# Weathering the Storm:

## ADDRESSING DEBT AND CLIMATE VULNERABILITY IN THE PACIFIC

Caritas OCEANIA

Caritas AUSTRALIA

JUBILEE AUSTRALIA RESEARCH CENTRE

# Weathering the Storm: Addressing Debt and Climate Vulnerability in the Pacific

**Publishers:** Caritas Australia, Caritas Oceania and Jubilee Australia Research Centre

**Lead Author:** Luke Fletcher

**Contributions by:** Suhailah Ali, Zhi Yan, Damian Spruce, Sam Quinn and Emily Mitchell

**Editing:** Suhailah Ali and Damian Spruce

**Design:** Twofold Design

**Date of Publication:** November 2024

**Acknowledgements:** We wish to thank the following people for contributing to the ideas in this report: Sindra Sharma, Susan Engel, Dr Transform Aqorau, Emmeline Siale Ilolahia, Adam Wolfenden, Iolanda Fresnillo, Lori Osmundsen, Sophie Hardefeldt and Tim Jones.

## About Caritas

As the Catholic Church's international aid and development agency, Caritas Australia works hand in hand with the most marginalised communities in Australia and overseas, to confront the challenges of poverty. Through locally-led programs, we work with all people, with shared hope and compassion, towards a world where all can thrive and reach their full potential. Through partnerships with local organisations and Church networks, and as a member of Caritas Internationalis, one of the largest humanitarian networks in the world, we are able to reach where the need is greatest and work together for a just future. Working together for justice and dignity. Building together a thriving future for all.

## About Jubilee

Jubilee Australia is a Sydney based research centre which strives for a fairer future where a healthy planet, empowered communities and just economies go hand in hand. We conduct research-based advocacy, in partnership with other organisations and communities across Australia and the Asia-Pacific, to defend the rights of people and the planet over profit, and hold corporations and governments accountable.

## Copyright text



*COVER: This seawall in Ra in Fiji's Viti Levu has been built to give some protection from the tides, but climate change will require much more significant infrastructure for coastal communities to be secure. Photo credit: Emma Harvey, Jubilee Australia.*

# Table of Contents

# Foreword

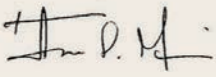
Two years ago Caritas Oceania's report on climate finance and debt in the Pacific, *Twin Clouds on the Horizon,* was launched, in collaboration with Jubilee Australia and Caritas Australia. In launching it I wrote of my experience as a child watching the horizon for gathering storms, and the signs that my parents taught me to look for to understand how the weather was developing and what dangers lay out at sea. These reports act as warnings of impending bad weather, and the need for the Pacific community to make preparations to deal with them and minimize the threat they pose and the damage they can cause.

The twin storms, of debt dangers and climate disasters, are further explored in the new report, and more importantly and practically the ways that they can be prepared for: policies that can help shield the Pacific from the worst of climate disasters and impacts, and that will assist in stopping debt from taking over Government spending that should be going to health, education and climate adaptation.

This is even more important as we consider issues of debt and relationship in the year of Jubilee. Jubilee 2025 will be a time of reflection and renewal, as in the Jubilee spirit debts are forgiven and relationships restored. Caritas Internationalis is organizing a global campaign across the Catholic community and beyond, to highlight unjust debt around the world and call for action to be taken to forgive debt and prevent it in the future. We know that in many developing countries, and countries that are vulnerable to climate change, governments are paying more in interest and other debt servicing obligations than they are on health education, or climate adaptation.

For those of us in the Pacific, the connections between debt and climate disasters are important ones to consider, and the Jubilee Year offers us the chance to reflect and act on them.

Malo aupito



Cardinal Soane Mafi
Bishop of Tonga and Niue
President of Caritas Oceania

*Children playing at a school in Samoa where 7 percent of people live in low lying coastal areas vulnerable to rising sea levels*
*Photo credit: Caritas Australia*

# Executive summary

There is a 'nexus' between achieving sustainable development and climate resilience. On the one hand, the absence of climate resilience can retard sustainable and inclusive development. On the other hand, building climate resilience, through the development of new and improved infrastructure, emergency and health systems, and the strengthening of both the public and the private sphere, can go a long way to setting the scene for large gains in sustainable and inclusive development.

One aspect of this nexus between climate resilience and sustainable development is the issue of sovereign debt. There is a worsening debt situation in developing countries, where new lending after 2010 has seen sovereign debt levels on the rise. Several Pacific Island states are among those that now have very high sovereign debt vulnerabilities.

At the heart of this report is the 'vicious circle of debt and climate crises'; the report follows on from a 2022 publication, *Twin Clouds on the Horizon,* delving more deeply into how the tensions between debt and climate, including climate finance, play out at a country level and examining other vulnerabilities that the debt problem could exacerbate.

## The Pacific Debt Situation

The current situation with respect to Pacific nations and sovereign debt is a complex one. Pacific nations themselves are diverse in size and in the nature and make-up of their economies. Some nations have quite high total debt levels relative to the size of the economy, some levels are moderate, and the past few years has seen movement of debt-to-GDP going both ways (i.e. up in some cases, down in others). The top official creditors to Pacific nations are the ADB, China, Japan, and the World Bank. Some countries, such as Fiji, Vanuatu and Kiribati, also have significant amounts of debt owed to domestic creditors, but most do not, meaning that their entire debt stock is owed to external creditors.

However, total debt levels, as measured in the debt-to-GDP ratio, are just one way to measure debt—more significant is the impact that debt repayments (or 'debt service') is having on the economy and on the ability of a government to deliver social services. Such an impact can be measured by other methods: for example, if the ratio of annual debt service to government revenue is consistently above 15 per cent, this indicates a situation where the debt levels are already unsustainably high. To look more deeply into the question of current Pacific country debt levels and impacts, and to examine what the future projections are for how debt levels could worsen in the coming years, this study chose seven case study countries: Fiji, Kiribati, Samoa, the Solomon Islands, Tonga, Tuvalu and Vanuatu.

Of the case study countries, Fiji, Samoa and Tonga are of greatest concern: Fiji and Samoa are already showing debt-service-to-revenue percentage which are on or around the 15 per cent level, indicating that they are already in a situation where debt is materially impacting the government's ability to deliver basic services. The Solomon Islands, Kiribati and Tuvalu are not facing any current or near-future challenges in meeting their debt obligations in that their debt-service-to-revenue percentages are low. Tonga and Vanuatu's debt service as a proportion of revenue are currently under the threshold but projections suggest they may soon become worryingly high.

Looking at the debt problem over the longer term, one commonality among the analyses of the case study countries is that debt-to-GDP projections—specifically those performed by the IMF/World Bank—are expected to increase beyond sustainability thresholds in coming years. The IMF/World Bank rate the risk of debt distress for Kiribati, the Solomon Islands, Tonga, Tuvalu, and Vanuatu as high and as moderate for Fiji and Samoa. The principal reason that debt levels are projected to increase, to be taken with a grain of salt, is a projected decline in grant aid in the coming years, forcing PICs to turn to loans to meet their finance needs for development and climate resilience.

## Debt and Climate Resilience

Extreme weather events such as tropical cyclones, storm surges and droughts are on the increase due to human-induced climate change; Table 3.6 lists some of the more damaging recent events and their economic impact on particular countries. Simultaneously, there are chronic and cascading climate impacts such as the loss of food sources from higher annual temperatures, and sea level rise and the loss of fisheries and marine life from a warming ocean. The increasing frequency and intensity of these impacts is having an economically quantifiable effect on Pacific countries and communities.

Although estimating the costs of climate adaptation, mitigation and loss and damage is challenging, some estimates suggest that around 6.6 per cent of GDP annually will be needed, on average, for Pacific Island states for adaptation alone (there is a large amount of variation from this average for particular countries). Estimates of total finance needs for Pacific nations (mitigation, adaptation and loss and damage) are around USD$1.5 billion per year, although this is likely to be an underestimate. Current financing going to the Pacific is estimated at USD$0.2-0.6 billion, far short of what is needed.

The gap between what is needed to finance climate resilience and what is currently being proposed not only increases Pacific nations' climate risks, it places them at greater debt risks as well. If the Pacific cannot rely on the international community to meet their needs for climate resilience, they will likely be forced to finance it through their own borrowing: it is this new borrowing which will drive up debt levels to an alarming extent. The other alternative is that Pacific countries will simply not be able to afford climate adaptation actions, they will not have enough money to effect the green energy transition, and not have funds to recover from climate events. While these would be unacceptable outcomes in themselves, they would also increase PIC debt vulnerabilities.

## Other Risks and Vulnerabilities

The situation is further complicated given the fact that the need for revenue to repay debt (or to finance climate resilience) could be a factor in Pacific countries making unsustainable development choices. This is most clear in the case of mining, as Fiji and the Solomons explore terrestrial mining and Tonga and Kiribati consider deep sea mining as a way to increase government revenue and earn foreign exchange. These are potential choices that such nations may come to regret, both because the revenues may be less than hoped, and because the environmental impacts—given current mining practices in the region—are likely to be severe and irreversible.

Another concern is the dependence of many PICs on a single source of government or foreign exchange revenue—for example fishing revenues (in the case of Kiribati and Tuvalu) or remittances (particularly for Tonga and Samoa). The vulnerability here comes from the fact that a sudden loss of these revenues could cause a debt shock. A further concern is that the long-term impact of labor mobility schemes is uncertain, but the debt repayment and climate needs may risk the governments being locked into policies which could be economically or socially harmful.

## Recommendations

**First, this report recommends an immediate increase of climate finance to the Pacific to ensure that mitigation, adaptation and loss and damage are adequately funded.** This finance should be additional to official aid, consistent with UNFCCC goals, and have enough proportionately set aside for adaptation and loss and damage.

**Second, this finance should be in the in grant form and via appropriate mechanisms.** It should be in the form of grants not loans and it should be from country contributions to a simplified public financial vehicle under the UN rather than the multilateral development banks

**Third, steps must be taken to improve the global community's capacity to address and respond to sovereign debt crises.** These steps must include: reforms to establish a new architecture to allow for the cancellation or restructuring of unsustainable and illegitimate debts, the development of new debt sustainability assessments, more transparency about debt from borrower and lender governments and agencies, mechanisms to limit predatory finance from undermining debt restructuring efforts, and the establishment of legislation to ensure more transparent governance and management of debts.

# Glossary of Terms

| | |
|---|---|
| **Adaptation finance** | Finance that helps countries to better to withstand the impacts of climate change |
| **Balance of trade** | The difference between a country's exports and imports. It can be positive (a surplus) or negative (a deficit) |
| **Development Assistance Committee** | The body within the OECD that sets the global aid rules |
| **Debt-for-climate swaps** | An agreement where creditors provide debt relief in exchange for a commitment by debtor countries to spend the money they save in debt servicing on climate action |
| **Debt-to-GDP** | The standard measure of the size of a country's debt, given as a proportion of the size of its economy (GDP) |
| **Debt service** | The amount of money paid by a country in a given year to its creditors |
| **Domestic debt** | The value of government bonds or securities held by residents of the country |
| **External debt** | Debt owed to other countries and multilateral development institutions |
| **Government revenue** | The total amount of income that a government collects in a year |
| **Joint National Action Plans** | An initiative established in 2010 by the Cancun Adaptation Framework for nations to draw up climate resilience plans |
| **Loss and damage finance** | Payments to countries for climate impacts that communities are unable to adapt to |
| **Maturity** | The date at which the principal of a bond or other debt instrument becomes due |
| **Mitigation finance** | Finance that helps countries reduce their carbon emissions and transform their economic reliance away from fossil fuels and towards renewable energy |
| **Nationally Determined Contributions** | A mechanism established under the 2015 Paris Climate Agreement for countries to assess climate finance needs |
| **Principal** | The non-interest component of a debt obligation |
| **Remittances** | Personal income transfers between family members or friends from one country to another |

# Abbreviations

| | |
|---|---|
| **ADB** | Asian Development Bank |
| **AIFFP** | Australian Infrastructure Financing Facility for the Pacific |
| **AIIB** | Asian Infrastructure Investment Bank |
| **CCZ** | Clarion Clipperton Zone |
| **DAC** | Development Assistance Committee |
| **DSA** | Debt Sustainability Analysis |
| **DSM** | Deep Sea Mining |
| **EEZ** | Exclusive Economic Zone |
| **GDP** | Gross Domestic Product |
| **IBRD** | International Bank for Reconstruction and Development |
| **ICDF** | The Taiwanese International Development Agency |
| **IDA** | The International Development Agency (the World Bank's concessional lending arm that lends to low income countries) |
| **IMF** | The International Monetary Fund |
| **ISA** | International Seabed Authority |
| **JICA** | The Japanese International Cooperation Agency |
| **JNAP** | Joint National Action Plan |
| **NCQG** | New Collective Quantified Goal on Climate Finance |
| **ODA** | Official Development Assistance |
| **OECD** | Organisation for Economic Co-operation and Development |
| **NDC** | Nationally Determined Contribution |
| **PALM Scheme** | Pacific Assisted Labour Migration Scheme |
| **PIC** | Pacific Island Country |
| **PIF** | Pacific Island Forum |
| **WB** | World Bank |
| **UNFCCC** | United Nations Framework Convention on Climate Change |

*Mountain village near Kwaio, Mailaita Province, Solomon Islands. Photo credit: Tommy Esau, Jubilee Australia*

# Introduction: Climate resilience and sustainable development

Climate resilience refers to the capacity of social, economic and environmental systems to deal with or respond to hazardous events or trends related to the effects of climate change. Most Pacific Island Countries (PICs) adhere to the joint aims of improving their sustainable development objectives while at the same time increasing their climate resilience.

An example is Fiji, whose five and 20-year development plans aim to increase per capita GDP; provide universal access to all essential services, including housing, electricity, safe water and sanitation; and improve the level of education and health care. At the same time, Fiji, like most PICs, is already feeling the effects of climate change: 25,700 Fijians are estimated to be pushed into poverty every year due to cyclones and floods, which cost an estimated FJD $500 million per year in annual asset losses.[1] Fiji is typical of most PICs in this respect.

There is a 'nexus' between achieving sustainable development and climate resilience. On the one hand, the absence of climate resilience can retard sustainable and inclusive development. On the other hand, building climate resilience, through the development of new and improved infrastructure, emergency and health systems, and the strengthening of both the public and the private sphere, can go a long way to setting the scene for large gains in sustainable and inclusive development.[2]

One aspect of this nexus between climate resilience and sustainable development is the issue of sovereign debt. There is a worsening debt situation in developing countries, where new lending after 2010 has seen sovereign debt levels on the rise. Forty-eight countries around the world currently pay more on sovereign debt interest payments than on health services—this equates to 3.3 billion people.[3] New data suggest that the Global South now face the worst debt crisis since global records began; 38 per cent of government revenue across developing countries is now absorbed by debt servicing (54 per cent in Africa).[4]

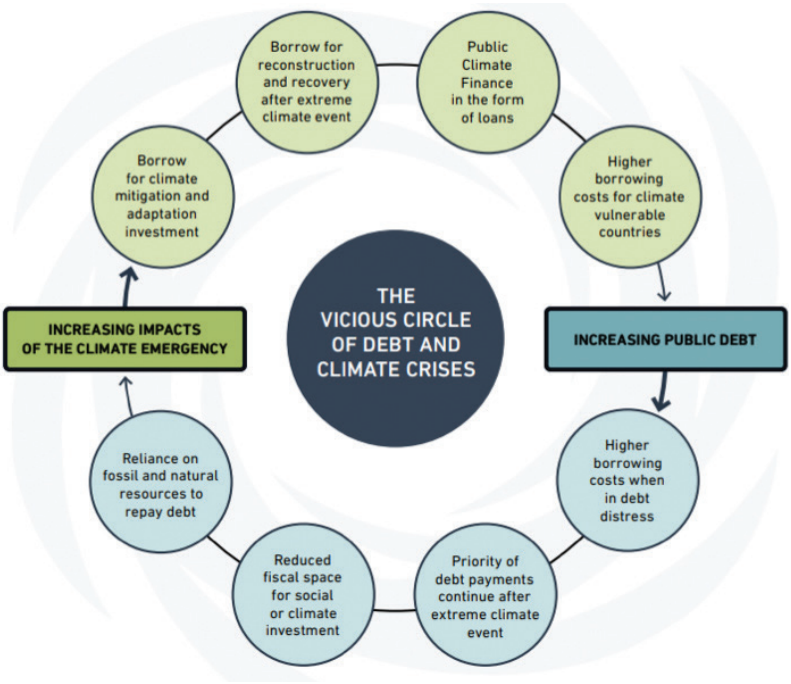
Many PICs are vulnerable to future debt crises, and several are already making annual debt service payments that take up a large chunk of their annual budget expenditure. Just as the costs of more frequent climate-induced disasters have worsened sovereign debt vulnerabilities in Pacific states, a failure to implement effective climate resilience programs will likely push many countries into worse and worse debt situations, which will in turn further undermine sustainable development.

Relatedly, if climate finance relies extensively on debt-based delivery mechanisms, we may help inoculate Pacific communities against the worst ravages of climate change while concurrently worsening their debt situation, leading to other types of vulnerabilities.

The 'vicious circle of debt and climate crises' (Figure 0.1) is therefore at the heart of this report, as it was in our 2022 publication, *Twin Clouds on the Horizon.* While the *Twin Clouds* report focused on the problem from a regional and institutional perspective, this report delves deeper by examining how the tensions between debt and climate, including climate finance, play out at a country level.[5]

This report also examines other vulnerabilities that the debt problem could exacerbate, such as natural resource extraction/depletion and the potential relationship between sovereign debt and the issue of temporary and seasonal labour migration schemes, and the impact that they are having on Pacific communities.

Figure 0.1: The Vicious Circle of Debt and Climate Crises




*Illaria Crotti and Iolanda Fresnillo (2021) 'The Climate Emergency: What's debt got to do with it?', Brussels: Eurodad.*

**Chapter 1** examines the current situation in PICs vis-a-vis sovereign debt, including an overall snapshot, or birds-eye-view of the situation. It provides a discussion of the factors that must be taken into account when trying to understand sovereign debt.

**Chapter 2** delves further into the Pacific debt situation using seven case studies that examine these debt issues at the country level. The case studies explore: who are the creditors; is there any indication that countries are already facing challenges from their debt servicing levels; and what do the future projections of debt measurements tell us about the financial burdens facing each country?

**Chapter 3** begins with an examination of the estimates of PICs' climate finance needs. It then interrogates how the current approach to climate finance risks exacerbating Pacific nations' debt burdens.

**Chapter 4** examines how responses to debt crisis may exacerbate other challenges, including resource extraction, and the reliance on other potentially environmentally and socially exploitative sources of income such as remittances and fishing licenses.

The report concludes with findings and recommendations about what donor governments and institutions can do to intervene now to prevent these interacting problems getting worse.

*Margret teaches at a school for deaf and mute students in the Solomon Islands that received support with repairs and rainwater harvesting following Cyclone Harold. Photo credit: Neil Nuia Caritas Australia.*

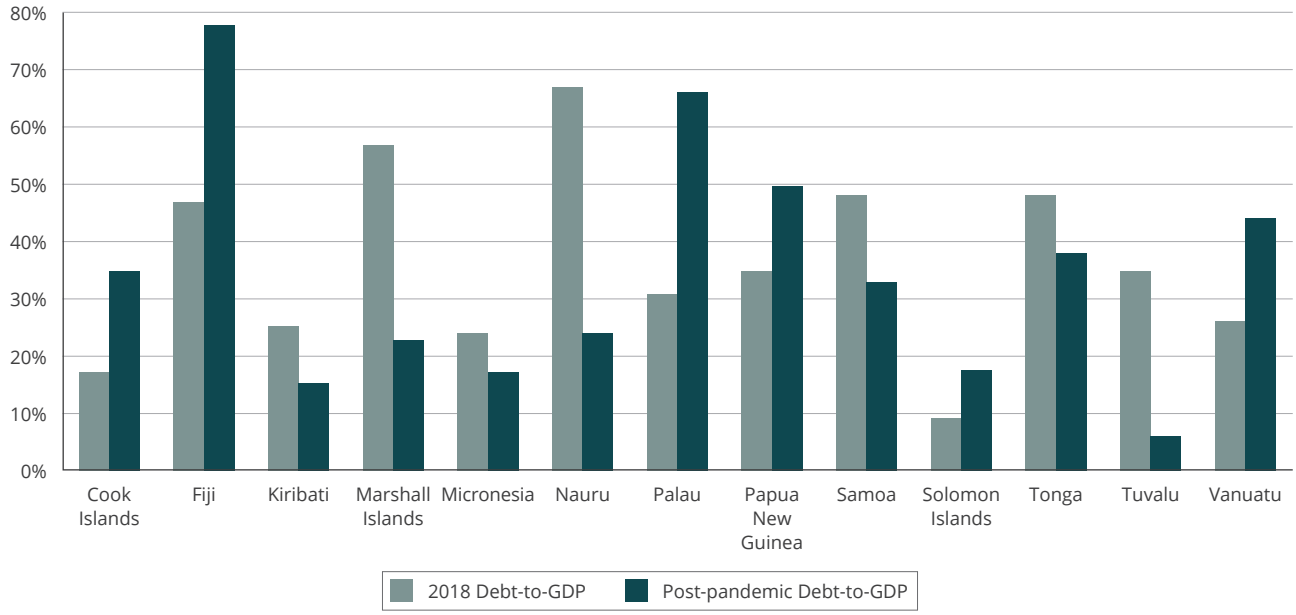
# Chapter 1: The Pacific Debt Situation

The PIC network consists of 14 independent states that are located across Melanesia, Micronesia and Polynesia—the majority of Pacific Island States. In addition, there are several non-sovereign Pacific countries, which are not covered in this report as they have no sovereign debt including Guam, the Commonwealth of the Northern Mariana Islands (CNMI), American Samoa, New Caledonia, and French Polynesia. States with free association agreements such as the Federated States of Micronesia (US) or Cook Islands (NZ) and Niue still have national debts but were not selected as case study countries.

Within the 14 PICs, there is a large amount of diversity:

- It includes first, the large, relatively mature economies of Fiji and PNG, the two economic giants of Pacific Island nations. Their combined economies make up 90 per cent of combined PIC Gross Domestic Product (GDP). PNG and Fiji both carry total public debt worth billions of US dollars.
- Second, there are the middle-sized Pacific nations such as Samoa, the Solomon Islands, Tonga and Vanuatu. These nations have populations between 100,000 and one million, and economies based on subsistence agriculture, cash crops for export and in some cases, timber. Their total public debt stock is generally in the realm of several hundred million US dollars.
- Third, there are the smaller states such as the Cook Islands, Kiribati, the Federated States of Micronesia, Palau and Tuvalu. These island nations have small populations, little land area and are often dependent on fishing revenue for survival. Of these at least three (Kiribati, the Marshall Islands and Tuvalu) are considered low-lying atoll states. Their total public debt stock is consequently very small (less than USD$100 million).

Figure 1.1: Comparison of Nominal Debt-to-GDP Ratio of PICs Pre- and Post-Pandemic*




* The pre-pandemic (2018) data are from the IMF World Economic Outlook database from that year; the figures from post-pandemic are from the most recent reliable year for debt-to-GDP data (either 2022, 2023 or 2024) from country budget papers or the most recent IMF Debt Sustainability Analysis. Table 1.1 uses the same sources specifying the year of data.

The impact of the COVID-19 pandemic on Pacific debt levels is varied. As one can see from Figure 1.1, the debt-to-GDP ratio for some Pacific states has fallen since before the pandemic (the year 2018 was used), in some cases drastically so (see especially the Marshall Islands, Micronesia, Nauru and Tuvalu). Other countries have seen a significant jump in the debt-to-GDP ratio, such as the Cook Islands, Fiji and Vanuatu. At least in the case of Fiji and the Cook Islands, these large jumps were a result of significant borrowing that governments needed to undertake due to the pandemic-induced loss of economic activity, especially the decline in tourist revenues. Other nations, such as Kiribati and the Solomon Islands, saw relatively small changes (i.e. less than ten per cent either way).

## 1.1 Choice of Case Studies

This report has chosen to feature seven countries as case studies: Fiji, Kiribati, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu.

The choice of the seven was premised on two key factors. First, the availability of reliable and extensive country data from the financial ministries as well as from the international financial institutions. The IMF undertakes country consultations (known as Article IV consultations) which generally include a Debt Sustainability Analysis (DSA) that is jointly prepared by IMF and World Bank staff. Generally speaking, the IMF are responsible for the short-term debt projections and the World Bank staff for the longer-term projections. Examining the differences between government projections and the IMF/World Bank projections allows interesting points of comparison.[6]

Second, there was an attempt to include countries that highlight the range of challenges faced across the Pacific – related to their size, the impact of climate change and COVID-19. Of the two giants of the region, Fiji is the pertinent case study for this report because it has recently seen a doubling of its debt-to-GDP ratio and is a more typical Pacific Island nation than PNG. PNG is somewhat of an outlier due to its huge

population, large land mass, and formal economic reliance on natural resources, such as oil and gas, mining and forestry. It would usefully be the subject of a separate report.

Many of the smaller states, including the low-lying atolls, are extremely vulnerable to extreme weather events and other climate change impacts. This necessitates significant ongoing aid for climate resilience, and the potential for very serious debt problems in the near future. This report focuses on Tuvalu and Kiribati, over the Cook Islands, Palau, Micronesia and the Marshall Islands, noting that the challenges and the debt outlooks are quite similar – though Palau is an exception. This choice was also influenced by Jubilee and Caritas's existing relationships in Tuvalu and Kiribati, and the other countries having free association agreements with larger states (New Zealand and the USA), which has important impacts on the economic challenges and opportunities facing them.

Table 1.1: Summary of Key Debt Statistics for Pacific Islands Countries

| Country | Date of data | GDP (million USD) | Public Debt Stock (million USD) | Debt-to-GDP Ratio (%) | Proportion of External/ Domestic debt | IMF Risk of Debt Distress |
|---|---|---|---|---|---|---|
| Cook Is | Jun 2024 | 374 | 131 | 35 | 100/0 | N/A |
| Fiji | Jun 2024 | 5848 | 4,518 | 78.0 | 36/64 | Moderate |
| Kiribati | Jun 2023 | 206 | 31 | 15.0 | 100/0 | High |
| Marshall Is | Jun 2022 | 263 | 60 | 22.8 | 100/0 | High |
| Micronesia | Dec 2022 | 224 | 38 | 17 | 94/6 | High |
| Nauru | Jun 2024 | 154 | 37 | 24 | 67/33 | N/A |
| Palau | Jun 2022 | 246 | 163 | 66.2 | 100/0 | Moderate |
| PNG | Jun 2024 | 31 855 | 16,276 | 51.1 | 49/51 | High |
| Samoa | Jun 2023 | 945 | 316 | 33.4 | 100/0 | High |
| Sol Is | Jun 2023 | 1505 | 263 | 17.5 | 58/42 | Moderate |
| Tonga | Jun 2023 | 547 | 203 | 38.0 | 87/13 | High |
| Tuvalu | Dec 2023 | 64 | 4 | 5.8 | 69/31 | High |

**Source:** The data are from the most recent Debt Sustainability Analysis and from Ministry of Finance data. For case study countries the specific sources are given at the introductory table at the beginning of each case study in Chapter 2.

## 1.2 Measuring Debt and Assessing Debt Risks

There are a number of considerations to take into account when assessing a country's debt situation: the size of the debt; the nature of the debt; the impact of debt payments; and projecting how all of these are going to change in the future.

Looking first at the **size of the debt:** the total amount of debt owed by a country is known as debt stock. The are two ways to describe the scale of a country's debt. The first is to give the amount in absolute terms. It is necessary to choose a currency to do this, as the debt is not always denominated in a single currency. For example, the size of the debt can be valued in the local currency of the debtor country, or in an international one. In either case, all debts must be converted into the same currency to be summed; when the conversion is done, the exchange rates used should be as close as possible to the actual exchange

rates at the time. This study uses US dollars as the default denomination when discussing absolute amounts of debt to enable comparisons between the PICs. Conversion was done using historical estimates of the exchange rate between local currency and US dollars at the time.

Another way to describe the size of a country's debt is to measure debt in comparison to the size of the national economy. This is the origin of the debt-to-GDP ratio. GDP is the monetary value of all end use goods and services produced within the borders of a country.[7] GDP is a useful but limited tool. There are many types of work and economic interactions that it does not measure, e.g. household labor (family members caring for children, the elderly, or the sick); labour done to produce goods or services for household use (e.g. growing your own food, or cutting down a tree to build a house); and economic transactions that might see money or goods change hands but which do not end up being recorded in the banking system (e.g. selling goods at a local market but not banking the proceeds). In many parts of the Pacific, where access to/use of the banking system is low, many people grow their own food and either consume it or trade it in local markers, with the informal economy many times larger than the formal economy. GDP also does not account for the degradation of the natural environment or the use of non-renewable resources, that is there is no minus for the loss of natural resources from mining, fishing, logging, climate related disasters and so on. Such activities are only a plus in national account. GDP, therefore, only measures so much but it is the data that is available.

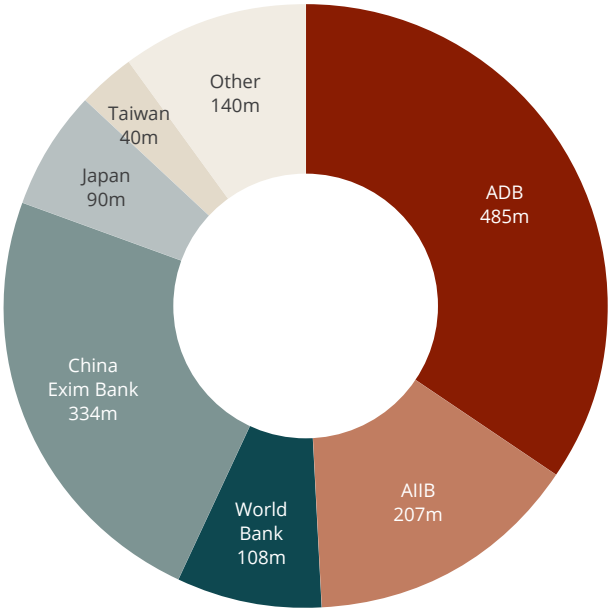
Aside from the weaknesses of GDP as a measurement, debt-to-GDP as a tool has more general limitations in that it is a fairly blunt tool for assessing the impact of debt on a nation's economy and society in the here and now. Debt-to-GDP gives no information on the interest rate being charged on the debt, how much government revenue is being received with which to pay the debt, and whether debt payments are going to actors within the debtor country or outside. It is therefore important to look beyond just debt-to-GDP and include other aspects or ways of gaining a fuller picture of a nation's debt situation.

Along with examining the size of the debt relative to that of the economy, it is important to understand **to whom the debt is owed**. Debt owed to people or institutions inside the country is known as **domestic debt**. Domestic debt is (usually) equivalent to the value of government bonds or securities held by residents of the country—these could either be individuals or institutional investors like banks or local pension funds. Debt owed to people or institutions outside the country is known as **external debt**. External debt is usually owed to other countries, multilateral institutions such as the World Bank or the Asian Development Bank (ADB), private banks, or overseas investors in government bonds and securities. The people who hold a government's debt are known as its creditors. Bilateral and multilateral creditors are often referred to as 'official creditors'.

When looking at the seven countries in these case studies, two of them (Samoa and Kiribati), do not have any domestic debt, as their government does not presently use bonds or securities to raise money. In such cases, one hundred per cent of their sovereign or public debt is external debt. The percentage breakdown between external and domestic debt for each PIC is given in Table 1.1.

Figure 1.2 indicates the largest official creditors, i.e. the largest suppliers of external debt to the majority of PICs (this figure excludes PNG and Fiji, which collectively hold more than 80 per cent of the region's debt [8]). As the figure shows, the largest official creditors are the Asian Development Bank (ADB), a Chinese bilateral lending agency, the China Exim Bank) and the China-led Asian Infrastructure Investment Bank (AIIB).

Figure 1.2: Debt Owed in USD to Official Creditors by PICs (excluding PNG, Fiji, Niue)




**Source:** Author's calculations, based on either the most recent IMF/WB Debt Sustainability Analysis or finance ministry budget papers.

The nature of the creditors is important because the repayment terms often depend on the class of creditor giving the loan. Multilateral development banks such as the World Bank and the ADB class nations based on their relative wealth and their ability to handle new loans. The World Bank has an arm, the International Development Agency (IDA), which only provides concessional loans, that is loans with a large grant component and lower interest rates, to eligible low-income countries. 'Blend' countries receive a mix of these highly concessional loans from the IDA and less concessional loans from the International Bank for Reconstruction and Development (IBRD). The ADB uses a similar classification: group A countries, which are assessed to have a higher level of debt distress, receive more concessional loans, while group B countries are equivalent to World Bank 'blend countries'.

Bilateral agencies can be aid agencies (e.g. the Japan International Cooperation Agency or JICA), export credit agencies (e.g. China's Exim Bank), or something in between (e.g. the Australian Infrastructure Finance Facility for the Pacific or AIFFP). Export credit agencies tend to offer loans with less concessional repayment terms than multilateral or bilateral aid agencies. This is one reason why some analysts have feared the recent entrance of China as a lender in the Pacific.[9] In other words, it is likely that the terms of its loans to PICs are at less concessional rates than the World Bank or ADB which could potentially increase debt risks for vulnerable PICs. The highest interest loans come from purely private lenders such as commercial banks, or through bonds traded on financial markets.

In both cases, external debts are generally predominately denominated in foreign currencies and thus subject to exchange rate fluctuations. A crisis leading to the depreciation of a local currency is a key cause of debt crises. For example, a natural disaster devastating a key export sector generally also results in downward pressure on currency in small states. Or a currency crisis spreads from one state to the next in a region through contagion as was the case with the Asian Financial Crisis of 1997-98.

It should be remembered that a list of the top aid donors in the region does not equate to a list of the top creditors. Australia, for example, is the largest aid donor by far in the 2008-2021 period if grant aid is included, followed by Japan, New Zealand and China (Table 1.2). When it comes to lenders, Australia does

not feature in the top six, however, as it has until recently given its aid to the Pacific only as grants. China is the largest lender, followed by Japan, the World Bank and the ADB (Table 1.2).

Table 1.2: Top Aid Donors to the Pacific, 2008-2021

| Top Six Aid Donors (All Aid Types) | | Top Six Lenders | |
|---|---|---|---|
| Country | USD (billion) | Country | USD (billion) |
| Australia | 14,99 | China | 1.91 |
| Japan | 2.45 | Japan | 1.16 |
| New Zealand | 3.24 | World Bank | 1.06 |
| China | 3.21 | Asian Development Bank | 0.91 |
| United States | 2.93 | IMF | 0.48 |
| World Bank | 1.83 | EU | 0.45 |

**Source:** Lowy Institute Pacific Aid Map, accessed on 9 October 2021. Note that these figures include PNG and Fiji received considerably more grants and loans than the other Pacific countries combined.

As per Table 1.1, several case study nations have a sizeable proportion of domestic debt: for example, Fiji (64%), Vanuatu (42%) and Kiribati (31%). Domestic debt can be a double-edged sword. On the one hand, it is generally, although not always, denominated in local currency, which means that the revenues needed to meet domestic debt service can be generated in local currency (e.g. by taxes). External debt is usually denominated in foreign currencies such as US dollars, Japanese Yen, Chinese Yuan or Special Drawing Rights (SDRs—a type of international reserve currency created by the IMF). Earning foreign exchange can pose difficulties for developing countries, including small island states, to generate and therefore to repay such loans. That is it requires exports or other financial flows (e.g. remittances) and small island states have limited capacity for export often based on using up non- or semi-renewable resources such as minerals, fisheries and forestry.

On the other hand, external debt for the majority of countries under consideration here is often highly concessional, with long repayment periods and low interest rates. Domestic debt, in contrast, is not only at higher interest rates, but also more prone to interest rate shocks; it may be subject to the impacts exchange rate depreciation when it is denominated in foreign currencies, although this is not common.

A third way of assessing a country's debt is **the size of its annual debt payments, or 'debt servicing'.** The amount of a government's spending on annual debt servicing is arguably a much more reliable indicator of a country's debt situation than the debt-to-GDP measurement. This is because it takes into account the interest rates on the debt, and how the redirection of government revenues is impacting government finances and the delivery of government services in the current or short term. Recent debt service figures also provide a snapshot of the impact that debt repayment is having right now, rather than some unspecified time in the future.

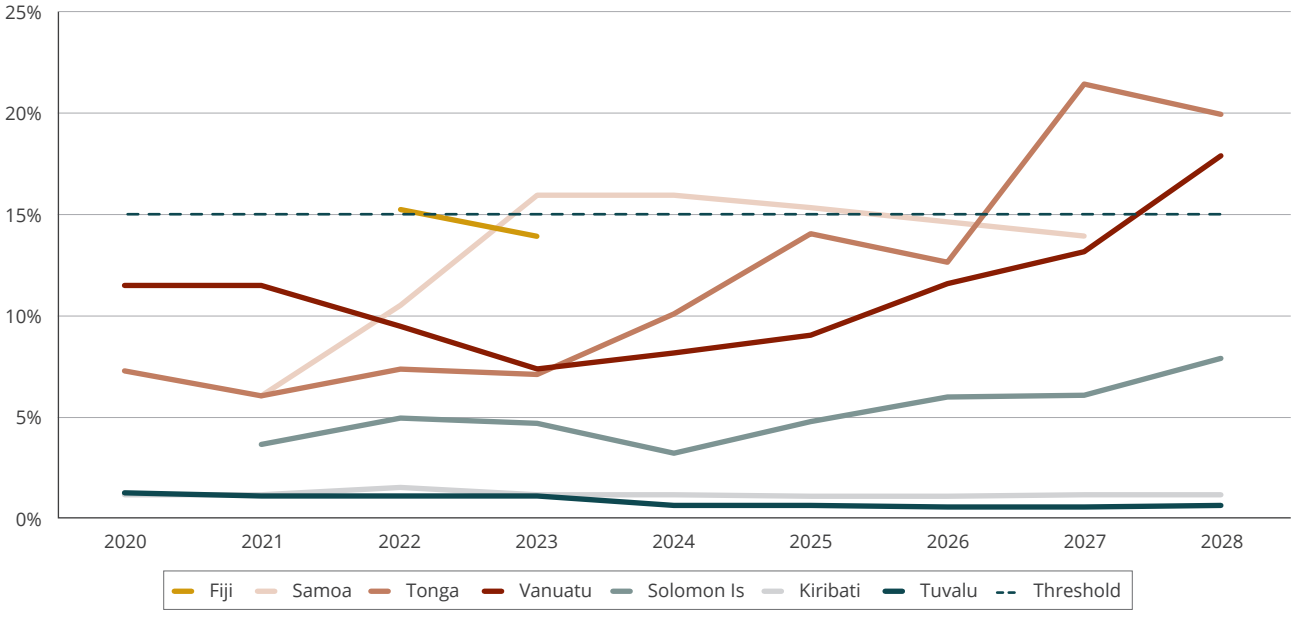
An often deployed concept that is important here is 'debt sustainability': although whether a person or institution considers a debt sustainable depends on what criteria are used to assess sustainability. Is it based on objective economic indicators? Is it the capacity to repay, and if not, how is that capacity to repay assessed? What sorts of sacrifices should be considered in determining the capacity to repay? An independent UN expert on debt and human rights recently made the following observation to the UN Human Rights Council about the drawbacks of some debt sustainability approaches:

*Debt sustainability analyses are still based on an inadequate understanding of sustainability. They take primarily into account the economic growth prospects of a State and its ability to service debt without having to resort to exceptional financing or major policy adjustments, with the result that sometimes a stock of public debt may be considered sustainable even if its service entails the State's failure to comply with its human rights obligations because the resources necessary for servicing its debt deprive it of the financial means to realize human rights. On the contrary, debt cannot be called sustainable if the social and human rights dimensions of sustainability are ignored; a more comprehensive definition of debt sustainability incorporates economic, social and environmental sustainability, meaning that debt sustainability is only achieved when debt service does not result in violations of human rights and human dignity. Debt sustainability analyses should, thus, incorporate human rights impact assessments.*[10]

There are a number of ways of trying to determine how punitive debt servicing is, but the two most common are comparing debt servicing to government revenue and comparing external debt servicing to exports. The latter measurement is a good indicator of the pressure that debt service is putting on a country's foreign exchange earning ability.

Instead of comparing total debt service to government revenue, where possible in this study we have isolated it to external debt service plus debt service on the interest portion of domestic debt, i.e. the debt service on the principal has been excluded. This is because domestic principal can usually be refinanced, and it is therefore not usually paid for out of government revenue. Analysis by the Jubilee Debt Campaign (now Debt Justice UK) of sixty countries has found that countries whose external debt service plus domestic debt interest is greater than 15 per cent of government revenue for a number of years are more likely to see a fall in real public spending per person.[11] As Figure 1.3 shows, Fiji and Samoa are hovering around this 15 per cent threshold at present; Kiribati, Tuvalu and the Solomon Islands are in no immediate danger of breaching the 15 per cent threshold; Tonga and Vanuatu are projected to rise about it over the next few years.[12]

### Figure 1.3: Debt Service as % of Government Revenue for the Seven Case Study Countries




**Sources:** Most recent DSAs (Debt Sustainability Analyses) from IMF/World Bank.

A final way to look at a country's debt is to **run future projections** into the medium- or long-term, usually the debt-to-GDP ratio. This modelling requires access to very detailed data sets, and therefore can only realistically be done by government finance ministries or institutions like the IMF and the World Bank. As mentioned above, the Fund and the Bank jointly perform Debt Sustainability Analysis (DSA) for countries which it perceives to be in debt distress. The IMF/World Bank use five different measurements in the debt projections for DSAs, comparing either external debt or public debt (both total or debt service) to GDP, exports and revenues. They have three types of rating for a country's debt carrying capacity: weak, medium or strong (Table 1.3). Thresholds for the different debt measurements are lowest for countries with weak carrying capacity and highest for countries with strong debt carrying capacity. Most of the countries in this study are designated as either in the weak or medium category.

In carrying out their analysis, the IMF/World Bank first run what they call a 'baseline' scenario. This tends to be a fairly optimistic scenario based on assumptions of GDP growth, balance of payments, government spending and aid flows (grants and loans). The IMF/World Bank then usually run a number of alternative scenarios based on modelling shocks to the system. This could be a global shock (e.g. as happened with the pandemic where a global economic contraction and shut down of travel hit many Pacific nations very hard); or it could be a shock tailored to a specific country (e.g. climate or natural disaster shocks, or the impact of a sudden loss or reduction of an important revenue stream).

Table 1.3: IMF Debt Carrying Capacity Ratings and Debt Thresholds

| Debt Carrying Capacity Classification | Present Value (PV) of external debt as a percentage of | | External debt service as a percentage of | | PV of total public debt |
|---|---|---|---|---|---|
| | GDP | Exports | Exports | Revenue | GDP |
| Weak | 30 | 140 | 10 | 14 | 35 |
| Medium | 40 | 180 | 15 | 18 | 55 |
| Strong | 55 | 240 | 21 | 23 | 70 |

**Source:** International Monetary Fund, *Guidance Note on the Bank-Fund Debt Sustainability Framework for Low Income Countries,* February 2018.

Many governments, including some of the countries in this report, also do projections of their debt-to-GDP ratio into the future. Some countries do projections of debt-servicing compared to GDP, or revenue or exports. IMF/World Bank analyses in the DSA tends to be deeper, partly on account running a number of scenarios. It is interesting to note in the case studies that follow where the IMF/World Bank and government projections of future debt differ.

## Conclusion

The current situation with respect to Pacific nations and sovereign debt is a complex one. Pacific nations themselves are quite diverse in size and in the nature and make-up of their economies. Some nations have quite high debt relative to the size of the economy, some are quite low, and the past few years has seen movement of debt-to-GDP going both ways (i.e. up in some cases, down in others). This report has chosen to examine the debt profiles of seven Pacific nations: Fiji, Kiribati, Samoa, the Solomon Islands, Tonga, Tuvalu and Vanuatu. These represent a range of countries and each has a different story to tell. The case studies in the next chapter examine the economic context, the size of the debt, who the creditors are, the debt service as a percentage of revenues, and study and compare future debt projections.

*Houses on the shoreline, Ra, Fiji. The large numbers of people leaving on or near the coast is one of the reasons why the Pacific is so vulnerable to climate change. Photo credit: Emma Harvey, Jubilee Australia*

# Chapter 2: Pacific Debt Case Studies

## 2.1 Fiji

**Currency:** Fijian Dollars (FJD)
**Symbol:** FJ$
**Exchange Rate:** 2.25FJD/USD

| Date | Nominal GDP | | Public Debt Stock | | Debt-to-GDP Ratio (%) | External/ Domestic Ratio | IMF Risk of Debt Distress |
|---|---|---|---|---|---|---|---|
| | (million FJ$) | (million USD) | (million FJ$) | (million USD) | | | |
| June 2024 | 13,170 | 5848 | 10,276 | 4,518 | 78.0 | 36/64 | Moderate |

**Source:** Ministry of Finance, *Supplement to the 2024-2025 Budget Address*, 35.

### Overview

Fiji, along with PNG, is one of the two economic giants of the Pacific Island nations. With a population of around 930,00, it is the administrative hub of the Pacific region with many international development institutions and universities based in its capital, Suva. It is largely a services-based economy built around tourism: services routinely make up between 63-67 per cent of GDP, and tourism directly or indirectly makes up 40 per cent of the Fijian economy. Agriculture and manufacturing, particularly sugar and the garment sector respectively, have traditionally been the other two major contributors to the Fijian formal economy. However, both have seen significant declines in revenue since 2000 due to declining yields of sugar cane, the reduction in trade preferences and tax concessions, and a decline in productivity due to a lack of new investment and industrial transformation. Even before the pandemic hit, Fiji was running significant current account deficits (i.e. it has been paying more for goods and services from abroad than it has been earning). The deficit on the current account is somewhat ameliorated by remittances abroad, which since about 2000 have routinely brought in between 4-7 per cent of GDP.

From 2017 onwards, Fiji's trade balance grew worse and the country had to make use of foreign loans to meet external obligations. Between 2017-2019, Fiji's debt-to-GDP ratio had already risen from 43.5 to 49.0 per cent of GDP. The tourism shutdown caused by the pandemic saw GDP plummet by 17 per cent in 2020 and a further 5 per cent in 2021. The rebound in 2022 was strong at 20 per cent and it is projected that 2023 will also see another strong year for growth (8 per cent).[13]

### The Current Debt Picture

Fiji is in many ways an outlier compared to the other six nations in this study. First, it is a much larger economy and it is classified by the IMF as an upper-middle income country, which means that it does not have the same access to concessional finance from multilateral lending institutions as other low or low-middle income PIC states have. Still, because of its small size and vulnerabilities, it is a 'blend' country thus still eligible for some concessional loans. Second, it has large and mature domestic debt markets; it is the only nation in the Pacific for whom the majority of debt is owed domestically. Third, its debt-to-GDP ratio,

currently at 78 per cent is extremely high: indeed, it is the only country in the study whose total public debt stock is above 50 per cent of GDP.

It seems likely that Fiji's move above 50 per cent debt-to-GDP territory might have happened without the COVID-19 pandemic, but this undoubtedly contributed to the exponential rise that occurred in recent years. During the pandemic years of 2020, 2021 and 2022, public debt skyrocketed to over 90 per cent of GDP. It has since fallen to the high 70s, not due to debt repayments but rather the GDP rebound. Fiji's debt-to-GDP ratio would be even higher, by around eight percentage points, if it included state-guaranteed debts i.e. contingent liabilities to corporations such as Fiji Airways, the Fiji Development Bank and the Fiji Sugar Corporation.[14]

As at June 2024, the stock of external debt was FJ$3,682 million, or 36 per cent of total public debt.[15] Before 2010, the make-up of Fiji's debt profile was overwhelmingly domestic, with external debt at or below 20 per cent of total public debt; indeed, in 2010, external debt was only FJ$645 million, which means that it has increased fivefold over the past 14 years.[16] The largest single foreign creditor is the ADB, holding 39 per cent as of 2023. The World Bank holds 30 per cent of the debt, with the IDA holding the larger share. In terms of bilateral creditors, Japan, China and Australia all have outstanding Fijian debt on their books (Figure 2.1). Since 2020, when Fiji paid off the last of its global bonds, all of Fiji's external debt is in the form of loans and the vast majority is denominated in US dollars.[17]

As of June 2024, the stock of domestic debt was FJ$6,593 million, or 64% of total debt; its rate of increase, however, has been much slower than external debt, merely doubling since 2010.[18] The main holder of Fiji's domestic debt is the Fiji National Provident Fund at 57 per cent of holdings; insurance companies, the Reserve Bank of Fiji and commercial banks all hold sizeable portions (Figure 2.2). Because this domestic debt is denominated principally in local (FJ$) rather than foreign currency, this makes Fiji's debt profile is potentially manageable despite being very high as a proportion of GDP. This is because, if if Fiji can grow its GDP consistently, the majority of its debt repayments can simply be taken care of by the gradual growth of GDP. On the other hand, domestic debt is not concessional and the maturity date of the bond portfolio is important because too many maturing at one time can put pressure on government cash flow. A large proportion of Fiji's domestic debt has been in T-Bills with one-year maturities, although Fiji has expressed a desire to move more of its debt to longer term maturities (ten, fifteen and twenty years).[19]

Figure 2.1: External debt by Creditor (2023)

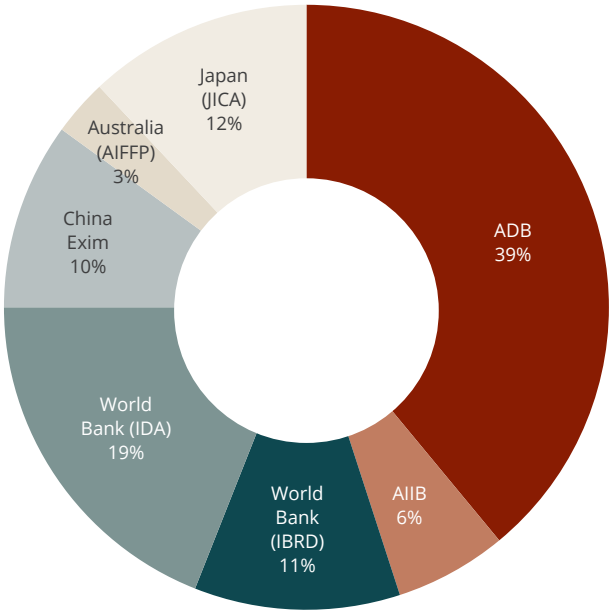
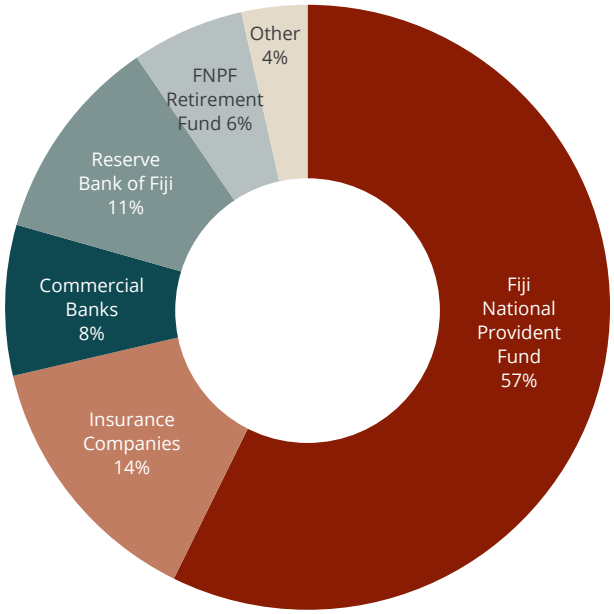


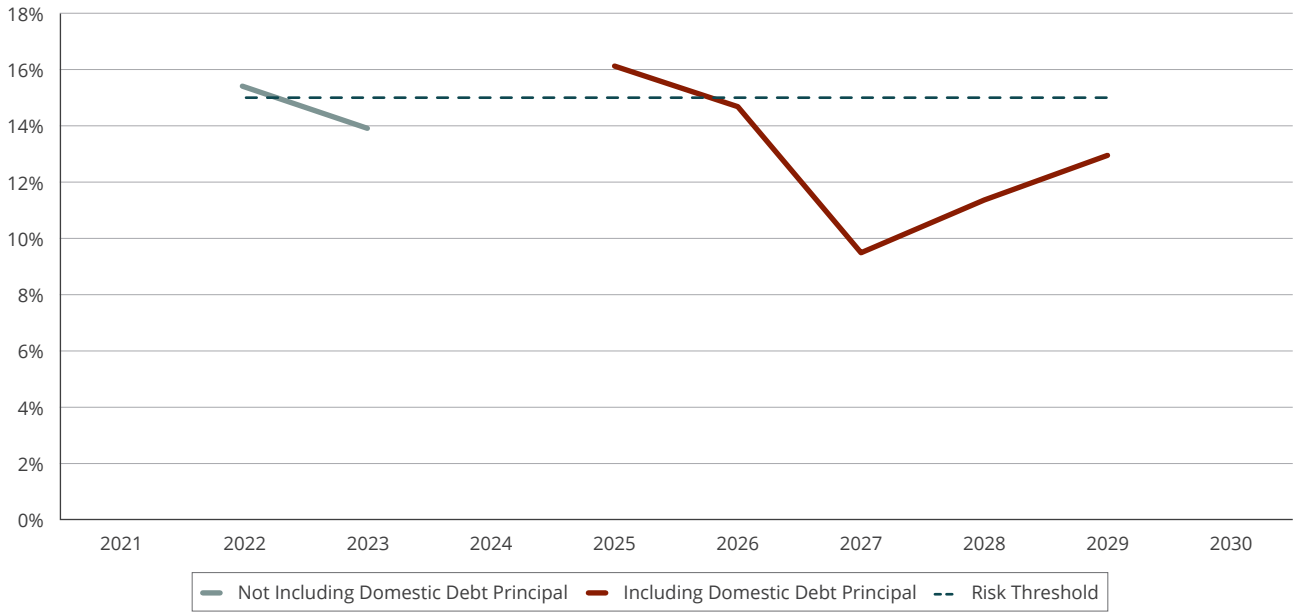

Figure 2.2: Domestic Debt by Creditor (2023)




**Source:** Goh and Wolfenden, *Debt Dynamics in Fiji,* 20-21, calculations from Reserve Bank of Fiji data.

As a debt management strategy, Fiji is seeking to convert as much of its domestic debt as possible into long-term bonds: the average time to maturity (ATM) of both domestic and external in its debt portfolio is around 10-11 years. This is a sensible strategy in terms of debt vulnerability, although it does mean higher interest rate payments for the government.[20] Nevertheless, having such a high debt-to-GDP ratio and a large proportion of non-concessional debt is going to have a significant impact on Fiji's annual debt payments. Fiji's debt service as a percentage of government revenues over the coming few is projected to fall below 15 per cent but then start to rise again after 2027(Figure 2.3).[21]

Figure 2.3: Debt Service as a % of Government Revenue

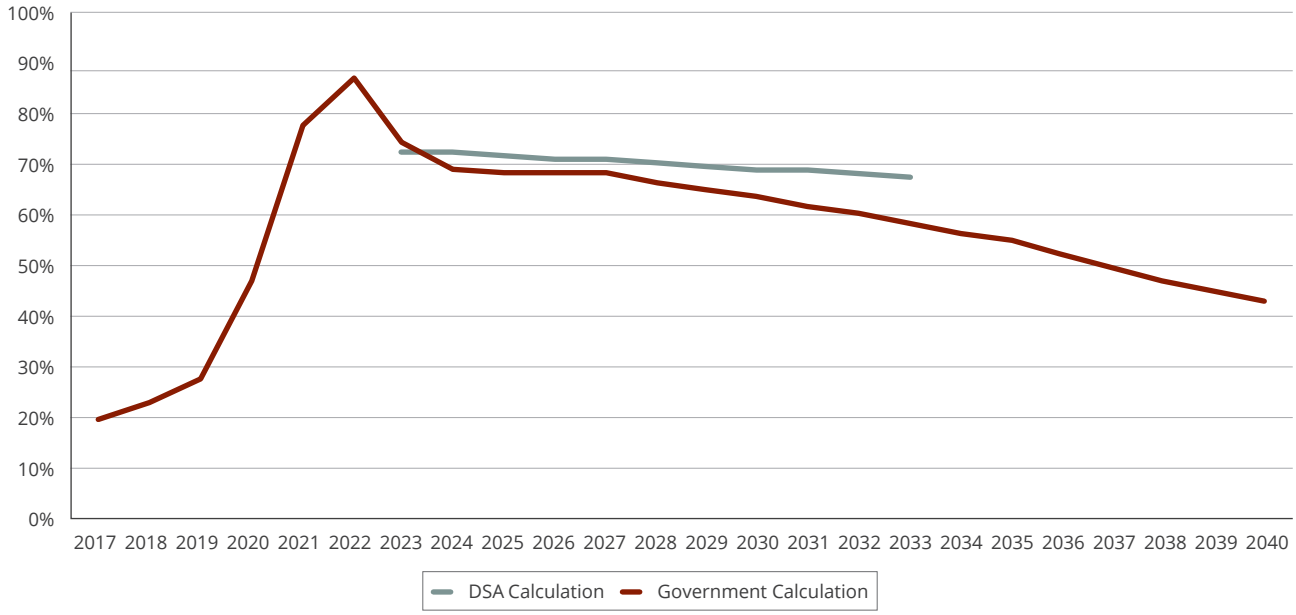



**Source:** Author's calculation from Ministry of Finance, *Supplement to the 2024-2025 Budget Address*, 31-32, 25, 39.

## Future Debt Projections

The Fijian Government's plans to manage its debt are laid out in the 15 year fiscal framework in the 2024-2025 budget papers; they project that the nominal debt-to-GDP ratio will remain at around the same level (the high 70s) for the rest of the decade before gradually and steadily starting to come down in the 2030s, reaching around 60 per cent by 2040 (Figure 2.4). The projections are based on the assumptions in the framework, which include steady real GDP growth of 3.0 per cent, inflation of 2-3 per cent per annum, domestic interest rates at around the 10-year average, and the financing mix at around 70:30 domestic to external debt.[22] Many of these assumptions could be challenged, but perhaps the most optimistic is projecting a real GDP growth of 3.0 per cent, given Fiji's very mixed and unsteady record of economic growth.

Figure 2.4: Public Debt-to-GDP Ratio (Historical and Projected)




Source: *Supplement to the 20245-2025 Budget Address,* 31, 45; *Fiji 2024 DSA,* 40

Because Fiji is a World Bank 'blend' country, the DSA is less detailed and comprehensive than for the other countries in this report. For example, the DSA only made economic projections of debt-to-GDP ten years into the future, instead of 15 or 20 years. The most recent DSA (June 2024) is less optimistic than government projections, with debt starting just above 80 per cent of GDP but not falling much, so that it is still in the high 70s by 2033, whereas government projections have debt-to-GDP dipping into the 60s by then. The DSA seems to have taken a similar assumption about real GDP growth but was less optimistic about interest rates than the government, which may account for the discrepancy. Another consideration is that this is the DSA's baseline scenario; when it modelled different scenarios such as growth shock and a real depreciation shock, external debt-to-GDP shot up considerably. The DSA reflected: 'The external debt trajectory is also vulnerable to macroeconomic shocks, which could be driven by external as well as domestic factors, including natural disasters.'[23] This last observation about natural disasters and debt is discussed (with respect to Fiji and the other case studies) more extensively in Chapter 3.

*Mangroves and lagoon, Tarawa, Kiribati. Photo credit: Robin Weeks/Shutterstock*

## 2.2 Kiribati

**Currency:** Kiribati Dollar & Australian Dollar
**Symbol:** $AUD
**Exchange Rate:** 0.66 AUD/USD

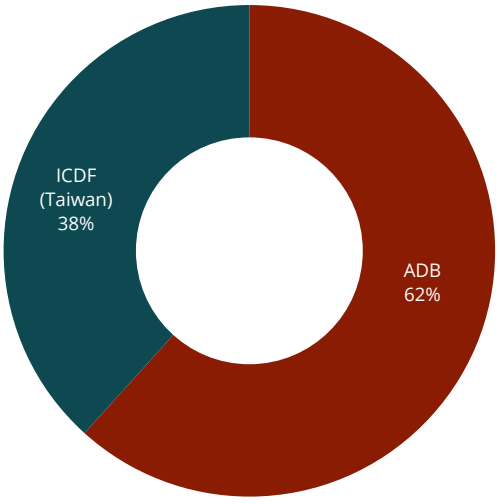
| Date | Nominal GDP | | Public Debt Stock | | Debt-to-GDP Ratio (%) | External/ Domestic Ratio | IMF Risk of Debt Distress |
|---|---|---|---|---|---|---|---|
| | (million AUD) | (million USD) | (million AUD) | (million USD) | | | |
| June 23 | 312 | 206 | 46.7 | 30.8 | 15.0 | 100/0 | High |

**Source:** Government of Kiribati, Recurrent Budget 106; Fiscal Strategy for the 2023 Budget p 20.

### Overview

Kiribati is a small island state in Micronesia made up of 32 coral atolls and one raised coral island, which are collectively spread out over a vast area in the middle of the Pacific Ocean. About half of Kiribati's 120,000 people live on the Tarawa atoll. A small economy, its GDP is very low compared to the PIC average, as is its per capita income. Most of its revenues come from the sale of fishing licenses; it also exports small amounts of copra and coconut oil. Revenue from fishing licenses allowed Kiribati to build up capital account surpluses during the years 2014-2020, however, as the revenues have declined since 2020, so have the surpluses. Kiribati, like Tuvalu, has very high public sector wages compared to other PICs. The increasing engagement in seasonal worker schemes has Kiribati facing serious labour shortages, including in healthcare. Perhaps one of the greatest challenges it faces, apart from the existential danger that climate-induced sea level rises pose, is learning poverty: 70 per cent of its ten year olds, for example, are unable to read proficiently.[24]

Figure 2.5: Debt Breakdown by Creditor (2022)




**Source**: Government of Kiribati *Supplement to the 2024-2025 Budget Address,* 31, 45; and *IMF, Fiji Article IV Consultation 2024,* 40.

## The Current Debt Picture

Kiribati's debt was, according to the most recent government financial statements, AU$46.7 million in June 2023, which equalled 15 per cent of GDP. It has no domestic debt, and its external debt is owned to only two creditors, the ADB and the Taiwanese lending agency, the International Cooperation and Development Fund (ICDF) (Figure 2.5). Government projections have nominal debt-to-GDP trending downwards towards 10 per cent by 2026. In contrast, the DSA, while concurring with the government's debt-to-GDP figure for 2022, had the figure jumping to over 22 per cent by June 2023, and upwards from there. Without much information in the government budget papers about the assumptions used for its projections, it is hard to say what is the likely cause of these discrepancies. Nevertheless, both the government and the DSA have debt service at a very low percentage of government revenues, well under the risk threshold being used for this study (Figure 2.7)

Figure 2.6: Short term Debt-to-GDP Projections

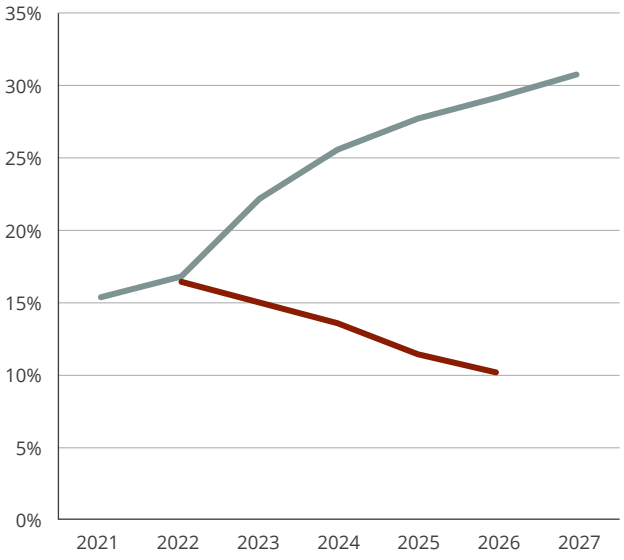
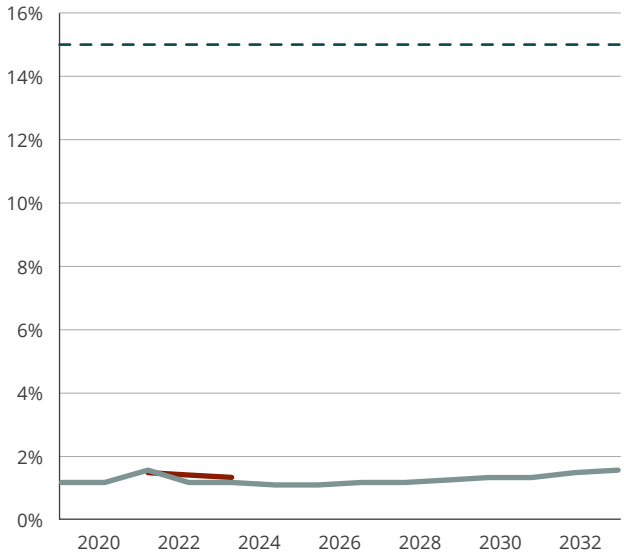



Figure 2.7 Debt Service as % of Gov't Rev Short term





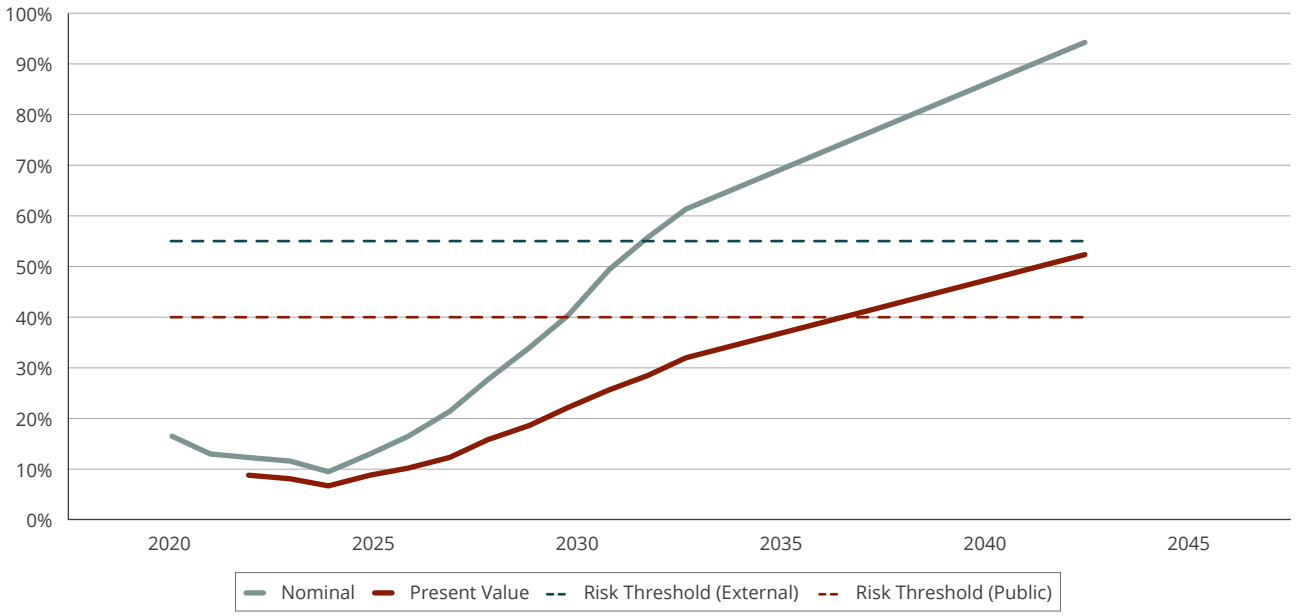
## Future Debt Projections

The DSA continues to classify Kiribati's debt carrying capacity as 'medium', which means that its debt threshold for external debt-to-GDP is 40 per cent and its threshold for public debt-to-GDP is 55 per cent. Since Kiribati has no domestic debt, its public and external debt-to-GDP curves are identical. Figure 2.8 demonstrates when the nominal and present value (PV) debt-to-GDP curves cross each of these thresholds;  the nominal curve crosses the risk thresholds, estimated to be in the early to mid-2030s; the PV curve does not cross the risk threshold for external debt until the late 2030s, and the public threshold until the mid 2040s.

These long-term scenarios are based on a number of assumptions from the DSA. First, it assumes real GDP growth will ease from its current level of around 4 per cent of GDP down to 2 per cent over the medium term (i.e. from around 2028) onwards. Second, it projects fiscal deficits over the long term due to elevated levels of current spending, a narrow domestic revenue base and a gradual decline in fishing revenues.[25]

The DSA's modelling of alternative scenarios, including a growth shock and a shock to exports, sees debt-to-GDP and other debt ratios rise and breach the thresholds much faster. The DSA concluded: 'Given that most scenarios flag high risks and with Kiribati's high exposure to climate-change-related events, staff's judgement is that there is a high enough probability of large and protracted breaches in the long run to assign final ratings of a high risk of external and overall debt distress.'[26] The fact that both the *likelihood* of future climate events and the *economic* costs of such events are high, creates a particular risk to the debt profiles of Kiribati and other similar countries studied in this report like Turubu.

Figure 2.8: Baseline Scenario Debt-to-GDP Long Term DSA Projections: Kiribati



*Downtown Apia, Samoa. Photo credit: Shutterstock.*

## 2.3 Samoa

**Currency:** Samoan tālā (WST)
**Symbol:** SAT/$
**Exchange Rate:** 2.70SAT/USD (June 2023)

| Date | Nominal GDP | | Public Debt Stock | | Debt-to-GDP Ratio (%) | External/ Domestic Ratio | IMF Risk of Debt Distress |
|---|---|---|---|---|---|---|---|
| | (million SAT) | (million USD) | (million SAT) | (million USD) | | | |
| June 2023 | 2551 | 944 | 853 | 316 | 33.4% | 100/0 | High |

**Sources:** Ministry of Finance, *Fiscal Strategy 2024/25 Main Estimates; Samoa 2023 Debt Sustainability Analysis.*

### Overview

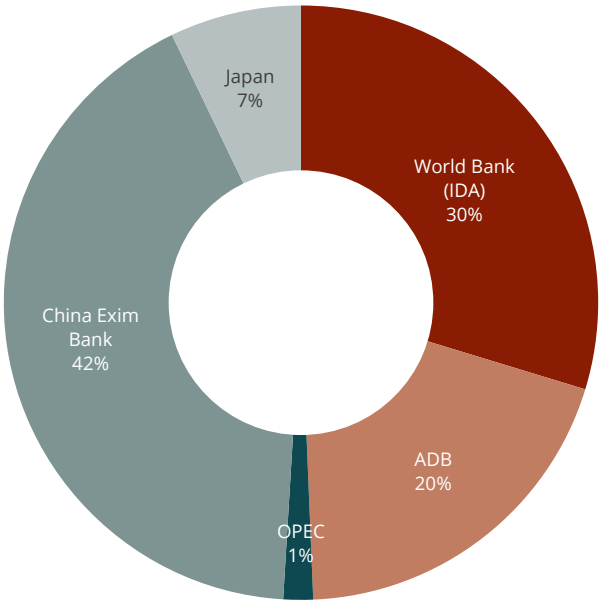
Samoa is a small-to-medium-sized (by PIC standards) economy with an annual GDP of just under USD$1 billion a year. The Samoan formal economy is highly dependent on aid money and two critical sectors: tourism and remittances from foreign workers. During the pandemic years, the tourism industry, which routinely makes up around 15-25 per cent of GDP, fell to almost zero. Remittances jumped to over 30 per cent of GDP in this time, although the trend is projected to return to the 20-25 per cent average in coming years. Emerging from three years of economic contraction driven by the pandemic, the Samoan economy is projected to bounce back in FY2023 (final numbers not in yet). The recovery is due to a rebound in the tourism industry and public sector expenditure. Exports make up a relatively small part of GDP (around 5 per cent).[27]

### The Current Debt Picture

Samoa's total public debt was SAT$853 million in June 2023, which put its debt-to-GDP ratio at 33.4 per cent. However, the debt-to-GDP figure would be 46.5 per cent if it also included publicly guaranteed private sector debt.[28]

As per Figure 2.9, Samoa's main creditors as at end FY2022 were the China Exim Bank (42 per cent), the World Bank (IDA) (30 per cent) and the ADB (20 per cent). Samoa had some amounts of private debt (raised on financial markets) in previous years, but it is not carrying any currently.

Figure 2.9: Samoa's Debt Breakdown by Creditor




Source: IMF, *Samoa DSA, 2023 Article IV Consultation*, 4.

The Samoan debt-to-GDP ratio has come down significantly from 46.5 per cent in June 2021 to 33.3 per cent in June 2023. In its 2024/25 Fiscal Strategy, the Government of Samoa projected that public debt-to-GDP will continue to trend downwards by a few percentage points per year, declining to 17.3 per cent by FY2027 (Figure 2.10). This is due to the government's plans to continue paying down public debt through annual debt service of around SAT 100 million per year or so.[29] It should be noted that paying down debt in this way is having a significant impact, with both the government and the DSA estimating that debt servicing as a percentage of revenues will nudge the 15 per cent threshold (Figure 2.11). For the record, the government has set itself a threshold target of keeping debt service-to-revenues below 20 per cent, which it expects to keep below in the coming years.[30]

The short-term DSA projections from March 2023 are quite different to those of the government. Instead of falling from 33.4 per cent as the government projects, it has nominal debt-to-GDP rising slowly through the decade to reach 40 per cent by 2028 (Figure 2.10). The discrepancies seem to be once again partly due to a difference in projected real GDP growth: for example, the Samoan government projected an average annual real GDP growth of 6 per cent in both the 2024FY and 2025FY, while the DSA estimates are in the 4 per cent range. Another reason for the difference in projections is that the government sees debt stock falling over the short term, whereas the DSA sees a steady accumulation of debt over the coming years, presumably from new borrowing.[31]

Figure 2.10: Short term Debt-to-GDP Projections

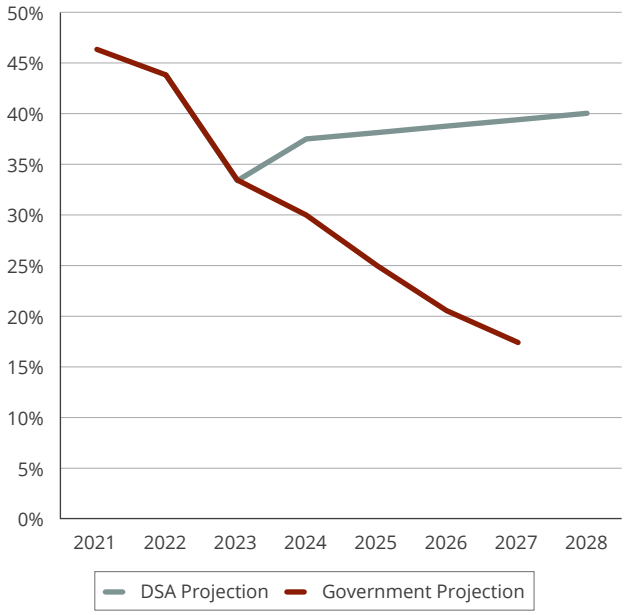
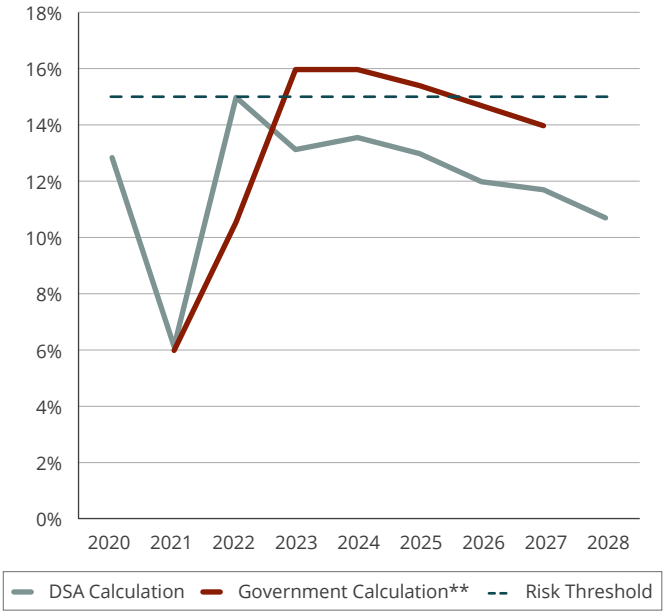



Figure 2.11 Debt Service as % of Govt Rev Short term



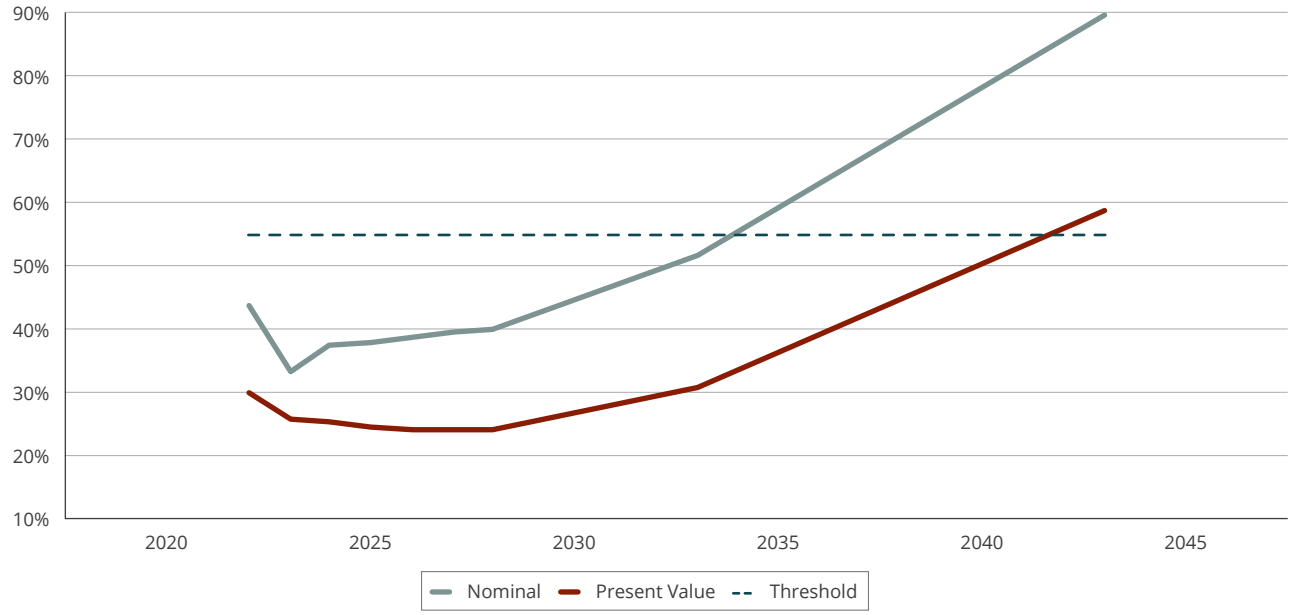

Sources: *2023 Samoa DSA,* 17-18, *Samoa Fiscal Strategy FY 2024-25,* 6, 16.

## Long-term Debt Projections

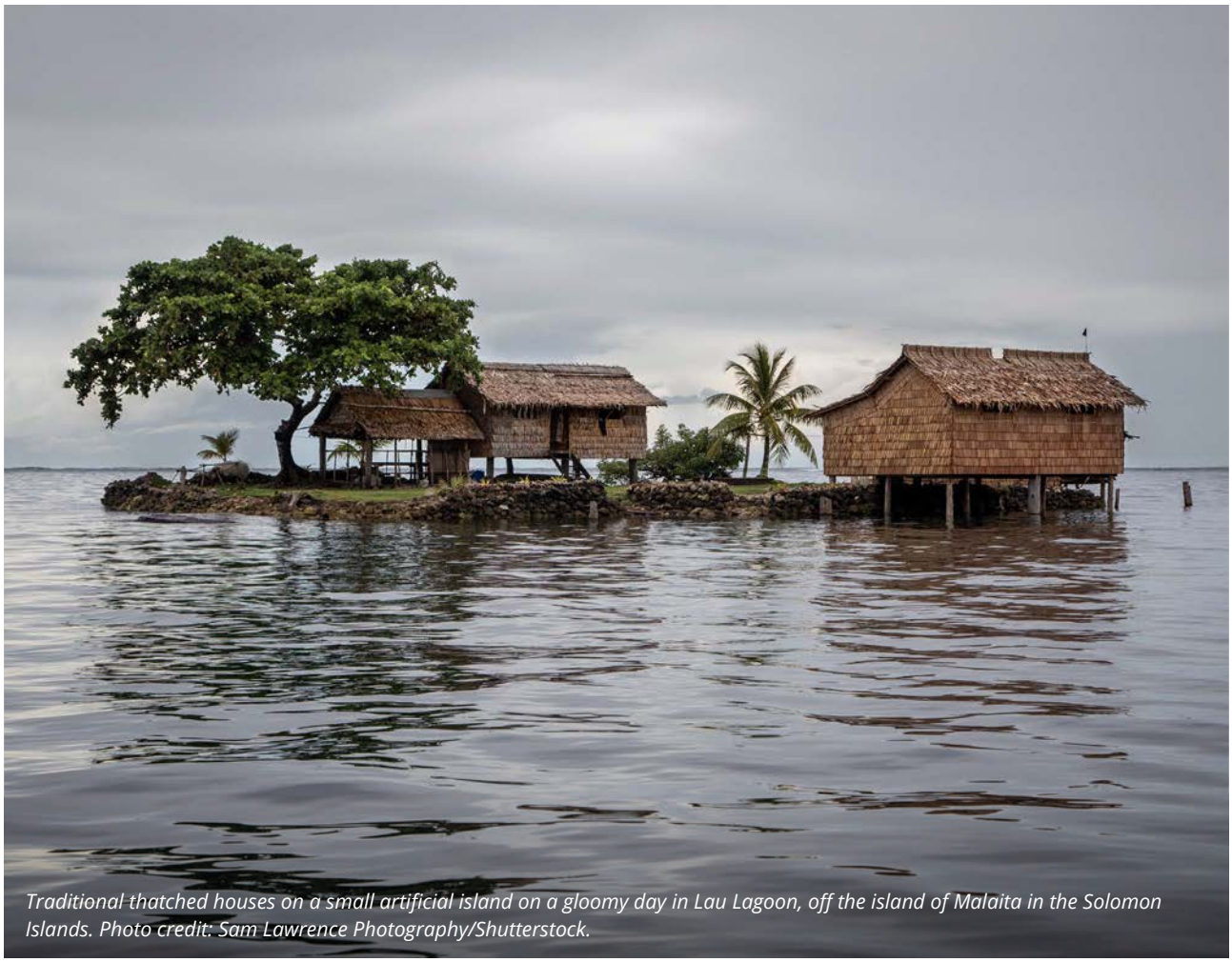
Looking at the long-term DSA debt projections, external debt-to-GDP is predicted to rise steadily from the late 2020s in a gradually accelerated manner. The DSA risk threshold for public debt is set at 55 per cent of GDP, given that, the organisation classifies Samoa as having a medium level of debt carrying capacity. Nevertheless, the threshold is predicted to be breached in 2034 for the nominal debt-to-GDP ratio and in 2041 for PV debt-to-GDP (Figure 2.12) — these projections occur because the DSA assumes that Samoa will need new borrowings to meet its climate finance needs. The DSA also modelled for a natural disaster shock occurring in the near future, which it found result in PV debt-to-GDP breaching the threshold in the 2030s. It is partly due to the reasonable chances of a natural disaster shock occurring in the next decade or so that the DSA categorised Samoa as at a high risk of debt distress.[32]

The DSA makes the point that the highest risk to debt sustainability comes from the impact of natural disasters and climate change: in other words, if Samoa is unprepared for future climate impacts, its debt will soon become unsustainable. The DSA goes on to say: 'Revenue mobilization will be critical in this regard, given the continued needs for expenditure on climate-related infrastructure and strengthening the social safety net.'[33] Chapter 3 explores the extent of new borrowings that might be needed for Samoa to achieve climate resilience.

Figure 2.12: Baseline Scenario Debt-to-GDP Long Term DSA Projections: Samoa




Sources: IMF, *2023 Samoa Debt Sustainability Analysis,* 17-18.



*Traditional thatched houses on a small artificial island on a gloomy day in Lau Lagoon, off the island of Malaita in the Solomon Islands. Photo credit: Sam Lawrence Photography/Shutterstock.*

## 2.4 Solomon Islands

**Currency:** Solomon Islands Dollar (SBD)
**Symbol:** $SBD
**Exchange Rate:** 0.12USD/SBD

| Date | Nominal GDP | | Public Debt Stock | | Debt-to-GDP Ratio (%) | External/ Domestic Ratio | IMF Risk of Debt Distress |
|---|---|---|---|---|---|---|---|
| | (million SBD) | (million USD) | (million SBD) | (million USD) | | | |
| June 2023 | 12,575 | 1509 | 2188 | 263 | 17.5 | 58/42 | Moderate |

Ministry of Finance, Solomon Islands Debt as at 30-June 2023 (SBD million)

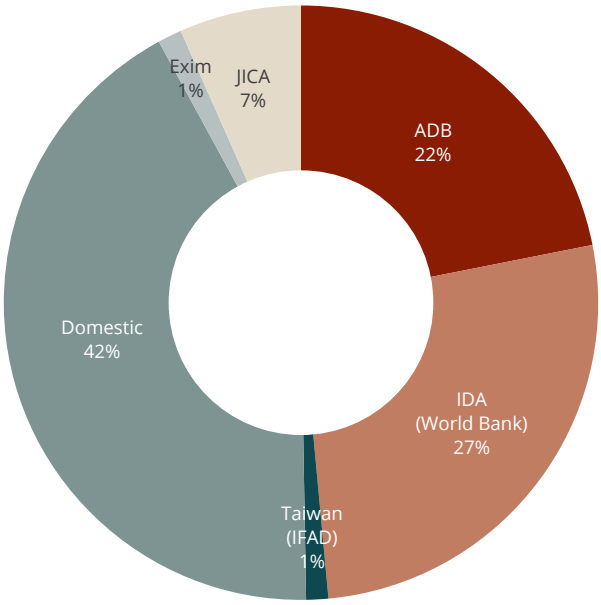
### Overview

The Solomon Islands is a Melanesian country consisting of 21 major islands and around 900 smaller ones. It has a population of over 700,000 people, a young and growing population, with around 40 per cent below 15 years of age. Internal conflict in 2003 contributed to development challenges from which it continues to recover; during a flare-up of political tensions in November 2021, looting and rioting caused the loss of jobs and a seven per cent fall in GDP. This unrest and the pandemic combined to contract economic activity. GDP per capita is well below the average for PICs, and the Solomons also lags behind Pacific neighbours in access to infrastructure and public services. The IMF estimated in 2023 that the country would need additional spending totally 6.9 per cent of GDP every year to 2030 to meet the Sustainable Development Goals (SDGs). Three-quarters of its people live in rural areas and rely on gardens to grow food and to sell in local markets; cash crops for export to international markets include copra, cocoa and palm oil. Historically, its main export has been timber, however, overlogging is seeing timber revenues decrease (along with a fall in demand from China, the main destination for timber exports) as well as causing widespread environmental destruction. The Solomons has one major operating mine, the Goldridge Mine on Guadalcanal, which has recently reopened operations, and several mining projects in development, especially for nickel.[34] Economic growth is projected to return on the back of the pandemic bounce-back and a slate of public infrastructure projects that the government has invested in with the help of its development partners, including the ambitious Tina River Hydro projected on the main island of Guadalcanal. The Solomon Islands has a relatively small and underdeveloped tourism sector, which makes up around five per cent of GDP and one per cent of employment.

### The Current Debt Picture

At SBD$12.6 million or 17.5 per cent of GDP in 2022, the Solomons has relatively low debt stocks compared to comparable neighbours like Vanuatu, Tonga and Fiji. Its largest creditors are the World Bank (IDA) and the ADB, and 42 per cent of its debt is held by domestic creditors through mostly medium- and long-term government securities (Figure 2.17).

Figure 2.13: Solomon Islands Public Debt Breakdown by Creditor (2023)




Source: Ministry of Finance, *Solomon Islands Debt as at 30-Jun-2023 (SBD million).*

Both the government and the DSA project a growth of the debt-to-GDP ratio over the short term as loan repayments become due (Figure 2.15). While debt service will increase by 2027, it will still remain well below the 15 per cent threshold in the short term—especially as this calculation also includes debt service on principal for domestic debt, meaning it is likely to be a slight overestimate (Figure 2.16).

Figure 2.14: Debt-to-GDP Projections (Short term)

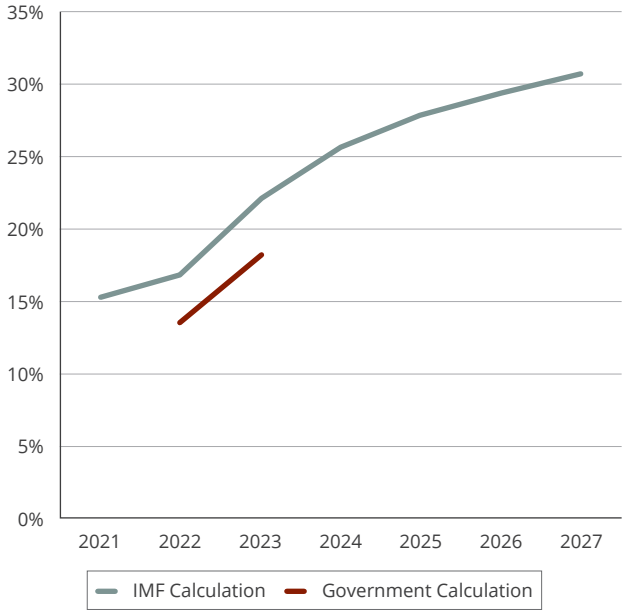
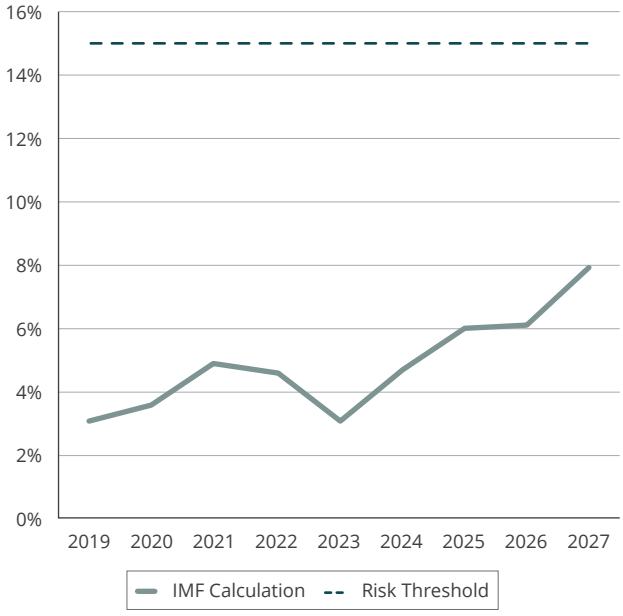



Figure 2.15: Debt service as % Gov't Revenues

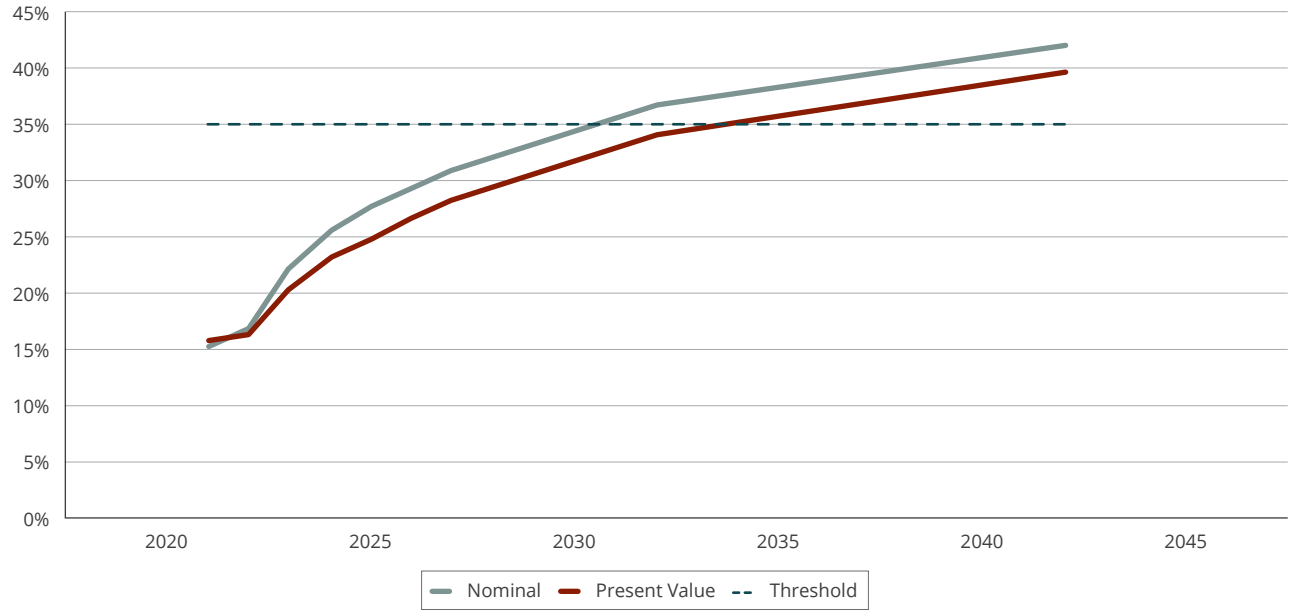



Source: *2024 Budget Strategy and Operational Rules,* August 2024, 27; 2023 Solomon Islands DSA, 13.

## Debt Projections

In the longer term, the DSA's baseline projections for both nominal and PV debt-to-GDP are on the rise, breaching the 35 per cent threshold by the 2030s (Figure 2.16). This is assumes that a growth in mineral exports will replace the loss of timber exports — which is by no means guaranteed or without other consequences. One of the reasons why debt-to-GDP ratio rises quite quickly is that the intended shift from external to domestic debt will see the proportion of concessional debt decline; the greater amount of domestic debt will have higher interest rates. The DSA also predicts that grants from aid donors will reduce over time. Additionally, the IMF sounded a note of caution that the large public infrastructure projects, if not well-managed, could be a millstone around the country's neck.[35]

Figure 2.16: Baseline Scenario Debt-to-GDP Long Term DSA Projections: Solomon Islands




**Source:** 2023 Solomon Islands DSA, 13.

In terms of modelling other scenarios, an export shock would cause the debt-to-GDP curve to rise much more steeply than in the baseline scenario. Likewise, a natural disaster shock would cause the curve trajectories to shift upwards. The DSA estimates a probability of a natural disaster shock occurring in the Solomon Islands in any given year at 12.5 per cent, meaning that there is a real possibility of multiple natural disaster shocks in the coming years.[36] Another concern with the long-term Solomon Island debt prognosis is that the large proportion of it as domestic debt leaves it with a large susceptibility to interest rate shocks, as debt denominated in government securities is more sensitive to interest rate rises.

*Ha'amonga'a Maui in Nuku'alofa, Tonga. Photo credit: Shutterstock.*

## 2.5 Tonga

**Currency:** Tongan Pa'anga (TOP)
**Symbol:** $TOP
**Exchange Rate:** 0.41USD/TOP (June 23)

| Date | Nominal GDP | | Public Debt Stock | | Debt-to-GDP Ratio (%) | External/ Domestic Ratio | IMF Risk of Debt Distress |
|---|---|---|---|---|---|---|---|
| | (million TOP) | (million USD) | (million TOP) | (million USD) | | | |
| June 2023 | 1334 | 547 | 495 | 203 | 38 | 87/13 | High |

Sources: *Budget Strategy FY2025,* 14 and IMF, *Tonga DSA (Article IV Consultation),* 14.

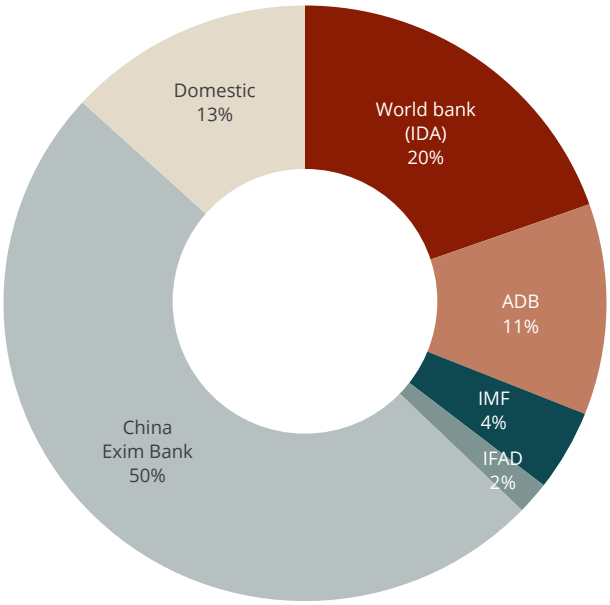
### Overview

Tonga is a small-sized Pacific nation with a population of around 105,000, over 70 per cent of whom live on the main island of Tongatapu. The tourism sector is relatively underdeveloped; nevertheless, the services sector (including tourism) contributes around 50 per cent to Tonga's GDP. The primary sectors, agriculture and fisheries, contribute around 18 per cent of GDP, however, the proportion of agriculture as a percentage of economic activity would be significantly higher if the informal economy were included in GDP measurements.[37] A large proportion of Tonga's population are either seasonal workers or live abroad semi-permanently, and the value of remittances is estimated to be the equivalent of over 40 per cent of GDP. Tonga has suffered extensively as a result of climate-related weather events in recent years. It is particularly vulnerable to three ongoing sources of climate risk: first, tropical cyclones, storm surges and coastal flooding; second, drought; and third, sea-level rise. These are a major threat to Tonga's economy due to its reliance on agriculture, tourism and fisheries. Additionally, neither its infrastructure nor its public services are climate-resilient. It has suffered three major national disasters since 2018: tropical cyclone Gita in 2018, tropical cycle Harold in 2020, and the earthquake and tsunami resulting from the eruption of Hunga Tonga-Hunga Ha'apai (HTHH) in 2022. These three natural disasters are estimated to have caused an average loss of 11 per cent of GDP in each of those three years.[38] A Tongan budget statement estimated that rebuilding from the HTHH disaster cost Tonga 36 per cent of GDP.[39]

### The Current Debt Picture

According to Ministry of Finance figures, Tonga's public debt stands at TOP$495 million as of June 2023, or 38.0 per cent of GDP (this is slightly inconsistent with DSA figures, which has public sector debt at 41.2 per cent of GDP in June 2023).[40] As of June 2022, around 50 per cent of Tonga's debt was owed to the China Exim bank; other important creditors include the World Bank (IDA) (20 per cent), the ADB (11 per cent), and domestic bondholders (13 per cent) (Figure 2.17).

Figure 2.17: Tonga's Public Debt Breakdown by Creditor (2022)




**Source:** Author's calculations from *Tonga 2023 DSA (Article IV Consultation),* 3 & 13.

The China Exim Bank loan was made to Tonga to help finance the rebuilding of the Nuku'alofa central business district after 2006 pro-democracy riots caused significant destruction. Concerns about repayment by government officials saw the Chinese government extend the grace period on the debt. This has led to a situation where much of the debt was deferred into the 2020s, and it is now falling due and must be repaid by 2028. One estimate held that US$120 million was outstanding on the loan in January 2024.[41] The government announced in its recent budget papers that in the 2024FY, it started paying down the Exim loan in earnest, paying off TOP$26 million (approximately US$10.6 million). According to some estimates, the government is needing to make payments of between US$15-17 million annually.[42]

The differences between the short-term debt-to-GDP projections of the government and of the DSA are quite stark. The government has debt-to-GDP falling from its current level towards or even under 20 per cent by 2027, as it takes on the challenge of paying off the China Exim loan. The IMF/World Bank projections, in the most recent DSA (November 2023), are much less sanguine, projecting that public debt-to-GDP will turn upwards again after 2023, reaching over 60 per cent by 2027 (Figure 2.18).

As Figure 2.19 shows, the government expects slightly higher debt servicing in the short term (around 16-17 per cent of government revenues). In contrast, the IMF/World Bank DSA estimates a large jump in debt-service as a percentage of revenues after 2026 to over 20 per cent, which is cause for some concern.

Figure 2.18: Debt-to-GDP Short Term Projections

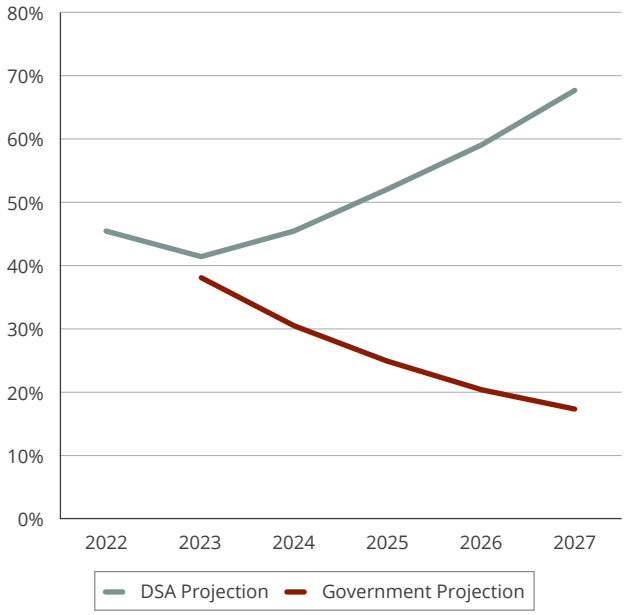
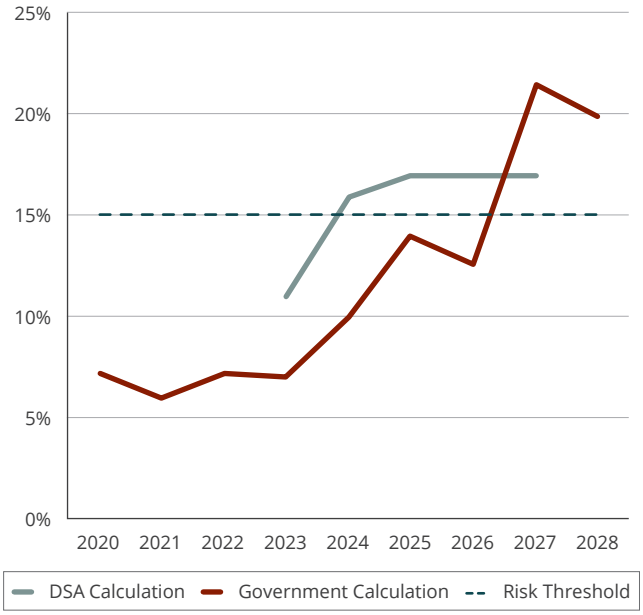



Figure 2.19: Debt Service as % of Gov't Revenues



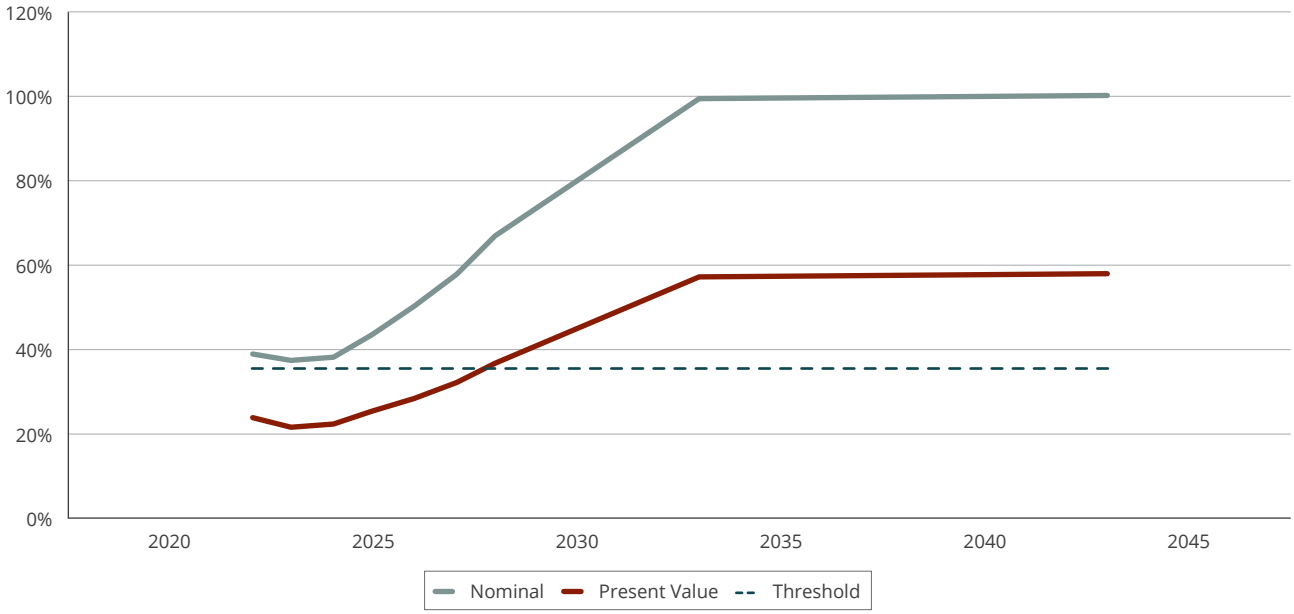

Sources: *Budget Strategy and Funding Envelope 2024-2025,* 25 & Tonga 2023 DSA, 14.

As Figure 2.19 shows, the government expects slightly higher debt servicing in the short term (around 16-17 per cent of government revenues). In contrast, the IMF/World Bank DSA estimates a large jump in debt-service as a percentage of revenues after 2026 to over 20 per cent, which is cause for some concern.

## Long-term Debt Projections

The government projections in the most recent budget papers go as far as 2027, so it is difficult to discern a long-term plan for how the government will address the debt problem. However, at a recent meeting with civil society organisations convened by the Civil Society Forum of Tonga, government officials explained that their plan to manage Tonga's debt challenges was through economic growth of 3 per cent per year.[43] The DSA has taken a much more cautious approach to Tonga's GDP growth, projecting long-term growth of 1.2 per cent. The DSA explained that these low growth projections are due to 'increasingly frequent natural disasters, persistent loss of workers to emigration, and limited economies of scale due to geographical barriers'.[44] As Figure 2.19 shows, the baseline projections show nominal debt reaching 100 per cent of GDP by 2033, while PV debt reaches around 60 per cent. In either case, as Tonga is estimated to have a low debt carrying threshold, both projections see the debt easily overtake this marker over the next few years.

Figure 2.20: Baseline Scenario Debt-to-GDP Long Term DSA Projections: Tonga




Source: *2023 Tonga DSA,* 13.

*Aerial shot of Tuvalu including its airstrip. Photo credit: Shutterstock.*

## 2.6 Tuvalu

**Currency:** Tuvaluan Dollar & Australian Dollar
**Symbol:** AUD
**Exchange Rate:** 0.68 AUD/USD

| Date | Nominal GDP | | Public Debt Stock | | Debt-to-GDP Ratio (%) | External/ Domestic Ratio | IMF Risk of Debt Distress |
|---|---|---|---|---|---|---|---|
| | (million AUD) | (million USD) | (million AUD) | (million USD) | | | |
| Dec 2023 | 93.8 | 63.8 | 5.46 | 3.71 | 5.8 | 69/31 | High |

**Source:** Tuvalu Ministry of Finance, *2024 Fiscal Risk Report*, 9.

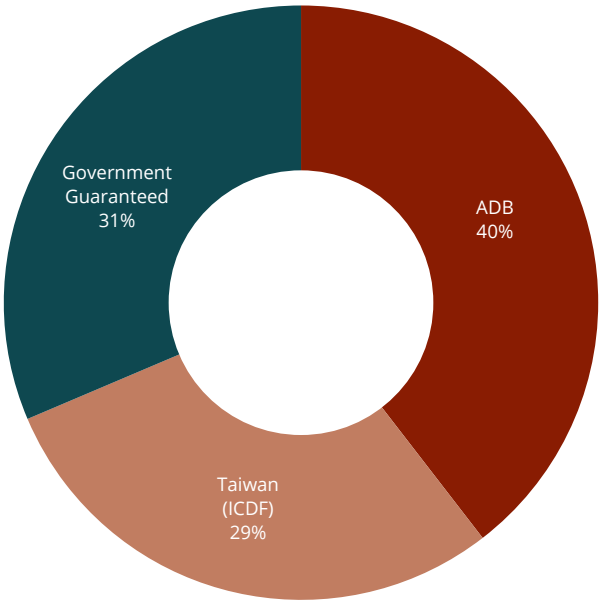
### Overview

Tuvalu is made up of three reef islands and six atolls in Polynesia; it is one of the smallest nations in the world both by population—somewhere in the vicinity of 12,000—and by land area. As with Kiribati, the Marshall Islands and Palau, almost all its people live within one kilometer of the coast, making it extremely vulnerable to climate change. Rising sea levels are expected to increase storm surges and coastal inundation, and extreme heat will cause a spike in heat-related illnesses. Cyclone Pam in 2015 is estimated to have cost 30 per cent of GDP. With little arable land, it is dependent on food and fuel imports and its economy is reliant on the sale of fishing licenses, and overseas aid. Overseas grants make up around 40 per cent of GDP and government spending as a proportion of the economy is very high, making up over 100 per cent of GDP. Goods exports are just one per cent of GDP and services exports only 20 per cent, whereas goods and services imports are much higher than this, meaning that Tuvalu generally has recurrent structural deficits. Large climate adaptation projects will bring in new grant money but as it will be spent rather than saved, the IMF estimates that the overall annual deficit will be equivalent to about 7 per cent of GDP in coming years. Moreover, climate change could cut into the main domestic source of revenue, international fishing licenses.[45]

### The Current Debt Picture

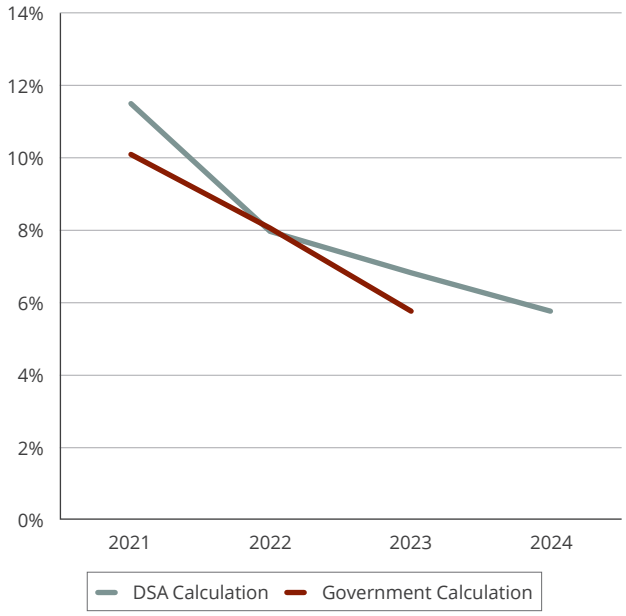
The absolute amounts of debt held by Tuvalu are very small, given the size of its economy. At the end of 2023, the dollar value of public and publicly-guaranteed debt was AUD 5.46 million. Around 40 per cent of this was owed to the ADB, 30 per cent to Taiwan, and another 30 per cent was government guaranteed debt from the Tuvalu Electric Corporation (Figure 2.21). Tuvalu does not have any issues with debt in the short term. Debt service is well below fifteen per cent of government revenues and debt-to-GDP is also low (under 10 per cent) (Figures 2.22 and 2.23).

## Figure 2.21: Tuvalu Debt Breakdown by Creditor

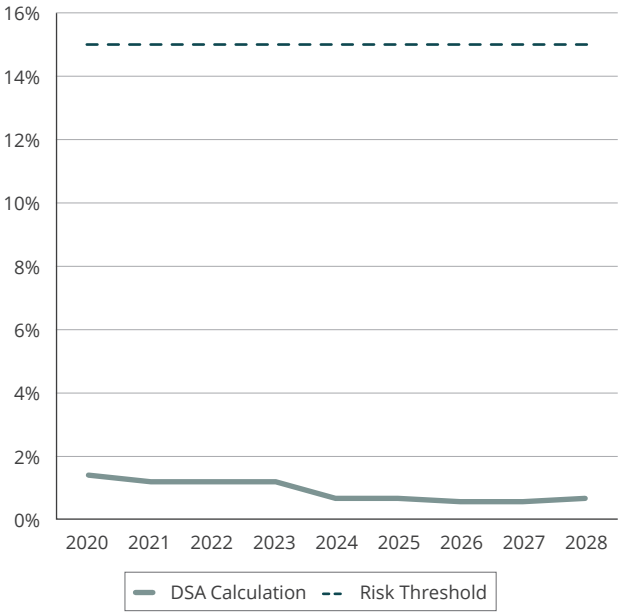



Source: *Tuvalu 2023 DSA,* 6.

## Figure 2.22 Debt-to-GDP Short Term Projections




## Figure 2.23: Debt Service as % of Gov't Revenues

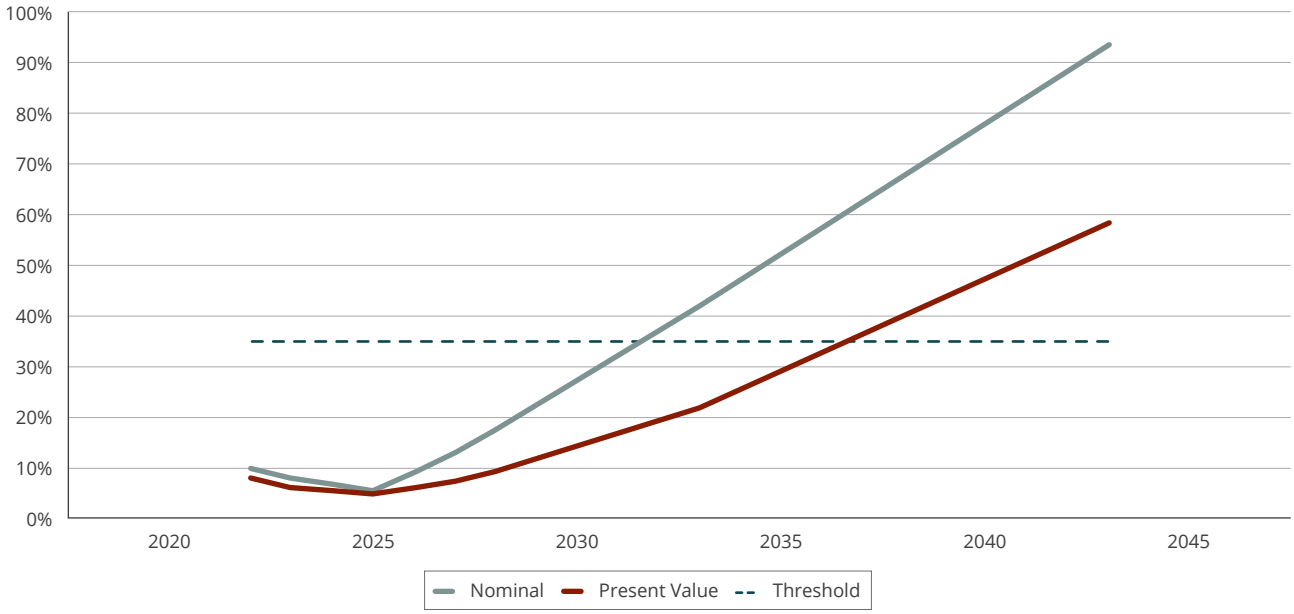



Sources: Tuvalu *2023 DSA,*19 & Tuvalu Fiscal Risk Report 2024, 9.

## Long-term Debt Projections

Tuvalu's debt situation is more worrying in the long term. The DSA baseline scenario projects that Tuvalu will pass the safe debt-to-GDP threshold in the early 2030s for nominal debt, and in the late 2030s for PV debt (Figure 2.24). The major issue is the cost of climate adaptation, which is discussed more in Chapter 3. The DSA assessments are that expenses, including the costs of adaptation, will rise faster than grant revenues, leading to a rising public debt as Tuvalu will not be able to rely on domestic revenue mobilisation for climate adaptation. A fishing revenue shock or a natural disaster shock spells serious trouble for Tuvalu, with PV public debt thresholds being breached in the early 2030s and debt-to-GDP skyrocketing to well over 100 per cent of GDP.[46]

Figure 2.24: Baseline Scenario Debt-to-GDP Long Term DSA Projections: Tuvalu




Source: *Tuvalu 2023 DSA,* 13.

*Women walking on Malo Island, Vanuatu. Photo credit: Shutterstock.*

## 2.7 Vanuatu

**Currency:** Vanuatu vatu (VUV)
**Symbol:** VT
**Exchange Rate:** 1VT=0.0084USD

| Date | Nominal GDP | | Public Debt Stock | | Debt-to-GDP Ratio (%) | External/ Domestic Ratio | IMF Risk of Debt Distress |
|---|---|---|---|---|---|---|---|
| | (billion VT) | (million USD) | (billion VT) | (USD) | | | |
| Dec 2023 | 122,600 | 1030 | 54,065 | 454 | 44.1 | 75/25 | Moderate |

**Source:** Ministry of Finance, *Budget 2024, Volume 1, Fiscal Strategy Report* (Government of Vanuatu, 2024); *Vanuatu 2023 DSA (Article IV Consultation).*

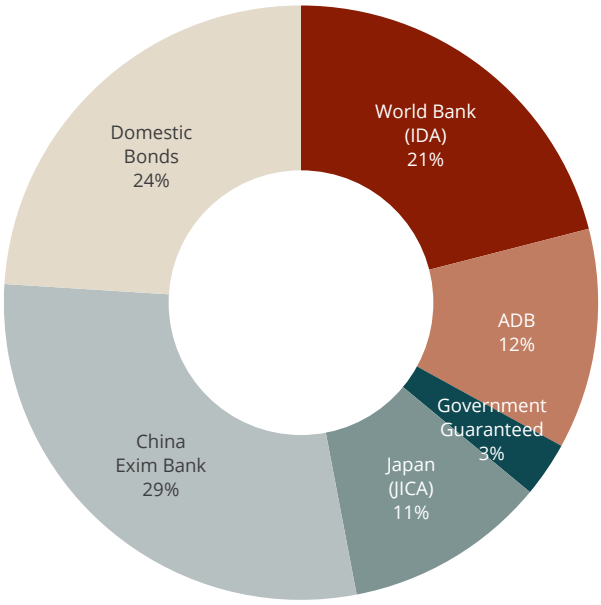
### Overview

A medium-sized country by Pacific Island standards, the 80 islands that make up the Melanesian archipelago of Vanuatu are home to over 300,000 people. Agriculture and tourism are the mainstays of the formal economy, with Vanuatu producing copra, kava and cocoa for the domestic market and for export. Vanuatu also relies on exports of timber, beef and financial services. Copra production has been hit hard in parts of the island as a result of labour shortages, changing weather patterns, lower prices and a new pest, the Coconut Rhinoceros Beetle. Vanuatu's industrial sector is based on mining, quarrying, manufacturing and construction—the latter is predicted by the government to expand, particularly with projects such as the building of climate-resilient bridges. Like many Pacific nations, the pandemic caused a serious economic downturn in 2020 (around 5 per cent of GDP), partly due to the loss of tourist revenues (tourist visits fell in 2020 by over 80 per cent). Vanuatu's financial position turned around in 2021 and 2022, with GDP growth of 0.6 and 1.9 per cent respectively, on the back of a recovery in tourism, ongoing remittances revenues and strong agricultural production. Vanuatu is another country that has a high vulnerability to natural disasters, including those caused by climate change: it was recently placed at the top of the World Risk Index.[47]

### The Current Debt Picture

Vanuatu's debt was VT54,065 at the end of 2023, representing 44.1 per cent of GDP. Around one quarter of this was domestic debt. As for the three-quarters of external debt, it was owed to a collection of bilateral (China Exim, Japan's JICA) and multilateral (IDA, ADB) agencies (Figure 2.25). The government has stated in its debt strategy that it will prioritise financing from domestic sources and is seeking to develop its domestic debt market. It is seeking to keep debt denominated in foreign currencies (currently at 77 per cent) at below 70 per cent in the future.[48]

Figure 2.25: Vanuatu's Public Debt Breakdown by Creditor (2022)




Source: *Ministry of Finance, Budget 2024, Volume 1, Fiscal Strategy Report, 24.*

Figure 2.26: Short term Debt-to-GDP Projections

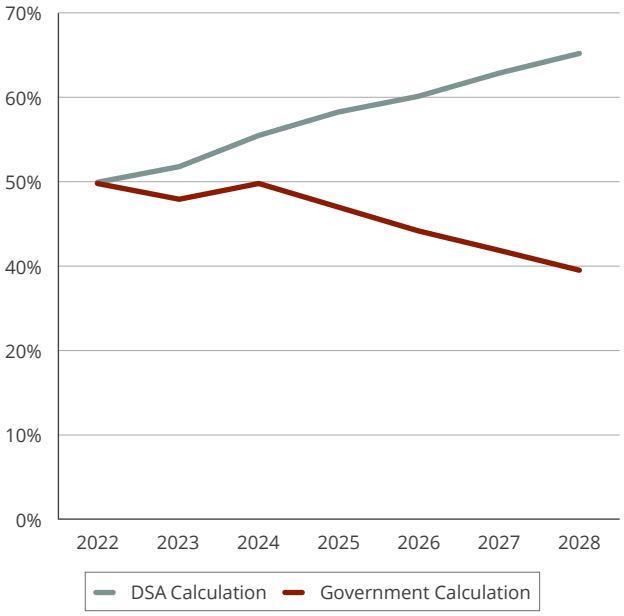
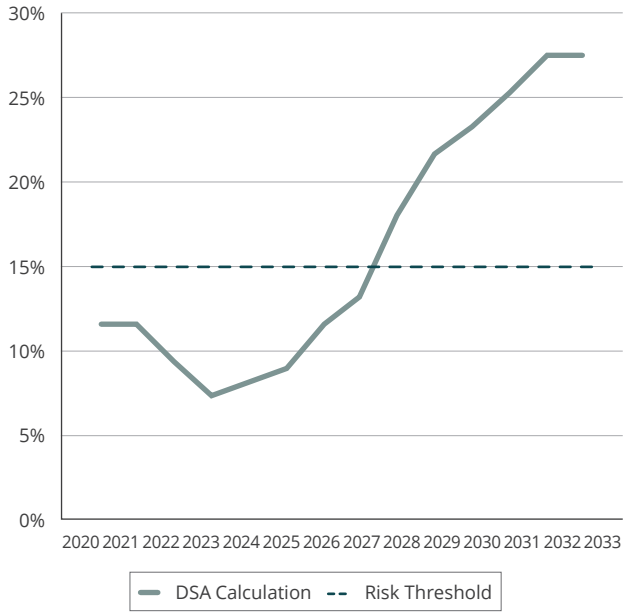



Figure 2.27: Debt Service-to-Revenue (%)




Source: *DSA.*

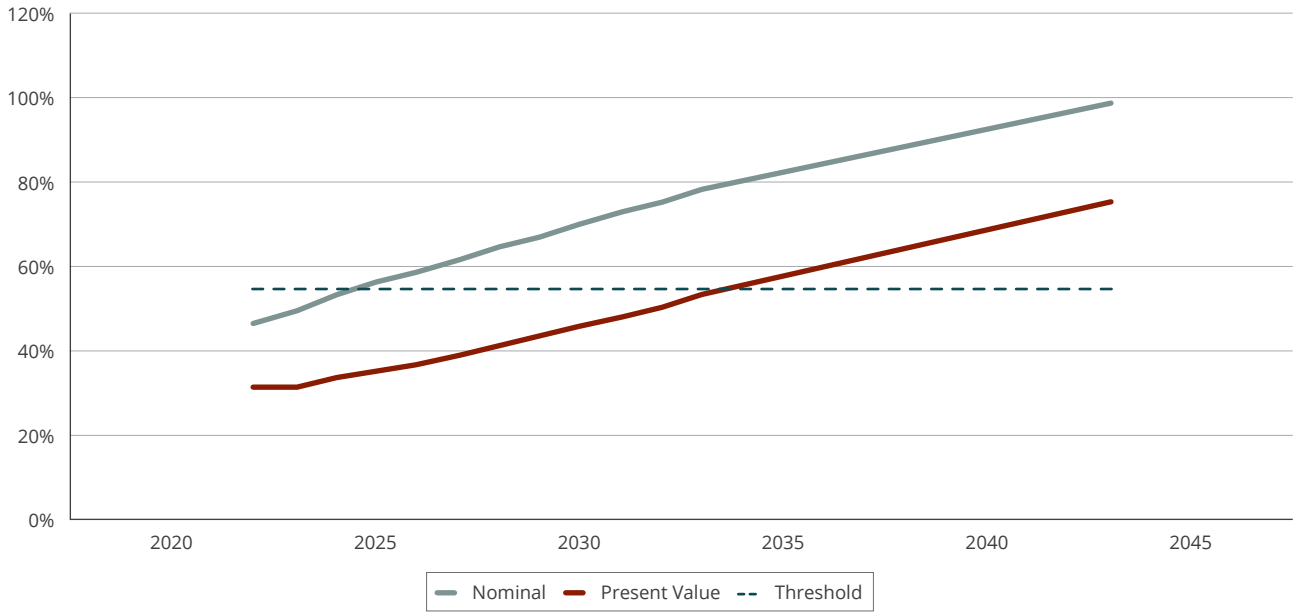
Nevertheless, the Vanuatu Government is sending somewhat mixed messages about its intentions with respect to its debt profile. On the one hand, its debt projections for the coming few years suggest a gradual paying down of the debt from its current level of 44.1 per cent to reach 34.5 per cent by 2028. On the other hand, it has given itself a significant amount of latitude in its key debt targets, setting the higher ceiling for public debt-to-GDP at 60 per cent. Moreover, it has ambitious plans for capital upgrades, particularly of

infrastructure, in the coming years.[49] This is perhaps why the DSA's short-term projections are for public debt-to-GDP to rise to over 60 per cent by 2028 (Figure 2.26). The government does not have projections for debt service in its budget papers, but the DSA analysis suggests a sharp incline in its debt service-to-revenue projections from the year 2027, breaching the 20 per cent line in 2030, well above our threshold of 15 per cent (Figure 2.27).

## Long-term Debt Projections

The DSA has assessed Vanuatu's debt carrying capacity as moderate, and therefore its risk threshold for public debt-to-GDP is set at 55 per cent. Its projections are based on a medium-term growth path of 3 per cent GDP and a relatively small downward revision of growth (0.5 per cent GDP) from ongoing natural disasters.[50] However, long-term projections show a gradual increase in debt-to-GDP under the baseline scenarios, with PV debt-to-GDP breaching the threshold in 2034 and nominal debt-to-GDP breaching it very soon (in 2025) (Figure 2.28). Other scenarios would see the PV debt-to-GDP curves on a much sharper upward trajectory: a growth shock, or a loss of revenues from the Economic Citizenship Program (a citizenship-by-investment scheme), would see debt-to-GDP skyrocket.[51]

Figure 2.28: Baseline Scenario Debt-to-GDP Long Term DSA Projections: Vanuatu




Source: IMF, *Vanuatu 2023 DSA (Article IV Consultation)*

## 2.8 Assessing the Long-term Debt Projections

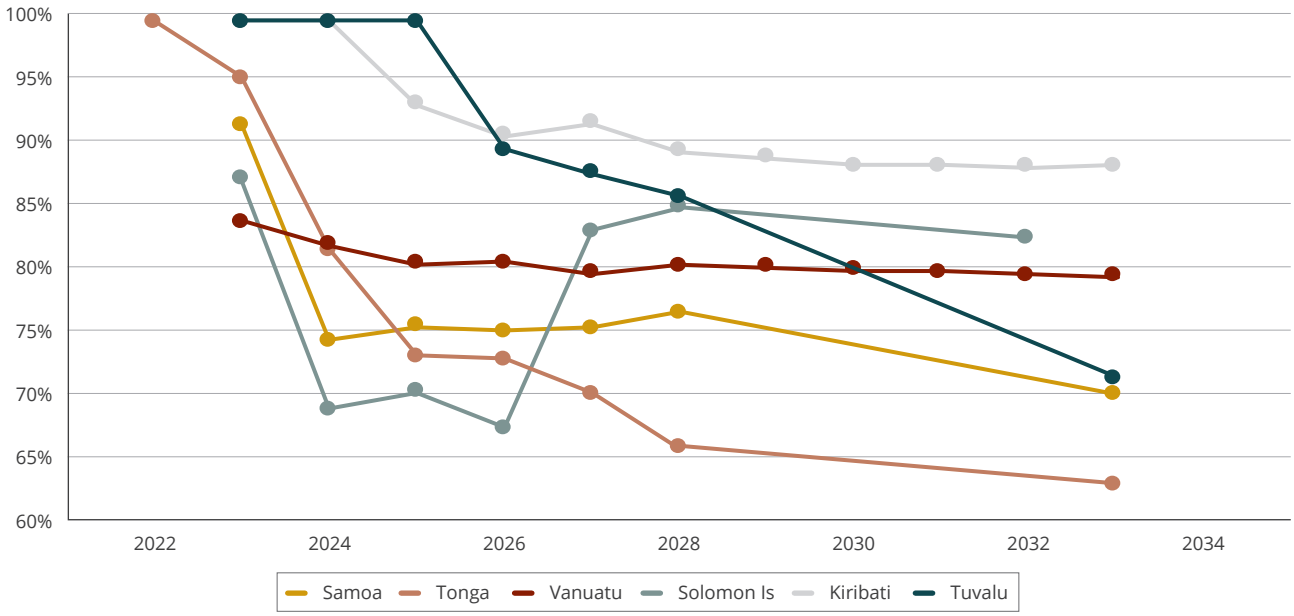
The case studies in Chapter 2 reveal what seems like a worrying trend in most of the countries studied when it comees to the long-term (i.e. 15 or 20 years) projections of the debt-to-GDP relationship in the DSAs. Most of these projections reveal debt thresholds would be breached, even under the baseline scenarios. One factor in the pessimistic debt-to-GDP projections are the IMF/World Bank's cautious projections of GDP growth. Some of this caution was because the IMF/World Bank have been building in the cost of climate disasters (both sudden and slow-moving) into its growth forecasts. If GDP is held back by climate events, it will be harder to keep debt at a sustainable level, especially if it is not being paid down.

But reduced GDP growth alone cannot account for the long-term debt projections. A more important cause of the upward trajectory of debt-to-GDP curves in the DSA's long term debt projections comes from the assumptions about future grant aid. The DSA makes assumptions of the amount of grants in the short-term on the basis of 'committed or highly likely grants' arriving to a country. But beyond the five-year time horizon, it's a different story. As the guidance note on DSAs explains, after five years the IMF and World Bank make the assumption that for the poorest countries, external financing will start to shift from grants to concessional loans. The reason for this appears to be that if they did not make that assumption, it would undercut these countries' ability to access grant financing in the future. As the guidance note explains:

> *Assuming in the baseline that new grants are provided can improve the risk rating, and leave the donors unable to provide the grants. Against this backdrop, the DSA should include firmly committed grants, and can include highly likely grants provided that their inclusion does not change the risk of debt distress rating (and thus is consistent with the grants being available).*[52]

The DSA assumptions of a fall in grants and rise in loans can be shown graphically by the fall in the grant proportion of aid for the low-income case study countries (see Figure 2.29.)

Figure 2.29: Falling Grant Proportion of Aid Flows in Debt Sustainability Analyses' Future Projections




**Source:** Most Recent IMF/World Bank DSAs.

DSAs regularly point out that securing more grant funding will alter the debt-to-GDP projections and potentially shift the curve downwards below the danger thresholds. A good example is the Tongan DSA, which includes a 'fiscal adjustment' scenario, whereby the government would increase tax revenues, reduce current expenditures and secure new grant commitments "consistent with historical trends". The new grant commitments here assume a further 2-3 per cent of GDP in grant income (which historically averages around the 15-20 per cent of GDP range). Under this scenario, Tonga's debt-to-GDP becomes manageable. It should be noted that reforms to reduce current expenditures—along the lines recommended in the Tongan and in other DSAs—are common features of IMF advice to member countries, and have often been the subject of criticism for causing too much economic pain and hurting development.

In other words, the long-term debt-to-GDP projections of the DSAs for most of the case studies in this chapter should be taken with a grain of salt, in that they are designed to be pessimistic so as not to hurt the chances of countries gaining new grant aid. Nevertheless, these long-term projections, while flawed, do point to an unresolved debt/climate tension for Pacific Island states, because they are generally premised on future aid levels either remaining static or increasing only modestly. As we will see in the next chapter, this is an assumption which simply cannot hold water if Pacific nations are to access the resources and support they need to respond to the climate crisis.

## Conclusion

This chapter has presented case studies examining the current and future debt situation for seven Pacific Island countries: Fiji, Kiribati, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. The countries have varying profiles in terms of geographical attributes, population and economy size, and industries. Likewise, there is diversity as to whom they owe and whether they have domestic or external creditors. When it comes to current debt challenges, three of the countries - Solomon Islands, Kiribati and Tuvalu - are not facing any current or near-future challenges in meeting their debt obligations. In contrast, Fiji, Samoa and Tonga are already showing worrying debt service-to-revenue comparisons, and Vanuatu may be heading in the same direction in a few years. Countries like Fiji, the Solomon Islands and Tuvalu, with large amounts of domestic debt from the issuance of private securities, are less under pressure to earn foreign exchange but face a higher risk of punishing debt services if global interest rates remain high. The long-term debt-to-GDP projections in the DSAs are to be taken with a grain of salt, however, they do point to a larger problem around how a significant increase in financing needs for climate resilience could impact Pacific debt levels; this is the focus of the next chapter.

*Locals Abraham and Gladys walk on the artificial pathway they built up in their village of Surabata in Solomon Islands' Malaita Province to cope with rising sea inundation. Photo credit: Caritas Australia.*

# Chapter 3: Debt and Climate Vulnerability

## 3.1 Estimating the Costs of Climate Resilience

As is by now well known, Pacific Island states are some of the most vulnerable when it comes to climate change. Extreme weather events such as tropical cyclones, storm surges and droughts are on the increase due to human-induced climate change. Tropical storms and cyclones can do enormous damage to infrastructure. Table 3.1 lists some of the more damaging recent events and their economic impact on particular countries.

Simultaneously, there are chronic and cascading climate impacts. Storm surges and flooding inundate land that is used for living space and for gardening and agriculture, and puts pressure on fresh water supplies. Extreme heat is projected to reduce ocean fish stocks and crop yields, and put pressure on public on health systems. The increasing frequency and intensity of these impacts is having an economically quantifiable effect on Pacific countries and communities. Box 3.1 describes how these climate impacts affect a local community via the case study of the village of Surabuta in the Solomon Islands.

Table 3.1: The Economic Cost of Extreme Weather Events[53]

| Country | Extreme Weather Event | Economic Impact |
|---|---|---|
| Fiji | Tropic Cyclone Yasa (2020) | Estimated costs of more than FJD$500 million, 31,000 households affected |
| | Tropical Cyclone Winston (2016) | Loss of 30,000 houses, 488 schools and 88 health centres; FJD$2.0 billion worth of damages, or around 20 per cent GDP |
| | Tropic Cyclone Evan (2012) | Losses to housing, infrastructure, livelihoods and crops; total damage and loss estimated at FJD$194.9 million |
| Vanuatu | Tropical Cyclone Pam (2015) | Caused agricultural damage of 64.1 per cent of GDP |
| | Cyclone Harold (2020) | Caused damage of 60 per cent of GDP |
| Palau | Typhoon Surigae | USD $4.8 million worth of losses across health, infrastructure, education, housing, communications and food security |
| Tonga | Tropical Cyclone Gita (2018) | Caused damage of around 38 per cent of GDP |

As discussed in our previous *Twin Clouds* report, there is strong correlation showing how how climate induced loss and damage can drive increases in sovereign debt. Vanuatu's Cyclone Pam in 2015 provides an example. After the cyclone, government debt almost doubled, from 21% of GDP before to 39% afterwards. Four years after that, government debt to GDP was over 50%, largely due to lending for reconstruction. In its 2019 review of Vanuatu's economic and financial prospects, the IMF stated "there is little fiscal space to address another natural disaster".[54] Research by the International Institute for the Environment and Development in Caribbean countries found that for the Bahamas, Fiji and Belize, the trend has been for debt-to-GDP to rise after disaster events.[55]

### Box 3.1 Climate change impacts in Surabuta, Solomon Islands

Like all Pacific nations, the Solomon Islands is highly vulnerable to climate change. It has experienced climate change-induced sea level rise that is 2-3 times higher than the global average, which has far-reaching impacts in a country where over 80% of its population lives in low-lying coastal areas.[56]

The village of Surabuta is located on the island of Malaita in the Solomon Islands. Rising sea levels have reduced the amount of land that can be used to grow food, such as taro and coconuts, as well as sago palm trees which provide the material for houses. The community's well water has also been rendered undrinkable because of sea level rise. Abraham Alona, Surabuta resident, said, "Our great-grandparents dug this well a long time ago, and people from the village would come and fetch water, but [now] it had salt in it. When high tide comes, the well is full of salt water." Residents now rely on rainwater tanks for their drinking and washing water.

Community infrastructure is also affected. The road that enables community members to travel to the health clinic, school, market and surrounding villages can be inundated by the rising tides. Gladys Anisioro, another Surabuta resident, explained that "if the sea comes in, trucks won't be able to cross, because the sea covers the road". She described how everyone in the community, including children and elderly people, are working together to build up the level of the road using stones and mud. Gladys also spoke of the need to protect the village's sanitation infrastructure: "The toilets need to be built up, because the sea level will cover them too."

The effects of sea level rise are also evident in Surabuta's cemetery. As Abraham pointed out to Caritas as he stood in the cemetery: "You see cracks on the graveyard because sea level rise has reached here and it covers every grave here." Without protection from rising tides, the graves are at risk of further erosion and potential loss.

The community is responding with resilience: building up their roads, moving their food gardens, using rainwater harvesting, protecting residential infrastructure and speaking out about their situation. But even when climate change adaptations are possible, cost is always an issue and sources of funding are never guaranteed. Moreover, the loss of the community's land, and the potential loss of their ancestor's graves, represents a profound and incalculable loss of their cultural and ancestral heritage. The village of Surabuta is an example of the pressing need for both climate finance for adaptation as well as climate change mitigation through global greenhouse gas reductions to prevent further sea level rise.

What is 'climate finance' and how does it relate to climate resilience? This report uses the term 'climate finance' to refer to any local, national or transnational financing—drawn from public, private and alternative sources of financing—that seeks to support mitigation or adaptation actions to address climate change, or loss and damage resulting from the impacts of climate change.[57] This is an amendment of the United Nations Framework Convention on Climate Change (UNFCCC) definition that incorporates loss and damage.

*Climate change mitigation* refers to projects that help countries reduce their carbon emissions and transform their economic reliance away from fossil fuels and towards renewable energy. *Climate change adaptation* refers to programs that help countries be better able to withstand the impacts of climate change. The model village of Koroipita in Fiji's Western Province is an example of an adaptation project

which would help promote climate resilience while bringing many other benefits to the community (see Box 3.2). *Loss and damage* refers to payments for climate impacts that communities are unable to adapt to: it includes impacts from both extreme weather events such as cyclones and floods, and slow-moving catastrophes such as sea level rise or ocean acidification. All three aspects of climate finance are considered essential to climate resilience. Loss and damage financing can, along with emergency humanitarian assistance, help countries rebuild without having to take on more debt; adaptation financing can help reduce the scale of the damage in the first place, thus reducing the amount of borrowing needed.

### Box 3.2: Rebuilding Livelihood of climate-affected communities in Fiji through disaster-resilient model villages

Koroipita is a model village located in the Western Province of Fiji that provides refuge and livelihood support to climate- and disaster-affected communities. The initiative, founded back in 1986 following devastating cyclones, has since been supported by a number of donors and development agencies, including the Fiji Government, New Zealand Government, Habitat for Humanity, Rotary Club, and the European Union.[58]

Koroipita currently boasts approximately 275 houses, all designed to withstand the impacts of climate-related disasters and extreme weather. In 2016, when Tropical Cyclone Winston devastated the small island nation, all 260 houses at the time escaped serious damage.[59]

As well as providing resilience to disasters, Koroipita is a green village. Sustainable agriculture, organic composting and food systems, along with grey sewage and sustainable water management processes, support its residents to access basic needs, while communities are supported to undertake activities that promote environmentally sustainable livelihoods.

Recognising the long-term impacts inflicted by disasters upon communities, the project goes beyond just short-term provision of shelter and essential needs. Instead, residents are empowered to rehabilitate their livelihoods, through taking part in compulsory income generation activities, such as money management courses, whilst also providing education through schools and trainings.[60] As a result, they are supported to access the basic short-term needs in food, water and shelter, whilst simultaneously empowered to re-build their lives and eventually seek permanent relocation elsewhere.

Leba Tamari is the Advocacy Coordinator at Caritas Fiji, who previously worked on the project. She highlighted the importance of building community self-dependence through livelihood activities as a form of adaptation to climate impacts, and believes the model presents a promising approach that could be replicated more widely.

> *"Many other projects have created more dependency rather than community empowerment", she said. "We want to move away from dependency. A positive example I've seen was a family of climate refugees, forced to migrate from their home on Kiowa Island due to sea-level rise. They were provided refuge in Koroipita for three years, and eventually supported to obtain Fiji citizenship. Their children were provided early education, whilst the mother was trained in caregiving, enabling her to obtain an income. They have now migrated to New Zealand."*

While the Koroipita project presents a viable model in supporting relief and climate change adaptation in Fiji, the growing climate–debt crisis requires larger systemic changes for supporting the long-term security of Pacific islanders. There is an urgent need to better support Pacific governments to finance initiatives such as the Koroipita project at scale without further compounding their debt burden.

> *"Replication of this model is now of importance to venture into, as proven by Koroipita. It creates a utopia community; however, it requires access to climate finance. Due to the high climate debt in Fiji, it will be a struggle to establish."*
> – Leba Tamari (Advocacy Coordinator, Caritas Fiji)

Estimating the costs of climate resilience is a task that is not without challenges, both when it comes to cost estimations by Pacific states themselves as well as by independent third parties. Table 3.1 lists climate finance estimates by PICs that are readily available. Some estimates are taken from (Joint) National Action Plans (NAPS or JNAPs), which were an initiative established in 2010 by the Cancun Adaptation Framework.

A second source of country data is from Nationally Determined Contributions (NDCs) established under the 2015 Paris Climate Agreement. Many country NDCs focus only on finance needs for mitigation, since this is at the heart of the NDC process, but some countries used them to estimate adaptation needs. Although many PICs have published NAPs/JNAPs, their weaknesses when it comes to estimating climate finance needs are that they only include adaptation, not mitigation nor loss and damage, and were often done over a decade ago, which risks underestimating the size, scale and cost of the problem. Very few Pacific nations have published NDCs; those that have published them do not necessarily include cost estimates for finance needs.

*Koroipita Model Village, Fiji. Photo credit: Mr Paul Forrest; photo provided by Leba Tamari.*

Table 3.2: Available PIC Estimates of Needs for Climate Finance

| Country | Source | Period | Assessment of Total Needs over the period | Annual Avg Financing Needed | |
|---|---|---|---|---|---|
| | | | | Local Currency | USD |
| Cook Islands | Joint National Action Plan | 2011-2015 | At least NZD$41,7 million* | N/A | N/A |
| Fiji | Fiji Climate Vulnerability Assessment | 2021-2030 | FJD$9.27 billion (not including recurrent costs) | FJD $927 million | 412 million |
| Kiribati | Kiribati Joint Implementation Plan for Climate Change and Disaster Risk Management | 2013-2023 | AUD$103,11 million | AUD $96.91 million | 9.69 million |
| RMI | Joint National Action Plan for Climate Change Adaptation & Disaster Risk Management | 2014-2018 | USD$9,70 million | - | 1.94 million |
| FSM | Individual Joint National Action Plans for Yap, Kosrae, Pohnpei & Chuuk | 5 years | USD$108.3 million | - | $21.7 million |
| PNG | Nationally Determined Contribution Implementation Plan | 2021-2030 | USD$133 million | - | 13.3 million |
| Tonga | Joint National Action Plan 2 on Climate Change and Disaster Risk Management | 2018-2028 | USD$147 million | - | 14.7 million |
| Tuvalu | National Strategic Action Plan for Climate Change Disaster and Risk Management | 2012-2016 | AUD$6.97 million | AUD $1.39 | 0.95 million |
| Vanuatu | Vanuatu's Revised and Enhanced Nationally Determined Contribution | 2021-2030 | USD$1,214,350,000 | - | 121.4 million |

**Sources:** Cook Islands Joint National Action Plan 2011-2015; Fiji Climate Vulnerability Assessment, June 2021; Kiribati Joint Implementation Plan for Climate Change and Disaster Risk Management (KJIP) 2014-2023; Republic of the Marshall Islands Joint National Action Plan for Climate Change Adaptation &v Disaster Risk Management 2014 – 2018; Federated States of Micronesia Individual Joint National Action Plans for Yap, Kosrae, Pohnpei & Chuuk; Papua New Guinea NDC Implementation Plan; Solomon Islands 2021 Nationally Determined Contribution; Tuvalu National Strategic Action Plan for Climate Change and Disaster Risk Manamgement 2012–2016; Vanuatu's Revised and Enhanced Nationally Determined Contribution, 2021-2030.

* This estimate does not include climate-proofing infrastructure, which could cost as much as NZD$237 m, however it was not clear how much of this had already been spent.

Of the above, Fiji and Vanuatu estimates are likely to be the most accurate, as they are both recent and also based on a considerable amount of detailed work. Fiji's Climate Vulnerability Assessment estimated investment needs of FJD$9.272 billion over ten years and recurrent costs of between roughly one quarter and one half a billion Fijian dollars (only investment needs were included in the figure in Table 3.1 above). This is just for adaptation, it does not include the costs of getting to new zero emissions (mitigation), which have various costs associated with it, depending on how quickly net zero is reached and by what method.[61] The Vanuatu assessment, which is discussed further below, is the only one that has all three types of climate resilience costs built into the one report.

Estimates for the other countries in Table 3.1 would seem to be less robust: either they are derived from plans that are either more than ten years old (i.e. when the full impact of the climate crisis was less well understood), or the plans themselves are not as fully developed and complete as those of Fiji and Vanuatu (this is not surprising given the technical difficulties and resources that are associated with putting together estimates of climate finance needs). They are likely, therefore, to be underestimates.

A comparison with some external estimates of Pacific adaptation financing needs helps to bear this out. A study by the IMF Asia and Pacific and IMF Fiscal Affairs Departments estimated annual public sector costs (in percentage of GDP) for making infrastructure climate resilient for several Pacific countries. The estimates, which varied from country to country, are listed for most of the case study countries (with the exception of Samoa) in Table 3.2 below.[62]

Another study, conducted by Johanna Tiedmann and other colleagues from the IMF using a different methodology, estimated the annual finance gap for adaptation as 6.7 percent of 2030 GDP, or double the average that the IMF Asia and Pacific study suggests. The Tiedmann methodology reached a higher number because it includes not just spending on physical infrastructure for climate adaptation (at 3.0 per cent of GDP) but also spending on health and education for climate resilience (3.7 per cent of GDP). In other words, it incorporates the overlap between the climate finance gap and the relevant SDGs, thus connecting climate resilience with sustainable development.[63] The Tiedmann studies' estimates for adaptation spending for this report's case study countries are also in Table 3.3.

Both studies have strengths and weaknesses. The IMF Asia and Pacific study's strength is that it makes individual estimates by country of the adaptation costs. The Tiedmann study does not disaggregate data by country, but rather comes up with an average figure for PIC nations overall: it does not capture the variance between countries, which are significant as some countries' adaptation needs (e.g. low-lying atoll states) will be much higher as a proportion of GDP than others. Despite this weakness, the Tiedmann study is likely a more realistic estimate in the aggregate because of its incorporation of health and education spending. Indeed, elsewhere the IMF extrapolates from the Tiedmann study that the Pacific will need USD $850 million per year for climate adaptation.[64]

Table 3.3: Comparison of Estimates for Annual Adaptation Costs

| Country | IMF Asia and Pacific Department | | Tiedmann et al Estimates | |
|---|---|---|---|---|
| | (% GDP) | (million USD)* | (% GDP)** | (million USD)* |
| Fiji | 0.5%*** | 25 | 6.6% | 329 |
| Kiribati | 26% | 58 | 6.6% | 15 |
| Marshall Is | 6% | 21 | 6.6% | 55 |
| Sol Is | 2.5% | 40 | 6.6% | 105 |
| Tonga | 4% | 19 | 6.6% | 31 |
| Tuvalu | 17.5% | 10 | 6.6% | 4 |
| Vanuatu | 14% | 148 | 6.6% | 70 |
| **TOTAL** | | **321** | | **608** |

* Conversion by author, using 2022 GDP figures.
** This is an average as Tiedmann *et al* did not disaggregate country data across the 7 PICs that it based Pacific estimates on: Fiji, Kiribati, Micronesia, Samoa, Solomon Islands, Tuvalu and Vanuatu.
*** This estimate for Fiji seems to be on the low side, especially as the World Bank has estimated that Fiji will need to spend 1-3 per cent GDP annually on coastal protection alone.[65]

This USD $850 million figure is only for adaptation; it does not include costs either for mitigation or loss and damage. However, adaptation will likely take the lion's share of costs for most PICs, as work by the Vanuatu Government has shown. Vanuatu's estimates put annual adaptation costs at just over 60 per cent of total climate finance needs (Table 3.4). Applying this breakdown to the USD $850 million annual figure for Pacific adaptation as a whole, we can estimate annual climate finance needs for all PICs as in the USD $1.5 billion dollar range.

Table 3.4: Vanuatu Annual Climate Finance Cost Estimates by Category

| | Estimated Cost over 10 Years (USD) | Percentage |
|---|---|---|
| Adaptation Costs | 721.1 million | 59% |
| Mitigation Costs | 315.6 million | 26% |
| Loss and Damage Costs | 177.7 million | 15% |
| **TOTAL** | **1 214.4 million** | |

**Source:** Vanuatu's Revised and Enhanced Nationally Determined Contribution, 2021-2030.

## 3.2 The Financing Gap

Our previous report on this subject, *Twin Clouds on the Horizon*, pointed to the large gap that exists between PICs needs for climate finance and the realities of how much funding has been forthcoming. Using Organisation for Economic Co-operation and Development (OECD) data, that report estimated USD $3.6 billion was made available to PICs or to Pacific regional initiatives between 2015 and 2020, or USD $0.6 billion per year.[66] United Nations Development Program (UNDP) estimates were even lower, at just USD $0.2 billion a year.[67] When compared to the estimate cost above, these finance flows are approximately USD $1 billion short of the minimum of what was needed.

It may turn out that even this figure of USD $1.5 billion needed annually for Pacific climate finance is an underestimate. Since 2009, climate change has sped up and the impacts are unfolding much faster than most thought possible, thus the USD$100 billion goal is now generally acknowledged to be insufficient.[68] A recent United Nations Environment Program (UNEP) report has estimated that adaptation costs/finance needs are around 10-18 times as much as current flows: while developing countries need somewhere between US $215-387 billion per year for adaptation, only US$21.5 was disbursed in 2021.[69] Estimates put the annual bill for loss and damage needs at USD $400 million a year, which is why estimates of annual needs globally, including for adaptation, are often estimated to be around one trillion US dollars.[70] If these figures are taken to be accurate, USD $1.5 billion per year for the Pacific would probably be an underestimate.

The *Twin Clouds* publication further reported that climate financing disbursements to the Pacific have been overly weighted towards mitigation: 44 per cent exclusively and 28 per cent combining adaptation and mitigation. This is too high a proportion of funding going to mitigation, with insufficient allocations for adaptation and loss and damage (as yet, the loss and damage fund has only just been created and no loss and damage funds have been disbursed).[71]

The difference between climate finance needs and the reality, especially for adaptation, is not just a problem for Pacific nations. Climate finance during the year 2022, albeit with the help of generous accounting methods, reached US$100 billion in 2022, which was the first year that the world reached the US$100 billion goal that had been set in 2009. However, these funds were mostly for mitigation, and adaptation is still being left behind globally.

The case of Tonga provides a clear illustration of how serious the financing gap is even for a nation that has seen an increase in aid flows in recent years. Tonga's NDC report and Joint National Action Plan 2 (JNAP2) in 2018 costed the country's climate finance needs as US$147 million over the next ten years; however, this estimate is very much on the low side.[72] A more accurate assessment is given in the IMF's Climate Change Policy Assessment (CCPA) report which estimated the costs of climate adaptation at US$671 million (this includes 130 million for resilient transport infrastructure, 100 million for resilient public buildings, 81 million for coastal protection and 70 million for agriculture, food, fisheries etc).[73] However, achieving climate resilience also means improving the general resilience of government services, such as developing public health services, integrated climate curricula in schools, training and awareness programs. Including the need to meet certain key SDGs, Tonga would need to increase its aid/climate finance receipts by 13 per cent of GDP annually in 2030 calculations.[74]

Compare this to what Tonga is actually getting in climate finance/aid flows. Tonga's Official Development Assistance (ODA) was around US$80 million annually (in 2018 prices), during the 2010s.[75] During this period, grant aid represented around 16.7 per cent of GDP annually.[76] As Table 3.5 shows, the government has projected aid to increase to around US$120 million a year by 2024. Even if aid levels were to keep at this level, this would only represent an increase of around 4 per cent of GDP, far less than the **extra** 13 per cent of GDP annually needed for climate resilience.[77] In any case, the DSA has assumed in its

baseline scenario that grant aid will return to the 15-20 per cent of GDP range for grant equivalent financing through the 2020s. The DSA concludes that "even modest increases in SDG- and climate-related spending beyond those already incorporated in the baseline will require additional external grants to avoid further worsening debt dynamics."[78] It is clear that even Tonga, a country where aid levels may be increasing, is still falling far short of its climate financing needs.

Table 3.5: Quantities of International Aid to Tonga in Recent Years

| Country | Tongan Government Estimate | |
|---|---|---|
| | Million TAL | Million USD |
| 2021FY | 185.8 | 76.3 |
| 2022FY | 212.5 | 87 |
| 2023FY (Projected) | 255.4 | 105 |
| 2024 FY (Projected) | 298.6 | 122 |

**Sources:** Tongan Ministry of Finance, *Budget Strategy FY2025*.

## 3.3 How Does the Finance Gap Worsen the Debt Situation?

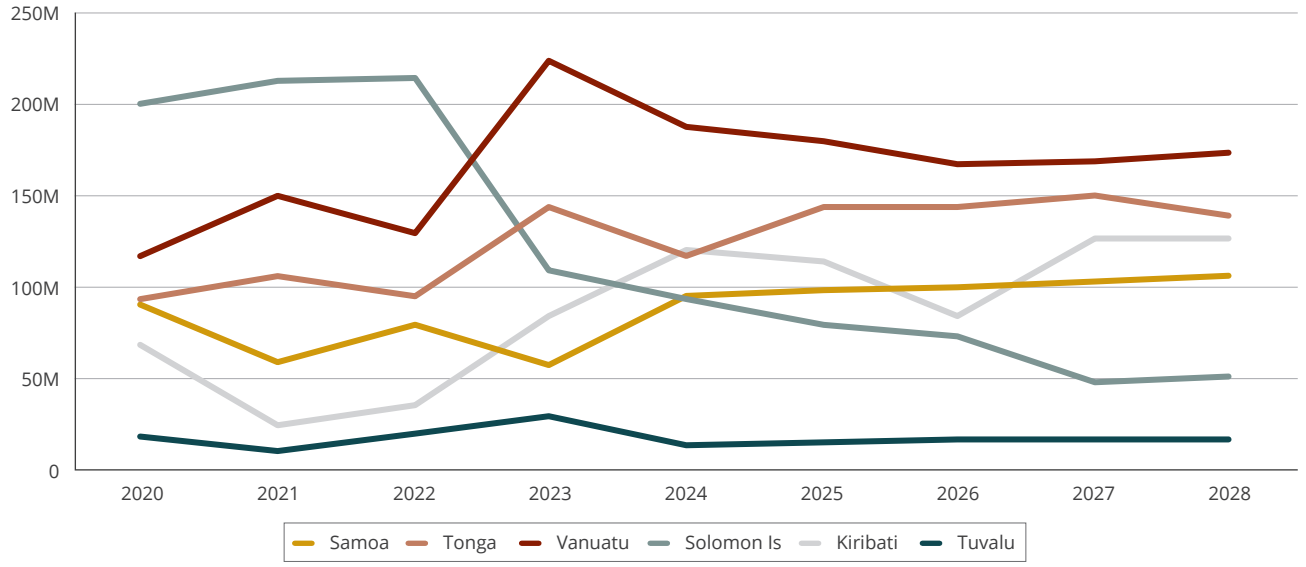
The climate finance gap is clearly evident. The question remains, how will it impact on the precarious sovereign debt situation that many Pacific countries already find themselves in? And, related to this, how might it push nations that are in relatively a secure debt situation into serious debt distress?

The climate finance gap could worsen debt distress both from an adaptation and a loss and damage perspective. Inadequate financing for adaptation and mitigation leaves countries vulnerable to climate change and unadapted to the new energy transition. Inadequate loss and damage financing leaves countries in financial dire straits when economic losses caused by climate change are not compensated. In both instances, if the climate finance gap is not closed, countries will need to borrow more, either to prevent and reduce damage from disasters (adaptation) or to rebuild after disasters have struck, further increasing sovereign debts.

Returning to the DSA projections in Chapter 2, it will be recalled that the long-term baseline projections must be taken with a grain of salt given that they assumed a transition from grant to concessional loans which may or may not be occurring. This would suggest that the projections are characterised by a pessimistic tinge which might cause observers to conclude that such outcomes are unlikely. However, another way of looking at these projections is that they are highlighting a particular frailty that Pacific nations have that will likely be exposed if the current the climate finance gap persists. This arises from the fact that the projections very probably fail to come to terms with, or underestimate, the climate finance gap.

The evidence for this claim can be found by looking at the projected aid flows relied on by the World Bank and the IMF in their DSAs. These project aid to increase slightly upwards for our seven case study countries (Figure 3.1). It should be clear from this graph, however, that these projected aid trends are relatively modest compared to the scale of what is needed. In other words, the DSAs have only assumed that the financing gap will be partially met in the coming years. The recent DSA for Kiribati, for example, assumes climate adaptation and maintenance costs will increase to three to six per cent of GDP per annum; this might seem like a lot, until it is remembered that the Asia and Pacific Department estimated that Kiribati's adaptation finance needs were 26 per cent of GDP (Table 3.2).

Figure 3.1: DSA Estimates of Annual Needed Aid Flows (million USD)




**Source:** Most Recent Debt Sustainability Analyses.

The DSA projections thus do not have aid increasing to the extent needed to meet Pacific nations' increased need for climate adaptation, putting PICs in an impossible position. If new climate finance commitments are not made from donor institutions soon, Pacific countries will face two options. They could skimp on adaptation financing and implement partial climate resilience programs, which are tailored to the size of the financing envelope provided. This will leave them more exposed to the impacts of climate change and will require greater amounts of loss and damage financing in the future. The other alternative would be for Pacific nations to borrow funds in order to make a fuller attempt to implement climate resilience programs. This would decrease their vulnerability to both sudden and ongoing climate disasters, but would drastically increase the risk of sovereign debt distress.

## Summary

Estimating the costs of climate adaptation, mitigation and loss and damage is a difficult task. Of the PICs studied in this report, only Vanuatu and Fiji have been able to assemble the resources to develop complete and costed plans. The best estimates suggest that around 6.6 per cent of GDP will be needed, on average, for Pacific Island states for adaptation alone, although this is an aggregate and there is a certain amount of variation between countries. This figure amounts to about USD$850 million per year in current dollars for adaptation. Since adaptation makes up around 60 per cent of total climate finance needs, this puts the annual climate finance needs for PICs at around USD$1.5 billion per year. Given that current estimates for climate financing going to the Pacific are between USD$0.2-0.6 billion per year, it is clear that the amounts currently being mobilized are well short of what is needed.

The needs are great, and while aid flows are projected to increase a little,  it is nothing like the scale on what is required. In short, Pacific countries require additional grant money in order to adjust to a warmer world. If the situation is not resolved, it places Pacific nations in a position of double vulnerability. Either they do a poor job at making themselves climate resilient, leaving themselves vulnerable to the impacts of climate change. Or they commit to climate resilience, finding the necessary resources via new borrowing. This will leave them more prepared for climate impacts, but vulnerable thanks to increased debt payments which will undermine any development gains that do occur.

*Phosphate mining in Nauru. Photo credit: Robert Szymanski/Shutterstock*

# Chapter 4: Other Risks and Vulnerabilities

While the previous chapter examined the interaction between debt and climate risks, this chapter looks at the relationship between debt and other human and environmental vulnerabilities facing PICs. The following sections will explore two specific issues: the impact of natural resource extraction, including the risks posed by the extraction of mineral resources, and dependence on a single source of revenue.

## 4.1 Pressure for New Mining

The Pacific region has a long history of mining, from the extraction of copper and gold in Papua New Guinea, nickel in New Caledonia to phosphates in Nauru. With the conversion to a renewables-based economy now underway, demand for 'green minerals' for the energy transition is projected to increase. A recent publication on the topic for the British Academy noted that while there will be new pressure to exploit reserves of metals such as copper, nickel, and manganese in places like the Pacific, dangers abound:

> *To achieve a (global) just transition to low-carbon future, it is crucial we consider how increased pressure to extract under conditions of climate change will intensify conflicts over scarce natural resources (water, land, forests, seas) and how it will exacerbate and transform the social and geographic distribution of injustice, including gendered, generational, and racialized inequalities.*[79]

Two of the study's authors have further noted that 'extractive projects planned or underway in the Pacific are located in some of the world's most complex and volatile environmental, social and governance conditions in the world.'[80] These concerns are equally valid for both terrestrial and (as yet untested) deep sea mining.

*Terrestrial Mining*

Papua New Guinea (PNG) is the epicentre of terrestrial mining in the Pacific, with multiple large-scale gold, silver, copper and nickel mines throughout the country, and many new mines proposed. The environmental legacy of existing mines – and their impact on human rights – has been well documented, where inadequate tailings disposal has caused the wreckage of many freshwater ecosystems. The most notable cases include: the Ok Tedi mine in Western Province, the Porgera mine in Enga Province, the Ramu-Nico mine in Madang Provence and the Panguna mine (now shut down) in the Autonomous Region of Bougainville. The history of mining in PNG and its role in development has been written on extensively—see for example the 2020 report from *Extraction to Inclusion*.[81]

Fiji is actively planning to expand its terrestrial mining sector. It is already home to several large-scale mining projects, including gold, bauxite and magnetite (iron sands), and the sector represents 0.5 per cent of GDP in 2022, down from a high of 2 per cent the year before.[82] For much of Fiji's history, the mining industry was dominated by the Emperor Gold mine in Vatukoula. In July 2023, Fiji had seven active mining leases across Viti Levu and Vanua Levu where mines are either operational or under development, and around 35 exploration prospecting licenses.[83] The Vatukoula gold mine has been operational for some years; several other mine have recently opened or are still in development, including the Tuvatu gold mine, the Mistry Mine, the Mount Kasi gold deposit and the Namosi copper/gold mine.[84] Mining for iron sands (also called black sand mining) is a new industry that entered Fiji a few years ago.[85] With no specific legislation surrounding it, iron sand has been sought from the region of Ba province, with further mining planned for the Sigatoka River. Fiji has been described as a very 'pro-mining' jurisdiction by the CEO of a Canadian mining company, Bryce Bradley: 'The government has proven very open to investment from foreign companies and

the potential for more jobs that the mining industry can bring to the country."[86] The Fijian government is currently undertaking a review of the 1965 Mining Act.

Another case study country which is considering ramping up mining is the Solomon Islands. The Solomons have many mineral resources, including gold, copper, nickel, bauxite and others. The Gold Ridge mine on Guadalcanal, which reopened in 2022, has a long and complex history; there has also been significant bauxite mining on the small southerly island of Rennell. Most of the new mines planned in the Solomons are nickel mines. A more detailed examination of mining in the Solomon Islands is given in box 4.1.

### Box 4.1 Solomon Islands: From Logging to Mining

So thoroughly have Solomon Islands and foreign logging companies exploited its tropical rainforests that they are fast disappearing. The Solomon Islands has lost over 7 per cent of its tree cover since the year 2000, and the Guardian estimated in 2021 that the forest cover in the Solomon Islands will be exhausted by 2036 if logging continues at its current rate.[87] A sustainable rate of logging for the Solomons would be around 325,00 cubic metres of timber per year: in 2017, the Solomons exported 3 million cubic metres. In the long-term, revenues from logging are certain to come down, whether due to the adoption of more sustainable logging practices or the worst case scenario of the island's rainforests being logged out. In the short-term, logging revenues are also on the decline, down 6 per cent in 2024; this is partly due to weak demand from China for its timber imports. The Central Bank of Solomon Islands Governor, Dr Luke Forau, recently described logging as a 'sunset industry'.[88]

Both internal and external actors have observed that the government of the Solomon Islands is betting on mining export revenues to fill the gap left by these declining timber exports. A Solomon Islands Ministry of Mines, Energy and Rural Electrification (MMERE) Tenements Map revealed that in 2019, there were at least 25 exploration or mining leases granted in the Solomon Islands. According to former director of MMERE Nicholas Piliki, there are an estimated US$7 billion worth of minerals ready to be exploited.[89] In June 2020, the Solomon Islands Government announced a plan to fast-track mining leases for three prospecting companies and it identified potential mining sites in Guadalcanal, Isabel, Choisel, Malaita and Temotu Provinces. Minerals being prospected include nickel, copper, gold, bauxite, cobalt, scandium, silica, and magnesium.

The Solomons currently has two major mining projects. The Gold Ridge Mine, a gold mine located upstream from Tihuhulu River on the island of Gualdalcanal, was the first large scale mine to be opened in the country. The mine had a brief first life in the late 1990s, but less than 12 months after operations commenced, an armed clash at the site of the mine occurred between the Solomon Islands Government and the Gualdalcanal Revolutionary Army. With many of the Malaitan workforce who were largely staffing the mine declining to come to work for safety concerns, the mine was forced to shut down in 2000.[90] After being acquired by the Chinese firm Wanguo International Mining Group, the mine was able to reopen over 20 years later, in 2022. Since then, it is estimated that it has generated more than SBD$1.6 billion (US$192 million) in revenues. Nevertheless, the Gold Ridge Mine has been associated with environmental problems and landowner discontent. A downstream landowner, Chief Samuel Basoe of Metapona, has petitioned the Ministry of Mines for SBD$14 million (US$1.68 million) of compensation for property loss and damage caused by the Gold Ridge mining operations; back in the 2000s,

when Australian company Australian Solomons Gold was attempting to reopen the mine, there were allegations made of improper behaviour to gain landowner consent, and inappropriate cultural engagement and unresolved environmental issues from the first period of mine operation were not resolved.[91]

The other site of present mining operations is the small southerly Island of Rennell. East Rennell is an unspoiled UNESCO world heritage site, whereas the rest of the island has been severely impacted by logging and mining. The coral island's limited amounts of soil is rich in bauxite. It is estimated that since 2014, half of the soil pockets in West Rennell have been excavated and shipped out by two firms, Indonesian-owned Bintang Mining Company Ltd and the Chinese Firm World Link Mining Ltd. Landowners on Rennell have blamed the government for allowing the leases to be easily distributed to facilitate such extraction. Many in the remote atoll have become dependent on processed foods due to a shortage of arable land for gardening, and the influx of foreign workers also brought social problems, such as the fathering of children without responsibility. A huge oil spill in Kangava Bay by the MV Solomon Trader, a tanker collecting bauxite ore for Bintang, caused further ecological damage to the island.[92]

In addition to these two mining ventures, the main area of growth appears to be nickel mining. In Isabel, two companies, the Solomon Islands Resources Company and Pacific Nickel, have apparently already commenced nickel operations. The government is currently attempting to replace the 1990 Mines and Minerals Act, said to be outmoded, with a new Minerals Resources Bill, currently before the parliament.[93] The government's pro-mining approach is not, however, politically uncontested. Speaking in parliament in December 2022, the Opposition Leader Matthew Wale in acknowledging that some in the government saw mining as an opportunity to to 'plug the gap left by logging', has questioned the wisdom of this approach.

*Deep Sea Mining*

Metal-rich mineral deposits are found in the seabed of the deep sea i.e. the ocean below 200m. These deposits include polymetallic nodules, spherical rocks approximately 10-20cm in diameter that have been formed over thousands or millions of years; cobalt-rich crusts, which are seamounts rising from the ocean floor packed with cobalt; and hydrothermal vents, which are volcanic ridges that produce sulfide deposits rich in copper, gold and silver. Deep sea mining (DSM) is the process of extracting these mineral deposits from the deep seabed. Polymetallic nodules are currently the main interest among mining companies because of their high content of nickel, manganese, copper and cobalt, four elements that are sought after for the 'green energy transition.' These minerals are found in sea territories of particular Pacific nations as well as in international waters, especially the Clarion Clipperton Zone (CCZ), which is an enormous undersea valley in the Eastern Pacific between Hawaii and Mexico.[94]

The most straightforward way for a nation to exploit these undersea deposits is to mine them within their own maritime territory. Each nation has an exclusive economic zone (EEZ) that reaches a minimum of 200 nautical miles from its coastline (and potentially up to 350 nautical miles). According to the DSM Campaign, Pacific nations PNG, Tonga, Fiji, Vanuatu, the Solomon Islands and the Cook Islands all have active mineral exploration licenses; however, having an active license does not necessarily mean that exploration is currently occurring. For example, anecdotal evidence suggests that Tonga did conduct explorations in its EEZ for minerals, but has since stopped the practice.[95] The Cook Islands, with a massive continental shelf of nearly 2 million square kilometers and an estimated US$10 trillion dollars worth of polymetallic nodules,

appears to be the most determined of the PICs to develop DSM within its own EEZ.[96] PNG at one point had an operating license for mining the sulfides around hydrothermal vents in the Bismark Sea within in its EEZ—however, local opposition, environmental concerns and finance woes saw the company liquidated in 2019.[97] Kiribati has had a pro-DSM president in power, although recent elections in August 2024 could have the potential to see changes in the government.[98]

The alternative pathway to DSM is to obtain seabed mining license in international waters. The most concentrated attempts have been in the CCZ, where Nauru, Tonga and Kiribati have sponsored mining company attempts to gain licenses. Although it is not among the case studies for this report, Nauru is the country that has been most aggressively pushing for the opening up of mining in international waters.[99] However, the International Seabed Authority (ISA) is the international body with the power to approve such mining licenses and has not done so yet, as there is still disagreement within the 36 nation-state members of the ISA Council (the ISA has 168 member states in total) as to whether DSM is deemed environmentally safe. This leaves plans by Nauru, Tonga and Kiribati and the companies they are partnering with in a temporary limbo—at least until July 2025 where a new deadline has been set for the ISA to finalise regulations governing DSM.[100]

Fiji has adopted a somewhat confusing stance on DSM, supporting the call by Palau in 2022 for a moratorium but emphasising the significant potential of DSM for Fiji in its 2024-2026 National Development plan.[101] In the Solomon Islands, the Minister of Mines and Energy has made statements suggesting an openness to DSM.[102]

Much of the criticism of DSM comes from the fact that that the destruction of large swathes of the ocean floor could have a devastating impact on the entire oceanic ecosystem, because so little is known about the connection between the deep seabed ecosystems and the rest of the ocean.[103] The Palau President Surangel Whipps Jr. expressed the dilemma succinctly at a United Nations Oceans Conference in June 2022: 'How can we in our right minds say 'let's go mining' without knowing what the risks are?'.[104] There are also more straightforward economic concerns that DSM could undermine the source of income of many PICs, the fishing industry. A report commissioned by the Civil Society Forum of Tonga has made the connection between DSM and the tuna fisheries on which so many PICs are reliant: first, these fisheries make up 37 per cent of government revenue at a regional level; second, studies have demonstrated that there is an overlap between areas where DSM will take place and fish migration pathways and fishing grounds; third, DSM activities could further reduce fish populations which are already declining due to overfishing and climate change.[105]

*Mining, Debt and Development*

Summarising the above sections in relation to the case study countries: Fiji and the Solomon Islands are in the best position to expand their terrestrial mining sectors, possessing both the mineral resources and government intentionality; Tonga and Kiribati have the desire to develop DSM, although their first moves towards that have been in international waters rather than in their EEZs; the Solomons Islands and Fiji appear to be leaving the door open to DSM as well. What does all this mean in terms of the link between mining and the debt challenges facing Pacific nations? At present, the connection tends to be more of an indirect than a direct one. For example, government officials (and others) promoting either terrestrial or deep sea mining in PICs don't generally cite the need to repay foreign debts as a rationale for expansion of the sector. Rather, pro-mining expansion positions are more often justified on the basis of mining's contribution to a country's development and economic growth.

For example, in Fiji in 2021, the then Acting Director of the Mineral Resources Department, Raymond Mohammed, reflected about the mining sector's 'potential to help with [post-covid] economic recovery'. Mohammed went on to say: The mining sector has been quite resilient throughout this pandemic because of the favourable economic conditions that the sector is operating in. For example, we've received a lot of

interest in gold exploration because the gold price is very high'.[106] This position was further reinforced by the *Fiji National Development Plan 2024-2029 and Vision 2050*, which was released in 2024. The plan concluded with respect to mining: 'The contribution of the mineral sector to GDP is expected to increase due to new mining investments and sustained interest in mineral exploration.'[107] The current Mininster for Lands and Mineral Resources, Filimoni Vosarogo, prefers to talk about mining in terms of 'balancing development with environmental protection and economic growth'.[108]

As described earlier, many observers in the Solomons also see mining as a source of export revenues, and of government revenue in general, to displace the expected dwindling returns from the forest sector. Indeed, the Solomon Islands government speaks about mining in similar terms as its Fijian counterpart. The executive summary of the *National Minerals Policy 2017-2021* says the following:

> *Mining in itself is clearly not sustainable, as it depletes a finite national asset. However, mineral extraction can indirectly become sustainable in so far as it stimulates sustainable development in other sectors. The Solomon Islands National Government is committed to achieving sustainable development outcomes and seeks to balance environmental and social requirements with a competitive tax system and fair and level playing field for investors.*[109]

If government officials are loath to justify the opening up of new mining projects on the grounds of repayment of national debts, there is at least some evidence of this connection being made. The recent report on the challenges of DSM for Tonga included a survey of 385 people to assess their attitudes towards DSM. Of the respondents, 88 per cent opposed it, but the 12 per cent who supported DSM were asked why. One of the regular answers was that the revenues could be used repay Tonga's debts.[110] It should also be noted that the report calculated that the maximum amount that Tonga could earn from DSM with its current mining industry partner was at most US$7.5 million annually (this compares to average annual revenues from tuna fisheries of US$8 million). The argument made by the paper is that the economic case that would justify the move to DSM is not all that impressive, especially given what Tonga and other Pacific nations might stand to lose from the endeavour in terms of the direct and indirect environmental impacts.[111]

Such concerns might also be made about the unrealistic economic benefits that may come to a country from terrestrial mining.[112] Indeed, justifications now being seen in Fiji and the Solomons—that the exploitation of non-renewable resources can be used to fund development programs—have been a feature of Papua New Guinean public discourse for decades. After initially considering and then rejecting a 'people-centred approach', from the 1970s onwards, the government of PNG opted for exploitation of non-renewable timber and mineral resources to generate enough revenues to fund development in the country. However, after decades of deforestation and the operation of over a dozen large mines, PNG remains one of the least developed nations in the Pacific on most of the human development indicators. Whether it comes to poverty, access to basic services, or child and maternal health, PNG's decision of collaborating with foreign countries to tap its resource wealth has arguably not been a very successful strategy.[113]

In summary, attempts to justify the pursuit of terrestrial or ocean mining on the grounds that it will be used to repay debts is rare, with governments preferring to justify new mining expansion using familiar rationales such as the need for economic growth and development. However, the fact Tongan people are now making that connection directly, in a country where the sovereign debt burden is already top of mind, is a warning for the future; other nations that could soon be in a more serious debt predicament and who have resource wealth might also start to make the link. Of course, the deeper concern is that although explicit links may or may not be made between opening up resource extraction and the repayment of debt, policymakers may feel that their debt situation is one day so dire as to have no choice but to pursue environmentally damaging courses of action in order to find money for repayment.

## 4.2 Dependence on a Single Source of Revenue

Overreliance on any one source of revenue—whether it be government revenue or foreign exchange revenue, or sometimes both at once—is always a dangerous situation for a developing country with a high debt load. If a source of government revenue dries up, this will make it hard to pay both external or domestic debts because the government revenue pie will be smaller. If it is a source of foreign exchange revenue (e.g. remittances) that dries up, then the shortage of foreign exchange will affect the ability to pay for imports and to service external debts, which are generally denominated in foreign currencies. A number of the Pacific case study nations for this report are in this situation, where one source of government or foreign exchange revenue dominates all the others (Table 4.1). The following sections will focus on two sources of revenue: fishing licenses and remittances.

Table 4.1: PICs Dependent on a Single Source of Government or Foreign Exchange Revenue

| Vulnerability | Country | Details |
|---|---|---|
| Remittances | Samoa | Remittances currently make up over 30 per cent of GDP and are the largest source of foreign exchange income. |
| | Tonga | Remittances currently make up over 40 per cent of GDP and are the largest source of foreign exchange income. |
| Fishing Licenses | Kiribati | Fishing license fees around 70-80 per cent of government revenues |
| | Tuvalu | Fishing license fees around 60 per cent of government revenues |

*Fishing Licenses*

The sale of fishing licenses is often an important way to make income for smaller Pacific nations with large ocean economic zones situated on fish migration routes. It is important to note that revenues from the sale of fishing licenses is distinct from, and in some cases can dwarf, the revenues from the fishing activities of local businesses. This is certainly the case for Tuvalu are Kiribati, which are the two Pacific nations most highly dependent on the 'blue economy' i.e., the proportion of their income derived from activities dependent on the ocean (e.g., fishing licenses, fishing, ocean-related tourism).[114] Fishing licenses fees are around of 70-80 per cent of government revenue for Kiribati and around 60 per cent for Tuvalu.[115]

This reliance on fishing revenues potentially places both nations in a precarious position in the long term should climate change or other factors see a fall in fish stocks, or should the foreign purchasers of these licenses decide to go elsewhere to fish. For Tuvalu, for example, the fishing license fees are currently around 42 per cent of GDP, projected by the DSA to fall to around 25 per cent of GDP in the early 2030s due to the impact of climate change on fish stocks. A further shock to fishing revenues—beyond this expected decline—is one of the incidents that would cause debt-to-GDP to skyrocket in the IMF's projections.[116]

*Remittances and Worker Migration Schemes*

The IMF defines remittances as: 'household income from foreign economies arising mainly from the temporary or permanent movement of people to those economies.'[117] They are in other words, personal income transfers between family members or friends from one country to another. In the context of Pacific countries, remittances are largely from members of the diaspora who migrate temporarily or permanently to more developed economies for work, and send a proportion of their income to family and friends back home. A calculation by the IMF of the origin of remittances going into Samoa shows that the number one destination is New Zealand, closely followed by Australia. The US is the only other country where significant amounts of remittances are coming from.[118]

The increase in PIC remittances is at least partly due to the investment by Australia and New Zealand governments in schemes to encourage temporary workers from the Pacific. In Australia, it is known as the Pacific Australia Labour Mobility (PALM) Scheme. As of August 2023, there were almost 31,000 Pacific workers participating in the scheme with almost 500 Australian businesses.[119]

The two Pacific countries that are most dependent on remittances are Tonga and Samoa. Tonga's remittances for 2022 were around 45 per cent of GDP (up from around 38 per cent in 2019); Samoa's were over 30 per cent in 2022, a more than 10 per cent increase from three years before. Fiji and the Marshall Islands also rely on remittances, but to a much lesser extent (around 10-11 per cent of GDP in 2022).[120] The Samoan fiscal strategy observed that the increase in remittances was particularly helpful in allowing the Samoan economy to weather challanges from COVD-19 which saw GDP fall in Samoa, reflecting: 'Remittances from overseas relatives played a vital role in sustaining consumption and livelihood which recorded an increase of 7.4% throughout FY2020/21 compared to the previous fiscal year.' The counter-cyclical nature of remittances (i.e. they went up as GDP went down) was also noted by the IMF.[121]

There have been criticisms of the operation of the labour migration schemes and their impact on the Pacific nations who are providing the workers. Questions have been raised as to whether the schemes are as positive as they are made out to be. There have been allegations of worker mistreatment under the schemes and concerns have been raised about the adverse impacts on families. It should be noted that a World Bank study was generally positive about the schemes, but the study did not investigate the long-term cultural impact that so many young people leaving their communities will have on cultural knowledge and environmental protection.[122] The IMF observed in its Article IV Consultation for Tonga that severe labour shortages due to worker migration was already having an impact on the economy by contributing to higher inflation.[123]

However, there is potentially a deeper vulnerability about these schemes which relates to the debt problem and the preoccupations of this report. Remittances for Samoa are now consistently higher than tourism earnings have been for a number of years and have far exceeded earnings from exports. The same is true for Tonga, but even more so, where even allowing for the post-COVID recovery in tourism, their remittances are several times greater than tourism receipts and much larger than export earnings. For both countries, remittances regularly exceed tax revenues.[124]

Remittances are by definition transfers between households; they are not part of government revenues, and therefore any variation in remittances should not *directly* affect how much revenue the government allocates towards debt payments. Nevertheless, there are indirect ways in which governments could become dependent on remittances for debt repayments. For both Tonga and Samoa, remittances are now the main mechanism keeping their balance of payments figures at zero or at a small deficit. Without these remittances then, all other things being equal (i.e. exports and net foreign aid remaining the same), a fall in remittances would see these countries with a shortage of foreign exchange. This could impact their ability to import vital goods, and it could also impact their ability to repay external debt (which is denoted in foreign currencies).

It is possible to envisage a scenario in which a Pacific nation like Samoa or Tonga had the desire or the need to reduce this remittance income. This could either come from the country's own initiative, because too much worker migration is causing labour shortages, family dysfunction, or otherwise weakening the cultural fabric. In this case, the government could be in an invidious position where it had to choose between implementing policies to enhance its economic growth or shore up social cohesion, and keeping its debt levels manageable. It is also possible to envisage another scenario in which a cut in remittances was imposed from the outside, for example, Australia or New Zealand deciding to cut back the program for domestic political reasons. This imposed scenario would potentially result in a debt shock to Samoa or Tonga, rather like the debt shock that would happen to Kiribati or Tuvalu from a sudden reduction in fishing license revenues.

## Summary

Sovereign debt is a problem that has a tendency to exacerbate and contribute to other risks that countries might already be facing. For example, a small country facing suddenly rising debts, or rising costs of climate adaptation for that matter, may find itself pressured to exploit its natural resources in a way that it otherwise might have sought to avoid and that could be ecologically damaging. For Fiji and the Solomons, it is possible to see this playing out on land, where plans are already afoot to increase terrestrial mining. In addition, the case has already been made in Tonga that repayment of debts is one of the rationales to pursue deep sea mining, a highly controversial practice; pressure on Kiribati to pursue deep sea mining could rise in light of paying for climate adaptation or for sovereign debts. Another type of vulnerability is when countries are dependent on a single source of government or foreign exchange revenue—for example fishing revenues or remittances. A sudden loss of these revenues could cause a debt shock; in the case of remittances, the need to repay debts might cause countries like Samoa and Tonga to persist with a migration policy which is economically or social harmful.

*Port Olry, Espiritu Santo, Vanuatu.*

# Conclusion and Recommendations

## Summary of Findings

The aim of this report was to explore the nexus of sustainable development and climate resilience in the Pacific via the frame of sovereign debt. This report is a deeper, more quantified examination of the vicious cycle between debt and climate crises in the Pacific first examined in our 2022 report *Twin Clouds on the Horizon*. The other context of the report is the worsening debt situation in developing countries, where new lending after 2010 has seen sovereign debt levels on the rise.

### *Debt in the Pacific*

The current situation with respect to Pacific nations and sovereign debt is a complex one. Pacific nations themselves are diverse in size and in the nature and make-up of their economies. Some nations have quite high total debt levels relative to the size of the economy, some levels are moderate, and the past few years has seen movement of debt-to-GDP going both ways (i.e. up in some cases, down in others). The top official creditors to Pacific nations are the ADB, China, Japan, and the World Bank. Some countries, such as Fiji, Vanuatu and Kiribati, also have significant amounts of debt owed to domestic creditors, but most do not, meaning that their entire debt stock is owed to external creditors.

However, total debt levels, as measured in the debt-to-GDP ratio, are just one way to measure debt—more significant is the impact that debt repayments (or 'debt service') is having on the economy and on the ability of a government to deliver social services. Such an impact can be measured by other methods: for example, if the ratio of annual debt service to government revenue is consistently about 15 per cent, this would indicate a situation where the debt levels are already unsustainably high. To look more deeply into the question of current Pacific country debt levels and impacts, and to examine what the future projections are for how debt levels could worsen in the coming years, this study chose seven case study countries: Fiji, Kiribati, Samoa, the Solomon Islands, Tonga, Tuvalu and Vanuatu.

Of the case study countries, Fiji, Samoa and Tonga are of greatest concern: Fiji and Samoa are already showing debt-service to revenue which are on or around the 15 per cent level, indicating that they are already in a situation where debt is materially impacting the government's ability to deliver basic services. The Solomon Islands, Kiribati and Tuvalu are not facing any current or near-future challenges in meeting their debt obligations in that their debt service to revenues are low. Vanuatu is an interesting case in that its debt service as a proportion of revenue is currently manageable but projections suggest it may soon become worryingly high.

Although neither the finance ministeries of most Pacific countries nor the IMF believes that a debt crisis has yet to hit the Pacific, not everyone agrees. Mark Brown, outgoing Pacific Island Forum chair recently said that 'the reality is that many of our Pacific countries in the region are in a position of debt distress'. Brown went on to observed that, despite all the focus on bilateral lenders like China, that 'much of this debt is with the institutions like the World Bank or the Asian Development Bank' and that the powerful nations who control these institutions are also in control of how mich climate finance is dispensed to the Pacific.[125]

Looking at the debt problem over the longer term, one commonality among all case study countries is that debt-to-GDP levels—especially those performed by the IMF/World Bank—are projected to increase beyond sustainability thresholds in coming years. The IMF/World Bank rate the risk of debt distress for Kiribati, the Solomon Islands, Tonga, Tuvalu, and Vanuatu as high and as moderate for Fiji and Samoa. The principal reason that debt levels are projected to increase, to be taken with a grain of salt, is a projected decline in grant aid in the coming years, forcing PICs to turn to loans to meet their finance needs for development and climate resilience.

*Debt and Climate Resilience*

Extreme weather events such as tropical cyclones, storm surges and droughts are on the increase due to human-induced climate change; Table 3.6 lists some of the more damaging recent events and their economic impact on particular countries. Simultaneously, there are chronic and cascading climate impacts such as the loss of food sources from higher annual temperatures, and sea level rise and the loss of fisheries and marine life from a warming ocean. The increasing frequency and intensity of these impacts is having an economically quantifiable effect on Pacific countries and communities.

Although estimating the costs of climate adaptation, mitigation and loss and damage is challenging, some estimates suggest that around 6.6 per cent of GDP annually will be needed, on average, for Pacific Island states for adaptation alone. This is an aggregate and there is a certain amount of variation, with some countries likely to require a much higher percentage. Estimates of total finance needs for Pacific nations (mitigation, adaptation and loss and damage) are around USD$1.5 billion per year. These figures might well be underestimates, given that globally adaptation and loss and damage needs are more in the realm of USD $600-800 billion (putting total needs at over a trillion dollars when factoring in mitigation). Current financing going to the Pacific is estimated at USD$0.2-0.6, far short of what is needed.

The gap between what is needed to finance climate resilience and what is currently being proposed not only increases Pacific nations' climate risks, it places them at greater debt risks as well. If the Pacific cannot rely on the international community to meet their needs for climate resilience, they will likely be forced to finance it through their own borrowing: it is this new borrowing which will drive up debt levels to an alarming extent. The other alternative is that Pacific countries will simply not be able to afford climate adaptation actions, not have enough money to effect the green energy transition, and not have funds to recover from climate events. While these would be unacceptable outcomes in themselves, they would also increase PIC debt vulnerabilities.

*Other Risks and Vulnerabilities*

The situation is further complicated given the fact that the need for revenue to repay debt (or to finance climate resilience) could be a factor in Pacific countries making unsustainable development choices. This is most clear in the case of mining, as Fiji and the Solomons explore terrestrial mining and Tonga and Kiribati consider deep sea mining as a way to increase government revenue and earn foreign exchange. These are potential choices that such nations may come to regret, both because the revenues may be less than hoped, and because the environmental impacts—given current mining practices in the region—are likely to be severe and irreversible.

Another concern is the dependence of many PICs on a single source of government or foreign exchange revenue—for example fishing revenues (in the case of Kiribati and Tuvalu) or remittances (particularly for Tonga and Samoa). The vulnerability here comes from the fact that a sudden loss of these revenues could cause a debt shock. A further concern is that the long-term impact of labor mobility schemes is uncertain, but the debt repayment and climate needs may risk the governments being locked into policies which could be economically or socially harmful.

## Status of Previous Recommendations from the Twin Clouds report

Our 2022 report *Twin Clouds on the Horizon* made a number of recommendations to address issues of debt and climate impacts and the recommendations in Weathering the Storm build on these. The *Twin Clouds* recommendations covered the areas of:

- Providing more grant-based climate finance and financing for loss and damage
- Financing the Pacific Resilience Facility
- Putting local communities and civil society at the heart of climate finance

- Rethinking the emphasis on large infrastructure – especially where loan financed
- Extending debt relief

There has been movement across all of these areas in the years since the launch of the report, including the establishment and initial funding of a Loss and Damage Fund, and financial commitments to the Pacific Resilience Facility. There are still questions however as to how the Loss and Damage Fund is to be delivered and the extent to which, as we recommended, it will be in the form of grants rather than loans. Currently the question of increasing global ambition for climate finance goals beyond the $100 billion target is being dealt with in the NCQG process, as discussed above.

Questions of access and putting local communities and civil society at the heart of climate finance have been raised by Pacific advocates and others, with sub-national and community/civil society windows being considered in the design of the Loss and Damage Fund – these need to be committed to. More work needs to be done on the recommendation in the report to reform global climate finance architecture to address barriers to access and place decision-making power in the hands of Pacific actors.

One positive sign that an emphasis on large infrastructure climate finance is being re-thought is in the new initiative of the DFAT AIFFP scheme which focuses on smaller scale energy infrastructure in the Pacific. The recent call for *Off-grid Renewable Energy Partnerships in the Pacific and Timor-Leste* can provide, for example, offgrid energy infrastructure for health facilities such as solar panels and batteries, responding directly to local needs for reliable and renewable energy.

Finally, to help extend debt relief the report called for:

- Multilateral creditors, bilateral creditors and private sector to collaboratively agree on mechanisms to systematically address the current debt crisis - including in the Pacific. This could include:
- Establishing an automatic mechanism for debt service suspension following a natural disaster or other shock;
- Developing a global approach to debt relief and restructuring for heavily indebted countries.

The Australian Government has recently announced the inclusion of Climate Resilient Debt Clauses in Australian sovereign loans, fulfilling the recommendation for bilateral automatic mechanisms to be introduced. More work needs to be done to extend these at a multilateral scale.

## Recommendations for this Report

The inescapable finding of this report is that the greatest risk to worsening sovereign debt levels in the Pacific is the need for increased finance for climate resilience, and the lack of ambition of donor countries to step up and meet this need. The chronic underfunding of climate resilience for the Pacific is not an unknown problem—it was a focus of our previous report, *Twin Clouds on the Horizon*, in 2022. Since then, some positive steps have been made, such as the principle of loss and damage being accepted at the global level.

However, despite some positive developments, financing gaps remain and as each year goes by, the urgency of the situation increases. The outgoing chair of the Pacific Islands Forum, Cook Islands President Mark Brown, recently remarked upon 'the glaring lack of contributions and commitments to climate finance that has not been forthcoming.'[126] In this context, it is worth once again restating that it was not the actions of Pacific nations that caused the climate crisis; that responsibility lies with the world's richer nations who have built their wealth on the burning of fossil fuels.

The **first two sets of recommendations** from this report therefore relate to the need for rich countries to **make commitments to finance climate resilience in the Pacific—and to follow up these commitments with action—that are commensurate with the scale of the need and that are of the type that will not create new debt.**

To that end, this report recommends:

**First, an immediate increase of climate finance to the Pacific to ensure that mitigation, adaptation and loss and damage is adequately funded.**

1. This finance should be additional to ODA and steps should be put in place to avoid double-counting;
2. It should be consistent with a more ambitious post-2025 New Collective Quantified Goal on Climate Finance (NCQG), which is to be discussed at COP29 in Azerbaijan;
3. It should have appropriate proportions going to adaptation and to loss and damage, with a separate fund set up for loss and damage;
4. Although more research needs to be done to establish the exact needs for the Pacific, preliminary estimations suggest that at least USD$1.5 billion is needed annually for the Pacific.

Australia's role in meeting these commitments is discussed in Box 5.1 below.

**Second, this finance should be in the appropriate form (grants not loans) and via appropriate mechanisms:**

1. The vast majority should in the form of grants not loans. Some bankable mitigation projects might be justifiable as loans, but loan-based finance is never appropriate for adaptation or for loss and damage.
2. Calls to meet needs for climate finance via mobilising the private sector, such as through blended finance, public-private partnerships or issuance of green bonds, should be resisted. Such mechanisms have a poor track record in developing countries and will all worsen the debt position of Pacific nations. Calls to use the MDBs, which provide 91 per cent of their climate finance as loans, should likewise be resisted.[127] It is acknowledged that the model under discussion at the moment is one with a core of public funding for climate finance wrapped around with layers of private sector finance. If this model prevails, there must be a massive central role played by public finance and a quantum of public finance which is the majority of the total. Both private finance and the use of debt must be strictly controlled and only used in situations where it is appropriate such as financing mitigation projects which are income producing. To prevent the growth of unjust debt and the risk of debt distress through climate financing, a strong set of principles and a climate/debt framework should be developed at the UNFCCC.
3. In terms of the vehicle to be used to deliver this climate finance, it is clear that more work needs to be done. *Twin Clouds* found a bewildering array of mechanisms for delivery of climate finance which many Pacific nations find hard to access. Once again, we endorse the recommendations in Twin Clouds for a simplification of the system, with local communities and civil society to be at the heart of the solutions. We continue to support an ongoing role for the *Pacific Resilience Facility (PRF)*, a regional financing mechanism that puts Pacific governance in control of climate finance for the Pacific, noting that the PRF alone may not be of a scale adequate to address the problem.[128]

Australia has historically been the largest aid donor in the Pacific and, along with New Zealand, plays an outsized role in terms of impacting policy developments there. *Seizing the Moment*, a recent report by several dozen Australian civil society organisations, addressed the question of Australia's role in the negotations leading up to a post-2025 New Collective Quantified Goal on Climate Finance (NCQG).[129] The report's findings are broadly in line with those of this report.

The **final set of recommendations relate to steps to improve the global community's capacity to address and respond to sovereign debt crises.**

Many nations are facing debt challenges like those of some of the Pacific nations in this report, and in some cases, much worse. Debt problems are global: as with the multilateral and bilateral schemes in the late 1990s and 2020s, only global solutions will suffice.

To this end, this report endorses the first four recommendations of the recent Bogota Declaration from September 2023:

1. Reform of the global debt architecture with a system that allows for the cancellation and restricting of unsustainable and illegitimate debts, by bringing transformative change to the current unfair and persistently unbalanced rules.
2. The development of a new debt sustainability assessment approach and methodology, managed under an independent multilateral framework.
3. Transparency, accountability, and access to quality of information on sovereign debt in both borrowing and lending countries. We urge the establishment of a public global debt registry that includes all debt contracts and lenders, including bondholders.
4. The establishment of legislation, both in borrowing and lender countries, to ensure a democratic and transparent governance and management of sovereign debt and fair debt resolution.[130]

Other steps that could be taken to address the debt situation include improving the participation of developing countries in the governance of the international financial institutions and providing more global liquidity via the greater use of Special Drawing Rights (SDRs).[131]

One option, not mentioned above, that some believe could jointly address debt and climate challenges in the Pacific are debt-for-climate swaps; these are where creditors provide debt relief in exchange for a commitment by debtor countries to spend the money they save in debt servicing on climate action or ocean conservation. While debt swaps can create space in the budget to invest in climate change adaptation, they do have potential drawbacks: for example, where debtor countries have struggled to repay their loans, they may also struggle to pay for the climate initiatives under the swap. Debt swaps can also come with high transaction costs or with conditions that restrict the decision-making of Pacific governments. Traditionally, debt swaps have not involved multilateral or private creditors, which also poses a challenge in the Pacific context where most external debt is owed to multilateral development banks, and where the largest bilateral creditor is China, which has not shown much interest in debt swaps

Most importantly, funds freed up under a debt swap would not take away the need for more new climate finance, so are not a substitute for other genuinely additional climate finance. In summary, debt swaps, whether for climate or for nature purposes, should be pursued carefully and selectively and should not be seen as a silver bullet to address either the debt of the climate crises in the Pacific. And they should only be pursued if they follow the highest and most rigorous standards for transparecny, accountability and inclusivity.[132]

## Summary

Returning to where we started, the principal aim of this report was to examine a theme which illustrates the critical nexus between climate resilience and inclusive development in the Pacific. It should be clear that any attempt to address sovereign debt cannot separate out the need to help Pacific nations adapt to climate change and continue on their path towards development goals. To this end, donor countries and institutions must tackle both problems simultaneously, by increasing climate finance commitments, making sure that the finance is delivered by the appropriate mechanisms, and immediately improving the global community's capacity to respond to the sovereign debt crisis.


*Malaita Province, Solomon Islands. Photo credit: Tommy Esau, Jubilee Australia.*

# Endnotes

1 Government of the Republic of Fiji, World Bank Group and the ACP-EU Natural Disaster Risk Reduction Program, *Climate Vulnerability Assessment Summary: Making Fiji Climate Resilient,* 2022, 2, https://documents1.worldbank.org/curated/en/163081509454340771/pdf/Climate-Vulnerability-Assessment-Making-Fiji-Climate-Resilient.pdf

2 Johanna Tiedemann, Veronica Platkov, Dina Prihardini, Juan Carlos Benitaz and Aleksandra Zdzienicka, 'Meeting the Sustainable Development Goals in Small Developing States with Climate Vulnerabilities: Cost and Financing', *IMF Working Paper* No. 2021/062, 2021, 7.

3 UN Trade and Development (UNCTAD), *A World of Debt Report 2024: A Growing Burden to Global Prosperity,* https://unctad.org/publication/world-of-debt

4 'New data show Global South is in worst debt crisis ever, with another lost decade looming', *Bretton Woods Project,* 13 December 2023, https://www.brettonwoodsproject.org/2023/12/new-data-show-global-south-is-in-worst-debt-crisis-ever-with-another-lost-decade-looming/

5 Fyfe Strachan, Zhi Yan and Lucia Gamarra, *Twin Clouds on the Horizon: Averting a Combined Climate and Debt Crisis in the Pacific Through Locally-delivered Climate Finance,* Caritas Oceania and Jubilee Australia Research Centre, October 2022, https://www.jubileeaustralia.org/resources/publications/twin-clouds-2022

## Chapter 1 *(p9-19)*

6 International Monetary Fund, Guidance Note on the Bank-Fund Debt Sustainability Framework for Low Income Countries, February 2018.

7 We are using GDP—Gross Domestic Product—as opposed to GNI—Gross National Income—as this is the indictor that the IMF and the World Bank use.

8 We did not include PNG and Fiji in this figure because doing so would have overrepresented their creditor profiles, given they collectively hold about four times more debt that the other PICs combined. Fiji's debt breakdown by creditor is featured below in Figure 2.1; it has been hard to get data on PNG's debt by creditor, but over the 2008-2021 period, China has been the largest provider of loans, followed by the World Bank and the ADB. Thus even had PNG and Fiji been included, the ADB would still have been the region's largest creditor, followed by China and the World Bank.

9 See, for example, Rory Metcalf, 'Sea of Manu Flags: A Pacific way to dilute China's influence', *Australian Foreign Affairs* Vol 17, 2023.

10 Attiya Waris, 'Fiscal legitimacy through human rights: a principled approach to financial resource collection and allocation for the realization of human rights,' *United Nations Human Rights Council, Fifty-fifth session, 26 February-5 April 2024, Agenda item 3, 13.*

11 See 'Our Risk Analysis', Debt Data Portal, *Debt Justice UK website,* https://data.debtjustice.org.uk/our-analysis.php accessed on 26 October 2024; Also see Jubilee Debt Campaign, *Paper: The Growing Global South Debt Crisis and Cuts in Public Spending,* January 2020.

12 Note that the estimates for Vanuatu, Tuvalu and Tonga are slight overestimates as they do include domestic debt principal payments.

## Chapter 2 *(p20-46)*

13 Goh Chien Yen and Adam Wolfenden, *Debt Dynamics in Fiji: Impacts, Challenges and Strategies for Sustainable Economic Development* (Pacific Network on Globalisation and Third World Network: 2023), 48-55; Ministry of Finance, Strategic Planning, National Development and Statistics, Economic and Fiscal Update: Supplement to the 20245-2025 Budget Address (Republic of Fiji, June 2024), 21, 47.

14 Goh and Wolfenden, *Debt Dynamics in Fiji,* 17-18.

15 *Supplement to the 2024-2025 Budget Address,* 44.

16 Goh and Wolfenden, *Debt Dynamics in Fiji,* 21.

17 *Supplement to the 2024-2025 Budget Address,* 44.

18 *Supplement to the 2024-2025 Budget Address,* 42; Goh and Wolfenden, *Debt Dynamics in Fiji,* 21.

19 Goh and Wolfenden, *Debt Dynamics in Fiji,* 19.

20 Goh and Wolfenden, *Debt Dynamics in Fiji,* 21.

21 It should be noted that the calculations for this graph have a large margin for error of around 1.5 per cent as while the government revenue figures are exact, the debt service figures are estimates.

22 *Supplement to the 2024-2025 Budget Address,* 38-39.

23 International Monetary Fund, *Republic of Fiji: Staff Report for the 2024 Article IV Consultation (Washington, D.C., June 2024),* 45, 47.

24 IMF, *Kiribati: Staff Report for the 2024 Article IV Consultation,* May 2024, 19-24.

25 IMF, *Kiribati: Staff Report for the 2024 Article IV Consultation*, May 2024, 7 & IMF, *Kirbati 2024 Debt Sustainability Analysis,* 20.

26 IMF, *2024 Article IV Consultation,* 12.

27 International Monetary Fund, *Samoa: Staff Report for the 2023 Article IV Consultation,* February 2023, 4-5, 49.

28 Samoa *2023 Debt Sustainability Analysis,* 18.

29 Ministry of Finance, *Fiscal Strategy 2024/25 Main Estimates* (Government of Samoa, 2024), 16.

30 *Fiscal Strategy 2024/25 Main Estimates,* 4.

31 IMF, *Samoa 2023 DSA, 17; Fiscal Strategy 2024/25 Main Estimates,* 16. The government seems to have left open the possibility of new borrowing, stating only that 'no non-concessional borrowings are anticipated over the medium term' (on 28) of the *Fiscal Strategy 2024/25.*

32 IMF, *Samoa 2023 DSA,* 9-10.

33 IMF, *Samoa 2023 DSA,* 11-12.

34 International Monetary Fund, *Solomon Islands: Staff Report for the 2023 Article IV Consultation,* May 2023, 4-11, 21.

35 2023 Solomon Islands DSA, 8, 12.

36 2023 Solomon Islands DSA, 9-10.

37 Tongan Ministry of Finance, *Budget Strategy FY2025,* 7-8.

38 International Monetary Fund, *Tonga: Staff Report for the 2023 Article IV Consultation,* November 2023, 4-7.

39 Riley Duke, 'Tonga Walks a Tightrope on its Chinese Debts,' *Lowy Interpreter,* 31 Jan 2024: https://www.lowyinstitute.org/the-interpreter/tonga-walks-tightrope-its-chinese-debts

40 *Budget Strategy FY2025,* 14 and *Tonga 2023 DSA,* 14.

41 *Budget Strategy FY2025,* 34-35; Duke, 'Tonga Walks a Tightrope.'

42 Duke, 'Tonga Walks a Tightrope.'

43 The comments were made at the People Centred Finance Management at the National Debt Symposium, 21 August 2024, Dr Moultaon Hall, Nuku'alofa.

44 IMF, *Tonga 2023 DSA,* 8.

45 International Monetary Fund, *Tuvalu: Staff Report for the 2023 Article IV Consultation,* July 2023, 3-12, 20-21; Tuvalu Ministry of Finance, 2021 National Budget.

46 Tuvalu 2023 Debt Sustainability Analysis, 11-12.

47 Ministry of Finance, *Budget 2024, Volume 1, Fiscal Strategy Report* (Government of Vanuatu, 2024), 5-11; *Vanuatu 2023 DSA (Article IV Consultation),* 3-7.

48 *Budget 2024, Volume 1, Fiscal Strategy Report,* 25.

49 *Budget 2024, Volume 1, Fiscal Strategy Report,* 25.

50 IMF, *Vanuatu 2023 Debt Sustainability Analysis, Vanuatu Staff Report for 2023 Article IV Consultation,* 6, 28.

51 IMF, *Vanuatu 2023 DSA,* 10, 12-13.

52 International Monetary Fund, *Guidance Note on the Bank-Fund Debt Sustainability Framework for Low Income Countries,* February 2018, 18.

## Chapter 3 *(p47-57)*

53 Government of Republic of Fiji, *Climate Vulnerability Assessment,* 42, 48, 50; *Twin Clouds,* 12; Fonua Talei, 'Cyclone Yasa Damage Costs Hit $500m: Seruiratu', *Fiji Sun,* 13 February 2021: https://fijisun.com.fj/2021/02/13/cyclone-yasa-damage-costs-hit-500m-seruiratu/

54 Fyfe Strachan, Zhi Yan and Lucia Gamarra, *Twin Clouds on the Horizon: Averting a Combined Climate and Debt Crisis in the Pacific Through Locally-delivered Climate Finance,* Caritas Oceania and Jubilee Australia Research Centre, October 2022, 5, https://www.jubileeaustralia.org/resources/publications/twin-clouds-2022

55 Ritu Bharadwaj, Tom Mitcheell, N Kathikeyan and Balakrishnan Ananda Kumar, *Sinking Islands, Rising Debts: Urgent need for new financial compact for small island developing states* (iied Working Paper, September 2023), 21.

56 Solomon Islands - Australia's commitment to strengthening climate and disaster resilience in the Pacific', Australian Government Department of Foreign Affairs and Trade Website: https://www.dfat.gov.au/about-us/publications/solomon-islands-australias-commitment-to-strengthening-climate-and-disaster-resilience-in-the-pacific accessed on 27 October 2024.

57 UNFCCC, 'Introduction to Climate Finance', https://unfccc.int/topics/introduction-to-climate-finance (last accessed 18 September 2024). In practice, defining what counts as climate finance depends upon the data being used. Most reporting classifies a project as climate finance if it has been reported to the Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) as having a focus on climate change adaptation and/or mitigation (based on Rio Markers - tags used by reporting countries to indicate the focus of the financing).

58 The Virtues Project Fiji, *Making a difference in Koroipita,* https://www.undp.org/sites/g/files/zskgke326/files/migration/pacific/SCEFI-Making-a-Difference-in-Koroipita.pdf

59 Liam Fox, 'Cyclone Winston: village built by Australian man for Fiji's poor survives unscathed', *ABC News,* Feb 27 2016: https://www.abc.net.au/news/2016-02-27/village-built-for-fijis-poor-survives-cyclone-winston-unscathed/7204826

60 About Us', *Model Towns Charitable Trust website,* https://modeltowns.org/about-us/ accessed on 27 October 2024.

61 See Government of the Republic of Fiji, *Climate Vulnerability Assessment: Making Fiji Climate Resilient*, June 2021 and Goh Chien Yen and Adam Wolfenden, *Debt Dynamics in Fiji: Impacts, Challenges and Strategies for Sustainable Economic Development* (Pacific Network on Globalisation and Third World Network: 2023), 79-82;

62 Era Dabla-Norris, James Daniel, Masahiro Nozaki, Cristian Alonso, Vybhavi BAlasundharam, Mattheiu Beellon, Chulung Chen, David Corvino, Joey Kilpatrick. 'Fiscal Policies to Address Climate Change in Asia and the Pacific', Asia and Pacific Affairs Department, *IMF Departmental Papers No. 2021/007*, March 2021. See Figure 40, page 52.

63 Johanna Tiedemann, Veronica Platkov, Dina Prihardini, Juan Carlos Benitaz and Alksandra Zdzienicka, 'Meeting the Sustainable Development Goals in Small Developing States with Climate Vulnerabilities: Cost and Financing', *IMF Working Paper No. 2021/062*, 2021, 9.

64 Manal Fouad, Natalija Novta, Gemma Preston, Tood Scneideer, and Sureni Weerathunga, 'Unlocking Access to Climate Finance for Pacific Island Countries', Asia and Pacific Affairs Department, *IMF Departmental Papers No. 2021/020*, 2021.

65 Climate Change and Disaster Management, *Pacific Possible Background Paper No. 6*, (International Bank for Reconstruction and Development/The World Bank, 2016), 31-34.

66 Strachan, Yan and Gamarra, *Twin Clouds on the Horizon*,15.

67 United Nations Development Program, Climate Finance in the Pacific: Are We on Track?, (Published with UKAID and the Pacific Islands Forum, 2021), 5.

68 Sophie Hardefeldt, Julie-Anne Richards, Sindra Sharma and Nick Henry, *Seizing the Moment: A New Climate Finance Goal that Delivers for the Pacific*, August 2024, 2.

69 United Nations Environment Program, *Adaptation Gap Report 2023*, xv.

70 For the $400 million a year loss and damage figure see Richards, Schalatek, Achampong and White's 2023 paper *The Loss and Damage Finance Landscape cited in Seizing the Moment*,16.

71 Strachan, Yan and Gamarra, *Twin Clouds on the Horizon*,17.

72 This is just the costs of implementing JNAP2 only covers selected mitigation projects. Likewise, the NDC report is very focused on mitigation and the transformation of Tonga's energy system. These plans do not incorporate Tonga's entire adaptation needs when it comes to infrastructure and making Tonga's health, education, and water, sanitation and hygiene (WASH) sectors climate resilient. Government of Tonga, Joint National Action Plan 2 on Climate Change and Disaster Risk Management, 2018-2028, May 2018, 44.

73 IMF, *Tonga Technical Assistance Report—Climate Change Policy Assessment*, 2020, 16-18, 35

74 IMF, *Tonga Climate Change Policy Assessment*, 2020, 35-37, 60-65.

75 IMF, *Tonga Climate Change Policy Assessment*, 2020, 33

76 IMF, *Tonga 2023 DSA*, 10.

77 IMF, *Tonga 2023 DSA*, 13

78 IMF, *Tonga Climate Change Policy Assessment*, 2020, 42

## Chapter 4 *(p58-66)*

79 Emilia Skrypek, Nicolas Bainton, John Burton and Eleonore Lebre, *The Justice Dimensions of Extracting Energy Transition Metals from the Pacific* (The British Academy, July 2022).

80 Nick Bainton and Emilia Skrypek, 'Pacific nations are extraordinarily rich in critical minerals. But mining them may take a terrible toll, *The Conversation*, 3 August 2022: https://theconversation.com/pacific-nations-are-extraordinarily-rich-in-critical-minerals-but-mining-them-may-take-a-terrible-toll-187172

81 Luke Fletcher, *From Extraction to Inclusion: Changing the Path to Development in Papua New Guinea* (Jubilee Australia Research Centre, the Oakland Institute, Act Now PNG, 2020), 12-15.

82 There was a 15 per cent decline in mining revenues in 2021, which along with the post-covid rebound in Fiji's GDP would have accounted for the discrepancy. See Ministry of Finance, Strategic Planning, National Development and Statistics, *Fiji National Development Plan 2024-2029 and Vision 2050* (Government of Fiji, 2024), 54.

83 Peceli Naiticoko, 'More potential for the mining division,' 13 July 2023: https://www.fbcnews.com.fj/news/more-potential-for-the-mining-division/

84 Glen Finau, 'Mining and Community Resistance in Post-Coup Fiji,' *Proceedings from the 1st Conference of the Pacific Islands University Research Network held in Noumea, Caledonia from the 3rd to 7th November 2014*, 323-326.

85 *A Line in the Sand: Investigating Black Sand Mining in PNG* (Jubilee Australia Research Centre, Fijian Council of Social Services, Caritas Archdiocese of Suva, May 2021).

86 Melissa Pistilli, 'Mining on the Resource-rich Island of Fiji's Viti Levu', *Investing News Network*, 3 November 2019 https://investingnews.com/innspired/viti-levu-mining-in-fiji/

87 Jeremy Gawo, Josh Nicolas and Kate Lyons, 'Lush forests laid to waste: how Pacific Islands got hooked on logging,' Guardian Australia, 21 June 2021: https://www.theguardian.com/world/2021/jun/01/lush-forests-laid-to-waste-how-pacific-islands-got-hooked-on-logging

88 IMF, *Solomon Islands: Staff Report for the 2023 Consultation*5, 8, 21; Charlie Piringi, 'Opinion: The Real Costs of Mining in the Solomon Islands', *Islands Business*, 14 June 2024, 6: https://islandsbusiness.com/features/opinion-the-real-cost-of-mining-in-solomon-islands/#:~:text=In%20June%202020%2C%20the%20Sogavare,%2C%20Malaita%2C%20and%20Temotu%20Provinces

89 Piringi, 'The Real Costs of Mining'.

90 Luke Fletcher, Scott Hickie and Adele Webb, *Risky Business: Shining a Spotlight on Australia's Export Credit Agency* (Jubilee Australia, December 2009), 25.

91 Piringi, 'The Real Costs of Mining'; Fletcher, Hickie and Webb, *Risky Business*, 26-28.

92 Mike Puia, ' "They failed us": How mining and logging destroyed a Pacific Island in a decade', *The Guardian*, 31 May 2021: https://www.theguardian.com/world/2021/may/31/they-failed-us-how-mining-and-logging-devastated-a-pacific-island-in-a-decade ; Charlie Piringi, 'Mining makes off with the last soil in this remote Solomon Islands Atoll', Earth Journalism Network, 30 November 2020: https://earthjournalism.net/stories/mining-makes-off-with-the-last-soil-in-this-remote-solomon-islands-atoll

93 IMF Solomon Islands 2024 Consultation, 8; Piringi, 'The Real Costs of Mining'; 'Our future should not be in mining: Wale', *Solomons Star*, 14 August 2024: https://www.solomonstarnews.com/gnut-targets-mining-logging-sectors/

94 IUCN Issues Brief: Deep Sea Mining, *IUCN website*, https://iucn.org/resources/issues-brief/deep-sea-mining accessed on 25 October 2024; 'What is Deep Sea Mining?', *Deep Sea Mining Campaign website*, https://dsm-campaign.org/the-issue/what-is-deep-sea-mining/ accessed on 25 October 2024: Lori Osmundsen, *All that Glitters is Not Gold: Critical Questions and Challenges of Deep Sea Mining for the Kingdom of Tonga* (Civil Society Forum of Tonga, June 2024). 9.

95 What is Deep Sea Mining?', *Deep Sea Mining Campaign website.*

96 Drake Long, 'Wildcatting the Pacific: Seabed Mining and the Pacific Islands', *9Dashline*, 10 April 2024: https://www.9dashline.com/article/wildcatting-the-pacific-seabed-mining-and-the-pacific-islands ; Bainton and Skrypek, 'Pacific nations are extraordinarily rich in critical minerals'.

97 'What is Deep Sea Mining?', *Deep Sea Mining Campaign website.*

98 'International ites, climate stance face test in Kiribati vote', i, 14 August 2024: https://nit.com.au/14-08-2024/13095/international-ties-climate-stance-face-test-in-kiribati-vote

99 Christina Lu, 'The Country with Nothing Left to Lose', *Foreign Policy*, 11 February 2024, https://foreignpolicy.com/2024/02/11/nauru-deep-sea-mining-economy-china-taiwan/

100 Long, 'Wildcatting the Pacific'; Elizabeth Claire Alberts, 'Deep sea mining rules delayed two more years: mining start remains unclear', *Mongabay*, July 2023, https://news.mongabay.com/2023/07/deep-sea-mining-rules-delayed-two-more-years-mining-start-remains-unclear/; Mackenzie Smith, 'Kiribati defends its backing of incumbent candidate in International Seabed Authority Elections', ABC Pacific Beat, 11 July 2024, https://www.abc.net.au/pacific/programs/pacificbeat/deep-sea-mining/104083814

101 Not with the risk': Palua, Fiji call for deep-sea mining moratorium,' Reuters, 28 June 2022, https://www.reuters.com/business/environment/not-worth-risk-palau-fiji-call-deep-sea-mining-moratorium-2022-06-27/ ; *Fiji National Development Plan 2024-2029*, 54.

102 Moffat Manu, 'Minister of Mines and Energy in the pre-cautionary approach to DSM and the carrying out of a 'nation-wide consultation' *Solomons Star*, 2 August 2022: https://www.solomonstarnews.com/pre-cautionary-approach-to-deep-sea-mining/

103 What are the Impacts?', *Deep Sea Mining Campaign website:* https://dsm-campaign.org/the-issue/what-are-the-impacts-of-dsm/ accessed on 25 October 2024.

104 'Not worth the risk': Palau, Fiji call for deep-sea mining moratorium,' Reuters, 28 June 2022: https://www.reuters.com/business/environment/not-worth-risk-palau-fiji-call-deep-sea-mining-moratorium-2022-06-27/

105 See Osmundsen, *All that Glitters*, 25. The studies connecting DSM sites and fishing grounds have been published in *Nature Sustainability, Ocean Sustainability and Marine Policy*.

106 Dionisia Tabureguci, 'Can mining dig Fiji out of COVID hole?', *Islands Business*, 25 March 2021, https://islandsbusiness.com/2021/can-mining-dig-fiji-out-of-covid-hole-2/

107 *Fiji National Development Plan 2024-2029 and Vision 2050, 54.*

108 Sainiani Boila, 'Balancing development and economic growth is vital: Vosarogo', *FBC News*, 18 April 2024, https://www.fbcnews.com.fj/news/balancing-development-and-economic-growth-is-vital-vosarogo/

109 Ministry of Mines, Energy and Rural Electrification, *National Minerals Policy 2017-2021* (Solomon Islands Government, 2017), 8: https://solomons.gov.sb/wp-content/uploads/2020/02/National-Minerals-Policy.pdf

110 Other reasons included the general benefits to the government revenues, the job and career opportunities, because it was government policy, and the potential for contributing to the global green energy transition. Osmundsen, *All that Glitters*, 14.

111 Osmundsen, *All that Glitters*, 16.

112 See Luke Fletcher and Christopher Prince, 'Can Panguna Save Bougainville?' in Christina Hill and Luke Fletcher (eds), *Growing Bougainville's Future: Choices for an Island and its Peoples* (Jubilee Australia Research Centre, September 2018), 50-59.

113 Fletcher, From *Extraction to Inclusion*, chapters 1 & 2.

114 IMF, *Kiribati: Staff Report for 2024 Article IV Consultation*, 18.

115 'Kiribati: Selected Economic Indicators, 2020-29' in IMF, *Kiribati: Staff Report for 2024 Article IV Consultation*, 18.

116 IMF, *Debt Sustainability Analysis, Tuvalu: 2023 Staff Report for Article IV Consultation*, 12.

117 https://www.imf.org/external/pubs/ft/bop/2007/pdf/appx5.pdf

118 IMF, *Samoa: Staff Report for 2023 Article IV Consultations*, 28.

119 Specifically, 30,805 workers and 481 businesses. See PALM Scheme Data, *Pacific Australia Labour Mobility website*: https://www.palmscheme.gov.au/palm-scheme-data: Accessed on 16 October 2024.

120 IMF, *Samoa: Staff Report for Article IV Consultations*, 28.

121 Samoan Ministry of Finance, *Fiscal Strategy 2024/2025 Main Estimates* (Government of Samoa, date), 5; IMF, *Samoa: Staff Report for Article IV Consultations*, 28.

122 Dung Doan, Matthew Dornan, and Ryan Edwards, *The Gains and Pains of Working Away from Home*, (World Bank Group and the Australian National University, November 2023).

123 IMF, *Tonga: Staff Report for 2023 Article IV Consultations*, 22.

124 IMF, *Samoa: Staff Report for Article IV Consultations, 27; IMF, Tonga: Staff Report for 2023 Article IV Consultations, 29; Samoan Ministry of Finance, Fiscal Strategy 2024/2025*, 8.

## Conclusion and Recommendations *(p67-72)*

125 Nic Maclellan, 'Outgoing Forum Chair Mark Brown reflects on challenging times', *Islands Business*, 24 August 2024: https://islandsbusiness.com/news-break/cook-islands-forum-chair/

126 Maclellan, 'Outgoing Forum Chair'.

127 *Briefing: Debt Demands & Debunking Distractions for Climate Action*, June 2024, Accessed on 15 October 2024 at https://assets.nationbuilder.com/eurodad/pages/3632/attachments/original/1717143516/Debt_demands_for_climate_action_June_24.pdf?1717143516

128 Strachan, Yan and Gamarra, *Twin Clouds on the Horizon*, 35-36.

129

130 See Bogota CSO Southern-led Meeting on Debt Output Document, September 2023, accessed on 15 October 2024 at https://assets.nationbuilder.com/eurodad/pages/3194/attachments/original/1696845336/BOGOTA_DECLARATION_07.10.pdf?1696845336. It will be noted that these and the other recommendations in the Bogota statement are not inconsistent with the recommendations on debt in *Twin Clouds*, simply more developed.

131

132 Sophie Hardefeldt, Julie-Anne Richards, Sindra Sharma and Nick Henry, *Seizing the Moment: A New Climate Finance Goal that Delivers for the Pacific*, August 2024.

UN Trade and Development (UNCTAD), *A World of Debt Report 2024: A Growing Burden to Global Prosperity*.

Centro de Derechos Economicos y Sociales and LATINDAD, *Proposal for High Integrity Principles for Debt Swaps*, October 2024, https://cdes.org.ec/web/wp-content/uploads/2024/10/Proposal-for-High-Integrity-Principles-for-Debt-Swaps.pdf

*Tupou outside her volcano and tsunami damaged home in Tonga which is one of the worlds most vulnerable countries to sea level rise. Photo credit Caritas Australia.*


Caritas
OCEANIA


JUBILEE
AUSTRALIA
RESEARCH CENTRE


Caritas
AUSTRALIA