INTERNATIONAL MONETARY FUND

IMF Country Report No. 16/323

TUVALU

October 2016

2016 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 2016 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 September 12, 2016, 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 September 12, 2016, following discussions that ended on May 31, 2016, 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 August 26, 2016.
- A **Debt Sustainability Analysis** prepared by the staffs of the IMF and the International Development Association (IDA).
- An **Informational Annex** prepared by the IMF staff.
- 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.

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October 4, 2016

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IMF Executive Board Concludes 2016 Article IV Consultation with Tuvalu

On September 12, 2016, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with Tuvalu.

The macroeconomic outlook is stable. Real GDP growth in 2015 is estimated at 2.6 percent and is projected to rise to 4 percent in 2016 on account of several large infrastructure projects and recovery spending following Cyclone Pam. Inflation remained steady in 2015 at 3.2 percent and is expected to rise slightly in 2016 to 3.5 percent as economic activity picks up.

The budget achieved a substantial surplus in 2015 for the fourth consecutive year, supported by strong fishing license fees, internet license fees related to the ".tv" domain, and development partner assistance. With four years of budget surpluses, fiscal buffers have been rebuilt and remain at a comfortable level, even though expenditures have increased rapidly. The fiscal position is expected to turn into a small deficit in 2016 and is projected to remain in deficit over the medium term.

Risks to the outlook relate to the effects of climate change, volatility in fishing revenues, and volatile global financial conditions, which could affect distributions to the budget from the Tuvalu Trust Fund.

Executive Board Assessment[2]

Executive Directors noted that the near-term macroeconomic outlook is stable and growth is picking up, partly owing to recovery spending following Cyclone Pam. Directors commended

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

[2] 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.

the authorities for the substantial progress achieved under their Policy Reform Matrix, 2012-15, as well as the commitment to continue these efforts under the national strategy for sustainable development, 2016-2020. However, important medium- and long-term challenges remain. These relate to sustaining investment to mitigate the effects of climate change, strengthening fiscal frameworks, public enterprise reform, and financial sector oversight.

Directors observed that Tuvalu's fiscal challenges are centered around revenue volatility and meeting the long-term costs associated with climate change while maintaining a sound fiscal position. They welcomed the recent initiatives to develop a climate change risk assessment framework and to incorporate disaster costs into budget planning. Directors noted, however, that improvements in public financial management were also needed, particularly with respect to the framework for capital budgeting.

Directors welcomed the rebuilding of fiscal buffers on the back of higher fishing licensing revenue in recent years. They underscored that sustaining adequate fiscal buffers is a critical element in the policy strategy to manage future risks. In this respect, Directors called for restraint on recurrent expenditure to sustain buffers and enhance debt sustainability. More broadly, the adoption of a medium-term fiscal framework that targets a small structural budget surplus will boost resilience. Directors also encouraged the authorities to continue seeking access to global climate change funding, with the assistance of development partners.

Directors emphasized that public enterprise reform remains a key policy priority, including improving corporate management and clearly defining and pricing social services. On financial sector oversight, they highlighted that the banking commission should conduct a review of non-performing assets and on-site supervision of banks, in collaboration with external advisors.

Directors welcomed the assessment that the exchange system is free of restrictions. While noting that the real exchange rate is in line with fundamentals, they encouraged the authorities to continue to implement the national development strategy to strengthen competitiveness. Directors also urged the authorities to make use of technical assistance to improve economic statistics.

Tuvalu: Selected Social and Economic Indicators, 2012-2017

Population (2014): 9,893 | Poverty rate (2010): 26.3 percent
Per capita GDP (2014 est.): US$3,827 | Life expectancy (2014): 66 years
Main export: Fish | Primary school enrollment (2006): 100 percent
Key export markets: Fiji, Australia, Japan | Secondary school enrollment (2001): 79.5 percent

	2012	2013	2014	2015	2016	2017
			Est.		Proj.	
	(Percent change)					
Real sector						
Real GDP growth	0.2	1.3	2.2	2.6	4.0	2.3
Consumer price inflation (period average)	1.4	2.0	1.1	3.2	3.5	2.9
Government finance	(In percent of GDP)					
Revenue and grants	84.3	107.5	123.1	123.5	124.5	113.3
Revenue	56.6	82.9	74.1	105.5	91.7	80.9
of which: Tax revenue	15.0	19.0	18.0	19.4	17.1	17.3
Fishing license fees	21.8	45.4	32.0	60.9	53.2	43.0
Grants	27.8	24.6	49.0	18.0	32.9	32.4
Total expenditure	75.0	81.1	86.8	116.3	127.3	117.6
Current expenditure	75.0	81.0	86.6	116.1	127.1	117.4
of which: Wages and salaries	31.9	32.2	36.1	37.4	43.2	43.8
Special Development Expenditure	6.2	7.4	9.2	13.3	23.9	13.5
Overall balance	9.3	26.3	36.3	7.2	-2.7	-4.2
Tuvalu Trust Fund (stock, $A million)	131	141	144	149	151	155
Consolidated Investment Fund (stock, $A million) 1/	4.5	12.2	24.3	30.8	28.9	26.2
Tuvalu Survival Fund (stock, A$ million)					5.0	5.0
	(Percent change, unless otherwise indicated)					
Money and credit						
Deposits	9.7	29.2	10.6	2.0	…	…
Credit	-11.4	15.2	-32.0	2.0	…	…
Lending interest rate (in percent)	10.6	10.6	10.6	9.1	…	…
	(In millions of Australian dollars, unless otherwise indicated)					
Balance of payments						
Current account balance	6.6	0.5	8.0	3.3	-1.8	-2.7
(In percent of GDP)	17.2	1.2	19.3	7.6	-4.0	-5.7
Exports of goods	19.9	18.8	19.2	19.7	20.1	20.6
o/w Fish	19.5	18.4	18.8	19.3	20.1	20.6
Imports of goods	-21.4	-32.2	-29.3	-33.6	-38.6	-39.9
Current transfers (net)	21.2	18.0	25.6	14.9	17.3	17.8
Capital and financial account balance	-3.4	8.7	-4.9	2.1	-1.8	1.3
of which: .TV domain license fees	3.7	4.4	4.5	6.3	6.3	6.3
Capital transfers (net)	4.7	5.1	5.8	9.1	11.3	8.6
Gross official reserves 2/	27.5	37.9	41.0	46.4	42.7	41.3
(In months of next year's imports)	5.4	8.3	7.4	7.1	6.5	6.1
	(In percent of GDP, unless otherwise indicated)					
Debt indicators						
Gross public debt	25.9	57.2	64.4	58.2	53.7	44.3
External	19.7	51.8	59.8	54.5	51.7	44.3
Domestic	6.3	5.4	4.6	3.8	2.0	0.0
Exchange rates						
Australian dollars per U.S. dollar (period average)	1.0	1.0	1.1	1.3	…	…
End-period	1.0	1.1	1.2	1.4	…	…
Real effective exchange rate (2005=100)	103.8	102.1	97.3	91.9	…	…
Nominal GDP (In millions of Australian dollars)	38.5	39.7	41.3	43.5	46.1	48.1

Sources: Tuvalu authorities; PFTAC; SPC; ADB; World Bank; and IMF staff estimates and projections.

1/ Includes government transfers of unspent capital spending allocations to the Tuvalu Development Fund in 2015, estimated at A$5.2 million.

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

INTERNATIONAL MONETARY FUND

TUVALU

STAFF REPORT FOR THE 2016 ARTICLE IV CONSULTATION

August 26, 2016

KEY ISSUES

Context. Tuvalu is a fragile micro-state facing tremendous challenges from its remoteness, lack of scale economies, weak institutional capacity, and above all, climate change, which threatens the country's very existence. Thanks to buoyant fishing licensing fees and grants, Tuvalu has accumulated fiscal buffers in recent years, but it is now incurring significant costs rebuilding after the devastating Cyclone Pam in March 2015. Looking ahead, Tuvalu faces substantial long-run costs in improving its infrastructure to mitigate the effects of climate change.

Outlook and risks. The macroeconomic outlook is stable. Real GDP growth in 2015 is estimated at 2.6 percent and is projected to rise to 4 percent in 2016 on account of several large infrastructure projects and recovery spending following Cyclone Pam. Inflation remained steady in 2015 at 3.2 percent and is expected to rise slightly in 2016 to 3.5 percent as economic activity picks up. Risks to the outlook relate to the effects of climate change, volatility in fishing revenues and global financial conditions, which could affect distributions to the budget from the Tuvalu Trust Fund. Domestically, continued poor management of public enterprises is a key vulnerability.

Policy challenges. Tuvalu has made significant progress on structural reform under the Policy Reform Matrix, 2012-15, but challenges remain. Tuvalu needs to reconcile fiscal sustainability with the need for significant capital spending to enhance climate change resilience. Continuing the recent performance will require recurrent expenditure restraint, improvements in capital investment budgeting, and effective public enterprise reform through enhanced governance and regulatory frameworks. The authorities are encouraged to continue seeking multilateral and regional risks transfer arrangements, as well as access to climate finance funding.

Other issues. Staff followed up on outstanding jurisdictional issues and completed the assessment of the exchange system in Tuvalu. Tuvalu is an Article XIV member but does not maintain exchange restrictions or multiple currency practices under Article XIV or Article VIII.

Approved By
APD (Mr. Helbling) and SPR (Mr. Allum)

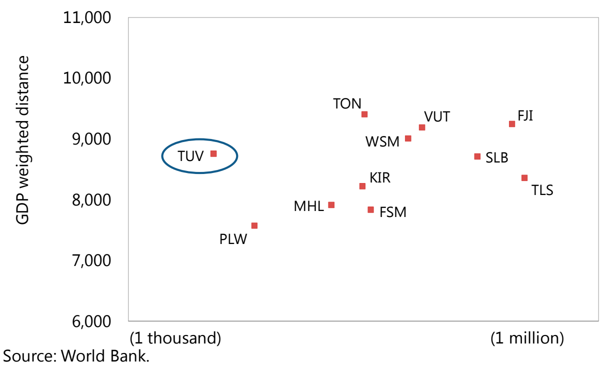
Discussions for the 2016 Article IV Consultation were held in Funafuti during May 20-31, 2016. The mission team comprised Messrs. D. Nyberg (Head, APD), A. Massara (STA), G. Pinto (LEG) and S. Karan (APD, Fiji Office). Mr. Sagdullayev (OED) and Ms. Pan (World Bank) joined the mission. Mses. Dubost and Rusli assisted in preparation of the report.

CONTENTS

CONTEXT: SMALL, REMOTE, AND VULNERABLE TO CLIMATE CHANGE

1. **Tuvalu is small, remote and among the most vulnerable countries to climate change.** With a population of some 10,000 people living on 11 low-lying atolls on a total land area of 26 square kilometers in the South Pacific Ocean, Tuvalu is among the smallest and most remote countries on earth. The majority of the population (57 percent) now lives on the narrow Funafuti atoll. Tuvalu is also among the most vulnerable countries to rising sea levels with an average height of less than 3 meters above sea level. Sea water flooding of low-lying areas occurs frequently and is expected to become more frequent and extensive over time.[1] The United Nations Framework Convention on Climate Change projects that sea levels will rise in this century and, in this context, Tuvalu is classified as a fragile state.

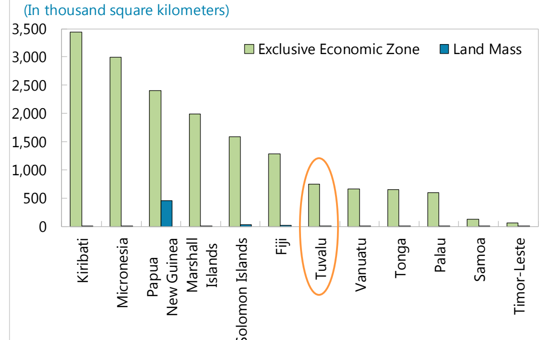
Population versus GDP-Weighted Distance[1/]
(In kilometers)



Source: World Bank.
1/ Distance to all countries weighted by GDP.

2. **The economy is dominated by the government and dependent on external sources of income.** Compared to its land size, Tuvalu has a relatively large exclusive economic zone (EEZ) covering 900,000 square kilometers, containing substantial tuna fish stocks, a renewable resource but subject to sustainability conditions. Foreign exchange inflows from fishing revenues and development partner grants have significantly raised living standards—life expectancy is around 66 years, absolute poverty is rare, access to primary education is effectively universal, and the per capita income of US$3,800 is relatively high. Nevertheless, foreign exchange inflows are highly volatile and the authorities have limited policy space — fiscal policy is the only macro policy lever given the absence of a central bank and the use of Australian dollar as the legal tender. The development of the private sector is constrained by the economy's small size limiting the scope for economic diversification and there are few employment opportunities outside of government and public enterprises. The cost of providing basic government services — such as health, education, sanitation, connectivity, transportation, and electricity — to a small and widely dispersed population is very high.

Pacific Islands: Exclusive Economic Zones and Land Mass
(In thousand square kilometers)



Source: Sea Around Us database.

[1] See Asian Development Bank (2013), "The Economics of Climate Change in the Pacific".

3. The authorities have recently unveiled a new development plan for 2016-20, Te Kageeka III (TKIII), with a key focus on climate change mitigation (see Box 1). With the new development plan, the authorities build on the previous plan with additional strategic reform priorities, including addressing climate change; environment; urbanization and migration; and oceans and seas. A policy reform matrix (PRM), formulated in consultation with development partners, has successfully concluded the first three phases, 2012-15. Progress under the PRM will now be evaluated and new targets formulated during 2016. The authorities have been receptive to recent Fund policy advice and technical assistance, with substantial progress on overall macroeconomic policies (for instance through the introduction of a medium-term budget framework and building buffers) and fiscal management of the economy, although challenges to fiscal sustainability remains. Tuvalu has generally made good progress towards meeting the Millennium Development Goals, although there is only mixed progress combating non-communicable diseases such as diabetes (see Box 1).

RECENT DEVELOPMENTS, OUTLOOK AND RISKS

4. Tuvalu was severely impacted by Cyclone Pam in March 2015. While there were no casualties, the cyclone is estimated to have affected 40 percent of the population and caused damages and losses of A$14 million, or around 33 percent of GDP (the post-cyclone rapid assessment covered agriculture, fisheries and infrastructure sectors). In the immediate crisis response, the authorities prioritized food security, recovery and reconstruction spending, with assistance from development partners. The reconstruction spending is expected to be financed by development partner grants but also by drawing on accumulated buffers, including the Consolidated Investment Fund (CIF).

5. The near-term macroeconomic outlook remains stable. While the cyclone damaged some productive capacity of the economy, particularly in the subsistence agricultural sector and infrastructure, reconstruction activities have provided a short-term boost to growth. Real GDP growth is estimated at 2.6 percent in 2015 and projected to rise to 4 percent in 2016 on account of several large government-funded infrastructure projects (Viaiku Lagi waterfront reclamation and school improvements) and recovery spending following Cyclone Pam. Growth has also been supported by expansion of government spending on health, education and increased civil service wages. Inflation remained steady in 2015 at 3.2 percent and is expected to rise slightly in 2016 to 3.5 percent as economic activity picks up. Over the medium term, real growth is projected to moderate to around 2 percent (in line with average growth over the past decade), while inflation is expected to remain in the 2-3 percent range. Over the longer run, rising sea levels, droughts, and ocean acidification may damage Tuvalu's infrastructure, erode coastlines, and reduce output potential. [2]

[2] The evidence on the impact of natural disasters on long-run growth is mixed: the Cavallo and Noy (2010) survey of the literature finds the limited evidence inconclusive, while Cabezon et al. (2015) find that for the Pacific islands, trend growth over 1980-2014 was 0.7 percentage point lower than it would have been without natural disasters. See Cabezon et al (2015), *Enhancing Macroeconomic Resilience to Natural Disasters and Climate Change in the Small States of the Pacific*, IMF Working Paper No. 15/125; and Cavallo and Noy (2010), *The Economics of Natural Disasters, A Survey*, IDB Working Paper Series, 124.

Box 1. Climate Change and Te Kakeega III - Tuvalu's New National Strategy for Sustainable Development, 2016-2020

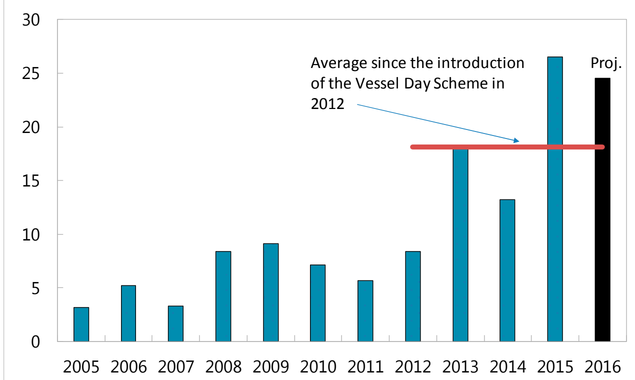
In early 2016, the government unveiled its new development priorities for 2016-20 with the broad theme to "Protect and Save Tuvalu". Tuvalu has made substantial progress towards meeting the Millennium Development Goals, although there has only been mixed progress on combating non-communicable diseases such as diabetes. The new plan aligns with the UN Sustainable Development Agenda and sets the direction for future development and meeting development goals by 2030. It builds on the previous development plan, TKII, that covered 2005-15, and adds several priority areas, including climate change highlighting that "the danger of climate change and the prospect of warming temperatures, sea level rise, and severe weather events, overhang the entire discussion of future development", with both short-run and longer-term policy implications.

Climate change mitigation costs are substantial. The TKIII cites an estimated cost of about 2 percent of GDP annually to build the country's adaptive capacity by climate-proofing critical infrastructure, adopting better early-warning systems for all hazards, and policy planning. The climate change adaptation measures will generally involve infrastructure projects with large up-front capital and long-term maintenance costs. As illustrated by Cyclone Pam, the cost of disaster impacts will be substantial, requiring assistance from development partners. The authorities have established a new "Climate Change and Disaster Policy Unit" within the Office of the Prime Minister to integrate climate change resilience into national policies, including contingency planning, early warning systems and communication protocols.

Tuvalu is seeking to access climate finance and risks transfer schemes. Tuvalu's greenhouse gas emissions as a share of global emission (0.000005 percent) are statistically insignificant. Nevertheless, Tuvalu's energy policy has set an ambitious target for 100 percent renewable energy by 2025; reducing total greenhouse gas emissions from energy consumption to 60 percent below 2010 levels by 2025 and further reduction from other sectors such as agriculture, conditional on access to needed technology and finance. The government is exploring access to multilateral climate finance schemes and risk transfer mechanisms to support its efforts to mitigate the effects of climate change, including through the Green Climate Fund (see discussion in paragraphs 8 and 19), Adaptation Fund, Least Developed Country Fund, Special Climate Change Fund, and the Global Environment Facility.

6. The budget achieved a substantial surplus in 2015 for the fourth consecutive year, supported by strong fishing license fee revenue. After accounting for transfers of unspent budget allocations to the Tuvalu Development Fund (TDF), staff estimates a surplus amounting to 7¼ percent of GDP. As in recent years, the budget performance was supported by strong revenue from fishing license fees, increasing to a record A$26.5 million (60 percent of GDP, and over half of total revenues). While volatile, fishing license fees have in recent years remained substantially above the historical average following the introduction of the regional Vessel Day Scheme (VDS) under the Nauru Agreement in mid-2012 that limits the total number of fishing days and vessels and charges higher minimum fees (see Annex 1). The recent above-average fishing license fee revenue has also been favorably affected by El Niño conditions, which attracted tuna fish migration into the warmer water in Tuvalu's EEZ. Moreover, the depreciation of the Australian dollar positively impacted the revenue performance as both fishing and internet license fees (for the ".tv" internet domain, about 15 percent of GDP) are contracted in U.S. dollars (the real effective exchange rate has depreciated by over 10 percent in the past two years). Donor grants were also substantial at 18 percent of GDP. Tax revenue is relatively small at around 19 percent of total revenue and has performed broadly in line with economic developments.

Tuvalu - Fishing License Fee Revenue
(In A$ million)



Sources: Tuvalu authorities and IMF staff calculations.

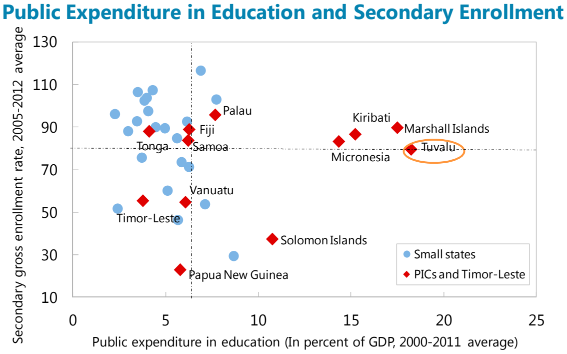
Table 1. Tuvalu: Summary of Fiscal Developments, 2012-16

	2012	2013	2014	2015 Est.	2016 Proj.
			(In percent of GDP)		
Revenue and grants	84.3	107.5	123.1	123.5	124.5
Of which:					
Tax revenue	15.0	19.0	18.0	19.4	17.1
Fishing license fees	21.8	45.4	32.0	60.9	53.2
".tv" license fees	9.6	11.0	10.9	14.4	13.8
Grants	27.8	24.6	49.0	18.0	32.9
Expenditures	75.0	81.1	86.8	116.3	127.3
Of which:					
Wages and salaries	31.9	32.2	36.1	37.4	43.2
Purchases of goods and services	20.1	21.3	20.6	26.0	25.8
Transfers (TMTS, scholarships, CSO, grants and subsidies) 1/	16.3	19.9	19.7	37.1	32.1
Special development expenditures 2/	6.2	7.4	9.2	13.3	23.9
Overall balance	9.3	26.3	36.3	7.2	-2.7

1/ Includes Cyclone Pam recovery spending.
2/ Includes A$5 million allocation to the Tuvalu Survival Fund.

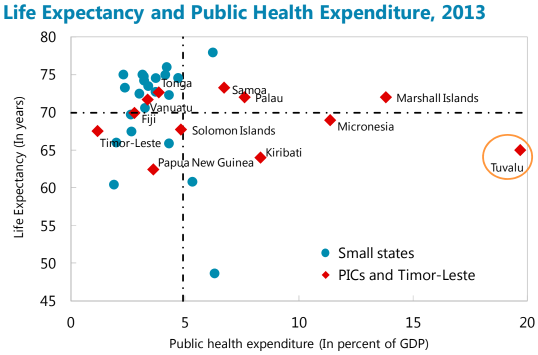
7. Expenditures continue to rise quickly. On the expenditure side, reconstruction spending following Cyclone Pam contributed to elevated spending in 2015, but there has also been a relaxation of expenditure discipline, partly related to rapid expansion in recurrent expenses for the Tuvalu Medical Treatment Scheme (TMTS), overseas education scholarships, and civil service wages that can be expected to be more permanent. Over the past four years, expenses on the TMTS have risen as the number of overseas referrals increased, relating to an aging population[1] with high incidence of non-communicable diseases like diabetes, and measures to contain costs have not materialized; education scholarships spending has increased from 5 percent of GDP in 2012 to 8½ percent of GDP in 2015 as the number of students educated abroad has increased; and the civil service wage bill have increased from 32 percent of GDP to 37½ percent. Subsidies for public enterprises remained sizeable, estimated at around 2 percent of GDP in 2015. Special development expenditures (which include capital investment spending) are estimated at 13 percent of GDP. Using project-by-project data, staff estimate that around 2 percent of the capital spending in 2015 was related to climate change mitigation (see Annex 2).

Public Expenditure in Education and Secondary Enrollment



Sources: World Bank, *World Development Indicators*; Country authorities; IMF, *World Economic Outlook*; and IMF staff estimates.

Life Expectancy and Public Health Expenditure, 2013



Sources: World Bank, *World Development Indicators*; and IMF staff estimates.

8. **The fiscal position is expected to turn into a small deficit in 2016 and is projected to remain in deficit over the medium term.** Expenditures are expected to remain elevated in 2016, partly owing to one-off expenditures on Cyclone Pam recovery (5 percent of GDP) and as the accumulated project balances in the TDF are spent. The establishment of the A$5 million (around 10 percent of GDP) Tuvalu Survival Fund (TSF) in the 2016 budget is also expected to be a one-off allocation.[2] But there is also strong growth of recurrent expenditures such as wages and salaries, TMTS, and scholarship spending. The authorities have introduced a reform plan to contain spending on TMTS but the spending level is expected to remain elevated owing to the difficulty of quickly tackling the high cost of health care provision and multi-year commitments for scholarship spending. On the revenue side, fishing license fees are expected to remain strong in 2016, projected around A$25 million. Against this background, staff projects a deficit of around 2¾ percent of GDP in 2016, smaller than the deficit of 13 percent envisaged in the budget, partly owing to under-spending on ambitious budget plans for special development expenditure. Going forward, staff expects fishing

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[1] The UNFPA (2014) projects that the share of population over 60 will rise from 9 to 13 percent of total between 2015-25.

[2] The TSF is intended for climate change mitigation and impact recovery expenses.

license revenues to moderate to around A$20 million starting in 2017 as the El Niño cycle wanes. This level of fishing license revenue is in line with recent historical averages (since the VDS Scheme was introduced) and is also recommended as prudent budgeting in the new development plan for 2016-20, TKIII. With fishing license revenue returning to recent averages, and elevated recurrent spending, the budget is projected to remain in deficit over the medium term (see Table 2). The government's application to the Green Climate Fund (GCF) for improving outer-island coastal protection was recently approved. The disbursement schedule for this large project is still under discussion, but it will likely span beyond the medium term (2021), with a long-term US$36 million grant but also an estimated US$3 million government contribution.

9. **The Tuvalu Trust Fund (TTF) continued to perform well**. The Fund's value stood at around A$148 million (340 percent of GDP) in 2015, exceeding by A$5 million the Fund's "maintained value", i.e., the inflation-adjusted baseline used for approving distributions from the Fund. Balances in the CIF have also increased, to A$26 million at end-2015, above the target CIF balance of 16 percent of the maintained value of the TTF (see Annex 3 for background discussion of the fiscal framework). In addition, the authorities established the TSF to finance recovery and rehabilitation from climate change impacts, and adaptation projects, although the governance structure and disbursement procedures of the Fund are still under discussion.

Table 2. Tuvalu: Trust Fund and Buffers, 2015

	Balance		Purpose
	(A$ mn)	(% of GDP)	
Tuvalu Trust Fund (TTF)	148	340	The TTF is a trust fund and distributions from the TFF are made to the CIF to meet general government expenditure when the market value exceeds the "maintained" value (adjusted for inflation).
Consolidated Investment Fund (CIF)	26	60	CIF is a buffer fund to finance budget expenditure in future years.
Tuvalu Survival Fund (TSF)	5	11	Established in 2016 to finance recovery from climate change impacts and investments in mitigation projects.

10. **Along with the strong fiscal performance, the balance of payments position remains in surplus driven by fishing license fees and continued donor inflows.** The labor market for Tuvalu's merchant seamen has collapsed in recent years owing to increased international competition, limiting remittance income. Nevertheless, strong fishing license fees and donor inflows have contributed to gross reserves covering around 7 months of imports and are expected to remain at a comfortable level in 2016. The current account surplus reached 7½ percent of GDP in 2015, while a small deficit is expected in 2016 on account of increased government consumption and the reserve coverage ratio is expected to decline over the medium term as government deficits rise.

11. **The financial sector remains saddled with substantial non-performing loans.** Owing to resource and capacity constraints, Tuvalu has not been able to establish an independent banking commission. The financial sector, consisting of two banks, National Bank of Tuvalu (NBT) with around

90 percent of total banking sector assets and the smaller Development Bank of Tuvalu (DBT), is effectively unregulated. With the assistance of Pacific Financial and Technical Assistance Center (PFTAC) advice, the Banking Commission Act of 2011 has been amended to allow the Minister of Finance to be the de-facto Banking Commissioner, and the oversight authority has been delegated to the Permanent Secretary for Finance. Reflecting its money transfer operations, the NBT has a long track record of profitability and capital appears adequate, but both the NBT and the DBT remain saddled with a large share of non-performing loans (around half of the lending portfolio is nonperforming), primarily related to state-owned enterprises and a failed housing loan scheme. Both banks have made substantial provisions (DBT provisions amount to 58 percent of gross loans, while NBT has fully provisioned for bad loans), but an accurate estimate of bank capital adequacy is impeded by the absence of on-site supervision. In addition to the two banks, the Tuvalu National Provident Fund (TNPF) invests social security contributions and it can also extend credit to members (not exceeding 30 percent of the balance).

12. There are both short-term and longer-term risks to the outlook (see Risk Assessment Matrix). Projections of fishing license fees are highly uncertain. The recent sharp increase in revenue from fishing license fees may prove transitory, as tuna fish is a migratory species and the population in Tuvalu's water could decline sharply in response to changes in weather conditions and, consequently, revenues could decline further than assumed in the baseline scenario. On the upside, fishing revenues could continue to remain stronger than recent averages. Increased volatility in Australia's asset markets where the TTF is invested, could imply large swings in market value and reduce transfers to Tuvalu's budget. Other external risks include donor aid volatility and further declines in remittances, continuing the sharp downturn after the Global Financial Crisis. On the domestic side, loss-making public enterprises and gaps in the regulation of banks pose contingent liabilities to the budget. Climate change related risks are expected to accumulate in the longer term. In an alternative scenario, the Debt Sustainability Analysis (DSA) suggests the risk of debt distress can be reduced by targeting a small structural surplus over the medium term (see discussion below).

Authorities' views

13. The authorities broadly agreed with staff's outlook and risks. They noted that the impact of Cyclone Pam and the establishment of the TSF have created large one-off spending that has contributed to elevated expenditures in 2015-16 and, in turn, created large swings in macroeconomic aggregates given the small size of the economy. Measures to limit cost pressures in health spending have not materialized owing to high incidence of non-communicable diseases (such as diabetes) and difficulties in recruiting specialized doctors to perform procedures locally. The TKIII continues the focus on education and aims to equip people with the skills and knowledge they need to achieve a higher degree of self-reliance in a changing world and the spending on scholarships will continue. The government will remain the driver of the economy given the small size of the private sector. They agreed that fishing license fee revenues have been growing strongly and view using an A$18-20 million projection range as conservative but prudent, although they view risks skewed to the upside.

POLICY DISCUSSIONS: BUILDING RESILIENCE

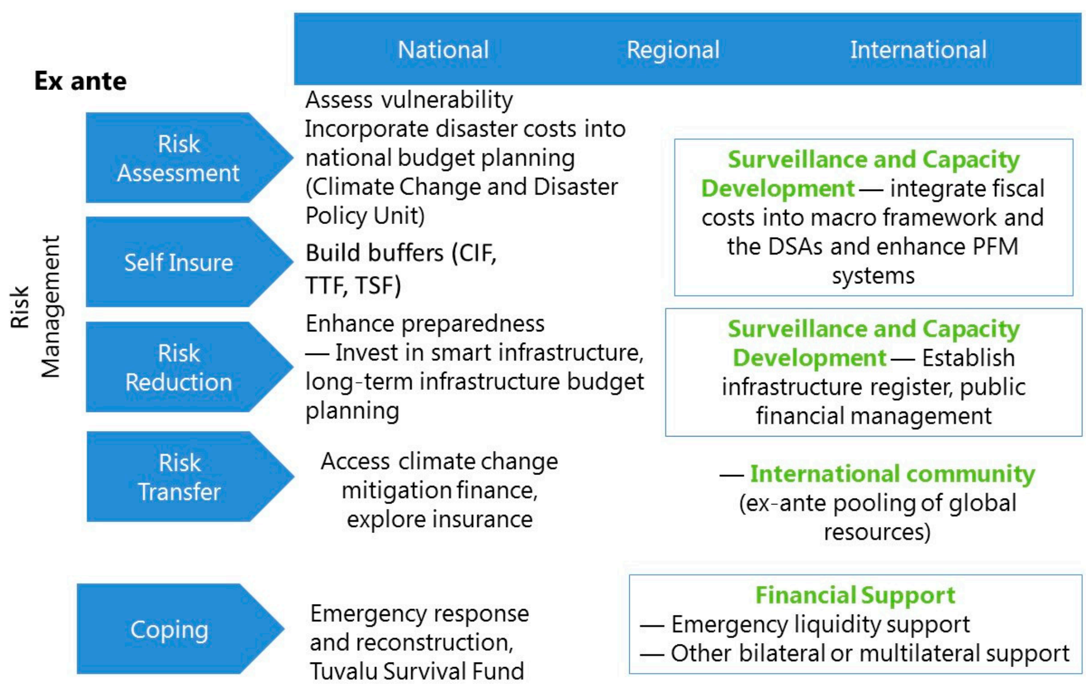
With rising sea levels, risks from climate change to the economy over the longer run are increasing. Looking ahead, with a narrow and volatile revenue base it will be important to preserve fiscal space to continue climate change mitigation investment and to enhance sustainability. Continuing the recent performance will require recurrent expenditure restraint and effective public enterprise and financial sector reform.

A. Fiscal Policy and Public Financial Management

14. Although the fiscal situation has improved in recent years, Tuvalu's fiscal challenges continue to revolve around revenue volatility and long-term costs of climate change. With rising temperatures and sea level, Tuvalu is likely to face increased frequency and intensity of weather events. The fiscal policy framework should balance sustainability with substantial investment needs to enhance resilience to climate change. To incorporate the costs of climate change into the macroeconomic framework, staff recommends a forward-looking, multi-pillar approach: *(i)* risk assessment *and* risk reduction; *(ii)* sustaining fiscal buffers; and *(iii)* international risk sharing.

Risk Assessment and reduction: Incorporating Climate Change Impact in a Forward-Looking Macroeconomic Framework

Multi-Pillar Framework: Strengthening Ex-Ante and Ex-Post Resilience



Note: Adapted from Cabezon et al (2015).

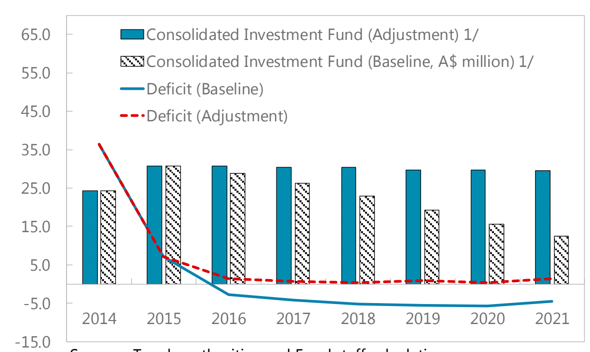
15. Climate change mitigation is a key policy priority. Tuvalu has spelled out its climate change vulnerability and mitigating investment needs in the National Adaption Program of Action (NAPA). The integration of climate resilience into national policies is the responsibility of the newly established Climate Change and Disaster Policy Unit with the Office of the Prime Minister. The authorities' recent initiatives to develop a climate change risk assessment framework and incorporating disaster costs into national budget planning are welcome (see Annex 2 for additional background). For instance, the recent establishment of the TSF is intended to assist in climate change mitigation and recovery, although the governance structure of the fund has not yet been specified. The TKIII recognizes that substantial investment in climate resilience will be necessary, with an estimated annual cost of 2 percent of GDP. In this context, a clearer classification between recurrent and capital expenditures would facilitate better budgeting and monitoring of climate change mitigation investment.

16. A long-term capital budgeting framework is needed for effective climate change mitigation. The climate change adaptation measures will generally involve infrastructure projects with large up-front capital and long-term maintenance costs. Going forward, the Tuvalu Infrastructure Strategy Investment Plan provides a long-term road map of projects, most of which have a climate change component. Although the infrastructure plan for climate change risk reduction is in place, consistent implementation is essential. The work underway to establish an infrastructure asset register will also be important to facilitate budgeting of the expected economic life and needed maintenance of existing assets. In this context, improvements in the fiscal management framework (capital budgeting and public financial management) will be needed to guide the medium-term budgeting process. In addition, continued progress in public financial management reform may improve the quality of spending and support additional development partner assistance. The recent Public Expenditure and Financial Accountability self-assessment found substantial progress in many areas, with scores improving in critical areas of accounting and financial reporting, but some areas remain weak such as procurement and expenditure arrears.

Sustaining Fiscal Buffers

17. Sustaining fiscal buffers will be critical in mitigating risks relating to climate change and revenue volatility. With sustained budget surpluses of the past four years, the balance in the CIF has commendably been built up and will allow the budget to absorb short-term revenue volatility for several years. With a narrow and volatile revenue base, it is essential to maintain buffers at the sustainable level. However, without restraining the strong growth in recurrent spending under current policies (baseline scenario), fiscal buffers are expected to decline over the medium term (see Box 2).

Tuvalu - Fiscal Adjustment Scenario
(In A$ million; unless otherwise indicated)



Sources: Tuvalu authorities and Fund staff calculations
1/ Includes transfers to the Tuvalu Development Fund

Box 2. Fiscal Adjustment Scenario

The baseline projection for fiscal policy entails a significant reduction in fiscal buffers and a deterioration in macroeconomic stability. The CIF balance would fall below the sustainable target of 16 percent of the maintained value of the TTF, with reserves coverage falling to below 6 months of imports over the medium term. At the same time, the baseline fiscal plans need to take into account the need for Tuvalu to continue enhance its resilience to climate change (building infrastructure such as sea walls, land reclamation, etc.), the cost of which is estimated at 2 percent of GDP per year.

Tuvalu - Fiscal Adjustment Scenario

	2014	2015	2016	2017	2018	2019	2020	2021
	(In percent of GDP)							
Total Expenditure	86.8	116.3	123.2	112.6	111.1	109.4	109.0	107.7
o/w								
Wages and salaries	36.1	37.4	39.9	39.7	39.0	38.4	38.1	37.8
Purchases of goods and services	20.6	26.0	25.5	25.5	25.2	24.7	24.4	24.2
Transfers (TMTS, scholarships, CSO, grants and subsidies) 1/	19.7	37.1	31.5	31.5	31.0	30.4	30.1	29.8
SDE (including climate change mitigation expenditure)	9.2	13.3	23.9	13.5	13.5	13.5	13.5	13.5
Fiscal Balance (Adjustment)	36.3	7.2	1.4	0.7	0.4	0.8	0.4	1.5
Fiscal Balance (Baseline)	36.3	7.2	-2.7	-4.2	-5.3	-5.6	-5.7	-4.4
Consolidated Investment Fund (Adjustment) 2/	24.3	30.8	30.8	30.4	30.4	29.8	29.8	29.5
Consolidated Investment Fund (Target balance)	22.4	23.5	24.0	24.6	25.3	25.9	26.5	27.2

1/ Includes Cyclone Pam-related spending (estimated at 5 percent of GDP in 2015).
2/ Includes unspent balances in 2015 tranferred to the Tuvalu Development Fund.

In the adjustment scenario, staff recommend that the authorities exercise recurrent expenditure restraint to maintain space for climate resilient infrastructure investment and make progress towards medium-term fiscal targets. By targeting a small structural surplus (around 1 percent of GDP), buffers are maintained to manage risks related to increased frequency of weather events. This could be achieved by civil service wage restraint (ensuring that wage increases are broadly in line with productivity gains), scaling back the strong increases in government subsidies (TMTS, scholarships and public enterprises) as well as goods and services purchases (see text table). Given high revenue dependence on fishing and internet license fees and grants, there is relatively less scope for tax revenue measures in the adjustment.

This adjustment scenario entails less external borrowing, and the risk of debt distress is significantly reduced (see the adjustment scenario of the DSA). Increased capital spending may increase imports of goods and services, leading to higher current account deficits. However, it is difficult to assess whether it would be significantly different compared to current policies given that the expenditures on TMTS and scholarships have a very high import content.

- **Baseline scenario.** Under the baseline scenario, moderating fishing revenues and continued elevated recurrent spending pressures relating to civil service wages, TMTS, scholarships, public enterprise subsidies, and other goods and services purchases, would result in persistent budget deficits over the medium term. On capital spending, the baseline scenario includes continued climate change mitigation investment of 2 percent of GDP annually. Under this scenario, fiscal buffers in the CIF are expected to decline over the medium term to below the 16 percent sustainable floor relative to the maintained value of the TTF. The DSA (2016-36) indicates that Tuvalu remains at high risk of debt distress, with a breach of indicative thresholds towards the end of the projection period.[3]

- **Adjustment scenario.** Under an adjustment scenario, staff recommends that the authorities target a small structural fiscal surplus (around one percent of GDP) over the medium-to-long term. Specifically, spending should be based on cautious assumptions regarding fishing license fees, with realistic assumptions based on fishing yields being in the A$20 million range (around 40 percent of GDP). Spending restraint is assumed to come from aligning wage growth to productivity gains in the economy, public enterprise reforms to limit budget subsidies, and increased efficiency of recurrent spending, including better targeting and tracking of spending on TMTS and scholarships. This scenario would maintain buffers in the CIF well above the sustainable threshold, allow re-investment of TTF distributions to build up balances towards the A$200 million target by 2020, and reduce longer-term borrowing and debt distress risks. Under the structural balance approach, positive shocks to fishing license fees would result in fiscal surpluses that can be saved in the CIF; similarly, CIF drawdowns can finance temporary shortfalls in license fees. Over time, the baseline assumption for license fees should be adjusted to reflect recent trends, perhaps using a six-year moving average (t-4 to t+1).

18. Progress on public enterprise reform continues to be slow (see Annex 4). The public enterprises (PE) remain hampered by a combination of below-cost tariff structures, payment arrears, weak management capacity and most thus require government subsidies to operate. The staffing of the Public Enterprise Reform Management Unit remains plagued by vacancies and high turnover. The majority of PEs requires annual subsidies and capital injections to remain viable, and therefore reform remains a policy priority, including improving corporate governance; cleaning up balance sheets on the basis of sound accounting; clearing unpaid taxes; and clearly defining and costing remaining social responsibilities. There has been some progress in recent years. For instance, the sale of the main hotel – Vaiaku Lagi – is progressing. To enhance the government oversight of public enterprises in the Public Enterprise Review and Monitoring Unit, staffing continuity and workforce planning is needed. While not a PE, the financial situation of the Tuvalu Cooperative Society (TCS) is deteriorating due to sizeable arrears to suppliers and banks (amounting to around 4 percent of GDP), combined with rapidly accumulating interest rate costs. A comprehensive action plan is

[3] The DSA analyzes gross public debt as the TTF is not fully sovereign and it cannot be drawn down freely (see Annex 3).

urgently needed to restore financial viability. In the long run, higher PE profitability will increase the flow of dividends and ease fiscal pressures.

International risk sharing

19. International risk sharing will be important to alleviate risks relating to climate change. Tuvalu has been actively seeking access to multilateral funding of climate change mitigation, such as the GCF, Adaptation Fund, Special Climate Change Fund and the Global Environment Facility. Going forward, increasing capacity to meet the accreditation and fiduciary standards of these initiatives will be important for timely access to financing. In this context, it is encouraging that Tuvalu's application to the GCF for a long-term US$36 million project to build outer island coastal protection was recently approved. Exploring options for disaster insurance could also spread the financial burden of recovering from natural disaster, although the menu of options is currently limited in this area.

Authorities' views

20. The authorities broadly agreed with staff's analysis. With above-average fishing revenue in recent years, the authorities' will continue to focus on building up buffer funds, aiming to reach a balance of A$200 million (380 percent of projected 2020 GDP) in the TTF by 2020. The authorities are cognizant of the rapid rise in recurrent expenditures and have introduced a reform plan to increase efficiency in the health sector in the National Health Reform Plan (2016-19), but also recognized the challenges in reducing costs over the medium term with an aging population and high incidence of non-communicable diseases. On civil service wages, the authorities highlighted the high cost of living given the small size of the market which needs to be reflected in wages. Public enterprise reform remains a key priority for the government, where management needs to improve to limit the subsidies that weaken the government's financial position. The authorities are working on a reform plan to revive the TCS and the vital role it plays in providing food security to the remote outer islands and a high-level working group has been established.

B. Financial Sector Reform

21. The financial sector needs effective oversight. The level of non-performing loans in the NBT and the DBT appears to have declined over the past two years, but they remain at high levels. The DBT will need additional capital to increase lending,[4] while the NBT appears to have a sufficient capital cushion to write off the non-performing loans without a capital injection. The Banking Commissioner should conduct on-site examinations and a non-performing asset review, with the assistance of PFTAC advisors.

22. Access to financial services could be broadened. There is no foreign bank presence in Tuvalu, but the authorities have expressed interest in cooperating with a foreign bank to facilitate international banking services (including ATM access). More broadly, access to financial services is hampered by the lack of effective collateral, partly relating to customary land ownership, but also lack of financial literacy. In this context, TNPF is a key source of financial access where participants can access up to 1/3 of the member's

[4] Subject to the findings of a detailed review, the upper range for DBT's capital need is perhaps in the 2 percent of GDP range.

contribution. TNPF is also providing financial education to members approaching retirement age, but broader efforts to enhance financial literacy are needed. Tuvalu's largest bank, the NBT has maintained the key working international correspondent banking relationships, but access to some currency clearing services is complicated.

C. External Assessment

23. The real exchange rate is broadly in line with the long-run average (Annex 5). While the level of the real exchange rate has returned to its 20-year average and there is no sign of significant misalignment, the economy's competitiveness remains weak, with remoteness causing high transportation costs and the lack of scale increasing fixed costs.[5] The real exchange rate plays a limited role in current account developments, which are mostly driven by exogenous factors such as fishing and internet licensing fees and donor flows. However, continued expansion of government spending could result in increased imports and a deterioration of the external position.

D. Other issues

24. Staff followed up on outstanding jurisdictional issues and completed the assessment of the exchange system in Tuvalu. At the time of joining Fund, Tuvalu notified the Fund that it intended to avail itself of transitional arrangements under Section 2 of Article XIV. Staff followed up on outstanding jurisdictional issues and completed the assessment of the exchange system in Tuvalu. Tuvalu is an Article XIV member but does not maintain exchange restrictions or multiple currency practices under Article XIV or Article VIII. The authorities are considering whether to accept the obligations under Article VIII, but have yet to reach a decision. On AML/CFT, the authorities joined Asia Pacific Group (APG) as an observer in 2014 and continue to strengthen their AML/CFT framework in anticipation of a future comprehensive assessment. It has established a Transactions Tracking Unit in the Tuvalu Police Force to track suspicious transactions.

Authorities' views on financial sector, exchange rate assessment and other issues

25. The authorities broadly agreed with staff assessment and are cognizant of the need to strengthen the banking sector. They highlighted the role of broader financial access to facilitate credit to small and medium sized enterprises to facilitate broader-based economic growth. Development of mobile banking is hampered by poor connectivity. The authorities are looking to strengthen banking supervision, drawing on development partner expertise, and have requested PFTAC technical assistance. They agreed the exchange rate is in line with economic fundamentals.

[5] An EBA-lite style assessment of exchange rate alignment is not feasible due to data limitations and is of limited informative value given the prominent role of exogenous factors, especially the highly volatile fishing license fees and commodity prices. The use of the Australian dollar as the legal tender remains appropriate, given strong trade and financial linkages and limited capacity to run an independent monetary institution.

E. Staff Appraisal

26. The near-term macroeconomic outlook is stable. Real GDP growth is picking up on account of several large infrastructure projects and recovery spending following Cyclone Pam, while inflation is expected to remain stable. With four years of budget surpluses, fiscal buffers have been rebuilt and remain at a comfortable level. At the same time, expenditures have grown quickly and fiscal deficits are expected over the medium term. Risks to the outlook relate to the effects of climate change, sharper-than-expected decline in fishing revenues, and a global financial downturn, which could affect distributions to the budget from the TTF. There is no sign of significant exchange rate misalignment.

27. Tuvalu has made marked progress on structural reform under the PRM, but challenges remain. All the reforms set out through a consultative process with development partners in the PRM 2012-15 have been implemented. Substantial improvements have been made in the overall macroeconomic and fiscal management of the economy. Nevertheless, important challenges remain and staff encourages the authorities to continue building on the reform momentum and work with development partners in a possible fourth phase of the PRM to be aligned with the new development agenda, TKIII, with important priorities including enhancing fiscal sustainability, strengthened fiscal frameworks, sustaining climate change investment, public enterprise reform and financial sector oversight.

28. Tuvalu's fiscal challenges continue to revolve around revenue volatility and sustainably meeting the long-term costs of climate change. The authorities' recent initiatives to develop a climate change risk assessment framework and incorporating disaster costs into national budget planning are welcome, but a clearer classification between recurrent and capital spending to budget and monitor climate change mitigation investment is recommended. Staff welcomes the establishment of the TSF, subject to effective governance covenants, as a mechanism to quickly respond to the impact of natural disasters.

29. A long-term capital budgeting framework is needed for effective climate change mitigation. The Tuvalu Infrastructure Strategy Investment Plan provides a long-term road map of projects, but consistent implementation is essential. In this context, improvements in the fiscal management framework will be needed to guide the medium-term budgeting process. In addition, continued progress in public financial management reform may improve the quality of spending and support additional development partner assistance. Improved access to global climate change funding, supplemented by insurance and other international risk sharing facilities, will be important to manage the costs of climate change. Meeting the accreditation and fiduciary standards – with the continued help of development partners – of these initiatives will be important for timely access to financing.

30. Sustaining fiscal buffers will be critical in mitigating risks related to climate change and revenue volatility. With a narrow and volatile revenue base, it is essential to maintain buffers at the sustainable level. However, without restraining the strong growth in recurrent spending under current policies, fiscal buffers are expected to decline over the medium term. An adjustment scenario entailing recurrent expenditure restraint would provide fiscal space for essential climate change capital investment and allow re-investment of TTF distributions to build up balances towards the authorities' A$200 million target by 2020.

31. Public enterprise reform remains a policy priority and the financial sector needs effective oversight. Reform priorities include improving corporate governance; cleaning up balance sheets on the basis of sound accounting; clearing unpaid taxes; and clearly defining and costing remaining social responsibilities. In the long run, higher PE profitability will increase the flow of dividends and ease fiscal pressures. The Banking Commissioner should conduct on-site examinations and a non-performing asset review, with the assistance of PFTAC advisors. Efforts to promote financial literacy should also be enhanced to promote wider access to financial services and stimulate private sector development.

32. Staff followed up on outstanding jurisdictional issues and completed the assessment of the exchange system in Tuvalu. Staff encourages the authorities to accept the obligations under Article VIII, Sections 2(a), 3 and 4.

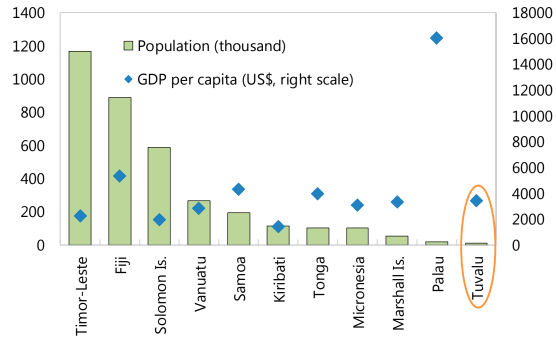
33. Statistics and data reporting, particularly national accounts and balance of payments statistics, remain weak and impede economic assessments. The authorities should increase statistical staffing and actively seek technical assistance from the Fund and PFTAC.

34. 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

Per capita income is relatively high....

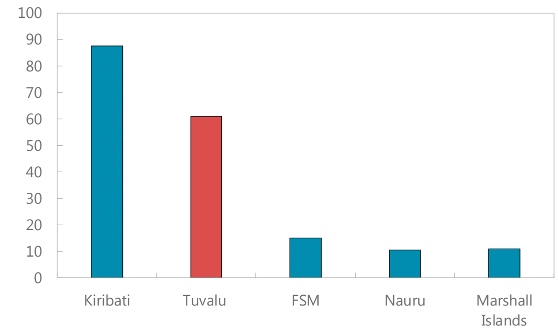
Population and GDP per Capita



Source: IMF, *World Economic Outlook*.

...supported by fishing license fee revenue....

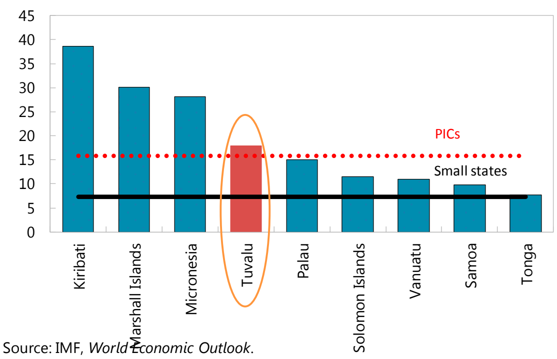
Fishing License Fees, 2015
(In percent of GDP)



Sources: Country authorities; and Fund staff estimates. FSM refers to 2014.

...and development partner grants.

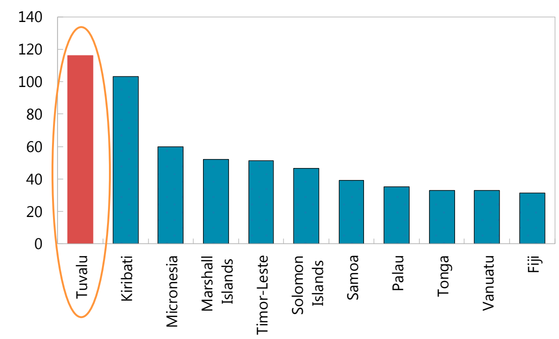
Grants, 2015
(In percent of GDP)



Source: IMF, *World Economic Outlook*.

The public sector is large and dominates the economy...

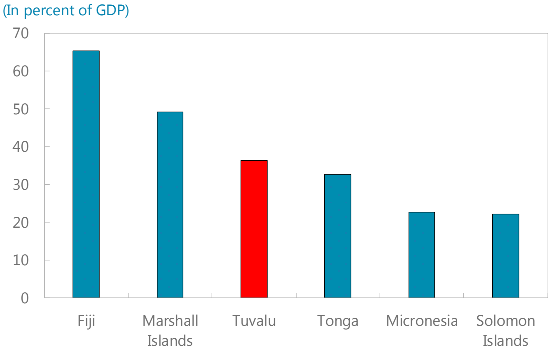
Government Expenditure, 2015
(In percent of GDP)



Sources: IMF, *World Economic Outlook*.

...while the private sector is small...

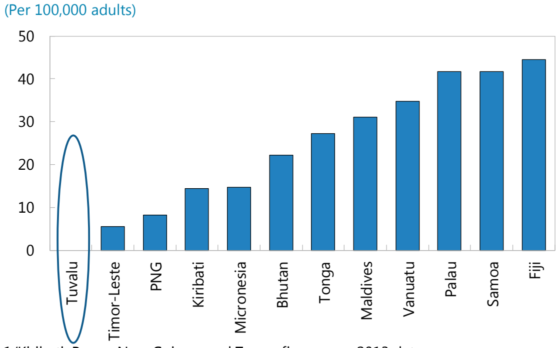
Private Sector Credit, 2015
(In percent of GDP)



Sources: Authorities; and Fund staff estimates

...and international financial connectivity is limited (no ATM access).

ATM Access, 2014 1/
(Per 100,000 adults)

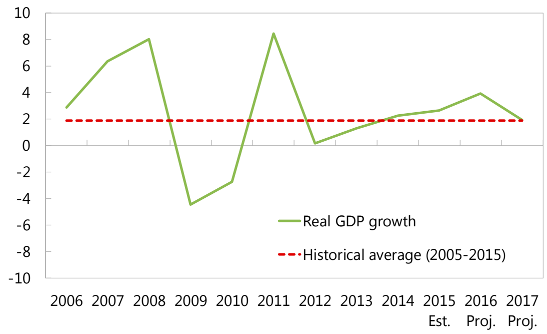


1/Kiribati, Papua New Guinea, and Tonga figures are 2013 data.
Source: IMF, *Financial Access Survey; and Fund staff estimates.*

Figure 2. Tuvalu: Economic Developments

Growth is volatile and currently above recent averages.

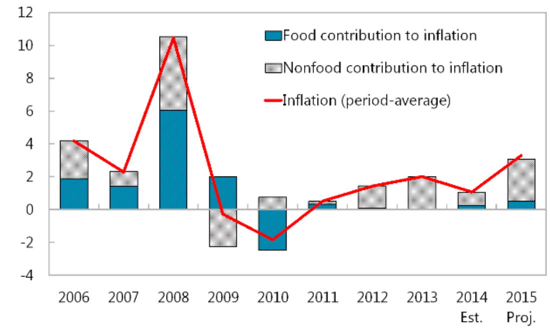
GDP Growth
(In percent)



Sources: Authority data; and IMF staff estimates.

Inflation remains contained.

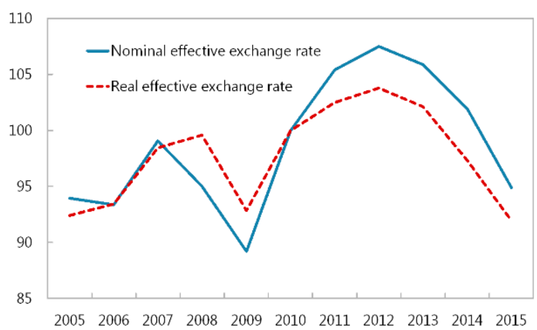
Contributions to Inflation
(In percent, year-on-year)



Sources: Authority Data; and IMF staff estimates.

The exchange rate has depreciated along with the weakening of the Australian dollar…

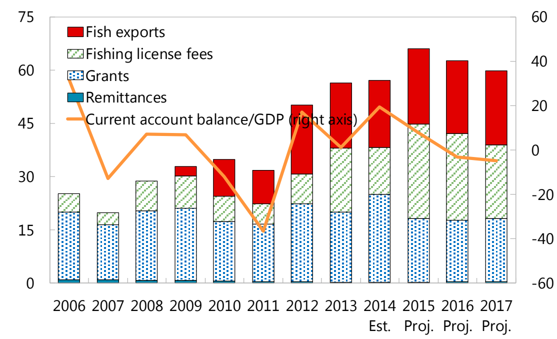
Effective Exchange Rates
(2010=100)



Source: IMF Staff estimates.

… boosting fishing license fees.

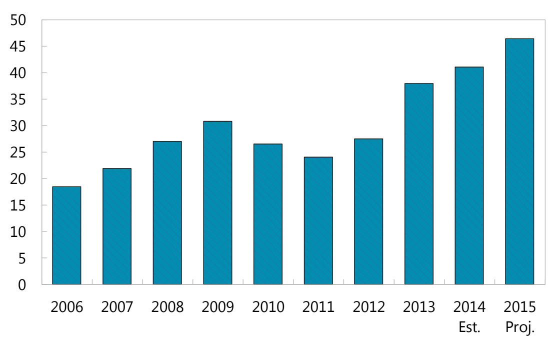
Main Balance of Payments Receipts
(In millions of AUS$)



Sources: Authority data; and IMF staff estimates.

Buffers have been replenished…

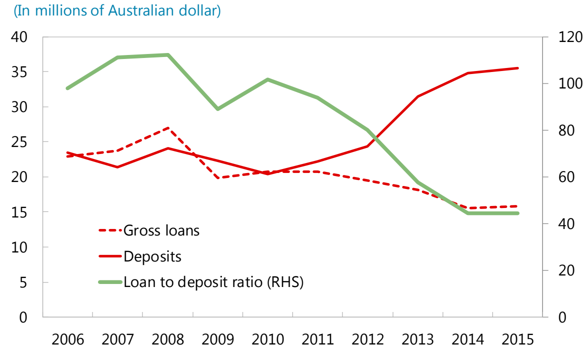
Gross Official Reserves
(In millions of Australian dollars)



Source: Authority data; and Fund staff estimates.

…and liquidity in the financial system has increased.

Banks' Assets and Liabilities
(In millions of Australian dollar)

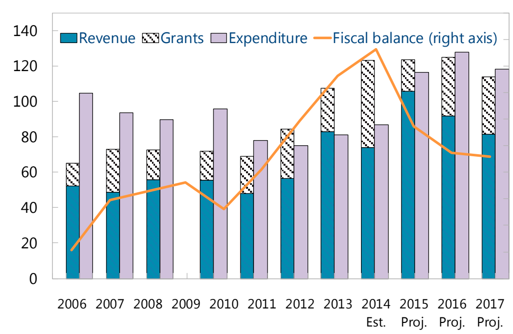


Source: Tuvalu authorities and Fund staff projections.

Figure 3. Tuvalu: Fiscal Developments

Fiscal surpluses have allowed building of buffers…

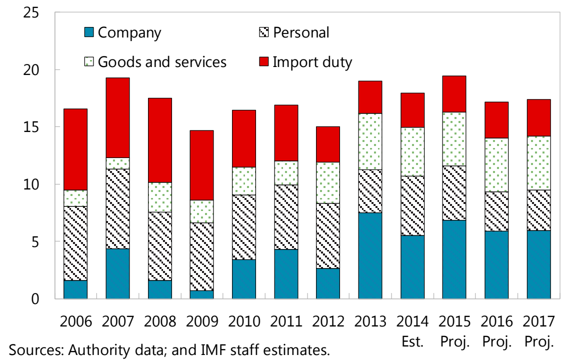
Fiscal Balance
(In percent of GDP)



Sources: Authorities data; and IMF staff estimates.

…and tax revenues have been increasing.

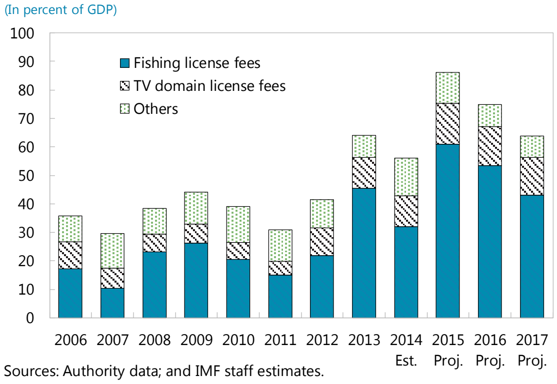
Tax Revenue
(In percent of GDP)



Sources: Authority data; and IMF staff estimates.

Fishing and internet license fees have boosted revenues…

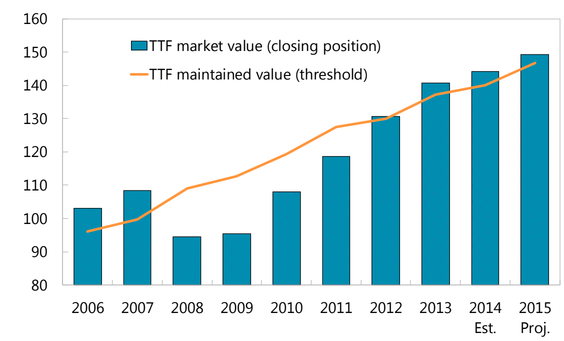
Non-tax Revenue
(In percent of GDP)



Sources: Authority data; and IMF staff estimates.

…and the Tuvalu Trust Fund has performed well.

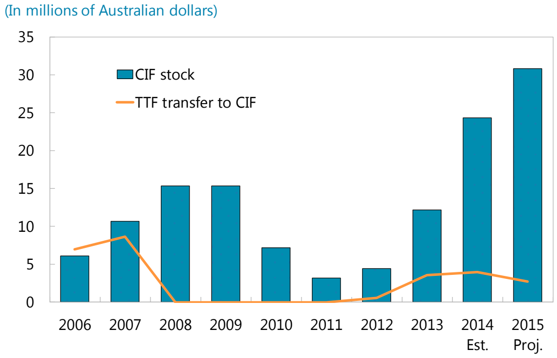
Tuvalu Trust Fund
(As of September of each year; in millions of Australian dollars)



Sources: Authority data; and IMF staff estimates.

The CIF balances are above the fiscal anchor of 16 percent of the maintained value of the TTF…

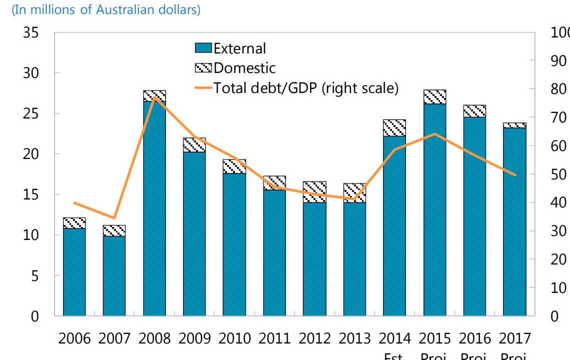
Consolidated Investment Fund
(In millions of Australian dollars)



Source: Tuvalu Authorities.

…and public debt remains relatively high.

Public Debt
(In millions of Australian dollars)



Sources: Authorities data; and IMF staff estimates.

Table 1. Tuvalu: Selected Social and Economic Indicators, 2012–2017

Population (2014): 9,893	Poverty rate (2010): 26.3 percent
Per capita GDP (2014 est.): US$3,827	Life expectancy (2014): 66 years
Main export: Fish	Primary school enrollment (2006): 100 percent
Key export markets: Fiji, Australia, Japan	Secondary school enrollment (2001): 79.5 percent

	2012	2013	2014	2015	2016	2017
			Est.		Proj.	
			(Percent change)			
Real sector						
Real GDP growth	0.2	1.3	2.2	2.6	4.0	2.3
Consumer price inflation (period average)	1.4	2.0	1.1	3.2	3.5	2.9
Government finance			(In percent of GDP)			
Revenue and grants	84.3	107.5	123.1	123.5	124.5	113.3
Revenue	56.6	82.9	74.1	105.5	91.7	80.9
of which: Tax revenue	15.0	19.0	18.0	19.4	17.1	17.3
Fishing license fees	21.8	45.4	32.0	60.9	53.2	43.0
Grants	27.8	24.6	49.0	18.0	32.9	32.4
Total expenditure	75.0	81.1	86.8	116.3	127.3	117.6
Current expenditure	75.0	81.0	86.6	116.1	127.1	117.4
of which: Wages and salaries	31.9	32.2	36.1	37.4	43.2	43.8
Special Development Expenditure	6.2	7.4	9.2	13.3	23.9	13.5
Overall balance	9.3	26.3	36.3	7.2	-2.7	-4.2
Tuvalu Trust Fund (stock, $A million)	131	141	144	149	151	155
Consolidated Investment Fund (stock, $A million) 1/	4.5	12.2	24.3	30.8	28.9	26.2
Tuvalu Survival Fund (stock, A$ million)					5.0	5.0
			(Percent change, unless otherwise indicated)			
Money and credit						
Deposits	9.7	29.2	10.6	2.0	…	…
Credit	-11.4	15.2	-32.0	2.0	…	…
Lending interest rate (in percent)	10.6	10.6	10.6	9.1	…	…
			(In millions of Australian dollars, unless otherwise indicated)			
Balance of payments						
Current account balance	6.6	0.5	8.0	3.3	-1.8	-2.7
(In percent of GDP)	17.2	1.2	19.3	7.6	-4.0	-5.7
Exports of goods	19.9	18.8	19.2	19.7	20.1	20.6
o/w Fish	19.5	18.4	18.8	19.3	20.1	20.6
Imports of goods	-21.4	-32.2	-29.3	-33.6	-38.6	-39.9
Current transfers (net)	21.2	18.0	25.6	14.9	17.3	17.8
Capital and financial account balance	-3.4	8.7	-4.9	2.1	-1.8	1.3
of which: .TV domain license fees	3.7	4.4	4.5	6.3	6.3	6.3
Capital transfers (net)	4.7	5.1	5.8	9.1	11.3	8.6
Gross official reserves 2/	27.5	37.9	41.0	46.4	42.7	41.3
(In months of next year's imports)	5.4	8.3	7.4	7.1	6.5	6.1
			(In percent of GDP, unless otherwise indicated)			
Debt indicators						
Gross public debt	25.9	57.2	64.4	58.2	53.7	44.3
External	19.7	51.8	59.8	54.5	51.7	44.3
Domestic	6.3	5.4	4.6	3.8	2.0	0.0
Exchange rates						
Australian dollars per U.S. dollar (period average)	1.0	1.0	1.1	1.3	…	…
End-period	1.0	1.1	1.2	1.4	…	…
Real effective exchange rate (2005=100)	103.8	102.1	97.3	91.9	…	…
Nominal GDP (In millions of Australian dollars)	38.5	39.7	41.3	43.5	46.1	48.1

Sources: Tuvalu authorities; PFTAC; SPC; ADB; World Bank; and IMF staff estimates and projections.

1/ Includes government transfers of unspent capital spending allocations to the Tuvalu Development Fund in 2015, estimated at A$5.2 million.

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

Table 2. Tuvalu: Medium-Term Baseline Scenario, 2011–2021

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
				Est.				Proj.			
(Percent change)											
Growth and inflation											
Real GDP growth	8.5	0.2	1.3	2.2	2.6	4.0	2.3	2.3	2.2	2.0	2.1
CPI inflation (period average)	0.5	1.4	2.0	1.1	3.2	3.5	2.9	2.8	2.8	2.6	2.5
(In percent of GDP)											
Fiscal accounts											
Total revenue and grants	69.0	84.3	107.5	123.1	123.5	124.5	113.3	111.5	110.2	109.4	109.2
Revenue	47.8	56.6	82.9	74.1	105.5	91.7	80.9	79.5	78.5	77.9	77.9
Grants	21.2	27.8	24.6	49.0	18.0	32.9	32.4	32.0	31.7	31.5	31.3
Total expenditure and net lending	77.9	75.0	81.1	86.8	116.3	127.3	117.6	116.8	115.8	115.0	113.7
Overall balance (including grants)	-8.9	9.3	26.3	36.3	7.2	-2.7	-4.2	-5.3	-5.6	-5.7	-4.4
(In millions of Australian dollars, unless otherwise indicated)											
Balance of payments											
Current account	-13.9	6.6	0.5	8.0	3.3	-1.8	-2.7	-2.8	-2.7	-1.6	-1.1
(In percent of GDP)	-36.5	17.2	1.2	19.3	7.6	-4.0	-5.7	-5.5	-5.1	-3.0	-1.9
of which:											
Exports	10.2	19.9	18.8	19.2	19.7	20.1	20.6	22.4	23.3	24.3	25.2
(Annual percent change)	-6.7	95.6	-5.7	2.5	2.5	1.8	2.5	9.0	4.0	4.0	4.0
(In percent of GDP)	26.7	51.7	47.3	46.6	45.4	43.6	42.7	44.7	44.7	44.8	45.0
Imports	-17.6	-21.4	-32.2	-29.3	-33.6	-38.6	-39.9	-42.0	-43.5	-44.4	-45.9
(Annual percent change)	1.9	21.5	50.6	-9.2	14.6	14.9	3.4	5.3	3.7	2.1	3.3
(In percent of GDP)	46.3	55.6	81.2	70.8	77.1	83.7	82.8	83.5	83.3	82.1	81.8
Services, net	-30.2	-22.4	-24.5	-21.3	-28.4	-35.1	-34.2	-34.1	-33.5	-33.3	-33.1
Income, net	9.4	9.2	20.4	13.8	30.6	28.6	24.7	24.8	24.9	25.7	26.6
Current transfers, net	14.3	21.2	18.0	25.6	14.9	23.1	26.0	26.0	26.1	26.1	26.1
Capital and financial account	12.3	-3.4	8.7	-4.9	2.1	-1.8	1.3	1.6	1.1	0.4	0.8
(In percent of GDP)	32.3	-8.7	22.0	-11.8	4.8	-4.0	2.7	3.3	2.1	0.8	1.4
Overall balance	-1.7	1.9	10.0	3.1	5.4	-3.6	-1.4	-1.1	-1.5	-1.2	-0.3
of which: Capital transfers	12.3	4.7	5.1	5.8	9.1	11.3	8.6	6.1	6.5	6.6	6.7
.TV domain license fees	2.4	3.7	4.4	4.5	6.3	6.3	6.3	6.3	6.3	6.3	6.7
Memorandum items											
Gross external public debt (percent of GDP)	19.2	19.7	51.8	59.8	54.5	51.7	44.3	36.6	30.3	24.6	13.1
External debt service ratio 1/	3.1	2.0	2.9	2.9	12.2	12.0	11.6	12.4	10.2	9.8	20.4
Gross official reserves (millions of U.S. dollars)	24.1	27.5	37.9	41.0	46.4	42.7	41.3	40.2	38.7	37.5	37.2
(In months of next year's imports)	6.0	5.4	8.3	7.4	7.1	6.5	6.1	5.8	5.6	5.3	5.0
Tuvalu Trust Fund (stock, $A million)	118.7	130.6	140.6	144.1	149.3	151.0	154.8	158.6	162.6	166.7	170.8
Consolidated Investment Fund (stock, $A million) 2/	3.2	4.5	12.2	24.3	30.8	28.9	26.2	22.9	19.3	15.6	12.4

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

1/ In percent of exports of goods and services.

2/ Includes government transfers of unspent capital spending allocations to the Tuvalu Development Fund in 2015, estimated at A$5.2 million.

Table 3. Tuvalu: Summary Operations of the General Government, 2011–21

	2011	2012	2013	2014	2015 Est.	2016	2017	2018 Proj.	2019	2020	2021
					(In percent of GDP)						
Total revenue and grants	69.0	84.3	107.5	123.1	123.5	124.5	113.3	111.5	110.2	109.4	109.2
Revenue	47.8	56.6	82.9	74.1	105.5	91.7	80.9	79.5	78.5	77.9	77.9
Tax revenue	16.9	15.0	19.0	18.0	19.4	17.1	17.3	17.3	17.3	17.4	17.5
Personal income tax	5.6	5.7	3.7	5.2	4.8	3.5	3.5	3.5	3.5	3.5	3.5
Corporate income tax	4.3	2.6	7.5	5.5	6.8	5.9	5.9	6.0	6.0	6.0	6.1
Consumption & sales tax	0.1	1.5	3.1	3.0	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Excise and others	2.0	2.1	1.8	1.3	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Import duty	4.9	3.1	2.8	3.0	3.2	3.2	3.2	3.2	3.2	3.2	3.2
Nontax revenue	30.9	41.5	63.9	56.2	86.1	74.5	63.6	62.2	61.2	60.5	60.5
of which: Fishing license fees	14.9	21.8	45.4	32.0	60.9	53.2	43.0	42.2	41.8	41.6	41.3
Interest and dividends	4.0	2.3	0.5	8.0	3.5	3.3	3.2	3.1	2.9	2.9	2.9
.TV license fees	4.9	9.6	11.0	10.9	14.4	13.8	13.2	12.6	12.1	11.7	11.9
Grants 1/	21.2	27.8	24.6	49.0	18.0	32.9	32.4	32.0	31.7	31.5	31.3
Total expenditure and net lending	77.9	75.0	81.1	86.8	116.3	127.3	117.6	116.8	115.8	115.0	113.7
Current expenditure	76.1	75.0	81.0	86.6	116.1	127.1	117.4	116.6	115.6	114.9	113.5
of which: Wages and salaries	31.3	31.9	32.2	36.1	37.4	43.2	43.8	43.8	44.0	44.0	44.0
TMTS	5.6	6.1	6.5	6.5	6.9	6.8	6.9	6.9	7.0	6.9	6.8
Special development expenditure	10.2	6.2	7.4	9.2	13.3	23.9	13.5	13.5	13.5	13.5	13.5
Interest payments	0.8	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.4	0.1
Capital expenditure and net lending	1.8	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Capital expenditure	1.8	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Net lending	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overall balance (incl. grants)	-8.9	9.3	26.3	36.3	7.2	-2.7	-4.2	-5.3	-5.6	-5.7	-4.4
Overall balance (excl. grants)	-30.1	-18.4	1.8	-12.6	-10.7	-35.6	-36.6	-37.3	-37.3	-37.2	-35.7
Primary balance	-8.1	9.7	26.5	36.5	7.3	-2.6	-4.1	-5.1	-5.5	-5.2	-4.3
Financing	8.9	-9.3	-26.3	-36.3	-7.2	2.7	4.2	5.3	5.6	5.7	4.4
Foreign (net)	-0.5	-0.1	-1.0	-0.4	-1.4	-1.3	-1.2	-1.2	-1.1	-1.1	-1.1
Domestic (net)	-0.1	0.0	-0.1	0.0	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
CIF (net, -=increase)	9.4	-9.2	-25.3	-35.9	-5.7	4.2	5.6	6.6	6.9	6.9	5.6
Memorandum items:											
Public debt (in percent of GDP)	23.8	25.9	57.2	64.4	58.2	53.7	44.3	36.6	30.3	24.6	13.1
Stock of CIF ($A million) 2/	3.2	4.5	12.2	24.3	30.8	28.9	26.2	22.9	19.3	15.6	12.4
Nominal GDP ($A million)	38.1	38.5	39.7	41.3	43.5	46.1	48.1	50.2	52.3	54.2	56.1

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

1/ Includes transfer from the Tuvalu Trust Fund to the Consolidated Investment Fund.

2/ Includes government transfers of unspent capital spending allocations to the Tuvalu Development Fund in 2015, estimated at A$5.2 million.

Table 4. Tuvalu: Balance of Payments, 2011–21
(In millions of Australian dollars, unless otherwise indicated)

	2011	2012	2013	2014 Est.	2015	2016	2017	2018 Projections	2019	2020	2021
	(In millions of Australian dollars, unless otherwise indicated)										
Current account balance	-13.9	6.6	0.5	8.0	3.3	-1.8	-2.7	-2.8	-2.7	-1.6	-1.1
excluding official grants	-29.5	-16.0	-17.5	-17.6	-11.6	-24.9	-28.7	-28.8	-28.7	-27.7	-27.1
Goods and services balance	-37.6	-23.9	-37.9	-31.4	-42.2	-53.6	-53.5	-53.6	-53.6	-53.5	-53.8
Trade	-7.4	-1.5	-13.5	-10.0	-13.8	-18.5	-19.3	-19.5	-20.2	-20.2	-20.7
Exports, f.o.b.	10.2	19.9	18.8	19.2	19.7	20.1	20.6	22.4	23.3	24.3	25.2
of which: Fish	9.4	19.5	18.4	18.8	19.3	20.1	20.6	22.4	23.3	24.3	25.2
Imports, f.o.b.	-17.6	-21.4	-32.2	-29.3	-33.6	-38.6	-39.9	-42.0	-43.5	-44.4	-45.9
Services	-30.2	-22.4	-24.5	-21.3	-28.4	-35.1	-34.2	-34.1	-33.5	-33.3	-33.1
Credit	4.2	4.3	4.2	4.4	4.6	4.9	5.1	5.3	5.5	5.7	5.9
Debit	-34.4	-26.6	-28.7	-25.7	-33.0	-40.0	-39.3	-39.4	-39.0	-39.0	-39.0
Net income	9.4	9.2	20.4	13.8	30.6	28.6	24.7	24.8	24.9	25.7	26.6
Credit	10.6	13.7	23.8	17.3	34.3	32.5	28.8	29.1	29.3	30.3	31.3
Debit	-1.2	-4.5	-3.4	-3.5	-3.7	-3.9	-4.1	-4.2	-4.4	-4.5	-4.7
Net transfers	14.3	20.3	18.0	22.9	16.1	15.3	15.8	12.6	12.9	13.2	13.6
Credit	16.7	22.4	20.4	25.3	18.6	18.0	18.5	15.5	15.9	16.3	16.8
Debit	-2.4	-2.2	-2.3	-2.4	-2.6	-2.7	-2.8	-2.9	-3.0	-3.1	-3.2
Capital and financial account	12.3	-3.4	8.7	-4.9	2.1	-1.8	1.3	1.6	1.1	0.4	0.8
Capital account	14.7	8.4	7.4	8.0	13.0	13.0	14.8	12.2	12.7	13.1	13.5
of which: Capital tranfers	12.3	4.7	5.1	5.8	9.1	11.3	8.6	6.1	6.5	6.6	6.7
.TV domain license fees	1.9	3.7	4.4	4.5	6.3	6.3	6.3	6.3	6.3	6.3	6.7
Financial account	-2.3	-11.8	1.3	-12.9	-10.9	-14.9	-13.5	-10.6	-11.6	-12.6	-12.7
Direct investment (net)	-0.1	1.6	-0.6	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
Portfolio investment (net)	0.0	-7.0	-1.1	-1.2	-4.2	-3.2	-3.8	-2.9	-2.9	-3.0	-3.1
Other (net) 2/	-2.3	-6.4	3.0	-12.1	-7.0	-12.0	-10.0	-8.0	-9.0	-10.0	-10.0
Errors and omissions	-0.1	-1.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overall balance	-1.7	1.9	10.0	3.1	5.4	-3.6	-1.4	-1.1	-1.5	-1.2	-0.3
Financing											
Change in official reserves (-=increase in reserves)	1.7	-1.9	-10.0	-3.1	-5.4	3.6	1.4	1.1	1.5	1.2	0.3
Memorandum items:											
Current account balance (percent of GDP)	-36.5	17.2	1.2	19.3	7.6	-4.0	-5.7	-5.5	-5.1	-3.0	-1.9
excluding official grants (percent of GDP)	-77.5	-41.5	-44.1	-42.5	-26.6	-54.1	-59.6	-57.2	-54.9	-51.1	-48.4
Gross official reserves 1/	24.1	27.5	37.9	41.0	46.4	42.7	41.3	40.2	38.7	37.5	37.2
(in months of imports of goods and services)	6.0	5.4	8.3	7.4	7.1	6.5	6.1	5.8	5.6	5.3	5.0

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

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

2/ Includes financial transactions related to the joint venture company, Tuvalu Tuna FH Co.

Table 5. Tuvalu: Assets and Liabilities of the Banking Sector, 2007-15
(In millions of Australian dollars, unless otherwise indicated)

	2007	2008	2009	2010	2011	2012	2013 Est.	2014 Est.	2015 Est.
	(In millions of Australian dollars)								
Assets	38.4	46.0	41.4	41.1	42.8	44.3	50.4	54.2	55.3
Cash	1.1	1.1	1.5	1.2	1.6	2.3	1.5	0.7	0.7
Deposits	10.2	12.8	13.8	14.9	16.7	18.0	20.0	23.3	23.7
Loans and advances 1/	23.7	27.0	19.8	20.7	20.8	19.5	18.1	15.5	15.8
of which: Government loans	4.9	3.6	1.7	2.1	0.3	0.3	0.0	0.0	0.0
Claims on other banks	0.6	2.2	1.1	1.6	1.0	1.8	8.7	12.4	12.7
Fixed assets	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4
Other assets	2.1	2.4	4.7	2.4	2.3	2.4	1.8	1.9	2.0
Liabilities	25.4	31.0	24.8	21.7	23.5	25.7	32.8	35.7	36.4
Deposits	21.4	24.1	22.3	20.4	22.2	24.3	31.4	34.8	35.5
of which: Government deposits	4.3	3.4	2.6	3.9	3.3	4.4	13.8	13.4	13.6
Demand deposits	7.1	9.7	7.9	7.6	7.6	10.2	18.3	14.5	14.8
Securities	…	…	…	…	0.1	0.1	0.2	0.1	0.1
Liabilities to other banks 2/	1.4	2.3	1.0	0.7	0.6	0.5	0.5	0.4	0.4
Other liabilities	2.6	4.6	1.6	0.6	0.6	0.7	0.6	0.4	0.4
Capital	13.0	15.0	16.6	19.4	19.2	18.6	17.6	18.5	18.9
of which: Paid-up capital	3.4	3.7	4.0	4.6	4.7	4.7	4.7	5.5	5.6
Retained earnings	2.3	3.1	3.9	5.7	5.1	4.5	6.1	5.2	5.3
Provision for credit impairment	7.3	8.2	8.6	9.1	9.5	9.4	6.8	7.8	8.0

Sources: National Bank of Tuvalu; and Development Bank of Tuvalu.

1/ Gross loans and advances.

2/ Development Bank of Tuvalu's loans from the European Investment Bank.

Annex I. The Fisheries Sector in Tuvalu

The fish stock is Tuvalu's most important natural resource. Tuvalu's EEZ of about 900,000 square kilometers is almost 28,000 times its land area, and has an abundance of tuna resources which gets boosted during the El Nino-Southern Oscillation.[1] Fish constitute a large share of Tuvalu's exports and given the limited and infertile land area, fish is also an important source of food for the population.

The Vessel Day Scheme (VDS) under the Parties to Nauru Agreement (PNA) has worked well for Tuvalu. The PNA controls the largest sustainable purse seine tuna fisheries area in the world and around half of the global supply of skipjack tuna. In 2010, the PNA members established a VDS to limit purse seine fishing in their waters which also allowed transferability of vessel days amongst members. As a result, access fees have increased and Tuvalu's revenues from fishing license fees reached a record 60 percent of GDP in 2015.

The United States (US) South Pacific Treaty which started in 1988 has also benefited Tuvalu. The Treaty has been restructured and extended a number of times over the years and included an economic assistance package to Forum Fisheries Agency and more recently had also incorporated the VDS. However, in early 2016, the U.S. government announced plans to withdraw from the Treaty due to rising costs and other viability concerns. Nonetheless, the Pacific countries and the US were keen to discuss a restructured Treaty that would be mutually beneficial in the long term. In June 2016, a new agreement was reached by the U.S. government officials and the Forum Fisheries Agency which is planned to come into effect from 2017. The new agreement is expected to provide more flexibility to the U.S. boats in choosing the type and number of fishing access days. The revised treaty is expected to provide returns of over US$14,000 per fishing day (compared to just over US$11,000 per fishing day in 2016) and last for six years. However, the agreement is currently in principle only, and both the U.S. and Pacific governments need to endorse the deal.

Despite the benefits from the VDS, fishing license fee remain volatile and the recent surge in license fees may be unsustainable. The use of fish aggregating devices is proving controversial as it can disrupt the mechanics of the VDS where days are allotted based on the volume of historical catches as well as sustainability of fish stocks. This has resulted in lobbying to ban usage of fish aggregating devices in the PNA area totally or at least during the spawning months. Over the longer term, market conditions, climate change, failure in regional cooperation on the shared resource, and overfishing can easily erode fish stocks and the premium prices received in license fee and therefore affect fiscal planning as well as future livelihood.

Better utilization and value-adding in the fisheries sector remains a long term challenge. While the Tuvalu government has entered joint ventures with foreign companies in fishing, there is little value addition in Tuvalu. The ability to capitalize fully on its most important resource is hindered mostly by capacity constraints in transport and storage, limited private sector development, access to credit, and other technical constraints related to value addition of fisheries resources.

[1] The El Nino-Southern Oscillation refers to the oscillation between a warm (El Nino) and a cold (La Nina) state every 2-7 years in the tropical Pacific Ocean, which has a very strong influence on the distribution and abundance of tuna. See *Pacific Possible, Tuna Fisheries,* World Bank Group, May 2016.

Annex II. Climate Change Investment in Tuvalu

Rising sea levels threaten Tuvalu's existence. Recent estimates of rising sea levels in Tuvalu indicate that the annual change has accelerated from around 1mm per year in the 1980s to an estimated 5mm per year since the early 1990s. Rising sea levels result in less resilient coastlines during tropical storms and other natural disasters.

Tuvalu has made climate-proofing a key policy measure in their recent medium-term fiscal framework and Infrastructure Strategy and Investment Plan. Investment has begun across a number of areas, including fortifying coastlines of the outer islands, refurbishing schools and other government buildings to serve as evacuation centers, and upgrading communication systems across the islands. In 2015, the authorities spent an estimated 2.2 percent of GDP (roughly A$1m) on climate-change infrastructure projects, with several additional upgrades planned for the medium term.[1]

Climate-proofing will require the use of existing fiscal buffers, with donor support in the medium term. The World Bank estimates the cost of climate-proofing measures at 2 percent of GDP per year over the long term, most of which will come in the form of capital expenditures. In the near term, the authorities will draw down on existing fiscal buffers (the CIF and the Tuvalu Survival Fund) to finance these investments. Should the value of the CIF fall below prudent levels, as envisaged in the baseline scenario, the authorities will rely on donor support for financing in the medium and long term. Donor financing is expected to average more than 20 percent of GDP over the period 2022-2036.

Mitigating the effects of climate change puts Tuvalu's long-term debt path on a higher trajectory. External financing, combined with other high-priority expenditures, will weigh on the fiscal balance in the long term. Under the baseline scenario, the balance, which averaged a surplus of over 14 percent of GDP between 2011-2015, is projected to fall to an average deficit of 6 percent of GDP in the years 2016-2036. Public sector debt, which stood at 58 percent of GDP in 2015, will rise to 70 percent in 2036 in the baseline scenario. The costs incurred by these projects should be partially offset by reduced subsidies to public enterprises and more efficient social spending.

Long-term planning and prioritization will be needed. Capacity constraints and remoteness may create delays in implementation and higher costs if the spending is front-loaded. Investments should thus be laid out over the long term, prioritizing urgent upgrades in the near term. The preparation of the upcoming Asset Management Framework is a welcome development. The Framework will estimate replacement costs and annual maintenance requirements of the current stock of infrastructure assets in Tuvalu. The Framework will be used to identify maintenance and eventual replacement needs for these assets, and will be a key input in future updates of Infrastructure Strategy and Investment Plan. The recent creation of the Climate Change and Disaster Policy Unit within the Office of the Prime Minister is another important development. The Unit will track ongoing climate change investment and will facilitate much-needed coordination among donors.

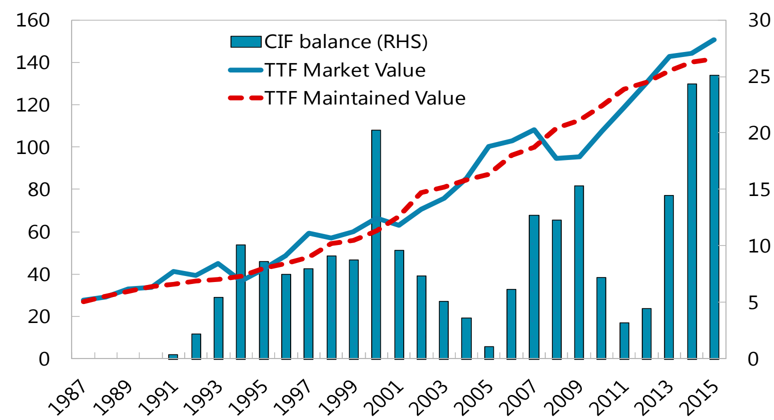
[1] The estimate includes only budgetary expenditures. Additional climate-proofing projects are directly financed by donor partners and are considered off-budget.

Annex III. The Tuvalu Trust Fund and the Fiscal Framework

The Tuvalu Trust Fund (TTF) is an important source of budgetary revenue for the Tuvalu government. It was created by Tuvalu and its main development partners in 1987, and the original contribution of A$27 million has grown to A$148 million (around 340 percent of GDP) in September 2015. When TTF's market value exceeds the so called "maintained value" indexed to Australia's CPI, the excess will be transferred to the Consolidated Investment Fund (CIF), which can be freely drawn by Tuvalu's government to finance budget spending.

Tuvalu Trust Fund and Consolidated Investment Fund

(In A$mn)



Sources: Tuvalu authorities and Fund staff calculations

The CIF is a buffer fund. Recognizing that the market value of the TTF can drop below the maintained value for sustained periods of time, the authorities target a minimum balance of the CIF amounting to 16 percent, which would enable budgetary contributions for the expected average downturn of four years, as illustrated in the periods 2001-04 and 2008-12, when the CIF balances were drawn down as the TTF did not distribute. In 2016, the budget deficit will be funded by a drawdown of the CIF, while broadly maintaining the target balance of 16 percent of the maintained value of the TTT.

The TTF is professionally managed and audited by international firms. The investment focus is a combination of defensive (cash, bonds, fixed income instruments, 40 percent), diversified (assets with low correlation with other asset classes, 30 percent) and growth (typically equity and property, 30 percent) assets. The TTF is subject to an annual audit by international audit firms.

Withdrawal rules from the TTF are rigid. The withdrawal rules from the TTF are specified in the *Agreement Concerning an International Trust Fund for Tuvalu*, and only in very exceptional circumstances would the capital of the fund be considered to be drawn down by the Government of Tuvalu. In the 29 years that the Fund has been operating this has not occurred (not even after Cyclone Pam). The Board of Directors has all powers over the Fund. A director appointed by the Government of Tuvalu is the Chairman of the Board and one director appointed by each other original party to the agreement.

While an important source of funds for the government, the TTF distributions can be pro-cyclical. The government's available resources tend to rise when market returns (and economic conditions) are high. Recognizing this, the Tuvaluan authorities have in many cases recapitalized the TTF when times are good. The government, donors, and the TTF's advisory committee have discussed modalities to make TTF disbursements more regular and reduce pro-cyclicality.

Annex IV. Public Enterprise Reform

Public Enterprise reform remains a priority. With support from the Asian Development Bank and other development partners, the policy and regulatory framework for public enterprises has improved, including the establishment of the Public Enterprise Reform and Monitoring Unit in 2009; the enactment of the Public Enterprises Act in 2009; the removal of politicians and civil servants from public enterprise boards; the timely submission of audited annual reports to Parliament for all public enterprises; and the merger of the Tuvalu Philatelic Bureau, Tuvalu Post Office, and Tuvalu Travel Office into a single entity known as the Tuvalu Post and Travel Office. The government is progressing on the sale of the Vaiaku Lagi Hotel.

Tuvalu Public Enterprises: Financial Peformance, 2014
(In thousands of Australian dollars; unless otherwise indicated)

	Revenue	Profit/(Loss)	Assets	Debt	Equity	Equity Ratio
Development Bank of Tuvalu (DBT)	543	-591	2,452	1,278	1,046	43%
National Bank of Tuvalu (NBT)	3,857	1,075	44,352	33,904	9,644	22%
Telecommunications Corporations (TTC)	1,835	-124	1,812	-	414	23%
Tuvalu Electricity Corporation (TEC)	4,334	-195	4,464	453	-344	-8%
Vaiaku Lagi Hotel Limited (VLHL)	849	321	413	-	326	79%
Total	11,418	486	53,493	35,635	11,086	21%

Source: ADB (2015), Public Enterprise Specialist Report.

Tuvalu Public Enterprises: Financial Peformance, 2009-14
(In thousands of Australian dollars)

	2009	2010	2011	2012	2013	2014
Development Bank of Tuvalu (DBT)	1,172	-199	-178	-1,075	-448	-591
National Bank of Tuvalu (NBT)	1,044	1,184	1,173	912	2,645	1,075
Telecommunications Corporations (TTC)	-965	-151	-290	-299	-186	-124
Tuvalu Electricity Corporation (TEC)	-140	26	301	314	-1,279	-195
Vaiaku Lagi Hotel Limited (VLHL)	-22	-80	-67	-29	55	321
Total	1,089	780	939	-177	787	486

Source: ADB (2015), Public Enterprise Specialist Report.

The financial performance has improved, but remains weak for many PEs. The only PE with a consistent track record of profits is NBT. The electricity provider's (TEC) profitability is dependent on government support as the tariff levels have been set lower than the cost of supply. In the absence of government subsidies, TEC losses would have been $1.37 million in 2012, $1.80 million in 2013 and $1.41 million in 2014. In 2014, the government approved $2.35 million of additional equity for DBT, TEC and TTC, of which $2 million was used to pay off debt owed to NBT. The government also settled its debt to VLHL which boosted the hotel's profit and equity since the debt had previously been fully provisioned. With the exception of TEC, the other PEs now have positive equity. The only PE which is paying company tax is NBT.

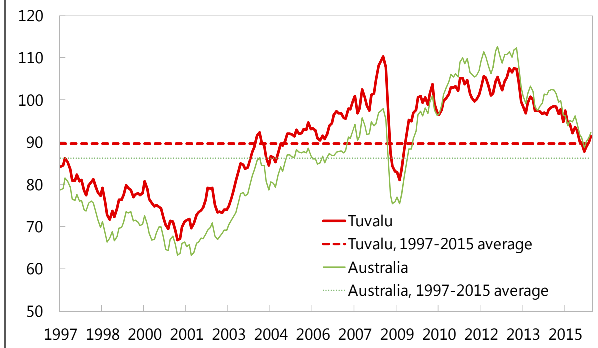
Despite improved in PE performance, continued progress is needed to operate on commercial basis and reduce government subsidies. With the assistance of development partner support, resolving the cross-liabilities of unpaid bills to public enterprises by the government and unpaid taxes to the government by public enterprises would also help operational management. More work is also needed to contract out selected activities of the Public Works Department (PWD). The recent escalation of government-funded capital works and cyclone reconstruction efforts has prompted the government to develop a rationalization strategy to improve the commercial and financial viability of the PWD.

Annex V. External Sector and Exchange Rate Assessment

Tuvalu's real effective exchange rate (REER) has returned to its historical level. The REER has depreciated by about 12 percent since its recent peak in early 2013. The real depreciation was mainly driven by the weakening of Australia dollar, the legal currency used in Tuvalu. Historically, Tuvalu's REER has moved closely with that of Australia, but has been less appreciated since the global crisis. (Figure 1)

Figure 1. Real Effective Exchange Rates

(Index, 2010 = 100)



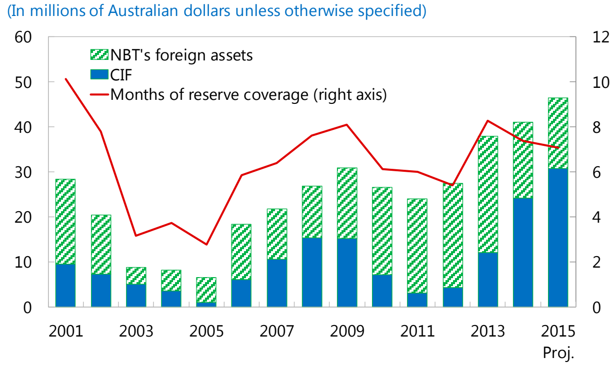
Source: IMF Staff calculations.

There is no sign of significant exchange rate misalignment, but loose policies could increase the risk of overvaluation over the medium term. Benefiting from lower global food and commodity prices as well as increased trade diversification and retail competition, Tuvaluan inflation has been below trading partners' inflation.

Reserves appear sufficient, but would decline in the medium term.[1] Significant increase in the CIF as a result of fiscal surpluses in 2013-15 pushed reserves to a 7-8 months of imports (text Figure 2). In the medium term, however, fiscal balance is expected to move into a widening deficit on the back of stagnated fishing license fees and climate-related pressures on expenditure, which will cause the CIF to decline over the medium term and a rise of imports. As a consequence, import reserve cover will decline to below 6 months in the medium term. Although the reserve cover appears sufficient by traditional cover, an estimate based on risk metrics suggests it should be kept at above 7 months of imports.

International Reserves

(In millions of Australian dollars unless otherwise specified)



Source: Tuvalu authorities.

1/ Ratio of international reserves to next year's imports of goods and services, in months.

Tuvalu's competitiveness remains weak. Remoteness causes high transportation cost and isolation, and the lack of scale increases transaction cost. Moreover, weak human capital impedes Tuvaluans to explore overseas job opportunities, with declining remittances pointing to structural weaknesses. In this connection, improving business climate and taking an innovative approach to explore growth opportunities, including strengthening effectiveness of education and training, are particularly important in the long run.

[1] Reserves are defined as the sum of CIF and liquid foreign assets held by the National Bank of Tuvalu.

Annex VI. Tuvalu: Policy Reform Matrix

Priority Reform Areas	Phase I Jan–Oct	Phase 2 Jan 2012–Jun 2013	Phase 3 Aug 2014–Dec 2015
	Budget Support Policy Actions		
1. Public Financial Management Technical assistance (TA) provided by Government of Australia, Government of New Zealand, ADB and IMF as contributor to Pacific Islands Technical Assistance Centre (PFTAC).	Public Financial Management Reform Roadmap approved by Cabinet ***(ADB, AUS, NZL, WB) - COMPLETED*** Medium Term Fiscal Framework updated and maintained; Budget manual developed; Annual Budget Calendar prepared and published; The Ministry of Finance produces at least quarterly reports***;*** Bank reconciliations are completed on a monthly basis; Public accounts are brought up to date and kept current; Quarterly meetings of the Macroeconomic Policy Committee held ***(AUS, NZL, WB) - COMPLETED*** Cabinet approval for Ministry of Finance and Economic Development to develop a Public Procurement Policy (***ADB, AUS) - COMPLETED***	Procurement Policy, Procurement Act and associated regulations developed and endorsed by Cabinet ***(AUS, NZL, WB) - COMPLETED*** Adherence to the Tuvalu Debt Risk Management and Mitigation Policy including quarterly debt schedule and arrears update ***(AUS, NZL) - COMPLETED***	Procurement annual report for 2014 developed by the CPU and approved by Cabinet. Report includes procurement tenders completed, number and value of contracts issued, staff training conducted, and 2015 work plan. (***ADB) - COMPLETED*** Government procurement website developed and launched as a centralized resource for all public procurement-related information, including information on the Procurement Act and regulations, bidding documents and contracts registry. (***ADB)*** ***- COMPLETED***
2. Public Enterprise Performances and private sector development TA provided by Government of Australia and ADB.	Community Service Obligations defined between Government and public enterprises with corresponding budget allocations made in National Budget ***- COMPLETED*** All public enterprises except National Fishing Authority of Tuvalu completed Audits and Annual Reports (including audited financial statement) and presented to Parliament ***(ADB) - COMPLETED*** Cabinet approved management contract for the Vaiaku Lagi Hotel and the establishment of a taskforce to prepare and finalize the management contract.	All public servants removed from Public Enterprise Boards (except as allowed under the Public Enterprises Act 2009) ***(AUS, NZL) - COMPLETED***	Cabinet approval of the PERP, which sets out strategies to improve the commercial and financial viability of public enterprises, highlight issues and challenges faced, and determine which PEs should be retained, absorbed or privatized. ***(ADB) - COMPLETED*** Cabinet approval of the concession sale of the VLH, VLH land surveyed, and preparation of sale and tender documents. ***(ADB) - COMPLETED*** Cabinet approval of the PWD

Priority Reform Areas	Phase I Jan–Oct	Phase 2 Jan 2012–Jun 2013	Phase 3
	(ADB) Cabinet approved the merger of the Tuvalu Philatelic Bureau, Tuvalu Post Office, and Tuvalu Travel Office. ***(ADB) - COMPLETED***		rationalization strategy to promote contracting out of capital works to the private sector ***(ADB) - COMPLETED*** Corporate governance review of National Fishing Authority of Tuvalu and Joint Ventures with aims to improve its operations including an independent review of the joint venture agreements ***(NZL)- COMPLETED***
3. Fiscal Policy TA provided by Government of Australia, Government of New Zealand and ADB.	Revenue and Expenditure Review Committee established and reports to Cabinet on the protection of social services expenditure and achievement of savings ***(AUS, NZL) - COMPLETED*** Fiscal Ratios approved by Cabinet (Domestic revenue to GDP; Recurrent expenditure to GDP; Wages and salaries to domestic revenue; Tuvalu Medical Treatment Scheme to domestic revenue; Tuvalu Overseas Scholarship Scheme to domestic revenue; Primary balance to GDP; and Net Present Value of public debt to GDP) ***(ADB) - COMPLETED***	Increased Tuvalu Consumption Tax (TCT) compliance to 75% of TCT registered entities including 100% of public enterprises ***(AUS, NZL) - COMPLETED*** Tax audit training conducted and tax audits undertaken for at least two large taxpayers ***(AUS, NZL, WB) - COMPLETED*** TCT rate increased to 7% in 2013 and 10% by 2016 (4% in 2012) ***(AUS, NZL) - COMPLETED***	The revised Financial Instructions under the Public Finance Act endorsed by Cabinet. The revision strengthens financial rules to manage, replenish, and regulate the use of the Consolidated Investment Fund as a long-term fiscal buffer, ensuring that the target CIF savings balance will be a level, which is equivalent to 16% of the maintained value of the TTF and regulated through a CIF Contributions and Savings Plan. ***(ADB, AUS, NZL, WB) - COMPLETED*** Strengthened treasury commitment and expenditure control by introducing centralized commitment control procedures ***(WB) - COMPLETED*** Oversight of fisheries revenues strengthened through efficient record keeping and financial reconciliation between Fisheries and Treasury Departments ***(WB)- COMPLETED***

Priority Reform Areas	Phase I Jan–Oct 2012	Phase 2 Jan 2012–Jun 2013	Phase 3 Aug 2014–Dec 2015
			All financial records in the customs database updated and a full reconciliation of customs revenues with Treasury records concluded (***AUS, NZL) – COMPLETED***
4. Public Administration TA provided by Government of Australia.	Public Service Reform Committee established; staff appraisal process updated; national taskforce to review wage structure established ***(AUS) - COMPLETED***		Outer Island kaupule (local government) accounts updated and audited and a streamlined financial reporting framework to reduce administrative burden on the kaupules and enabling better tracking of funds piloted (***WB)- COMPLETED***
5. Health TA provided by Government of Australia and Government of New Zealand.	Implementation of cost reduction measures for the Tuvalu Medical Treatment Scheme (TMTS) including accommodation and caretaker costs ***(AUS, NZL, WB) - COMPLETED***	TMTS review undertaken based on analyses provided on the medical system such as the Medium Term Expenditure Framework for Health ***(AUS, NZL, WB) - COMPLETED*** Non-salary budget allocation increased on preventative health care on the 2012 outturn and 2013 budget by at least 5% as a step towards achieving the long-term milestone in line with the Tuvalu National Strategy for Sustainable Development 2005-2015 (Te Kakeega II) Medium Term Review (MTR) priorities ***(AUS, NZL) - COMPLETED***	TMTS Policy revised, patient referral process strengthened and 2014 annual report for TMTS developed and approved (***AUS, NZL)- COMPLETED***
6. Education TA provided by Government of Australia and Government of New Zealand.	Ministry of Education, Youth and Sports and the Office of the Prime Minister to report to Parliament annually on the costs of implementing the scholarship programs and on adherence to the training policy ***(AUS, NZL, WB) - COMPLETED***	Government's training and scholarship policy review undertaken informed by analyses provided on the education and training system such as the Medium Term	Government continues to improve the efficiency of the tertiary education scheme, enabling government to increase spending on basic and vocational education ***(AUS, NZL) – COMPLETED***

Priority Reform Areas	Phase I Jan–Oct 2012	Phase 2 Jan 2012–Jun 2013	Phase 3 Aug 2014–Dec 2015
	Government limits new scholarships awards for the 2013 intake at 30 or less ***(AUS, NZL) - COMPLETED*** Implementation of cost reduction measures for the in-service scholarships including accompanied allowances cancellation and tighter enforcement of extensions and variations ***(AUS, NZL, WB) - COMPLETED***	Expenditure Framework for Education (***AUS, NZL, WB) - COMPLETED*** Report on the savings made from the cost reduction measures for the in-service scholarships ***(AUS, NZL) - COMPLETED*** Non-salary budget allocation increased on primary education on the 2012 outturn and 2013 budget by at least 5% as a step towards achieving the long-term milestone in line with the Te Kakeega II MTR priorities ***(AUS, NZL) - COMPLETED***	Sufficient resources allocated to improve basic education (***AUS, NZL) – COMPLETED*** Tuvalu Maritime Training Institute curriculum revised to improve employment opportunities and encourage female students (***WB) - COMPLETED***

Sources: ADB (2015) and Fund staff estimates.
Notes: ADB = Asian Development Bank, AUS = Government of Australia, NZL = Government of New Zealand, WB = World Bank.

Appendix I. Risk Assessment Matrix 1/

Sources of Risks	Likelihood	Potential Impact	Recommendation
Tighter or more volatile global financial conditions	M.	Medium. Elevated market volatilities will feed through to the market value of TTF that is primarily invested in Australia, making TTF's transfers to the budget more uncertain.	Save most if not all investment returns, and smooth TTF transfers to the budget by targeting a longer-horizon benchmark.
Reduced financial services by global/regional banks ("de-risking")	H	High. With limited existing access to international banking services, Tuvalu could be severely impacted by further loss of correspondent banking services.	Strengthening banking sector oversight.
Weaker-than-expected growth in advanced and emerging economies	H/M	Medium. Slower growth and reduced demand in the Pacific region would cause remittances by seafarers and seasonal workers to fall. But meanwhile, a weakening Australian dollar would help improve Tuvalu's competitiveness.	Develop human capital to improve competitiveness Foster domestic business climate to improve employment. Take an innovative approach to explore foreign employment opportunities.
Lower foreign aid	M.	High. A decline in foreign aid will substantially affect fiscal soundness.	Establish a transparent fiscal framework that addresses pro-cyclicality and saves for rainy days. Conduct fiscal consolidation and build fiscal buffers. Closely engage with donors to mobilize development aid.
Lower fishing revenue	M.	Medium. Fishing license fees decline more than projected due to changing weather conditions.	Continue implementing a medium-term framework, saving excess fishing revenue.
Climate change	H.	High. Increased incidence of natural events with large recovery costs and lower potential output. In the short term, the occurrence of extreme weather conditions could cause fluctuation in fishing revenues.	Strengthen fiscal buffers (see above). Build adaptive capacity to increase resilience, with donors' assistance. Improve debt management capacity.
Poor governance of public enterprises and banks	H.	High. The weaknesses in public enterprises and banks pose challenges to growth.	Adopt public enterprise reforms to enhance transparency and accountability.

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

INTERNATIONAL MONETARY FUND

TUVALU

STAFF REPORT FOR THE 2016 ARTICLE IV CONSULTATION—DEBT SUSTAINABILITY ANALYSIS

August 26, 2016

Approved By
Thomas Helbling and Peter Allum, and Satu Kahkonen (IDA)

Prepared jointly by the staffs of the International Monetary Fund and the International Development Association

The Debt Sustainability Analysis (DSA) concludes that Tuvalu remains at a high risk of debt distress. Although fiscal buffers have been replenished over the past four years, risks to debt sustainability remain high owing to the increased recurrent fiscal spending in 2015 and the 2016 budget. Under the baseline scenario, the fiscal position would move into a deficit from 2016 onwards as the spending is not sufficiently scaled back in the context of normalizing revenue. In the medium term, external and public debt-to-GDP are expected to fall below the indicative thresholds as fiscal buffers are drawn down to amortize existing debt and to finance the fiscal deficit. However, in the long run, the debt stock is expected to once again breach the indicative thresholds as fiscal buffers fall below prudent levels and external borrowing is renewed. This trajectory underscores the importance of targeting a small structural fiscal surplus to lower the risk of debt distress while maintaining fiscal space to improve climate change resilience. In an adjustment scenario, the risk of debt distress is lowered as recurrent spending is contained and a small structural surplus is achieved, allowing fiscal buffers to remain above prudent levels.

RECENT DEBT DEVELOPMENTS

1. **The government's external liabilities are a mix of concessional and commercial debt.** As of end-2015, total public and publicly guaranteed debt is estimated at US$19million, equivalent to 58.2 percent of GDP. External debt stood at US$17.8 million (54.5 percent of GDP), and domestic debt — owed to domestic banks — at US$1.2 million (3.8 percent of GDP). Bilateral donors provide only grant assistance, while multilateral institutions, most notably the Asian Development Bank, have provided concessional loans as well as grants to the government. Meanwhile, loans contracted at nonconcessional terms by two fishing joint ventures established by the National Fishing Corporation of Tuvalu (NAFICOT) and Asian companies account for a significant share of public debt. These loans are guaranteed by the government, and constitute contingent government liabilities.[1] In recent years, one joint venture has been working on a new loan agreement to finance the expansion of its fishing capacity, which implies an addition of public debt.

Tuvalu Public Debt, End-2015

	Creditor	Outstanding amount (US$ million)	Outstanding amount (Percent of GDP)	Concessional
External Debt		**17.8**	**54.5**	
Central Government Debt	ADB	5.2	15.8	Yes
Development Bank Debt	EIB	1.1	3.5	No
Fishing Joint Venture Debt	Commercial bank	11.5	35.2	No
Domestic debt		**1.2**	3.8	No

2. **External assets remain sizeable, but not fully sovereign.** The Tuvalu Trust Fund (TTF), which was mainly capitalized by development partners in 1987, has grown from A$27 million to more than A$148 million (around 340 percent of GDP) in 2015. The TTF is not fully sovereign and cannot be drawn down freely: when its market value exceeds a "maintained value" indexed to Australian CPI, the TTF Board—representing both donors and Tuvalu government—can decide to transfer the excess to the budget. The transfers are deposited into the Consolidated Investment Fund (CIF), which is a fiscal buffer fund used to finance future budget expenditures. The TTF assets are invested abroad, mostly in Australia. Since access to the TTF by Tuvaluan government is conditional, this DSA analyzes public debt on gross rather than net basis.

UNDERLYING ASSUMPTIONS

3. **The baseline macroeconomic framework can be summarized as follows:**

[1] An effectively defunct and wholly government-owned public enterprise called the National Fishing Corporation of Tuvalu (NAFICOT) is party to the two fishing joint ventures (JV). NAFICOT owns 50 percent of the JV that was established together with a company of the Taiwan Province of China, and 40 percent of the Korean one.

(continued)

- **Growth**. Real GDP is projected to grow by an average of 2.2 percent per annum over the medium term due to the implementation of a few large infrastructure projects financed by grants from development partners.[2] Over the long run, growth is projected to average 2 percent driven mainly by climate change infrastructure investment but would continue to be hampered by the dominance of inefficient public enterprises in the economy, capacity constraints, and weak competitiveness.

- **Inflation**. Owing to rapid increases of public spending and wages as well as reconstruction spending from Cyclone Pam and a weakening Australian dollar, inflation is projected to reach around 3 percent in the near term and moderate to 2.2 percent in the medium run, which is similar to the 2014 DSA.

- **Balance of payments.** In the baseline scenario, Tuvalu's current account deficit would average around 1 percent of GDP over the medium term, as revenues from fishing license fees return to their historical average of roughly $A20 million. Imports fall from their 2016 peak over the medium term but remain elevated relative to historical averages as a result of ongoing climate-proofing investment. Exports continue to hover around 55 percent of GDP in the medium and long term. The narrowing of the current account deficit vis-à-vis the 2014 DSA reflects the unexpected windfalls from fishing license fees. FDI inflows would be minimal and mostly include reinvestment of fishing joint venture earnings. Despite efforts of the authorities to privatize certain public enterprises, there has been little success in attracting foreign investors, and therefore no significant FDI inflows associated with privatization are assumed.

- **Fiscal.** Expenditure is assumed to be higher over the projection period (compared to the 2014 DSA) reflecting strong increases in social spending and subsidies. Fishing and internet licensing revenues are higher (compared to the 2014 DSA). They are assumed to be in line with recent 4-year averages and to remain buoyant in the medium term. Grants will gradually decline to around 18.5 percent of GDP in the long run as reform implementation reduces the flows of donor contributions to the budget. Given the weakening fishing license fees and foreign grants, expenditures would be compressed gradually from 116 percent of GDP in 2015 to 94 percent of GDP by 2036. On the expenditure side, recurrent spending, particularly toward the TMTS and scholarships, remain elevated, while climate-proofing investment spending remains around 2 percent of GDP. The baseline scenario projects an overall fiscal deficit 5 percent of GDP over the medium term. Concessional borrowing would remain small in the medium term as fiscal buffers are drawn down, but then gradually increase as buffers are depleted over the longer run.

4. Baseline assumptions: Under the baseline scenario, moderating fishing revenues and continued elevated recurrent spending pressures related to civil service wages, TMTS, scholarships, public enterprise subsidies, and other goods and services purchases, would result in persistent budget deficits over the medium term. On capital spending, the baseline scenario includes the cost

[2] These expenditures would be extrabudgetary and do not affect debt levels.

(continued)

of bolstering sea walls and other "climate-proofing" measures, estimated at 2 percent of GDP per year over the long term, most of which will occur in the form of capital spending, but also maintenance of existing infrastructure.[3] Under this scenario, deficits will be financed through drawdowns of the CIF, causing balances to fall below 16 percent of the maintained value of the TTF over the medium term.

5. Adjustment scenario assumptions: Under an adjustment scenario, wage growth is aligned to productivity gains in the economy and public enterprise reform limits the budget subsidies. In addition, with increased efficiency in spending on TMTS and scholarships (with development partner assistance), buffers in the CIF are maintained above the sustainable threshold. The adjustment scenario would also maintain fiscal space for essential climate change capital investment and allow re-investment of TTF distributions to build up balances towards the A$200 million target by 2020.

DEBT SUSTAINABILITY

A. Baseline Scenario

6. Under the baseline scenario, external and public debt breach the indicative threshold of the debt-to-GDP ratio. The threshold for PV of Debt to GDP is determined by the CPIA index, a measure of the country's institutional capacity. The trajectory shows a decline in debt levels over the medium term reflecting amortization of existing loans and limited borrowing. Two spikes in the debt service profile in 2021 and 2027 are related to one-off repayments for the Korean joint venture fishing vessel and a DBT equity injection. Increased borrowing in the outer years as buffers fall below prudent levels (e.g. three months of current expenditures), implies that the debt trajectory begins to rise again and breaches the threshold by the end of the projection period (Figure 1). New borrowing would be mostly from external sources. Domestic financing will remain small due to severe asset quality problems in the domestic banking system.

7. Stress tests show to both external and public sector debt indicate that the debt ratios are highly sensitive to exports and exchange rate shocks. A one-time 30 percent nominal depreciation would cause the debt-to-GDP ratio to stay above the indicative threshold in most of the projection period. A standard shock to exports also results in a breach of the debt-to-export threshold.

B. Adjustment Scenario

8. Under an adjustment scenario where fiscal policy is anchored by an appropriate fiscal balance target, the risk of debt distress is lowered while maintaining fiscal space for investment in climate change resilience. Given the volatility of fishing license fees, targeting a structural balance would help reduce procyclicality—the structural balance is estimated on the basis

[3] There may also be an adverse growth impact from the vulnerability to natural disasters. See Cabezon et al (2015), *Enhancing Macroeconomic Resilience to Natural Disasters and Climate Change in the Small States of the Pacific*, IMF WP No 15/125; and Cabezon, Tumbarello and Wu (2015), *Strengthening Fiscal Frameworks and Improving the Spending Mix in Small States*, IMF WP No 15/12.

of a moving average of fishing license fees. In an adjustment scenario targeting a small structural surplus (around 1 percent of GDP), recurrent spending is rationalized (including public enterprise subsidies and social spending), which will ensure adequate CIF buffers (16 percent of the maintained value of the TTF). The adjustment scenario includes the cost of climate change investment, as in the baseline scenario. The adjustment scenario entails reversing part of the recent recurrent spending increases through civil service wage restraint, scaling back the government subsidies (TMTS, scholarships and PEs) as well as goods and services purchases. With a small structural surplus over the medium to long run, CIF buffers would be maintained at a comfortable level, and debt indicators would improve significantly (see discussion in paragraph 17 of the Staff Report).

C. Authorities' View

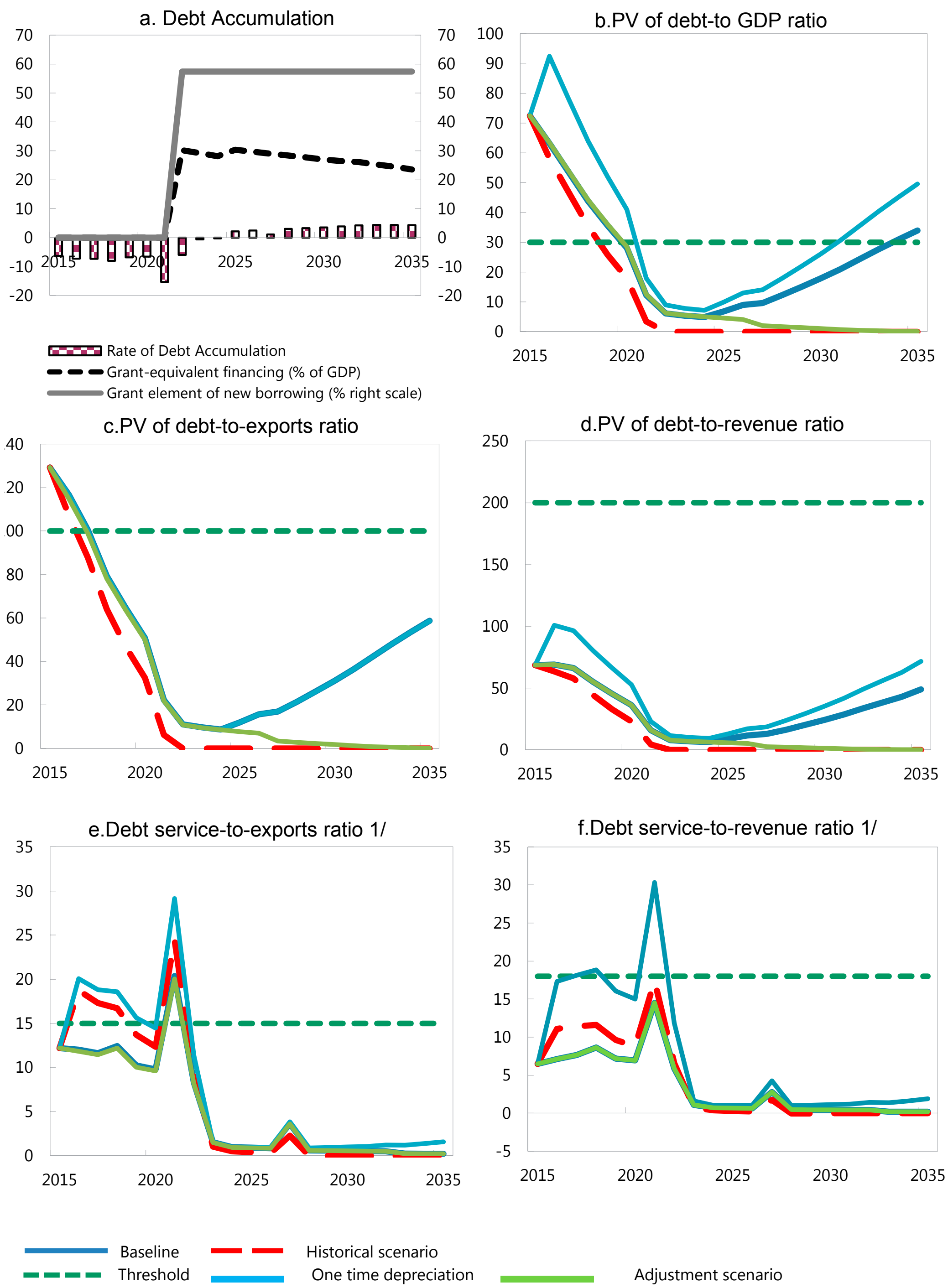
9. The authorities broadly concurred with the overall assessment of the Debt-Sustainability Analysis, but made a couple of observations. First, the authorities, while recognizing the volatility of fishing revenues, are more optimistic about the near-term outcome, and expect revenues to be higher than staff projection in the next few years. Second, they indicated that the larger of the two fishing joint ventures has remained profitable, and the probability for the government to assume the company's debt obligation is small.

D. Conclusions

10. Tuvalu's DSA points to a high risk of debt distress, which is the same conclusion that was drawn in the 2014 DSA. Under the baseline scenario, the budget would move into a deficit from 2016 onwards as spending is not sufficiently scaled back in the context of normalizing revenues. In the medium term, public and external debt-to-GDP levels fall below the indicative thresholds but would breach the thresholds again in the long run once the CIF balance falls below prudent levels and external borrowing is renewed. The debt trajectory highlights the importance of targeting a small structural fiscal surplus to lower the risk of debt distress while maintaining fiscal space to improve climate change resilience.

11. Stress tests show that Tuvalu's external and public sector debt dynamics are susceptible to shocks. Standard shocks in DSA, particularly one-time 30 percent nominal depreciation and slowing growth and exports, would cause certain external debt indicators to breach their respective thresholds for prolonged periods. Public debt indicators also worsen dramatically under bound tests.

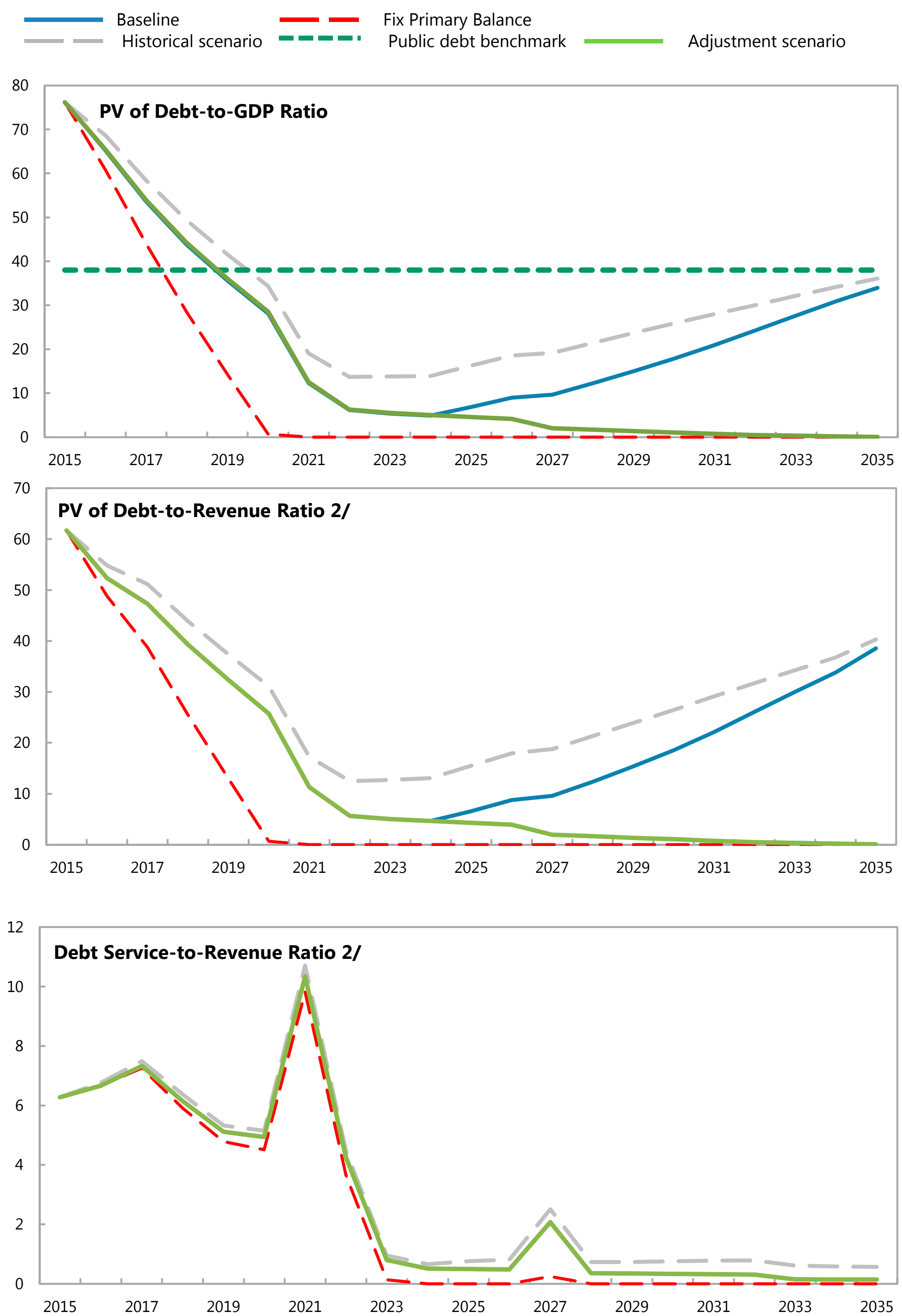
Figure 1. Tuvalu: Indicators of Public and Publicly Guaranteed External Debt under Alternative Scenarios, 2016-2035 1/



Sources: Country authorities; and staff estimates and projections.

1/ Two spikes in the debt service profile in 2021 and 2027 are related to one-off repayments for the Korean joint venture fishing vessel and a DBT equity injection, respectively.

Figure 2. Tuvalu: Indicators of Public Debt Under Alternative Scenarios, 2015-2035 1/



Sources: Country authorities; and staff estimates and projections.

1/ Assumes that real GDP growth is at baseline minus one standard deviation divided by the square root of the length of the projection period.

2/ Revenues are defined inclusive of grants.

Table 1a. Tuvalu: External Debt Sustainability Framework, Baseline Scenario, 2012-2035
(in percent of GDP, unless otherwise indicated)

	Actual				Historical 6/ Average	Standard 6/ Deviation	Estimate	Projections							
	2012	2013	2014	2015			2016	2017	2018	2019	2020	2016-2020 Average	2025	2035	2021-2035 Average
External debt (nominal) 1/	**19.7**	**51.8**	**59.8**	**54.5**			**51.7**	**44.3**	**36.6**	**30.3**	**24.6**		**11.7**	**71.2**	
of which: public and publicly guaranteed (PPG)	19.7	51.8	59.8	54.5			51.7	44.3	36.6	30.3	24.6		11.7	71.2	
Change in external debt	0.5	32.1	8.0	-5.3			-2.8	-7.4	-7.7	-6.2	-5.8		5.0	5.6	
Identified net debt-creating flows	-13.3	-2.0	-16.9	-8.5			2.6	5.3	5.2	5.0	3.1		3.3	10.2	
Non-interest current account deficit	**-17.5**	**-1.7**	**-19.8**	**-8.7**	**-0.2**	**15.8**	**2.9**	**4.7**	**4.6**	**4.3**	**2.3**		**2.6**	**10.8**	6.1
Deficit in balance of goods and services	61.9	95.6	75.9	97.0			116.3	111.1	106.7	102.6	98.7		90.3	87.7	
Exports	62.8	58.0	57.2	56.0			54.2	53.4	55.3	55.2	55.3		57.0	57.9	
Imports	124.7	153.5	133.1	153.0			170.5	164.4	162.0	157.8	154.1		147.3	145.7	
Net current transfers (negative = inflow)	-55.2	-45.4	-61.9	-34.3	-38.9	20.8	-50.2	-54.0	-51.8	-49.9	-48.2		-40.5	-30.4	-37.5
of which: official	-58.7	-45.3	-61.8	-34.2			-50.1	-54.0	-51.8	-49.8	-48.1		-40.5	-30.3	
Other current account flows (negative = net inflow)	-24.3	-51.8	-33.8	-71.4			-63.1	-52.3	-50.3	-48.5	-48.3		-47.2	-46.5	
Net FDI (negative = inflow)	**4.2**	**-1.5**	**0.7**	**0.7**	**1.3**	**2.4**	**0.7**	**0.7**	**0.7**	**0.7**	**0.7**		**0.7**	**0.7**	0.7
Endogenous debt dynamics 2/	**0.0**	**1.2**	**2.1**	**-0.6**			**-1.1**	**-0.2**	**-0.1**	**0.0**	**0.1**		**0.0**	**-1.4**	
Contribution from nominal interest rate	0.3	0.5	0.5	1.2			1.1	0.9	0.9	0.8	0.7		0.2	0.0	
Contribution from real GDP growth	0.0	-0.3	-1.2	-1.8			-2.2	-1.1	-1.0	-0.8	-0.6		-0.1	-1.4	
Contribution from price and exchange rate changes	-0.2	1.0	2.8	...			...	...	...	...	...		...	...	
Residual (3-4) 3/	**13.8**	**34.0**	**24.9**	**3.2**			**-5.3**	**-12.7**	**-12.9**	**-11.3**	**-8.9**		**1.7**	**-4.6**	
of which: exceptional financing	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0	0.0	
PV of external debt 4/	...	...	73.9	72.4			63.2	53.6	43.8	35.6	28.1		6.8	34.0	
In percent of exports	...	...	129.1	129.2			116.6	100.4	79.3	64.6	50.8		12.0	58.6	
PV of PPG external debt	**...**	**...**	**73.9**	**72.4**			**63.2**	**53.6**	**43.8**	**35.6**	**28.1**		**6.8**	**34.0**	
In percent of exports	**...**	**...**	**129.1**	**129.2**			**116.6**	**100.4**	**79.3**	**64.6**	**50.8**		**12.0**	**58.6**	
In percent of government revenues	**...**	**...**	**99.7**	**68.6**			**69.0**	**66.2**	**55.1**	**45.4**	**36.1**		**8.9**	**49.0**	
Debt service-to-exports ratio (in percent)	**2.0**	**2.9**	**2.9**	**12.2**			**12.0**	**11.6**	**12.4**	**10.2**	**9.8**		**0.9**	**0.2**	
PPG debt service-to-exports ratio (in percent)	**2.0**	**2.9**	**2.9**	**12.2**			**12.0**	**11.6**	**12.4**	**10.2**	**9.8**		**0.9**	**0.2**	
PPG debt service-to-revenue ratio (in percent)	**2.2**	**2.0**	**2.3**	**6.5**			**7.1**	**7.7**	**8.6**	**7.2**	**6.9**		**0.7**	**0.2**	
Total gross financing need (Millions of U.S. dollars)	-4.8	-0.6	-6.5	-0.4			3.3	3.9	4.3	3.9	3.2		1.7	7.6	
Non-interest current account deficit that stabilizes debt ratio	-17.9	-33.7	-27.8	-3.4			5.7	12.1	12.3	10.6	8.1		-2.4	5.2	
Key macroeconomic assumptions															
Real GDP growth (in percent)	0.2	1.3	2.2	2.6	1.9	4.5	4.0	2.3	2.3	2.2	2.0	2.6	2.1	2.2	2.1
GDP deflator in US dollar terms (change in percent)	1.3	-4.9	-5.2	-14.6	2.4	9.9	-4.8	2.3	1.6	1.6	1.6	0.4	1.6	1.6	1.6
Effective interest rate (percent) 5/	1.5	2.3	0.9	1.8	1.5	0.4	1.9	1.9	2.0	2.2	2.4	2.1	2.5	0.0	1.0
Growth of exports of G&S (US dollar terms, in percent)	68.5	-11.0	-4.3	-14.2	32.2	55.7	-4.3	3.0	7.7	3.7	3.9	2.8	4.7	3.9	4.0
Growth of imports of G&S (US dollar terms, in percent)	-7.3	18.6	-16.0	0.8	6.9	16.0	10.2	0.9	2.4	1.2	1.1	3.2	2.4	3.7	3.3
Government revenues (excluding grants, in percent of GDP)	56.6	82.9	74.1	105.5			91.7	80.9	79.5	78.5	77.9		76.7	69.3	74.8
Aid flows (in Millions of US dollars) 7/	11.1	9.4	18.2	5.9			10.6	11.0	11.3	11.6	11.9		14.8	17.8	
of which: Grants	11.1	9.4	18.2	5.9			10.6	11.0	11.3	11.6	11.9		12.3	12.3	
of which: Concessional loans	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0		2.5	5.5	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...	...			...	...	...	...	...		30.4	23.6	27.6
Grant-equivalent financing (in percent of external financing) 8/	...	...	...	...			...	...	...	...	...		92.7	86.8	91.6
Memorandum items:															
Nominal GDP (Millions of US dollars)	39.9	38.4	37.3	32.7			32.3	33.8	35.1	36.5	37.8		45.1	65.3	
Nominal dollar GDP growth	1.5	-3.6	-3.1	-12.3			-1.1	4.6	4.0	3.8	3.6	3.0	3.7	3.8	3.7
PV of PPG external debt (in Millions of US dollars)			25.2	22.8			20.5	18.1	15.4	13.0	10.6		3.1	22.2	
(PVt-PVt-1)/GDPt-1 (in percent)				-6.3			-7.3	-7.3	-8.0	-6.8	-6.5	-7.2	2.2	4.3	1.0
Gross workers' remittances (Millions of US dollars)	0.4	0.3	0.3	0.2			0.2	0.2	0.2	0.3	0.3		0.3	0.4	
PV of PPG external debt (in percent of GDP + remittances)	...	...	73.4	71.9			62.8	53.2	43.5	35.4	27.9		6.8	33.7	
PV of PPG external debt (in percent of exports + remittances)	...	...	127.6	127.6			115.1	99.2	78.3	63.8	50.2		11.8	58.0	
Debt service of PPG external debt (in percent of exports + remittances)	...	...	2.9	12.1			11.9	11.5	12.3	10.1	9.6		0.9	0.2	

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

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

3/ Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; drawdowns of the CIF; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.

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

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

6/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

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

8/ 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).

Table 1b. Tuvalu: External Debt Sustainability Framework, Adjustment Scenario, 2012-2035

(in percent of GDP, unless otherwise indicated)

	Actual				Historical [6/] Average	Standard [6/] Deviation	Estimate	Projections							
	2012	2013	2014	2015			2016	2017	2018	2019	2020	2016-2020 Average	2025	2035	2021-2035 Average
External debt (nominal) 1/	**19.7**	**51.8**	**59.8**	**54.5**			**51.7**	**44.3**	**36.6**	**30.3**	**24.6**		**6.1**	**0.9**	
of which: public and publicly guaranteed (PPG)	19.7	51.8	59.8	54.5			51.7	44.3	36.6	30.3	24.6		6.1	0.9	
Change in external debt	0.5	32.1	8.0	-5.3			-2.8	-7.4	-7.7	-6.2	-5.8		-0.6	-0.2	
Identified net debt-creating flows	-13.3	-2.0	-16.9	-8.5			2.6	5.3	5.2	5.0	3.1		3.3	11.5	
Non-interest current account deficit	**-17.5**	**-1.7**	**-19.8**	**-8.7**	**-0.2**	**15.8**	**2.9**	**4.7**	**4.6**	**4.3**	**2.3**		**2.6**	**10.8**	6.1
Deficit in balance of goods and services	61.9	95.6	75.9	97.0			116.3	111.1	106.7	102.6	98.7		90.3	87.7	
Exports	62.8	58.0	57.2	56.0			54.2	53.4	55.3	55.2	55.3		57.0	57.9	
Imports	124.7	153.5	133.1	153.0			170.5	164.4	162.0	157.8	154.1		147.3	145.7	
Net current transfers (negative = inflow)	-55.2	-45.4	-61.9	-34.3	-38.9	20.8	-50.2	-54.0	-51.8	-49.9	-48.2		-40.5	-30.4	-37.5
of which: official	-58.7	-45.3	-61.8	-34.2			-50.1	-54.0	-51.8	-49.8	-48.1		-40.5	-30.3	
Other current account flows (negative = net inflow)	-24.3	-51.8	-33.8	-71.4			-63.1	-52.3	-50.3	-48.5	-48.3		-47.2	-46.5	
Net FDI (negative = inflow)	**4.2**	**-1.5**	**0.7**	**0.7**	**1.3**	**2.4**	**0.7**	**0.7**	**0.7**	**0.7**	**0.7**		**0.7**	**0.7**	0.7
Endogenous debt dynamics 2/	**0.0**	**1.2**	**2.1**	**-0.6**			**-1.1**	**-0.2**	**-0.1**	**0.0**	**0.1**		**0.0**	**0.0**	
Contribution from nominal interest rate	0.3	0.5	0.5	1.2			1.1	0.9	0.9	0.8	0.7		0.2	0.0	
Contribution from real GDP growth	0.0	-0.3	-1.2	-1.8			-2.2	-1.1	-1.0	-0.8	-0.6		-0.1	0.0	
Contribution from price and exchange rate changes	-0.2	1.0	2.8	...			...	...	...	...	...		...	...	
Residual (3-4) 3/	**13.8**	**34.0**	**24.9**	**3.2**			**-5.3**	**-12.7**	**-12.9**	**-11.3**	**-8.9**		**-3.9**	**-11.7**	
of which: exceptional financing	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0	0.0	
PV of external debt 4/	...	...	73.9	72.4			63.2	53.6	43.8	35.6	28.1		4.5	0.1	
In percent of exports	...	...	129.1	129.2			116.6	100.4	79.3	64.6	50.8		7.8	0.1	
PV of PPG external debt	**...**	**...**	**73.9**	**72.4**			**63.2**	**53.6**	**43.8**	**35.6**	**28.1**		**4.5**	**0.1**	
In percent of exports	**...**	**...**	**129.1**	**129.2**			**116.6**	**100.4**	**79.3**	**64.6**	**50.8**		**7.8**	**0.1**	
In percent of government revenues	**...**	**...**	**99.7**	**68.6**			**69.0**	**66.2**	**55.1**	**45.4**	**36.1**		**5.8**	**0.1**	
Debt service-to-exports ratio (in percent)	**2.0**	**2.9**	**2.9**	**12.2**			**12.0**	**11.6**	**12.4**	**10.2**	**9.8**		**0.9**	**0.2**	
PPG debt service-to-exports ratio (in percent)	**2.0**	**2.9**	**2.9**	**12.2**			**12.0**	**11.6**	**12.4**	**10.2**	**9.8**		**0.9**	**0.2**	
PPG debt service-to-revenue ratio (in percent)	**2.2**	**2.0**	**2.3**	**6.5**			**7.1**	**7.7**	**8.6**	**7.2**	**6.9**		**0.7**	**0.2**	
Total gross financing need (Millions of U.S. dollars)	-4.8	-0.6	-6.5	-0.4			3.3	3.9	4.3	3.9	3.2		1.7	7.6	
Non-interest current account deficit that stabilizes debt ratio	-17.9	-33.7	-27.8	-3.4			5.7	12.1	12.3	10.6	8.1		3.2	11.0	
Key macroeconomic assumptions															
Real GDP growth (in percent)	0.2	1.3	2.2	2.6	1.9	4.5	4.0	2.3	2.3	2.2	2.0	2.6	2.1	2.2	2.1
GDP deflator in US dollar terms (change in percent)	1.3	-4.9	-5.2	-14.6	2.4	9.9	-4.8	2.3	1.6	1.6	1.6	0.4	1.6	1.6	1.6
Effective interest rate (percent) 5/	1.5	2.3	0.9	1.8	1.5	0.4	1.9	1.9	2.0	2.2	2.4	2.1	2.5	0.3	1.6
Growth of exports of G&S (US dollar terms, in percent)	68.5	-11.0	-4.3	-14.2	32.2	55.7	-4.3	3.0	7.7	3.7	3.9	2.8	4.7	3.9	4.0
Growth of imports of G&S (US dollar terms, in percent)	-7.3	18.6	-16.0	0.8	6.9	16.0	10.2	0.9	2.4	1.2	1.1	3.2	2.4	3.7	3.3
Government revenues (excluding grants, in percent of GDP)	56.6	82.9	74.1	105.5			91.7	80.9	79.5	78.5	77.9		76.7	69.3	74.8
Aid flows (in Millions of US dollars) 7/	11.1	9.4	18.2	5.9			10.6	11.0	11.3	11.6	11.9		12.3	12.3	
of which: Grants	11.1	9.4	18.2	5.9			10.6	11.0	11.3	11.6	11.9		12.3	12.3	
of which: Concessional loans	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...	...			...	...	...	...	...		...	...	
Grant-equivalent financing (in percent of external financing) 8/	...	...	...	...			...	...	...	...	...		...	...	
Memorandum items:															
Nominal GDP (Millions of US dollars)	39.9	38.4	37.3	32.7			32.3	33.8	35.1	36.5	37.8		45.1	65.3	
Nominal dollar GDP growth	1.5	-3.6	-3.1	-12.3			-1.1	4.6	4.0	3.8	3.6	3.0	3.7	3.8	3.7
PV of PPG external debt (in Millions of US dollars)			25.2	22.8			20.5	18.1	15.4	13.0	10.6		2.0	0.0	
(PVt-PVt-1)/GDPt-1 (in percent)				-6.3			-7.3	-7.3	-8.0	-6.8	-6.5	-7.2	-0.3	-0.1	-1.8
Gross workers' remittances (Millions of US dollars)	0.4	0.3	0.3	0.2			0.2	0.2	0.2	0.3	0.3		0.3	0.4	
PV of PPG external debt (in percent of GDP + remittances)	...	...	73.4	71.9			62.8	53.2	43.5	35.4	27.9		4.4	0.1	
PV of PPG external debt (in percent of exports + remittances)	...	...	127.6	127.6			115.1	99.2	78.3	63.8	50.2		7.7	0.1	
Debt service of PPG external debt (in percent of exports + remittances)	...	...	2.9	12.1			11.9	11.5	12.3	10.1	9.6		0.9	0.2	

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

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

3/ Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; drawdowns of the CIF; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.

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

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

6/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

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

8/ 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).

Table 2a. Tuvalu: Public Sector Debt Sustainability Framework, Baseline Scenario, 2012-2035
(In percent of GDP, unless otherwise indicated)

	Actual						Estimate					Projections				
	2012	2013	2014	2015	Average 5/	Standard Deviation 5/	2016	2017	2018	2019	2020	2021	2016-21 Average	2025	2035	2021-35 Average
Public sector debt 1/	25.9	57.2	64.4	58.2			53.7	44.3	36.6	30.3	24.6	13.1		11.7	71.2	
of which: foreign-currency denominated	19.7	51.8	59.8	54.5			51.7	44.3	36.6	30.3	24.6	13.1		11.7	71.2	
Change in public sector debt	2.1	31.2	7.2	-6.2			-4.5	-9.4	-7.7	-6.2	-5.8	-11.5		5.0	5.6	
Identified debt-creating flows	-10.0	-24.0	-34.3	-2.6			1.1	2.0	3.6	4.2	4.6	3.6		1.2	0.2	
Primary deficit	-9.9	-27.3	-37.2	-8.6	4.9	23.0	1.5	3.1	4.4	4.8	4.9	3.8	3.8	5.2	8.4	6.5
Revenue and grants	84.3	107.5	123.1	123.5			124.5	113.3	111.5	110.2	109.4	109.2		103.9	88.1	
of which: grants	27.8	24.6	49.0	18.0			32.9	32.4	32.0	31.7	31.5	31.3		27.2	18.8	
Primary (noninterest) expenditure	74.4	80.2	85.9	114.8			126.0	116.4	115.9	115.0	114.3	113.0		109.1	96.5	
Automatic debt dynamics	-0.1	3.2	2.8	6.1			-0.4	-1.1	-0.9	-0.6	-0.4	-0.2		-0.1	-2.4	
Contribution from interest rate/growth differential	-0.1	-0.2	-1.8	-1.4			-2.0	-1.0	-0.9	-0.7	-0.5	-0.3		-0.1	-2.6	
of which: contribution from average real interest rate	-0.1	0.2	-0.5	0.3			0.2	0.2	0.1	0.1	0.2	0.2		0.0	-1.2	
of which: contribution from real GDP growth	0.0	-0.3	-1.3	-1.7			-2.2	-1.2	-1.0	-0.8	-0.6	-0.5		-0.1	-1.4	
Contribution from real exchange rate depreciation	0.0	3.4	4.6	7.4			1.7	0.0	0.1	0.1	0.1	0.1		...	...	
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		-3.9	-5.9	
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	0.0	
Recognition of implicit or contingent liabilities	0.0	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		-3.9	-5.9	
Other (specify, 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	0.0	
Residual, including asset changes	12.1	55.3	41.5	-3.6			-5.6	-11.4	-11.3	-10.5	-10.4	-15.1		3.8	5.5	
Other Sustainability Indicators																
PV of public sector debt	...	...	78.5	76.2			65.2	53.6	43.8	35.6	28.1	12.3		6.8	34.0	
of which: foreign-currency denominated	...	...	73.9	72.4			63.2	53.6	43.8	35.6	28.1	12.3		6.8	34.0	
of which: external	...	...	73.9	72.4			63.2	53.6	43.8	35.6	28.1	12.3		6.8	34.0	
PV of contingent liabilities (not included in public sector debt)	...	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	-7.7	-24.5	-34.5	-0.9			9.8	11.4	11.3	10.5	10.4	15.1		5.7	8.5	
PV of public sector debt-to-revenue and grants ratio (in percent)	...	...	63.8	61.7			52.4	47.3	39.3	32.3	25.7	11.3		6.6	38.6	
PV of public sector debt-to-revenue ratio (in percent)	...	...	105.9	72.2			71.1	66.2	55.1	45.4	36.1	15.8		8.9	49.0	
of which: external 3/	...	...	99.7	68.6			69.0	66.2	55.1	45.4	36.1	15.8		8.9	49.0	
Debt service-to-revenue and grants ratio (in percent) 4/	2.6	2.6	2.2	6.3			6.7	7.3	6.2	5.1	4.9	10.3		0.5	0.1	
Debt service-to-revenue ratio (in percent) 4/	3.9	3.4	3.6	7.3			9.1	10.3	8.6	7.2	6.9	14.5		0.7	0.2	
Primary deficit that stabilizes the debt-to-GDP ratio	-12.0	-58.5	-44.3	-2.5			6.0	12.5	12.1	11.1	10.7	15.3		0.2	2.8	
Key macroeconomic and fiscal assumptions																
Real GDP growth (in percent)	0.2	1.3	2.2	2.6	1.9	4.5	4.0	2.3	2.3	2.2	2.0	2.1	2.5	2.1	2.2	2.1
Average nominal interest rate on forex debt (in percent)	1.5	2.3	0.9	1.8	1.5	0.4	1.9	1.9	2.0	2.2	2.4	2.7	2.2	2.5	0.0	1.0
Average real interest rate on domestic debt (in percent)	5.0	5.4	5.2	4.5	5.0	0.4	4.9	7.7	...	...	...	...	6.3	...	...	
Real exchange rate depreciation (in percent, + indicates depreciation) 6/	0.1	17.6	9.3	12.7	2.0	14.2	...	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	0.9	1.8	1.9	2.5	1.8	1.3	1.9	2.1	2.0	1.8	1.6	1.5	1.8	1.6	1.6	1.6
Growth of real primary spending (deflated by GDP deflator, in percent)	-3.9	9.2	9.5	37.2	5.2	12.0	14.1	-5.5	1.9	1.4	1.4	0.9	2.4	1.0	-1.6	0.9
Grant element of new external borrowing (in percent)	...	...	...	...	...	...	...	...	...	...	...	...	...	57.4	57.4	...

Sources: Country authorities; and staff estimates and projections.

1/ Central government gross debt

2/ 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.

3/ Revenues excluding grants.

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

5/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

6/ The exhange rate projections use WEO data and are fixed after 2021.

Table 2b. Tuvalu: Public Sector Debt Sustainability Framework, Adjustment Scenario, 2012-2035
(In percent of GDP, unless otherwise indicated)

	Actual						Estimate					Projections				
	2012	2013	2014	2015	Average 5/	Standard Deviation 5/	2016	2017	2018	2019	2020	2021	2016-21 Average	2025	2035	2021-35 Average
Public sector debt 1/	25.9	57.2	64.4	58.2			53.7	44.3	36.6	30.3	24.6	13.1		6.1	0.9	
of which: foreign-currency denominated	19.7	51.8	59.8	54.5			51.7	44.3	36.6	30.3	24.6	13.1		6.1	0.9	
Change in public sector debt	2.1	31.2	7.2	-6.2			-4.5	-9.4	-7.7	-6.2	-5.8	-11.5		-0.6	-0.2	
Identified debt-creating flows	-10.0	-24.0	-34.3	-2.6			-3.0	-2.9	-2.1	-2.2	-1.5	-2.3		-2.3	-1.3	
Primary deficit	-9.9	-27.3	-37.2	-8.6	4.9	23.0	-2.6	-1.8	-1.3	-1.6	-1.1	-2.1	-1.8	-2.2	-1.3	-1.7
Revenue and grants	84.3	107.5	123.1	123.5			124.5	113.3	111.5	110.2	109.4	109.2		103.9	88.1	
of which: grants	27.8	24.6	49.0	18.0			32.9	32.4	32.0	31.7	31.5	31.3		27.2	18.8	
Primary (noninterest) expenditure	74.4	80.2	85.9	114.8			121.9	111.5	110.2	108.6	108.3	107.1		101.7	86.8	
Automatic debt dynamics	-0.1	3.2	2.8	6.1			-0.4	-1.1	-0.9	-0.6	-0.4	-0.2		-0.1	0.0	
Contribution from interest rate/growth differential	-0.1	-0.2	-1.8	-1.4			-2.0	-1.0	-0.9	-0.7	-0.5	-0.3		-0.1	0.0	
of which: contribution from average real interest rate	-0.1	0.2	-0.5	0.3			0.2	0.2	0.1	0.1	0.2	0.2		0.0	0.0	
of which: contribution from real GDP growth	0.0	-0.3	-1.3	-1.7			-2.2	-1.2	-1.0	-0.8	-0.6	-0.5		-0.1	0.0	
Contribution from real exchange rate depreciation	0.0	3.4	4.6	7.4			1.7	0.0	0.1	0.1	0.1	0.1		...	...	
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	
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	0.0	
Recognition of implicit or contingent liabilities	0.0	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	0.0	
Other (specify, 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	0.0	
Residual, including asset changes	12.1	55.3	41.5	-3.6			-1.5	-6.5	-5.6	-4.1	-4.3	-9.2		1.7	1.1	
Other Sustainability Indicators																
PV of public sector debt	...	...	78.5	76.2			65.2	53.6	43.8	35.6	28.1	12.3		4.5	0.1	
of which: foreign-currency denominated	...	...	73.9	72.4			63.2	53.6	43.8	35.6	28.1	12.3		4.5	0.1	
of which: external	...	...	73.9	72.4			63.2	53.6	43.8	35.6	28.1	12.3		4.5	0.1	
PV of contingent liabilities (not included in public sector debt)	...	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	-7.7	-24.5	-34.5	-0.9			5.7	6.5	5.6	4.1	4.3	9.2		-1.7	-1.1	
PV of public sector debt-to-revenue and grants ratio (in percent)	...	...	63.8	61.7			52.4	47.3	39.3	32.3	25.7	11.3		4.3	0.1	
PV of public sector debt-to-revenue ratio (in percent)	...	...	105.9	72.2			71.1	66.2	55.1	45.4	36.1	15.8		5.8	0.1	
of which: external 3/	...	...	99.7	68.6			69.0	66.2	55.1	45.4	36.1	15.8		5.8	0.1	
Debt service-to-revenue and grants ratio (in percent) 4/	2.6	2.6	2.2	6.3			6.7	7.3	6.2	5.1	4.9	10.3		0.5	0.1	
Debt service-to-revenue ratio (in percent) 4/	3.9	3.4	3.6	7.3			9.1	10.3	8.6	7.2	6.9	14.5		0.7	0.2	
Primary deficit that stabilizes the debt-to-GDP ratio	-12.0	-58.5	-44.3	-2.5			1.9	7.6	6.5	4.7	4.6	9.4		-1.6	-1.1	
Key macroeconomic and fiscal assumptions																
Real GDP growth (in percent)	0.2	1.3	2.2	2.6	1.9	4.5	4.0	2.3	2.3	2.2	2.0	2.1	2.5	2.1	2.2	2.1
Average nominal interest rate on forex debt (in percent)	1.5	2.3	0.9	1.8	1.5	0.4	1.9	1.9	2.0	2.2	2.4	2.7	2.2	2.5	0.3	1.6
Average real interest rate on domestic debt (in percent)	5.0	5.4	5.2	4.5	5.0	0.4	4.9	7.7	...	...	...	...	6.3	...	...	
Real exchange rate depreciation (in percent, + indicates depreciation) 6/	0.1	17.6	9.3	12.7	2.0	14.2	...	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	0.9	1.8	1.9	2.5	1.8	1.3	1.9	2.1	2.0	1.8	1.6	1.5	1.8	1.6	1.6	1.6
Growth of real primary spending (deflated by GDP deflator, in percent)	-3.9	9.2	9.5	37.2	5.2	12.0	10.4	-6.5	1.2	0.7	1.7	1.0	1.4	0.6	-1.6	0.6
Grant element of new external borrowing (in percent)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Sources: Country authorities; and staff estimates and projections.

1/ Central government gross debt

2/ 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.

3/ Revenues excluding grants.

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

5/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

6/ The exhange rate projections use WEO data and are fixed after 2021.

Table 3. Tuvalu: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2015-2035
(In percent)

	Projections							
	2015	2016	2017	2018	2019	2020	**2025**	2035
PV of debt-to GDP ratio								
Baseline	72	63	54	44	36	28	**7**	34
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2015-2035 1/	72	58	47	35	26	18	**0**	0
A2. New public sector loans on less favorable terms in 2015-2035 2	72	63	54	44	36	28	**8**	57
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2016-2017	72	68	60	49	40	32	**8**	38
B2. Export value growth at historical average minus one standard deviation in 2016-2017 3/	72	67	64	54	46	39	**18**	40
B3. US dollar GDP deflator at historical average minus one standard deviation in 2016-2017	72	63	57	47	38	30	**7**	36
B4. Net non-debt creating flows at historical average minus one standard deviation in 2016-2017 4/	72	79	87	77	69	61	**40**	54
B5. Combination of B1-B4 using one-half standard deviation shocks	72	70	70	60	52	44	**22**	44
B6. One-time 30 percent nominal depreciation relative to the baseline in 2016 5/	72	92	78	64	52	41	**10**	50
PV of debt-to-exports ratio								
Baseline	129	117	100	79	65	51	**12**	59
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2015-2035 1/	129	107	88	64	47	32	**0**	0
A2. New public sector loans on less favorable terms in 2015-2035 2	129	117	100	79	65	51	**15**	98
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2016-2017	129	117	100	79	65	51	**12**	59
B2. Export value growth at historical average minus one standard deviation in 2016-2017 3/	129	143	175	144	123	103	**45**	102
B3. US dollar GDP deflator at historical average minus one standard deviation in 2016-2017	129	117	100	79	65	51	**12**	59
B4. Net non-debt creating flows at historical average minus one standard deviation in 2016-2017 4/	129	146	162	139	125	111	**71**	93
B5. Combination of B1-B4 using one-half standard deviation shocks	129	112	101	84	72	61	**29**	59
B6. One-time 30 percent nominal depreciation relative to the baseline in 2016 5/	129	117	100	79	65	51	**12**	59
PV of debt-to-revenue ratio								
Baseline	69	69	66	55	45	36	**9**	49
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2015-2035 1/	69	63	58	44	33	23	**0**	0
A2. New public sector loans on less favorable terms in 2015-2035 2	69	69	66	55	45	36	**11**	82
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2016-2017	69	74	75	62	51	41	**10**	55
B2. Export value growth at historical average minus one standard deviation in 2016-2017 3/	69	73	79	69	59	50	**23**	58
B3. US dollar GDP deflator at historical average minus one standard deviation in 2016-2017	69	69	70	59	48	38	**9**	52
B4. Net non-debt creating flows at historical average minus one standard deviation in 2016-2017 4/	69	86	107	97	88	79	**53**	77
B5. Combination of B1-B4 using one-half standard deviation shocks	69	76	87	76	66	56	**28**	64
B6. One-time 30 percent nominal depreciation relative to the baseline in 2016 5/	69	101	97	80	66	53	**13**	72

Table 3. Tuvalu: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2015-2035 (concluded)

(In percent)

				Debt service-to-exports ratio 1/				
Baseline	12	12	12	12	10	10	**1**	0
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2015-2035 1/	12	19	17	17	14	12	**0**	0
A2. New public sector loans on less favorable terms in 2015-2035 2	12	20	19	19	16	14	**1**	4
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2016-2017	12	20	19	19	16	14	**1**	2
B2. Export value growth at historical average minus one standard deviation in 2016-2017 3/	12	23	28	28	23	22	**2**	4
B3. US dollar GDP deflator at historical average minus one standard deviation in 2016-2017	12	20	19	19	16	14	**1**	2
B4. Net non-debt creating flows at historical average minus one standard deviation in 2016-2017 4/	12	20	19	20	17	15	**3**	4
B5. Combination of B1-B4 using one-half standard deviation shocks	12	17	15	15	13	12	**2**	2
B6. One-time 30 percent nominal depreciation relative to the baseline in 2016 5/	12	20	19	19	16	14	**1**	2
				Debt service-to-revenue ratio 1/				
Baseline	6	7	8	9	7	7	**1**	0
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2015-2035 1/	6	11	11	12	10	9	**0**	0
A2. New public sector loans on less favorable terms in 2015-2035 2	6	12	12	13	11	10	**1**	3
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2016-2017	6	13	14	15	12	12	**1**	1
B2. Export value growth at historical average minus one standard deviation in 2016-2017 3/	6	12	12	13	11	10	**1**	2
B3. US dollar GDP deflator at historical average minus one standard deviation in 2016-2017	6	12	13	14	12	11	**1**	1
B4. Net non-debt creating flows at historical average minus one standard deviation in 2016-2017 4/	6	12	13	14	12	11	**2**	4
B5. Combination of B1-B4 using one-half standard deviation shocks	6	12	13	14	12	11	**1**	2
B6. One-time 30 percent nominal depreciation relative to the baseline in 2016 5/	6	17	18	19	16	15	**1**	2
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	56	56	56	56	56	56	**56**	56

Sources: Country authorities; and staff estimates and projections.

1/ Variables include real GDP growth, growth of GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.
2/ Assumes that the interest rate on new borrowing is by 2 percentage points higher than in the baseline., while grace and maturity periods are the same as in the baseline.
3/ Exports values are assumed to remain permanently at the lower level, but the current account as a share of GDP is assumed to return to its baseline level after the shock (implicitly a an offsetting adjustment in import levels).
4/ Includes official and private transfers and FDI.
5/ Depreciation is defined as percentage decline in dollar/local currency rate, such that it never exceeds 100 percent.
6/ Applies to all stress scenarios except for A2 (less favorable financing) in which the terms on all new financing are as specified in footnote 2.

Table 4. Tuvalu: Sensitivity Analysis for Key Indicators of Public Debt 2015-2035

	Projections							
	2015	2016	2017	2018	2019	2020	2025	2035
PV of Debt-to-GDP Ratio								
Baseline	76	65	54	44	36	28	7	34
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	76	69	58	49	42	34	16	36
A2. Primary balance is unchanged from 2015	76	61	44	28	14	1	0	0
A3. Permanently lower GDP growth 1/	76	66	56	47	41	35	28	120
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2016-2017	76	73	68	62	57	53	51	118
B2. Primary balance is at historical average minus one standard deviations in 2016-2017	76	78	78	68	60	52	32	54
B3. Combination of B1-B2 using one half standard deviation shocks	76	75	72	64	57	52	43	91
B4. One-time 30 percent real depreciation in 2016	76	94	79	67	56	46	16	26
B5. 10 percent of GDP increase in other debt-creating flows in 2016	76	70	58	48	40	32	11	37
PV of Debt-to-Revenue Ratio 2/								
Baseline	62	52	47	39	32	26	7	39
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	62	55	51	44	37	31	15	40
A2. Primary balance is unchanged from 2015	62	49	39	26	13	1	0	0
A3. Permanently lower GDP growth 1/	62	53	49	42	37	32	27	130
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2016-2017	62	57	58	53	50	46	48	131
B2. Primary balance is at historical average minus one standard deviations in 2016-2017	62	62	69	61	54	48	30	61
B3. Combination of B1-B2 using one half standard deviation shocks	62	60	62	56	51	47	40	102
B4. One-time 30 percent real depreciation in 2016	62	75	70	60	51	42	16	30
B5. 10 percent of GDP increase in other debt-creating flows in 2016	62	56	51	43	36	30	11	43
Debt Service-to-Revenue Ratio 2/								
Baseline	6	7	7	6	5	5	0	0
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	6	7	7	6	5	5	1	1
A2. Primary balance is unchanged from 2015	6	7	7	6	5	5	0	0
A3. Permanently lower GDP growth 1/	6	7	7	6	5	5	1	3
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2016-2017	6	7	8	7	6	6	1	4
B2. Primary balance is at historical average minus one standard deviations in 2016-2017	6	7	8	7	6	5	1	2
B3. Combination of B1-B2 using one half standard deviation shocks	6	7	8	7	6	6	1	3
B4. One-time 30 percent real depreciation in 2016	6	8	10	9	7	7	1	1
B5. 10 percent of GDP increase in other debt-creating flows in 2016	6	7	7	6	5	5	1	0

Sources: Country authorities; and staff estimates and projections.
1/ Assumes that real GDP growth is at baseline minus one standard deviation divided by the square root of the length of the projection period.
2/ Revenues are defined inclusive of grants.

INTERNATIONAL MONETARY FUND

TUVALU

STAFF REPORT FOR THE 2016 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

August 26, 2016

Prepared By	Staff Representatives for the 2016 Consultation with Tuvalu

CONTENTS

FUND RELATIONS

(As of July 31, 2016)

Membership Status
Joined June 24, 2010; Article XIV

General Resource Account

	SDR Million	% Quota
Quota	2.50	100.00
Fund holdings of currency (Exchange Rate)	1.89	75.72
Reserve Tranche Position	0.61	24.32

SDR Department

	SDR Million	% Allocation
Net cumulative allocation	1.69	100.00
Holdings	1.09	64.33

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 is the only commercial bank in Tuvalu handling foreign exchange transactions. Tuvalu avails itself of transitional arrangements under Section 2 of Article XIV, but does not maintain exchange restrictions or multiple currency practices subject to Article XIV or Article VIII.

Article IV Consultation
The previous Article IV consultation discussions were held in Funafuti in May 2014. The staff report (IMF Country Report No. 14/253) was discussed by the Executive Board on August 25, 2014.

Technical Assistance
The Pacific Financial Technical Assistance Centre (PFTAC) has provided assistance on tax policy and administration (2007, 2008, 2010' 2016); financial sector supervision (2008); and balance of payments and national accounts statistics (2006, 2008, 2009, 2010, 2012, 2013, 2015 and 2016).

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. Tubagus Feridhanusetyawan is the current resident representative.

WORLD BANK-IMF COLLABORATION

The Bank and the Fund teams maintain a close working relationship and have an ongoing dialogue on macroeconomic and structural issues. Since Tuvalu's decision to pursue membership of the Bretton Woods institutions in 2009, the Bank team has joined all IMF missions to Tuvalu since the country's membership mission, including the Article IV missions. The teams agreed that Tuvalu's main macroeconomic challenges are to ensure fiscal sustainability, strengthening public service delivery, and create a more supportive environment for development. Based on this shared assessment, the teams identified the following structural reform areas, all of which are also addressed in the authorities' reform plan, as macro-critical:

- **Strengthening fiscal buffers.** In the absence of its own currency and monetary policy, sound fiscal policy is key to maintaining macroeconomic stability. Maintenance of buffer assets is key to ensuring sustainability. Maintaining adequate buffer assets will require sound fiscal policy including saving of cyclical revenues and expenditure restraint, including containing wage bill pressures. Moreover, there remains room to improve public financial management as well as strengthen public sector management to improve budget execution and effectiveness in public resource utilization.

- **Adapting and responding to climate change.** Tuvalu is one of the countries to be most affected by climate change and rising sea levels. In this context, climate change can lead to both structural and cyclical fiscal costs. To this end, explicitly recognizing the adaptation and response cost in budget will help ensure the continuity and efficiency on both spending and funding fronts. However, donor financing will remain important in enhancing the country's ability to cope with natural disasters and climate change, given that the total costs may be too high for small states like Tuvalu to fully internalize by building buffers.

- **Exploring opportunities for poverty reduction, job creation, and private sector development.** Tuvalu's geographic isolation, small size, and poor land quality have made it challenging to generate domestic private sector employment. Adequate education and training need to be provided for Tuvaluans to better utilize overseas job opportunities and to reduce rising poverty. Strengthening oversight on the financial sector will also facilitate improved access to finance and private sector activities.

- **Strengthening public service delivery.** The Government of Tuvalu in the Te Kakeega III and the medium term reform agenda identified improving service delivery in the health and education sectors as key objectives. Based on earlier analysis and sector strategic plans, the Government is continuing reforms to improve allocative and technical efficiency as well as to ensure sector financing sustainability.

The teams expect to sustain the close cooperation going forward. Attachment 1 details the specific activities implemented and planned by the two teams over the period 2016 to 2018.

Tuvalu: Bank and Fund Implemented/Planned Activities in Macro-Critical Areas [2016-2018]		
	Products	**Expected/Actual Delivery**
World Bank Work Program	• Joint participation in Article IV Mission	Annual/Biennial
	• Country Policy Institutional Assessment	Annual
	• Tuvalu Aviation Investment Program	Implementing
	• Third Budget Support Operation	FY2017
	• Pacific Regional Oceanscape Project	Implementing
	• Energy Project	Implementing
	• Telecom Project	FY2017 – FY18
IMF Work Program	• PFTAC: National Accounts Mission	January 2016
	• PFTAC: Review Tax Reform	June 2016
	• PFTAC: Onsite Examination of Financial Sector	Planned for October 2016
	• PFTAC: National Accounts Mission	Planned for January 2017

RELATIONS WITH THE ASIAN DEVELOPMENT BANK

Partnerships

ADB has been working with Tuvalu since 1993 and has approved 3 loans totaling $7.8 million, 4 program grants totaling $9.59 million, and over 22 technical assistance projects totaling $7.72 million, largely supporting public sector management, education, and maritime transport sectors. Cumulative disbursements to Tuvalu for lending and grants, financed by ordinary capital resources, the Asian Development Fund, and other special funds amount to $15.5 million.

ADB's approach and operations in Tuvalu are aligned to Tuvalu's eighth national development plan, the National Strategy for Sustainable Development (Te Kakeega III), 2016–2020. ADB's operational focus over the medium term supports the Te Kakeega III's cross-cutting objectives of Infrastructure and Support Services; the Economy, Growth and Stability; Environment, and Climate Change. These strategic priorities are in line with ADB's corporate strategy 2020.

ADB, together with development partners, remain committed to supporting government's roadmap for improving the management of public resources, exercising prudent public expenditure and fiscal management, strengthening corporate governance, and delivering better public services to the people of Tuvalu.

ADB participates as a team member of the International Monetary Fund Article IV Mission to Tuvalu, and liaises closely with the Pacific Financial Technical Assistance Centre—particularly on macroeconomic management and fiscal conditions.

ADB observes the biannual meetings of the Tuvalu Trust Fund Board and cooperates with civil society organizations in Tuvalu to strengthen the effectiveness, quality, and sustainability of its services.

ADB is also committed to undertaking joint missions with development partners to improve coordination and lessen demands on country capacity.

ADB Supported Projects and Programs

The government embarked on a comprehensive reform program from 2012 to 2015 implemented through technical assistance and a coordinated program of flexible budget support grants provided by ADB, the governments of Australia and New Zealand, and the World Bank. Collaborative efforts towards improved governance, social development, education and human resources, and macroeconomic growth and stability helped mitigate the social and economic impact of the global financial crisis and strengthened Tuvalu's fiscal sustainability against future shocks.

ADB provided grants in 2008, 2012, and 2015, totaling $7.6 million, towards sound macroeconomic and fiscal management and improved public enterprise performances. The latest grant of $2.0 million, approved in September 2015, completed the final set of reforms begun with ADB support in

2012. Public procurement reforms supported by ADB have resulted in competition among suppliers, cost-savings, transparent procurement proceedings, and improved public confidence in the use of public finances. Reforms to contract out selected construction works currently undertaken by the Public Works Department and privatize the government-owned hotel will help reduce the drain from ad hoc government subsidies on the national budget, attract greater private sector participation, and generate employment. Improvements to the management and maintenance of government's fiscal buffer fund will help ensure long-term macroeconomic stability and economic self-sufficiency.

ADB approved preparatory work in July 2015 for the proposed Outer Island Maritime Infrastructure Project, which will rehabilitate and improve maritime infrastructure in selected outer islands of Tuvalu; and improve safety, efficiency, and sustainability of maritime transportation between Funafuti and the eight outer islands. This investment project, likely to cost around $25 million, is expected to be approved in late 2016.

ADB technical assistance has supported public financial management, governance, education, and capacity development in Tuvalu. Tuvalu also benefitted from regional technical assistance in economic management, audit capacity, aviation safety, private sector development, infrastructure planning, climate change, and safeguards.

Future Directions

The introduction of a base annual allocation of $3.0 million for small developing member countries from January 2015, which will double to $6.0 million in 2017, has boosted ADB's scope for investment opportunities in Tuvalu.

In mid-March 2015, tropical cyclone Pam caused significant damage to agriculture and infrastructure, estimated at over $15.0 million. The government is seeking contributions from development partners for prioritized interventions in the Tuvalu Recovery and Vulnerability Reduction Plan, which requires over $70.0 million to implement. Towards this objective, ADB will seek approval for the proposed Outer Island Maritime Infrastructure Project in 2016.

Over the medium term, ADB's focus on the transport sector and strengthening public sector management will help improve the efficiency and safety of outer island transportation through upgraded port facilities and help sustain good fiscal management. Regional approaches to information and communication technology, disaster risk management, and climate change will be explored.

PFTAC COUNTRY STRATEGY 2012-2016

Background

Tuvalu's strong fishing and .tv revenues during the past 3 years have allowed it to overcome some of the difficulties created by the earlier global financial crisis. The short-term outlook appears stable on the back of continued favorable fishing and .tv revenues as well as large donor-financed investments, but vulnerabilities in the state owned enterprises and financial sector continue to pose challenges to macro stability.

PFTAC Technical Assistance (TA) has been moderate and concentrated in the revenue and statistics sectors. Recent PFTAC TA has been focused on assisting the authorities achieve the gains planned from revenue reforms through on-the-job assistance in revenue administration following the completion of an ADB project that supported the PFTAC-designed reforms. There has also been significant assistance in developing national accounts and balance of payments statistics, in part to allow Tuvalu to meet the requirements of IMF membership. PFTAC provided TA in 2012 to develop a PFM Reform Roadmap.

Strategy 2012-2016

PFTAC's TA strategy is guided by the APD regional strategy note and is planned within the results framework for the current PFTAC funding cycle.

PFTAC TA aims to support the authorities sustain progress on improving fiscal sustainability. PFTAC will continue to work closely with the broader development partner group to ensure coherence and will aim to support implementation of actions in the authorities' shared policy matrix.

In the **Public Financial Management** area, PFTAC provided support in 2012 to develop a PFM roadmap to prioritize the strengthening of PFM weaknesses identified in the 2011 PEFA (*1.2*). Support to implementation of specific elements will also be available, in coordination with other development partners and in particular the Australian Agency for International Development or AusAID -supported budget and treasury advisors. In 2014 PFTAC provided TA to rewrite Tuvalu's Financial Instructions, and worked with Ministry of Finance officials in 2015 to conduct a PEFA Self-Assessment and revise their 2011 Roadmap. The Self-Assessment identified many improvements since the 2011 PEFA. Officials from Tuvalu have regularly attended PFTAC's PFM workshops including the most recently delivered (with PFTAC's Macro-Fiscal Advisor) on medium-term expenditure forecasting. In the PFM area PFTAC anticipates continuing collaboration with the Australia-Department of Foreign Affairs and Trade funded Budget Advisor to assist Tuvalu staff in their development of medium-term budget planning and forecasting, including planning for asset repair/replacement financing.

In the **revenue** area, The Pacific Technical Assistance Mechanism (PACTAM)[1] has supported Tuvalu's Inland Revenue Department with a three year placement of a revenue advisor thus reducing reliance on PFTAC TA. The main objectives of PACTAM's TA package included: (a) providing on-the-job training in tax audit; (b) strengthening debt and returns management; and (c) mentoring and advising the Director of Inland Revenue by providing technical tax advice. Indications are that good progress has been made to the extent that PACTAM recently scaled down its TA package from a full time advisor to quarterly short term expert visits. To obtain an objective and independent view of how far the organization has progressed its modernization journey the authorities have requested a PFTAC review to provide an assessment of current revenue administration performance and to help identify future reform priorities.

In **statistics**, PFTAC resumed the provision of regular assistance on national accounts compilation (*4.1*), taking over from the SPC which has been doing this since 2010. PFTAC carried out national accounts TA missions in February 2015 and January 2016 to help incorporate major administrative and survey data sources, improve methods and build capacity. However, the latter has been hampered by staff absence and with the sole compiler now embarking on long-term study leave, the productive outlook is uncertain. PFTAC originally provided support on balance of payments compilation) but this was then covered by the Japan Administered Account for Selected IMF Activities or JSA Project on the Improvement of External Sector Statistics in the Asia and Pacific Region, which formally concluded in October 2015. Further discussion is required to scope out how such support might be provided from now on.

In financial sector supervision, **PFTAC provided strategic support to the authorities by reviewing the Banking Commissions Act and making some recommendations as to changes to the oversight authority, which were accepted and in 2015 the Act was amended.** The Banking Commission and Banking Commissioner's position remain, however if no one is appointed the Minister of Finance will be the Commissioner or someone appointed by him. The Minister exercised his prerogative and appointed the Permanent Secretary who will also hold the Banking Commissioner's position. PFTAC staged two TA missions to Tuvalu in 2015 to review and assess the banking sector.

Given the lack of in country capacity, establishing a basic on and off site supervision office will be problematic and will require TA resources. PFTAC did draft a basic set of prudential reporting and held a few workshops with the Ministry of Finance and local bank on how to implement this approach. A follow-up TA to the Ministry of Finance aimed at performing an on-site review of the Bank of Tuvalu and requiring, on a regular basis, the reporting of financial data would be the next step.

No direct **macroeconomic** support is currently envisaged, with the TTFAC and ADB's Public Expenditure Management TA currently taking the lead in these areas.

[1] The Pacific Technical Assistance Mechanism (PACTAM), an Australian Government initiative, places highly skilled employees in the Pacific to assist local employers to meet their human resource needs and contribute to developing capacity in the workplace.

STATISTICAL ISSUES

(As of August 1, 2016)

I. Assessment of Data Adequacy for Surveillance
General: Data provided to the Fund have serious shortcomings that significantly hamper surveillance. Shortcomings are most serious in the national accounts and monetary statistics. The Pacific Financial Technical Assistance Centre (PFTAC) and the Statistics Department (STA) have provided technical assistance (TA) to the Central Statistics Division (CSD) of the Ministry of Finance to help compiling 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 is gradually improving. Attention needs to be paid to improving source data for national accounts.
Price statistics: The consumer price index (CPI) is the only price index compiled in Tuvalu. The CSD produces a quarterly CPI, which is timely and of reasonable quality. The CPI expenditure weights were revised in 2011, based on the 2010 Household Income and Expenditure Survey. Ideally, weights should be not more than five years old so as to ensure that the index remains representative of current expenditure patterns.
Government finance statistics (GFS): Tuvalu neither compiles nor publishes GFS data. However, MOF issue monthly fiscal statements (of central government data) for budget analysis and control, and apply IPSAS (cash) and IFRS (accrual) accounting standards for all public sector entities. However, the classifications of some accounts, particularly on capital spending, need to be improved to be in line with international standards. Previous TA compiled draft GFS and Classification of the Functions of Government (COFOG) tables for budgetary central government. Follow on steps were automation within the financial accounting system; and collection of source data to fill existing data gaps in debt and aid data. Staff resource levels remain an impediment to efficient and effective GFS data compilation.
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 of Tuvalu and the Development Bank of Tuvalu provided the Article IV mission with their balance sheets, which were used to produce the monetary data on the two banks. **Financial sector surveillance:** Financial Soundness Indicators (FSIs): Tuvalu does not compile FSIs.

Balance of payments and International Investment Position (IIP): Tuvalu's External Sector Statistics (ESS) has been considerably improved with the IMF TA under the recently ended JSA Project on the Improvement of ESS in the Asia and Pacific Region. Balance of payments and international investment position data are compiled annually following the *BPM6*. However, compilation of the ESS data are not regular due to heavy dependency on the lone CSD compiler and need to streamlined. With regard to quality of the data, shortcomings still remain in the coverage of nonfinancial private sector, FDI, exports, and debt-related transactions and positions.	
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 data ROSC 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 August 1, 2016)

	Date of Latest Observation	Date Received	Frequency of Data[8]	Frequency of Reporting[8]	Frequency of Publication[8]
Exchange rates[1]	04/2016	05/2016	D	NA	NA
International reserve assets and reserve liabilities of the monetary authorities[2]	12/2015	04/2016	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	12/2015	05/2016	M	I	NA
Interest rates	12/2015	05/2016	M	I	NA
Consumer price index	03/2016	05/2016	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	12/2015	04/2016	M	M	M
Stocks of central government and central government-guaranteed debt[6]	12/2015	04/2016	A	A	NA
External current account balance	12/2013	05/2016	A	A	A
Exports and imports of goods and services	12/2013	05/2016	A	A	A
GDP/GNP	12/2012	05/2016	A	A	NA
Gross external debt	12/2015	05/2016	A	A	NA
International investment position[7]	12/2013	05/2016	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 fur and state and local governments. Data on local government operations (kaupules) are not compiled but constitute a very sr portion of general government operations. For analytical purposes, central government data are a close proxy to gen 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 Barry Sterland, Executive Director for Tuvalu
and Sardor Sagdullayev, Advisor to Executive Director
September 12, 2016

Our Tuvaluan authorities thank the IMF team for the constructive dialogue, engaging policy discussions and comprehensive assessment of the challenges facing the Tuvaluan economy. The authorities broadly agree with the staff's assessment of policy challenges and responses. We would like to convey our Tuvaluan authorities' appreciation to the Fund and development partners for their continuous support. The authorities look forward to continued close engagement with the IMF.

Tuvalu is the Fund's smallest member with a population of around 10,000. It is one of the most remote countries in the world with nine island atolls covering a total land area of only 26 square km and spreading over 900,000 square km of exclusive economic zone. Because of its small population, Tuvalu has a small domestic market with little potential for economies of scale, limited infrastructure, and expensive international market access. As a result, there are limited business opportunities in the domestic economy and there is poor absorptive capacity for major investment. There is also limited potential for the tourism sector to grow as international flights are expensive and there are currently only two per week. Tuvalu's dependence on foreign aid and assistance is significant. Increased competitiveness in the global labor market has seen a decline in the overseas employment of Tuvalu nationals, which has affected the flow of remittances. The public sector, including public enterprises, dominates Tuvalu's economy. Tuvalu is at the forefront of the effects of climate change and sea level rise with the highest point estimated to be about three meters above sea level. The country is already vulnerable to natural disasters and was severely impacted by Cyclone Pam in March 2015.

Despite these challenges, the authorities are committed to pushing forward a strong development agenda. In November 2015 they adopted Te Kakeega III, the national strategy for sustainable development for 2016-2020, which is aligned with the UN Sustainable Development Agenda. This national development plan focuses on twelve strategic areas including climate change, governance, economic growth, the private sector, employment, health and social development. The authorities are also committed to continuing their efforts to build adequate policy buffers to enhance economic resilience alongside continued assistance from the international community.

Economic Outlook

The authorities agree with the staff's assessment of the outlook and risks. Recent economic performance has been strongly affected by Cyclone Pam which is estimated to have cost around 33 percent of GDP. Expansionary fiscal policy and the implementation of large infrastructure projects in 2016, including recovery spending following the cyclone, is expected to boost growth to about 4 percent, compared to 2.6 percent in 2015.

Inflation has moved up slightly from 2 percent in 2014 to over 3 percent in 2015, in light of the pickup in economic activity, increased government expenditures and a weaker Australian dollar. The balance of payments position remains in surplus, driven by stronger fishing and Internet revenues, while gross official reserves are expected to remain at around seven months of imports.

While the medium-term growth outlook for the Tuvaluan economy is expected to be positive, downside risks to the economy remain. These stem from the country's geographical position, heavy dependence on foreign aid and fishing revenue, and banking and fiscal vulnerabilities. The authorities do, however, see upside risks from fishing license fees.

Fiscal policy

The Tuvalu authorities are committed to maintaining a responsible fiscal policy while also meeting critical social and developmental expenditures. Since Tuvalu uses the Australian dollar as legal tender and has no central bank, macroeconomic management largely relies on fiscal policy. The fiscal situation has significantly improved in the last three-to-four years as record high fishing license revenues and grants from development partners have underpinned revenue. As a result, Tuvalu achieved its fourth consecutive year of fiscal surplus in 2015, boosting the Consolidated Investment Fund (CIF) which serves as a fiscal buffer.

The authorities plan to use the CIF resources to finance revenue shortfalls over the next few years. The CIF has some capacity, although the authorities recognize the need to contain expenditure growth and will carefully consider a range of options to do so (including those outlined by staff).

Reform of public enterprises remains a key priority for the Government, which is seeking to limit subsidies. This is part of an overall strategy to increase the role of the private sector as a generator of jobs and source of growth.

Our authorities agree that investments in climate resilience are a key priority for the budget. They have established the Tuvalu Survival Fund (TSF) to finance recovery and rehabilitation from climate change impacts and disasters, and to make investments in mitigation and adaptation projects. It is expected that building resilience against climate change will require Tuvalu to invest around 2 percent of GDP annually to climate-proof critical infrastructure. The authorities welcome international support through the Green Climate Fund and will continue to seek support for climate adaptation expenditures from the international community.

Financial Sector

The authorities agree with staff that further progress is needed to strengthen supervisory and regulatory frameworks in the banking sector. With the help of development partners and PFTAC, they recently made amendments to the Banking Commission Act 2011 to improve onsite supervision and increase its effectiveness. The authorities also achieved progress in reducing non-performing loans, but acknowledge that more needs to be done. Given limited infrastructure in the banking sector (there is no ATM in the country, for example), financial services are restricted to a small number of people and the access of outer islanders is constrained. The authorities are mindful of capacity constraints and would be grateful for additional technical or financial assistance from the Fund and development partners to strengthen the financial system.

Structural Reforms

The authorities are committed to pursuing structural reforms, especially of public enterprises. The Public Sector Reform Committee is currently working with technical assistance to improve public sector efficiency in order to provide more timely, reliable and quality public services at an affordable cost. At the same time, the authorities acknowledge the urgency of future reforms to the SOE sector and will continue to explore ways to strengthen public enterprises in order to improve their governance, administration and profitability.

The authorities are committed to meeting international standards and strengthening their AML/CFT regime. They also acknowledge the need to meet the standards required by the Fund in terms of data quality and availability. However, capacity constraints and a shortage of qualified staff are hindering improvements in the quality of statistics. Nevertheless, the authorities are committed to cooperating closely with PFTAC and staff to address this issue.