IMF Country Reports 19/288

Federated States of Micronesia: 2019 Article IV Consultation-Press Release; Staff Report; and Statement by the Executive Director for the Federated States of Micronesia

INTERNATIONAL MONETARY FUND

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IMF Country Report No. 19/288

FEDERATED STATES OF MICRONESIA

September 2019

2019 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR THE FEDERATED STATES OF MICRONESIA

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2019 Article IV consultation with the Federated States of Micronesia, the following documents have been released and are included in this package:

- A **Press Release** summarizing the views of the Executive Board as expressed during its August 28, 2019 consideration of the staff report that concluded the Article IV consultation with the Federated States of Micronesia.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on August 28, 2019, following discussions that ended on June 17, 2019, with the officials of the Federated States of Micronesia on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on August 1, 2019.
- An **Informational Annex** prepared by the IMF staff.
- A **Debt Sustainability Analysis** prepared by the staffs of the IMF and International Development Association
- A **Statement by the Executive Director** for the Federated States of Micronesia.

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International Monetary Fund
Washington, D.C.

Press Release No. 19/324
FOR IMMEDIATE RELEASE
September 6, 2019

International Monetary Fund
700 19th Street, NW
Washington, D. C. 20431 USA

IMF Executive Board Concludes 2019 Article IV Consultation with the Federated States of Micronesia

On August 28, 2019, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with the Federated States of Micronesia (FSM).

The FSM economy has performed well in recent years. GDP growth has remained higher than its historical average, albeit slowing from 2.4 percent in FY2017 (ending September 2017) to 1.2 percent in FY2018 due to a contraction in construction. Employment growth has also remained higher than the historical average. Inflation remained low owing to the use of the U.S. dollar as legal tender. Fiscal and external current account balances recorded large surpluses in FY2017–18, reflecting the authorities' prudent policy to save windfall tax revenues. Over the medium term, growth is projected to converge to its potential rate, estimated at 0.6 percent, in line with the performance over the last two decades, while inflation is projected to stay at 2 percent over the medium term.

Risks to the outlook are tilted to the downside. Unless economic supports under the Compact Agreement with the United States are renewed, the FSM is expected to lose access in 2023 to U.S. Compact grants, banking sector oversight by the Federal Deposit Insurance Corporation, and post-disaster rehabilitation assistance by U.S. federal agencies, resulting in substantial macroeconomic uncertainty. On the upside, decisive progress in pro-growth structural reforms can raise potential growth, and renewal of the economic supports under the Compact Agreement would reduce downside risks.

The FSM economy is highly vulnerable to climate change. Rising sea levels and temperatures threaten livelihoods, particularly on low-lying islands, and are compounded by the rising frequency and intensity of natural disasters, constituting significant downside risks. In this context, a Climate Change Policy Assessment (CCPA) was conducted as an integral part of the Article IV Consultation. The CCPA is a joint IMF and World Bank initiative to assist small states to understand and manage the expected economic impact of climate change, while safeguarding long-run fiscal and external sustainability.

[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.

Executive Board Assessment[2]

Executive Directors welcomed Micronesia's strong economic performance and improved fiscal and external positions. Directors noted, however, that significant challenges remain related to the expected expiration of the U.S. Compact Agreement, climate change, and weak private sector activity. Against this backdrop, Directors emphasized the need for steadfast policy actions and reforms to reduce uncertainty and risks, strengthen resilience, and promote private sector-led growth.

Directors welcomed the authorities' commitment to building fiscal buffers by saving revenue windfalls. In light of the uncertainty regarding the continuation of the Compact grants, they recommended a gradual fiscal adjustment through domestic revenue mobilization and improved expenditure efficiency. In particular, Directors encouraged implementation of growth-friendly tax policy reforms, including the introduction of a value added tax (VAT), and limiting wage bill growth and nonessential expenditures, while safeguarding priority spending on education, healthcare, and climate-resilient infrastructure. Ongoing efforts to improve public financial management would also contribute to fiscal sustainability.

Noting the vulnerability of Micronesia's economy to natural disasters and climate change, Directors welcomed the joint IMF-World Bank Climate Change Policy Assessment. They agreed that Micronesia's resilience to climate change could be strengthened by closing gaps in preparedness, developing a disaster resilience strategy, and through a greater focus on adaptation. Directors encouraged greater use of disaster risk transfer mechanisms, including disaster insurance.

Directors urged the authorities to strengthen their banking regulation and supervision capacity given the possible reduction in FDIC oversight in 2023. They underscored the need to update banking laws, adopt prudential banking regulations, and develop a reform roadmap to strengthen the Banking Board's supervision of commercial banks.

Directors emphasized the importance of vitalizing the private sector to shore up potential growth. In this regard, they emphasized the importance of improving the business and investment climate, including by lowering business startup costs, digitalizing the land registry, and reducing undue regulatory burdens on FDI.

Directors commended the authorities for their efforts to strengthen data provision and encouraged continued use of technical assistance for revenue administration, public financial management, financial sector supervision, and macroeconomic statistics.

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

Table. Micronesia: Selected Economic Indicators, FY2015–24 1/

Nominal GDP (FY2017):	US$363 million
Population (FY2017):	102,259
GDP per capita (FY2017):	US$3,549
IMF Quota:	SDR 5.1 million

	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
				Est.	Projections					
Real sector (annual percent change)										
Real GDP	5.0	0.7	2.4	1.2	1.4	0.8	0.7	0.6	0.6	0.6
Consumer prices	0.0	-0.9	0.1	1.5	1.8	2.0	2.0	2.0	2.0	2.0
Employment	0.1	2.1	1.5	1.0	0.8	0.2	0.1	0.0	0.0	0.0
Public (incl. public enterprises)	-1.0	0.8	0.9	…	…	…	…	…	…	…
Private	0.8	2.7	0.8	…	…	…	…	…	…	…
Nominal wages	2.9	-0.9	2.3	…	…	…	…	…	…	…
Public average wage/private average wage	2.2	2.2	2.2	…	…	…	…	…	…	…
Consolidated government finance (in percent of GDP)										
Revenue and grants	66.3	69.1	79.0	96.4	87.6	72.4	71.2	67.8	66.7	57.1
Revenue	37.1	35.9	41.7	58.2	48.9	35.7	35.2	34.7	34.3	45.1
Tax revenue	12.4	12.9	17.6	34.7	25.8	13.1	13.1	13.1	13.1	13.1
of which: corporate income tax	1.3	1.8	6.3	22.7	14.2	1.6	1.6	1.6	1.6	1.6
Non-tax revenue	24.7	23.0	24.1	23.5	23.1	22.6	22.1	21.6	21.2	32.0
of which: Fishing license fees	20.7	19.1	20.0	19.4	19.0	18.5	18.0	17.5	17.1	16.6
Grants 2/	29.3	33.2	37.3	38.2	38.8	36.7	36.0	33.0	32.5	12.0
Expenditure	55.9	61.8	64.4	69.1	68.7	65.7	64.8	62.3	62.3	61.7
Expense	48.7	49.3	48.0	51.2	49.7	48.2	47.4	47.4	47.4	47.4
Net acquisition of nonfinancial assets	7.3	12.6	16.4	17.9	19.0	17.5	17.4	15.0	14.9	14.4
Net lending/borrowing	10.4	7.3	14.6	27.3	19.0	6.7	6.4	5.4	4.4	-4.6
Net lending/borrowing (excl. grants)	-18.9	-25.9	-22.7	-10.9	-19.8	-30.1	-29.6	-27.6	-28.0	-16.6
Balance of trust funds 3/	145.4	165.6	187.4	224.9	246.5	264.4	282.7	301.9	321.6	317.8
Commercial banks (in percentage of GDP; end of period)										
Loans	13.2	14.7	12.9	13.1	13.3	13.5	13.7	13.9	14.1	14.3
Deposits	80.3	77.9	88.1	88.2	88.3	88.4	88.5	88.6	88.7	88.8
Interest rates (in percent, average for FY)										
Consumer loans	15.7	15.7	15.7	…	…	…	…	…	…	…
Commercial loans	6.8	7.8	7.6	…	…	…	…	…	…	…
Balance of payments (in millions of U.S. dollars)										
Trade balance	-127.9	-110.3	-120.2	-127.0	-132.7	-131.7	-134.1	-129.0	-131.5	-132.8
Net services and income	22.5	13.6	9.7	8.8	8.2	7.4	6.9	6.2	5.5	54.1
Private and official transfers	110.3	109.6	137.9	209.3	184.2	134.6	137.0	132.4	134.9	60.3
Current account	4.9	12.9	27.3	91.0	59.7	10.3	9.7	9.6	8.9	-18.3
(in percent of GDP)	1.6	3.9	7.5	24.5	15.7	2.6	2.4	2.3	2.1	-4.2
External debt (in millions of U.S. dollars; end of period)										
Outstanding stock	81.1	80.4	80.4	75.4	70.4	65.2	61.4	57.5	53.7	70.0
(in percent of GDP)	25.7	24.3	22.1	20.3	18.5	16.7	15.3	13.9	12.7	16.1
Memorandum items:										
Exchange rate regime				U.S. dollar is the official currency						
Real effective exchange rate 4/	109.9	114.3	114.1	113.0	…	…	…	…	…	…
Nominal GDP (in millions of U.S. dollars)	315.1	331.4	362.9	371.9	380.9	391.3	402.1	412.6	423.4	434.4

Sources: FSM authorities and IMF staff estimates and calculations.

1/ Fiscal year ends on September 30.

2/ Excludes contributions to the Compact Trust Fund.

3/ Compact Trust Fund and FSM Trust Fund.

4/ Calendar year. 2010=100.

FEDERATED STATES OF MICRONESIA

STAFF REPORT FOR THE 2019 ARTICLE IV CONSULTATION

July 30, 2019

KEY ISSUES

Context. The economy of the Federated States of Micronesia (FSM) has performed well in recent years, with relatively high growth and low inflation. Fiscal and current account balances have recorded large surpluses since 2017, owing to the authorities' decision to save revenue windfalls. Nonetheless, the FSM faces significant medium-term uncertainty as various economic supports under the Compact Agreement with the United States are set to expire in 2023. Unless they are renewed, the FSM is expected to lose access to Compact grants, giving rise to a fiscal cliff in 2023; banking sector oversight by the Federal Deposit Insurance Corporation; and post-disaster rehabilitation assistance. The country is highly vulnerable to climate change, while private sector activity remains anemic.

Policy recommendations. It is time to act now to:

- Implement a fiscal adjustment of 4–5 percent of GDP through 2023 to cope with the fiscal cliff. This can be achieved by gradually introducing growth-friendly tax measures and rationalizing nonessential expenditures, while protecting spending on education, healthcare, and infrastructure.
- Improve resilience to climate change by strengthening capacity to implement adaptation projects. Over the medium term, disaster risks should be mitigated by using disaster insurance and disaster-contingent foreign financing.
- Strengthen the FSM's own capacity for banking supervision by updating banking laws and developing prudential regulations.
- Vitalize the private sector by making the FSM more business friendly and upgrading the foreign direct investment regime.

Approved By
Ranil Salgado (APD) and Zuzana Murgasova (SPR)

Discussions took place in Pohnpei during June 4–17, 2019. The mission comprised Mr. Nozaki (head, APD), Mr. Abdelkader (ICD), Mmes. Le and Singh (APD). It assisted an IMF-World Bank team comprising Mr. Davies, Mr. Huang, Ms. Prihardini (all FAD), and Ms. Esler (World Bank) in conducting a Climate Change Policy Assessment during June 10–17. Messrs. Ray and Amor (OED), Ms. Hunter (Resident Representative for Pacific Islands), Mr. Rabanal (Asian Development Bank), and Mr. Blackman (World Bank) participated in meetings. The mission met with Finance Secretary Lawrence; Environment, Climate Change, and Emergency Management Secretary Yatilman; Research and Development Secretary Henry; Banking Commissioner Giltamag; Insurance Commissioner Sana; senior officials of the national government, the state government of Pohnpei, and state-owned enterprises; development partners; and private sector representatives. Mmes. Abebe and Kanyabutembo (APD) assisted with the preparation of this report.

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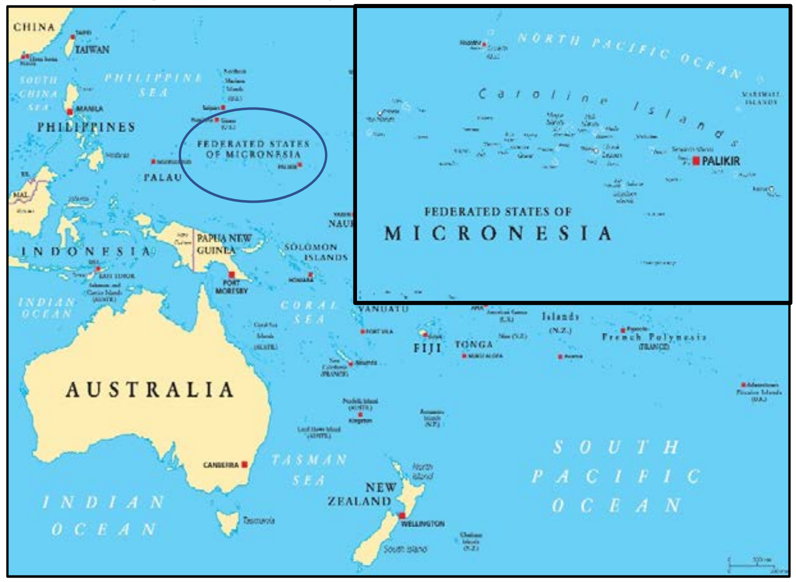
BACKGROUND

1. **The Federated States of Micronesia (FSM) is a Pacific island state, dependent on foreign grants and vulnerable to climate change.** The country comprises 607 islands spread over the world's 14th largest geographic Exclusive Economic Zone (EEZ). The Compact Agreement with the United States provides for grants and various assistance. The FSM is highly vulnerable to climate change, facing frequent weather-related disasters and rising sea levels. Its federal structure, comprising four states with diverse cultures, has challenged national-level consensus building. While extreme poverty remains high compared with Pacific Island peers, significant improvements have been made over the last decade in maternal and child health, access to electricity, and improved sanitation.



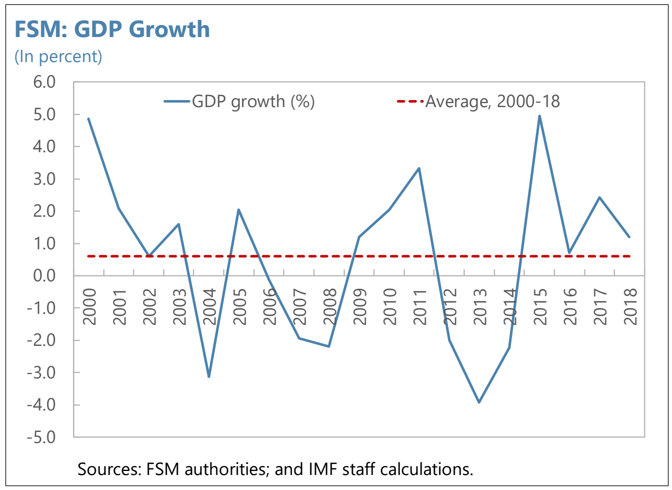
Source: iStock.com/PeterHermesFurian

2. **The FSM faces significant medium-term uncertainty related to the post-2023 relationship with the United States.** Unless arrangements under the Compact Agreement are renewed, the government is expected to lose access to the Compact grants and various macro-critical services in 2023 (Box 1). While the U.S. government has been contributing into a trust fund (known as the Compact Trust Fund; CTF) with an aim to replace these grants from 2024, distributions from the fund are unlikely to be enough to offset the loss of the grants, giving rise to a fiscal cliff."

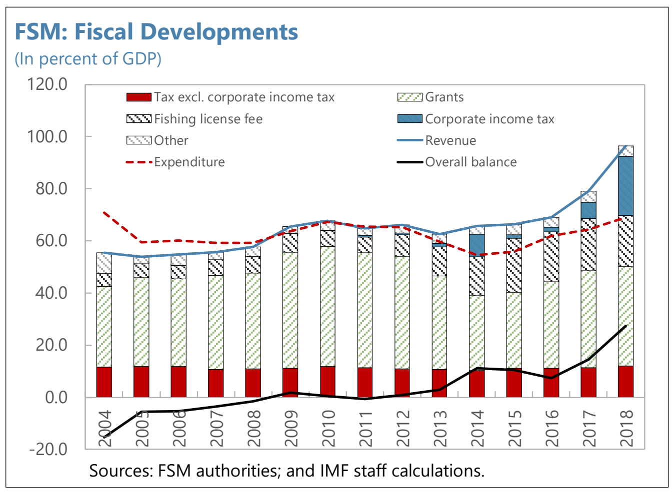
3. **Now is the time for action to reduce the post-2023 uncertainty.** There has been some progress in implementing the reforms recommended during the 2017 Article IV consultation, including saving revenue windfalls into the FSM Trust Fund (FSMTF)—a fund established by the FSM government with the aim to provide an additional revenue source to ensure long-term fiscal sustainability (Appendix I). Nonetheless, little progress has been made on revenue mobilization and expenditure rationalization to cope with the potential fiscal cliff. In addition, the 2019 Article IV consultation also covered actions to address the potential reduction of banking sector oversight and post-disaster rehabilitation under the Compact Agreement, as well as structural reforms to promote private sector development. To help the authorities strengthen climate change resiliency, a Climate Change Policy Assessment (CCPA) was conducted as an integral part of the consultation.

RECENT DEVELOPMENTS

4. The FSM economy has performed well in recent years. GDP growth has been higher than the historical average since FY2015 (ending September 2015). While GDP growth is estimated to have slowed down from 2.4 percent in FY2017 to 1.2 percent in FY2018 due to a contraction in construction, employment growth has remained higher than the historical average. Inflation has been low due to the use of the U.S. dollar as legal tender and is estimated at 1.5 percent in FY2018.



5. Revenue windfalls strengthened the fiscal position. The general government (comprising national and state governments) has recorded budget surpluses since 2012, with revenues from foreign grants and fishing license fees (reflecting the FSM's large EEZ) accounting for around a half of GDP. The surplus increased to 15 percent of GDP in FY2017 and 27 percent of GDP in FY2018, owing to large-scale corporate tax payments from investment companies domiciled in the FSM,[1] while a pickup in capital grants from the United States and the World Bank boosted public investment. The decision to save most of the revenue windfalls allowed the government to build up the FSMTF to 57 percent of GDP in FY2018. Meanwhile, the value of the CTF rose to 168 percent of GDP.

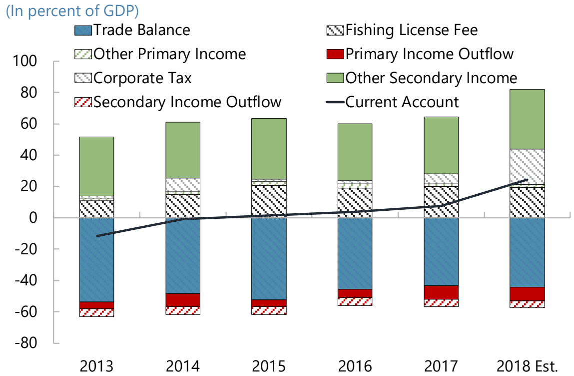


6. The external position also improved. The FSM's large trade deficit has been financed by surpluses in the income balances, generated mostly by grants and fishing license fees. The current account (CA) balance turned to a surplus in FY2015 due to rising fish exports and fishing license fees, while the trade deficit has narrowed in FY2016–17, consistent with real depreciation driven by low inflation in the FSM relative to trading partners. The CA surplus surged to 24.5 percent of GDP in FY2018 owing to the large corporate tax payments. The FSM has a positive net international

[1] The corporate tax windfalls have originated from occasional sales of foreign assets by investment companies and associated profits. A peer review by the OECD Global Forum on Transparency and Exchange of Information for Tax Purposes assesses the FSM as provisionally largely compliant.

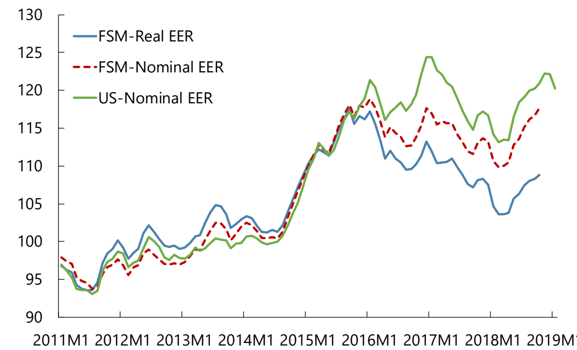
investment position (NIIP) amounting to 130 percent of GDP at end-FY2017, mainly reflecting a large share of bank deposits invested abroad and the buildup of the FSMTF.[2]

FSM: Current Account and Components
(In percent of GDP)



Source: FSM authorities; and IMF staff calculations.

FSM: Effective Exchange Rate (EER)
(Index, 2010=100)



Sources: IMF staff estimates.

7. The FSM's external position is assessed to be broadly consistent with the level implied by fundamentals and desirable policies (Appendix II). The underlying CA balance in FY2018 is estimated at a surplus of 3.4 percent of GDP after adjusting for the windfall corporate tax payments. The EBA-lite methodology estimates the CA norm at 3.9 percent of GDP, resulting in a relatively small CA gap of -0.5 percent. The policy gap (about -3 percent of GDP) is mostly explained by medium-term fiscal adjustment needs of 4–5 percent of GDP to avoid the FY2024 fiscal cliff (¶14). The results should be interpreted with caution, given the FSM's heavy dependence on grants and fishing license fees, which can be volatile.

OUTLOOK AND RISKS

8. Growth is projected to converge to potential over the medium term. It is projected to improve to 1.4 percent in FY2019 reflecting a recovery in construction, then converging to potential estimated at 0.6 percent by FY2022. The estimate is underpinned by labor productivity growth of 0.7 percent and a slight contraction in employment, in line with the FSM's performance over the last two decades, also taking account of the likely impact of natural disasters (the FSM experienced five natural disasters during this period). Inflation is projected to converge to 2 percent over the medium term, in line with U.S. inflation. Owing to a further corporate tax windfall collected in 2019Q1, fiscal and CA surpluses are projected to reach 19 percent and 16 percent of GDP, respectively, in FY2019.

9. Risks to the outlook are tilted to the downside (Appendix III). The substantial uncertainty surrounding the post-2023 relationship with the United States, including the FSM's capacity to cope with the fiscal cliff, disaster rehabilitation, and financial sector supervision, can discourage private investment and cause emigration, dampening growth. Weather-related natural disasters remain a major downside risk to the economy. A sharp tightening of global financial conditions may reduce the prices of risky financial assets held by the CTF and FSMTF, hindering the planned buildup of these funds. On the upside, decisive reforms on public investment management

[2] The NIIP does not include accumulated U.S. contributions to the CTF.

(¶16) and private sector development (¶34–36), as well as renewal of the Compact Agreement or new grants from development partners, can shore up potential growth.

Authorities' Views

10. The authorities broadly agreed with staff's assessment on the economic outlook and risks. They acknowledged the substantial uncertainty originating from the potential expiration of the Compact support in 2023 and noted that a government committee, Joint Committee on Compact Review and Planning, has been working on the economic and other implications for over a year now, including the critical areas identified by staff.

POLICY DISCUSSIONS

With the scheduled expiration of the Compact Agreement heightening medium-term uncertainty, the authorities should start implementing fiscal consolidation, improving climate change resilience, strengthening banking sector supervision, and accelerating efforts to develop a vibrant private sector.

A. Start Fiscal Consolidation to Avoid Fiscal Cliff

Background

11. The fiscal balance is projected to remain in surplus through FY2023. Under staff's baseline projection assuming no fiscal consolidation, the surplus is projected at 4–7 percent of GDP during FY2020–23, as grants and fishing license fees remain abundant. The combined value of the CTF and FSMTF is projected to reach 322 percent of GDP by FY2023, reflecting scheduled contributions from the U.S. government into the CTF, continued transfers of budget surpluses to the FSMTF, and a nominal rate of return assumed at 5 percent.

FSM: General Government Operations, FY2017-2024
(Baseline scenario; in percent of GDP)

	FY2017	FY2018	FY2023	FY2024
	Est.	Projections		
Revenue	**79.0**	**96.4**	**66.7**	**57.1**
Tax revenue	17.6	34.7	13.1	13.1
Wage and salary tax	2.5	2.5	2.5	2.5
Gross revenue tax	5.4	5.8	5.4	5.4
Corporate Tax	6.3	22.7	1.6	1.6
Import taxes	3.4	3.5	3.5	3.5
Grants	37.3	38.2	32.5	12.0
Non-tax revenue	24.1	23.5	21.2	32.0
Fishing license fees	20.0	19.4	17.1	16.6
Other nontax revenues	4.0	4.0	4.0	15.2
Distributions from trust funds	0.0	0.0	0.0	11.3
Other	4.0	4.0	4.0	4.0
Expenditure	**64.4**	**69.1**	**62.3**	**61.7**
Expense	48.0	51.2	47.4	47.4
Net acquisition of nonfinancial assets	16.4	17.9	14.9	14.4
Net lending/borrowing	**14.6**	**27.3**	**4.4**	**-4.6**
Memorandum items:				
U.S. grants	29.5	29.0	26.6	6.2
Balance of trust funds	187.4	224.9	321.6	317.8
Compact Trust Fund	155.7	167.9	231.2	225.3
FSM Trust Fund	31.7	57.0	90.4	92.5

Sources: FSM authorities and IMF staff estimates and calculations.

12. Nonetheless, the FSM is expected to face a fiscal cliff in FY2024, with greater revenue volatility afterwards. Unless the Compact Agreement or parts of it are renewed, Compact grants amounting to 20 percent of GDP

will expire in FY2023 and be replaced by investment returns accruing to the CTF, projected at around 11 percent of GDP in FY2024. As a result, the overall balance is projected to turn from a surplus of around 4½ percent of GDP in FY2023 to a deficit of 4½ percent of GDP in FY2024. Moreover, the distribution will be limited to investment returns from the CTF, with no distribution allowed in case of negative returns. This will translate into significant revenue volatility, complicating fiscal management.

13. **Due to the fiscal cliff, the FSM remains at high-risk of debt distress.** Under the baseline scenario, the post-FY2023 fiscal deficits would put debt on an upward trajectory, with the external debt-to-GDP ratio rising from 12 percent in FY2023 to 57 percent in FY2039. The Debt Sustainability Analysis (DSA) suggests that DSA thresholds on the present value of external debt-to-GDP and public debt-to-GDP will be breached within a 20-year horizon, which is more appropriate for the FSM because the standard 10-year horizon would mask the consequence of the potential FY2024 fiscal cliff on debt dynamics.

Staff's Views

14. **To cope with the fiscal cliff, a gradual fiscal adjustment of 4–5 percent of GDP through FY2023 is warranted.** While there is uncertainty in staff's baseline projection, this would likely enable balancing the budget in FY2024, minimizing fiscal financing needs and concerns over the fiscal cliff. Given the potential impact on growth—staff analysis suggests that the adjustment can shave off GDP growth by 0.1–0.3 percent annually over FY2020–24—the adjustment should be gradual, supported by efforts to raise grants-financed public investment[3] and pro-growth structural reforms to vitalize the private sector.

FSM: Illustrative Fiscal Scenarios
(In percent of GDP)

	FY2023		FY2024	
	Baseline	Adjustment	Baseline	Adjustment
Revenue	**66.7**	**69.7**	**57.1**	**60.1**
U.S. grants	26.6	26.6	6.2	6.2
Distributions from Trust Funds	0.0	0.0	11.3	11.3
Tax revenue	13.1	16.1	13.1	16.1
Other	27.0	27.0	26.6	26.6
Expenditure	**62.3**	**60.3**	**61.7**	**60.3**
Overall balance	**4.4**	**9.4**	**-4.6**	**-0.1**

Sources: FSM authorities and IMF staff estimates and calculations.

15. **The adjustment can be achieved by growth-friendly measures, preserving essential social spending.**

- Growth-friendly tax policy reforms, including introducing a VAT and selected excises on tobacco, alcohol, and fuel, and tightening eligibility on concessional fishing license fees for the domestic fishing industry, can contribute 2½–3 percent of GDP. These measures would be more efficient and less distortive than a tax rate increase for the gross receipts tax, which is levied on business

[3] The FSM has access to a large amount of unused capital grants committed under the Compact Agreement, which can be mobilized by strengthening implementation capacity.

turnover. These tax policy reforms should be supplemented by accelerating tax administration reforms, supported by technical assistance (TA) from the Pacific Financial Technical Assistance Center (PFTAC), and the planned roll-out of a new tax administration IT system.

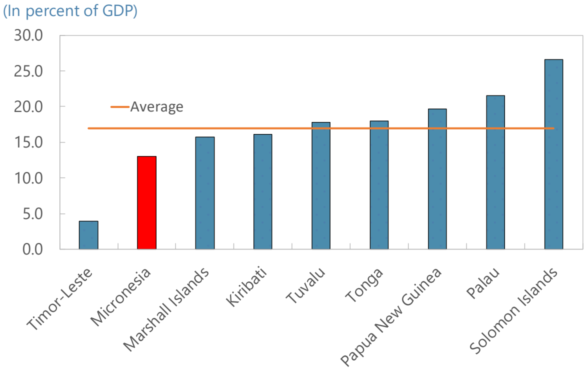
FSM: Menu of Fiscal Adjustment Measures

Category	Measures	Yields (% of GDP)
Tax policy reform	Introduce a VAT (with a tax rate at 8-9% or higher); introduce/raise excise taxes on tobacco, alcohol, fuel; tighten eligibility on concessional fishing license fees for the domestic fishing industry	2.5-3.0
Tax administration reform	Improve tax filing rates by rolling out a new IT system and strengthen audit	0.5-1.0
Wage bill rationalization	Limit annual wage bill growth to 1 percent by slower salary increases. Measures should be targeted at nonessential public services.	1.2
Public financial management (PFM) reform	Rationalize expenditure on goods and services by rolling out a new IT system and improving procurement	0.5-1.0

Sources: IMF staff estimates and calculations.

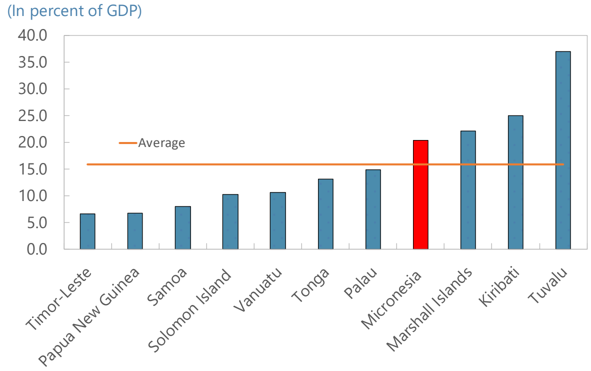
- To mitigate the negative impact on the poor, expenditure reforms should focus on rationalizing nonessential expenditure, while preserving spending on education, healthcare, and infrastructure, including on climate change resilience. Limiting wage bill growth at 1 percent annually over FY2020–23 would yield a saving of 1¼ percent of GDP by FY2023, which can be achieved by slower salary increases rather than employment measures (e.g., hiring restraints), complemented by efforts to enhance public sector efficiency (Box 2). Rationalizing goods and services spending through public financial management (PFM) reforms (¶16) can also generate savings and promote growth.

Pacific Islands: Tax Revenue, 2018
(In percent of GDP)



Sources: FSM authorities; and IMF staff calculations.

Pacific Islands: Government Wage Bill, 2017
(In percent of GDP)



Sources: FSM authorities; IMF staff calculations.

16. PFM reforms are critical to underpin fiscal adjustment. Weaknesses in PFM include reliance on manual processing as well as inadequate procurement procedures and capital project screening. With support from the World Bank and PFTAC, the authorities adopted a reform roadmap for 2017–20 and are upgrading PFM regulations and the IT system. Stepping up these efforts can generate multi-faceted benefits from: (i) identifying expenditure savings without undermining the quality of spending; (ii) speeding up execution of projects financed by capital grants, which can cushion the negative growth impact of the fiscal adjustment; and (iii) laying the foundation for more efficient public investment management, which will help climate change adaptation.

17. Future revenue windfalls should be saved to build up the FSMTF. In this context, staff commends the authorities' decisions to save the revenue windfalls during FY2017–18 and welcomes

the newly adopted mechanism to save fixed proportions of corporate income tax collections and fishing license fees to the FSMTF.[4] This effort can be further ensured by budget process reforms reducing the scope for undue and ad-hoc spending increases.

18. The current arrangement restricting post-2023 distributions from the CTF to investment returns will result in large revenue volatility. Reconfiguring the distribution arrangement aimed at lowering the volatility—which would require amending the Trust Fund Agreement under the U.S. Compact Agreement—would help reduce fiscal risks beyond FY2023. In the absence of such a reconfiguration, the volatility can be offset by drawdowns from the FSMTF as needed. In this case, distributions from both trust funds should be set at a level that can sustain their balances in the long run. According to staff simulations (Appendix IV), setting annual distributions at 11 percent of GDP from the two trust funds, as envisaged in the fiscal adjustment scenario (¶14), would lead to a decrease in the combined value of the two funds as a percent of GDP in the long run. Undertaking a gradual fiscal adjustment beyond FY2023 and reducing annual distributions to 6 percent of GDP by FY2034 would stabilize the expected value of the trust funds at about 270 percent of GDP through FY2050, ensuring long-run sustainability and intergenerational equity.

Authorities' Views

19. The authorities broadly concurred with staff's assessments and recommendations on fiscal policy. They supported staff's judgement to use a 20-year forecast horizon in the DSA in consideration of the expected fiscal cliff. A gradual fiscal adjustment through FY2023 would be warranted, aimed at preserving the budget space for critical development spending, in particular on education and health. Efforts to enhance tax compliance will continue, while tax policy reforms including the introduction of a value added tax (VAT) will be considered as a policy option. Ongoing PFM reforms supported by the World Bank and the European Union would help improve the quality of government spending and assess potential for rationalization. Revenue windfalls will continue to be saved into the FSMTF, ensured by the recently enacted amendment to the FSMTF law, while limited use of the windfalls for high-quality government spending would also be warranted in case economic growth slows down more than envisaged.

20. The authorities agreed that potential revenue volatility inherent in the current arrangement of CTF distributions would imply substantial fiscal risks for post-2023. The CTF committee has been actively engaged with their fund managers for the last 18 months to review options to amend the distribution formula and CTF legislation. The authorities did not agree with the recommendation to draw from the FSMTF to offset the volatility. The recommendation essentially safeguards the CTF while shifting the risks of depletion to the FSMTF. It is the policy of the authorities to continue building the FSMTF beyond FY2023, building on the hard-won fiscal prudence of recent years, ensuring benefits for future populations, and progressing toward economic self-sufficiency and less dependence on foreign financial assistance.

[4] The rule now stipulates that at least 50 percent of corporate tax payments and 20 percent of fishing license fees should be saved into the FSMTF.

B. Strengthen Climate Change Resilience

Background

21. The FSM economy is highly vulnerable to climate change. Rising sea levels and temperatures threaten livelihoods, particularly on low-lying islands, and are compounded by the rising frequency and intensity of natural disasters, resulting in significant macroeconomic costs.[5]

22. The U.S. Compact Agreement currently insures the FSM against natural disaster risks. Under the Compact Agreement, the USAID and FEMA fund post-disaster reconstruction for public and private property, following declarations of disasters by the presidents of the FSM and the United States. This assistance will no longer be available for post-2023, unless renewed.

23. In this context, a Climate Change Policy Assessment (CCPA) was conducted as an integral part of the 2019 Article IV Consultation.[6] The CCPA reviewed the FSM's macro-relevant climate change policies, including on mitigation, adaptation, and disaster risk financing, contributing to staff's views and recommendations laid out below.

Staff's Views

24. Good progress has been made on climate change preparedness, but gaps remain. The FSM has developed the Nationally Determined Contribution under the Paris Agreement, a national climate change policy, the Infrastructure Development Plan (IDP) that includes mitigation and adaptation projects, and state-level action plans for disaster risks. However, it has yet to develop an overarching National Adaptation Plan that is fully integrated with sectoral and state-level strategies, and a comprehensive disaster resilience strategy that covers early warning, disaster response, and risk financing.

25. Accelerating climate change adaptation requires strengthening public investment management and mobilizing further grant financing. Speeding up adaptation investment would generate multiple benefits, including boosting growth in the short run and lowering reconstruction costs and output losses in the event of natural disasters. While the FSM has an ambitious list of adaptation projects, finishing them over the next 10 years would require substantially increasing public investment. Since the country's limited capacity to implement capital projects is the main bottleneck, staff recommends strengthening public investment management, particularly at the state level, to identify and smoothly execute high priority

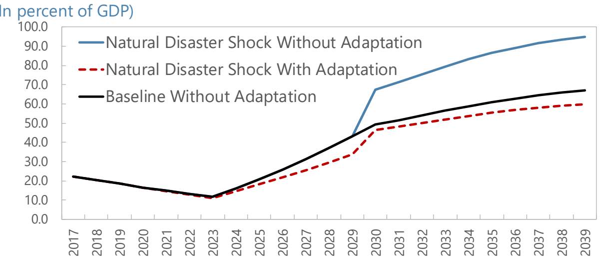
[5] Typhoon Maysak in 2015 caused damages estimated at about 3.5 percent of GDP, and recent disasters such as typhoon Wutip and tropical depression Jelawat damaged infrastructure and the agriculture sector.

[6] The CCPA is a tool developed by IMF and World Bank staff to help small states analyze and develop a policy response to the expected economic impact of climate change and weather-related natural disasters. Since 2017, CCPA pilots have been completed for Seychelles, St Lucia, Belize, and Grenada. The CCPA for the FSM is the first in the Pacific.

adaptation projects. This can be supported by establishing a standardized methodology for project appraisal and selection across states. The FSM's high risk of debt distress and the fiscal adjustment need through FY2023 would also call for mobilizing grant financing and prioritizing projects.

FSM: Public Sector Debt under a Natural Disaster Shock

(In percent of GDP)



Sources: IMF staff calculations.
Notes: the figure shows an illustrative simulation on the impact of a natural disaster on public debt, comparing scenarios with and without adaptation investment ramp-up.
Without adaptation: GDP growth remains at its potential under the baseline. When a disaster hits in 2030, real GDP declines by 5 percent and public debt rises by 10 percent of GDP.
With adaptation: reflecting higher adaptation investment over 2020-30, GDP grows faster than potential during this period. When a disaster hits in 2030, real GDP declines by only 3 percent whereas public debt rises by only 4 percent of GDP, as higher adaptation investment would lower reconstruction costs and output losses.

26. A disaster resilience strategy should be developed in view of the expected expiration of the U.S. post-disaster assistance. Making greater use of risk transfer mechanisms can reduce the burden on the budget when disasters hit for post-2023. The strategy should include increasing use of insurance, such as regional parametric schemes under the Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI); broadening the range of disaster-contingent financing from the World Bank and AsDB; and further building up the FSM's fiscal buffers that enable immediate post-disaster response.[7] The FSMTF could also provide for an additional buffer in the event of a catastrophic disaster, but this should only be a last resort.

Authorities' Views

27. The authorities appreciated the findings and recommendations of the CCPA. Disasters such as tropical storms, inundations, and droughts have become more intense and frequent in the FSM in recent years, causing severe damages in both main and outer islands. Policy planning is well advanced, as all four states have adopted Joint State Action Plans for climate change. The authorities acknowledged the need to identify disaster risk financing options in view of the expected expiration of the U.S. post-disaster assistance in 2023. To expedite climate resilience building, they stressed the need for climate finance institutions to streamline access requirements to be in line with capacity in small states, and emphasized the need for development partners to mobilize technical support to fill implementation capacity gaps.

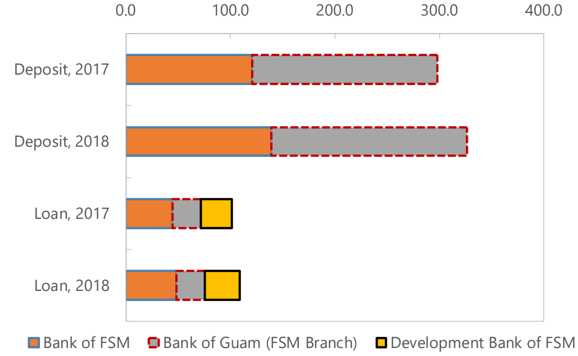
[7] The FSM has established and built up a fund called the Disaster Relief Fund, which allows quick post-disaster spending to save lives and protect public health and safety.

C. Strengthen Banking Sector Supervision

Background

28. Two commercial banks and a government-owned development bank dominate the FSM's financial sector. The Bank of FSM (BFSM), a domestic commercial bank, and a branch of the Bank of Guam have deposits totaling 90 percent of GDP. Private sector credit remains low, with the loan-to-deposit ratio at as low as 15 percent and the rest of deposits invested abroad. The FSM Development Bank (FSMDB), a non-deposit-taking and state-owned bank, accounts for 30 percent of total private sector credit. The FSMDB is funded mostly by capital contributed by the national government and retained earnings from the past.

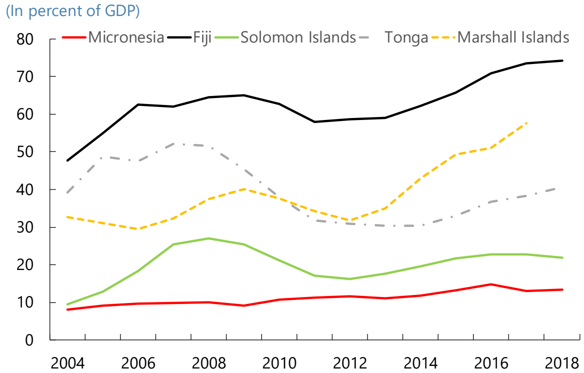
FSM: Deposits and Loans
(In millions of U.S. dollars)



Sources: Micronesian authorities; and IMF staff calculations.

29. The FSM has benefited from FDIC oversight on the banking sector. Deposits at the BFSM, accounting for about 40 percent of total deposits, are insured by the FDIC under the Compact Agreement, while the Bank of Guam is also FDIC insured. Regulated by the FDIC under the standards applicable for FDIC-insured banks, the BFSM is well capitalized, liquid, and profitable, and has avoided a loss of corresponding banking relationships.[8] The FSM is expected to lose access to the FDIC oversight unless the service agreement under the Compact Agreement providing for FDIC insurance is renewed.

Selected Pacific Island Economies: Credit to Private Sector
(In percent of GDP)



Sources: Micronesia authorities; and IMF staff calculations.

Staff's Views

30. Strengthening banking sector supervision is important to cope with a possible reduction in the FDIC oversight. The FSM Banking Board should upgrade the legal and regulatory framework for prudential supervision, strengthen monitoring of commercial banks, and develop a reform roadmap with actions needed to maintain financial sector stability and corresponding banking relationships. The first critical step would be upgrading the Banking Act to address various legislative gaps, including on fit and proper requirements, licensing criteria, and corrective and sanctioning powers. This effort will be supported by the IMF and PFTAC TA.

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[8] As of end-March 2019, the BFSM's tier-1 risk-based capital ratio was 40.4 percent, well above the average for FDIC-insured banks (19.7 percent).

31. Promoting private sector credit will need to follow a gradual process. The main bottleneck appears to be the lack of collateral due to the land tenure prohibiting non-FSM citizens from owning land.[9] This can be potentially resolved by using land lease as collateral, which has not been put into practice yet. Strengthening the business climate and enhancing financial literacy can help to create bankable projects in the private sector. The FSMDB has contributed to expanding private sector credit, with its lending growing by 15 percent annually over the last three years. Credit unions can also play a role, although their contribution would likely remain small. To ensure prudent lending, the FSMDB and credit unions should be placed under the supervision of the Banking Board.

Authorities' Views

32. The presence of the U.S. FDIC has served the authorities well in safeguarding the banking sector. They agreed that the FSM should strengthen its own capacity for banking supervision. Upgrading the Banking Act, with support from IMF TA, would be warranted to modernize the legal framework for prudential supervision and ensure the maintenance of corresponding banking relationships. This should be followed by developing prudential regulations and strengthening technical capacity of supervisors.

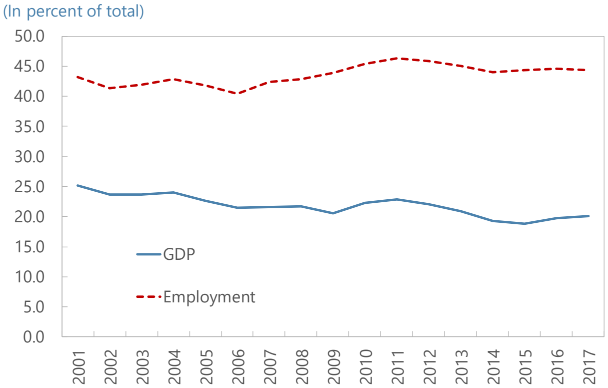
33. The FSMDB has played a key role in promoting private sector credit. Its recently developed scheme for loan guarantee will provide start-up businesses with access to finance. The authorities noted that expanding the oversight of the Banking Board to the FSMDB would be premature at this stage, as the FSMDB will remain profitable and fully funded by government capital and retained earnings. The Banking Board agreed that credit unions should be brought under its oversight.

D. Vitalize the Private Sector

Background

34. Vitalizing the FSM's weak private sector would require targeted structural reforms. The FSM's long-term economic growth has been the lowest among Pacific Island countries, reflecting the stagnant private sector accounting for only a quarter of economic activity. Private sector development has been constrained by the FSM's remoteness, small size, and geographical dispersion. Given capacity constraints, reforms should be targeted to those with maximum gains. Against this background, the Article IV consultation focused on how to improve the business and investment climate, streamline

FSM: Private Sector Share in GDP and Employment
(In percent of total)

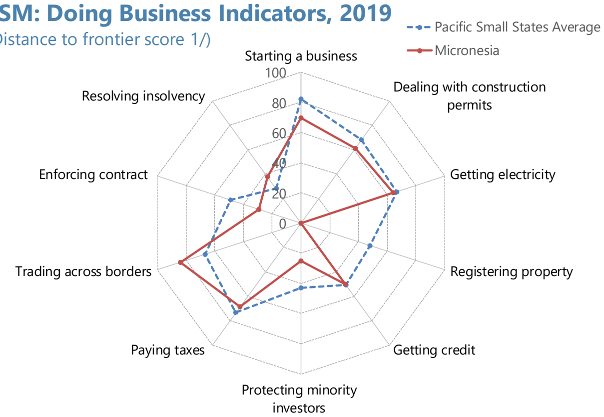


Sources: FSM authorities; and IMF staff calculations.

[9] Because Bank of Guam is a foreign bank and BFSM has minor foreign shareholding, the two banks are prohibited from owning land in the FSM.

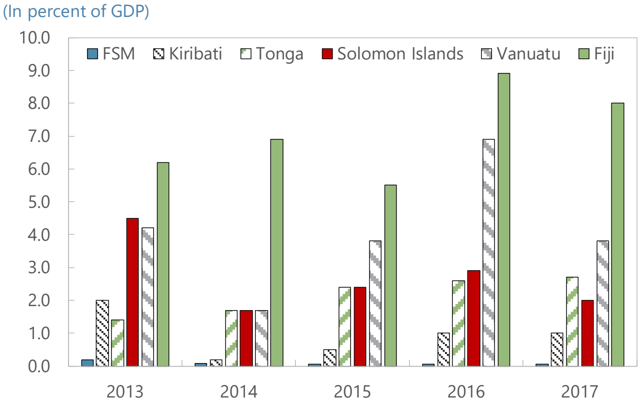
the foreign direct investment (FDI) regime, and promote private sector credit. These efforts should support ongoing and prospective sectoral reforms, targeted for information and communication technologies, fishery, maritime, energy, and sustainable niche tourism, with support from the World Bank and AsDB (Appendix V).

FSM: Doing Business Indicators, 2019
(Distance to frontier score 1/)



Source: World Bank.
1/ On a scale of 0 to 100; 100 is the frontier and 0 is the furthest from the frontier.

Selected Pacific Island Economies: FDI
(In percent of GDP)



Sources: Micronesian authorities; and IMF staff calculations.

Staff's Views

35. Improving the business and investment climate is critical for private sector development and stronger governance. The World Bank's Doing Business Indicators highlight the FSM's weaknesses in starting business, enforcing contracts, protecting investors, and registering property.[10] To address these obstacles, staff recommends lowering business license fees; reducing the time and cost for settling a commercial dispute; improving the quality of the judicial process; and making the land tenure management business-friendly through digitalizing the land registry.

36. Upgrading the FDI regime can foster private sector development. While FDI can generate employment and business opportunities domestically, it has been very low in the FSM compared with Pacific Island countries, likely reflecting the FSM's weak business and investment climate and complex state-specific FDI regimes. In addition to the efforts to make the FSM more business friendly, FDI should be promoted by clarifying the regime and reducing undue regulatory burdens. The Foreign Investment Act can be upgraded to harmonize FDI laws and regulations across states, expand the list of national priority sectors, streamline licensing processes, and establish a national single window.

Authorities' Views

37. Efforts to promote the private sector are underway. Improving the FSM's business and investment climate would require coordination with state governments—land registries are managed at state levels, for example. A bill to amend the Foreign Investment Act, aimed at

[10] The Doing Business Indicators for the FSM should be interpreted with caution, given reliance on a limited number of respondents and limited information availability for some states.

establishing a one stop shop for FDI applications and fast-track processing for priority sectors, is being prepared in consultation with state governments. Similarly, some state governments are embarking on judicial reforms for faster business dispute resolution.

E. Data Adequacy and Capacity Development

38. Data shortcomings continue to hamper macroeconomic surveillance. Staff welcomes that the FSM continues to implement the enhanced General Data Dissemination System. While the coverage of key macroeconomic data is broadly sufficient, they are not compiled in a timely manner. Resolving issues with tax data sharing between the Department of Finance and the Statistics Office, with support from the PFTAC, will be critical for improving the accuracy of national accounts.

39. Staff welcomes the authorities' interest in capacity building. Further capacity building on revenue administration, PFM, financial sector supervision, and macroeconomic are critical for addressing the FSM's challenges. While the modality of such TA should reflect the FSM's capacity constraints, strong ownership by the authorities would be key for advancing reforms.

Authorities' Views

40. The authorities looked forward to further assistance from the IMF and PFTAC on improving tax administration, bank supervision, and macro statistics. They would prefer hands-on TA tailored to the need of the FSM, with TA missions leaving tangible outputs that can be referenced by technical staff (e.g., manuals for tax administrators). Discussions are underway to resume tax data sharing between the Department of Finance and the Statistics Office, with due consideration on confidentiality for taxpayers.

STAFF APPRAISAL

41. The economy of the FSM has performed well in recent years. The FSM enjoyed output and employment growth higher than the historical average and low inflation owing to the use of the U.S. dollar as legal tender. The fiscal balance has recorded large surpluses since FY2017, with the external position assessed to be broadly consistent with fundamentals and desirable policies. Nonetheless, the FSM remains highly vulnerable to climate change and natural disasters, while private sector activity remains anemic. Looking forward, growth is projected to converge to a potential rate of 0.6 percent, in line with the performance over the last two decades.

42. Risks to the outlook are tilted to the downside. Unless the arrangements under the Compact Agreement providing for economic supports are renewed, the government is expected to lose access to the Compact grants and various services by 2023, resulting in substantial macroeconomic uncertainty. Now is the time for policy actions to reduce this uncertainty.

43. A gradual fiscal adjustment is warranted to cope with the expected fiscal cliff. The FSM remains at high-risk of debt distress, with the Compact grants set to expire under the current arrangement, putting debt on a rising path. A gradual fiscal adjustment of 4–5 percent of GDP through FY2023 would be needed to balance the budget in FY2024. Growth-friendly tax measures

and tax administration reforms, as well as rationalization of the wage bill and nonessential expenditures, would help protect spending on education, healthcare, and infrastructure. Continuing the prudent policy to save revenue windfalls will enable a further buildup of the FSMTF, strengthening fiscal resiliency.

44. The FSM's resilience to climate change can be strengthened by closing gaps in preparedness, speeding up adaptation, and developing a disaster resilience strategy. Developing an overarching adaptation plan that is fully integrated with sectoral and state-level strategies would help reduce the gaps in preparedness. Swift implementation of adaptation projects would require stronger public investment implementation capacity as well as further mobilization of grant financing and prioritization of projects. Making greater use of disaster risk transfer mechanisms including disaster insurance can help strengthen the government's ability to respond to natural disasters for post-2023.

45. The FSM's own capacity for banking sector supervision should be strengthened in view of the possible reduction in FDIC oversight in 2023. Efforts should be stepped up to update banking laws, adopt prudential banking regulations, and develop a reform roadmap to strengthen the Banking Board's supervision of commercial banks. The FSMDB and credit unions should be placed under the supervision of the Banking Board to ensure prudent lending.

46. Vitalizing the private sector is critical to shore up potential growth and navigate the FSM through the post-2023 uncertainty. The business and investment climate can be improved by lowering business startup costs, reducing time for settling disputes, digitalizing the land registry, and reducing undue regulatory burdens on FDI.

47. Further capacity building on revenue administration, PFM, financial sector supervision, and macroeconomic statistics are critical for addressing the FSM's challenges. The authorities' interest in TA in these areas is welcome. While the modality of TA should reflect capacity constraints, strong ownership by the authorities would be key for advancing reforms.

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

Box 1. Compact of Free Association Between the United States and the FSM

The original Compact of Free Association (Compact Agreement) between the United States and the FSM was signed in 1986.[1] The current Compact, amended in 2004, provides for the United States' responsibility for the security and defense of the FSM as well as the right of eligible FSM citizens to enter, study, and freely seek employment in the United States without visas. The Compact will remain effective unless it is terminated in accordance with the agreement. Under the Compact, the United States also provides the FSM with various economic supports until FY2023, including:

- Annual grants during FY2004–23 to support specific public services, including education, health, and infrastructure development (the so-called Compact sector grants).
- Annual contributions into the Compact Trust Fund during FY2004-23, aimed at building up revenue sources for post-FY2023 and supporting the FSM's budgetary self-reliance.
- Assistance for various public services, including special education; post-disaster relief and reconstruction by the Federal Emergency Management Agency (FEMA) and USAID; deposit insurance and supervisory oversight for the Bank of FSM by the Federal Deposit Insurance Corporation (FDIC); postal services; civil aviation safety; and weather monitoring and forecasting. These supports are set to expire in FY2023.[2]

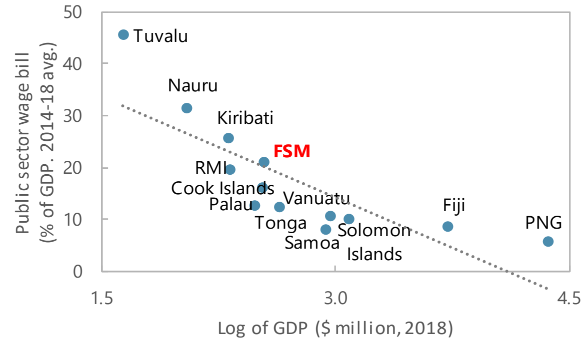
[1] The FSM became an independent nation after its constitution was ratified in 1978. Prior to this, the country was part of the U.N. Trust Territory of the Pacific Islands under the administrative control of the United States.

[2] For more detail, see the May 2018 report by U.S. Government Accountability Office (GAO-18-415).

Box 2. Improving the Efficiency of the Public Service in the FSM[1]

The public sector wage bill tends to be elevated in Pacific Island countries. The median ratio of the wage bill to GDP in the Pacific is about 13 percent, more than twice as large as the average for emerging market and developing economies. Possible reasons include: the minimum staffing requirements for a fully functioning government in small states can be disproportionately high; state-owned enterprises are prevalent due to structural impediments to private sector activity; and hiring in the public sector is used as a *de facto* social safety net.

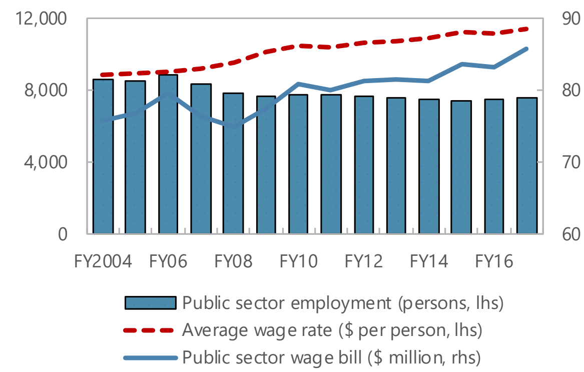
Pacific Island Countries: Public Sector Wage Bill, Latest Year Available



Sources: AsDB staff calculations.

The FSM's wage bill is high relative to its regional peers. Latest available estimates show that the ratio of public sector employment to total population in the FSM (7.5 percent) is slightly above the Pacific average (7.2 percent). However, public employment in the health and education sectors is low compared with the peers: the density of physicians is 0.6 per 1,000 population in the FSM, lower than the regional average of 0.8; and the student-to-teacher ratio is 39.3 in the FSM, while the regional average is 21.7.

FSM: Public Sector Wage Bill Dynamics



Sources: AsDB staff calculations.

Since 2004, the number of public sector employees (including state-owned enterprises) in the FSM has declined by about 0.9 percent annually but average wage rates per employee increased nearly 2.0 percent. Benchmarking against private sector counterparts reveals substantial wage premia for public sector employees and ample scope to raise productivity in the public service.

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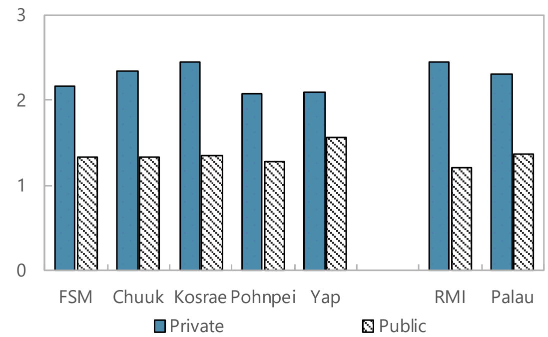
[1] Prepared by Rommel Rabanal (AsDB), based on AsDB reports and data on public sector reform in the FSM and the Pacific.

Box 2. Improving the Efficiency of the Public Service in the FSM (concluded)

Therefore, a combination of slower wage increases and reforms to enhance public sector efficiency can help promote longer-term fiscal sustainability.

Ratio of Output per Worker to Wage Rates, FY2004-17 Average

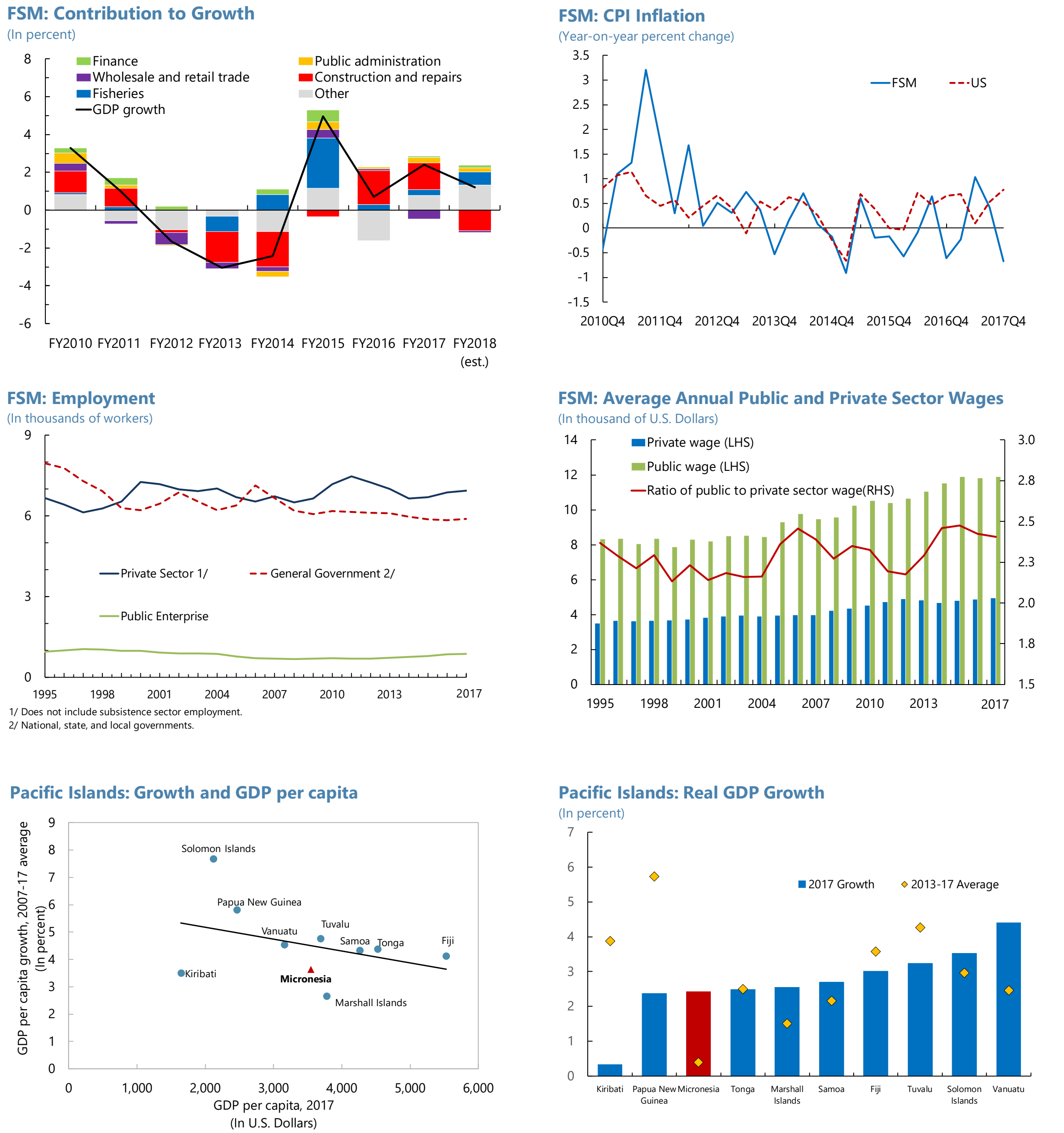


Sources: AsDB staff calculations.

Recent public administration reviews in the FSM, supported by Asian Development Bank (AsDB), have helped identify critical reforms to encourage better performance in national and state governments. Key recommendations include:

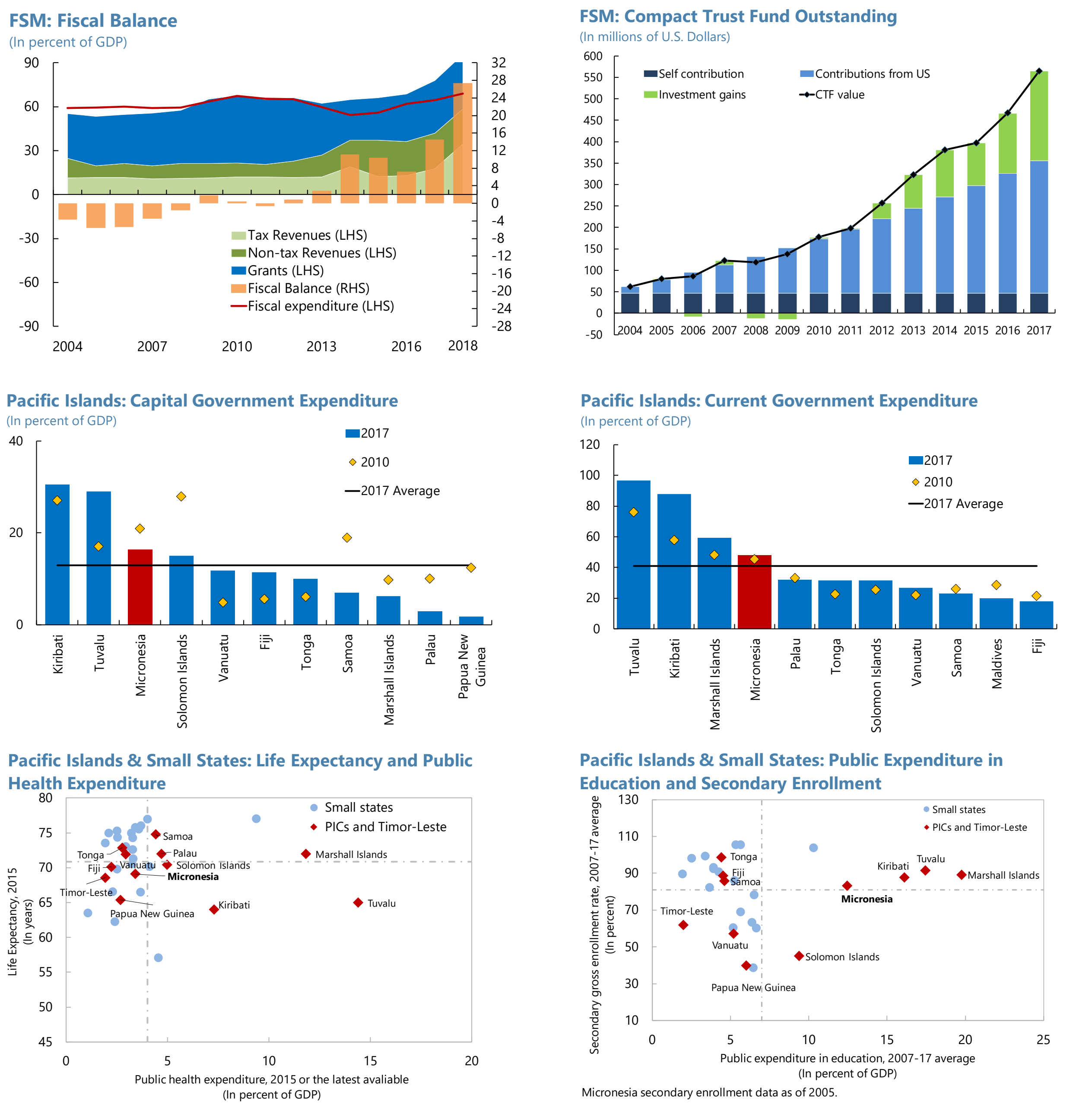
- **Simplifying job grading and pay structures.** Overlaps in job grading and pay structures have undermined incentives for good performance. A draft bill effectively simplifying the pay scale and levels for national government employees has been prepared by the national government.
- **Consolidating the public service system.** Special service contracts have been increasingly used to attract skilled personnel. Clear compensation advantages for contract personnel seem to have reduced incentives to perform among regular staff. Contract positions performing core civil service functions should be integrated into the regular public service under a reformed and unified compensation structure, while noncore positions can remain contracted out for limited durations.
- **Strengthening performance-based contracts for education and health.** The FSM Strategic Development Plan 2004–24 highlights the need for performance-based contracting (PBC) for teaching and health services personnel, but current arrangements are missing several critical components. A well-designed PBC framework requires a clear set of objectives and performance indicators, systems for collecting and validating data on these indicators, and appropriate incentives to motivate achievement of agreed upon goals and targets.

Figure 1. Federated States of Micronesia: Real Sector Developments



Sources: FSM authorities; IMF WEO database; and IMF staff estimates and calculations.

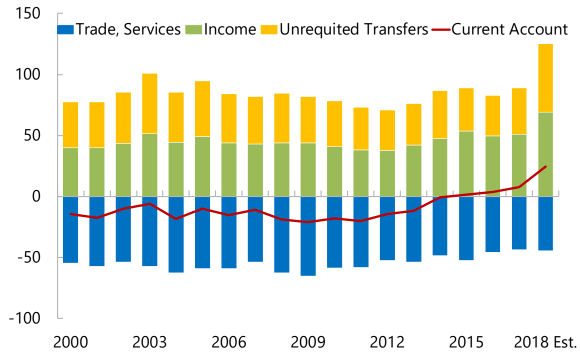
Figure 2. Federated States of Micronesia: Fiscal Developments



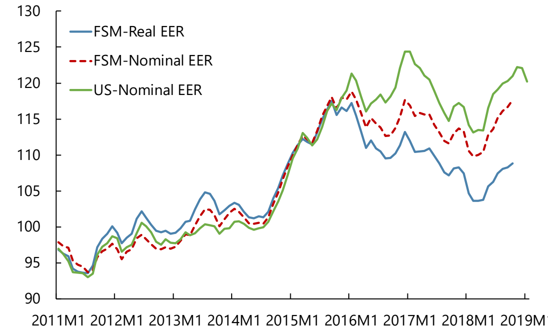
Sources: FSM authorities; World Bank WDI database; and IMF staff estimates and calculations.

Figure 3. Federated States of Micronesia: External and Credit Developments

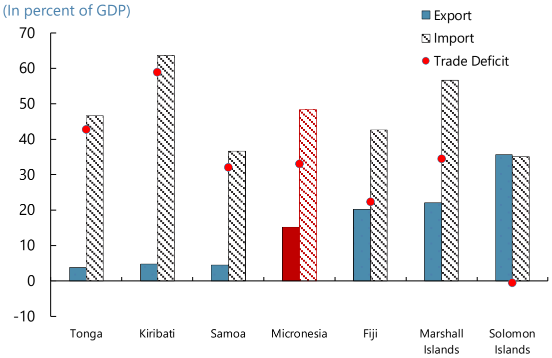
FSM: Balance of Payments
(In percent of GDP)



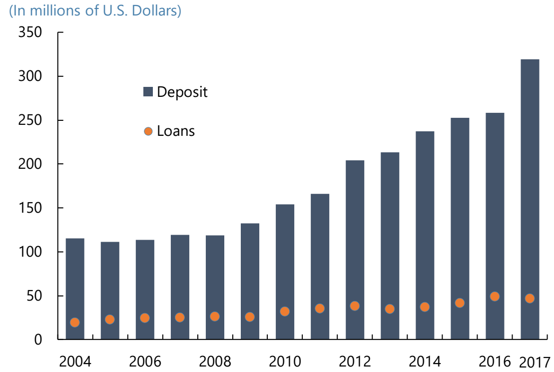
FSM: Effective Exchange Rate (EER)
(Index, 2010=100)



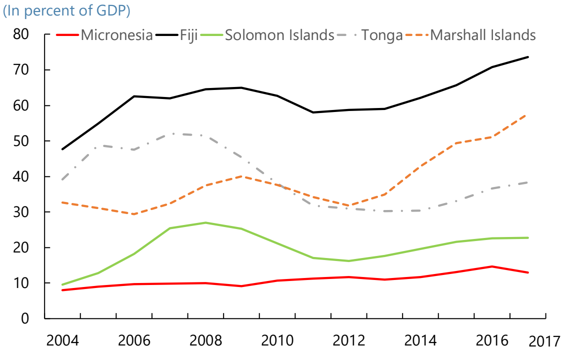
FSM: Trade Balance, 2017
(In percent of GDP)



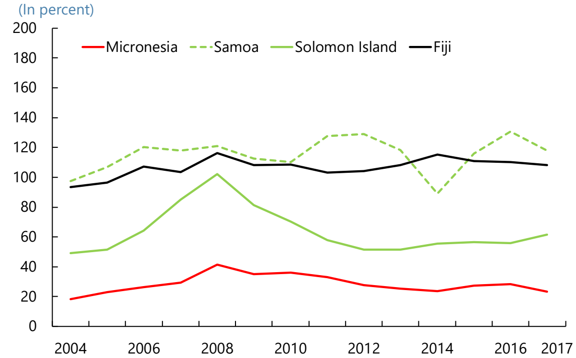
Commercial Bank Deposits vs. Loans
(In millions of U.S. Dollars)



Pacific Islands: Credit to Private Sector
(In percent of GDP)



Loan-to-Deposit Ratio
(In percent)



Sources: FSM authorities; IMF WEO database; and IMF staff estimates and calculations.

Table 1. Federated States of Micronesia: Selected Economic Indicators, FY2015–24 1/

Nominal GDP (FY2017):	US$363 million
Population (FY2017):	102,259
GDP per capita (FY2017):	US$3,549
IMF Quota:	SDR 5.1 million

	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
				Est.			Projections			
Real sector (annual percent change)										
Real GDP	5.0	0.7	2.4	1.2	1.4	0.8	0.7	0.6	0.6	0.6
Consumer prices	0.0	-0.9	0.1	1.5	1.8	2.0	2.0	2.0	2.0	2.0
Employment	0.1	2.1	1.5	1.0	0.8	0.2	0.1	0.0	0.0	0.0
Public (incl. public enterprises)	-1.0	0.8	0.9	...	...	...	...	...	...	...
Private	0.8	2.7	0.8	...	...	...	...	...	...	...
Nominal wages	2.9	-0.9	2.3	...	...	...	...	...	...	...
Public average wage/private average wage	2.2	2.2	2.2	...	...	...	...	...	...	...
Consolidated government finance (in percent of GDP)										
Revenue and grants	66.3	69.1	79.0	96.4	87.6	72.4	71.2	67.8	66.7	57.1
Revenue	37.1	35.9	41.7	58.2	48.9	35.7	35.2	34.7	34.3	45.1
Tax revenue	12.4	12.9	17.6	34.7	25.8	13.1	13.1	13.1	13.1	13.1
of which: corporate income tax	1.3	1.8	6.3	22.7	14.2	1.6	1.6	1.6	1.6	1.6
Non-tax revenue	24.7	23.0	24.1	23.5	23.1	22.6	22.1	21.6	21.2	32.0
of which: Fishing license fees	20.7	19.1	20.0	19.4	19.0	18.5	18.0	17.5	17.1	16.6
Grants 2/	29.3	33.2	37.3	38.2	38.8	36.7	36.0	33.0	32.5	12.0
Expenditure	55.9	61.8	64.4	69.1	68.7	65.7	64.8	62.3	62.3	61.7
Expense	48.7	49.3	48.0	51.2	49.7	48.2	47.4	47.4	47.4	47.4
Net acquisition of nonfinancial assets	7.3	12.6	16.4	17.9	19.0	17.5	17.4	15.0	14.9	14.4
Net lending/borrowing	10.4	7.3	14.6	27.3	19.0	6.7	6.4	5.4	4.4	-4.6
Net lending/borrowing (excl. grants)	-18.9	-25.9	-22.7	-10.9	-19.8	-30.1	-29.6	-27.6	-28.0	-16.6
Balance of trust funds 3/	145.4	165.6	187.4	224.9	246.5	264.4	282.7	301.9	321.6	317.8
Commercial banks (in percentage of GDP; end of period)										
Loans	13.2	14.7	12.9	13.1	13.3	13.5	13.7	13.9	14.1	14.3
Deposits	80.3	77.9	88.1	88.2	88.3	88.4	88.5	88.6	88.7	88.8
Interest rates (in percent, average for FY)										
Consumer loans	15.7	15.7	15.7	...	...	...	...	...	...	...
Commercial loans	6.8	7.8	7.6	...	...	...	...	...	...	...
Balance of payments (in millions of U.S. dollars)										
Trade balance	-127.9	-110.3	-120.2	-127.0	-132.7	-131.7	-134.1	-129.0	-131.5	-132.8
Net services and income	22.5	13.6	9.7	8.8	8.2	7.4	6.9	6.2	5.5	54.1
Private and official transfers	110.3	109.6	137.9	209.3	184.2	134.6	137.0	132.4	134.9	60.3
Current account	4.9	12.9	27.3	91.0	59.7	10.3	9.7	9.6	8.9	-18.3
(in percent of GDP)	1.6	3.9	7.5	24.5	15.7	2.6	2.4	2.3	2.1	-4.2
External debt (in millions of U.S. dollars; end of period)										
Outstanding stock	81.1	80.4	80.4	75.4	70.4	65.2	61.4	57.5	53.7	70.0
(in percent of GDP)	25.7	24.3	22.1	20.3	18.5	16.7	15.3	13.9	12.7	16.1
Memorandum items:										
Exchange rate regime					U.S. dollar is the official currency					
Real effective exchange rate 4/	109.9	114.3	114.1	113.0	...	...	...	...	...	...
Nominal GDP (in millions of U.S. dollars)	315.1	331.4	362.9	371.9	380.9	391.3	402.1	412.6	423.4	434.4

Sources: FSM authorities and IMF staff estimates and calculations.
1/ Fiscal year ends on September 30.
2/ Excludes contributions to the Compact Trust Fund.
3/ Compact Trust Fund and FSM Trust Fund.
4/ Calendar year. 2010=100.

Table 2a. Federated States of Micronesia: General Government Operations, FY2015–24 1/

(In millions of U.S. dollars)

	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
				Est.			Projections			
Revenue	**209.0**	**229.0**	**286.7**	**358.5**	**333.8**	**283.2**	**286.1**	**279.5**	**282.5**	**248.2**
Tax revenue	39.0	42.7	64.0	129.0	98.3	51.2	52.6	54.0	55.4	56.9
Wage and salary tax	8.2	8.5	8.9	9.2	9.5	9.8	10.1	10.3	10.6	10.9
Gross revenue tax	17.4	17.8	19.5	21.7	20.4	21.0	21.6	22.1	22.7	23.3
Corporate Tax	4.1	6.0	22.7	84.5	54.1	6.2	6.3	6.5	6.7	6.8
Import taxes	9.0	10.1	12.5	13.1	13.7	13.8	14.2	14.5	14.9	15.3
Other taxes	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Grants 2/	92.2	110.0	135.2	142.0	147.6	143.7	144.7	136.3	137.4	52.3
Current	79.2	85.9	108.4	115.1	119.8	114.9	115.0	105.6	105.7	26.6
U.S. Compact sector grants	62.4	60.7	67.5	67.5	67.5	67.5	67.5	67.5	67.5	0.0
Other U.S. grants	15.2	16.2	17.1	17.2	17.3	17.4	17.5	17.6	17.7	5.6
Other	1.6	9.0	23.8	30.4	35.0	30.0	30.0	20.5	20.5	21.0
Capital	11.9	21.6	22.5	23.2	24.0	24.9	25.8	26.6	27.5	21.3
U.S. Compact sector grants	7.3	7.2	5.2	5.7	6.2	6.7	7.2	7.7	8.2	8.2
Other U.S. grants	4.6	14.4	17.3	17.6	17.9	18.2	18.6	19.0	19.3	13.1
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	1.1	2.5	4.4	3.7	3.8	3.9	4.0	4.1	4.2	4.3
Non-tax revenue	77.8	76.4	87.5	87.5	87.9	88.3	88.8	89.2	89.6	139.0
Fishing license fees	65.2	63.4	72.6	72.3	72.3	72.3	72.3	72.3	72.3	72.3
Dividend and interest income	0.3	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
Other nontax revenues	12.3	12.6	14.4	14.7	15.1	15.5	15.9	16.3	16.7	66.1
Distributions from trust funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.9
Other	12.3	12.6	14.4	14.7	15.1	15.5	15.9	16.3	16.7	17.2
Expenditure	**176.3**	**204.9**	**233.7**	**256.9**	**261.6**	**257.2**	**260.5**	**257.2**	**263.7**	**268.2**
Expense	153.4	163.3	174.4	190.4	189.3	188.6	190.5	195.5	200.6	205.8
Wages and salaries	69.8	69.8	73.7	76.4	78.2	80.4	82.6	84.8	87.0	89.3
Purchases of goods and services	67.8	75.6	86.6	99.6	96.3	93.1	92.4	94.8	97.3	99.9
Interest payments	1.1	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Subsidies	0.3	0.3	1.3	1.4	1.4	1.4	1.5	1.5	1.6	1.6
Grants	6.1	9.8	4.2	4.3	4.4	4.5	4.7	4.8	4.9	5.0
Other expenses	8.3	6.8	7.6	7.8	8.0	8.2	8.5	8.7	8.9	9.1
Net acquisition of nonfinancial assets	22.9	41.6	59.4	66.5	72.3	68.6	70.0	61.8	63.1	62.4
Gross operating balance	55.6	65.7	112.3	168.1	144.5	94.6	95.6	84.1	81.9	42.4
Net lending/borrowing	**32.7**	**24.1**	**53.0**	**101.6**	**72.2**	**26.0**	**25.7**	**22.3**	**18.8**	**-20.0**
Memorandum items:										
U.S. Compact sector grants	69.7	67.8	72.6	73.1	73.6	74.1	74.6	75.1	75.6	8.2
Other U.S. grants	19.8	30.6	34.4	34.8	35.2	35.6	36.1	36.6	37.1	18.7
Net lending/borrowing excluding:										
Total grants	-59.5	-85.9	-82.2	-40.4	-75.4	-117.6	-119.1	-114.0	-118.6	-72.3
U.S. grants	-56.8	-74.3	-54.1	-6.3	-36.6	-83.7	-85.0	-89.4	-93.9	-46.9
Balance of trust funds	458.2	548.7	680.0	836.2	938.8	1,034.5	1,136.6	1,245.5	1,361.5	1,380.6
Compact Trust Fund	397.3	466.9	565.0	624.2	677.2	744.9	817.5	895.4	978.9	978.9
FSM Trust Fund	60.9	81.8	115.0	212.0	261.6	289.7	319.2	350.1	382.6	401.8
Nominal GDP	315.1	331.4	362.9	371.9	380.9	391.3	402.1	412.6	423.4	434.4

Sources: FSM authorities and IMF staff estimates and calculations.

1/ Fiscal year ending September. The consolidated fiscal accounts cover the national and four state governments.

2/ Excludes contributions to the Compact Trust Fund.

Table 2b. Federated States of Micronesia: General Government Operations, FY2015–24 1/

(In percent of GDP)

	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
				Est.			Projections			
Revenue	**66.3**	**69.1**	**79.0**	**96.4**	**87.6**	**72.4**	**71.2**	**67.8**	**66.7**	**57.1**
Tax revenue	12.4	12.9	17.6	34.7	25.8	13.1	13.1	13.1	13.1	13.1
Wage and salary tax	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Gross revenue tax	5.5	5.4	5.4	5.8	5.4	5.4	5.4	5.4	5.4	5.4
Corporate Tax	1.3	1.8	6.3	22.7	14.2	1.6	1.6	1.6	1.6	1.6
Import taxes	2.9	3.0	3.4	3.5	3.6	3.5	3.5	3.5	3.5	3.5
Other taxes	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Grants 2/	29.3	33.2	37.3	38.2	38.8	36.7	36.0	33.0	32.5	12.0
Current	25.1	25.9	29.9	30.9	31.4	29.4	28.6	25.6	25.0	6.1
U.S. Compact sector grants	19.8	18.3	18.6	18.1	17.7	17.2	16.8	16.4	15.9	0.0
Other U.S. grants	4.8	4.9	4.7	4.6	4.5	4.4	4.4	4.3	4.2	1.3
Other	0.5	2.7	6.6	8.2	9.2	7.7	7.5	5.0	4.8	4.8
Capital	3.8	6.5	6.2	6.2	6.3	6.4	6.4	6.5	6.5	4.9
U.S. Compact sector grants	2.3	2.2	1.4	1.5	1.6	1.7	1.8	1.9	1.9	1.9
Other U.S. grants	1.5	4.4	4.8	4.7	4.7	4.7	4.6	4.6	4.6	3.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.4	0.8	1.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Non-tax revenue	24.7	23.0	24.1	23.5	23.1	22.6	22.1	21.6	21.2	32.0
Fishing license fees	20.7	19.1	20.0	19.4	19.0	18.5	18.0	17.5	17.1	16.6
Dividend and interest income	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other nontax revenues	3.9	3.8	4.0	4.0	4.0	4.0	4.0	4.0	4.0	15.2
Distributions from trust funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.3
Other	3.9	3.8	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Expenditure	**55.9**	**61.8**	**64.4**	**69.1**	**68.7**	**65.7**	**64.8**	**62.3**	**62.3**	**61.7**
Expense	48.7	49.3	48.0	51.2	49.7	48.2	47.4	47.4	47.4	47.4
Wages and salaries	22.2	21.1	20.3	20.5	20.5	20.5	20.5	20.5	20.5	20.5
Purchases of goods and services	21.5	22.8	23.9	26.8	25.3	23.8	23.0	23.0	23.0	23.0
Interest payments	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Subsidies	0.1	0.1	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Grants	1.9	3.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Other expenses	2.6	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Net acquisition of nonfinancial assets	7.3	12.6	16.4	17.9	19.0	17.5	17.4	15.0	14.9	14.4
Gross operating balance	17.6	19.8	31.0	45.2	37.9	24.2	23.8	20.4	19.3	9.8
Net lending/borrowing	**10.4**	**7.3**	**14.6**	**27.3**	**19.0**	**6.7**	**6.4**	**5.4**	**4.4**	**-4.6**
Memorandum items:										
U.S. Compact sector grants	22.1	20.5	20.0	19.7	19.3	18.9	18.6	18.2	17.9	1.9
Other U.S. grants	6.3	9.2	9.5	9.4	9.2	9.1	9.0	8.9	8.8	4.3
Net lending/borrowing excluding:										
Total grants	-18.9	-25.9	-22.7	-10.9	-19.8	-30.1	-29.6	-27.6	-28.0	-16.6
U.S. grants	-18.0	-22.4	-14.9	-1.7	-9.6	-21.4	-21.2	-21.7	-22.2	-10.8
Balance of trust funds	145.4	165.6	187.4	224.9	246.5	264.4	282.7	301.9	321.6	317.8
Compact Trust Fund	126.1	140.9	155.7	167.9	177.8	190.4	203.3	217.0	231.2	225.3
FSM Trust Fund	19.3	24.7	31.7	57.0	68.7	74.0	79.4	84.9	90.4	92.5

Sources: FSM authorities and IMF staff estimates and calculations.
1/ Fiscal year ending September. The consolidated fiscal accounts cover the national and four state governments.
2/ Excludes contributions to the Compact Trust Fund.

Table 3. Federated States of Micronesia: Balance of Payments, FY2015–24

	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
				Est.	Projections					
	(In millions of U.S. dollars)									
Current account balance	4.9	12.9	27.3	91.0	59.7	10.3	9.7	9.6	8.9	-18.3
Trade balance	-127.9	-110.3	-120.2	-127.0	-132.7	-131.7	-134.1	-129.0	-131.5	-132.8
Exports, f.o.b.	39.9	49.7	55.2	57.3	59.9	62.3	64.8	66.9	69.0	70.8
Imports, f.o.b.	167.7	160.0	175.4	184.3	192.6	194.0	198.9	195.9	200.5	203.6
of which: petroleum products	45.7	43.6	47.8	49.0	50.2	51.6	53.0	54.4	55.8	57.3
Services account	-36.8	-41.2	-37.5	-38.4	-39.3	-40.4	-41.5	-42.6	-43.7	-44.4
Receipts	43.0	42.1	54.4	55.8	57.1	58.7	60.3	61.9	63.5	65.1
of which: travel	30.9	29.1	30.5	31.3	32.0	32.9	33.8	34.7	35.6	36.6
Payments	79.9	83.3	92.0	94.1	96.4	99.1	101.8	104.5	107.2	109.6
of which: freight and insurance	24.9	26.3	28.8	29.6	30.3	31.1	32.0	32.8	33.6	34.5
of which: transportation 1/	17.4	18.3	20.0	20.5	21.0	21.6	22.2	22.8	23.4	24.0
Income, net	59.4	54.8	47.2	47.1	47.5	47.8	48.4	48.8	49.2	98.6
Receipts	73.2	72.1	78.7	78.8	79.0	79.3	79.5	79.8	80.1	129.3
of which: fishing license fees	65.1	63.2	72.5	72.3	72.3	72.3	72.3	72.3	72.3	72.3
Payments	13.8	17.4	31.5	31.6	31.5	31.4	31.1	31.0	30.9	30.8
of which: foreign workers earnings	4.2	5.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
Transfers	110.3	109.6	137.9	209.3	184.2	134.6	137.0	132.4	134.9	60.3
Private	10.7	13.4	31.1	94.3	65.4	19.1	21.0	23.0	25.1	26.2
Inflows 2/	27.2	30.1	48.2	111.4	82.5	36.2	38.1	40.1	42.2	43.3
Outflows	16.6	16.7	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1
Official	99.6	96.2	106.7	115.0	118.8	115.5	115.9	109.4	109.8	34.2
US Compact	62.4	60.7	67.5	67.5	67.5	67.5	67.5	67.5	67.5	0.0
Other	37.2	35.5	39.3	47.5	51.3	48.0	48.5	41.9	42.3	34.2
Capital account balance	30.9	32.4	23.1	28.0	29.8	30.4	31.8	32.6	34.2	34.2
Capital inflow	30.9	32.4	23.1	28.0	29.8	30.4	31.8	32.6	34.2	34.2
Compact Capital grants	7.3	7.2	5.2	5.7	6.2	6.7	7.2	7.7	8.2	8.2
Other	23.6	25.3	17.9	22.4	23.6	23.7	24.7	25.0	26.0	26.0
Financial account balance	47.4	26.7	57.9	119.1	89.4	40.7	41.5	42.2	43.1	15.9
Direct Investment (net)	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3
Portfolio investment (net)	40.7	-3.3	15.6	83.4	53.6	7.2	8.3	4.8	1.3	-37.6
Other investment (net)	6.9	30.1	42.5	35.9	36.0	33.8	33.5	37.7	42.0	53.8
Errors and Omissions	11.6	-18.7	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	(In percent of GDP)									
Current account balance	1.6	3.9	7.5	24.5	15.7	2.6	2.4	2.3	2.1	-4.2
Trade balance	-40.6	-33.3	-33.1	-34.2	-34.9	-33.7	-33.4	-31.3	-31.1	-30.6
Exports	12.7	15.0	15.2	15.4	15.7	15.9	16.1	16.2	16.3	16.3
Imports	53.2	48.3	48.3	49.6	50.6	49.6	49.5	47.5	47.4	46.9
Service	-11.7	-12.4	-10.3	-10.3	-10.3	-10.3	-10.3	-10.3	-10.3	-10.2
Income (net)	18.8	16.5	13.0	12.7	12.5	12.2	12.0	11.8	11.6	22.7
Receipts	23.2	21.8	21.7	21.2	20.7	20.3	19.8	19.3	18.9	29.8
of which: fishing license fees	20.7	19.1	20.0	19.4	19.0	18.5	18.0	17.5	17.1	16.6
Payments	4.4	5.2	8.7	8.5	8.3	8.0	7.7	7.5	7.3	7.1
Transfers	35.0	33.1	38.0	56.3	48.4	34.4	34.1	32.1	31.9	13.9
Private 2/	3.4	4.1	8.6	25.4	17.2	4.9	5.2	5.6	5.9	6.0
Official	31.6	29.0	29.4	30.9	31.2	29.5	28.8	26.5	25.9	7.9
Capital account balance	9.8	9.8	6.4	7.5	7.8	7.8	7.9	7.9	8.1	7.9
Capital grants	9.8	9.8	6.4	7.5	7.8	7.8	7.9	7.9	8.1	7.9
of which Compact capital grants	2.3	2.2	1.4	1.5	1.6	1.7	1.8	1.9	1.9	1.9
Financial account balance	15.0	8.1	16.0	32.0	23.5	10.4	10.3	10.2	10.2	3.7
Direct investment (net)	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Portfolio investment (net)	12.9	-1.0	4.3	22.4	14.1	1.8	2.1	1.2	0.3	-8.7
Other investment (net)	2.2	9.1	11.7	9.6	9.5	8.6	8.3	9.1	9.9	12.4
Errors and omissions	3.7	-5.6	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Sources: FSM authorities and IMF staff estimates and calculations.
1/ Refers to passenger services transportation.
2/ Includes household remittance and corporate tax on income from abroad.

Table 4. Federated States of Micronesia: Deposit Money Banks, FY2013–17
(In millions of U.S. dollars, unless otherwise noted)

	FY2013	FY2014	FY2015	FY2016	FY2017
Assets and liabilities					
Assets	237.7	262.9	281.1	288.4	351.2
Foreign assets 1/	193.8	218.0	231.2	231.1	295.6
Claims on private sector	34.9	37.3	41.5	48.8	47.0
Consumer loans	24.6	27.4	31.1	35.3	34.5
Commercial loans	10.3	9.9	10.3	13.5	12.5
Claims on the public sector	1.5	0.1	0.8	0.8	0.7
Others assets	7.5	7.5	7.6	7.6	7.9
Liabilities	237.7	262.9	281.1	288.4	351.2
Deposits	213.2	237.3	253.0	258.3	319.6
Of which: national government	63.7	34.0	57.9	62.2	60.2
Capital accounts	18.0	18.9	20.5	21.9	23.3
Other liabilities	6.5	6.8	7.6	8.2	8.3
Memorandum items:					
Loan/deposit ratio (in percent)	16.4	15.7	16.4	18.9	14.7
Deposits (percent change)	4.3	11.3	6.6	2.1	23.7
Loans (percent change)	-8.1	6.8	11.2	17.7	-3.8
Interest rates (percent) 2/					
Deposit rates					
Savings deposits 3/	0.6	0.5	0.3	0.2	0.2
CDs	0.4	0.5	0.6	0.4	0.4
Time Deposits	0.8	0.6	0.6	0.4	0.4
Loans rates 4/					
Consumer loans	15.7	15.7	15.7	15.7	15.7
Commercial loans	6.4	6.4	6.8	7.8	7.6

Sources: FSM authorities and IMF staff estimates and calculations.

1/ Includes loans to abroad.

2/ Calendar year average.

3/ Average rates offered by the deposit money banks.

4/ Average rates charged by the deposit money banks.

Table 5. Federated States of Micronesia: Vulnerability Indicators, FY2015–19

	FY2015	FY2016	FY2017	FY2018 Est.	FY2019 Proj.
Deposit money banks					
Deposits (in percent of GDP)	80.3	77.9	88.1	…	…
Deposits (Year-on-year percent change)	6.6	2.1	23.7	…	…
Loans (in percent of GDP)	13.2	14.7	12.9	…	…
Loans (Year-on-year percent change)	11.2	17.7	-3.8	…	…
Loan to deposit ratio (in percent)	16.4	18.9	14.7	…	…
Foreign assets (in percent of GDP)	73.4	69.7	81.5	…	…
Equity capital (in percent of total asset)	7.3	7.6	6.6	…	…
FSM Development Bank					
Loans (in percent of GDP)	7.9	8.4	9.0	…	…
External indicators					
Exports (goods & services, y/y percent change)	-0.4	10.8	19.4	3.1	3.5
Imports (goods & services, y/y percent change)	4.6	-1.7	9.9	4.1	3.8
Current account balance (percent of GDP)					
Including official transfers	1.6	3.9	7.5	24.5	15.7
Excluding official transfers	-30.1	-25.1	-21.9	-6.4	-15.5
Total external debt					
In millions of U.S. dollars	81.1	80.4	80.4	75.4	70.4
In percent of exports of goods and services	97.8	87.5	73.3	66.7	60.2
In percent of GDP	25.7	24.3	22.1	20.3	18.5
Debt service					
In millions of U.S. dollars	7.4	6.7	6.4	6.6	6.8
In percent of exports of goods and services	8.9	7.3	5.8	5.8	5.8
In percent of GDP	2.3	2.0	1.8	1.8	1.8

Sources: FSM authorities and IMF staff estimates and calculations.

Table 6. Federated States of Micronesia: Financial Soundness Indicators, FY2013–17
(In percent)

	FY2013	FY2014	FY2015	FY2016	FY2017
Capital adequacy					
Regulatory capital to risk-weighted assets	36.5	37.7	27.9	24.0	37.0
Regulatory tier 1 capital to risk-weighted assets	36.5	37.7	27.9	24.0	37.0
NPL net of provisions to capital 1/	0.9	6.1	-2.0	-0.9	-6.0
Asset quality					
NPL to total loans ratio 1/	3.5	4.9	2.1	2.0	1.0
Sectoral distribution of loans					
Residents	67.3	66.2	61.4	69.0	64.0
Deposit-takers	0.0	0.0	0.0	0.0	0.0
Central bank	0.0	0.0	0.0	0.0	0.0
Other financial corporations	0.0	0.0	0.0	0.0	0.0
General government	0.0	0.0	0.0	0.0	0.0
Non-financial public corporations	2.7	0.2	1.2	1.0	1.0
Other domestic sectors	64.6	66.0	60.2	68.0	63.0
Non-residents	32.7	33.8	38.6	31.0	36.0
Earnings and profitability					
Return on assets	0.6	0.6	0.8	1.0	1.0
Return on equity	7.2	7.7	10.5	15.0	14.0
Interest margin to gross loans	8.0	8.0	7.2	8.6	9.7
Interest margin to gross income	79.6	80.2	79.2	83.0	84.0
Non-interest expenses to gross income	78.6	77.1	70.5	63.0	55.0
Personnel expenses to non-interest expenses	47.3	47.5	47.1	45.0	48.0
Liquidity					
Liquid assets to total assets	64.3	66.3	62.7	65.0	67.0
Liquid assets to short-term liabilities	331.9	304.3	257.4	254.0	240.0
Loan to deposit ratio	16.4	15.7	16.4	18.9	14.7
Other					
Capital-to-total assets	7.4	6.9	6.7	6.0	6.0
Risk-weighted assets to total assets	20.4	18.3	24.2	25.5	17.3

Sources: IMF, Financial Soundness Indicators (FSI) database; and IMF staff estimates and calculations.
1/ NPL=Non-performing loans.

Table 7. Federated States of Micronesia: Progress with Sustainable Development Goals

Goals	2005	Latest	Year of latest data
Poverty 1/			
Income share held by lowest 20%	5.6	5.5	2013
Poverty gap at $1.90 a day (2011 PPP) (%)	1.6	5.5	2013
Poverty headcount ratio at $1.90 a day (2011 PPP) (% of population)	8.1	15.4	2013
Poverty headcount ratio at national poverty lines (% of population)	29.9	41.2	2013
Hunger	…	…	…
Good Health and Well-being			
Births attended by skilled health staff (% of total)	82.7	100.0	2009
Mortality rate, under-5 (per 1,000 live births)	47.0	33.1	2016
Mortality rate, neonatal (per 1,000 live births)	22.9	17.2	2016
Adolescent fertility rate (births per 1,000 women ages 15-19)	29.0	14.9	2016
Education			
Government expenditure on education, total (% of GDP) 2/	6.7	12.5	2015
Gender Equality			
Proportion of seats held by women in national parliaments (%)	0.0	0.0	2016
Clean Water and Sanitation			
People using basic drinking water services (% of population)	90.8	88.4	2015
People using basic sanitation services (% of population) 3/	56.2	56.3	2014
Affordable and Clean Energy			
Access to electricity (% of population)	55.2	75.4	2016
Access to clean fuels and technologies for cooking (% of population)	11.2	12.0	2016
Decent Work and Economic Growth			
GDP per capita growth (annual %)	2.4	2.6	2017
Commercial bank branches (per 100,000 adults)	12.3	14.3	2016
Automated teller machines (ATMs) (per 100,000 adults)	3.1	14.3	2016
Industry, innovation, and infrastructure			
Manufacturing, value added (annual % growth)	-60.6	40.5	2016
Mobile cellular subscriptions (per 100 people)	13.3	22.3	2016
Reduced Inequalities			
GINI index (World Bank estimate)	42.4	40.1	2013
Global Partnerships for the Sustainable Development			
Fixed broadband subscriptions (per 100 people)	0.0	3.6	2017
Individuals using the Internet (% of population)	11.9	33.4	2016

Sources: UN, *SDG Indicators Global Database* ; World Bank, *World Development Indicators; IMF, Financial Access Survey.*

Green highlight indicates improvements, orange highlight indicates worsening, and grey highlight indicates no data is available.

1/ Comparability of poverty indicators between 2005 and latest data is limited due to metrological changes in household surveys.

2/ 2005 data as of 2000.

3/ 2005 data as of 2006.

Appendix I. Main Recommendations of the 2017 Article IV Consultation

Fund Recommendations	**Policy Actions**
Fiscal policy	
Implement a gradual medium-term fiscal adjustment through domestic revenue mobilization, expenditure reforms, and higher trust fund savings, in line with the authorities' 2023 Action Plan.	The authorities have contributed to the FSMTF beyond their commitment in the 2023 Action Plan, with substantial revenue windfalls in FY2017–18 saved in the trust fund. However, little progress has been made on revenue mobilization and expenditure rationalization.
Eliminate the deficit of, and budget transfer to, the Social Security Fund (SSF), which could be achieved by rationalizing dependency benefits.	Benefit payments remained above contributions by 0.5 percent of GDP in FY2017. Following an actuarial study, the government submitted to Congress a bill to introduce parametric reforms with a view to improve the sustainability of the SSF. The bill has not been passed yet.
Implement PFM reforms by acquiring a revenue management system, improving budgeting of multiyear capital projects, implementing Public Expenditure and Financial Accountability Assessments (PEFA) for states, and undertaking Public Investment Management Assessment (PIMA).	The authorities adopted a PFM reform roadmap for 2017–20. With support from the World Bank, preparation is underway for IT systems on tax administration and PFM, covering national and state governments, with tender processes starting soon. A focused PIMA was conducted in the context of the Climate Change Policy Assessment.
Undertake external review of the FSMTF.	Financial statements for the FSMTF have been prepared and audited, but external review of the FSMTF has not been done.
Continue efforts to adapt to climate change, including explicit recognition of fiscal costs in the budget.	Recent progress includes establishment of the Department of Environment, Climate Change, and Emergency Management to oversee climate change efforts. Projects for climate change adaptation financed by development partners remain excluded from the budget.
Structural reforms, financial sector supervision, and statistics	
Improve access to finance.	Credit by the two commercial banks remain directed mostly toward consumer loans due to the lack of collateral. The government-owned FSM Development Bank expanded its loan portfolio by 15 percent annual in the last 3 years.

Fund Recommendations	**Policy Actions**
Structural reforms, financial sector supervision, and statistics	
Reduce transportation costs through port upgrades and renewable energy.	With assistance from bilateral and multilateral donors, renewable energy projects are being implemented across all states. Once completed, these projects can lower the cost of electricity and enhance access to electricity. On the maritime sector, the authorities have focused on upgrading terminal buildings and facilities and port planning to improve safety and efficiency, with support from the World Bank.
Strengthen regulatory frameworks, including through streamlining the foreign direct investment process.	A bill to amend the Foreign Investment Act to streamline the FDI process and establish a one-stop shop for FDI applications is under preparation in consultation with state governments.
Increase oversight of credit unions by the Banking Board to promote safe financial inclusion.	The draft legislation of Credit Union Act, aimed at expanding the supervisory oversight of the Banking Board to credit unions, is under preparation.
Improve national accounts and external sector statistics with a view to improve their coverage and timeliness.	Efforts to improve these statistics are underway with support from PFTAC, but progress remains slow.

Appendix II. External Sector Assessment

The FSM's external position is assessed to be broadly consistent with the level implied by fundamentals and desirable policies. However, these results should be interpreted with caution, given the FSM's heavy dependence on grants and fishing license fees, which can be volatile. If economic supports under the Compact Agreement with the United States are not renewed after its expiration in September 2023, avoiding a future worsening of the current account position would require a gradual fiscal adjustment.

1. External position. The current account balance has improved over recent years, turning from a deficit of 12 percent of GDP in FY2013 to an estimated surplus of 24.5 percent of GDP in FY2018, with the large trade deficit offset by a corporate income tax windfall amounting to 21 percent of GDP, official transfers, secondary income inflows, and fishing license fees. The trade deficit has narrowed over 2016–17, consistent with real depreciation since 2016 driven by low inflation compared with trading partners. The FSM has a positive net international investment position (NIIP) amounting to 130 percent of GDP at end-FY2017, mainly reflecting a large share of bank deposits invested abroad and the buildup of the FSMTF.[1]

2. External balance assessment (EBA)[2] suggests that the external sector position of the FSM is broadly consistent with the level implied by fundamentals and desirable policies.

- The underlying current account balance in FY2018 is estimated at a surplus of 3.4 percent of GDP, with the corporate tax income windfall (21 percent of GDP) taken out from the projected current account balance (24.5 percent of GDP). The EBA-lite methodology estimates the FSM's current account norm (the level consistent with fundamentals and desirable policies with the envisaged expiration of the U.S. Compact Agreement) to be 3.9 percent of GDP, resulting in a model-estimated current account gap (the difference between the underlying current account balance and the current account norm) of -0.5 percent. The policy gap was estimated at around -3 percent of GDP, most of which was explained by the contribution from the medium-term fiscal adjustment needs of 4–5 percent of GDP (to avoid the expected fiscal cliff in FY2024).[3] However, the impact on the current account gap was offset by a positive model residual of 3 percent of GDP (partly reflecting structural factors that are not captured by the model). On balance, staff assesses the external position in 2018 to be broadly consistent with the level implied by fundamentals and desirable policies, while noting the large uncertainties surrounding the model estimates and the special characteristics of the FSM economy. In staff's view, the 2018 current account surplus was supported by official inflows from the Compact Agreement. After its expected expiration, the current account would turn to deficit, without the recommended fiscal

[1] The NIIP does not include accumulated U.S. contributions to the CTF.

[2] The Real Effective Exchange Rate approach is not applied due to data limitations. This approach also is not suitable to address the structural break associated with the expected expiration of the U.S. Compact grants. The external sustainability approach is not applicable either, because of the FSM's positive NIIP in both historical and projection years.

[3] The contribution from fiscal policy distortion is estimated to be 3 percent of GDP, with a coefficient on the fiscal balance of 1.0 reflecting the close historical relationship between the fiscal and current account balances in the FSM (instead of 0.4 from the EBA-Lite Current Account model).

adjustment over the medium term. A gradual fiscal adjustment would help keep the current account at surplus starting FY2024, avoiding worsening of the external position.

FSM: External Balance Assessment, 2018
(In percent of GDP)

Actual Current Account (CA) Balance, 2018	24.5%
Cyclically Adjusted CA After Adjustment for Temporary Factors (=a) 1/	3.4%
Cyclically Adjusted CA Norm from EBA Lite Model (=b)	3.9%
CA Gap (=a-b)	-0.5%
Of Which: Policy Gap	-3.4%

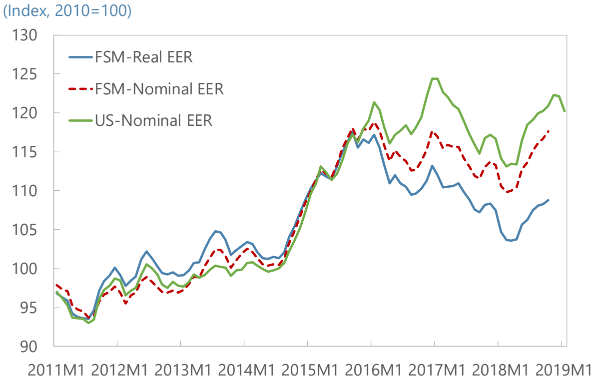
1/ Also adjusted for a one-off revenue windfall in corporate income tax.

3. Exchange rate regime. The use of the U.S. dollar as the official currency is appropriate given the small size of the economy, close financial and trade linkages with the United States, and limited administrative capacity for independent monetary and exchange rate policies.

4. Reserves. With no central bank or foreign exchange reserves, government deposits serve as the means to absorb short-term liquidity shocks. The national government deposits were around 17 percent of GDP in 2018, which corresponds to 2.8 months of imports and 4 months of general government current spending. This is higher than the one month of government spending proposed by Wiegand (2013)[4] as a standard yardstick for fiscal reserves.

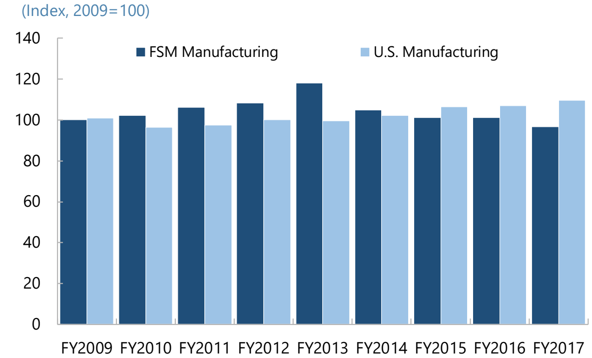
5. Competitiveness. The FSM's nominal and real effective exchange rates appreciated in 2015, mimicking the strengthening of the U.S. dollar. Since then, the FSM's real effective exchange rate has depreciated due to its low inflation compared with trading partners. Similarly, the FSM's manufacturing unit labor cost has decreased in the past 5 years. These developments are consistent with a slight decrease in the trade deficit, which nonetheless remains sizable.

Effective Exchange Rate (EER)
(Index, 2010=100)



Sources: IMF staff estimates.

FSM: Unit Labor Cost
(Index, 2009=100)



Sources: FSM authorities, FRED; and IMF staff calculations.
FSM employment and wage data for the manufacturing sector proxied by total private sector.

[4] Wiegand, Johannes, 2013, "Euroization, Liquidity Needs, and Foreign Currency Reserves," Chapter 3 in IMF Country Report 13/223, pp. 13–16.

Appendix III. Risk Assessment Matrix[1]

Risk	Relative Likelihood	Impact if Realized	Potential Impact	Staff Advice on Policy Response
Greater uncertainty surrounding post-2023 relationship with the U.S., including on the FSM's capacity to cope with the fiscal cliff, disaster rehabilitation, and financial sector supervision. (External/domestic; medium term)	M	H (downside)	Growth slowdown due to lower private investment and higher emigration.	Implement fiscal consolidation through revenue mobilization and expenditure rationalization; strengthen climate change resilience; build capacity for financial supervision; and implement structural reforms to vitalize the private sector.
Natural disasters and climate change. (External; medium term)	H	H (downside)	Growth slowdown due to impairment of infrastructure (floods), weaker agricultural production (droughts or floods), and impaired fishing activity.	Build up infrastructure for climate change adaptation by strengthening capacity for public investment management and mobilizing further grant financing. Develop a disaster risk financing strategy.
Sharp tightening of global financial conditions. (External; short term)	L-M	M (downside)	Hinders the buildup of the CTF and FSMTF, which in turn reduces government revenue from these funds. A rise in U.S. interest rates can lead to a tightening of financial conditions in the FSM.	Implementing fiscal consolidation would mitigate the impact on the fiscal position. Strengthen capacity for financial sector supervision.
Decisive push for growth-friendly structural reforms, renewal of U.S. Compact Agreement, or new external grants. (External/domestic; medium term)	M	H (upside)	Raises potential growth and improves the fiscal position.	Invest fiscal savings resulting from such reforms to enhance fiscal buffers.

[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. The blue arrows indicate whether the risk is to the upside or downside. All risks are medium-term risks, except for the lower energy scenario which is a short to medium-term risk.

Appendix IV. Simulations on Long-Run Sustainability of Trust Funds

1. **Unless arrangements under the Compact Agreement are renewed, the government is expected to lose access to the Compact grants in 2023.** While the U.S. government has been contributing into the Compact Trust Fund (CTF) with an aim to replace these grants from 2024, distributions from the fund are unlikely to be enough to offset the loss of the grants, giving rise to a "fiscal cliff."

2. **Further, institutional arrangements on the CTF imply greater revenue volatility.** Namely, the use of the CTF by the FSM government is subject to restrictions; most importantly, distributions from the CTF in a given year are effectively limited to investment returns in the previous year, with no drawdown allowed in case of negative returns. The revenue volatility would be translated into significant fiscal risks beyond FY2023, as analyzed by Asian Development Bank (2015), Graduate School USA (2018), and U.S. Government Accounting Office (2018). For example, Monte-Carlo simulations by U.S. Government Accounting Office (2018) indicate that the probability of the CTF unable to disburse any funds in one or more years during FY2024–34 would be as high as 41 percent.

3. **Reconfiguring the distribution arrangement aimed at lowering the volatility would help reduce the fiscal risks.** In the absence of such a reconfiguration, the volatility could be offset by drawdowns from the FSM Trust Fund (FSMTF) as needed. The mechanism would work as follows. The FSM government would first decide on a benchmark distribution amount from the trust funds. Then, if financial returns to the CTF were to exceed the benchmark, the government would receive the benchmark amount and the remainder would be transferred to the FSMTF. If the returns were lower than the benchmark, the gap would be covered by a drawdown from the FSMTF. The sustainability of this mechanism would hinge on various factors, including the starting values of the CTF and the FSMTF, the probability distribution of financial returns, and distribution benchmarks.

4. **This appendix summarizes Monte Carlo simulations that assess a sustainable range of distribution benchmarks from FY2024 onwards.**

A. Methodology

5. **The key features and baseline assumptions of simulations are as follows:**

- Economic growth. The projection assumes a long-run real growth rate of 0.6 percent from FY2024, with inflation at 2 percent (thus nominal GDP grows by 2.6 percent annually).
- The starting value of the trust funds. The end-FY2023 values of the CTF and the FSMTF are projected to reach US$979 million (231 percent of GDP) and US$383 million (90 percent of GDP), respectively. The projected CTF value envisages contributions from the U.S. government as stipulated in the Compact Agreement and a nominal rate of return of 5 percent per annum during FY2019–23, which is conservative compared to historical returns

to the CTF.[1] The FY2023 value of the FSMTF is derived from annual contribution of $15 million and a nominal rate of return of 5 percent per annum during FY2020–23.

- Probability distribution of investment returns. To simplify, trust funds are invested in a portfolio comprising safe and risky assets, with equal weights. The annual rate of return for the safe asset is nonstochastic and fixed at 3 percent, which equals the 6-month LIBOR rate projected for 2024 by the April 2019 World Economic Outlook. The rate of return for the risky asset is assumed to follow normal distribution with no serial correlation, with its mean and standard deviation assumed at 6 percent and 18 percent, respectively, based on historical data for S&P500 total returns.

- Distribution benchmark. Three scenarios are considered.

  - Scenario 1: status quo. The annual distribution benchmark from the CTF and the FSMTF is set at 16 percent of GDP per year in FY2024 and fixed thereafter. This scenario mimics staff's baseline scenario that assumes no fiscal consolidation efforts during FY2020–23, under which fiscal deficit excluding trust fund distributions reaches 16 percent of GDP in FY2024.[2]

  - Scenario 2: fiscal consolidation over FY2019–23. The annual distribution benchmark is set at 11 percent of GDP per year in FY2024 and fixed thereafter. This scenario mimics the case where the authorities implement a fiscal adjustment amounting to 4–5 percent of GDP over FY2019–23, as recommended by staff. In this scenario, the government would be able to balance the budget from FY2024 and onwards.

  - Scenario 3: further fiscal consolidation beyond FY2023. The annual distribution benchmark is set to decrease gradually from 11 percent of GDP in FY2024 to 6 percent of GDP by FY2034 and fixed thereafter. This scenario envisages long-run fiscal consolidation in addition to Scenario 2, by 5 percent of GDP over 10 years after FY2024. In this scenario, the government would be able to balance the budget from FY2024 onwards with an annual distribution lower than in Scenario 2.

- Monte Carlo simulations. A random draw of risky asset returns over FY2024–50 generate a path of the CTF and FSMTF values for this period. 10,000 random draws then generate fan charts depicting the distribution of the CTF and FSMTF values for FY2024–50.

B. Results

6. Scenario 1: status quo (Figure 1). Simulated paths for the combined value of the two trust funds follow downward trajectories, with the mean path hitting zero around FY2048. The FSMTF would gradually lose its effectiveness as a buffer against volatility in CTF returns, with only an 18 percent probability of the FSMTF value remaining positive through FY2050. The results suggest that continuing the status quo with annual distribution of 16 percent of GDP would not be sustainable in the long run.

[1] The CTF recorded an average nominal rate of return of 6.7 percent per annum over FY2006–17.

[2] In the baseline scenario, the fiscal deficit is projected to reach 4½ percent of GDP in FY2024, with distributions from the CTF amounting to 11.3 percent of GDP recorded as revenue.

7. Scenario 2: fiscal consolidation over FY2019–23 (Figure 2). Compared with Scenario 1, the probability of the combined CTF and FSMTF value remaining positive through FY2050 improves to 84 percent. The life of the FSMTF is extended, with a 62 percent probability of the FSMTF value remaining positive through FY2050. Nonetheless, the combined CTF and FSMTF value is likely to fall as a percent of GDP, with its mean value decreasing to 135 percent of GDP in FY2050, challenging long-run sustainability and intergenerational equality.

8. Scenario 3: fiscal consolidation beyond FY2024 (Figure 3). Compared with Scenario 2, long-run sustainability improves significantly. Gradually reducing annual distributions to 6 percent of GDP would help sustain the mean value of the combined CTF and FSMTF at around 270 percent of GDP over the long run, ensuring intergenerational equity. The FSMTF would function as an effective buffer, with a 96 percent probability of its value remaining positive through 2050.

C. Sensitivity Analysis

9. To check the robustness of the results against the parameter values worse than assumed in the baseline, sensitivity analyses are conducted as follows. The results, reported in Figure 4, further highlight the importance of fiscal consolidation through and beyond FY2023 in ensuring the long-run sustainability of the trust funds.

10. A lower rate of return for CTF and FSMTF for FY2020–23, assuming 3 percent per annum (instead of 5 percent in the baseline). This would result in lower values for the CTF and FSMTF in FY2023 (US$905 million and US352 million, respectively). In the status quo scenario (Scenario 1), the long-run decrease in the combined CTF and FSMTF value is more pronounced and the FSMTF would deplete by FY2050 with a probability of 99.99 percent. In the fiscal consolidation scenarios over FY2020–23 and beyond FY2024 (Scenarios 2 and 3), the mean value of the combined CTF and FSMTF in FY2050 worsens, but the probability of the FSMTF remaining positive would remain at 96 percent in Scenario 3. This highlights the importance of the fiscal consolidation beyond FY2024.

11. A lower rate of return for the safe asset from FY2024 onwards, assuming 2 percent per annum (instead of 3 percent in the baseline). In all three scenarios, the mean value of the combined CTF and FSMTF in FY2050 would decrease vis-à-vis under the baseline assumptions. The probability of the FSMTF remaining positive in FY2050 would also decrease in three scenarios, but remain as high as 93 percent in Scenario 3.

12. A lower expected rate of return for the risky asset, assuming 4 percent (instead of 6 percent in the baseline). The result is broadly similar to the case of a lower safe asset return, while the worsening in the long-run value of the trust funds and the probability of the FSMTF depletion is more pronounced.

13. A higher standard deviation for the risky asset, assuming 23 percent (instead of 18 percent in the baseline). The results are broadly in line with those under the baseline assumptions, suggesting the robustness of simulation results against higher asset return volatility.

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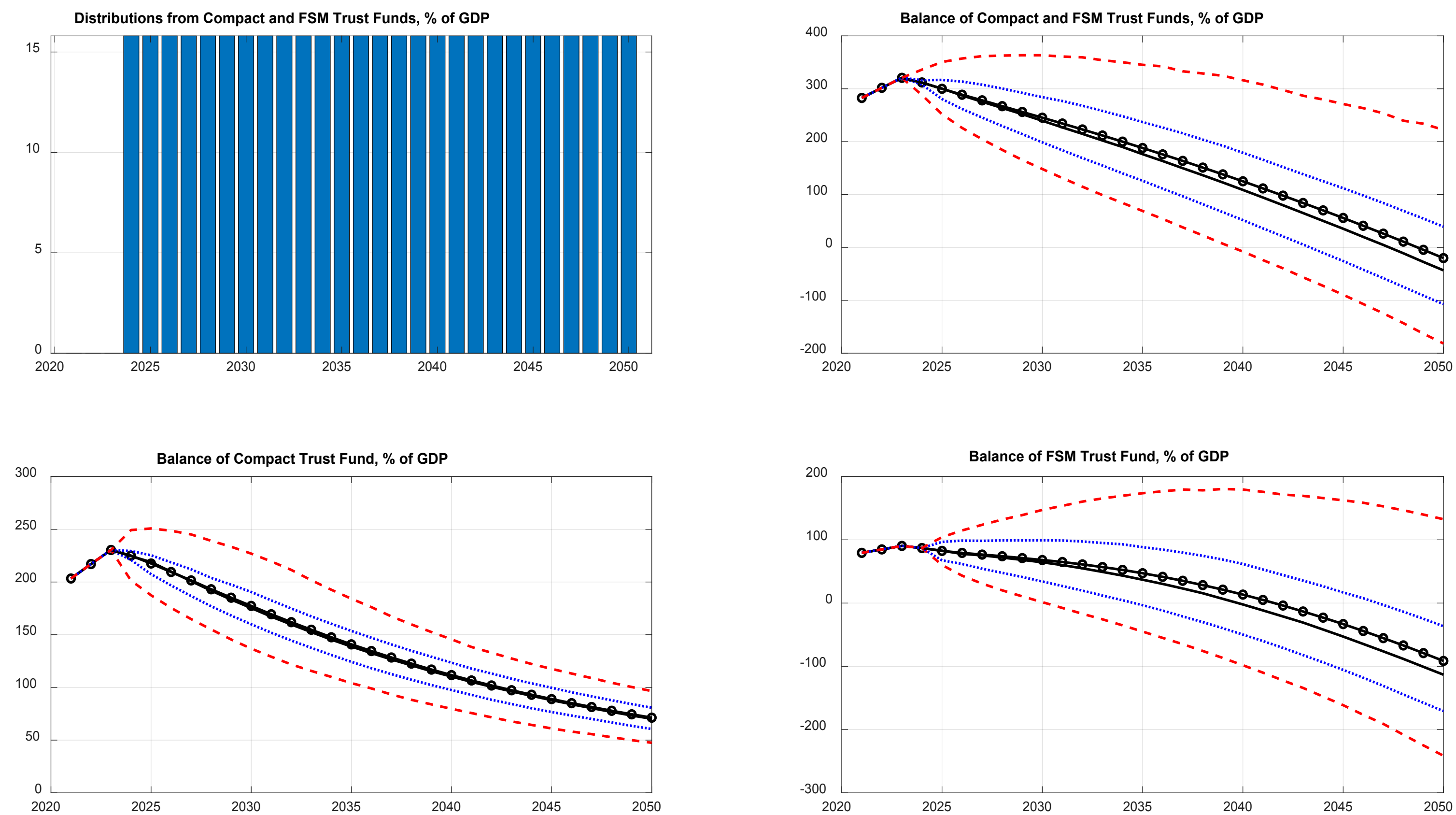
Graduate School USA, 2018, "Compact Trust Funds in the Freely Associated States: Mechanics and Stochastic Projections." Link: http://www.pitiviti.org/news/downloads/CTF_in-FAS_FY17-1.pdf.

U.S. Government Accounting Office, 2018, "Compacts of Free Association: Actions Needed to Prepare for the Transition of Micronesia and the Marshall Islands to Trust Fund Income," GAO-18-415. Link: https://www.gao.gov/products/GAO-18-415.

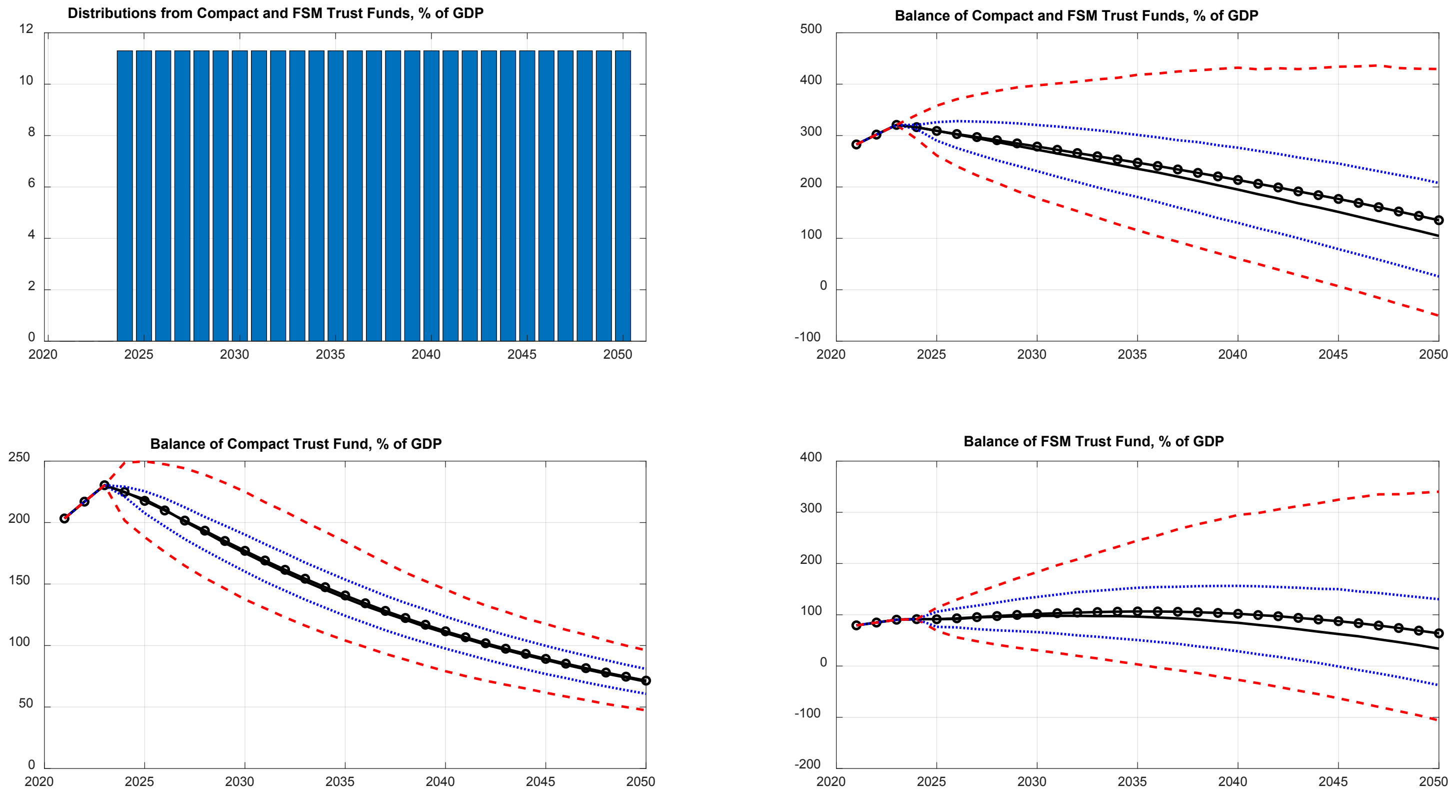
Figure 1. Monte Carlo Simulation Results for Scenario 1: Status Quo



Sources: IMF staff calculations.

Note: line with circle markers = mean; black solid line = median; blue dotted line = 25th and 75th percentile; and red dashed line = 5th and 95th percentile.

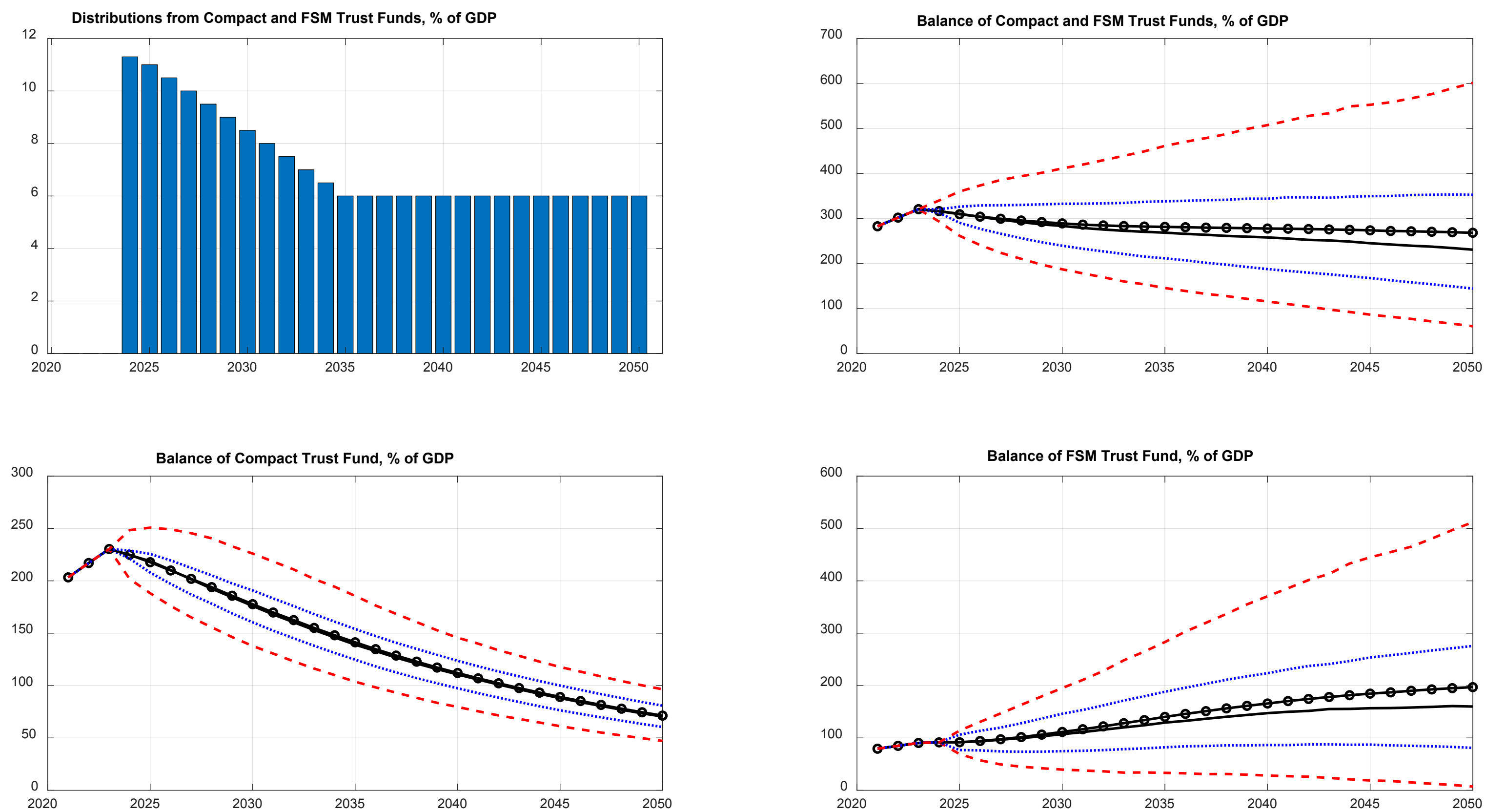
Figure 2. Monte Carlo Simulation Results for Scenario 2: Fiscal Consolidation Over FY2019–23



Sources: IMF staff calculations.

Note: line with circle markers = mean; black solid line = median; blue dotted line = 25th and 75th percentile; and red dashed line = 5th and 95th percentile.

Figure 3. Monte Carlo Simulation Results for Scenario 3: Further Fiscal Consolidation Beyond FY2023



Sources: IMF staff calculations.

Note: line with circle markers = mean; black solid line = median; blue dotted line = 25th and 75th percentile; and red dashed line = 5th and 95th percentile.

Figure 4. Sensitivity to Baseline Parameter Values

	Scenario 1: status quo		Scenario 2: fiscal consolidation over FY2020-23		Scenario 3: fiscal consolidation beyond FY2024	
	Average balance of CTF and FSMTF in FY2050, combined (% of GDP)	Probability of positive FSMTF balance in FY2050 (%)	Average balance of CTF and FSMTF in FY2050, combined (% of GDP)	Probability of positive FSMTF balance in FY2050 (%)	Average balance of CTF and FSMTF in FY2050, combined (% of GDP)	Probability of positive FSMTF balance in FY2050 (%)
Baseline assumptions						
	-20.2	17.7	135.2	61.7	268.3	96.1
Lower return for CTF and FSMTF for FY2020-23: 3 percent p.a. (against 5 percent in the baseline)						
	-90.4	0.0	47.3	9.9	169.3	95.8
Lower safe asset return: 2 percent p.a. (against 3 percent in the baseline)						
	-47.5	11.8	98.6	50.9	222.2	93.4
Lower expected return for risky asset: 4 percent p.a. (against 6 percent in the baseline)						
	-68.0	7.7	66.3	40.3	186.2	89.1
Higher standard deviation for risky asset: 23 percent (against 18 percent in the baseline)						
	-20.7	22.2	138.5	59.4	270.3	92.4

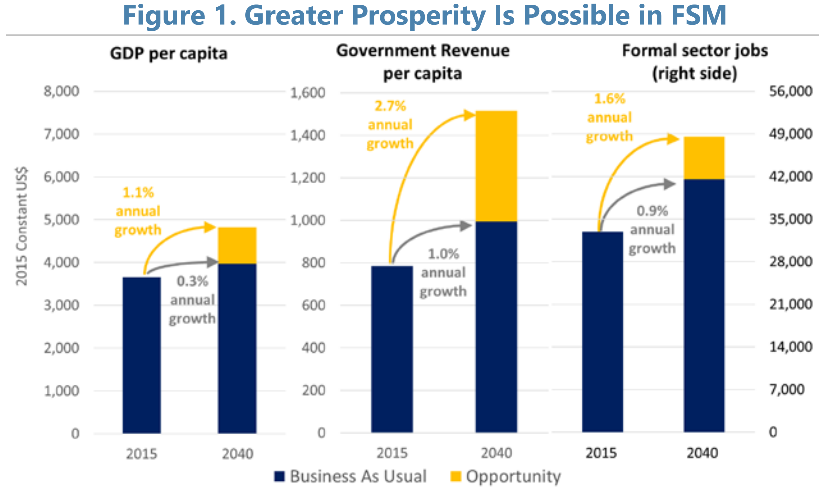
Sources: IMF staff calculations.

Appendix V. Structural Reforms to Support Private Sector Development in Key Sectors[1]

The FSM is currently implementing key structural reforms in the fisheries, information and communication technologies (ICT), maritime and energy sectors that can help to unlock greater private sector development and investment, and stimulate higher economic growth, public revenues and job creation.

Traditional manufacturing-based, export-led growth is not a feasible development model for the FSM, given the constraints posed by the nation's remoteness, small size, dispersion, and environmental fragility. In this context, *Pacific Possible*[2]—a recent major analytical project conducted by the World Bank—assessed the long-term development opportunities and challenges faced by Pacific island countries, including the FSM. A key conclusion of *Pacific Possible* is that, relative to a baseline "business-as-usual" scenario, the FSM has the potential to realize substantial additional economic growth, public revenues, and job creation via targeted structural reforms that can maximize the gains from the nation's natural oceanic resources and reduce the economic cost of distance via ICT (see figure). Given the FSM's high dependence on imports—and imported fuel in particular—key public investments to enhance the efficiency of the nation's maritime and energy sectors also offer opportunities to drive productivity gains for the private sector and reduced costs for households. Finally, with its relative proximity to East Asia, unlocking the potential of the tourism sector also offers an important opportunity to raise incomes and create jobs in the FSM.

Figure 1. Greater Prosperity Is Possible in FSM



Source: World Bank (2017).

[1] Prepared by Andrew Blackman (World Bank).

[2] World Bank. 2017. Pacific Possible: Long-term Opportunities and Challenges for Pacific Islands Countries. Washington, D.C.: World Bank.

Recognizing these opportunities to foster shared prosperity, and with support from the World Bank and Asian Development Bank, the authorities have embarked on an integrated agenda of capital investment and policy reform to unlock the potential of key sectors:

- Fisheries: The archipelagic nature of the FSM means that the nation's ocean resources (such as fish stocks) comprise the primary natural resource on which future economic growth will be based, while coastal ecosystems directly sustain livelihoods and significantly contribute to food security. Ongoing efforts to strengthen the sustainable management of both oceanic and coastal fisheries are thus crucial to long-term economic and social sustainability. Increasing demand for transshipment in the north Pacific could also provide opportunities to leverage additional economic benefits for the FSM, such as increased fish processing (i.e., tuna loining and processing bycatch) and vessel support services (i.e., containerization, vessel and equipment repairs, crewing, and bait and fuel supplies). Ongoing efforts to improve the efficiency of ICT, maritime, and energy infrastructure (see below), and efforts to support an enabling regulatory environment at the state level, including access to land, will be crucial to take full advantage of these opportunities.

- ICT: Greater and more affordable connectivity can help lower transaction costs, create new economic opportunities, enhance delivery of both public and private services, and provide an essential "life-line" to isolated communities in the event of a natural disaster. Following the landing of fiber optic submarine cables to three of the four states (with the cable to Kosrae projected to land in FY2021), the authorities are now focusing on: (i) capital investments to improve the core on-island infrastructure necessary for widespread access; and (ii) implementation of recent reforms to the legislative and regulatory frameworks (including the Telecommunications Act 2014) that are expected to promote new investment and greater competition, and ultimately deliver lower prices and higher quality ICT services to businesses and households.

- Maritime: The FSM's economy is highly dependent on shipping and port facilities for international, inter-state, and inter-island trade. Citizens of outer islands also depend on these facilities for travel to main and other outlying islands, and for access to education, markets, and health services. Consequently, the authorities are focused on capital investments (including upgrading terminal buildings and facilities and rehabilitating utilities) and enhanced port planning to improve the safety, efficiency, and climate resilience of the main island ports for the benefit of all Micronesians.

- Energy: While around 76 percent of national households have access to electricity, this rate varies widely among states, with electrification rates of 95 percent in Kosrae and Pohnpei, and 87 percent in Yap, but only 27 percent in Chuuk. Increasing the available generation capacity, reducing generation costs, and improving the efficiency and reliability of electricity supply are crucial to lower costs to businesses and households, and to reduce social problems associated with high tariffs and low electrification rates such as health issues due to indoor air pollution caused by burning kerosene and wood, and environmental issues such as deforestation and land degradation. The authorities are currently focusing on: (i) upgrading and extending power systems and networks to increase access and improve the reliability and quality of supply, especially in Chuuk and Pohnpei; and (ii) scaling up renewable energy generation, storage, and

distribution to improve the security and lower the cost of supply, including through the installation of mini-grids in remote areas.

- Tourism: Blessed with rich cultural, natural, and historical attractions, the authorities have long recognized the vast potential for the tourism sector to drive higher economic growth and incomes and job creation in the FSM. Realizing this potential, however, will require deep collaboration between the national and state governments to deliver a multisectoral reform and investment program that can support improved air connectivity with key East Asian markets, and facilitate the significant investment in tourism-related infrastructure and private-sector enterprises that are required to develop the tourism sector and reverse the declines in tourist arrivals over the past decade. To preserve the nation's traditional and cultural heritage, a tourism development strategy focused on niche markets should be pursued, rather than a strategy of high tourist volume.

FEDERATED STATES OF MICRONESIA

July 30, 2019

STAFF REPORT FOR THE 2019 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

Prepared By

Asia and Pacific Department
(In consultation with other departments)

CONTENTS

FUND RELATIONS

(As of June 30, 2019)

Membership Status: Joined June 24, 1993; accepted Article VIII

General Resources Account:

	SDR Million	Percent Quota
Quota	5.10	100.00
Fund holdings of currency	5.10	100.00
Reserve tranche position	0.00	0.01

SDR Department:

	SDR Million	Percent Allocation
Net cumulative allocation	4.81	100.00
Holdings	6.25	130.18

Outstanding Purchases and Loans: None

Latest Financial Arrangements: None

Projected Payments to Fund[1]

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

	Forthcoming				
	2019	2020	2021	2022	2023
Principal					
Charges/Interest		0.00	0.00	0.00	0.00
Total		0.00	0.00	0.00	0.00

Exchange Rate Arrangement

The de jure and de facto exchange rate arrangement is an arrangement with no separate legal tender. The U.S. dollar is legal tender and the official currency. The Federated States of Micronesia (FSM) maintains an exchange system that is free of restrictions on international payments and transfers for current and capital transactions.

Article IV Consultation

The Federated States of Micronesia is on a 24–month consultation cycle. The 2017 Article IV consultation discussions were held during June 5–14, 2017. The Executive Board discussed the staff report and concluded the consultation on September 1, 2017.

Technical Assistance: PFTAC, LEG, MCM, and STA have provided technical assistance on tax policy and administration, public financial management, banking supervision, combatting of financial crime, and statistics.

Resident Representative: The IMF Regional Resident Representative Office based in Suva, Fiji covers 12 IMF member countries in the Pacific, including the FSM. Ms. Leni Hunter is the current Resident Representative.

[1] When a member has overdue financial obligations outstanding for more than three months, the amount of such arrears will be shown in this section.

RELATIONS WITH OTHER IFIS

Relations with other IFIs:

- World Bank Group: http://projects.worldbank.org/search?lang=en&searchTerm=&countrycode_exact=FM
- Asian Development Bank: https://www.adb.org/countries/micronesia/main

RELATIONS WITH THE PACIFIC FINANCIAL TECHNICAL ASSISTANCE CENTRE

Background

FSM has been a modest user of PFTAC technical assistance (TA) in recent years. The intended focus in FY19 had been on tax administration and financial sector supervision, with assistance provided to help strengthen tax payment and tax return filing compliance as well as plans to assist in updating banking legislation that has been delayed until FY20. Some remote follow-on support was provided in Government Finance Statistics (GFS), plus a weeklong training event in February 2019 delivered in FSM to GFS compilers from both FSM and the Marshall Islands.

TA delivery to FSM will scale-up in FY20 with efforts moving forward with the banking law; delivery of tax auditor training in May 2019 that is focused on the Gross Receipts Tax (GRT) that is used in FSM and other Northern Pacific countries; TA missions in both real sector statistics (GDP) and GFS; and missions planned under the PFM and Macroeconomic Analysis programs. Furthermore, a diagnostic tax administration evaluation mission that was requested after finalization of the FY19 workplan will be provided in early 2020 to assist in formulating an appropriate strategy to strengthen tax administration and support possible tax reforms. The volume of TA will significantly increase over recent years if the FY20 workplan is fully delivered.

PFTAC TA aims to support the authorities as they continue to move towards long-term fiscal sustainability. Efforts aim to assist the authorities achieve tangible results from the foundations laid with previous PFTAC assistance and inputs from other development partners, with an emphasis on strengthening tax administration and taxpayer compliance, building capacity to independently compile and disseminate macroeconomic statistics, modernize banking legislation, and assist with PFM reforms.

In the PFM area, the focus has been on assisting the authorities with implementation of the PFM roadmap. The authorities are now engaged in planning for a Financial Management Information System funded by the World Bank. Pending a request from the authorities, provision has been made in the FY20 workplan for a mission, with assistance possibly related to the roadmap or supporting activities in preparation for the FMIS.

In the tax administration area, the technical assistance during FY19 helped with strengthening on-time filing and payment compliance and the management of arrears and outstanding tax returns. During the first quarter of FY20 practical training was delivered to build audit capacity. A diagnostic review of the tax administration and processes will be undertaken in early 2020 to help inform the provision of future PFTAC technical assistance and to assist in the formulation of a tax reform strategy and road map for implementation.

In financial sector supervision, PFTAC is assisting the Banking Board to enhance its regulatory framework for banks and providing training on supervision of key banking risks. The Banking Board and PFTAC initiated a Banking regulatory reform project in 2017, with a workshop providing advice

on key components of banking law and regulations and undertaking a preliminary assessment of the banking regulatory framework. After some delays given constraints with availability of Legal experts in following-up from the workshop, PFTAC and LEG will start assistance to the Banking Board in July 2019 in revising and updating the FSM banking law. In other capacity development, the Banking Board attended the PFTAC MCM IT and Cyber Risk workshop held in Vanuatu in August 2018. The Banking Board has also requested training for bank examiners, which PFTAC has planned for FY21.

In the area of statistics, FSM implemented the enhanced General Data Dissemination System (e-GDDS) in July 2017, with support from the IMF's Statistics Department. PFTAC will continue to provide annual capacity building training to allow for GDP compilation independent from the US Graduate School, subject to staff resources remaining adequate in the Statistics Office. This was most recently provided through a mission of the PFTAC real sector statistics advisor in April 2018, with an additional mission planed in FY20.

The most recent GFS TA occurred in February 2019 when a mission provided hands on training to compilers on how to use source data (annual financial statements) to derive the annual GFS statement of operations, stock data for the balance sheet and the functions of government for the budgetary central government (BCG) and state governments.

In macroeconomics, there has been no recent direct assistance provided. However, forecasting of long-term economic and fiscal scenarios will be supported, if requested by the authorities, in cooperation with other TA providers.

STATISTICAL ISSUES

(As of July 8, 2019)

I. Assessment of Data Adequacy for Surveillance
General: Data provision has serious shortcomings that significantly hamper surveillance. While coverage of key macroeconomic data is broadly sufficient, they are not compiled in a timely manner. Most affected areas are: national accounts and external sector statistics, where data are compiled annually with nearly a year lag. This makes it difficult to make accurate and timely evaluation of economic developments on an ongoing basis. To improve data dissemination, the authorities implemented the enhanced General Data Dissemination System (e-GDDS) in July 2017, with technical assistance from STA.
National accounts: National accounts have been prepared, with the support of the U.S. Graduate School, dating back to FY1995. Annual GDP estimates based on the production and income approaches are compiled and released with a lag of 11 months. GDP data have not been rebased for more than 10 years (current base year is FY2004). A national census was conducted in 2010 and a household survey in 2013. GDP estimates based on the expenditure approach are not compiled, leading to a lack of investment/savings indicators. Fixed ratios are used in estimating value added for private sector operating surplus. The authorities are planning to conduct a business survey that would help with the rebasing of GDP.
Employment: Data on employment and wages are available on an annual basis and classified by sectors based on the filings to Social Security Administration. However, no unemployment data are available except for 2013 when the household survey was conducted.
Price statistics: A quarterly consumer price index (CPI), recently rebased to 2017Q1 and utilizing expenditure weights derived from an earlier household survey, is published for the FSM and for each state. However, data releases are often delayed.
Government finance statistics: Fiscal data for the budgetary central government and 4 state governments have been prepared, with the support of U.S. Graduate School, going back to FY2004. Data are compiled in line with *Government Finance Statistics Manual 2014 (GFSM 2014)* based on annual audit reports of the budgetary central and 4 state governments. The fiscal accounts are consolidated between the national and state governments. However, government agencies and local governments (municipalities) are not covered. There is potential to expand the coverage to the general government by including extrabudgetary units of the central government and the social security funds as the source information is available from the annual financial statements. Financial information is also readily available for public corporations and compilation of public sector GFS may commence, taking into consideration local capacity.
Monetary statistics: The Banking Board compiles monthly monetary data with a three-month lag. The data comprise interest rates, the accounts of commercial banks, and the FSM Development Bank. The depository survey data are not compiled based on IMF's standardized report forms (SRFs), hindering international comparability. The FSM also reports some data and indicators of the Financial Access Survey (FAS), including the two indicators adopted by the UN to monitor Target 8.10 of the Sustainable Development Goals (SDGs). These are often reported with delays.
Financial sector surveillance. The FSM started compiling Financial Soundness Indicators (FSIs) data in 2016 (data are available on a quarterly basis going back to 2013). The FSM also reports some data and indicators of the Financial Access Survey (FAS), including the two indicators adopted by the UN to monitor Target 8.10 of the Sustainable Development Goals (SDGs). Both data are often reported with delays.

External sector statistics: The authorities compile annual balance of payments and international investment position (IIP) statistics in broad conformity with the sixth edition of the *Balance of Payments and International Investment Position Manual (BPM6),* with assistance from the United States Graduate School. While the balance of payments and IIP data are regularly published on the FSM Division of Statistics website and available up to 2017, those data are not reported to STA after 2014. Large errors and omissions in the balance of payments undermine the usability of these data for assessment of external sustainability. A PFTAC technical assistance mission in April 2018 recommended enhancements to the source data and estimation methods for re-exports of fuel, imports, travel credits/debits, personal transfers, interest payments, transactions and positions of direct and other investment liabilities to bring overall improvement to balance of payments and IIP.

II. Data Standards and Quality	
Participant in the Fund's General Data Dissemination System (GDDS) since November 2014. Implemented the enhanced GDDS (e-GDDS) in July 2017. The National Summary Data Page (NSDP) is available at: http://www.fsmstats.fm/?page_id=605	Data ROSC is not available.

Table 1. Federated States of Micronesia: Table of Common Indicators Required for Surveillance

As of July 8, 2019

	Date of Latest Observation	Date Received	Frequency of Data[7]	Frequency of Reporting[7]	Frequency of Publication[7]
Exchange Rates[1]	NA	NA	NA	NA	NA
International Reserve Assets and Reserve Liabilities of the Monetary Authorities	NA	NA	NA	NA	NA
Reserve/Base Money	NA	NA	NA	NA	NA
Broad Money	May 2018	Mar 2019	M	M	M
Central Bank Balance Sheet	NA	NA	NA	NA	NA
Consolidated Balance Sheet of the Banking System	Apr 2018	Mar 2019	M	M	M
Interest Rates[2]	May 2018	Mar 2019	M	M	M
Consumer Price Index	End-FY2017	Nov 2018	Q	Q	Q
Revenue, Expenditure, Balance/Composition of Financing[3] General Government[4] and Central Government	FY2017	Nov 2018	A	A	A
Stocks of Central Government and Central Government-Guaranteed Debt[5]	End-FY2018	Feb 2019	A	A	A
External Current Account Balance	FY2017	Nov 2018	A	A	A
Exports and Imports of Goods and Services	FY2017	Nov 2018	A	A	A
GDP/GNP	FY2017	Nov 2018	A	A	A
Gross External Debt	End-FY2018	Feb 2019	A	A	A
International Investment Position[6]	FY2017	Nov 2018	A	A	A

[1] The U.S. dollar is legal tender and the official currency.
[2] Includes the interest rate on consumer loans and commercial loans, as well as deposit rates.
[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); Not Available (NA).

Table 2. Federated States of Micronesia: Data Adequacy for Surveillance and Dissemination Practices Compared with the e-GDDS Framework

Data Category	Methodology			Periodicity		Timeliness		Advance Release Calendar
	Base year	Coverage (adequate)	Other	e-GDDS	FSM	e-GDDS	FSM	
Real Sector 1/								
National accounts (GDP)	>10Y	Yes	Exp. approach; fixed ratios	Q	A	1Q	11M	No
Consumer price index (CPI)	...	Yes	...	M	Q	2M	1Q-3Q	No
Fiscal Sector 2/								
General government operations	...	Broadly	...	A	A	3Q	11M	No
Central government operations	...	Yes	...	Q	A	1Q	3Q	No
Central government gross debt	...	Yes	...	Q	A	2Q	3Q	No
Financial Sector 3/								
Depository corporations survey	...	Yes	Classification (no SRFs)	M	M	1Q	3Q	No
Central bank survey (not applicable)								
Interest rates	...	Yes	...	M	M	...	3Q	No
Stock market (not applicable)								
External Sector 4/								
Balance of payments	...	Partially	...	Q	A	1Q	11M	No
External debt	...	Yes	...	Q	A	2Q	11M	No
Foreign exchange reserves (not applicable)								
Merchandise trade	...	Duty-free imports	...	M	A	12W	11M	No
International investment position (IIP)	...	Partially	...	A	A	3Q	11M	No
Exchange rates (not applicable)								
Supplementary Data								
Labor market	...	Yes	...	A	A	3Q	11M	No
Financial soundness indicators (FSI)	...	Yes	...	Q	Q	1Q	>4Q	No

Note: The timeliness benchmark is typically three quarters (3Q) for annual data and one quarter (1Q) for quarterly data.
1/ Annual GDP data are compiled and released with a lag of 11 months, which complicate timely assessment of economic developments. GDP data have not been rebased for more than 10 years (current base year is FY2004). GDP estimates based on the expenditure approach are not compiled, leading to a lack of investment/savings indicators. Fixed ratios are used in estimating value added for private sector operating surplus. The CPI is compiled quarterly, but is often disseminated with long lags.
2/ The FSM compiles fiscal data for central and general government operations based on GFSM 2001. The fiscal accounts are consolidated between the national and state governments. However, government agencies and local governments (municipalities) are not covered.
3/ The FSM does not have a central bank and uses the U.S. dollar as legal tender. The depository survey data are not compiled with standardized report forms (SRFs), hindering international comparability. The FSIs are being compiled since 2016 but disseminated with occasional long lags.
4/ The FSM reports balance of payments and international investment position statistics in broad conformity with BPM6. However, the coverage and classification of imports of goods, personal transfers, direct investment liabilities, and public external assets require enhancements. In particular, the coverage of imports data suffers from non-inclusion of duty-free imports.

INTERNATIONAL MONETARY FUND

FEDERATED STATES OF MICRONESIA

July 30, 2019

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

Approved By
Ranil Salgado (IMF)
Marcello Estevão (IDA)

Prepared by the staff of the International Monetary Fund and the International Development Association (IDA)[1]

Risk of external debt distress	High
Overall risk of debt distress	High
Granularity in the risk rating	Sustainable
Application of judgement	Yes: the forecast horizon informing mechanical risk signals is extended to 20 years to take account of an expected fiscal cliff in FY2023.

The Federated States of Micronesia (FSM) remains at high risk of debt distress under the Debt Sustainability Framework (DSF). Unless the Compact Agreement with the United States or parts of it are renewed, the FSM will face a fiscal cliff when the U.S. Compact grants amounting to 20 percent of GDP are expected to expire in FY2023. Under the baseline scenario without fiscal adjustments, the fiscal cliff would put debt on an upward trajectory starting in FY2024, with the external debt-to-GDP ratio reaching 30 percent in FY2029 and 57 percent in FY2039, and the public debt-to-GDP ratio reaching 43 percent in FY2029 and 67 percent in FY2039. As a result, the DSF thresholds on the present value of external debt-to-GDP and public debt-to-GDP ratios are projected to be breached within a 20-year horizon. While mechanical application of the DSF based on a 10-year forecast horizon would imply a moderate risk rating, the envisaged breach of the thresholds within a 20-year forecast horizon would warrant an assessment of high risk of external and overall debt distress. Lowering the risk of debt distress would require a fiscal adjustment and steadfast structural reforms to promote private sector growth. The FSM's vulnerability to climate change and weather-related natural disasters constitutes a major risk and calls for strategies to strengthen climate change resilience.

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

PUBLIC SECTOR DEBT COVERAGE

1. **This Debt Sustainability Analysis (DSA) covers public sector debt owed by the national and state governments of the FSM.** As of end-FY2018 (ending September 2018), all public sector debt is external, owed to nonresidents. Due to the lack of data, public debt covers neither loan guarantees nor non-guaranteed debt by state-owned enterprises (SOEs). While data on public-private partnerships (PPPs) are also unavailable, the institutional framework and capacity for PPPs remains underdeveloped in the FSM, suggesting that PPP capital stock is unlikely to be substantial. Against this background, the contingent liability stress test with default settings under the DSF is used to analyze public debt not covered by this DSA. The FSM uses the U.S. dollar as the legal tender and does not have a central bank.

Coverage of Public Sector Debt

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

The country's coverage of public debt	The central, state, and local governments			
	Default		Used for the analysis	Reasons for deviations from the default settings
Other elements of the general government not captured in 1.	0	percent of GDP	0.0	
SoE's debt (guaranteed and not guaranteed by the government) 1/	2	percent of GDP	2.0	
PPP	35	percent of PPP stock	0.0	
Financial market (the default value of 5 percent of GDP is the minimum value)	5	percent of GDP	5.0	
Total (2+3+4+5) (in percent of GDP)			7.0	

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

BACKGROUND ON DEBT

2. **The FSM's public sector debt has decreased to 20 percent of GDP in FY2018 from a peak of 31 percent of GDP in FY2009.** Most of the debt is concessional and is contracted with official lenders. About 70 percent of the debt is from the Asian Development Bank (AsDB), 27 percent from the U.S. Department of Agriculture (rural utilities services), and the rest (3 percent) from the European Investment Bank (EIB) and a commercial private lender. All loans except from the EIB are denominated in U.S. dollars. Total debt service reached 5.8 percent of exports in FY2018 and is expected to remain broadly stable over the medium term. Because the FSM has not borrowed debt since FY2009 and principle repayments have been proceeding, public sector debt shows a downward trajectory since FY2009.

FSM: Stock of Public Sector Debt, end-FY2018			
	In millions of U.S. dollars	As a share of total debt	In percent of GDP
Total public debt	76	100	20
External	76	100	20
Multilateral	53	70	14
ADB	52	69	14
Bilateral	22	28	6
U.S. Department of Agriculture	21	27	6
European Investment Bank (EIB)	1	1	0
Commercial	2	2	0
Telecom vendor	2	2	0
Domestic	0	0	0
Source: FSM authorities and IMF staff estimates and calculations.			

BACKGROUND ON MACRO FORECASTS

3. Under the baseline projection, growth is projected to moderate to potential over the medium term, while fiscal and current account balances deteriorate in FY2024 (Box 1). Potential growth is estimated at 0.6 percent, in line with the FSM's performance over the last two decades. Inflation is projected to converge to 2 percent over the medium term, in line with the U.S. inflation. Due to the expected expiration of grants under the Compact Agreement with the United States, the fiscal and external current account balances are projected to worsen in FY2024 to deficits of 4½ percent of GDP and 4 percent of GDP, respectively. These projections are broadly in line with the previous DSA that accompanied the 2017 Article IV staff report for the FSM, with a notable exception that the post-FY2023 fiscal positions worsened. The financing mix envisages a combination of external debt, a drawdown from the FSM Trust Fund, and domestic debt. The realism tools suggest that macroeconomic and fiscal assumptions are reasonable (Figures 3 and 4).[2]

[2] Large residuals in Figure 3 reflect fiscal surpluses recorded in the past 5 years and projected through FY2023.

Box 1. Federated States of Micronesia: Key Macroeconomic Assumptions

- **GDP growth** is projected to moderate from 2.4 percent in FY2017 to 1.2–1.4 percent in FY2018–19, 0.7–0.8 percent in FY2020–21, and 0.6 percent in FY2022 and thereafter. Potential growth is estimated to be 0.6 percent, underpinned by labor productivity growth of 0.7 percent and a slight contraction in employment, in line with the FSM's performance over the last two decades. The estimate also takes account of the likely impact of natural disasters, as the FSM experienced five natural disasters during this period. Cross-country regression analyses by IMF staff[1] suggest that the FSM's high vulnerability to natural disasters warrants a moderate downward adjustment in the long-run projection for GDP growth by 0.1 percentage point.
- **Inflation** is projected to gradually pick up from 1.5 percent in FY2018 to 2 percent from FY2020 onwards, in line with inflation in the United States (the U.S. dollar is the FSM's legal tender). The GDP deflator is assumed to move in tandem with inflation.
- **The fiscal balance** is projected to be in a surplus of around 4-7 percent of GDP during FY2020–23. Despite a low tax-to-GDP ratio at about 13 percent of GDP, foreign grants, fishing license fees,[2] and other nontax revenues are expected to remain significant and fully cover government spending. Nonetheless, unless the Compact Agreement or parts of it are renewed, Compact grants from the United States amounting to 20 percent of GDP will expire in FY2023 and be replaced by investment returns accruing to the Compact Trust Fund, projected at around 11 percent of GDP in FY2024. As a result, the overall balance is projected to turn from a surplus of around 4½ percent of GDP in FY2023 to a deficit of 4½ percent of GDP in FY2024. The baseline projection assumes no fiscal consolidation efforts during FY2019–23. Due to a projected decline in distributions from the Compact Trust Fund as percent of GDP, the fiscal deficit is projected to rise further to around 6 percent of GDP in FY2029.
- **The current account balance** is projected to remain in a surplus of around 2–3 percent of GDP during FY2020–23 but turn into a deficit of 4 percent of GDP in FY2024, due to the fiscal cliff.
- **Financing mix.** With the fiscal balance remaining in surplus, no new debt disbursement is projected until FY2023. Beyond this, the paths of external and public debt are determined by projected fiscal deficits, GDP growth, interest rates for new debt, and the financing mix for fiscal gross financing needs. The financing mix envisages external project loans financing 90 percent of the fiscal deficit and a distribution from the FSM Trust Fund—a fund established by the FSM government with the aim to provide an additional revenue source to ensure long-term fiscal sustainability. The distribution is projected at $20 million per year after FY2030, as stipulated by law. The reminder is assumed to be financed by domestic borrowing from banks; such borrowing would unlikely crowd out private sector credit, given a very low loan-to-deposit ratio in the FSM.

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[1] See Lee and others, 2018, "The Economic Impact of Natural Disasters in Pacific Island Countries: Adaptation and Preparedness," IMF Working Paper No.18/108.

[2] Fishing license fees during FY2019-23 are projected to remain constant in nominal terms at the FY2018 level.

FSM: Macroeconomic Assumptions

	Current DSA (2019 Article IV)				Previous DSA (2017 Article IV)			
	2017	2018	2019-23	2024-39	2017	2018	2019-23	2024-37
Real GDP (y/y growth)	2.4	1.2	0.8	0.6	2.0	1.4	0.7	0.6
CPI (y/y growth)	0.1	1.5	1.9	2.0	0.9	2.0	2.8	2.0
Fiscal balance (percent of GDP)	14.6	27.3	8.4	-5.3	8.7	8.6	8.2	-4.4
Current account balance (percent of GDP)	7.5	24.5	5.0	-4.2	3.4	3.0	2.9	-5.3

Sources: FSM authorities and IMF staff estimates and calculations.

COUNTRY CLASSIFICATION AND DETERMINATION OF SCENARIO STRESS TEST

4. **The FSM's debt carrying capacity is assessed as weak.** The country's Composite Indicator (CI) index of 1.69 indicates a weak debt-carrying capacity under the 2018 DSF framework, and its debt carrying capacity remains the same as the last DSA. The CI is based on a weighted average of several factors such as the country's real GDP growth, remittances, international reserves, and world growth and the Country Policy and Institutional Assessment (CPIA) score, and the calculation of the CI is based on 10-year averages of the variables, across 5 years of historical data and 5 years of projection, and the corresponding CPIA.[3] Thus, DSA thresholds applicable for the FSM are: 30 percent for the present value (PV) of external debt-to-GDP ratio, 140 percent for the PV of external debt-to-exports ratio, 10 percent for the external debt service-to-exports ratio, 14 percent for the external debt service-to-revenue ratio, and 35 percent for the PV of public debt-to GDP ratio.

Calculation of the CI Index

Components	Coefficients (A)	10-year average values (B)	CI Score components (A*B) = (C)	Contribution of components
CPIA	0.385	2.745	1.06	63%
Real growth rate (in percent)	2.719	1.179	0.03	2%
Import coverage of reserves (in percent)	4.052	0.790	0.03	2%
Import coverage of reserves^2 (in percent)	-3.990	0.006	0.00	0%
Remittances (in percent)	2.022	4.164	0.08	5%
World economic growth (in percent)	13.520	3.559	0.48	29%
CI Score			1.69	100%
CI rating			Weak	

Applicable Thresholds

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

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

[3] The CI calculation is based on World Economic Outlook databases for April 2019 and October 2018.

5. Given the severity and frequency of natural disasters in the FSM, a tailored stress test for a natural disaster shock is added to the standard set of stress test scenarios.[4] On a natural disaster scenario, a one-off shock of 10 percentage points to debt-GDP ratio in FY2019 is assumed, with real GDP growth and exports growth lowered by 5.0 and 3.5 percentage points, respectively, in the year of the shock.[5] Shocks related to contingent liabilities are considered, using the default shock parameters, while the scenario with exchange rate depreciation is not considered as the U.S. dollar is the FSM's legal tender.

DEBT SUSTAINABILITY

A. External Debt Sustainability Analysis

6. Under the baseline scenario, the FSM's external debt is projected to breach a DSA threshold in the 2030s. Due to the fiscal cliff in FY2023 that would result in sizable fiscal deficits thereafter, the ratio of external debt to GDP is projected to rise from 12 percent in FY2023 to 30 percent in FY2029 and 57 percent in FY2039. As a result, the PV of external debt-to-GDP ratio breaches its threshold in FY2033, while the ratio of the PV of external debt to export and the ratios of debt service to revenue and exports remain below their thresholds throughout the projection period. The external debt path worsened compared to the previous DSA, which projected the external debt-to-GDP ratio to reach 24 percent in FY2027 and 49 percent in FY2037. This reflects the worsening of the long-run fiscal position compared to the previous DSA.

7. Stress tests point to the vulnerability of the FSM's external debt dynamics to shocks, especially related to natural disasters and a worsening of the fiscal position. The natural disaster shock would have a long-term effect on debt accumulation with the highest debt level in FY2039 among shock scenarios: the PV of external debt-to-GDP ratio rises to 41 percent in FY2029 and 83 percent in FY2039, breaching the threshold in FY2027, six years earlier than in the baseline. Among the standardized tests, a shock in the fiscal primary balance would result in the highest PV of external debt-to-GDP ratio for the 10-year horizon, breaching the threshold in FY2028.

B. Public Sector Debt Sustainability Analysis

8. Public sector debt follows closely the dynamic of external debt. Due to the fiscal cliff, fiscal deficit is expected to remain sizable from FY2024 onwards. As a result, the ratio of public debt to GDP is projected to rise from 12 percent in FY2023 to 43 percent in FY2029 and 67 percent in FY2039. Public debt rises faster than external debt, reflecting a gradually rising share of domestic debt in the government financing mix. As a result, the PV of public debt-to-GDP ratio breaches the threshold in FY2030. Like external debt, the public debt path worsened compared to the previous DSA, which projected the public debt-to-GDP ratio to reach 24 percent in FY2027 and 49 percent in FY2037. Stress tests also confirm the vulnerability of public debt dynamics to natural disasters and a worsening of the fiscal position. A negative

[4] The stress test for exchange rate depreciation is not conducted as the FSM uses the US dollar as legal tender. Because of this, the bottom-left chart in Figure 1 ("Customization of Default Settings") indicates that standardized tests are customized.

[5] The size of the shock on GDP growth (-5.0 percent), which is larger than the default value of the DSF framework (-1.5 percent), is based on cross-country regression results of Lee and others, 2018, "The Economic Impact of Natural Disasters in Pacific Island Countries: Adaptation and Preparedness," IMF Working Paper No.18/108.

growth shock can also lead to higher fiscal deficits as percent of GDP, sharply increasing the PV of public debt-to-GDP ratio to 115 percent in FY2039.

RISK RATING AND VULNERABILITIES

9. The FSM remains at high risk of external and overall debt distress. The DSA's mechanical external and overall debt-distress ratings are moderate because no DSA threshold is breached within the standard 10-year horizon. Nonetheless, following the DSA guideline, the horizon for the FSM is extended to 20 years, taking into account the fiscal cliff in FY2024 and sizable fiscal deficits thereafter, a likely structural break that would put debt on an upward trajectory barring fiscal adjustments. With one out of four external debt thresholds and the threshold for total public debt breached by end-FY2039, the FSM's external and overall debt distress risk ratings should be judged to be high. The judgement is also in line with stress test results, which indicate the vulnerability of the FSM's external and public debt paths to natural disasters and a worsening of the fiscal position. The high risk rating underscores the need to implement fiscal adjustments and develop a strategy for climate change resilience, as well as improving capacity for debt management.

10. Consideration on the FSM's access to trust and sinking funds would not alter the high risk rating. The DSA is conducted on a gross debt basis and does not net out financial assets to which the FSM government has access in the future: the Compact Trust Fund (156 percent of GDP in FY2017), the FSM Trust Fund (32 percent of GDP), and a sinking fund for public debt (about 6 percent of GDP). However, these funds should not be regarded as liquid and readily available for debt repayments: (i) under the Compact Agreement, drawdowns from the Compact Trust Fund are prohibited prior to FY2024 and limited to investment returns after FY2024; (ii) the FSM Trust Fund Act (amended in 2019 by Public Law No. 20–185) stipulates that no funds can be withdrawn from the fund before FY2030; and (iii) the size of the sinking fund, only slightly larger than the annual fiscal deficit projected post-FY2024, would not affect the thrust of the analyses presented above.

AUTHORITIES' VIEWS

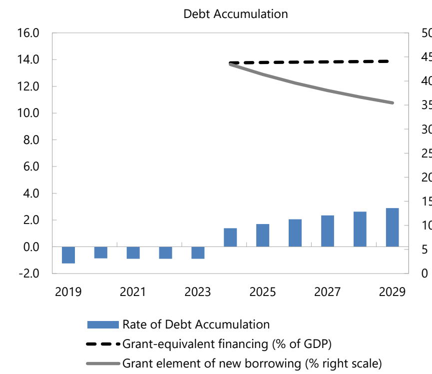
11. The authorities agreed that the FSM remains at high risk of debt distress. They supported staff's judgement to use a 20-year forecast horizon, which incorporates the FSM's country-specific prospect that U.S. Compact grants are expected to expire in FY2023 under the Compact Agreement. They also agreed that a gradual fiscal adjustment through FY2023, aimed at coping with the fiscal cliff while preserving the budget space for critical development spending, would be warranted and reduce the debt distress risk.

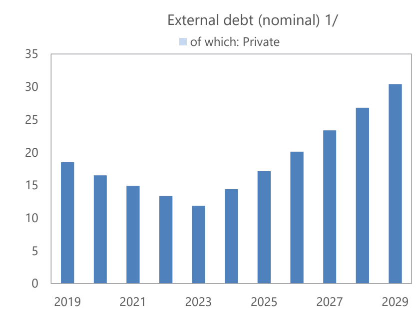
Table 1. Federated States of Micronesia: External Debt Sustainability Framework, Baseline Scenario, 2018–39

(In percent of GDP, unless otherwise indicated)

	Actual	Projections								Average 8/	
	2018	2019	2020	2021	2022	2023	2024	2029	2039	Historical	Projections
External debt (nominal) 1/	**20.3**	**18.5**	**16.5**	**14.9**	**13.3**	**11.9**	**14.4**	**30.4**	**57.3**	**26.3**	**18.8**
of which: public and publicly guaranteed (PPG)	**20.3**	**18.5**	**16.5**	**14.9**	**13.3**	**11.9**	**14.4**	**30.4**	**57.3**	**26.3**	**18.8**
Change in external debt	-1.9	-1.8	-2.0	-1.6	-1.6	-1.5	2.5	3.6	1.0		
Identified net debt-creating flows	**-25.0**	**-15.9**	**-2.7**	**-2.5**	**-2.4**	**-2.1**	**4.2**	**4.1**	**3.9**	**4.1**	**-0.1**
Non-interest current account deficit	**-25.0**	**-16.4**	**-2.7**	**-2.8**	**-2.6**	**-2.4**	**4.0**	**3.7**	**3.0**	**4.2**	**-0.3**
Deficit in balance of goods and services	44.5	45.2	44.0	43.7	41.6	41.4	40.8	40.3	39.5	**52.2**	**41.7**
Exports	30.4	30.7	30.9	31.1	31.2	31.3	31.3	31.3	31.3		
Imports	74.9	75.9	74.9	74.8	72.8	72.7	72.1	71.7	70.8		
Net current transfers (negative = inflow)	-56.3	-48.4	-34.4	-34.1	-32.1	-31.9	-13.9	-14.3	-15.0	**-37.9**	**-24.1**
of which: official	-30.4	-30.7	-29.0	-28.4	-26.1	-25.5	-7.4	-7.4	-7.4		
Other current account flows (negative = net inflow)	-13.2	-13.2	-12.3	-12.4	-12.1	-11.9	-22.9	-22.4	-21.5	**-10.1**	**-18.0**
Net FDI (negative = inflow)	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**
Endogenous debt dynamics 2/	**0.0**	**0.4**	**-0.1**	**0.3**	**0.2**	**0.2**	**0.2**	**0.4**	**0.9**		
Contribution from nominal interest rate	0.5	0.7	0.1	0.4	0.3	0.3	0.2	0.5	1.2		
Contribution from real GDP growth	-0.3	-0.3	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.3		
Contribution from price and exchange rate changes	-0.3	...	...	...	...	...	...	...	...		
Residual 3/	**23.1**	**14.1**	**0.7**	**0.9**	**0.8**	**0.6**	**-1.7**	**-0.5**	**-3.0**	**-5.0**	**1.0**
of which: exceptional financing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Sustainability indicators											
PV of PPG external debt-to-GDP ratio	**16.4**	**14.8**	**13.6**	**12.4**	**11.2**	**10.0**	**11.1**	**20.6**	**41.3**		
PV of PPG external debt-to-exports ratio	**54.1**	**48.3**	**44.0**	**39.8**	**35.8**	**32.0**	**35.5**	**65.8**	**132.1**		
PPG debt service-to-exports ratio	**5.8**	**6.6**	**5.1**	**5.0**	**4.7**	**4.6**	**4.4**	**4.5**	**7.7**		
PPG debt service-to-revenue ratio	**3.0**	**4.1**	**4.4**	**4.4**	**4.3**	**4.2**	**3.0**	**3.2**	**5.8**		
Gross external financing need (Million of U.S. dollars)	-86.2	-54.5	-4.2	-4.8	-4.5	-3.8	23.5	25.6	35.0		
Key macroeconomic assumptions											
Real GDP growth (in percent)	1.2	1.4	0.8	0.7	0.6	0.6	0.6	0.6	0.6	**0.8**	**0.7**
GDP deflator in US dollar terms (change in percent)	1.2	1.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	**2.8**	**1.9**
Effective interest rate (percent) 4/	2.4	3.6	0.3	2.4	2.1	2.2	2.1	2.0	2.2	**2.6**	**2.0**
Growth of exports of G&S (US dollar terms, in percent)	3.1	3.5	3.4	3.4	2.9	2.9	2.6	2.6	2.6	**6.8**	**2.9**
Growth of imports of G&S (US dollar terms, in percent)	4.1	3.8	1.4	2.6	-0.1	2.5	1.8	2.5	2.5	**2.2**	**2.2**
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	...	...	35.5	37.2	**...**	**38.2**
Government revenues (excluding grants, in percent of GDP)	58.2	48.9	35.7	35.2	34.7	34.3	45.1	43.7	41.5	**32.3**	**41.4**
Aid flows (in Million of US dollars) 5/	142.0	147.6	143.7	144.7	136.3	137.4	62.3	69.5	87.0		
Grant-equivalent financing (in percent of GDP) 6/	...	...	...	...	...	...	13.8	13.9	13.4	**...**	**13.8**
Grant-equivalent financing (in percent of external financing) 6/	...	...	...	...	...	...	86.0	80.5	85.5	**...**	**83.2**
Nominal GDP (Million of US dollars)	372	381	391	402	413	423	434	494	640		
Nominal dollar GDP growth	2.5	2.4	2.7	2.8	2.6	2.6	2.6	2.6	2.6	**3.6**	**2.6**
Memorandum items:											
PV of external debt 7/	16.4	14.8	13.6	12.4	11.2	10.0	11.1	20.6	41.3		
In percent of exports	54.1	48.3	44.0	39.8	35.8	32.0	35.5	65.8	132.1		
Total external debt service-to-exports ratio	5.8	6.6	5.1	5.0	4.7	4.6	4.4	4.5	7.7		
PV of PPG external debt (in Million of US dollars)	61.2	56.5	53.3	49.7	46.1	42.4	48.3	101.8	264.5		
(PVt-PVt-1)/GDPt-1 (in percent)		-1.2	-0.9	-0.9	-0.9	-0.9	1.4	2.9	1.9		
Non-interest current account deficit that stabilizes debt ratio	-23.1	-14.6	-0.7	-1.2	-1.1	-0.9	1.4	0.1	2.0		

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





Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

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

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

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

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

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

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

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

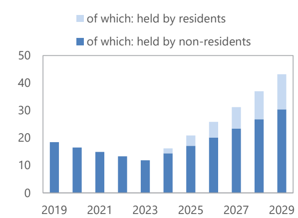
Table 2. Federated States of Micronesia: Public Sector Debt Sustainability Framework, Baseline Scenario, 2018–39

(In percent of GDP, unless otherwise indicated)

	Actual	Projections								Average 6/	
	2018	2019	2020	2021	2022	2023	2024	2029	2039	Historical	Projections
Public sector debt 1/	20.3	18.5	16.5	14.9	13.3	11.9	16.2	43.2	67.0	26.3	22.7
of which: external debt	20.3	18.5	16.5	14.9	13.3	11.9	14.4	30.4	57.3	26.3	18.8
Change in public sector debt	-1.9	-1.8	-2.0	-1.6	-1.6	-1.5	4.4	6.1	1.2		
Identified debt-creating flows	-27.6	-19.0	-7.3	-6.7	-5.7	-4.7	4.4	6.1	4.4	-8.2	-1.1
Primary deficit	-27.6	-19.2	-6.9	-6.6	-5.6	-4.7	4.4	5.8	4.0	-7.9	-1.1
Revenue and grants	96.4	87.6	72.4	71.2	67.8	66.7	57.1	55.8	53.5	70.3	64.0
of which: grants	38.2	38.8	36.7	36.0	33.0	32.5	12.0	12.0	12.0		
Primary (noninterest) expenditure	68.8	68.4	65.5	64.6	62.1	62.1	61.5	61.5	57.5	62.4	62.9
Automatic debt dynamics	0.0	0.2	-0.4	-0.1	-0.1	-0.1	-0.1	0.4	0.3		
Contribution from interest rate/growth differential	-0.2	0.1	-0.4	-0.1	-0.1	-0.1	-0.1	0.4	0.3		
of which: contribution from average real interest rate	0.0	0.3	-0.3	0.0	0.0	0.0	0.0	0.6	0.7		
of which: contribution from real GDP growth	-0.3	-0.3	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.4		
Contribution from real exchange rate depreciation	0.2	...	...	...	...	...	...	...	...		
Other identified debt-creating flows	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Privatization receipts (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Recognition of contingent liabilities (e.g., bank recapitalization)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Debt relief (HIPC and other)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Other debt creating or reducing flow (please specify)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Residual	25.7	17.3	5.3	5.1	4.2	3.3	0.0	0.0	-3.1	7.3	3.2
Sustainability indicators											
PV of public debt-to-GDP ratio 2/	16.4	14.8	13.6	12.4	11.2	10.0	12.9	33.4	51.1		
PV of public debt-to-revenue and grants ratio	17.1	16.9	18.8	17.4	16.5	15.0	22.6	59.8	95.5		
Debt service-to-revenue and grants ratio 3/	1.8	2.3	2.2	2.2	2.2	2.1	2.4	14.3	11.7		
Gross financing need 4/	-25.8	-17.2	-5.3	-5.1	-4.1	-3.2	5.8	13.8	10.3		
Key macroeconomic and fiscal assumptions											
Real GDP growth (in percent)	1.2	1.4	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.8	0.7
Average nominal interest rate on external debt (in percent)	2.4	3.6	0.3	2.4	2.1	2.2	2.1	2.0	2.2	2.6	2.0
Average real interest rate on domestic debt (in percent)	1.2	2.6	-1.6	0.4	0.1	0.2	0.1	6.0	6.6	-0.1	2.8
Real exchange rate depreciation (in percent, + indicates depreciation)	1.0	...	...	...	...	...	...	...	...	-1.1	...
Inflation rate (GDP deflator, in percent)	1.2	1.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.8	1.9
Growth of real primary spending (deflated by GDP deflator, in percent)	8.6	0.9	-3.6	-0.7	-3.2	0.5	-0.3	0.6	-0.3	2.6	-0.3
Primary deficit that stabilizes the debt-to-GDP ratio 5/	-25.7	-17.4	-4.9	-5.0	-4.1	-3.2	0.1	-0.4	2.8	-14.8	-3.2
PV of contingent liabilities (not included in public sector debt)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

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

Public sector debt 1/



Sources: Country authorities; and staff estimates and projections.

1/ Coverage of debt: The central, state, and local governments. Definition of external debt is Residency-based.

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

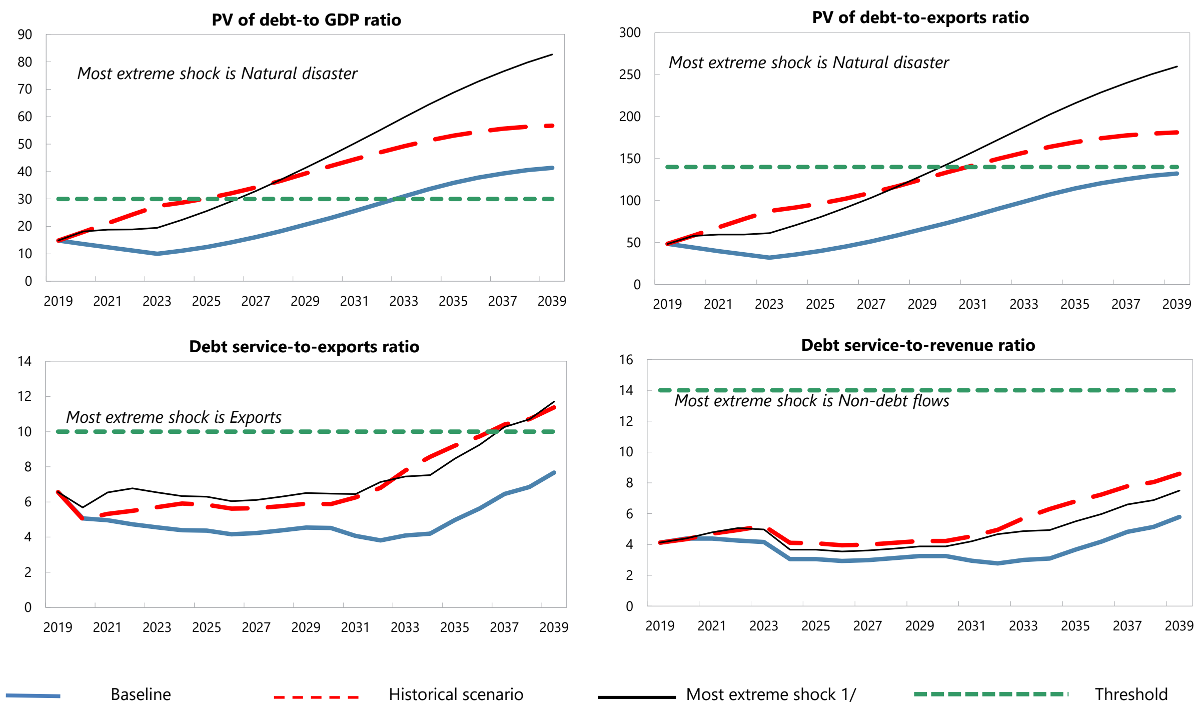
3/ Debt service is defined as the sum of interest and amortization of medium and long-term, and short-term debt.

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

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

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

Figure 1. Federated States of Micronesia: Indicators of Public and Publicly Guaranteed External Debt Under Alternative Scenarios, 2019–39



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

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

Borrowing Assumptions for Stress Tests*	Default	User defined
Shares of marginal debt		
External PPG MLT debt	100%	
Terms of marginal debt		
Avg. nominal interest rate on new borrowing in USD	2.1%	2.1%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	29	29
Avg. grace period	10	10

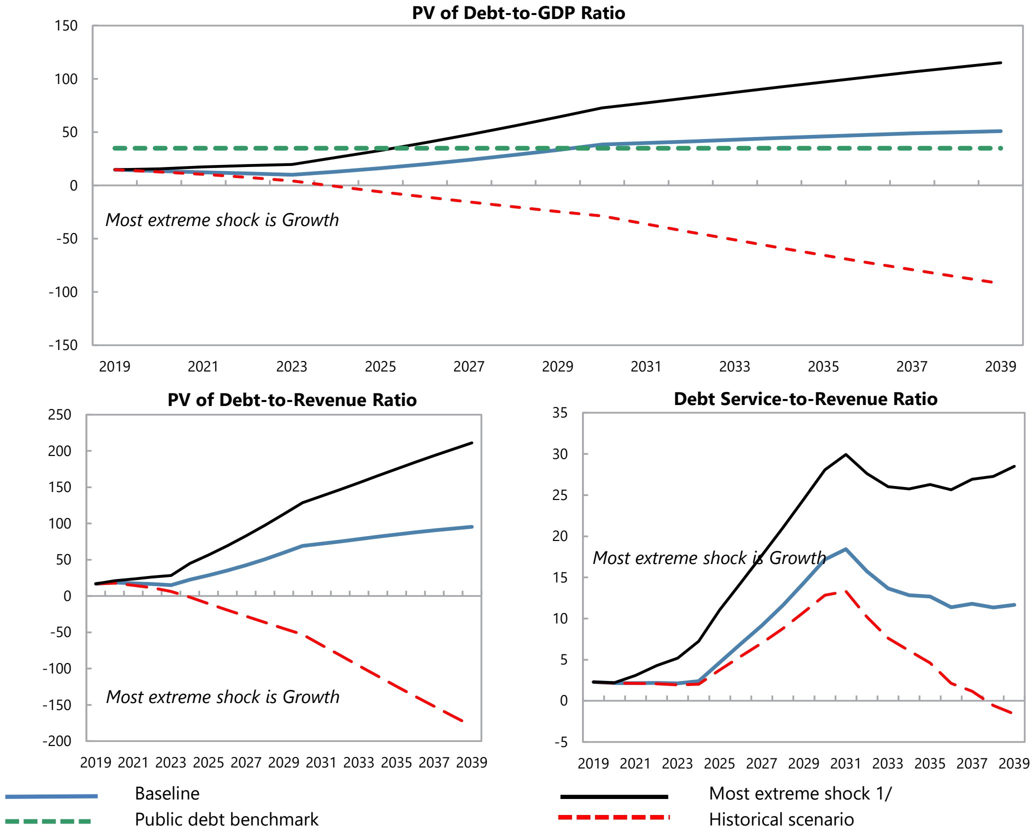
* Note: All the additional financing needs generated by the shocks under the stress tests are assumed to be covered by PPG external MLT debt in the external DSA. Default terms of marginal debt are based on baseline 10-year projections.

Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2029. Stress tests with one-off breaches are also presented (if any), while these one-off breaches are deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most exterme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

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

Figure 2. Federated States of Micronesia: Indicators of Public Debt Under Alternative Scenarios, 2019–39



Borrowing Assumptions for Stress Tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	50%	50%
Domestic medium and long-term	17%	17%
Domestic short-term	32%	32%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	2.1%	2.1%
Avg. maturity (incl. grace period)	29	29
Avg. grace period	10	10
Domestic MLT debt		
Avg. real interest rate on new borrowing	7.0%	7.0%
Avg. maturity (incl. grace period)	3	3
Avg. grace period	2	2
Domestic short-term debt		
Avg. real interest rate	5.0%	5.0%

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

Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2029. The stress test with a one-off breach is also presented (if any), while the one-off breach is deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most exterme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

Table 3. Federated States of Micronesia: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2019–39

(In percent)

	Projections 1/											
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2039
PV of debt-to GDP ratio												
Baseline	15	14	12	11	10	11	12	14	16	18	21	**41**
A. Alternative Scenarios												
A1. Key variables at their historical averages in 2019-2029 2/	15	18	21	24	27	29	**30**	**32**	**34**	**37**	**39**	**57**
B. Bound Tests												
B1. Real GDP growth	15	14	13	12	11	12	14	15	18	20	22	**45**
B2. Primary balance	15	16	19	19	19	21	24	26	28	**31**	**33**	**54**
B3. Exports	15	16	19	18	17	18	20	22	24	26	29	**48**
B4. Other flows 3/	15	18	21	20	19	21	22	24	26	28	**31**	**48**
B5. Depreciation	15	14	12	11	10	11	12	14	16	18	21	**41**
B6. Combination of B1-B5	15	18	19	18	17	18	19	21	23	26	28	**47**
C. Tailored Tests												
C1. Combined contingent liabilities	15	16	15	15	14	15	17	19	21	23	26	**48**
C2. Natural disaster	15	18	19	19	19	22	26	29	**33**	**37**	**41**	**83**
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	30	30	30	30	30	30	30	30	30	30	30	30
PV of debt-to-exports ratio												
Baseline	48	44	40	36	32	35	40	45	51	58	66	132
A. Alternative Scenarios												
A1. Key variables at their historical averages in 2019-2029 2/	48	58	68	78	87	92	97	102	109	117	125	**181**
B. Bound Tests												
B1. Real GDP growth	48	44	40	36	32	35	40	45	51	58	66	132
B2. Primary balance	48	53	61	62	61	69	75	82	90	98	107	**174**
B3. Exports	48	57	76	71	67	71	77	84	93	102	112	**186**
B4. Other flows 3/	48	59	69	65	62	66	70	76	83	90	98	**153**
B5. Depreciation	48	44	40	36	32	35	40	45	51	58	66	132
B6. Combination of B1-B5	48	60	58	61	57	61	66	72	80	88	96	**163**
C. Tailored Tests												
C1. Combined contingent liabilities	48	51	50	47	45	49	54	60	67	74	82	**152**
C2. Natural disaster	48	58	59	60	61	70	80	91	104	116	130	**260**
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	140	140	140	140	140	140	140	140	140	140	140	140
Debt service-to-exports ratio												
Baseline	7	5	5	5	5	4	4	4	4	4	5	8
A. Alternative Scenarios												
A1. Key variables at their historical averages in 2019-2029 2/	7	5	5	5	6	6	6	6	6	6	6	11
B. Bound Tests												
B1. Real GDP growth	7	5	5	5	5	4	4	4	4	4	5	8
B2. Primary balance	7	5	5	5	5	5	5	5	5	5	6	11
B3. Exports	7	6	7	7	7	6	6	6	6	6	7	12
B4. Other flows 3/	7	5	5	6	5	5	5	5	5	5	5	10
B5. Depreciation	7	5	5	5	5	4	4	4	4	4	5	8
B6. Combination of B1-B5	7	5	6	6	6	6	6	5	5	6	6	10
C. Tailored Tests												
C1. Combined contingent liabilities	7	5	5	5	5	5	5	5	5	5	5	8
C2. Natural disaster	7	5	6	5	5	5	6	5	6	6	6	11
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	10	10	10	10	10	10	10	10	10	10	10	10
Debt service-to-revenue ratio												
Baseline	4	4	4	4	4	3	3	3	3	3	3	6
A. Alternative Scenarios												
A1. Key variables at their historical averages in 2019-2029 2/	4	4	5	5	5	4	4	4	4	4	4	9
B. Bound Tests												
B1. Real GDP growth	4	5	5	5	5	3	3	3	3	3	4	6
B2. Primary balance	4	4	5	5	5	4	4	4	4	4	4	8
B3. Exports	4	4	5	5	5	4	4	3	4	4	4	7
B4. Other flows 3/	4	4	5	5	5	4	4	4	4	4	4	8
B5. Depreciation	4	4	4	4	4	3	3	3	3	3	3	6
B6. Combination of B1-B5	4	4	5	5	5	4	4	3	4	4	4	7
C. Tailored Tests												
C1. Combined contingent liabilities	4	4	5	5	4	3	3	3	3	3	4	6
C2. Natural disaster	4	4	5	5	5	4	4	4	4	4	4	8
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	14	14	14	14	14	14	14	14	14	14	14	14

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

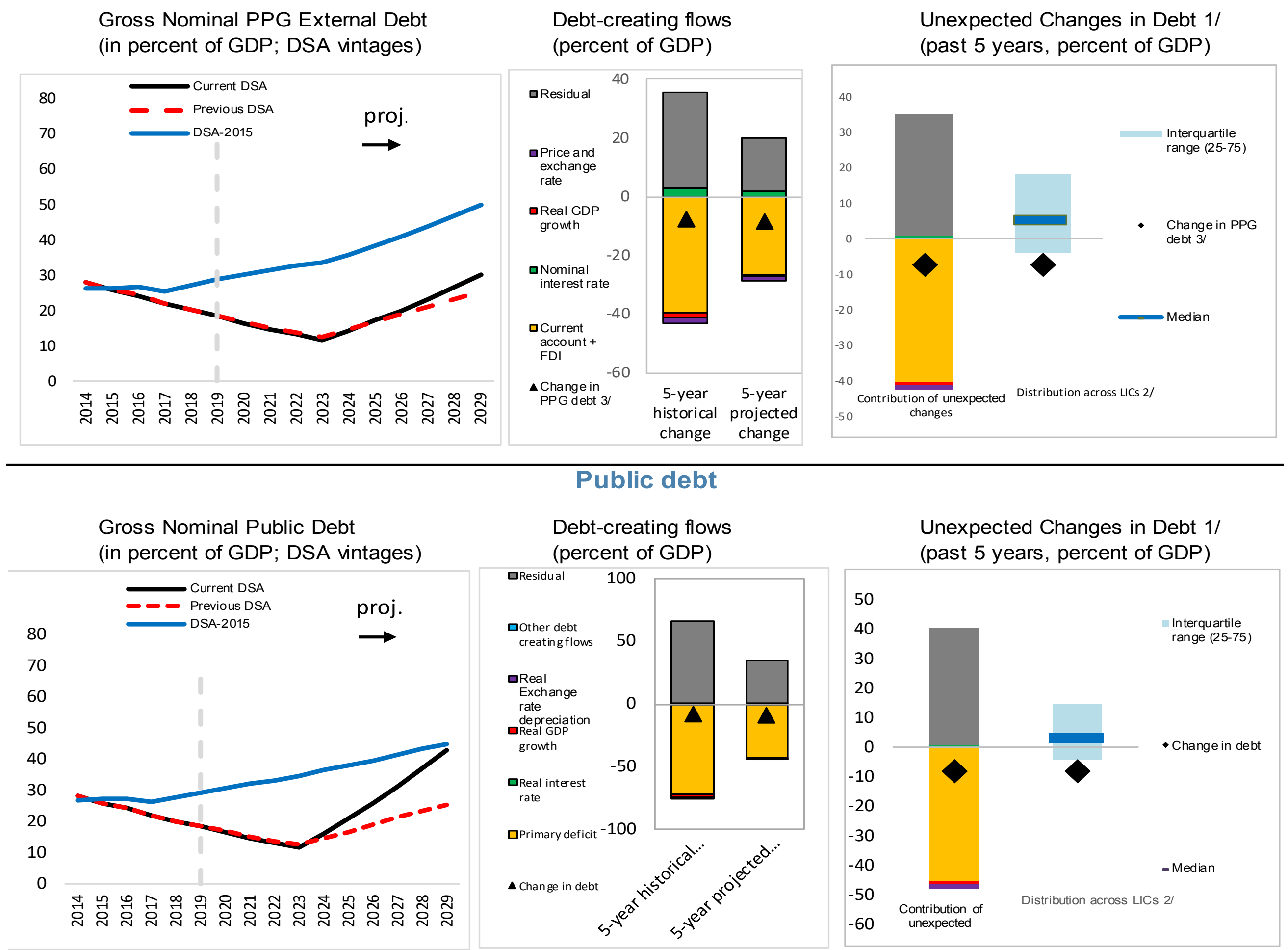
Table 4. Federated States of Micronesia: Sensitivity Analysis for Key Indicators of Public Debt, 2019–39
(In percent)

	Projections 1/											
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2039
PV of Debt-to-GDP Ratio												
Baseline	15	14	12	11	10	13	16	20	24	28	33	**51**
A. Alternative Scenarios												
A1. Key variables at their historical averages in 2019-2029 2/	15	13	11	8	4	-1	-6	-11	-15	-20	-24	-92
B. Bound Tests												
B1. Real GDP growth	15	16	17	19	20	26	33	**40**	**48**	**56**	**64**	**115**
B2. Primary balance	15	21	26	25	24	27	30	34	**38**	**42**	**47**	**66**
B3. Exports	15	16	19	18	17	20	23	27	31	**35**	**40**	**56**
B4. Other flows 3/	15	18	21	20	19	22	26	30	34	**38**	**43**	**58**
B5. Depreciation	15	14	12	11	10	13	16	20	24	28	33	**51**
B6. Combination of B1-B5	15	18	17	14	13	16	20	24	28	33	**38**	**56**
C. Tailored Tests												
C1. Combined contingent liabilities	15	19	18	17	15	18	22	25	29	34	**39**	**58**
C2. Natural disaster	15	24	24	24	24	29	34	**40**	**46**	**53**	**60**	**98**
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public debt benchmark	35	35	35	35	35	35	35	35	35	35	35	35
PV of Debt-to-Revenue Ratio												
Baseline	17	19	17	16	15	23	29	35	43	51	60	95
A. Alternative Scenarios												
A1. Key variables at their historical averages in 2019-2029 2/	17	18	15	11	6	(2)	(11)	(19)	(28)	(36)	(45)	(179)
B. Bound Tests												
B1. Real GDP growth	17	21	23	26	28	45	57	70	83	98	113	211
B2. Primary balance	17	29	37	37	36	46	52	59	67	76	85	123
B3. Exports	17	22	26	26	25	34	40	47	55	63	72	104
B4. Other flows 3/	17	25	30	30	29	39	45	52	60	69	78	108
B5. Depreciation	17	19	17	16	15	23	29	35	43	51	60	95
B6. Combination of B1-B5	17	25	24	20	19	28	35	42	49	58	67	104
C. Tailored Tests												
C1. Combined contingent liabilities	17	27	25	25	23	32	38	45	52	61	70	107
C2. Natural disaster	17	32	33	35	35	50	60	70	81	93	106	182
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Debt Service-to-Revenue Ratio												
Baseline	2	2	2	2	2	2	5	7	9	12	14	12
A. Alternative Scenarios												
A1. Key variables at their historical averages in 2019-2029 2/	2	2	2	2	2	2	4	5	7	9	11	(2)
B. Bound Tests												
B1. Real GDP growth	2	2	3	4	5	7	11	14	18	21	25	28
B2. Primary balance	2	2	7	9	8	9	9	10	12	14	17	16
B3. Exports	2	2	2	2	2	3	5	7	10	12	15	13
B4. Other flows 3/	2	2	2	3	3	3	5	7	10	12	15	13
B5. Depreciation	2	2	2	2	2	2	5	7	9	12	14	12
B6. Combination of B1-B5	2	2	2	4	3	4	7	9	12	14	17	15
C. Tailored Tests												
C1. Combined contingent liabilities	2	2	6	4	5	5	6	8	10	13	15	12
C2. Natural disaster	2	2	8	6	8	8	10	13	16	18	21	21
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

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

Figure 3. Federated States of Micronesia: Drivers of Debt Dynamics – Baseline Scenario

External debt



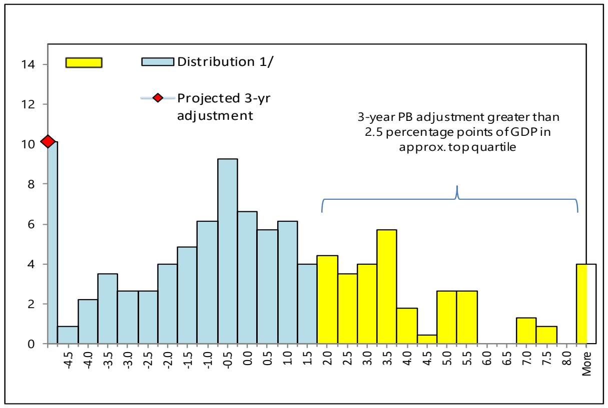
1/ Difference between anticipated and actual contributions on debt ratios.

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

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

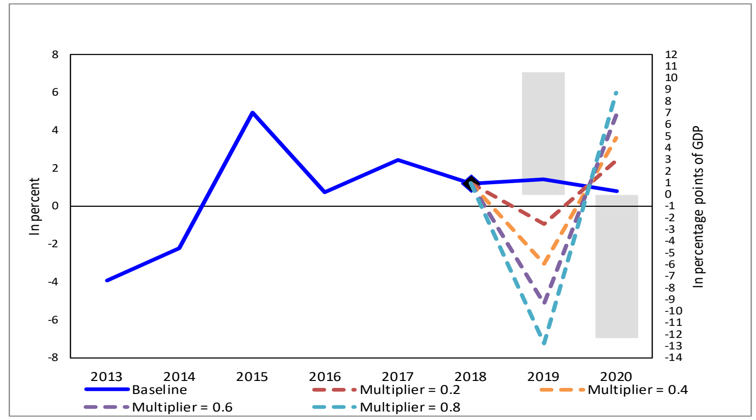
Figure 4. Federated States of Micronesia: Realism Tools 1/

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



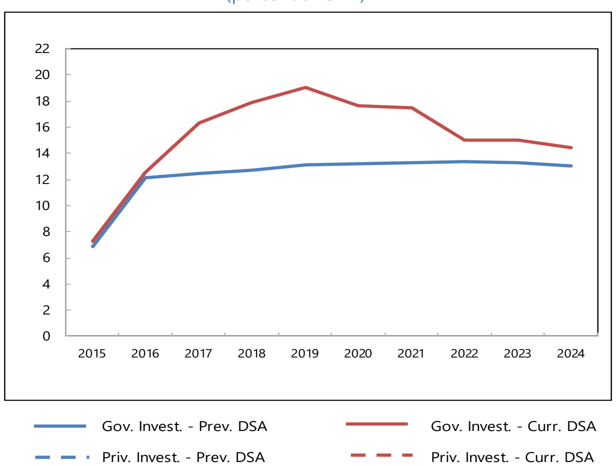
1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

Fiscal Adjustment and Possible Growth Paths 1/



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

Public and Private Investment Rates
(percent of GDP)



1/ The data needed to conduct the investment growth realism tool is not available for the DSA exercise.

Statement by Nigel Ray, Executive Director for the Federated States of Micronesia and Sali David, Advisor to the Executive Director
August 28, 2019

The Federated States of Micronesia (FSM) is a small island country spread out over the western Pacific Ocean with more than 600 islands, covering an area roughly the width of Australia. It has a population of just over 100,000. Four autonomous states make up the FSM – Pohnpei, Kosrae, Chuuk and Yap – each with its own distinct language and ethnic identity.

A key challenge for the country is the forthcoming expiry of annual grants from the United States (US) – equivalent to more than 20 percent of GDP – made under the Compact of Free Association between the two countries. After 2023, most of these will be replaced by distributions from a Compact Trust Fund (CTF) being built up from US contributions. However, the current track for contributions, together with expected investment returns, means that these distributions are unlikely to compensate for the loss of grants while also maintaining the CTF's real value over time. The FSM also has its own, separate trust fund, the FSM Trust Fund (FSMTF) as an additional revenue source to enhance fiscal self-reliance.

A government committee has been established to plan for the expiry of the grants and of some support services currently received from the US. The FSM has an Action Plan 2023 to help prepare for these events, that includes increasing revenue mobilization, building fiscal buffers and developing the private sector. President David W. Panuelo was elected in May 2019 and aims to continue driving a reform agenda.

Other challenges include mitigating climate change effects and building resilience to natural disasters. The FSM is the first Pacific island country to have an IMF-World Bank Climate Change Policy Assessment (CCPA), conducted alongside the Article IV consultation.

The FSM authorities broadly agree with staff's recommendations and are grateful for the technical assistance and training they receive from the Fund.

Fiscal policy

The FSM will face a fiscal cliff after 2023, with the overall balance projected to turn from a surplus of around 5 percent of GDP in 2023 to a deficit of 4-5 percent of GDP in 2024. The authorities broadly agreed with staff's recommendation for a gradual fiscal adjustment leading up to 2023 to preserve budget space for priority areas of spending such as education and health. They will continue to enhance tax compliance and consider growth-friendly tax policy reforms, such as introducing a value added tax and selected excises on tobacco, alcohol and fuel. The authorities are also rationalizing tax expenditures and strengthening tax administration through the roll-out of a new IT system. Ongoing PFM reforms with the World Bank and European Union will help streamline and rationalize nonessential expenditure, as well as ensuring space for spending on climate change resilience.

The authorities are committed to continue building up the FSMTF by saving revenue windfalls into it. Funds in the FSMTF have grown from about $13 million in 2014 to around $230 million in 2019. New laws were also enacted this year that earmark 50 percent of corporate tax receipts and 20 percent of fishing license fees as contributions to the FSMTF. As things currently stand, the FSM will only be able to take investment returns out of the CTF, meaning there could be large revenue volatility after 2023. The authorities do not agree with staff's recommendation to use the FSMTF as a stabilizer, as they want to keep building up the FSMTF for the long term. Instead, the authorities are seeking a review of the rules around CTF distributions.

Fiscal deficits post-2023 would place external debt on an upward trajectory, leaving the FSM at a high risk of debt distress. The authorities support staff's consideration of the debt trajectory over a 20-year horizon in the DSA, as this reflects the risks facing the country. They intend to continue maximizing grant financing and not take on any new loans up to 2023.

Financial sector

Supervision of the FSM's financial sector would be significantly transformed by any reduction in US FDIC oversight after 2023. The authorities agree with staff's recommendation to strengthen the FSM Banking Board's capacity for banking supervision, update the banking laws, maintain correspondent banking relationships and develop prudential regulations. The authorities have been active in addressing international tax transparency issues given that a number of investment companies are based in the FSM. An assessment by the EU and OECD Global Forum on Transparency and Exchange of Information for Tax Purposes two years ago found the FSM to be largely compliant.

Private sector development

The authorities agreed that improving the business and investment climate, and facilitating access to credit, is critical for private sector development. The country's remoteness, limited natural resources and sparse population present challenges to private-sector growth. However, efforts are underway to implement reforms in sectors such as fisheries, information and communication technologies, maritime transportation, energy and niche tourism. These include judicial reforms for business dispute resolution and coordinating with the four State governments on land registries. A bill to amend the Foreign Investment Act is currently before Congress, aimed at streamlining FDI laws and creating a single national window for FDI.

Climate Change

The FSM has many low-lying islands at risk from natural disasters, compounded by rising sea levels and temperature change. The CCPA found there is generally good planning in place, and there may be available financing to address climate change impacts from the $200 million backlog of unspent compact infrastructure funds. However, some infrastructure gaps remain, largely as a result of the need to find suitable projects for donors

as well as a lack of absorptive capacity in the FSM.

The CCPA recommended developing an overarching National Adaptation Plan that is fully integrated with sectoral and subnational strategies, as well as a comprehensive strategy for building resilience to natural disasters, particularly for early warning, disaster response and risk financing. The latter is important given the expected loss of access to direct funding from US federal agencies for natural disaster response and reconstruction after 2023.

The authorities will reflect on the findings and recommendations of the CCPA. Full implementation of the FSM's energy master plan should enable the country to meet its Naturally Determined Contributions under the Paris Agreement. The authorities agree that adaptation planning is lacking and will continue to seek sources of financing as well as technical assistance to support their planning. They would also like climate finance institutions to streamline their requirements for small states that have limited capacity to access funding.