2021 and November 2022, and some planned missions had to be delayed. By end November 2022, missions started to be conducted in person again. A total of 109 days of technical assistance were provided during FY2022.

The workplan for FY2023 focuses on the same areas as in previous years. It includes missions to: (i) follow up on the enhancement of prudential and risk management standard and review off-site financial risks analysis, (ii) update GDP compilation and improve used methods and data sources, (iii) implement quarterly budget execution reporting, and (iv) improve tax audits and revenue administration, implement and enhance compliance improvement strategy, and managing large taxpayers.

STATISTICAL ISSUES

(As of May 2023)

I. Assessment of Data Adequacy for Surveillance	
General: Data provided to the Fund have serious shortcomings that significantly hamper surveillance. Shortcomings are the most serious in the national accounts and monetary statistics. PFTAC and STA have provided TA to the Central Statistics Division (CSD) of the Ministry of Finance (MoF) to help compile statistics for surveillance and the authorities' own policy analysis and formulation. The CSD will need to train additional staff to improve data provisioning.	
National Accounts: With PFTAC assistance, the compilation methodology for the national accounts has been gradually improving but capacity weakness hinders timely dissemination. Attention needs to be paid to improving source data to reduce the reliance on fixed ratios and other assumptions over long periods of time. GDP has been updated to 2021.	
Price Statistics: The CPI is the only price index compiled in Tuvalu. The CPI expenditure weights are expected to be adjusted for 2024 as the household income and expenditure survey field works were completed in 2022 and the reports are expected to be completed and released in 2023. Ideally, weights should be adjusted every five years to ensure that the index remains representative of current expenditure patterns.	
Government Finance Statistics (GFS): Tuvalu neither compiles nor publishes GFS data. However, the MoF issues monthly fiscal statements (of central government data) for budget analysis and control and apply IPSAS (cash) and IFRS (accrual) accounting standards for public sector entities. The classification of current, capital and special development expenditures needs to be improved to be in line with international standards. Specific focus and attention should be given to fill existing gaps in debt and aid data sources, particularly the operation of the Tuvalu Development Fund. Resumption of the publication of debt bulletins is a priority, including debt of public enterprises. Staff resource levels remain an impediment to efficient and effective GFS data compilation. With continued PFTAC support and supplementation and full operation of the new FMIS around July 2021, the CSD may compile and disseminate annual GFS for the upcoming GFS yearbook and quarterly GFS in the near term.	
Monetary and Financial Statistics: Tuvalu uses the Australian dollar as its legal tender and does not have a central bank. Monetary and financial statistics are currently not produced in Tuvalu. The National Bank, the Development Bank and the Tuvalu National Provident Fund provided the Article IV mission with their balance sheets, which were used to produce the monetary data on the financial sector. **Financial Sector Surveillance:** Financial Soundness Indicators (FSIs): Tuvalu does not compile FSIs.	
Balance of Payments (BOP) and International Investment Position (IIP): A TA mission was held in March 2023 to improve the external sector statistics (ESS) and assist CSD to compile the statistics. The authorities provided the Article IV mission with the external sector statistics that were revised and updated since 2013.	
II. Data Standards and Quality	
Tuvalu began participating in the General Data Dissemination System (GDDS) in 2013 and joined the enhanced GDDS (e-GDDS) as of May 2015.	No Reports on the Observance of Standards and Codes (ROSC) for Tuvalu are available.
III. Reporting to STA	
Annual balance of payments and IIP statements, both in BPM6 format, were submitted to STA in May 2014 for the first time.	

Tuvalu: Table of Common Indicators Required for Surveillance
(As of May 2023)

	Date of Latest Observation	Date Received	Frequency of Data[8]	Frequency of Reporting[8]	Frequency of Publication[8]
Exchange rates[1]	04/2023	04/2023	D	NA	NA
International reserve assets and reserve liabilities of the monetary authorities[2]	12/2022	04/2023	M	I	NA
Reserve/base money[3]	NA	NA	NA	NA	NA
Broad money[3]	NA	NA	NA	NA	NA
Central bank balance sheet[3]	NA	NA	NA	NA	NA
Consolidated balance sheet of the banking system	12/2022	04/2023	M	I	NA
Interest rates	NA	NA	NA	NA	NA
Consumer price index	12/2022	04/2023	Q	Q	NA
Revenue, expenditure, balance, and composition of financing[4]—general government[5]	NA	NA	NA	NA	NA
Revenue, expenditure, balance, and composition of financing[4]—central government	12/2022	04/2023	Q	Q	Q
Stocks of central government and central government-guaranteed debt[6]	12/2022	04/2023	A	A	NA
External current account balance	12/2022	04/2023	A	A	A
Exports and imports of goods and services	12/2022	04/2023	A	A	A
GDP/GNP	12/2021	04/2023	A	A	NA
Gross external debt	12/2022	04/2023	A	A	NA
International investment position[7]	12/2022	04/2023	A	A	A

[1]Tuvalu uses the Australian dollar as its legal tender.
[2] 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.
[3]Tuvalu does not have a monetary authority. Foreign assets of National Bank of Tuvalu and the Consolidated Investment Fund constitute the official reserves of Tuvalu.
[4] Foreign, domestic bank, and domestic nonbank financing.
[5]The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments. Data on local government operations (kaupules) are not compiled but constitute a very small portion of general government operations. For analytical purposes, central government data are a close proxy to general government operations.
[6] Including currency and maturity composition.
[7] Includes external gross financial asset and liability positions vis-à-vis nonresidents.
[8]Daily (D); weekly (W); monthly (M); quarterly (Q); annually (A); irregular (I); and not available (NA).

Statement by Mr. Nicholl, Executive Director, and Mr. Becker, Advisor to Executive Director on Tuvalu
July 10, 2023

CONTEXT

Tuvalu became the 187th member of the Fund in 2010 and this is the seventh Article IV consultation between Staff and the authorities since that time. The authorities found the frank, constructive discussions, as well as the strong commitment of the mission team very helpful and look forward to enduring engagements with the Fund.

The main challenges facing Tuvalu concern the development needs of the country while safeguarding the sustainability of both its natural and donor-provided resources. Fund surveillance and capacity development play a key role in maximizing the benefits from limited endowments and help to catalyze contribution to the country's development goals by other multilateral development partners and the broader donor community.

With a population of only around 12,000 people and annual Gross National Income of less than US$100 million, this small group of islands is particularly vulnerable due to its geographic isolation, lack of fertile land, susceptibility to the impact of climate change, and inability to reap economies of scale in the provision of public goods and services.[1]

CLIMATE CHANGE AND THE RESILIENCE AND SUSTAINABILITY FACILITY

Tuvalu is highly vulnerable to natural disasters[2] and climate change. The authorities expressed concern that if international targets for reducing emissions are not met, rising sea levels could make Tuvalu uninhabitable in the coming two to three decades. The Long-Term Adaptation Plan (L-TAP)[3] is an ambitious policy aimed at ensuring that Tuvalu remains a viable country beyond the year 2100. The aim is to reclaim land and build up the mainland, which is currently on average only around ½ of-one meter above high tides. A key part of adaptation policies is to engage assistance required to access climate finance. A complicating factor is to ensure that local authorities can become duly 'accredited entities' that are able to administer and disburse climate finance once this funding is made available. Given the lack of creditworthiness to borrow, the success of Tuvalu's adaptation plans relies entirely on bilateral donors and multilateral development partners. The National Disaster Office is expected to be given new powers as the umbrella organization which will coordinate disaster responses in a less fragmented manner. As the world transitions away from non-renewable to renewable sources of energy, Tuvalu will face major challenges in meeting the costs associated with electricity generation.

---

[1] Refer also to Becker, C (2012), *'Small Island States in the Pacific: the tyranny of distance?,'* IMF, https://www.imf.org/en/Publications/WP/Issues/2016/12/31/Small-Island-States-in-the-Pacific-the-Tyranny-ofDistance-26253

[2] In 2015 Tropical Cyclone Pam caused significant destruction and reconstruction costs are estimated by the World Bank to have amounted to more than 30 percent of GDP.

The authorities find Appendix IV particularly useful in identifying the fundamental Public Financial Management and Public Investment Management reforms needed to support better access to climate finance. The gaps identified fall well within the mandate of the Fund, but the appendix falls short of explaining how IMF engagement (beyond PFTAC support) could help fill those gaps.

The authorities maintain interest in a revised Resilience and Sustainability Facility due to a potentially catalytic role in unlocking further climate finance. In its current form, the RSF is not a viable option for Tuvalu. The capacity of one of the Fund's smallest but most vulnerable members to comply with and meet requirements associated with an accompanying Upper Credit Tranche program is severely constrained. Data for surveillance is limited, infrequent, and compiled using technical assistance. Tuvalu is also a microstate with commensurately small quota resources in the Fund. As a result, even the maximum access under the RSF would only unlock only a very small amount of financing. Current access limits become somewhat meaningless when applied to very small states and constrain productive engagement. It is also notable that given the low debt carrying capacity of Tuvalu, donors and multilateral agencies generally recommend only grant and concessional financing to limit the risk of debt distress. Notably, the authorities are most interested in the capacity development component of such an arrangement, to help institutionalize the production of key macro-statistics and support the implementation of recommended fiscal reforms.

STRUCTURAL REFORM AND DEVELOPMENT

Structural issues encompass physical infrastructure, a narrow economic base, and challenges in retaining skilled workers. Infrastructure projects are typically linked to climate mitigation and disaster resilience, often with a very high grant financing component. Efforts to improve the reliability of internet access and increase mobile phone coverage on the outer islands have fostered progress on inclusiveness and efficiency in service delivery to some of the most vulnerable in society. Discussions with multilateral development partners are progressing on the possibility of splicing into a fast deep sea internet cable that would ensure more reliable connectivity. Plans are also being made for potentially forced relocation of the population if climate mitigation plans are unable to secure sustainable adaptation. While relocation is not the first policy choice of the authorities, they feel strongly that contingency planning is necessary.

---

[3] The estimated cost of L-TAP is around A$2 billion or 2,000 percent of GDP. See summary here https://tcap.tv/news/2022/11/14/tuvalu-presents-long-term-adaptation-plan-ltap

A chronic shortage of skilled labor is an ongoing concern for government and the nascent private sector. The government has undertaken a comprehensive restructuring and realignment of pay scales to address migration pressures. Incentives are now better aligned for skilled workers to return from offshore work assignments and training courses. While this has had budget implications, it was a one-off change that will better position the country going forward. The change is also expected to better support a larger role for the private sector given its current rather limited role. Broadening the economic base would not only bring benefits in terms of diversification in production but would also allow the government to tap into a wider revenue base. While becoming involved in higher levels of the value-added chain in the fishing industry would unlock benefits for Tuvalu, several barriers would have to be overcome. Limited land for a production facility, lack of fresh water and refrigeration, unreliable power supply, disruptions to shipping with unreliable vessels, and unestablished distribution networks, would make it difficult to establish such an engine for economic growth in the short-term. Even a small-scale domestic fish market for local consumption is facing problems related to its viability. Development in this prerequisite supporting infrastructure will require ongoing assistance.

CASH ECONOMY, FINANCIAL DEVELOPMENT, CONNECTIVITY TO INTERNATIONAL PAYMENTS

The economy is entirely based on Australian dollar cash with no internet banking, no debit cards, and no Automatic Teller Machines are available on the islands. To increase efficiency in retail, wholesale, and government payments the authorities are planning a gradual and phased move into more electronic-based payments. In the first stage of the project, bank accounts would be accessible for internet banking before being linked to debit cards and a limited number of ATMs. Such a move would significantly benefit the vulnerable part of the population that remains unbanked and not well connected on the remote outer islands. Introduction of electronic payments would also support the tourism sector which is currently burdened by travelers having to physically import large amounts of cash. Bank queues on payday would also be shorter and hence contribute dramatically to higher efficiency.

As financial literacy improves and oversight is better established at some point in the future, there might be consideration given to introducing credit cards. This will require careful planning given that there is only one bank and that all its credit exposures would be highly concentrated with little scope for diversification of risk.

The financial system mainly consists of the commercial bank, the development bank, and the provident fund. Fund advice to increase staffing from just two persons for the prudential supervisor was well noted. Plans currently include splitting the functions of the Financial Inclusion Unit out of the existing police force structure and to ensure adequate resourcing. In a country of only 12,000 people it is often difficult to find qualified staff. The authorities are also aspiring to become a member of the Asia Pacific Group (APG) on Money Laundering this year, which would unlock technical assistance on AML/CFT compliance and associated legislation to support the remaining correspondent banking relationship(s). Other benefits would come from participating in mutual assessments and gap analysis on which more robust compliance can be based.

The Development Bank of Tuvalu (DBT) is supporting structural change. Loans are granted and targeted at women, youth, clean energy, and capacity building. Given that these loans perform a social and allocative purpose, they are often loss-making and hence the DBT is a burden to the national budget.

FISCAL BALANCES AND DEBT SUSTAINABILITY

The government of Tuvalu does not have access to domestic or international debt markets and due to the narrow revenue base relies heavily on grants. An ongoing challenge the authorities face concerns volatile and lumpy payments made by development partners, often in currencies they are unable to convert into Australian dollars at a competitive exchange rate due to their relative financial isolation. The authorities believe that it would be helpful if donors were to consider disbursements in Australian dollars to limit the leakage of support that occurs when the local authorities—rather than the major development partners—are forced to enter into foreign exchange transactions. Payments in Australian dollars, the fifth most traded currency in the world, would be much cheaper for development partners than the authorities. It would also be helpful if payments of grants were better coordinated (by a forum of donors) to be less volatile.

The increase in wages that resulted from efforts to retain human capital and make the public service more efficient was a once-off-realignment and will not be a recurring fiscal burden. The authorities consider the change to be a structural reform necessary to address fundamental weaknesses in the economic structure.

The tax base is narrow and there are few opportunities for raising additional revenues. There is a high degree of economic vulnerability which has been exacerbated by the recent increase in imported food and fuel prices. Costs have risen disproportionately as diesel generators are the main way of power generation. In this environment the government does not believe that it is currently the correct time to raise the Value Added Tax rate and are therefore unable to recoup the revenue lost from customs duties following the ratification of the Pacer Plus trade agreement. Meanwhile, the introduction of the ASYCUDA platform has produced promising results in supporting domestic revenue mobilization through enhanced efficiency. The reformed arrangements of the Dot.tv contract with a new vendor could also help further support fiscal consolidation efforts.

Unforeseen substantial expenses are incurred from time to time. For example, the aging three shipping vessels are currently under repair and subject to refitting. Such frequent and lengthy outages are disruptive for supply lines and getting essential goods and services to outer islands. Medical expenses related to the pandemic are also a fiscal burden, although tele-doctors might constitute a permanent efficiency gain. Scholarships aimed at building human capital and economic capacity continue to be expensive and retention of skilled workers once they have benefited from such programs remains difficult. The authorities expect that recent pay scale restructuring will be beneficial in this area.

The fiscal position is subject to continual pressure and is volatile. With the exchange rate fixed, no independent monetary policy, and limitations on financing longer-term reforms, the budget threatens to be in ongoing deficit and subject to a high degree of variability (which also limits the ability to plan effectively). The authorities are well aware of the long-term implications of a fiscally unsustainable situation but have elected to defer the more decisive consolidation efforts to a time when the economy is in a more robust position. In the medium term, the balance of the Consolidated Investment Fund can be utilized as a buffer against shocks.

The Debt Sustainability Analysis indicates that Tuvalu remains at high risk of debt distress. It is therefore appropriate that most donor assistance remains grant based and that the authorities do not engage in non-concessional borrowing.