

INTERNATIONAL MONETARY FUND

IMF Country Report No. 17/386

KIRIBATI

December 2017

2017 ARTICLE IV CONSULTATION—PRESS RELEASE; AND STAFF REPORT

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 2017 Article IV consultation with Kiribati, the following documents have been released and are included in this package:

- A Press Release.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on a lapse of time basis, following discussions that ended on September 20, 2017, with the officials of Kiribati on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on November 21, 2017.
- An Informational Annex prepared by the IMF staff.
- A Debt Sustainability Analysis prepared by the staffs of the IMF and the World Bank.

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

Copies of this report are available to the public from

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

Price: \$18.00 per printed copy

International Monetary Fund Washington, D.C.

Press Release No. 17/505 FOR IMMEDIATE RELEASE December 18, 2017 International Monetary Fund 700 19th Street, NW Washington, D. C. 20431 USA

IMF Executive Board Concludes 2017 Article IV Consultation with Kiribati

On December 8, 2017, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation¹ with Kiribati, and considered and endorsed the staff appraisal without a meeting on a lapse-of-time basis.²

Kiribati's economic fundamentals have strengthened in recent years. Strong fishing revenue improved the fiscal position, strengthened the current account, and boosted business confidence. After registering a double-digit rate in 2015, real GDP growth declined to 1.1 percent in 2016, but is projected to pick up to about 3 percent this year driven by construction and wholesale and retail trade. Inflation has remained subdued in line with the prices of imported goods. With several donor-financed infrastructure projects in the pipeline and fishing revenue projected to remain robust over the medium term, economic prospects are broadly favorable.

The authorities have made commendable progress in structural reforms. They have implemented important reforms to improve the governance and management of the Revenue Equalization Reserve Fund (RERF) and replenished the fund from the cash reserves. Concrete steps have been taken to address the funding gap of the Kiribati Provident Fund (KPF), improve connectivity and transportation services, and enhance access to global climate change financing. Kiribati's participation in overseas labor mobility schemes also increased, albeit from a low base.

Despite a favorable economic outlook, risks to near-term growth are substantial and skewed to the downside. A change of the climate cycle could imply large uncertainties for fishing revenue. Potential global financial market turmoil can feed into the domestic economy through the exposure of the Revenue Equalization Reserve Fund (RERF) and the KPF, the country's two major savings vehicles. Given Kiribati's high reliance on imported goods, commodity price shocks and exchange rate volatility could swing imports in ways hard to accommodate. Support from development partners is essential to mitigate these downside risks. There are also upside

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

² The Executive Board takes decisions under its lapse-of-time procedure when it is agreed by the Board that a proposal can be considered without convening formal discussions.

risks to the long-run outlook if the planned infrastructure investment has stronger-than-expected impact on potential growth.

Executive Board Assessment

In concluding the 2017 Article IV consultation with Kiribati, Executive Directors endorsed the staff's appraisal, as follows:

Kiribati's economic fundamentals have strengthened in recent years. After registering a double-digit rate in 2015, real GDP growth declined to 1.1 percent in 2016, and is projected to pick up to about 3 percent this year driven by construction and wholesale and retail trade. Inflation has remained subdued in line with the prices of imported goods. With several donor-financed infrastructure projects in the pipeline and fishing revenue projected to remain robust over the medium term, economic prospects are broadly favorable. Risks to near-term growth, however, are substantial and skewed to the downside particularly related to the large volatility of fishing revenue.

The authorities have made commendable progress on structural reforms. They have implemented important reforms to improve the governance and management of the RERF and replenished the fund from the cash reserves. Concrete steps have been taken to address the funding gap of the Kiribati Provident Fund (KPF), improve connectivity and transportation services and enhance access to global climate change financing. Kiribati's participation in overseas labor mobility schemes also increased, albeit from a low base.

Prudent management of public resources remains the key policy priority, especially against the considerable long run spending pressure. A strengthened fiscal policy framework would entail setting rolling, multi-year expenditure paths consistent with a balanced budget target in the medium term and a plan to institutionalize the RERF as an endowment fund, including by implementing a rule-based withdrawal mechanism.

Strengthening macroeconomic management capacity is critical for the effective implementation of the authorities' development strategy. To this end, the authorities should push forward structural fiscal reforms by addressing weakness in tax administration and public financial management, as well as improving the institutional framework for public investment. Other priorities include enhancing climate change adaptation capacity, establishing a comprehensive banking regulation and supervision framework, and better aligning the investment strategies of the public funds with their institutional roles.

A more dynamic private sector would help the implementation of the authorities' growth strategy and ensure inclusive economic prosperity for the nation. Continued investment in the country's soft infrastructure is essential to create an enabling environment for private sector growth and employment. These should include enhancing business environment by promoting better infrastructure and connectivity, improving business registration and licensing, and enhancing financial deepening.

Maintaining the momentum of SOE reforms is important to support private sector growth. The authorities should continue SOE divestment and outsourcing, as well as further strengthen the commercial mandate of the SOEs to promote operationally and financially sustainable delivery of public services. To create a level playing field, the VAT exemptions for SOEs should be phased out.

Building human capital especially through vocational and technical training would help Kiribati harness its natural resources. There is scope in further developing specialized and certified education in marine services and hospitality, increasing scholarship offerings for local students, and promoting Kiribati's participation in overseas labor mobility programs.

Table 1. Kiribati: Selected Economic Indicators, 2015–19

Nominal GDP (2015): US\$173.8 million Nominal GNI (2015): US\$453.1 million Main export products: fish and copra GDP per capita (2015): US\$1,578 Population (2015): 110,136 Quota: SDR 5.6 million

Main export products: fish and copra			Quot	a: SDR 5.6	million
	2015	2016	2017	2018	2019
				Proj.	
Real GDP (percent change)	10.3	1.1	3.1	2.3	2.4
Real GNI (percent change)	19.8	-13.0	2.3	-2.8	2.1
Consumer prices (percent change, average)	0.6	1.9	2.2	2.5	2.5
Central government finance (percent of GDP)					
Revenue and grants	155.8	116.4	136.0	126.1	122.2
Total domestic revenue	110.4	83.7	79.1	69.2	68.3
Of which: fishing revenue	92.0	65.1	58.6	48.9	48.1
External Grants	45.4	32.7	56.9	56.9	53.9
Expenditure and net lending	113.2	112.3	145.1	133.4	133.0
Current	60.3	71.4	85.3	73.5	73.2
Development	52.9	40.9	59.8	59.8	59.8
Recurrent fiscal balance (incl. budget grants)	52.2	14.3	1.1	0.5	3.3
Overall balance 1/	42.6	4.1	-9.2	-7.3	-10.9
	-42.6	-4.1	9.2	7.3	10.9
Financing Of which: Revenue Equalization Reserve Fund	-42.0	-4.1	9.2	7.5	10.9
(RERF)	-22.3	-12.3	0.0	0.0	0.0
RERF					
Closing balance (in millions of Australian dollars)	756	868	923	949	976
Per capita value (in 2006 Australian dollars)	5,481	6,089	6,193	6,126	6,056
	3, 101	0,003	0,133	0,120	0,030
Cash reserve buffer 2/	122	4.45	447	121	422
Closing balance (in millions of Australian dollars)	133	145	117	121	133
Balance of payments					
Current account including official transfers (in	70.4	252	07.0		
millions of US dollars)	79.1	35.3	27.2	8.7	4.8
(In percent of GDP)	46.7	19.4	14.0	4.3	2.3
External debt (in millions of US dollars)	32.3	40.9	47.6	53.4	65.0
(In percent of GDP)	19.8	22.8	24.4	26.3	30.8
External debt service (in millions of US dollars)	0.6	0.7	1.2	0.6	2.0
(In percent of exports of goods and services)	3.9	3.7	6.1	2.8	9.4
Exchange rate (A\$/US\$ period average)	1.3	1.3			
Memorandum item:					
Nominal GDP (In millions of US dollars)	181.7	194.3	202.5	211.6	219.5
•					

Sources: Data provided by the Kiribati authorities; and Fund staff estimates and projections.

^{1/} Overall balance in the table is different from official budget because loans are classified as financing.

^{2/} Cash reserve buffer includes the government's custodian account and cash account.



INTERNATIONAL MONETARY FUND

KIRIBATI

STAFF REPORT FOR THE 2017 ARTICLE IV CONSULTATION

November 21, 2017

KEY ISSUES

Context. Kiribati is a small and fragile state vulnerable to climate change. Record high fishing revenue in recent years has boosted growth, improved the current account, and strengthened the fiscal stance. However, fishing revenue is projected to decline as the impact of favorable weather conditions wears off. Long-run spending pressure is substantial due to the country's large infrastructure gap and significant climate change adaptation cost. The government's development strategy, the Kiribati 20-Year Vision (KV20), identifies fisheries and tourism as the two strategically important sectors to achieve inclusive and sustained long-run growth.

Key policy recommendations.

- Accommodating the considerable public spending needs in a fiscally sustainable way calls for strengthening the fiscal policy framework. Key elements should include committing to a structurally balanced budget over the medium term and institutionalizing a rule-based withdrawal mechanism for the Revenue Equalization Reserve Fund (RERF), Kiribati's sovereign wealth fund, to support long-run development spending while ensuring intergenerational equity.
- Enhancing macroeconomic policy capacity and institutions is critical for the effective implementation of the government's development strategy. The priority is to push forward structural reforms in tax administration and public financial management. Strengthening the institutional framework for public investment for better efficiency and productivity is also important given the government's ambitious near term development spending plan.
- Achieving sustained and inclusive growth depends on creating better
 conditions for private sector growth. A more dynamic private sector can help
 absorb the rising labor supply and support the implementation of the strategy to
 maximize the potentials in fisheries and tourism. Key areas include improving
 business environment, further strengthening public sector reforms, and continuing
 to invest in human capital.

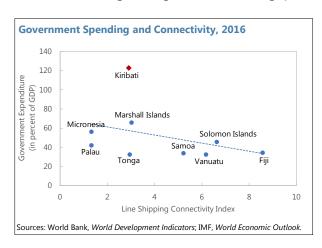
Approved By Tarhan Feyzioglu (APD) and Kevin Fletcher (SPR) Discussions were held in South Tarawa during September 11–20, 2017. The staff team included Ding Ding (head) and Simon Paroutzoglou (both APD) and Arti Devi (IMF Regional Resident Office in Fiji). Staff from the World Bank also joined part of the mission. Gulrukh Gamwalla-Khadivi and Chau Ngoc Bao Nguren (both APD) assisted in preparing this report.

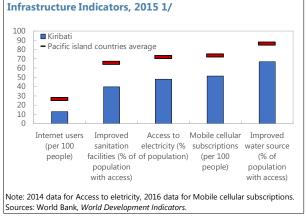
CONTENTS

CONTEXT	3
RECENT DEVELOPMENTS, OUTLOOK AND RISKS	
ENHANCING SUSTAINABILITY AND POLICY CAPACITY	7
A. Securing Long-Run Fiscal Sustainability	
B. Improving Capacity Development	
IMPROVING SOFT INFRASTRUCTURE	12
STAFF APPRAISAL	14
BOXES	
1. External Sector Assessment	5
2. Volatility of Fishing Revenue and the Impact on the RERF	8
FIGURES	
1. The Cross-Country Setting: Economic Fundamentals	16
2. The Cross-Country Setting: Development Indicators	17
3. Recent Developments	18
TABLES	
1. Selected Economic Indicators, 2015–19	19
2. Summary of Central Government Operations, 2015–22	
3. Medium-Term Projections, 2015–22	
4. Balance of Payments, 2015–19	22
ANNEXES	
I. Risk Assessment Matrix	23
II. Main Recommendations of the 2016 Article IV Consultation	24
III A Rule Based RERE Withdrawal Mechanism	25

CONTEXT

- 1. Kiribati faces long-standing development challenges due to its extreme remoteness and large dispersion. With over thirty remote islands spread over 3.5 million square kilometers of ocean, the cost of infrastructure and public service delivery is high. A narrow production and export base (mainly limited to fisheries and copra) makes the country highly dependent on income from fishing license fees. Weaknesses in business climate and financial intermediation also limit economic and job opportunities. With the lowest per capita GDP in the region, about a fifth of the population lives below the basic needs poverty line. The country's long-run prospects are further clouded by climate change—the low elevation of the atolls (1.8 meters on average) make them extremely vulnerable to sea level rise.
- **2. Notwithstanding these challenges, there are opportunities favorable for long-run prospects.** Kiribati's vast exclusive economic zone (EEZ), one of the largest in the Pacific, represents great marine resources. Fishing license fees are historically volatile, but regional cooperation under the Parties to the Nauru Agreement (PNA) since 2012, favorable weather conditions for fishing in the Kiribati EEZ, and the strengthening of the U.S. dollar together contributed to a substantial increase in fishing revenue and strengthening of the RERF's balance.¹ With a balance equivalent to 350 percent of GDP, the RERF serves as an important vehicle for intergenerational investment. Assistance from development partners, especially in infrastructure investment financing, has been substantial even by regional standards. Significant improvements in transportation and connectivity infrastructure (roads, airports and telecommunication) in recent years have boosted economic activity and business confidence, though a large infrastructure gap remains.





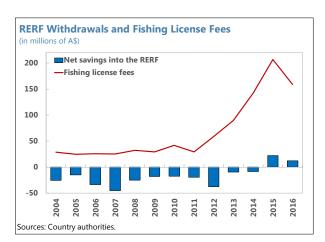
RECENT DEVELOPMENTS, OUTLOOK AND RISKS

3. Growth has remained strong thanks to the strong fishing revenue and several donor-funded infrastructure projects. Fishing license fees averaged nearly 80 percent of GDP in 2014-16 compared to the historical average of 25 percent. After registering a double-digit rate in 2015, real GDP growth declined to 1.1 percent in 2016, partly due to the completion of the major road

¹ Fishing license fees are collected in the U.S. dollar while the Australian dollar is Kiribati's legal tender.

project in Tarawa and a decline in fishing revenue by about 20 percent from the historical high in 2015. Headline inflation picked up to nearly 2 percent in 2016 owing to the rising prices of imported goods, which constitute the bulk of Kiribati's consumer price basket. Inflation has moderated somewhat in 2017.

- 4. The government's fiscal position registered a modest recurrent surplus in 2016 and is likely to remain balanced this year. Fishing revenue exceeded the budget projection by 25 percent of GDP in 2016, but was offset by budget overruns, most notably the overspending of the copra subsidies by nearly 6 percent of GDP. The 2017 Budget envisaged a balanced budget with a spending consolidation of 6 percent. As fishing revenue came in strong in the first nine months of the year, the government issued two supplementary budgets including an appropriation of A\$30 million (12 percent of GDP) for outer island development. As a result, budget spending is likely to increase from 71 percent of GDP in 2016 to 85 percent of GDP this year, compared to the historical average of 55 percent of GDP before the fishing revenue boom.
- 5. The improvement in the fiscal position has allowed the government to reinvest RERF earnings instead of relying on RERF withdrawals to finance deficits. The government also made several transfers from its cash reserves to the RERF, including a transfer of A\$70 million in 2016, and implemented important reforms to improve the governance and management of the fund. As of August 2017, the RERF's net capitalization value reached nearly A\$900 million (around 350 percent of GDP). Continued strong fishing revenue in 2017 means



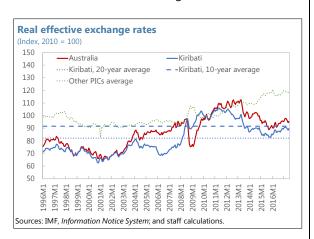
that the government has again accumulated significant cash reserves, which now stand at about A\$110 million relative to the recommended buffer of A\$45 million (equivalent to three months of recurrent spending).

6. **Kiribati's external balances also improved.** The current account surplus registered 19 percent of GDP in 2016 and is projected to remain high at 14 percent this year, with strong fishing revenue more than offsetting the elevated imports related to infrastructure investment. Kiribati's real effective exchange rate (REER) remained stable for much of 2016, but tracked the weakening of the Australian dollar since early 2017. Staff assesses the external position in 2016 to be broadly in line with the level implied by medium-term fundamentals and desirable policies (Box 1). However, there is substantial uncertainty around this assessment, given the idiosyncratic features of the Kiribati economy. Given the large size of the RERF relative to external debt, there are no immediate risks to external stability. However, long-run sustainability risks are significant if reliance on grants is eventually reduced (see accompanying Debt Sustainability Analysis for details).

Box 1. External Sector Assessment

Kiribati's external balances are largely driven by exogenous factors. Current account inflows are dominated by fishing license fees, RERF investment income and donor contributions, while the outflows related to infrastructure investment are mostly financed by project grants and loans. Although the 2016 current account surplus, at 19 percent of GDP, is stronger than underlying economic fundamentals based on the EBA current account model, the estimated current account gap is largely due to residuals. More generally, the methodology is not fully suitable for Kiribati given the specific characteristics of the economy, most notably the large volatility of its fishing revenue and the substantial current transfers related to donor grants. Due to data limitations, the EBA REER model is also not feasible for Kiribati. Nonetheless, the REER has been stable for most of 2016 and 2017 and broadly in line with the historical averages. With a small

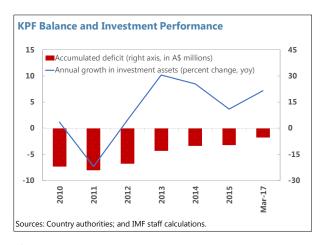
variety of exported goods and an imports-dependent economy, the real exchange rate has limited impact on the current account. The EBA external sustainability approach suggests that the projected medium-term current account balance is in line with the level that would stabilize the net international investment position (NIIP) as a share of GDP. On balance, staff assesses the external position in 2016 to be broadly in line with the level implied by medium-term fundamentals and desirable policies. However, there is substantial uncertainty around this assessment, given the idiosyncratic features of the Kiribati economy.



More broadly, Kiribati's external competitiveness relies on the government's continued efforts to address long-standing structural impediments. While the planned improvement in transport services can enhance Kiribati's export capacity, infrastructure deficits and lack of scale remain important structural challenges. There is also significant scope for further improvements in ease of doing business, where Kiribati lags peer economies in the Pacific. To ensure long run external sustainability, securing donor grants for development spending is critical.

The use of the Australian dollar as the legal tender remains appropriate. It provides a strong nominal anchor given close trade and financial linkages with Australia (a high share of the RERF's assets is invested in Australian markets) and limited capacity to run an independent monetary institution. Kiribati has accepted the obligations under Article VIII of the IMF's Articles of Agreement and maintains an exchange system free of restrictions on payments and transfers for current international transactions.

7. The authorities have made remarkable progress on structural reforms. In line with staff's recommendation in the 2016 Article IV consultation, concrete steps have been taken to address the funding gap of the Kiribati Provident Fund (KPF) with the accumulated deficit reduced by 50 percent.² The multi-year SOE reform is now in its final phase with the government on track to reduce the number of SOEs by almost half through privatization and mergers. The authorities also secured funding from the Green Climate Fund (GCF) to enhance the country's



ability to access the largest source of climate change financing in the world. Kiribati's participation in overseas labor mobility schemes also increased, albeit from a low base.

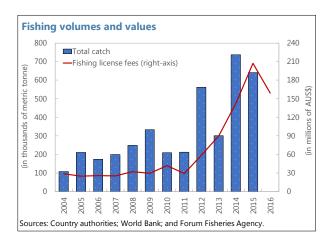
8. Growth is projected to pick up to around 3 percent in 2017 driven by construction and wholesale and retail trade. With several donor-financed infrastructure projects in the pipeline and fishing revenue projected to remain robust over the medium term, economic prospects are broadly favorable. The planned large investment in telecommunication, transportation and outer island development has the potential to sustain growth momentum over the longer term, as evidenced by the strong economic impact of the newly completed road project in Tarawa. Inflation is projected to remain modest in 2017 and pick up to around 2.5 percent over the medium term consistent with that in major trading partners.

Kiribati: Recent Major Infrastructure Projects								
Project	Development Partners	Total Project Cost	Year	Modality				
Kiribati Road Rehabilitation Project	World Bank, ADB, Government of Australia	\$17.6 million	2011-2015	Grant				
Kiribati Aviation Investment Project	World Bank, Government of Australia	\$14.3 million	2012-2018	Grant				
Project for Reconstruction of Nippon Causeway	JICA	3.8 billion yen	2016-2019	Grant				
Bonriki International Airport Upgrade Project	Taiwan Province of China	\$14.7 million	2016-2019	Loan				
South Tarawa Sanitation Improvement Sector Project	ADB	\$2.8 million	2014-2019	Grant				
Pacific Regional Connectivity Program Project for Kiribati	World Bank	\$20 million	2017-2022	Grant				
Source: Kiribati authorities								

9. Despite the positive economic outlook, risks to near-term growth are substantial and skewed to the downside (Annex I). The favorable weather conditions underpinning the strong fishing volume have lasted unusually long. A change of the climate cycle could imply large revenue uncertainties. Potential global financial market turmoil can feed into the domestic economy through

² The KPF is a national compulsory saving scheme and serves as a savings fund for its participating members. Participation in the KPF is mandatory for all citizens employed in the public or private sector, and the plan is funded by equal contributions from the employee and the employer. The KPF operates similarly to a cash-balance pension plan, where members are in effect owners of a balance that is carried forward year to year and accrues interest at rate determined annually by the KPF Board (crediting rate). The funding gap represents the net liabilities of the fund.

the exposure of the RERF and the KPF, both investing most of their assets in foreign markets. Given Kiribati's high reliance on imported goods, commodity price shocks and exchange rate volatility could swing imports in ways hard to accommodate. On the other hand, there are upside risks to the long-run outlook if the planned infrastructure investment has a stronger-than-expected impact on potential growth.



Authorities' Views

10. The authorities broadly agreed with staff's assessment of Kiribati's economic outlook. They noted that although the national accounts data show a neutral growth impact of government spending on subsidies, there are indirect positive impacts through the increase in household disposable income and consumption, particularly in the outer islands. They pointed out that the additional allocation of A\$30 million in this year's Supplementary Budget for outer island development (together with approximately A\$40 million from the World Bank and the ADB) is further aimed at meeting the Government's commitment on developing better infrastructure for the outer island residents. This spending is likely to lift potential growth and support the delivery of more inclusive growth in Kiribati. The authorities pointed out that fishing revenue could be highly volatile with risks on both sides, although they agreed that it is appropriate to assume a modest decline in fishing revenue for the baseline projection. They are mindful of Kiribati's vulnerability to natural disasters and climate change related shocks and have taken steps to increase Kiribati's access to various sources of climate financing globally.

ENHANCING SUSTAINABILITY AND POLICY CAPACITY

11. With the improvement in the fiscal balance, Kiribati now has a historic opportunity to consolidate these gains while supporting investment and long-run prosperity. The government has an ambitious development agenda, envisaged in the Kiribati 20-Year Vision (KV20), to promote inclusive and sustainable growth by devoting resources to the strategically important sectors—fisheries and tourism—and to stimulate growth in other sectors through positive spillovers. Prudent management of public resources and further strengthening macroeconomic policy capacity are crucial for the effective implementation of this strategy.

A. Securing Long-Run Fiscal Sustainability

12. Budget decisions need to be based on a prudent assessment of revenue projections, spending goals, and wealth management targets. The large volatility in fishing revenue presents a significant challenge to public financial management. In staff's baseline scenario, fishing revenue is projected to decline by about 15 percent in 2018 (but remain high by historical standards) as the favorable weather conditions start to wear off, though this assumption is subject to significant uncertainties (Box 2). Long-run spending pressure is substantial due to Kiribati's large infrastructure gap and significant climate change adaptation cost, while the repeated use of supplementary

budgets since 2015 highlights the risk of procyclical spending. Despite the recent replenishment, the real per capita value of the RERF is still 20 percent below the peak in the 2000s. Staff's debt sustainability analysis (DSA) also indicates that Kiribati remains at high risk of debt distress, highlighting the importance of securing donor support for infrastructure investment.

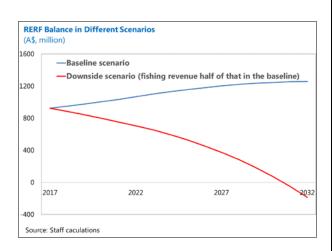
Box 2. Volatility of Fishing Revenue and the Impact on the RERF

Fisheries is one of Kiribati's most important assets and the main driver of economic growth.

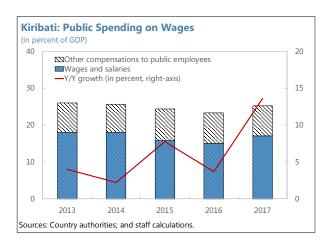
Historically fishing revenue was low and volatile. The introduction of the Vessel Day Scheme (VDS) in 2012 through the PNA allowed Kiribati to more effectively tap into its fisheries resources. In 2014 alone, Kiribati waters supplied one quarter of the tuna in the global market. Fishing activity now provides approximately 80 percent of the government's revenue.

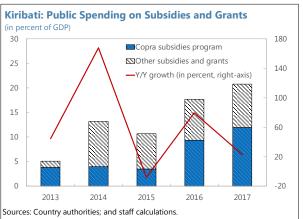
However, such a high concentration in a volatile revenue source poses challenges for public financial management. First, fishing volumes can fluctuate significantly year-on-year due to weather patterns that are hard to forecast. Since 2015, fish stocks in the Kiribati EEZ have been stronger than historical averages, thanks to the warm and rainy El Niño. Forecasts of the El Niño Southern Oscillation cycle are highly uncertain due to historical irregularity, but the opposite phases of El Niño and La Niña occur on average every two to seven years. Should the drought conditions of La Niña prevail, Kiribati could see a sharp decline in fishing volume. Second, the tuna price is driven by supply and demand conditions in a globally competitive market where prices can be volatile. Finally, the VDS scheme allows member countries to negotiate the license fees on an individual basis. Under the PNA the cost of a day's fishing has increased from a minimum rate of \$5,000 introduced in 2012 to \$8,000 in 2015, while the actual rates traded are currently in the \$10,000–\$11,000 range. These fees can fluctuate considerably due to market conditions and/or idiosyncratic shocks to individual countries.

Future growth of the RERF depends heavily on fishing revenue and the government's fiscal stance. Staff's simulations indicate that, in the baseline scenario where the policy stance keeps unchanged and fishing revenue remains constant around A\$130 million per year in real terms, the RERF would increase gradually to around A\$1.2 billion over the long run. In a downside scenario where fishing revenue declines by half while public spending remains the same as in the baseline scenario, the fiscal deficit would widen sharply leading to a depletion of the RERF in about 15 years.



- 13. Against this background, a strengthened fiscal policy framework is needed to safeguard sustainability while ensuring resources are available for long run development. Key elements of such a framework should include the following:
- Committing to a structurally balanced budget over the next three years. This would entail setting an expenditure path that is consistent with meeting fiscal balance including donor budgetary support but excluding foreign financed capital expenditure. If revenue deviates from projections, then expenditure should be adjusted gradually on a rolling basis, with a view to maintaining fiscal balance by the end of the projection period and taking into account future revenue projections based on an assessment of the degree to which the revenue shock is likely to be temporary or permanent. This approach would help insulate spending from potential volatility in fishing revenue, allow further accumulation of the RERF investment returns, and avoid a widening of fiscal deficits adding pressure to long run sustainability given Kiribati's high risk of debt distress (see the accompanying Debt Sustainability Analysis). Achieving a structurally balanced outturn would require limiting the growth of the wage bill and subsidies and grants in line with nominal GDP, and correcting the sharp increase in discretionary expenditure that occurred in 2016–17. Given fiscal sustainability risks, adjustments to revenue surprises should also be biased toward saving revenue overperformance while adjusting more quickly to downside surprises. Finally, the authorities should refrain from borrowing non-concessional loans, which may entail significant currency risks, jeopardize long-run fiscal sustainability, and constrain future borrowing capacity.





• Making efficient use of cash buffers. An appropriately-sized cash reserve buffer—equivalent to three months of recurrent spending—should be maintained to cope with revenue volatility and external shocks. The government's current cash reserves, including the custodian account managed by an external fund manager and the cash deposits, are well above the threshold that is considered adequate to cope with revenue volatility and external shocks. Transferring the excess reserves into the RERF could help strengthen fiscal discipline, as withdrawals from the RERF require more legislative scrutiny.

• Formulating a long-run RERF withdrawal mechanism. Over the longer run, the above structural balance target could be adjusted in line with a rule-based annual financing from the RERF to support the government's development agenda while ensuring intergenerational equity. From the intergenerational social welfare perspective, the *optimal* annual net accumulation of the fund depends on two competing factors: the need to compensate future generations for the decline in per capita fishing revenue, and the rising non-fishing income in real per capita terms (Annex III). For example, if the two factors offset each other, the optimal mechanism would imply keeping the real per capita RERF constant, which would allow an annual withdrawal from the fund by around 1 percent (assuming the real return of the fund of around 3 percent and population growth of around 2 percent), equivalent to about 3.5 percent of GDP in 2021. Such a withdrawal mechanism, if kept rule-based and transparent, could simplify budget planning while ensuring that the RERF is maintained as an endowment fund that can provide the population with a permanent and stable stream of income. The mechanism should be adjusted over time to reflect structural changes in fishing revenue, potential growth, investment spending needs, and RERF earnings.

Authorities' Views

14. The authorities welcomed staff's recommendations of a comprehensive fiscal policy framework, noting the long-standing aim of having a balanced budget over the medium term.

They noted that although the government would like to maintain certain flexibility for development financing, they are committed to limiting the use of the RERF's principal to finance budget deficits, while allowing the RERF to function as an endowment fund for both short and long run development. They agreed that there may be efficiency gains to move the excess cash deposit to the custodian account or the RERF. They disagreed that spending has been procyclical, noting that the Supplementary Budgets are related to Statutory Expenditure (such as international subscriptions), the unexpected increase in the cost of copra subsidies, and one-off spending for outer island development.

B. Improving Capacity Development

- **15.** Enhancing macroeconomic management capacity is critical for the effective implementation of the government's development strategy. As highlighted in the 2015 and 2017 IMF High-Level Dialogue in the Pacific region, addressing weakness in institutions and administrative capacity is macro critical for the Pacific Island Countries. To this end, the authorities should push forward structural fiscal reforms to address the institutional weakness identified in the recent PFTAC-led technical assistance on VAT administration and public financial management. Immediate actions are needed in the next 12 months to improve budget reporting and control, with a view to establish a strategy by the Cabinet to guide future budget development. A steadfast implementation of the overarching modernization plan of the Kiribati Taxation Division (KTD) will support sequencing, prioritization and coordination of the different streams of the KTD reform program and yield further improvement in tax revenue.
- 16. Strengthening the institutional framework for public investment is crucial given the government's ambitious near term development spending plan. The government has allocated

funding equivalent to 12 percent of GDP for outer island development and plans to scale up investment in transportation service. As infrastructure investment has been largely financed by external resources thus far, there is a strong case for the authorities to review the public investment policy framework to identify deficiencies in project planning, allocation and implementation, and to build experience and capacity for project management. An improved institutional framework could also catalyze more donor support for infrastructure investment, provided that the country can absorb efficiently additional infrastructure financing.

- 17. Climate change and natural disasters are macro critical for Kiribati. Staff's analysis of potential growth suggests that climate change alone is likely to cause a reduction in annual growth by 0.1 percentage point per year over the long run (Box 3 of the 2016 staff report). This estimation, however, is based on the "known" growth effect of climate change on the agriculture, health, and tourism sectors and may not capture the full impact.³ To enhance disaster management capacity and match external financing for climate change adaptation, the budget should include an explicit provision up to 3 percent of GDP annually to cover the recurrent cost of coastal protection, soil desalinization, and infrastructure maintenance. The cash reserve buffer can serve as a contingency plan to enhance ex-ante readiness to respond to natural disasters, backstopped by the RERF as a last-resort measure.
- **18.** A comprehensive banking supervision and regulation framework is needed to safeguard financial stability. The Kiribati financial sector essentially consists of one commercial bank (a joint venture between the ANZ and the Government of Kiribati) and two public financial institutions (the Development Bank of Kiribati, DBK, and the Kiribati Provident Fund, KPF). The public financial institutions have a critical role in enhancing financial deepening and provide most of the personal and business loans in the country. Ensuring their long-term sustainability and financial stability requires a legislative framework that can provide the supervisor with the necessary legal powers to authorize and supervise banks with a comprehensive suite of prudential standards. In addition, further commercialization of the DBK into a deposit taking institution should be carefully weighed against its current risk management capacity, capital buffers against the legacy doubtful loans, and the bank's developmental objectives, including ensuring continued affordable access to financial services.
- 19. The investment strategies of the various public funds should be better aligned with their institutional roles. Given the large size of the cash reserves (currently 40 percent of GDP) and the relatively low return of the cash deposits, there is a strong case to transfer some of the deposits to the RERF while ensuring ample liquidity is maintained for cash management purposes. A more conservative investment strategy of the KPF may be appropriate given the fund's institutional investor role, where determination of risk-tolerance should put more emphasis on the need to protect the value of its assets, particularly in the current absence of financial buffers to absorb losses. Meanwhile risks associated with the KPF's exposures to domestic assets, including those through the Small Loans Scheme (SLM) to the KPF members, should be closely monitored. Finally, staff welcomes

³ For instance, <u>Climate Change and Disaster Management (The World Bank, 2016)</u> estimated that the additional cost of coastal protection and infrastructure adaptation due to rainfall and temperature increases for Kiribati could amount to 12 percent of GDP annually by 2040.

the recently conducted reviews of the RERF custodial arrangements, which should lead to more transparent and cost efficient management of the fund.

20. There is considerable scope to enhance the efficiency of the copra subsidy program.

The program serves mainly as a livelihood subsidy to support Kiribati's outer island residents to keep them employed, monetized and motivated to stay in the outer islands to elevate the pressure of overcrowding in the main island. Given the large size of the program (currently 12 percent of GDP) and its long-run impact on public finance, continued efforts are needed to reduce the leakages of the program to make it more cost efficient. The authorities should also consider improving the incentive structure of the program to avoid over-harvesting of coconuts and to make the program serve better as a catalyst to foster economic diversification on the outer islands, for instance by finding additional and more value-added usage of the underlying resource (e.g., coconut oil) and developing better utilization of copra byproducts (e.g., animal feed).

Authorities' Views

21. The authorities broadly shared staff's assessment on capacity development priorities.

They noted that implementing the public financial management reform needs to be in a sustainable manner with consideration given to coordination across government agencies, aligning its implementation with the implementation of the new financial management information system as well as building absorptive capacity of staff. They expressed interest in receiving technical assistance through a Public Investment Management Assessment (PIMA). They agreed that banking sector regulatory oversight needs to be enhanced, and there is scope to improve the returns on the cash reserve funds. They noted that measures have been taken to address the leakages in the copra subsidy program and agreed that there is a need to ensure the sustainability of copra production and incentivize further diversification of the sector. On climate change, the government is taking a concerted effort in seeking opportunities to increase access to various sources of climate financing, noting that international support is critical in ensuring that such funding is accessible for small countries.

IMPROVING SOFT INFRASTRUCTURE

- **22.** Achieving sustained and inclusive growth in Kiribati depends on creating better conditions for private sector growth, as there is limited scope in the public sector to absorb the strong population growth. The KV20 sets an ambitious goal to increase the private sector's contribution to GDP from the current 48 percent to 65 percent by 2036, through the implementation of an integrated policy framework that seeks to stimulate trade development and economic activities in fisheries and tourism. To this end, further improvements in the country's soft infrastructure, namely, business environment, access to finance, the role of the SOEs, and human capital development, are important in achieving a private sector led growth in the long run.
- 23. Improving the business environment is the key pillar for private sector growth and employment. The authorities are in the process of reforming business legislation to further streamline business licensing and registration. Despite the substantial progress in improving physical infrastructure and connectivity, the country's transportation needs remain considerable. Further development in air

transportation and shipping services, including by promoting private sector participation in the latter, could support fishing and tourism related economic activities and bolster outer island development. Thorough feasibility analyses are needed to assess the economic and social benefits of public investment in transportation against the potentially substantial long-run cost.

- 24. Enhancing financial deepening is an essential element for private sector development. The public financial institutions finance most personal and small business loans in Kiribati, with much of household borrowings backed by their provident fund savings. Facilitating private sector access to credit and reducing the cost of financing (currently at around 10 percent for small business loans) would be best achieved by improving financial education, land access procedures, dispute resolution mechanisms and loan recovery processes. Building on the recent investment in ICT infrastructure, more efforts are welcome to promote the development of mobile banking, as experience in the region has demonstrated its financial deepening and job-creation benefits. The recent regional withdrawal of correspondent banking relations has so far had limited impact on financial services in Kiribati, notwithstanding anecdotal evidence of increased compliance costs.
- 25. Promoting private sector led growth also depends on furthering SOE reforms. The authorities have made commendable progress in downsizing and rationalizing the SOE sector such as the consolidation of the two copra SOEs. The focus of the next stage of the reform should be on the institutional improvements needed to place SOEs on a more commercial footing. Further improving SOE auditing and contingent liability management can help achieve the operationally and financially sustainable delivery of public services. The VAT exemptions for SOEs should be phased out to create a level playing field between public and private entities. Continued divestment and outsourcing of SOE activities to the private sector, for instance in the tourism sector, will help improve efficiency and strengthen public finances.
- **26.** While targeting the development of the fisheries and tourism sectors, the KV20 also places high importance on education. As such, the more tangible investments in infrastructure should be accompanied by investments in domestic human capital where education and vocational training plays an important role. There is scope in further developing synergies between the private sector and educational institutions that could provide specialized and certified education in marine services and hospitality. Enhancing scholarship offerings for local talent to be trained overseas, as well as promoting participation in overseas labor mobility, will provide long lasting benefits for human capital development and economic growth.

Authorities' Views

27. The authorities stressed that promoting private sector development is an integral part of the **KV 20.** They are committed to further improving infrastructure and transportation services to unlock Kiribati's potential growth and create an enabling environment for the private sector, particularly in fisheries and tourism. They noted the recent legislative reforms to facilitate business registration and licensing, and encouraged alternative resolution schemes for land registration disputes. The authorities reiterated their commitment to continuing SOE reforms with an emphasis on service delivery. The government will continue to implement measures aimed at having a highly educated and skilled population, including through improving English language literacy and vocational training.

STAFF APPRAISAL

- 28. Kiribati's economic fundamentals have strengthened in recent years. After registering a double-digit rate in 2015, real GDP growth declined to 1.1 percent in 2016, and is projected to pick up to about 3 percent this year driven by construction and wholesale and retail trade. Inflation has remained subdued in line with the prices of imported goods. With several donor-financed infrastructure projects in the pipeline and fishing revenue projected to remain robust over the medium term, economic prospects are broadly favorable. Risks to near-term growth, however, are substantial and skewed to the downside particularly related to the large volatility of fishing revenue.
- **29.** The authorities have made commendable progress on structural reforms. They have implemented important reforms to improve the governance and management of the RERF and replenished the fund from the cash reserves. Concrete steps have been taken to address the funding gap of the Kiribati Provident Fund (KPF), improve connectivity and transportation services and enhance access to global climate change financing. Kiribati's participation in overseas labor mobility schemes also increased, albeit from a low base.
- **30.** Prudent management of public resources remains the key policy priority, especially against the considerable long run spending pressure. A strengthened fiscal policy framework would entail setting rolling, multi-year expenditure paths consistent with a balanced budget target in the medium term and a plan to institutionalize the RERF as an endowment fund, including by implementing a rule-based withdrawal mechanism.
- **31.** Strengthening macroeconomic management capacity is critical for the effective implementation of the authorities' development strategy. To this end, the authorities should push forward structural fiscal reforms by addressing weakness in tax administration and public financial management, as well as improving the institutional framework for public investment. Other priorities include enhancing climate change adaptation capacity, establishing a comprehensive banking regulation and supervision framework, and better aligning the investment strategies of the public funds with their institutional roles.
- **32.** A more dynamic private sector would help the implementation of the authorities' growth strategy and ensure inclusive economic prosperity for the nation. Continued investment in the country's soft infrastructure is essential to create an enabling environment for private sector growth and employment. These should include enhancing business environment by promoting better infrastructure and connectivity, improving business registration and licensing, and enhancing financial deepening.
- **33. Maintaining the momentum of SOE reforms is important to support private sector growth.** The authorities should continue SOE divestment and outsourcing, as well as further strengthen the commercial mandate of the SOEs to promote operationally and financially sustainable delivery of public services. To create a level playing field, the VAT exemptions for SOEs should be phased out.

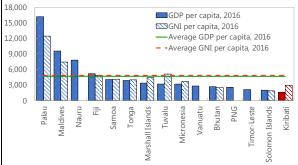
- **34. Building human capital especially through vocational and technical training would help Kiribati harness its natural resources.** There is scope in further developing specialized and certified education in marine services and hospitality, increasing scholarship offerings for local students, and promoting Kiribati's participation in overseas labor mobility programs.
- 35. It is recommended that the next Article IV consultation take place on the standard 12-month cycle.

Figure 1. The Cross-Country Setting: Economic Fundamentals

Kiribati has the lowest GDP per capita in the region...

Per capita Income, 2016

(In current U.S. dollars)

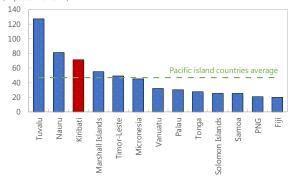


Sources: Kiribari authorities; World Bank, World Development Indicators; IMF, World Economic Outlook; and IMF staff estimates.

Public sector is large by regional standard...

Current Government Expenditure, 2016

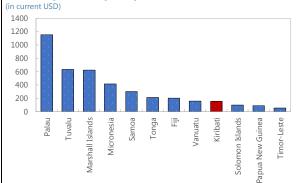
(In percent of GDP) 140



Sources: IMF, latest Article IV Staff Reports; and staff calculations.

Public health spending per capita is low...

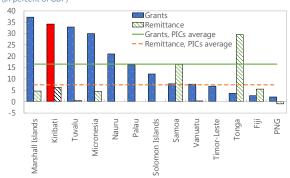
Health Expenditure per capita



Notes: 2014 data for all countries. Sources: World Bank, World Development Indicators. ... and is highly dependent on donor support.

Grants and remittances, 2016

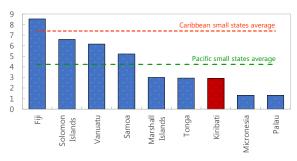
(In percent of GDP)



Sources: IMF, latest Article IV Staff Reports; and staff calculations.

...partly due to the country's remoteness.

Liner Shipping Connectivity Index

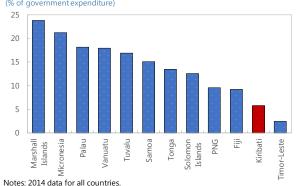


Notes: A smaller number indicates lower connectivity and higer transportation costs. 100 is the maximum index value. 2016 data for all countries. Sources: World Bank, World Development Indicators.

... and so is health spending as a share of total public expenditure.

Public health expenditure

(% of government expenditure)



Sources: World Bank, World Development Indicators.

Figure 2. The Cross-Country Setting: Development Indicators

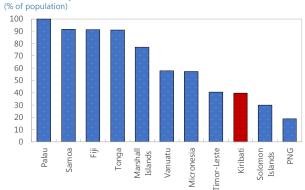
Kiribati lags the regional average on doing business indicators.

Doing Business Categories, 2017



Basic infrastructure such as access to sanitation facilities is poor by reginal standard.

Access to improved sanitation facilities

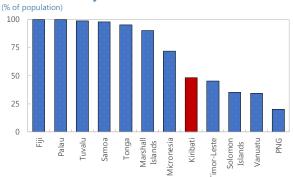


Notes: 2015 data for all countries.
Sources: World Bank, World Development Indicators.

Access to electricity is low...

Sources: World Bank, Doing Business (2017).

Access to electricity



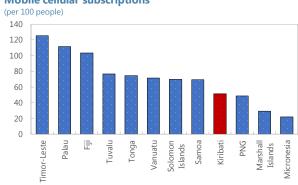
Notes: 2014 data for all countries. Sources: World Bank, World Development Indicators.

Sources: World Bank, World Development Indicators.

... internet...

... contributing to low access to cellular phones.

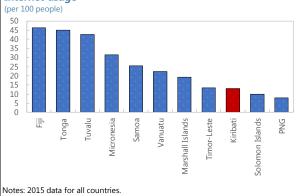
Mobile cellular subscriptions



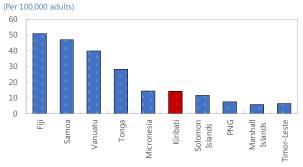
Notes: 2015 data for Palau and Marshall Islands; 2016 for remaining countries. Sources: World Bank, World Development Indicators.

... and financial services.

Internet usage



ATM Access



Notes: 2013 data for Kiribati; 2015 for Vanuatu, Tonga and PNG; 2016 for remaining countries.

Sources: IMF, Financial Access Survey

Figure 3. Recent Developments

Growth strengthened since 2012 on the back of rising fishing revenue.

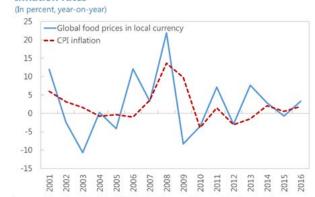
Growth rates



Sources: Country authorities; and staff calculations

Inflation has remained contained, in line with global food prices.

Inflation rates

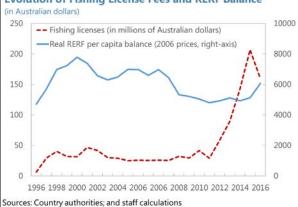


Sources: Country authorities; IMF, Global Assumptions; and staff calculations.

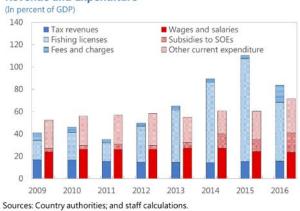
The real per capita value of the RERF recovered somewhat thanks to the strong fishing revenue.

Public recurrent expenditure rose sharply in 2016.

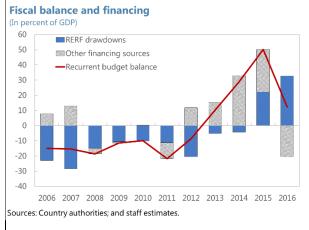
Evolution of Fishing License Fees and RERF Balance



Revenue and Expenditure

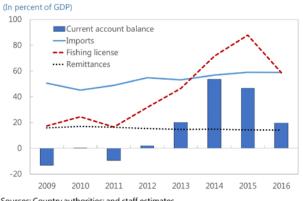


Improved fiscal stance led to net savings into the RERF.



The current account also improved in recent years.

Current account balance



Sources: Country authorities; and staff estimates.

Table 1. Kiribati: Selected Economic Indicators, 2015–19

Nominal GDP (2015): US\$173.8 million Nominal GNI (2015): US\$453.1 million Main export products: fish and copra GDP per capita (2015): US\$1,578 Population (2015): 110,136 Quota: SDR 5.6 million

	2015	2016_	2017	2018	2019
				Proj.	
Real GDP (percent change) Real GNI (percent change) Consumer prices (percent change, average)	10.3	1.1	3.1	2.3	2.4
	19.8	-13.0	2.3	-2.8	2.1
	0.6	1.9	2.2	2.5	2.5
Central government finance (percent of GDP) Revenue and grants Total domestic revenue Of which: fishing revenue External Grants	155.8	116.4	136.0	126.1	122.2
	110.4	83.7	79.1	69.2	68.3
	92.0	65.1	58.6	48.9	48.1
	45.4	32.7	56.9	56.9	53.9
Expenditure and net lending	113.2	112.3	145.1	133.4	133.0
Current	60.3	71.4	85.3	73.5	73.2
Development	52.9	40.9	59.8	59.8	59.8
Recurrent fiscal balance (incl. budget grants) Overall balance 1/	52.2	14.3	1.1	0.5	3.3
	42.6	4.1	-9.2	-7.3	-10.9
Financing Of which: Revenue Equalization Reserve Fund (RERF) RERF Closing balance (in millions of Australian dollars)	-42.6 -22.3	-4.1 -12.3	9.2 0.0 923	7.3 0.0 949	10.9 0.0 976
Per capita value (in 2006 Australian dollars) Cash reserve buffer 2/ Closing balance (in millions of Australian dollars)	5,481	6,089 145	6,193	6,126	6,056
Balance of payments Current account including official transfers (in millions of US dollars) (In percent of GDP)	79.1	35.3	27.2	8.7	4.8
	46.7	19.4	14.0	4.3	2.3
External debt (in millions of US dollars) (In percent of GDP)	32.3	40.9	47.6	53.4	65.0
	19.8	22.8	24.4	26.3	30.8
External debt service (in millions of US dollars) (In percent of exports of goods and services)	0.6	0.7	1.2	0.6	2.0
	3.9	3.7	6.1	2.8	9.4
Exchange rate (A\$/US\$ period average)	1.3	1.3			
Memorandum item: Nominal GDP (In millions of US dollars)	181.7	194.3	202.5	211.6	219.5

Sources: Data provided by the Kiribati authorities; and Fund staff estimates and projections.

^{1/} Overall balance in the table is different from official budget because loans are classified as financing.

^{2/} Cash reserce buffer includes the government's custodian account and cash account.

Table 2. Kiribati: Summary of Central Government Operations, 2015–22

	2015	2016	2017	2018	2019 Pr	2020	2021	2022
	(In mil	lions of Au	stralian de	ıllarc)	Pr	oj.		
Takal sassassa and assaska					220.2	240.7	2007	272
Fotal revenue and grants	350.8 248.5	284.4	347.9	335.0	338.3	349.7	360.7	372.7
Revenue Tax revenue	35.0	204.5 38.4	202.4 44.3	183.9 46.0	189.1 47.7	194.4 49.6	199.9 51.6	206.1 54.0
Nontax revenue	213.6	166.1	158.1	138.0	141.4	144.9	148.3	152.
Of which: fishing revenue	207.1	159.0	150.1	130.0	133.3	136.6	140.0	143.
External grants	102.2	79.9	145.5	151.0	149.1	155.3	160.7	166.0
otal expenditure	254.9	274.4	371.4	354.3	368.3	378.9	390.5	403.
Current expenditure 1/	135.8	174.4	218.2	195.3	202.6	206.3	211.9	218.
Wages and salaries	54.9	56.9	64.7	67.3	69.9	72.7	75.7	78.
Subsidies and Grants	24.1	43.3	53.2	59.7	61.8	63.9	65.9	68.
Other current expenditure	55.2	72.4	99.4	59.6	59.9	56.9	58.1	59
Of which: investment in outer islands	0.7	0.0	30.0	0.0	0.2	0.0	0.0	0
Contingency and maintenance	0.7	0.8	1.0	8.0	8.3	8.6	9.0	9.3
Development expenditure 2/	119.1 0.0	100.0	153.2	159.0 0.0	165.7	172.6 0.0	178.6 0.0	185.:
Net lending		0.0	0.0		0.0			0.0
Recurrent fiscal balance (incl. budget grants)	117.5	34.9	2.8	1.4	9.0	0.8	0.8	0.4
Overall balance 3/	95.9	10.0	-23.5	-19.3	-30.1	-29.2	-29.8	-30.9
inancing	-95.9	-10.0	23.5	19.3	30.1	29.2	29.8	30.
Domestic financing	-117.5	-34.9	-2.8	-1.4	-9.0	-0.8	-0.8	-0.
Revenue Equalization and Reserve Fund (RERF)	-50.3	-30.0	0.0	0.0	0.0	0.0	0.0	0.
Custodian account 4/	-70.5	30.0	-30.7	0.0	0.0	0.0	0.0	0.
Cash account 5/	3.2	-34.9	27.9	-1.4	-9.0	-0.8	-0.8	-0.
Project loans (net)	16.9	20.1	7.7	7.9	16.6	17.3	17.9	18.
Budgetary grants	4.8	4.8	18.6	12.8	22.5	12.8	12.8	12.
		(In percent	of GDP)					
otal revenue and grants	155.8	116.4	136.0	126.1	122.2	121.3	120.9	120.
Revenue	110.4	83.7	79.1	69.2	68.3	67.4	67.0	66.0
Tax revenue	15.5	15.7	17.3	17.3	17.2	17.2	17.3	17.
Nontax revenue	94.9	68.0	61.8	51.9	51.1	50.2	49.7	49.2
Of which: fishing revenue	92.0	65.1	58.6	48.9	48.1	47.4	46.9	46.4
External grants	45.4	32.7	56.9	56.9	53.9	53.9	53.9	53.9
otal expenditure	113.2	112.3	145.1	133.4	133.0	131.4	130.9	130.
Current expenditure	60.3	71.4	85.3	73.5	73.2	71.6	71.0	70.0
Wages and salaries	24.4	23.3	25.3	25.3	25.3	25.2	25.4	25.4
Subsidies and Grants	10.7	17.7	20.8	22.5	22.3	22.2	22.1	22.0
Other current expenditure	24.5	29.6	38.8	22.4	21.6	19.7	19.5	19.
Contingency and maintenance	0.3	0.3	0.4	3.0	3.0	3.0	3.0	3.
Development expenditure 2/	52.9	40.9	59.8	59.8	59.8	59.8	59.8	59.
Net lending	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
Recurrent fiscal balance (incl. budget grants) Overall balance 3/	52.2 42.6	14.3 4.1	1.1 -9.2	0.5 -7.3	3.3 -10.9	0.3 -4.1	0.3 -4.0	0. : -4.
inancing	-42.6	-4.1	9.2	7.3	10.9	10.1	10.0	10.0
Domestic financing	-52.2	-14.3	-1.1	-0.5	-3.3	-0.3	-0.3	-0.
Revenue Equalization and Reserve Fund (RERF)	-22.3	-12.3	0.0	0.0	0.0	0.0	0.0	0.
Custodian account 4/	-31.3	12.3	-12.0	0.0	0.0	0.0	0.0	0.
Cash account 5/	1.4	-14.3	10.9	-0.5	-3.3	-0.3	-0.3	-0.
Project loans (net) Budgetary grants	7.5 2.1	8.2 2.0	3.0 7.3	3.0 4.8	6.0 8.1	6.0 4.4	6.0 4.3	6. 4.
9 , 9	2.1	2.0	7.3	4.0	0.1	4.4	4.3	4.
Memorandum items:		0		0.0.	0===	4.00	4.000	
RERF closing balance (in millions of A\$)	756.1	867.8	922.6	948.9	976.1	1,004.0	1,032.7	1,067.
Custodial account balance (in millions of A\$) Cash account balance (in millions of A\$)	81.0 52.1	57.9 87.0	88.5 28.4	91.2 29.8	93.9 38.8	96.7 39.7	99.6 40.4	102. 40.
Cash reserve buffer in excess of 3 months of current spending 6/	99.2	101.3	62.4	72.2	82.1	39.7 84.8	87.1	40. 88.
Nominal GNI at market prices (in millions of Australian dollars)	466.9	435.8	453	447	464	484	500	52
Nominal GDP (in millions of Australian dollars)	225.1	244.2	255.9	265.6	276.9	288.3	298.4	309.
Real GDP (percentage change)	10.3	1.1	3.1	2.3	2.4	2.3	1.9	1.

Sources: Data provided by the Kiribati authorities; and staff estimates and projections. 1/ Projections for the current expenditure for 2017 included the supplementary budget. 2/ Development expenditure equals grants plus loans for development projects.

^{3/} Overall balance in the table is different from official budget because loans are classified as financing.

^{4/} The custodian account is government's fund managed by State Street.

^{5/} The cash account is the government's deposit account at ANZ.

^{6/} Cash reserve buffer includes the custodian account and the cash account.

Table 3. Kiribati: Medium-Term Projections, 2015–22

	2015	2016	2017	2018	2019	2020	2021	2022
		Proj.						
Real sector								
Real GDP (percentage change)	10.3	1.1	3.1	2.3	2.4	2.3	1.9	1.9
Inflation (period average)	0.6	1.9	2.2	2.5	2.5	2.5	2.5	2.5
Nominal GDP at market prices (in millions of A\$)	225.1	244.2	255.9	265.6	276.9	288.3	298.4	309.3
Government finance	(In percent of GDP)							
Total revenue and grants	155.8	116.4	136.0	126.1	122.2	121.3	120.9	120.5
Revenue	110.4	83.7	79.1	69.2	68.3	67.4	67.0	66.6
External grants	45.4	32.7	56.9	56.9	53.9	53.9	53.9	53.9
Total expenditure and net lending	113.2	112.3	145.1	133.4	133.0	131.4	130.9	130.5
Current expenditure	60.3	71.4	85.3	73.5	73.2	71.6	71.0	70.6
Development expenditure	52.9	40.9	59.8	59.8	59.8	59.8	59.8	59.8
Recurrent fiscal balance (incl. budget grants)	52.2	14.3	1.1	0.5	3.3	0.3	0.3	0.1
Overall balance	42.6	4.1	-9.2	-7.3	-10.9	-4.1	-4.0	-4.0
RERF balance (end of period; in millions of A\$)	756	868	923	949	976	1033	1067	1091
RERF Real per capita balance (in 2006 A\$)	5481	6089	6193	6126	6056	5987	5977	5900
Balance of payments			(In pei	cent of G	DP)			
Current account balance	46.7	19.4	14.0	4.3	2.3	2.1	0.8	0.5
Trade balance	-53.8	-53.1	-54.8	-55.9	-56.9	-57.9	-59.2	-60.5

Sources: Data provided by the Kiribati authorities; and Fund staff estimates and projections.

Table 4. Kiribati: Balance of Payments, 2015–19

	2015	2016	2017	2018	2019
				Proj.	
	ıI)	n millions c	of Australia	n dollars)	
Current account balance	105.1	47.5	35.8	11.5	6.3
Trade balance	-121.2	-129.7	-140.2	-148.6	-157.6
Exports, f.o.b.	11.6 132.9	14.0 143.7	11.4 151.6	11.7 160.3	12.2 169.8
Imports, f.o.b.					
Balance on services Credit	-89.5 10.5	-76.7 13.1	-78.6 14.0	-80.0 14.8	-81.4 15.6
Debit	100.0	89.8	92.6	94.7	97.0
Balance on factor income 1/	241.7	191.5	197.0	180.8	187.1
Credit	245.5	193.7	197.0	180.8	187.1
Fishing license fees	197.8	143.3	144.0	124.8	127.9
Investment income	32.1 15.6	34.4 15.9	36.5	38.6	40.8 18.4
Remittances and compensation of employees Debit	3.8	2.2	16.4 0.0	17.4 0.0	0.0
Balance on current transfers	74.1	62.4	57.7	59.2	58.1
Credit	75.4	63.6	59.0	60.6	59.6
Of which: Government	51.9	41.4	39.0	40.7	40.3
Debit Of which: Government	0.9 0.0	0.9 0.0	1.0 0.0	1.0 0.0	1.1 0.0
Financial and capital account balance	70.9	-9.0	-11.9	12.9	20.1
Government	38.4	36.8	25.0	25.9	34.3
Capital transfers	21.5	16.7	17.3	18.0	17.7
Loans (net)	16.9	20.1	7.7	7.9	16.6
Direct investment Financial institutions 2/	-1.1 33.7	-2.6 -43.1	-2.8 -34.1	-2.9 -10.2	-3.0 -11.2
Errors and omissions	-107.6	61.2	0.0	0.0	0.0
Overall balance	68.5	99.7	23.9	24.3	26.4
Change in external assets (increase -) 3/	-139.2	-17.0	-16.0	-24.7	-34.0
Revenue Equalization Reserve Fund Custodial account	-68.5 -70.7	-99.7 82.7	-22.9 7.0	-24.4 -0.3	-26.1 -7.9
		(In pei	rcent of GI	OP)	
Current account balance	46.7	19.4	14.0	4.3	2.3
Trade balance	-53.8	-53.1	-54.8	-55.9	-56.9
Exports, f.o.b.	5.2	5.7	4.5	4.4	4.4
Imports, f.o.b.	59.0	58.8	59.2	60.3	61.3
Balance on services	-39.8	-31.4	-30.7	-30.1	-29.4
Credit	4.6	5.4	5.5	5.6	5.7
Debit	44.4	36.8	36.2	35.7	35.0
Balance on factor income 1/	107.4	78.4	77.0	68.1	67.6
Credit	109.0	79.3	77.0	68.1	67.6
Fishing license fees	87.8	58.7	56.3	47.0	46.2
Investment income	14.3	14.1	14.3	14.5	14.7
Remittances	6.9	6.5	6.4	6.5	6.6
Debit	1.7	0.9	0.0	0.0	0.0
Balance on current transfers	32.9	25.5	22.5	22.3	21.0
Credit	33.5	26.1	23.1	22.8	21.5
Debit	0.4	0.4	0.4	0.4	0.4
Financial and capital account balance Government	31.5 17.0	-3.7 15.1	-4.7 9.8	4.8 9.8	7.2 12.4
Capital transfers	9.5	6.8	6.8	6.8	6.4
Loans (net)	7.5	8.2	3.0	3.0	6.0
Direct investment	-0.5	-1.1	-1.1	-1.1	-1.1
Financial institutions 2/ Errors and omissions	14.9 -47.8	-17.7 25.0	-13.3 0.0	-3.8 0.0	-4.1 0.0
Overall balance	30.4	40.8	9.3	9.2	9.5
Change in external assets (increase -) 3/	-61.8	-6.9	-6.2	-9.3	-12.3
Revenue Equalization Reserve Fund	-30.4	-40.8	-9.0	-9.2	-9.4
Custodial account	-31.4	33.9	2.7	-0.1	-2.9

Sources: Data provided by the Kiribati authorities; and Fund staff estimates and projections.

^{1/} Includes fishing license fees, which would be shown as current transfers under conventional international guidelines.

^{2/} Including errors and omisions for projections.

^{3/} Excludes valuation changes.

Annex I. Risk Assessment Matrix 1/

Sources of Risks	Likelihood and Transmission Channels	Potential Impact					
Global risks							
Tighter global financial conditions	High An increase in policy rates and term premia in the US and EU could have investors minimize exposure to Australian assets, thus amplifying volatility and market illiquidity.	Medium The lion's share of the RERF and the KPF assets is invested in the global financial markets including Australian markets. This exposure constitutes a significant channel through which a disruptive event in global markets could feed into the domestic economy.					
Weaker-than- expected global growth	Medium/High Significant slowdown in EMs/frontier economies (Medium) and structurally weak growth in key advanced and emerging economies (Medium/High).	Medium Fishing license fees and seamen's remittances could be negatively affected if demand for fish and shipping declines due to weaker than expected global growth. A decline in global returns and valuations would have a negative impact on RERF assets.					
Reduced financial services by correspondent banks	High Further loss of correspondent accounts with global and regional banks could further hurt Kiribati customers through reduced financial services and/or higher transaction cost.	Low/Medium The withdrawal of correspondent banking relations has been associated with higher transaction costs for remittances in some small island countries in the Pacific. The impact on Kiribati has been limited so far partly because of the country's relatively low remittances income from the Pacific region.					
Domestic risks							
Risks to fishing license fees	Medium Fishing license fees decline more than projected due to changing weather conditions.	High This would lead to higher fiscal deficits. A sustained decline in fishing revenue may jeopardize long run fiscal sustainability. The cash reserve buffer can mitigate the shock if the decline is temporary.					
	Low	High					
Natural disasters	Probability of occurrence of natural disaster is less than 10 percent for Kiribati.	Historical experience suggests that natural disasters can cause large loss and damages to production and potential growth. Contingency plans should include maintaining a strong cash buffer, seeking cost-effective insurance, and establishing contingent financing plans with development partners.					

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 is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly. "Short term" and "medium term" are meant to indicate that the risk could materialize within 1 year and 3 years, respectively.

Annex II. Main Recommendations of the 2016 Article IV Consultation

Fund Recommendations	Policy Actions
Fiscal Policy	
Commit to a structurally balanced budget based on the projected fishing revenue.	The 2017 Budget envisaged a balanced budget. But revenue overperformance is likely to be offset by the supplementary budgets.
Maintain an appropriately-sized cash reserve buffer and transfer the excess cash reserve to the RERF.	The authorities transferred A\$70 million from cash reserves to the RERF.
Budget provision recognizes climate change adaption costs and infrastructure maintenance needs.	Budget allocation to maintenance increased, but it did not cover infrastructure maintenance cost. Climate change adaption remains to be largely financed by external resources.
Phase out SOE exemptions of the VAT.	Not implemented
Strengthen PFM framework.	A PEFA (Public Expenditure and Financial Accountability) self-assessment was undertaken in 2017.
Other Policies	
Push forward SOE reforms.	Progress has been made to improve the performance of the Public Utilities Board (PUB).
Addressing deficiencies in financial supervision.	The authorities have taken steps to address the financing gap of the KPF.

Annex III. A Rule Based RERF Withdrawal Mechanism

We use a standard model to calculate the optimal accumulation of Kiribati's sovereign wealth fund. Capitalized letters denote aggregate (real) variables. Non-capital letters denote the corresponding per capita (real) variables.

Basic assumptions:

- **Population.** Annual population growth rates are n>1. Total population at time zero is normalized to 1.
- National income consists of GDP (income other than the fishing revenue) and fishing license fees. Fishing license fees at time t is E_t . GDP in year t is assumed to be $(qn)^t y_0$, where q>1 is the growth rate of per capita GDP and y_0 is the GDP per capita at time zero.
- Balance of the sovereign wealth fund at time t is denoted as S_t . Its per capita term is denoted as st
- **Net Interest rate** is denoted as *r*.
- **Per capita consumption** at time t is defined as c_t .
- Time discount is β <1.

The benevolent government chooses the consumption path to maximize welfare:

$$\sum_{t\geq 0} (\beta n)^t u(c_t)$$

subject to the intertemporal budget constraint:

$$\Sigma_{t \ge 0} \, n^t c_t / R^t = S_0 + W_0 + F_0$$

For each period *t*,

$$W_t = \Sigma_{s \ge t} Y_s / R^{s-t}$$

is the sum of current and future GDP discounted to time t and R is the nominal interest rate, while

$$F_t = \sum_{s>t} E_s / R^{s-t}$$

denotes fishing wealth, i.e. the sum of current and future fishing income discounted to time t, and So is the initial balance of the sovereign wealth fund.

The optimality conditions of the problem above yield:

$$n^{t}c_{t} = (1 - \beta n)(S_{t} + W_{t} + F_{t})$$
(1)

and

$$(S_t + W_t + F_t) = \beta n(1+r)(S_{t-1} + W_{t-1} + F_{t-1})$$
(2)

Equation (1) is the common annuity equation, i.e., the optimal aggregate consumption in each period should be a fixed fraction of total wealth including sovereign wealth fund and discounted value of current and future GDP and fishing income. Equation (2) is the evolution of total wealth.

When $\beta(1+r)=1$, equation (2) can be reduced to:

$$s_t + w_t + f_t = s_{t-1} + w_{t-1} + f_{t-1}$$
(3)

Or,

$$\Delta s_t + \Delta f_t + \Delta w_t = 0 \tag{4}$$

The optimal consumption-saving plan requires that the **total wealth per capita** should be kept constant (equation 3). In other words, the optimal accumulation of the sovereign wealth fund depends on the net change of the present values of fishing income and future GDP in real per capita terms (equation 4).

Moreover,

- If the aggregate fishing income is constant over time (that is, $E_t = E$), the change of fish wealth per capita, $\Delta f_t = f_t f_{t-1}$, is negative due to the increase of population. In this case, the optimal plan requires $\Delta s_t + \Delta w_t = -\Delta f_t > 0$. The dynamics of the optimal sovereign wealth fund per capita depends on the growth rate of GDP per capita.
- If the growth rate of GDP per capita is zero, ΔW_t will be 0 and it will be optimal to keep the per capita balance of the sovereign wealth fund growing to offset the decline of fishing income per capita.
- If $\Delta f_t + \Delta w_t = 0$, the optimal plan requires $\Delta s_t = 0$, i.e., the real per capita value of the sovereign wealth fund should be kept constant.



INTERNATIONAL MONETARY FUND

KIRIBATI

November 21, 2017

STAFF REPORT FOR THE 2017 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

Prepared By

The Asia and Pacific Department (In Consultation with Other Departments)

CONTENTS

FUND RELATIONS	_ 2
RELATIONS WITH THE PACIFIC FINANCIAL TECHNICAL ASSISTANCE CENTRE	_ 3
BANK-FUND COLLABORATION	_ 5
RELATIONS WITH THE ASIAN DEVELOPMENT BANK	7
STATISTICAL ISSUES	9

FUND RELATIONS

(As of October, 2017)

Membership Status: joined June 3, 1986; accepted Article VIII.

General Resources Account:	SDR Million	Percent Quota
Quota	5.60	100.00
Fund holdings of currency	5.60	100.02
Reserve position in Fund	0.00	0.08
SDR Department:	SDR Million	Percent Allocation
Net cumulative allocation	5.32	100.00
Holdings	5.39	101.29

Outstanding Purchases and Loans: None.

Financial Arrangements: None.

Projected Obligations to Fund: None.

Implementation of HIPC Initiative: Not Applicable.

Implementation of Multilateral Debt Relief Initiative (MDRI): Not Applicable.

Exchange Rate Arrangement: The Australian dollar circulates as legal tender.

Article IV Consultation:

The 2017 Article IV consultation discussions with Kiribati were held in Tarawa during September 11-21, 2017. Kiribati is on a 12-month consultation cycle. The IMF Board concluded the 2016 Article IV consultation on September 7, 2016.

Technical Assistance (TA), 1995–2017:

STA, LEG, MCM, FAD, and PFTAC have provided TA on statistics, tax administration and policy, budget management, Revenue Equalization Reserve Fund (RERF) and Pension Fund (KPF) management, financial sector reform and supervision, and combating financial crime and financial system abuse.

Resident Representative: The resident representative office in the Pacific Islands was opened in September 2010 in Suva, Fiji. Mr. Tubagus Feridhanusetyawan is the Resident Representative.

RELATIONS WITH THE PACIFIC FINANCIAL TECHNICAL ASSISTANCE CENTRE (PFTAC)¹

(As of October 1, 2017)

Through the end of the previous funding cycle (May 2011 to October 2016), PFTAC assistance to Kiribati has included 40 advisory missions, plus a further six missions since the start of Phase V on November 1, 2016. Kiribati also sent 48 officials to regional seminars and workshops through Phase IV, and a further 7 officials since the start of Phase V.

Tax Administration and Policy

A September 2017 mission to the Kiribati Taxation Department (KTD) assisted the authorities in the development of an overarching modernization plan to guide and further strengthen the implementation of reforms. This plan includes: (a) strengthening organization management and governance; (b) the launch of two pilot compliance improvement projects; (c) process improvements to further strengthen the newly adopted functional approach; and (d) improving audit capability. For each of these priority streams of work key tasks were identified, sequenced, and responsibility assigned. The introduction of quarterly reporting on reform implementation will provide the Commissioner with oversight of progress and help ensure successful implementation of the wide range of activities being undertaken by the KTD.

Public Financial Management (PFM)

Previous PFTAC support focused on training for budget analysts and cash and debt management. In July 2017, PFTAC assisted Kiribati in a PEFA self-assessment. This mission was joined by a representative of the Pacific Island Forum Secretariat as part of a climate change financing readiness assessment. The last PEFA assessment had been conducted by the ADB in 2011. Based on the recent PEFA self-assessment, PFTAC recommended priority actions that could be implemented immediately by the authorities such as: improving the budget document by including data on expenditures from the previous year and publishing on the website the approved budget document and other available fiscal reports. Other reforms that would need high level policy direction were also recommended such as developing a medium-term fiscal strategy and a debt management strategy.

PFTAC will continue to work closely with other donors who will be influencing PFM reforms in Kiribati, including the ADB who will finance the introduction of a new FMIS and the PIFS climate

1

¹ PFTAC in Suva, Fiji is a multi-donor TA institution, financed by IMF, AsDB, AusDFAT, Korea and NZAID, with the IMF as Executing Agency. The Centre's aim is to build skills and institutional capacity for effective economic and financial management that can be sustained at the national level. Member countries are: Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Timor-Leste, Tuvalu, and Vanuatu.

change readiness team. The Fiscal Affairs Department and PFTAC are also considering a joint TA mission to Kiribati to undertake a Public Investment Management Assessment (PIMA).

Financial Sector Regulation and Supervision

A PFTAC TA mission visited the Kiribati Ministry of Commerce, Industry, and Cooperatives (MCIC) in January 2015 to review the supervision framework and provide training on credit union supervision. Since then the MCIC has been attempting to formally register and supervise the credit unions. A follow-up mission is scheduled for November 2017 to provide additional training to MCIC staff on credit union supervision; assess progress on supervising the credit union sector since the January 2015 mission; assist the MCIC to establish a prudential return and off-site supervision process; and assist the MCIC to determine an appropriate supervision framework.

In addition to the credit union supervision work, representatives from the Kiribati Attorney General's Office and the Kiribati Ministry of Finance & Economic Development attended a PFTAC banking regulatory workshop in Guam in July 2017, to learn about banking regulatory frameworks, with the aim of potentially introducing banking regulation to Kiribati. PFTAC submitted to the Ministry of Finance & Economic Development a proposed Regulatory Framework Enhancement Strategy and Technical Assistance plan, which PFTAC is available to assist implementing if the Kiribati authorities decide to develop a banking regulatory framework.

Economic and Financial Statistics

PFTAC has provided regular TA on national accounts since 2008, assisting the authorities in making significant improvements in methodology and use of source data. Beginning in 2012, PFTAC has increased its TA with the development of an expenditure measure of GDP and with the preparation of statistical procedures for the incorporation of VAT data; the last mission was in August 2017. Progress has been slow due to capacity and resource constraints but internal estimates of GDP by expenditure have now been produced, albeit requiring further refinement. The VAT data, however, still require improvement for use in GDP. NA compilers benefited from regional courses in 2009, 2012, 2013, 2014 and 2017.

Macroeconomic Analysis

Two missions in 2011 provided assistance in building capacity related to forecasting techniques, using the medium-term fiscal framework developed as part of AsDB assistance, and assessing sustainable levels of draw-downs from Kiribati's Reserve Equalization Reserve Fund. A regional financial programming workshop held jointly in 2012 by PFTAC and the Singapore Regional Training Institute provided training in financial programming techniques to two economists of the Ministry of Finance and Economic Development. In 2015 PFTAC supported authorities during the IMF Article IV consultation and discussed TA and training. Economists from the Ministry of Finance and Economic Development participated in workshops on incorporating disaster risk into fiscal planning, forecasting tax revenues and medium-term planning for sustainable development in 2015 and 2016 and on compiling and forecasting GDP in 2017.

BANK-FUND COLLABORATION¹

A. World Bank-IMF Collaboration

(As of September 1, 2017)

The Fund and the Bank teams maintain close cooperation in various areas and consult frequently. During the current cycle, the Bank staff has joined the IMF missions, including IMF staff visits and the 2017 Article IV mission. The IMF staff and the World Bank staff maintained continuing close dialogue on economic developments and all aspects of the government reform program.

During the current cycle, the teams have produced a Joint DSA. The IMF team provided analysis and advice on the overall macroeconomic and fiscal framework, including fiscal and RERF sustainability. The IMF and World Bank have also been engaged in provision of technical assistance and advice in public financial management and debt management and policy. The Fund also provided technical assistance on tax administration and policy, budget management, and on statistical issues, including National Account Statistics, Government Finance Statistics and Balance of Payments. The Bank has been engaged in various infrastructure projects, including road rehabilitation, airport improvement, solar energy, and adaptation to climate change. Bank staff provided technical assistance on government expenditures – in particularly health expenditure, reforms of copra subsidy, liberalization of telecommunication sector, and management of the RERF. During this cycle the Bank has continued to work closely with the government on the comprehensive program of priority economic reforms and building resilience against external shocks, and supported coordination of donor TA around the reform agenda. Reforms identified through this process are now being supported under joint donor budget support, coordinated by the World Bank, with the fourth operation currently prepared in close consultation with the Government, ADB, NZ and Australian government.

The IMF and World Bank teams will continue close cooperation going forward, in particular in the context of the government reform program. As agreed earlier, the Fund will continue to lead on macro issues, in particular overall macroeconomic framework, including in the medium-and-longer term, and the Bank on macro-critical structural reform issues. The Fund and the Bank staff will also continue to cooperate with regard to follow up TA, including on the RERF management and public financial and debt management.

B. Relations with the World Bank Group

Kiribati became a member of the World Bank Group (WBG) in 1986. Since then, the WBG has provided strong support to Kiribati, including 13 IDA/ IBRD, Global Environment Fund, and Institutional Development Fund projects in different sectors totaling US \$118 million.

The World Bank approved a Regional Partnership Framework for 9 Pacific Islands, including Kiribati in February 2017. The new Framework focuses on three broad themes: (i) fully exploiting the limited

¹ Prepared by the World Bank staff.

set of economic opportunities available to the PIC9, (ii) enhancing access to public services and employment opportunities; and, (iii) protecting incomes and livelihoods.

Both IDA and IFC are significantly increasing engagement. Consistent with Kiribati's limited repayment capacity highlighted in the DSA, IDA-financing are being provided on 100 percent grant terms, and is expected to approximately quadruple with IDA18 scale up. IFC is playing an important role in strengthening investment climate in countries across the Pacific, and is similarly scaling up technical assistance to Kiribati to strengthen the business environment and to support specific PPP transactions or asset sales as the government moves to rationalize SOEs.

Key components of WBG engagement include:

- Supporting better fiscal and natural resource management. Through a programmatic budget support operation, the World Bank has supported the Government's implementation of a medium-term strategy to restore the country's fiscal sustainability. The first, second and third operations have been completed in 2014–16. The fourth operation is currently being prepared in close consultation with the Government and other donors. The operation will support two main policy priorities—first, strengthening public financial management, which focuses on strengthening the management of public assets and liabilities and second, improving the environment for inclusive growth, which focuses on fisheries joint ventures, competition and universal service provision in telecommunications, and the quality and coverage of essential public utilities.
- Improving connective infrastructure. To mitigate Kiribati's geographical disadvantage, the World Bank has scaled up support for basic infrastructure that connects the people of Kiribati to the outside world. Infrastructure investments integrating climate change adaptation planning has started in parallel with efforts to develop coordinated and more comprehensive multi-donor adaptation interventions. A South Tarawa road improvement investment (IDA: US\$26 million, ADB: US\$12 million and TF: US (?) \$19 million) is being undertaken jointly with the Asian Development Bank. The World Bank has also mobilized significant grant resources (US\$30 million) with Trust Fund (US (?) \$5.6 million mostly New Zealand and other development partners to help bring Kiribati airports up to international safety standards. A new project (US\$20 million) financing a fiber-optic cable to Tarawa was approved in May 2017.

Building climate resilience. Since 2003, the World Bank has been supporting climate change mitigation through the Kiribati Adaptation Program, with activities such as seawall construction, mangrove planting, and water conservation. Beyond climate change adaptation, the World Bank has been committed to addressing wider issues of vulnerability in Kiribati, including supporting renewable energy generation to reduce reliance on volatile imported diesel.

The Bank 's program for the next three financial years 2017–2020 under the IDA18 scale up will focus on water and sanitation for South Tarawa, fisheries under the Pacific Islands Regional Oceanscape Program (PROP), including maritime and outer islands support, and will continue to work with government on economic policy reforms.

RELATIONS WITH THE ASIAN DEVELOPMENT BANK¹

In total, the Asian Development Bank (ADB) has provided US\$52 million in concessional loans and grants since Kiribati joined the AsDB in 1974. Over half of this has been committed since 2010. In addition, TA amounting to US\$34.19 million has been provided over the same period. The latest AsDB loan to Kiribati, for South Tarawa Sanitation Improvement Sector project, was approved in October 2011, while the latest AsDB grant, for the Strengthening Fiscal Stability Program, was approved in November 2014. Between 2014–2017, additional financing amounting to US\$15.2 million has been approved for sanitation improvement, higher education, and road rehabilitation. The AsDB most recently approved a US\$0.95 million TA grant for South Tarawa water supply in 2016. Looking ahead, AsDB anticipates being able to provide at least US\$40 million in Asian Development Fund grants between 2017 and 2020 (including annual allocations of US\$7.2 million plus regional funds of US\$23.7 million).

In line with the broad objective of the Kiribati Development Plan 2016-19, which focuses on a better educated, healthier, more prosperous nation with a higher quality of life, ADB's engagement aims to strengthen governance, improve infrastructure, maintain a stable macroeconomic framework, improve access to basic services, strengthen climate change adaptation and reduce poverty. As many infrastructure services are provided by SOEs, improving corporate governance arrangements and the commercial focus of these enterprises is a key objective of ADB's support to the government's structural reform program. Technical assistance to improve economic management and public sector reform has helped improve SOE performance. In October 2011, ADB approved a loan for the South Tarawa Sanitation Improvement Sector Project that has improved sanitation and hygiene practices in South Tarawa and will increase access to sanitation from 64 percent to 80 percent by 2019. Additional financing of \$610,000 was approved in 2014. The Road Rehabilitation Project, approved in December 2010, has rehabilitated 32.5 kilometers of main roads and about 8 kilometers of feeder roads on South Tarawa. Additional financing of \$8.4 million in 2015 and 2016 will help complete the rehabilitation and allow the upgrade of the road network on Betio, the largest township on South Tarawa and the site of the country's main port. Cofinanced by the Government of Australia, the World Bank and the Pacific Regional Infrastructure Facility, the project will improve socioeconomic conditions for the people of South Tarawa. ADB also provided its first policy grant of \$3 million to Kiribati in 2014, which focused on helping Kiribati increase fiscal sustainability by improving public expenditure quality, revenue performance, management of public assets and liabilities, and the business environment.

ADB's strategic engagement in Kiribati in the medium term will continue to focus on major transformative infrastructure investments with the scope to mobilize significant co-financing, and given the improvement in Kiribati's fiscal situation, limited policy financing to further build buffers and demonstrate confidence in the government's reform agenda. While AsDB's program in Kiribati is currently focused on roads, sanitation, and policy based financing, the government, elected in early 2016, has placed very high priority on improving services, especially for the outer islands. Reflecting

¹ Prepared by the Asian Development Bank Staff.

KIRIBATI

this, ADB's future pipeline will focus primarily on providing reliable and clean water to the population of the main island of South Tarawa, improving ICT connectivity for Kiritimati island, and building or upgrading road, aviation and marine landings on the outer islands.

	2010	2012	2013	2014	2015	2016	2017
Loan Approvals							
Number	1	1	0	0	0	0	0
Amount (US\$m)	12	7.56	0	0	0	0	0
Grant Approvals							
Number	0	0	0	2	1	1	3
Amount (US\$m)	0	0	0	3.6	2.4	6	10
TA Approvals							
Number	2	1	2	1	0	0	2
Amount (US\$m)	0.85	0.2	0.8	1	0.22	0	8.0

^{1/} Prepared by the Asian Development Bank Staff.

STATISTICAL ISSUES

I. Assessment of Data Adequacy for Surveillance

(As of October 13, 2017)

General: Data provision has some shortcomings, but is broadly adequate for surveillance. Balance of Payments and to some extent Government Finance Statistics could be further improved.

National Accounts: With PTFAC assistance, GDP estimates have improved. There was one TA mission in August 2017 to improve the national data accounting system, with updates and revisions to GDP data for 2012-16. However, further capacity building would be needed to continue to improve the quality of GDP estimates, particularly expenditure-based GDP estimates. Presently, only current and constant 2006 prices GDP data is compiled using the Value-Added approach.

Price statistics: The monthly retail price index (2006=100) is produced with a short lag (about a month), based on a survey in South Tarawa (a national index is not available). There are no producer, wholesale, or trade price indices.

Government finance statistics: A Government Finance Statistics mission took place in June 2014 to integrate GFS requirements into the ongoing Chart of Accounts and approaches to extend coverage to include donor-financed projects. Another TA mission earmarked for late 2017 is expected continue ongoing work. A PEFA review was conducted in July-August 2017.

Monetary statistics: The balance sheets of all the financial institutions (Bank of Kiribati, Development Bank of Kiribati, Kiribati Provident Fund, and Kiribati Insurance Corporation) are available with lags, but the consolidated balance sheet of the financial sector is not available. Data on interest rates are reported with a long lag.

Balance of payments: Kiribati is part of the Pacific Region module of the JSA project on Improvement of External Sector Statistics (ESS) in the Asia and Pacific region. Three ESS missions were undertaken during 2014. Data are compiled quarterly in the BPM6 format. However, the quality of the data is improving only marginally due to capacity constraints, and quality of source data. The shortcomings pertain to adjustments to trade data, recording of investments income, direct investment and foreign aid data.

II. DATA STANDARDS AND QUALITY

Kiribati has been a participant in the General Data Dissemination System (GDDS) since 04.

No data ROSC are available.

III. REPORTING TO STA (OPTIONAL)

Data is reported to STA for publication in the *Government Finance Statistics Yearbook*, the Balance of Payments Statistics Yearbook and the IFS.

Kiribati: Table of Co	mmon Indica	ators Requi	red for Sur	veillance	
	Date of latest observation	Date received	Frequency of Data	Frequency of Reporting/7	Frequency of publication/7
Exchange Rates	9/22/2017	9/22/2017	D	D	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities /1	NA	NA	NA	NA	NA
Reserve/Base Money	NA	NA	NA	NA	NA
Broad Money	NA	NA	NA	NA	NA
Central Bank Balance Sheet	NA	NA	NA	NA	NA
Consolidated Balance Sheet of the Banking System	NA	NA	NA	NA	NA
Interest Rates /2	9/12/2017	9/12/2017	А	А	I
Consumer Price Index	9/15/2017	9/15/2017	М	Q	Q
Revenue, Expenditure, Balance and Composition of Financing/3 - General Government /4	9/15/2017	9/15/2017	А	А	I
Stocks of Central Government and Central Government-Guaranteed Debt /5	9/15/2017	9/15/2017	A	A	I
External Current Account Balance	9/15/2017	9/15/2017	А	А	I
Exports and Imports of Goods and Services	9/15/2017	9/15/2017	А	А	I
GDP/GNP	9/15/2017	9/15/2017	А	А	I
Gross External Debt	9/15/2017	9/15/2017	А	А	I
International Investment Position /6	9/15/2017	9/15/2017	А	А	I

^{1/} Any reserve assets that are pledged or otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.

^{2/} Both market-based and officially-determined, including discounts rates, money market rates, rates on treasury bills, notes and bonds.

^{3/} Foreign, domestic bank, and domestic nonbank financing.

^{4/} The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.

^{5/} Including currency and maturity composition.

^{6/} Includes external gross financial asset and liability positions vis-à-vis nonresidents.

^{7/} Daily (D); weekly (W); monthly (M); quarterly (Q); annually (A); irregular (I); and not available (NA).



INTERNATIONAL MONETARY FUND

KIRIBATI

November 21, 2017

STAFF REPORT FOR THE 2017 ARTICLE IV CONSULTATION—DEBT SUSTAINABILITY ANALYSIS

Approved By
Tarhan Feyzioglu and
Kevin Fletcher (IMF) and
John Panzer (IDA)

Prepared by the Staff of the International Monetary Fund and the World Bank¹

This update of the Debt Sustainability Analysis (DSA) indicates that Kiribati remains at high risk of debt distress despite the improved fiscal positions and economic fundamentals. Safeguarding long run fiscal sustainability requires continued effort to build fiscal buffers, as well as securing grants to finance the country's large infrastructure investment needs.

¹ The DSA was prepared jointly with the World Bank, in accordance with the standard Debt Sustainability Framework for Low-income Countries approved by the Executive Boards of the IMF and the IDA. Debt sustainability is assessed in relation to policy-dependent debt burden thresholds. Kiribati, with an average Country Policy and Institutional Assessment (CPIA) score of 2.9 over the last three years, is considered to have weak policy and institutional capacity for the purposes of the DSA framework, and assessed against relatively lower debt thresholds. Thus, the external debt burden thresholds for Kiribati are (i) PV of debt-to-GDP ratio: 30 percent; (ii) PV of debt-to-exports ratio: 100 percent; (iii) PV of debt-to-revenue ratio: 200 percent; (iv) debt service-to-exports ratio: 15 percent: and (v) debt service-to-revenue ratio: 18 percent.

BACKGROUND

- 1. Kiribati is a microstate in the Pacific and one of the remotest nations in the world. With a population of nearly 120,000 people, the island group consists of 33 geographically dispersed coral atolls over an ocean area of 3½ million square kilometers giving the country one of the largest Exclusive Economic Zones (EEZs) in the region. Impediments including Kiribati's geographic disadvantages and narrow production and export base (mainly limited to tuna fishing and copra) make the country highly dependent on revenue from selling fishing licenses and on donor support for infrastructure investment. Kiribati has a sovereign wealth fund, the Revenue Equalization Reserve Fund (RERF), which was established in 1956 from phosphate mining proceeds. Strong fishing revenue in recent years halted a prolonged period of relying on drawdowns from the RERF to finance budget deficits. As of August 2017, the RERF's net capitalization value registered nearly A\$900 million, an increase of more than 50 percent since its end-2010 balance.
- 2. Prudent management of public resources remains the key policy challenge especially given the considerable spending needs in development and climate change adaptation. Kiribati stands to lose the most from the negative effects of climate change, including but not limited to drought, higher incidences of natural disasters, loss of groundwater, and rising sea levels leading to coastal erosion. This could potentially lead to the relocation of people from the most affected parts of Kiribati. The costs of mitigating the adverse effects of climate change can partially be met by Kiribati's operating budget. Capital projects, however, require continued financial support from development partners.

THE BASELINE SCENARIO

- 3. The following are the key macroeconomic assumptions used for the baseline scenario.
- GDP and population growth are projected to moderate over the long run. Real GDP growth is projected to moderate to 2½ percent over the medium term and decline further to 1.7 percent over the long run in line with the historical average before the fishing revenue boom (1997-2014). The moderation in growth is mainly due to the envisaged decline in population growth from around 2 percent to below 1.5 percent over the long run, based on the United Nations' World Population Prospects, as well as a decline in infrastructure investment as a share of GDP and the negative growth impact of climate change (currently estimated to reduce the long-term growth rate by 0.1 percentage point).
- Inflation rose to 1.9 percent in 2016 and is projected to rise to 2.2 percent in 2017. In the medium to long term, inflation rises to 2.5 percent in line with trading partner inflation and international food and fuel price dynamics, given that the bulk of Kiribati's consumer price basket comprises imported items and the Australian dollar remains the legal tender.
- Fiscal revenue from the fisheries sector has been strong over the past several years. After lackluster performance in the late 2000s, fishing license revenue grew at an average rate of

65 percent during 2012–15. This was primarily a result of the 2012 implementation of the Vessel Day Scheme; and a stronger U.S. dollar during the same period.² Nonetheless, fishing revenue declined by over 20 percent in 2016 and is projected to remain around A \$150 million in 2017. The baseline assumption is that fishing revenue will remain constant in real terms at A\$130 million in the projection horizon (2018-37). It is worth noting that this assumption is subject to considerable uncertainties, especially related to the cyclical pattern of the El Nino Southern Oscillation.

- The government's fiscal position improved significantly since 2014. It is assumed that the government will maintain a broadly balanced recurrent budget in the medium term by reining in the growth of recurrent spending to offset the decline in fishing revenue as a share of GDP. In the longer term, recurrent spending is expected to increase from 70 percent of GDP to 73 percent of GDP with operating expenditure related to climate change adaptation and infrastructure maintenance rising from 3 percent of GDP to 6 percent of GDP.3 An annual withdraw of the RERF is needed to finance the recurrent deficit as the climate change adaptation cost rises. While the nominal RERF balance remains above A\$1 billion over the projection horizon, the real RERF balance declines by 30 percent from its end-2016 level.
- Development expenditure is expected at 60 percent of GDP in the short to medium term, thereafter falling to around 20 percent of GDP in the long term as ongoing and pipeline infrastructure projects are completed. Over the medium term (2018-22), development spending is projected to be financed by a combination of grants and loans, reflecting historical trend and the likely outcome of the upcoming development financing programs of the multilateral donors. Over the long run, however, the share of the development spending financed by concessional loans is assumed to increase from 10 percent to 30 percent as project financing by the major multilateral donors (currently 20 percent of the total grants) are assumed to be exclusively on credit terms.
- External balance. The current account surplus averaged around 40 percent of GDP during 201416 owing to the strong fishing license fees. As the growth in fisheries factor income slows down
 as a share of GDP, the current account balance will narrow considerably over the medium term.
 Over the long run, the current account balance will rise again due to the envisaged decline in
 imports related to development spending.

² Fishing license fee is denominated in the U.S. dollar.

³ <u>Climate Change and Disaster Management (The World Bank, 2016)</u> estimated that the additional cost of coastal protection and infrastructure adaptation due to rainfall and temperature increases for Kiribati in the low sea level rise scenario at about 12 percent of GDP annually by 2040. It is assumed that half of the cost is financed by the budget while the other half by development partners.

RESULTS

As in previous Article IV findings, the current DSA analysis indicates that Kiribati 4. continues to be at high risk of debt distress.

- Kiribati's current debt portfolio constitutes external debt only since all domestic debt was cleared in 2015, therefore the baseline and alternative scenarios do not assume any domestic debt in the short, medium and long terms.
- Sensitivity analyses of Kiribati's external debt exhibits higher relative risk. With the current set of assumptions, the baseline results show that the PV of external debt-to-GDP ratio breaches the indicative threshold (30 percent) by 2023; while the PV of external-debt-to-exports ratio breaches the threshold (100 percent) by 2025. The expected trend is mainly due to dependence on external financing for development investment.4
- Under the extreme test scenario, the PV of debt-to-GDP and PV of debt-to-export ratios breach their thresholds by 2022 and 2025, respectively. These ratios are vulnerable to shocks emanating from debt financing terms and conditions, and expected trend of exports.
- Public sector debt downside risks remain elevated. While historical fiscal surpluses were driven by robust fishing license fees, the tapering of the windfall revenue pose some risks unless strong fiscal commitment is shown by the authorities. Under the baseline scenario, the PV of total public debt to GDP is projected to breach its indicative threshold (38 percent of GDP) by 2025.5
- Public debt is unsustainable under the extreme shock scenario. The most extreme stress test scenario predicts the PV of public-sector-debt-to-GDP ratio breaches the threshold by 2017; and will likely more than double in the following decade. This is attributed to higher government external borrowing for project financing.

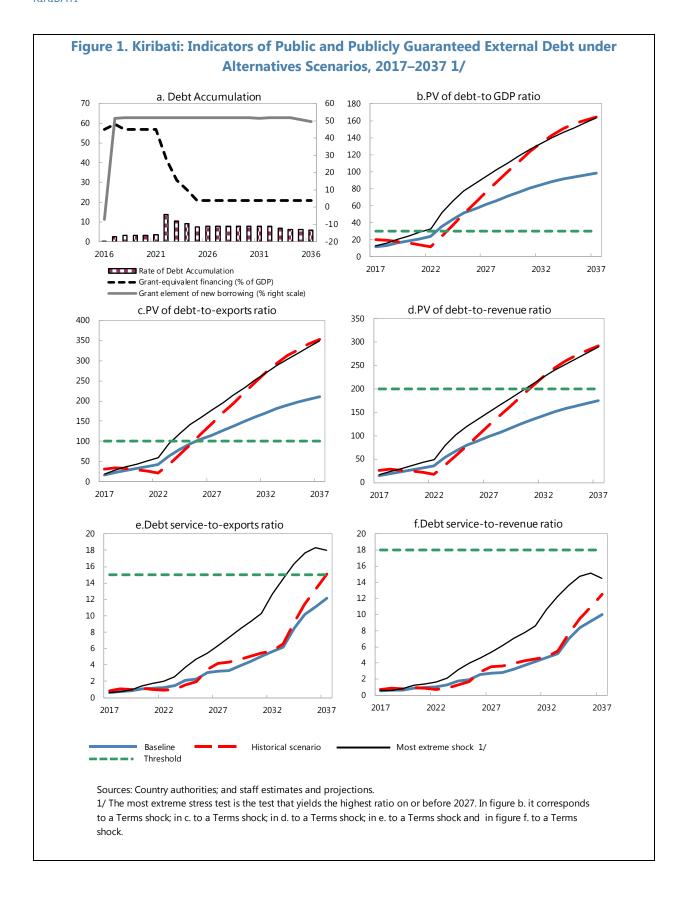
Kiribati: External Debt Balance as of end-2016											
Creditor	Balance										
Asian Development Bank	AUD 29,740,905										
International Cooperation and Development Fund, Taiwan Province of China	AUD 20,227,983										
Source: Kiribati Ministry of Finance, 2017 Budget.											

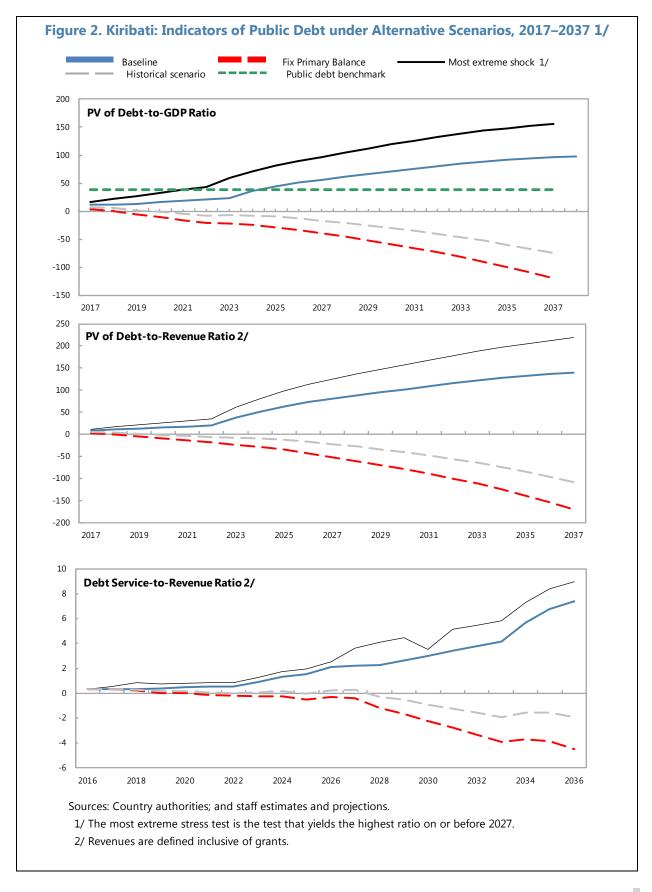
 $^{^4}$ The large residual in the external DSA table for the outer years reflects the projected sharp decline in development expenditure financed by grants. The gap between grants and capital and financial transfers reflects the historical data (registered BOP net transfers to the government is about 64 percent of pledged grants).

⁵ The large residual in the public sector DSA table reflects the volatility of fishing revenue (and RERF withdraw/deposit). Although the fiscal position has registered large surplus in recent years thanks to strong revenue, the surplus was largely saved in the RERF rather than used to repay government debt.

CONCLUSION

5. The risk of debt distress remains high. The DSA results suggest that Kiribati continues to face limited scope for external borrowing. Sound fiscal buffers, a refined RERF withdrawal mechanism to fund expenditure shortfalls, and continuing with economic/structural reforms can aid with fiscal consolidation and further lowering the debt distress rating. There is significant scope for Kiribati to support its fiscal stance and climate adaptation projects through additional finance from global climate funds, but this may require investment in terms of readiness programs specific to climate financing modalities and in project proposals and management. Continued support from development partners to finance development spending is essential to address the country's large infrastructure gap while safeguarding long run debt sustainability.





KIRIBATI

Table 1. Kiribati: Public Sector Debt Sustainability Framework, Baseline Scenario, 2014–2037

(In percent of GDP, unless otherwise indicated)

Public sector debt 1/ 179		(m bei	cent of	GDP,	uniess o	trierwise	marca	itea)								
Public sector debt 1			Actual		5/	Ctandard 5/	Estimate			F	Projectio	ns	2017 22			2022 27
Change in public sector debt		2014	2015	2016				2018	2019	2020	2021	2022		2027	2037	
Change in public sector debt	Dublic coston daht 1/	17.0	22.0	25.0			22.0	27.1	22.0	26.0	41.7	46.2		116.4	170 6	
Perminay definity Case C																
Primary deficit	Change in public sector debt	3.7	5.9	1.2			-2.0	4.1	4.9	4.9	4.7	4.5		8.1	2.9	
Peenue and grants 1427 155.8 116.4	Identified debt-creating flows	-23.6	-43.1	-6.2			7.1	6.4	9.8	9.0	8.7	8.5		12.5	16.7	
Primary (noninterest) expenditure	Primary deficit	-25.0	-43.2	-4.5	-1.0	20.2	8.8	6.9	10.4	9.5	9.4	9.3	9.0	15.8	21.8	18.3
Primary (noninterest) expenditure	Revenue and grants	142.7	155.8	116.4			136.0	126.1	122.2	121.3	120.9	120.5		76.6	70.3	
Automatic debt dynamics	of which: grants	53.3	45.4	32.7			56.9	56.9	53.9	53.9	53.9	53.9		14.0	14.0	
Contribution from interest rate/growth differential 0.5	Primary (noninterest) expenditure	117.7	112.6	111.9			144.7	133.0	132.6	130.8	130.2	129.8		92.5	92.1	
of which: contribution from average real interest rate 0.6 0.3 -0.1 -0.2 0.0 0.0 -0.1 0.0 0.0 -0.1 -0.8 -1.5 -2.6 -0.7 -0.8 -1.9 -2.6 -0.7 -0.8 -1.9 -2.6 -0.8 -0.1 0.0 0.0 -0.1 -1.3 -0.8 -0.1 0.0 <t< td=""><td>Automatic debt dynamics</td><td>1.4</td><td>0.2</td><td>-1.7</td><td></td><td></td><td>-1.6</td><td>-0.5</td><td>-0.6</td><td>-0.5</td><td>-0.6</td><td>-0.8</td><td></td><td>-3.3</td><td>-5.1</td><td></td></t<>	Automatic debt dynamics	1.4	0.2	-1.7			-1.6	-0.5	-0.6	-0.5	-0.6	-0.8		-3.3	-5.1	
of which: contribution from real GDP growth -0.1 -1.7 -0.3 -0.8 -0.5 -0.6 -0.7 -0.8 -1.9 -2.6 Contribution from real exchange rate depreciation 0.9 1.5 -1.3 -0.8 0.1 0.0	Contribution from interest rate/growth differential	0.5	-1.4	-0.4			-0.8	-0.5	-0.7	-0.7	-0.7	-0.9		-2.7	-4.1	
Contribution from real exchange rate depreciation 09 1.5 -1.3 -1.3 -1.3 -1.3 -1.3 -1.3 -1.3 -1.3	of which: contribution from average real interest rate	0.6	0.3	-0.1			0.0	0.0	-0.1	0.0	0.0	-0.1		-0.8	-1.5	
Other identified debt-creating flows 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	of which: contribution from real GDP growth	-0.1	-1.7	-0.3			-0.8	-0.5	-0.6	-0.7	-0.7	-0.8		-1.9	-2.6	
Privatization receipts (negative) 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,	Contribution from real exchange rate depreciation	0.9	1.5	-1.3			-0.8	0.1	0.0	0.2	0.1	0.1				
Recognition of implicit or contingent liabilities	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	
Debt relief (HIPC and other)	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	
Other (RERF) Column Colu	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	
Cher Sustainability Indicators PV of public sector debt 9,7 12,2 12,2 11,4 13,5 16,1 18,6 21,1 23,6 61,4 98,1 0,4 which retarnal 15,2 9,8 12,2 11,4 13,5 16,1 18,6 21,1 23,6 61,4 98,1 0,4 which retarnal 15,2 9,8 12,2 11,4 13,5 16,1 18,6 21,1 23,6 61,4 98,1 0,4 which retarnal 15,2 9,8 12,2 11,4 13,5 16,1 18,6 21,1 23,6 61,4 98,1 0,4	Debt relief (HIPC and other)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Other Sustainability Indicators PV of public sector debt of which: foreign-currency denominated of which: foreign-currency denominated of which: foreign-currency denominated of which: external of public sector debt-to-revenue and grants ratio (in percent) in the sector debt-to-revenue and grants ratio (in percent) in the sector debt-to-revenue and grants ratio of which: external 3/ Debt service-to-revenue and grants ratio (in percent) in the sector debt-to-revenue and grants ratio of public sector debt-to-revenue and grants ratio of publ	Other (RERF)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
PV of public sector debt 9,7 12,2 12,2 12,2 12,2 11,4 13,5 16,1 18,6 21,1 23,6 61,4 98,1 of which: foreign-currency denominated 5,2 9,8 12,2 11,4 13,5 16,1 18,6 21,1 23,6 61,4 98,1 of which: foreign-currency denominated 6,4 98,1 11,4 13,5 16,1 18,6 21,1 23,6 61,4 98,1 11,4 11,4 13,5 16,1 18,6 21,1 23,6 61,4 98,1 11,4 13,5 16,1 18,6 21,1 23,6 61,4 98,1 11,4 11,4 13,5 16,1 18,6 21,1 23,6 61,4 98,1 11,4 11,4 13,5 16,1 18,6 21,1 23,6 61,4 98,1 11,4 11,4 13,5 16,1 18,6 21,1 23,6 61,4 98,1 11,4 11,4 11,4 11,4 11,4 11,4 11,4 1	Residual, including asset changes	27.3	49.0	7.4			-9.2	-2.3	-4.9	-4.1	-4.0	-4.0		-4.3	-13.8	
Second Contingent liabilities (not included in public sector debt) Second Contingent liabilities (not included in public sector debt) Second Contingent liabilities (not included in public sector debt) Second Contingent liabilities (not included in public sector debt) Second Contingent liabilities (not included in public sector debt) Second Contingent liabilities (not included in public sector debt) Second Contingent liabilities (not included in public sector debt) Second Contingent liabilities (not included in public sector debt) Second Contingent liabilities (not included in public sector debt) Second Contingent liabilities (not included in public sector debt) Second Contingent liabilities (not included in public sector debt) Second Contingent liabilities (not included in public sector debt) Second Contingent liabilities (not included in public sector debt) Second Contingent liabilities (not included in public sector debt) Second Contingent liabilities (not included in public sector debt) Second Contingent liabilities (not included in public sector debt (not percent) Second Contingent liabilities (not included in public sector debt (not percent) Second Contingent liabilities (not included in public sector debt (not percent) Second Contingent liabilities (not included in public sector debt (not percent) Second Contingent liabilities (not included in public sector debt (not percent) Second Contingent liabilities (not included in public sector debt (not percent) Second Contingent liabilities (not included in public sector debt (not percent) Second Contingent liabilities (not included in public sector debt (not percent) Second Contingent liabilities (not included in public sector debt (not percent) Second Contingent liabilities (not included in public sector debt (not percent) Second Contingent liabilities (not included in public sector debt (not percent) Second Contingent liabilities (not included Second Contingent liabilities (not included in public sector de																
of which: external 5.2 9.8 12.2 11.4 13.5 16.1 18.6 21.1 23.6 61.4 98.1 PV of contingent liabilities (not included in public sector debt) <td></td>																
PV of contingent liabilities (not included in public sector debt)																
Gross financing need 2/ PV of public sector debt-to-revenue and grants ratio (in percent) 6.8 7.8 10.5 8.4 10.7 13.1 15.3 17.5 19.6 80.0 139.6 PV of public sector debt-to-revenue ratio (in percent) 10.8 11.0 14.6 14.4 19.5 23.5 27.5 31.5 35.4 97.9 174.4 of which: external 3/ Debt service-to-revenue and grants ratio (in percent) 4/ 0.3 0.4 0.4 0.4 0.5 0.5 0.6 0.7 0.5 0.6 0.7 0.9 10.0 10.0 10.0 17.5 27.4 PV of public sector debt-to-revenue ratio (in percent) 4/ 0 which: external 3/ Debt service-to-revenue and grants ratio (in percent) 4/ 0.3 0.4 0.4 0.4 0.5 0.5 0.6 0.7 0.5 0.6 0.7 0.9 1.0 1.0 0.2 0.7 1.0 0.9 1.0 0.0 0.7 1.0 0.0 0.7 1.0 0.9 1.0 0.0 0.7 1.0 0.9 1.0 0.0 0.7 1.0 0.9 1.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0																
PV of public sector debt-to-revenue and grants ratio (in percent)	•															
PV of public sector debt-to-revenue ratio (in percent)																
Debt service-to-revenue and grants ratio (in percent) 4/ 0.3 0.4 0.4 0.5 0.5 0.6 0.5 0.6 0.5 0.6 0.5 0.5 0.5 0.6 0.5 0.5 0.5 0.6 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5				14.6			14.4									
Debt service-to-revenue ratio (in percent) 4/ 0.6 0.6 0.5 0.5 0.6 0.7 0.9 1.0 1.0 2.7 10.0 Primary deficit that stabilizes the debt-to-GDP ratio -28.7 -49.2 -5.7 10.8 2.7 10.0 Primary deficit that stabilizes the debt-to-GDP ratio -28.7 10.0 10.8 2.7 5.5 4.6 4.6 4.8 7.7 18.9 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10																
No. Primary deficit that stabilizes the debt-to-GDP ratio -28.7 -49.2 -5.7 -49.2 -5.7 -49.2 -																
Real GDP growth (in percent) 0.9 10.3 1.1 2.3 3.8 3.1 2.3 2.4 2.3 1.9 1.9 2.3 1.8 1.6 1.7 Average nominal interest rate on forex debt (in percent) 0.0 2.7 2.1 1.2 0.7 1.8 1.9 1.7 1.9 1.8 1.6 1.8 1.1 1.0 1.1 Average real interest rate on domestic debt (in percent) 9.5 4.9 7.4 4.1 </td <td></td>																
Average nominal interest rate on forex debt (in percent) 0.0 2.7 2.1 1.2 0.7 1.8 1.9 1.7 1.9 1.8 1.6 1.8 1.1 1.0 1.1 Average real interest rate on domestic debt (in percent) 9.5 4.9 7.4 4.1 1.0 1.2 1.3 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2	Key macroeconomic and fiscal assumptions															
Average real interest rate on domestic debt (in percent) 9.5 4.9 7.4 4.1	Real GDP growth (in percent)	0.9	10.3	1.1	2.3	3.8	3.1	2.3	2.4	2.3	1.9	1.9	2.3	1.8	1.6	1.7
Real exchange rate depreciation (in percent, + indicates depreciation) 9.2 12.5 -6.3 0.3 15.0 <				2.1			1.8	1.9	1.7	1.9	1.8	1.6	1.8	1.1	1.0	1.1
Inflation rate (GDP deflator, in percent) 1.5 2.9 7.3 3.2 2.9 1.6 1.5 1.8 1.8 1.6 1.7 1.7 2.5 2.5 2.5 Growth of real primary spending (deflated by GDP deflator, in percent) 39.2 5.5 0.6 6.3 13.2 33.3 -6.0 2.1 1.0 1.4 1.6 5.6 1.7 1.7 2.5 2.5 0.5 0.5																
Growth of real primary spending (deflated by GDP deflator, in percent) 39.2 5.5 0.6 6.3 13.2 33.3 -6.0 2.1 1.0 1.4 1.6 5.6 1.7 1.5 -0.5																
	Grant element of new external borrowing (in percent)	, 33.2	41.9	41.2	0.5	13.2	-7.2	51.6	51.6	51.7	51.7	51.6	41.8	51.6	49.6	-0.5

Sources: Country authorities; and staff estimates and projections.

^{1/} Gross debt of general government

^{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.

Table 2. Kiribati: Sensitivity Analysis for Key Indica	ators o	t Pu	blic I	Debt	, 201	L7–2	037	
	2017	2018	2019	2020	2021	2022	2027	2037
PV of Debt-to-GDP Ratio								
Baseline	11	13	16	19	21	24	61	98
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages A2. Primary balance is unchanged from 2017	8	5 0	2 -6	-1 -11	-5 -16		-17 -40	-75 -120
A3. Permanently lower GDP growth 1/	13	16	20	24	29		92	191
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2018-2019	17	22	27	33	38	44	97	156
B2. Primary balance is at historical average minus one standard deviations in 2018-2019	30	32	34	37	39	42	79	99
B3. Combination of B1-B2 using one half standard deviation shocks	19	23	26	30	34	38	83	129
B4. One-time 30 percent real depreciation in 2018	14	15	17	18	20		45	73
B5. 10 percent of GDP increase in other debt-creating flows in 2018	17	19	21	24	26	29	66	90
PV of Debt-to-Revenue Ratio 2/								
Baseline	8	11	13	15	17	20	80	140
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages A2. Primary balance is unchanged from 2017 A3. Permanently lower GDP growth 1/	6 3 9	4 0 12	2 -5 16	-1 -9 20	-4 -13 23	-18	-22 -52 117	-108 -170 261
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2018-2019 B2. Primary balance is at historical average minus one standard deviations in 2018-2019 B3. Combination of B1-B2 using one half standard deviation shocks B4. One-time 30 percent real depreciation in 2018 B5. 10 percent of GDP increase in other debt-creating flows in 2018	12 22 14 11 12	17 25 18 12 15	22 28 21 14 17	26 30 25 15 20	31 33 28 16 22	31 18	125 103 107 59 87	218 141 182 104 127
Debt Service-to-Revenue Ratio 2/								
Baseline	0	0	0	1	1	1	2	8
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	0	0	0	0	0	0	0	-2
A2. Primary balance is unchanged from 2017	0	0	0	0	0	0	0	-5
A3. Permanently lower GDP growth 1/	0	0	0	1	1	1	3	13
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2018-2019	0	0	1	1	1	1	3	12
B2. Primary balance is at historical average minus one standard deviations in 2018-2019	1	1	1	1	1	1	4	10
B3. Combination of B1-B2 using one half standard deviation shocks	0	1	1	1	1	1	3	10
B4. One-time 30 percent real depreciation in 2018	0	0	1	1	1		3	12
B5. 10 percent of GDP increase in other debt-creating flows in 2018	0	0	0	1	1	1	3	8

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.

10

Table 3. Kiribati: External Debt Framework, Baseline Scenario, 2014–2037

(In percent of GDP, unless otherwise indicated)

	Actu	al		Historical ¹	6/ Standard 6/						Projectio	ons			
				Average	Deviation							2017-2022			2027-203
	2014	2015	2016			2017	2018	2019	2020	2021	2022	Average	2027	2037	Average
External debt (nominal) 1/	13.4	21.4	25.0			23.0	27.1	32.0	36.9	41.7	46.2		116.4	170.6	
of which: public and publicly guaranteed (PPG)	13.4	21.4	25.0			23.0	27.1	32.0	36.9	41.7	46.2		116.4	170.6	
Change in external debt	3.8	8.1	3.5			-2.0	4.1	4.9	4.9	4.7	4.5		8.1	2.9	
Identified net debt-creating flows	-52.6	-47.6	-18.6			-13.7	-3.9	-1.9	-1.8	-0.5	0.0		-25.4	-18.1	
Non-interest current account deficit	-53.7	-47.0	-19.8	-8.4	24.3	-14.5	-4.8	-2.8	-2.8	-1.6	-1.3		-25.9	-18.1	-2
Deficit in balance of goods and services	20.0	5.8	25.9			29.2	39.1	40.1	41.1	42.3	43.4		0.5	6.9	
Exports	85.4	97.6	69.8			66.2	57.0	56.3	55.6	55.3	54.8		52.9	46.6	
Imports	105.4	103.4	95.6			95.4	96.0	96.4	96.7	97.5	98.2		53.5	53.5	
Net current transfers (negative = inflow)	-54.2	-32.9	-25.5	-25.4	11.1	-22.5	-22.3	-21.0	-20.8	-20.6	-20.4		-7.2	-7.2	-7
of which: official	-48.4	-30.7	-22.8			-20.1	-20.1	-19.0	-19.0	-19.0	-19.0		-4.9	-4.9	
Other current account flows (negative = net inflow)	-19.4	-19.9	-20.2			-21.2	-21.6	-21.9	-23.1	-23.3	-24.2		-19.2	-17.8	
Net FDI (negative = inflow)	0.6	0.5	1.1	0.1	2.1	1.1	1.1	1.1	1.1	1.1	1.3		1.2	1.0	
Endogenous debt dynamics 2/	0.5	-1.1	0.2			-0.3	-0.1	-0.2	-0.1	0.0	-0.1		-0.7	-1.0	
Contribution from nominal interest rate	0.0	0.4	0.4			0.4	0.4	0.4	0.6	0.6	0.7		1.2	1.6	
Contribution from real GDP growth	-0.1	-1.5	-0.2			-0.7	-0.5	-0.6	-0.7	-0.7	-0.8		-1.9	-2.5	
Contribution from price and exchange rate changes	0.6														
Residual (3-4) 3/	56.3	55.7	22.1			11.7	8.0	6.8	6.7	5.3	4.6		33.5	21.0	
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/	5.2	9.8	12.2			11.4	13.5	16.1	18.6	21.1	23.6		61.4	98.1	
In percent of exports	6.1	10.1	17.5			17.2	23.7	28.5	33.4	38.2	43.0		115.9	210.8	
PV of PPG external debt	5.2	9.8	12.2			11.4	13.5	16.1	18.6	21.1	23.6		61.4	98.1	
In percent of exports	6.1	10.1	17.5			17.2	23.7	28.5	33.4	38.2	43.0		115.9	210.8	
In percent of government revenues	5.8	8.9	14.6			14.4	19.5	23.5	27.5	31.5	35.4		97.9	174.4	
Debt service-to-exports ratio (in percent)	0.0	0.4	0.6			0.6	0.7	0.8	1.1	1.2	1.2		3.2	12.1	
PPG debt service-to-exports ratio (in percent)	0.0	0.4	0.6			0.6	0.7	0.8	1.1	1.2	1.2		3.2	12.1	
PPG debt service-to-revenue ratio (in percent)	0.0	0.3	0.5			0.5	0.6	0.7	0.9	1.0	1.0		2.7	10.0	
Total gross financing need (Millions of U.S. dollars)	-95.0	-78.3	-33.4			-25.3	-6.8	-2.8	-2.4	0.3	1.7		-66.8	-50.2	
Non-interest current account deficit that stabilizes debt ratio	-57.4	-55.1	-23.4			-12.5	-9.0	-7.7	-7.7	-6.3	-5.8		-34.0	-21.0	

Table 3. Kiribati: External Debt Framework, Baseline Scenario, 2014–2037 (concluded)

(In percent of GDP, unless otherwise indicated)

	Actu	al		Historical ⁶ Average	^{6/} Standard ^{6/} Deviation						Projectio	ons 2017-2022			2027-2037
	2014	2015	2016			2017	2018	2019	2020	2021	2022	Average		2037	Average
Key macroeconomic assumptions															
Real GDP growth (in percent)	0.9	10.3	1.1	2.3	3.8	3.1	2.3	2.4	2.3	1.9	1.9	2.3	1.8	1.6	1.7
GDP deflator in US dollar terms (change in percent)	-5.4	-14.2	6.0	3.6	11.5	3.7	1.9	2.1	1.4	1.3	1.7	2.0	2.5	2.5	2.5
Effective interest rate (percent) 5/	0.0	2.7	2.1	1.2	0.7	1.8	1.9	1.7	1.9	1.8	1.6	1.8	1.1	1.0	1.1
Growth of exports of G&S (US dollar terms, in percent)	41.3	8.2	-23.4	17.1	20.6	1.5	-10.3	3.2	2.6	2.5	2.9	0.4	2.9	2.9	3.1
Growth of imports of G&S (US dollar terms, in percent)	8.1	-7.2	-0.9	6.3	10.6	6.7	4.8	4.9	4.1	4.0	4.4	4.8	4.3	4.1	0.4
Grant element of new public sector borrowing (in percent) Government revenues (excluding grants, in percent of GDP) Aid flows (in Millions of US dollars) 7/ of which: Grants of which: Concessional loans Grant-equivalent financing (in percent of GDP) 8/ Grant-equivalent financing (in percent of external financing) 8/	89.4 95.5 95.5 0.0 	41.9 110.4 90.0 76.9 13.1 48.6 91.5	41.2 83.7 69.3 59.4 9.8 34.9 91.6			-7.2 79.1 110.5 110.5 0.0 56.9 100.0	51.6 69.2 125.2 115.1 10.1 59.4 96.1	51.6 68.3 126.7 114.0 12.7 57.0 95.2	51.7 67.4 131.4 118.3 13.1 57.0 95.2	51.7 67.0 135.6 122.0 13.6 57.0 95.2	51.6 66.6 140.5 126.5 14.1 57.0 95.2	41.8	51.6 62.6 79.0 40.7 38.3 20.8 76.5	49.6 56.3 118.9 61.3 57.7 20.8 75.1	51.4 60.7 23.2 76.4
Memorandum items:															
Nominal GDP (Millions of US dollars)	179.1	169.4	181.7			194.3	202.5	211.6	219.5	226.5	234.8		290.5	437.7	
Nominal dollar GDP growth	-4.6	-5.4	7.2			6.9	4.2	4.5	3.7	3.2	3.7	5.0	4.3	4.1	4.2
PV of PPG external debt (in Millions of US dollars)	8.5	16.0	21.9			22.2	27.4	33.9	40.6	47.8	55.4		178.3	429.5	
(PVt-PVt-1)/GDPt-1 (in percent)		4.2	3.5			0.2	2.7	3.2	3.2	3.3	3.4	2.7	7.7	5.9	8.0
Gross workers' remittances (Millions of US dollars)	12.0	11.7	11.8			12.4	13.2	14.1	14.9	15.7	16.2		20.5	30.9	
PV of PPG external debt (in percent of GDP + remittances)	4.9	9.2	11.5			10.7	12.7	15.1	17.4	19.7	22.1		57.3	91.7	
PV of PPG external debt (in percent of exports + remittances)	5.7	9.4	16.0			15.7	21.3	25.5	29.8	33.9	38.2		102.3	183.0	
Debt service of PPG external debt (in percent of exports + remittances)	0.0	0.3	0.5			0.6	0.7	0.7	1.0	1.0	1.1		2.8	10.5	

Sources: Country authorities; and staff estimates and projections.

- 1/ Includes both public and private sector external debt.
- 2/ Derived as [r g p(1+g)]/(1+g+p+gp) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and p = growth rate of GDP deflator in U.S. dollar terms.
- 3/ Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.
- 4/ 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).

(In percentage)	ent)							
	•		Pro	jections				
	2017	2018	2019	2020	2021	2022	2027	2037
PV of debt-to GDP rat	tio							
Baseline	11	13	16	19	21	24	61	98
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/ A2. New public sector loans on less favorable terms in 2017-2037 2/	20 13	19 16	18 20	16 24	14 29	12 33	76 94	164 163
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	12	15	17	20	23	25	66	105
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	-2 15	0 18	2 21	5 24	7 27	10 31	49 80	93 127
 B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019 B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/ 	24	26	28	31	33	36	72	103
B5. Combination of B1-B4 using one-half standard deviation shocks	-14	-11	-8	-5	-2	0	48	106
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	16	19	22	26	29	33	86	137
PV of debt-to-exports r	atio							
Baseline	17	24	29	33	38	43	116	211
A. Alternative Scenarios								
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	30	34	32	30	26	21	144	353
A2. New public sector loans on less favorable terms in 2017-2037 2/	19	28	36	44	52	60	177	349
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	17	24	28	33	38	43	116	211
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	-3	0	4	8	11	15	81	175
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	17	24	28	33	38	43	116	211
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	36	45	50	55	60	66	137	221
B5. Combination of B1-B4 using one-half standard deviation shocks	-12	-12	-8	-6	-3	0	53	134
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	17	24	28	33	38	43	116	211
PV of debt-to-revenue	ratio							
Baseline	14	19	24	28	31	35	98	174
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	25	28	26	24	21	18	122	292
A2. New public sector loans on less favorable terms in 2017-2037 2/	16	23	30	36	43	49	150	289
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	16	21	25	29	34	38	105	187
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	-3	0	3	7	11	14	78	165
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	19	25	30	36	41	46	127	226
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	30	37	41	46	50	54	116	183
B5. Combination of B1-B4 using one-half standard deviation shocks	-17	-16	-12	-8	-4	1	77	189
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	20	27	33	38	44	49	137	243

Table 4. Kiribati: Sensitivity Analysis for Key Indicators of Public Debt, 2017–2037 (concluded)

(In percent)

			D					
	2017	2018	2019	2020	2021	2022	2027	2037
Debt service-to-exports :	ratio							
Baseline	1	1	1	1	1	1	3	12
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	1	1	1	1	1	1	4	15
A2. New public sector loans on less favorable terms in 2017-2037 2/	1	1	1	1	2	2	6	18
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	1	1	1	1	1	1	3	12
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	0	0	0	1	1	1	1	9
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	1	1	1	1	1	1	3	12
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	1	1	1	2	2	2	5	14
B5. Combination of B1-B4 using one-half standard deviation shocks B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	0 1	0 1	0 1	0 1	0 1	0 1	0 3	7 12
P. M	49							
Debt service-to-revenue	ratio							
Baseline	1	1	1	1	1	1	3	10
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	1	1	1	1	1	1	4	12
A2. New public sector loans on less favorable terms in 2017-2037 2/	1	1	1	1	1	2	5	14
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	1	1	1	1	1	1	3	11
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	0	0	0	0	1	1	1	9
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	1	1	1	1	1	1	4	13
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	1	1	1	1	1	1	4	11
B5. Combination of B1-B4 using one-half standard deviation shocks	0	0	0	0	0	0	0	9
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	1	1	1	1	1	1	4	14
Memorandum item: Grant element assumed on residual financing (i.e., financing required above baseline) 6/	41	39	38	36	34	32	24	12
Grant element assumed on residual infancing (i.e., littaticing required above baseline) of	41	39	30	30	34	32	24	12

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 assuming 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.