Republic of Palau

EconMAP Technical Note

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Where Do We Go from Here?

Updating the Economic Impact of COVID-19 and Strategies for Mitigation in the Republic of Palau

Graduate School USA

EconMAP ECONOMIC MONITORING & ANALYSIS PROGRAM

Economic Monitoring and Analysis Program (EconMAP) Technical Notes are intended to provide concise and timely analysis of important issues for decision-makers in Palau. Technical notes utilize currently available data sets and macroeconomic tools developed in close collaboration with the Palau government. The EconMAP program is managed by the Graduate School USA's Pacific and Virgin Islands Training Initiatives (PITI-VITI) with funding support from the Department of the Interior's Office of Insular Affairs. Comments, questions or requests for further detail may be directed to info@econmap.org.

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Introduction

In late March 2020, the Graduate School USA's Economic Monitoring and Analysis Program (EconMAP) published a *Technical Note* entitled, "Assessing the Impact of COVID-19 on the Palauan Economy. "At that time, the world was reacting to the rapid spread of the novel coronavirus 2019-nCoV (COVID-19) to reduce the spread of the disease, leading to the broad collapse of international travel and tourism.

The Republic of Palau effectively closed its borders at the beginning of April 2020. The original EconMAP *Technical Note* projected that GDP would fall by 9.5 percent in FY2020, with a further fall of 12.8 percent in FY2021—an overall decline of 21.1 percent. The *Technical Note* further projected job losses of over 3,100 full-time equivalent positions—27 percent of those formally employed in Palau prior to the COVID-19 pandemic.

As of this publication, Palau has not yet confirmed any domestic cases of COVID-19. The primary impact of the pandemic on Palau has been the collapse of its tourism industry, rather than a need to address outbreaks of the virus. Palau has engaged in significant efforts to prepare for the potential of community spread of COVID-19. Further, Palau embarked upon an ambitious mitigation program of unemployment benefits, temporary jobs creation, and support to the affected businesses in the private sector.

This updated *Technical Note* benefits from the availability of additional data measuring the fiscal and economic impact of the COVID-19 pandemic on Palau, as well as the experience of mitigating actions undertaken by the government of Palau and its major donors. This *Technical Note* has several key objectives:

- Update the assessment of the fiscal and economic impact of COVID-19 on the Republic of Palau, including estimating the impact of the mitigation program;
- Document the magnitude of donor support and measure the impact on future generations of the loan components of that support, including developing a scenario-based debt sustainability analysis; and
- Indicate the size of the fiscal adjustment, the magnitude of losses in jobs, income and business continuity that will transpire if further planned or requested donor support does not flow to Palau.

The primary impact of the pandemic on Palau has been a collapse of tourism rather than a need to address outbreaks of the virus.

Basic Assumptions of the Analysis

Travel Restrictions

Government policy on international travel restrictions has evolved since the closure of Palau's borders in April. Initially all travel was restricted and—apart from periodic freight, mail and shipping services—no travelers were permitted to enter Palau. This policy was modified in early June to require a 7-day quarantine period in Guam for returning residents and citizens, followed by a further 14-day quarantine upon arrival in Palau.

Opinion on the issue of repatriating citizens and residents of Palau has been strongly divided, with many favoring a total ban on all arrivals from overseas. This *Technical Note*, given the strong public opposition to opening the borders, thus assumes only residents, citizens and essential workers will be allowed entry with a 14-day mandatory supervised quarantine period until vaccines are developed, proven effective, and made available in Palau.

As a supplement to the basic assumptions, this *Technical Note* considers the outcomes from two potential re-opening scenarios: (i) an unlimited re-opening without a required quarantine period; and (ii) a limited re-opening under a "bubble" arrangement closely coordinated with Taiwan."

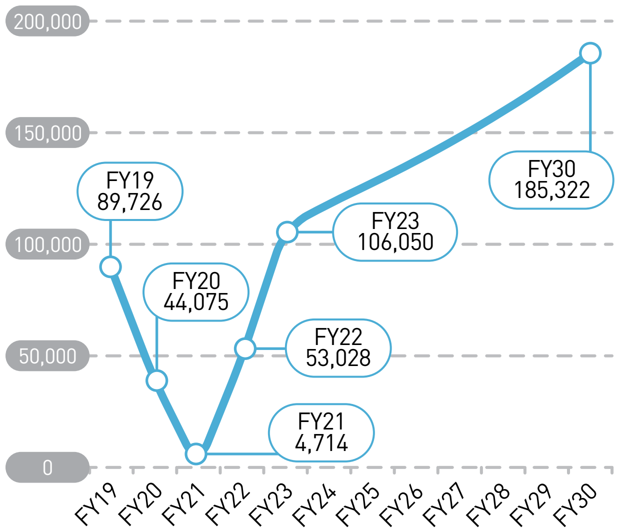
Tourism

The basic assumptions of the original *Technical Note* are mostly maintained in this update[1]. The first four months of the FY2020 fiscal year were favorable with visitor arrivals reaching 32,255 and growing by close to 30 percent compared with the same period during the previous year. Palau was on track to attract 116,000 visitors by the end of FY2020. Following the emergence of COVID-19, tourism numbers dropped by half in February, and by the end of March had collapsed.

[1] The opportunity has been taken to look carefully at some of the key modelling assumptions, industry projections and economic relationships in the model.

Figure 1 - Projected Tourism Arrivals

Virtual collapse in tourism from mid-FY20 to FY21



Given the travel restrictions outlined above it is assumed that, on average, Palau will receive just 400 non-residents each month. Thus, as Figure 1 indicates, for FY2020 a total of 44,075 visitors has been projected, representing a 51 percent reduction from FY2019.

It has further been assumed that during all of FY2021 current travel restrictions will remain in place and the overall number of visitors to Palau will remain negligible. Finally, it has been assumed that effective COVID-19 vaccines will have been made available to Palau by the end September 2021, after which visitors begin to return to Palau, eager to travel after a long period of restriction.

Following projections of international travel made by the International Air Transport Association (IATA)[2] this paper assumes that in FY2022 visitor numbers will attain a level of 45 percent of the pre-COVID-19 projected FY2020 level (116,000), 90 percent in FY2023, and full recovery in FY2024.

[2] Brian Pearce, Outlook for air travel in the next five years, IATA, May 13, 2020.

Construction

Construction has traditionally had a large impact on the economy and the assumptions about major projects have a significant impact on the model's outcome. It is assumed that major projects will continue as planned, including the airport Public-Private Partnership ($28 million phased over 2 years), the Japan International Cooperation Agency (JICA) funded relocation of the solid waste landfill ($16 million phased over 2 years), Compact Koror road repavement ($6-$7 million), remaining elements of the Koror-Airai Sanitation Project (KASP), One-Stop Shop building in Koror ($8 million), Oceans conference gym ($8.6 million), Anguar dock, and Compact road rehabilitation, to name the major projects. The projected higher level of grant-funded project expenditures is fortuitous as this will provide an anti-cyclical stimulus at a time when the cyclical negative impact on Palau's economy and the attendant fiscal deficit caused by COVID-19 are being realized.

Public Sector

Under the base scenario no change in the current levels of government operations or in public expenditures or programs has been assumed. However, in light of overseas travel restrictions, expenditures planned for government travel and medical referrals have been reprogrammed to support the health response. The impact of the mitigation effort and additional expenditures are discussed in the next section.

The Mitigation Program, CROSS, and U.S. CARES Act, and Financing

The CROSS Act

On April 27, 2020, the President of Palau signed into law the Coronavirus One Stop Shop Relief Act known as the CROSS Act. A total of $20 million was appropriated for an eight-month period through the end of January 2021. The law provided a variety of programs to mitigate the impact of the COVID-19 pandemic:

i. **Unemployment benefits**: Qualified individuals in priority affected sectors may receive $100: (i) per week, if they are unemployed and generating no income; (ii) per fortnight, if their monthly working hours and earnings have been reduced by at least 50%; or (iii) per month, if monthly work hours and earnings are cut by more than 25% but less than 50%. The program is available to both Palauan and foreign nationals. The program allows for 1,600 persons at a cost of $6.9 million.

ii. **Temporary jobs program**: Those unemployed as a result of the pandemic may apply for work in the temporary jobs program at the minimum wage of $3.50 an hour. Non-resident workers, particularly those in the tourism sector, may apply for transfer of employment visas to the temporary jobs, with an understanding that their original employers will either re-hire them once businesses re-open, or arrange for their repatriation when travel becomes possible. The program allowed for the creation of 700 jobs at a cost of $4.3 million.

iii. **Private sector relief**: loans to be administered by the National Development Bank of Palau are available to an estimated 112 businesses in affected industries. The loans may cover businesses' fixed costs and possibly finance improvements in tourism facilities. Loans will be provided with 10-year terms, with no payment obligations during the first two years; annual interest payments of 2% start by the third year; and principal repayments are due from the fourth year until maturity. Priority funding is for loans that cover businesses' fixed costs, capped at $30,000 every 3 months per employer. The CROSS act has allowed $8 million for this component.

iv. **Lifeline utility services**: This program enables a lifeline electric, water, and sewer subsidy program for low- or fixed-income households to include those affected by COVID-19. PPUC's lifeline subsidy covers 150 kilowatt hours of electricity and 5,000 gallons each of water supply and wastewater services, per household. A sum of $0.8 million was allocated for this program.

The U.S. CARES Act

Under the U.S. CARES Act 2020, the citizens of the Freely Associated States are eligible for certain unemployment benefits under two facilities:

i. **The Pandemic Unemployment Assistant** (PUA) program. The PUA program provides a temporary benefit to individuals whose employment or self-employment has been interrupted or lost as a direct result of the COVID-19 Pandemic. PUA provides up to 39 weeks of unemployment assistance or benefits.

ii. **The Federal Pandemic Unemployment Compensation** (FPUC) program. The FPUC program provides an additional amount of benefits to qualified individual receiving assistance under the Pandemic Unemployment Assistance.

Allowances under these two programs are $397 a week for up to 39 weeks through December 31, 2020 under the PUA, and $600 a week for periods beginning on or after April 1, 2020 through July 31, 2020 under the FPUC.

Financing

The Asian Development Bank (ADB) is the main donor supporting Palau with loan financing to mitigate the fiscal and economic impacts of the COVID-19 pandemic. A series of loan facilities have been arranged, are under discussion, or are planned later in the year:

i. In April, the ADB disbursed $15 million under the Palau Disaster Resilience Program (DRP) to finance initial costs associated with the CROSS program and to support continuing government operations, particularly health services.

ii. The government of Palau is currently arranging for a further $20 million under the ADB's COVID-19 Pandemic Response Option known as CPRO. It is anticipated this will be available in August.

iii. A Policy Based Loan (PBL) of up to $40 million to support funding of an extension of the CROSS act and to offset the projected fiscal shortfall through the remainder of FY2021 is also under active discussion. The PBL will involve the commitment of the national government to implement a series of fiscal and economic reforms.

While authority to borrow from the ADB in relation to ADB DRP was provided under the original provisions of the facility in 2017, the Presidential Borrowing Act of 2020 authorizes the President of Palau to borrow up to $60 million in support of COVID-19 mitigation, which in effect covers both the CPRO and PBL programs.

Fiscal and Economic Impact Update

Economic Impact

The impact of COVID-19 on the Palau economy is shown in Figure 2. In FY2020 real GDP is now projected to fall by 13.8 percent, an increase from earlier projections of 11.5 percent. The deterioration in the projected outcome is due to industry revisions in the economy where the impact is stronger than earlier projections. Notably, this impact is ameliorated by the mitigation efforts undertaken during the last four months of the fiscal year. The decline would be even more severe without the projected positive contribution of the construction sector.

Figure 2 - GDP Growth

Total two-year reduction in GDP is -25%

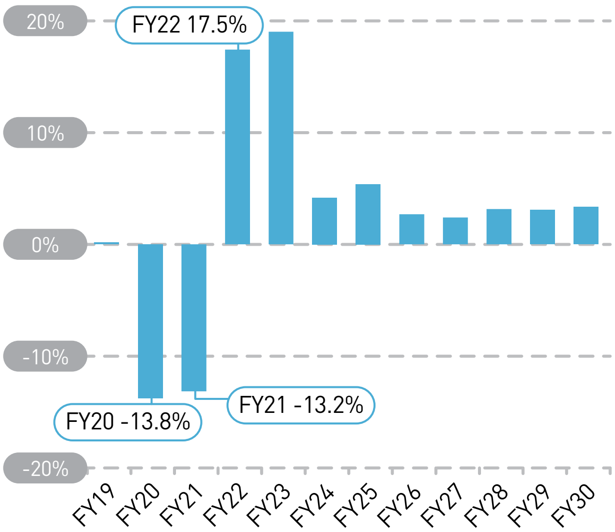
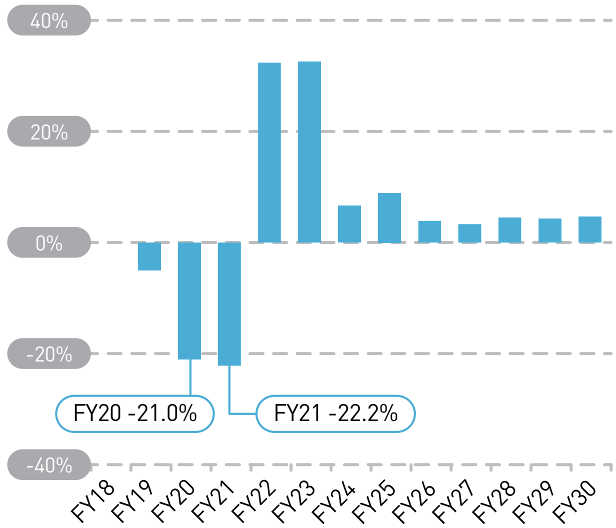


Figure 3 - Private Sector GDP Growth

Total two-year reduction in private sector GDP is -39%



In FY2021 there is a further projected reduction of real GDP by over 13.2 percent, which remains unchanged from earlier projections. The drop in FY2021 reflects the virtual disappearance of visitors for the whole fiscal year, the absence of further stimulus from construction, and the inclusion of continuing mitigation programs, which are described in more detail in the next section. After FY2021 the projections assume a steady return to normalcy with a high growth rate in FY2022 as the economy recovers from deep decline.

Figure 3 indicates the impact of the pandemic on the private sector. While the public sector is projected to remain unchanged due to donor financing to maintain basic services, the brunt of the COVID-19 impact will be felt by the private sector. In FY2020, a large reduction of 21 percent is anticipated, reflecting the collapse of the tourist economy after the end of March and indirect effects on secondary industries. In FY2021, a further reduction of 22 percent is projected, reflecting the full impact of the reduction in tourism through the period. Overall, a massive loss in output of 39 percent has been projected for the private sector.

During the crisis the public sector is projected to continue operating at prior levels, in part to maintain support for those areas of the private sector not directly impacted by the pandemic. Depending on the level of continuing donor support to assist Palau and the duration of the crisis, these assumptions may need to be re-evaluated.

> *The impact of COVID-19 is estimated to be a reduction in GDP of 14 percent in FY2020 and 13 percent in FY2021.*

Employment and Impact on Household Incomes

The impact on employment is shown in Figure 4 and is indicated for both Palauan and foreign workers. The figures are broadly consistent with earlier estimates. The implied loss of jobs for Palauans over the two fiscal periods is close 900 positions or 15 percent of the total number of Palauans employed. For foreign workers job loss is much larger, with a reduction

Figure 4 - Employment

Palauan labor affected less severely than foreign labor

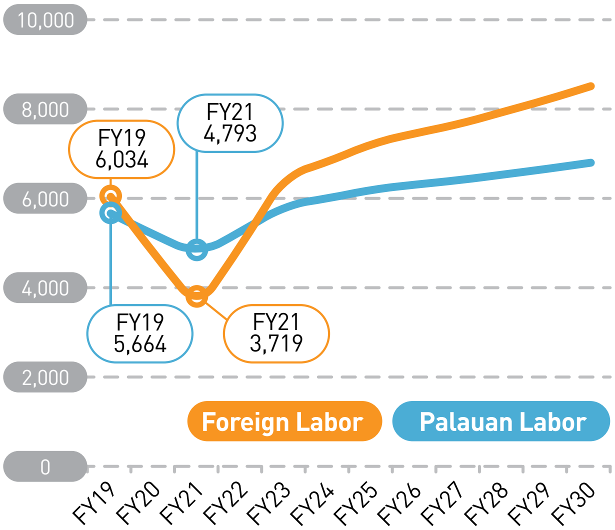
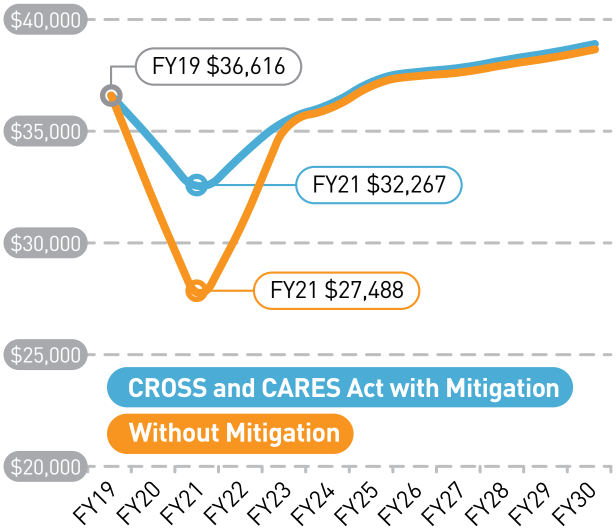


Figure 5 - Household Real Disposable Income

Mitigation reduces household income loss from 25% to 12%



in employment of 2,300 jobs or 38 percent of foreigners employed.

The impact on job losses result in a high level of unemployment. Typically, unemployment is not an issue for foreign workers as they leave Palau following cessation of employment. However, departure of released foreign workers is currently constrained by travel restrictions and minimal flight availability. In response to this, the intent of the government's CROSS Act has been to maintain the foreign work force in-country, so that Palau will be in a position to rebound quickly once recovery is underway.

The projected level of unemployment among Palauan workers exceeds anything Palau has previously experienced. The loss in jobs is projected through the ratio of jobs to output in various sectors of the Palau economy. As Palauans are largely concentrated in the public sector, job loss is mitigated overall. The impact on foreign labor is far greater, as they provide the majority of workers in the tourism sector.

Figure 5 indicates the impact on household incomes with the mitigating effect of the CROSS and CARES acts. Without the mitigation programs and unemployment benefits household incomes would have fallen by 25 percent, resulting in rising levels of poverty in both the Palauan and foreign sectors of the workforce. With mitigation, however, household incomes have fallen by only 12 percent from FY2019 levels. The magnitude of the coordinated government and donor response has been both timely and significant. The government and donor community should both take credit for rapid and well-designed mitigation efforts.

Fiscal Impact

The fiscal outturn is shown in Figure 6. Unlike the initial projections, these figures include the impact of mitigation efforts on the fiscal deficit. In FY2020 a fiscal deficit of $32 million—nearly 13 percent of GDP—is projected. In FY2021 the gap widens significantly, and the deficit rises to $50 million, or 15 percent of GDP. Even in FY2022 a significant deficit remains. The emergence of a nascent recovery is not sufficient to eliminate the need for deficit financing.

The magnitude of the projected deficit reflects three major forces: (i) the cyclical impact of the loss of the tourism industry on government

The negative impact on the fiscal balance over the three-year FY2020-FY2022 period may reach up to $126 million.

revenues, (ii) the introduced costs of the health response and mitigation efforts, and (iii) an emerging structural deficit. Of a total projected deficit of $82 million over the two fiscal periods, FY2020-FY2021, the cost of fully implementing the CROSS Act is $32 million, suggesting the cyclical and structural deficits are responsible for the remaining $50 million.

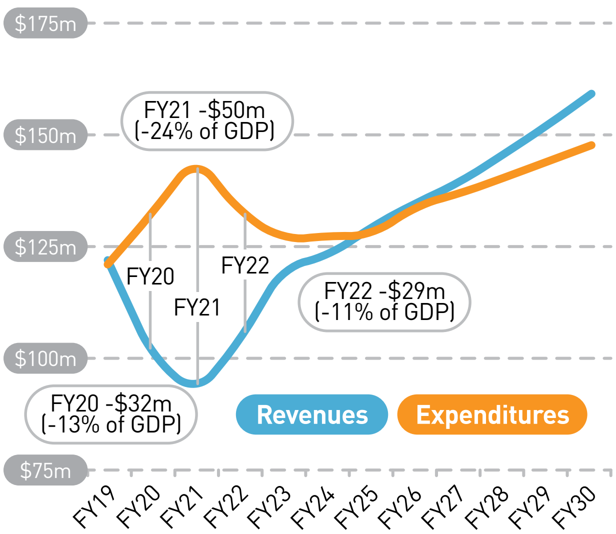
The current estimates include not only the provisions in the FY2020 budget, but also additional items appropriated in the two supplemental budgets enacted during the year. Additional costs associated with transfers to the SOE sector, Social Security and Civil Service Pension Fund of $10 million are now included (of which $7 million were not accounted for in the original estimates). The inclusion of large transfers to these public entities, outside the operation of the central government, represents the structural deficit.

Notably, the unprecedented size of the fiscal deficit is mitigated by the structure of Palau's fiscal account. About half of revenues are non-tax revenues representing grants, drawdowns from the COFA trust fund, fishing fees, and other fees and charges. These are all assumed to be unaffected by COVID-19. The principal components of the tax revenues are the payroll tax, gross revenues tax, hotel room tax, PPEF, and import taxes. Total tax revenue falls by $14 million in FY2020 and a further $10 million in FY2021. Over the two-year period, tax revenues are projected to fall by $23 million, or 42 percent of the FY2019 level.

On the expenditure side, the figures reflect the FY2020 budget and subsequent supplemental budgets. Adjustments have been made for both travel and medical referrals which are assumed to be eliminated due to travel restrictions. The generally conservative nature of the budget helps preserve the fiscal position but does not address the magnitude of the fiscal shock facing Palau. It has been assumed—but not recommended—that the budgeted expenditures for FY2020 are maintained into FY2021.

Figure 6 - Revenues and Expenditures

Even with mitigation, large deficits persist from FY20 to FY22



Financing

Figure 6 also indicates a total financing need of $82 million over the FY2020-FY2021 period. If these projections are realistic, with the emergence of a partial recovery in FY2022 total funding needs will increase to $110

The debt-to-GDP ratio is projected to rise to over 80 percent of GDP but then to fall rapidly as the economy recovers and converge on 40 percent by FY2030.

million—roughly 35 percent of GDP, based on the recovered level of projected nominal GDP in FY2023.

At the end of FY2019 the national government had accumulated a total reserve of cash deposits in the banking system of $31 million from prior fiscal surpluses. As part of the FY2020 budget supplementals, $14.8 million from these deposits has been appropriated to fund the cyclical downturn and structural deficit. As indicated earlier, a further $15 million of loans has been drawn under the ADB DRP. Arrangements for a further $20 million under the CPRO is nearing completion and $40 million is on the drawing board to be financed by a policy-based loan, all from the ADB. Current projections indicate a probable need of an additional $21 million for recovery in FY2022.

Comparison of Scenarios

Table 1 compares the original estimates of the impact of COVID-19 with the revised estimates that accommodate improved information available since March of this year, and the impact of the various mitigation efforts with donor support. The original estimates projected a 22 percent drop in GDP compared with a revised estimate of 27 percent. Donor support reduces the impact by 25 percent.

The small difference in impact of the mitigation effort on GDP results from insignificant change in most sectors of the economy: tourism output remains unchanged, as does government and construction output. Only the secondary and indirectly affected industries in retailing and services are beneficially impacted.

The revision to private sector estimates has been significant, as the extent of the impact has become better understood. Although significant, the impact of mitigation efforts on private sector GDP is relatively small. The impact on employment is relatively close under all three cases, but the impact of the mitigation efforts on protecting household incomes is large. Arguably, had the mitigation program unemployment resources been targeted to employers—allowing for workers to be kept on payroll—the outcome would have been still better; however, the rules of the CARES act and the PUA, in particular, would not have allowed for such an approach.

Table 1 - Original Estimates Compared with Current "with" and "without" Mitigation Scenarios

	Original impact paper	Updated information	Extended donor support
GDP	-22%	-27%	-25%
Private sector	-33%	-42%	-39%
Employment	-28%	-29%	-27%
Household incomes	-22%	-25%	-12%

Structural Imbalances in Public Entities

Part of Palau's overall financing need arises from structural imbalances in the SOE sector, Social Security, and the Civil Servant Pension Plan, each of which operate with significant deficits. While fiscal operations at the national government have been well-managed, financially undisciplined policies in key public entities foreshadow needed reforms.

In the SOE sector the failure to implement full cost recovery at PPUC results in both power and water running significant operational deficits. Power production recorded a $2.7 million operating deficit in FY2019 (12 percent of revenues) while water and sewer operations ran a deficit of $4.1 million (close to 80 percent of revenues.) As a result of these developments the ADB has declared the PPUC will be insolvent by the end of 2020. To help rectify the position the ADB is supporting a Policy-Based Loan of $10 million to recapitalize PPUC and support key maintenance that is long overdue. However, this loan is conditioned on the requirement that production should be priced at full cost recovery, among other requirements to introduce best practices in management of PPUC.

The Social Security system in Palau has been professionally managed and although the unfunded liability may be considered large at 66 percent, the ratio of contributions and investment earnings to benefits and administrative costs has generally been within sustainable limits. However, periodic adjustments have been required to bring the system into alignment. In FY2017 an additional $50 per month was awarded to beneficiaries and the government transferred $2 million to support the payment. In 2018 the rate of contribution for both employers and employees was raised from 6 to 7 percent. Again, at the start of FY2019 a further $50 per month was awarded to beneficiaries, but with no compensating increase in rates. Reform is thus required either through changes in contribution rates or adjustments to benefits, to bring the system back into balance.

The Civil Service Pension Plan is currently in imminent threat of collapse. With contributions projected to remain stagnant and benefits strongly growing, a recent evaluation of the system[3] projected collapse by FY2024. A 2017 actuarial review indicates a funded ratio of just 16 percent. In FY2019 total benefits and administrative costs were $10.4 million while contributions and investment earnings were $8.2 million; that is, expenses exceeded revenues by 27 percent. The gap without reform or infusion of funds from government is projected to widen considerably, requiring drawdown of investments until the projected collapse as early as FY2024.

Koror State

Koror state also faces serious financial issues due to the COVID-19 pandemic. In FY2019 the state operated a $10 million budget financed in large part from tourist-dependent fees from the Rock Islands and Jellyfish Lake; 60 percent of Koror state revenues were derived from this source. The second most important source of revenue is derived from commercial leases which are also dependent on tourist-based plant: hotels, dive and tour operators. Meanwhile, expenditures are heavily concentrated in payroll, which equates to 68 percent of FY2019 total expense. Adjusting to the loss of all tourist-related revenues thus places the state in dire financial circumstances. Fortunately, the state had saved a significant part of prior year surpluses and at the end of FY2019 had accumulated over $20 million in deposits.

While the reserve base is significant and can be drawn on to finance operations in the near term, this will not last indefinitely. With an unknown duration until recovery, the state needs to prepare an adjustment program and seek financial support. Given a commercially valuable asset in the Rock Islands, the state is well-positioned to seek loan financing. However, to ensure cash flow remains positive after recovery from the COVID-19 pandemic, the state needs to make structural adjustments. With expenses concentrated in payroll, there is little alternative to reductions in working hours, rates or numbers of state employees.

Payroll has grown rapidly in Koror state by an annual average of over 8 percent during the last 10 years, equally divided between numbers and wage rates of 4 percent each. With financial adjustments and design of programs to improve and rationalize its mission to manage the natural resource base in the Rock Islands, the state should be considered an attractive loan candidate. Use of financing would be an appropriate response to the cyclical fiscal shock facing Koror State. While the state is aware of its precarious position, the clock is ticking, and action is needed before reserves erode to a dangerously low level.

Recovery, Reform and Debt Sustainability

Duration of the Pandemic

The above impact and analysis is based on the assumption that recovery will not occur until the

[3] Republic of Palau Civil Service Pension Plan Strategic Review, Milliman report, Singapore, 2019.

outset of FY2022 after full access to a vaccine, and that Palau has the capacity to carry a debt load implied by the loss of its premier tourism industry for a protracted period. Palau has been fortunate to have not experienced any active COVID-19 cases and has taken the firm position of closing its borders. Recently, after hot internal debate, the nation has permitted entry of returning citizens, residents and critical personal, provided they undergo a 7-day quarantine period in Guam pre-arrival followed by a 14-day quarantine period in Palau post-arrival.

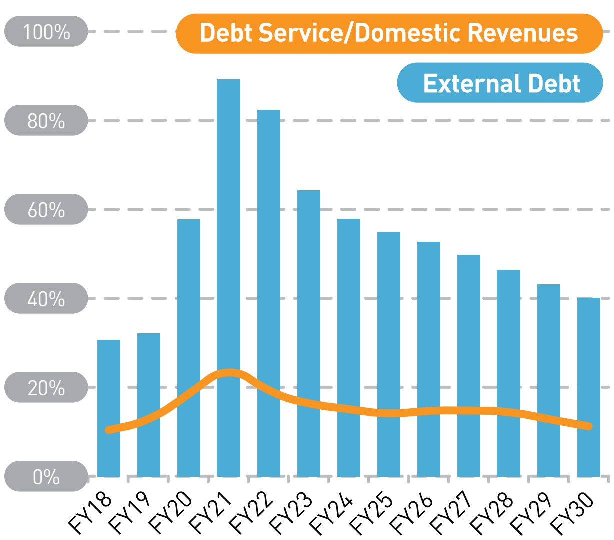
Given the characteristics of small island communities, cultural practices, high incidence of non-communicable diseases, and the age structure of the Palauan population, this seems an entirely appropriate policy. However, a question remains whether the nation can afford to take on a large debt load and what policies might be put in place over time to bring its external debt back to a prudent level.

Debt Sustainability

Figure 7 indicates the projected debt-to-GDP ratio and debt service implications. The debt-to-GDP ratio is expected to climb very rapidly

Figure 7 - External Debt and Debt Service

Debt to GDP ratio peaks in FY21 and improves thereafter



Debt service is projected to rise to $7.7 million or 2.4 percent of GDP in FY2025 as grace periods expire. This will not lead to debt stress provided Palau embarks on a series of reforms to ensure fiscal sustainability.

from an FY2019 level of 32 percent to GDP to over 80 percent in FY2021. It then falls rapidly as the recovery quickens, reaching 40 percent of GDP by FY2030. The debt-to-GDP ratio is impacted not only by the incurrence of new debt but also by the large 25 percent reduction in GDP, which pushes the ratio sharply up in the pandemic years but then in FY2023 drops rapidly with economic recovery.

This data includes not only new COVID-19 pandemic-related borrowing, but also loans currently in the pipeline and the PPUC policy-based loan. These projections also include the pattern of the debt schedule on existing loans, but does not include additional borrowing post FY2022.

Debt service takes on a similar profile, rising to over 20 percent of domestic revenues in the near-term but then dropping to close to 10 percent by FY2030. Debt service includes not only national government debt, but also existing debt previously incurred by the SOE sector.

To address the question of whether Palau can support this level of debt—an additional $110 million in the coming three years—these projections have assumed that Palau borrows from the ADB on concessional terms. The CPRO and PBL carry a 25-year term with a 5-year grace period and interest of 2 percent. On $96 million this amounts to an annual charge of $6.7 million, which represents about 2.1 percent of the recovered level of GDP in FY2023.

The Need for Reform

Even at concessionaly rates, additional pandemic-related debt service of $6.7 million annually—8.5 percent of projected national government domestic revenues in FY2023—is a significant additional financial burden. There are three potential ways for Palau to reduce this burden over time:

i. Structural reform in the SOE and social insurance sectors,

ii. Tax reform, and

iii. Growing the economy.

The earlier analysis indicated that public entities in the SOE sector and social insurance, SS and CPSP, are either operating below cost or with unsustainable policies with contributions and investment returns failing to cover benefits. In total it is estimated that these entities cost the nation over $10 million per annum and are effectively paid for by the taxpayer. Reforming financially underperforming entities that have subsidized consumers or beneficiaries for many years cannot be readily rectified in the midst of the COVID-19 pandemic. However, with commitment, reforms could be structured and programmed in the future to enable these entities to become financially viable.

The need to reform an outdated, inefficient, and distortionary tax regime has long been understood, but has failed to gather sufficient support for enactment. At present the tax to GDP ratio in normal times approaches 20 percent of GDP. After allowing for direct taxes on tourism, the ratio is closer to 15 percent on domestic institutions. The current tax regime cannot be efficiently deployed to raise the additional revenues that may be needed during the recovery phase after the pandemic passes without causing severe distortions. The tax reform proposal that focuses on adoption of a value-added tax (VAT), which is ideally suited to a tourism-based economy, would spread the additional burden between resident and tourist consumers.

Clearly, the favored option is to grow the economy and in tandem the tax revenue base. Modeling estimates indicate that government revenue is strongly elastic with respect to tourist arrivals and based on input-output analysis: for every dollar of tourist spending about 25¢ will accrue as government receipts. Based on a tourist spend of $1,200 per visitor in FY2025 prices after the tourism recovery, about 25,000 additional visitors would be required to service the additional debt. While government revenues are elastic with respect to tourism, this would be a large number of additional visitors on top of normal levels, potentially posing a threat to Palau's carefully guarded environment.

Given the size of the potential debt overhang Palau will need to convince its creditors that it is not leading itself into a position of debt distress. It is thus presumed that creditors would wish to see the adoption of a credible reform program to avert this undesirable outcome. Structural reforms in the SOE and social insurance sectors are needed irrespective of the current pandemic. This *Technical Note* recommends a mix of tax reform, revenue measures, and expenditure constraint coupled with a carefully designed growth strategy that does not threaten Palau's pristine environment.

Re-opening the Economy

At present there have been a variety of approaches globally to re-opening national economies during the COVID-19 pandemic. In the Pacific region, Palau's closest neighbors in east Asia, the South Pacific, Australia and New Zealand, COVID-19 incidence has been low and the pandemic has been generally well-controlled. Borders have been closed with only residents permitted to return, subject to closely-monitored 14-day quarantine periods. Elsewhere the story has been different with high rates of infection common.

Several economies, including the U.S. and Brazil, have re-opened prematurely and allowed the virus to reemerge, requiring a re-imposition

The analysis suggests Palau should maintain its policy of limited re-opening and continuing the 14-quarantine, which could be extended to the "bubble" concept, perhaps with Taiwan, when proven to be a safe option.

of lockdowns. This pattern is typified by "the hammer and the dance" metaphor[4]: lockdowns followed by easing, but only to be followed by further lockdowns, even if subsequently more geographically dispersed.

Palau has had no cases of COVID-19 and is thus subject to a different dynamic. Much of the population is aging and subject to high incidence of NCDs. Medical preconditions, cultural factors, and close living proximity of large extended families make Pacific Island communities especially vulnerable. The example of the different experiences of the two Samoas during the Spanish flu pandemic of 1918[5] and the high incidence of COVID-19 among Marshallese communities living in Arkansas attest to island vulnerability, but also to the potential for sound management to result in good outcomes.

Maintaining continued isolation with the exception of limited numbers of repatriated citizens, residents, and key personnel subject to 14-day quarantine periods is clearly the safest alternative. However, a "bubble" concept has been suggested with particular reference to New Zealand and Australia, but also possibly between Taiwan and Palau. Fiji has also indicated its interest in joining with New Zealand and Australia. However, the recent spike in COVID-19 infections in Australia and re-emergence of cases in Fiji suggests that while the bubble concept promises a reduced-risk approach to trans-border travel, the concept still requires careful evaluation. Fear of being responsible for spreading the virus to vulnerable island communities is also a deterrent to neighbor nations considering opening their borders as a means to support island economies.

Estimating the economic impact of early re-opening is fraught with difficulties; there are many variables subject to wide variances. However, by way of example this *Technical Note* examines two alternatives: (i) assumes that Palau re-opens its borders without the mandatory 14-day quarantine period in FY2021, and (ii) assumes Palau opens up a "bubble" with Taiwan also at the start of FY2021.

In the ***first example*** a small number of tourists, 20 percent of the pre-COVID FY2020 projected level, are assumed to visit Palau. However, following recent regional experience, this *Technical Note* assumes this is likely short-lived as Palau contracts active COVID-19 cases. A lockdown follows and the borders are once again sealed. It is assumed Palau is able to contain the spread of the virus through contact tracing and isolation. A more extreme scenario of rampant, uncontrolled community spread would be dire, indeed, but is not investigated here. The impact of uncontrolled community spread, while difficult to quantify in purely economic terms, is severe enough to be avoided—full stop.

While experiencing the initial and subsequent lockdowns of this imaginary scenario, households reduce their expenditures, limiting purchases to essential food items only. Modelling estimates suggest there is a small economic benefit to a brief re-opening in FY2021 as GDP contracts by 9.7 percent—less than the 13.2 percent reduction under a base scenario. This

[4] Tomas Pueyo, "Coronavirus: The Hammer and the Dance", https://medium.com/@tomaspueyo/coronavirus-the-hammer-and-the-dance-be9337092b56

[5] "A tale of Two Samoas", see https://tedium.co/2017/10/16/american-samoa-spanish-flu/, and "How American Samoa Kept a Pandemic at Bay", see https://www.laphamsquarterly.org/roundtable/how-american-samoa-kept-pandemic-bay

The analysis indicates that the cost of "going it alone" with donor support would be massive requiring large contractions in the government and reductions in civil service jobs.

economic gain is minor—and short-lived—but would have been achieved at what may be a great potential cost to the health and lives of the Palauan population.

This scenario is, of course, based on an imaginary outcome; but is designed to illustrate the case that re-opening the economy prematurely may not result in significant economic gain and could come with a high social cost. Such arguments prevailed in New Zealand, which implemented a strict lockdown policy rather than the alternative of the projected short-term gain from re-opening the economy.

The ***second example*** assumes that Taiwan and Palau enter into agreement and create a common travel area with agreed protocols allowing residents of each country to travel within the dual country "bubble" without a 14-day quarantine restriction. For modelling purposes, this *Technical Note* assumes that the number of Taiwanese tourists visiting Palau in FY2021 would reach 30,000, a number greater than the FY2019 level but not as high as the 41,000 that visited Palau in FY2012. This note also assumes that visitor numbers achieve 82,500 in FY2022--29,500 above the baseline as shown in Figure 8.

Figure 9 indicates significant results in FY2021. GDP falls by 3 percent compared with 13 percent in the base case scenario—an 11 percent improvement. The impact of the bubble thus makes a significant contribution to stabilization of the economy in FY2021. Figure 10 further indicates that jobs also improve, and the level of full-time equivalent positions rises by 1,050 as jobs are recreated and the workforce returns. Household incomes also rise by 4 percent, as people transition from reliance on unemployment benefits to normal wages.

Figure 8 - Projected Tourism Arrivals
Bubble projected to increase visitor arrivals by 30,000 in FY21 and FY22

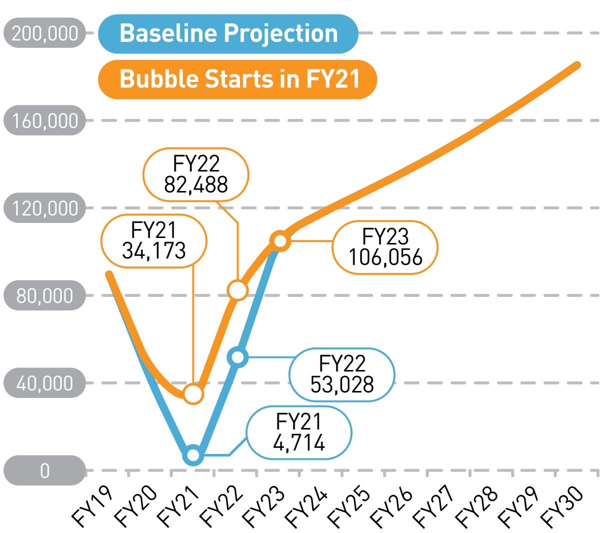


Figure 9 - GDP
Bubble adds 11% to GDP in FY21

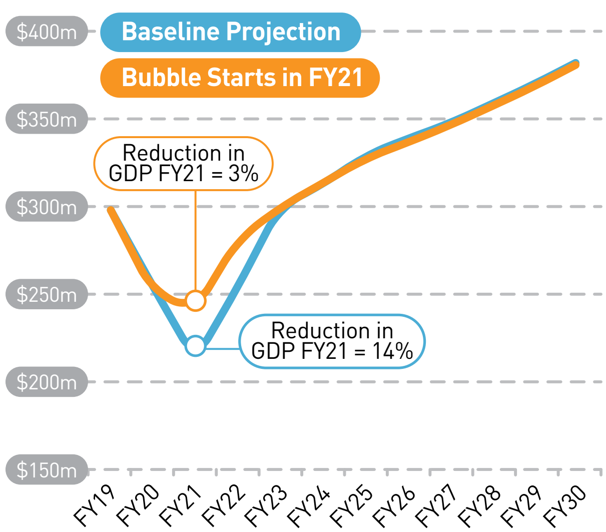


Figure 10 - Employment

Bubble saves 1,050 jobs in FY21

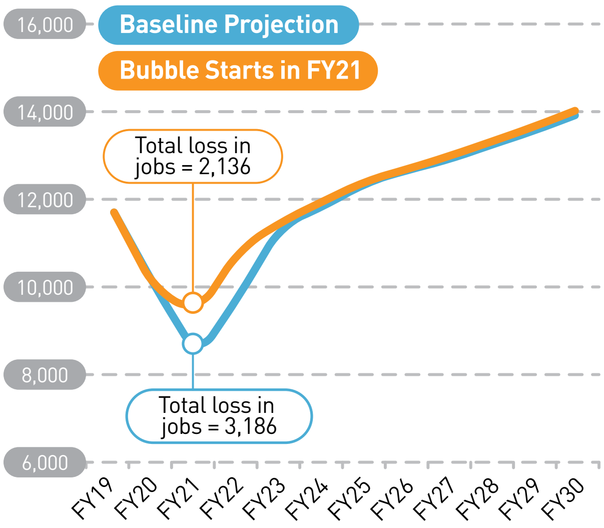
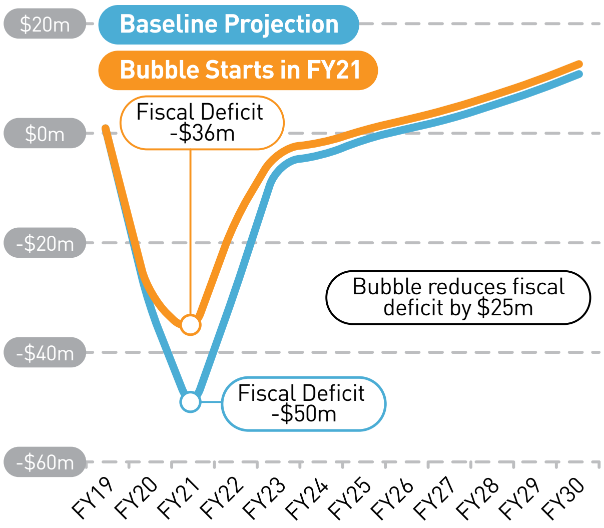


Figure 11 - Fiscal Deficit/Surplus

Bubble reduces fiscal deficit by $25m over FY21-FY22 period



Finally, the fiscal deficit drops from $50 million in FY2021 in the base case to $36 million in the bubble example, as Figure 11 demonstrates. In FY2022, the fiscal deficit drops from $29 million in the base case to $18 million in the bubble. This represents a total of $25 million less that Palau would need to borrow to mitigate the cyclical downturn. The debt-to-GDP ratio falls by 8 percent from the previously projected peak.

The bubble example thus looks favorable, but is based on the assumption that Palau remains COVID-free and that other circumstances do not arise to burst the bubble, such as the emergence of community spread in Taiwan. It also assumes that Taiwanese visitors feel safe and want to travel to Palau.

The concept of bubble tourism with Taiwan was presented to the Palauan leadership on July 22nd and was received with interest. The bubble concept passed the first test: plausibility. However, much work needs to be done to improve Palau's health system, to establish protocols in the tourism industry, and to confirm whether Taiwan itself is interested in the concept. The potential benefits are clearly favorable, while the risks are significantly reduced compared to a policy of unlimited re-opening.

Economic Impact without Donor Financing

The final section in this report explores the implications that would likely result should donor assistance and financing not be available to Palau to mitigate the impact of COVID-19. Two scenarios are discussed:

i. The baseline projection with extended donor support outlined above, which includes support to address the cyclical shortfall and finance the mitigation effort, and

ii. A limited donor support scenario for FY2020 only, but assuming Palau still benefits from the provisions of the CARES act

The Impact on the Tourism Economy

The extended donor scenario assumes that Palau has sufficient resources to maintain the large pool of both Palauan and foreign labor that is currently unemployed, and that the nation is thus able to respond quickly once recovery is initiated. Should Palau not receive donor assistance and is thus no longer able to support both the unemployed labor and private sector through the CROSS act, Palau would no longer be able to provide unemployment benefits and would need to repatriate all of its foreign workers in the tourism industry. Recovery of the tourism sector would thus be delayed. Figure 12 indicates the base projection of visitor arrivals and recovery, and the alternate scenario with limited donor assistance and the need to rehire and recruit the lost workers.

The impact on GDP

Figure 13 indicates the impact on the economy. Even with donor support to maintain government services and the unemployed, the economy contracts by 25 percent. This indicates the direct impact on the tourism sector and indirect effects on the reduction of demand in dependent sectors. However, should the termination of the existing mitigation effort become unavoidable and reductions in government expenditures become necessary to maintain fiscal balance, the impact on GDP would be much greater and the economy would contract by an overall 33 percent. The impact of a program of donor

Figure 12 - Visitor Arrivals

Tourism recovery under reduced support scenario slowed by repatriation of foreign workers

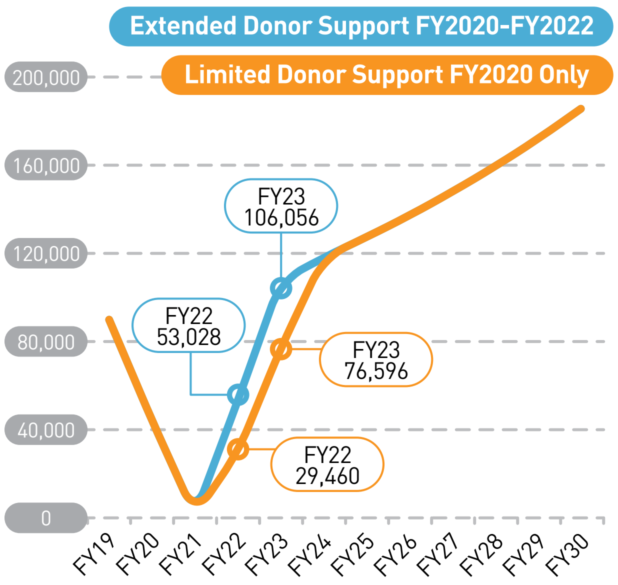
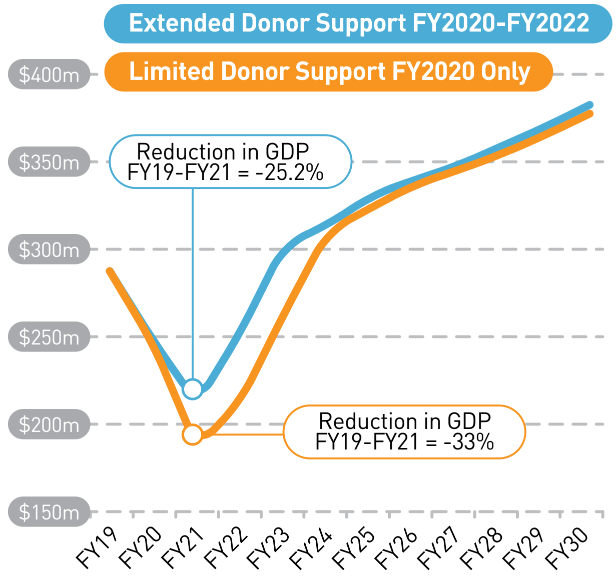


Figure 13 - GDP

Reduced donor support results in deeper, longer recession



support would thus help sustain the economy by an estimated 8 percent. In effect, Figure 13 indicates that while a V-shaped recovery is likely with donor support, a U-shaped period of recovery from a deeper decline would result without additional donor assistance.

Employment

The impact on employment is shown in Figure 14 and indicates a loss of 3,200 jobs as a result of the pandemic. It is currently reported by the Palau government that about 3,000 people have applied for unemployment assistance. However, should the government be required to contract its operations to maintain fiscal and macroeconomic stability, a further loss of 1,000 jobs would result both through retrenchment in government and through further contraction in the dependent sectors of the economy. Without extended donor support a total loss of jobs in FY2021of 4,200 could be anticipated.

The Impact on Household Incomes

The impact on household incomes is shown in Figure 15. With donor assistance financing unemployment benefits, a major contribution

Figure 14 - Employment

Extended donor support protects 1,013 jobs

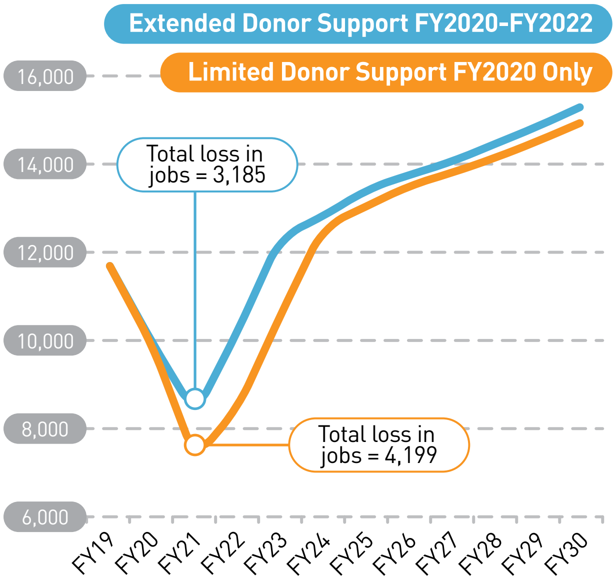
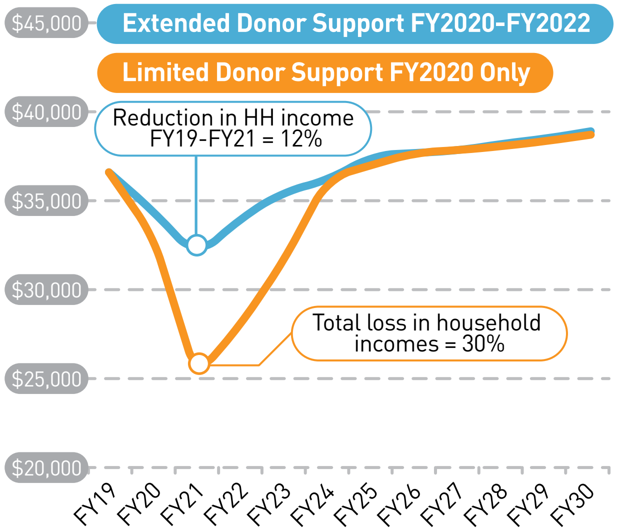


Figure 15 - Household Incomes

Extended donor support reduces household income loss from 30% to 12%



is achieved in supporting household incomes. Household incomes fall by 12 percent, but considerably less than the 25 percent projected for the economy. Should the government not have the resources to fund these benefits and indeed be required to further cut payroll, the impact on household incomes would fall by 30 percent, leading to a huge additional burden on the community. The projections indicate that from a level of household disposable income of $160 million in FY2019, incomes without any mitigation effort would fall to $119 million in FY2021—a loss of $41 million. However, with donor support household incomes fall to a reduced level of $150 million. Thus the expanded donor assistance is projected to contribute an additional $31 million to the livelihood of the community.

The Impact on Fiscal Revenues

Figure 16 indicates the impact of the mitigation program on government tax revenues. While tax revenues are projected to fall by 42 percent even with mitigation, due to the collapse of the tourism industry, without the benefit of extended donor assistance revenues would fall even further by 52 percent. Fortunately, Palau receives a significant proportion of revenues from other sources: bilateral donor grants, U.S. federal programs and services, third party grants from Japan, Taiwan, etc., fishing VDS fees, drawdowns from the Compact Trust Fund and other fees, which help mitigate the impact of the collapse of a major part of the private sector.

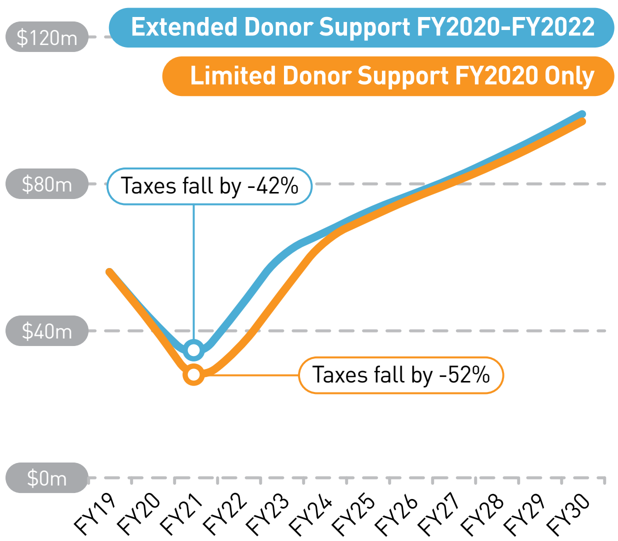
The Fiscal Adjustment and Reduction in Expenditures

The mitigation scenario assumes that government maintains the prior COVID-19 levels of services while achieving savings on non-essential items. Figure 17 displays a rising trend in government expenditures under the extended donor support scenario as service provisions are maintained, including the additional funding requirement of the mitigation effort.

In the absence of funding for mitigation programs (with the exception of the provisions of the CARES Act) government is required to undertake a brutal adjustment program. It is assumed that a reduction in civil servants of 30 percent is required, coupled with a reduction of 20 percent in wage rates of those remaining (a reduction of the working week of 1 day). Further

Figure 16 - Government Revenues

Extended donor support protects tax effort by 10%



reductions of 50 percent are required in the use of goods and services and other miscellaneous costs, although transfers to the Social Security Administration and Civil Service Pension Fund are maintained to support pension benefits.

The cuts required in the absence of extended donor assistance are of a degree never experienced in Palau. The cuts would be necessary to restore fiscal balance and macroeconomic stability but would impose an unprecedented social cost.

The Impact on the Budget

Figures 18 and 19 indicate the impact of the reductions on the budget by type of expenditures and on employment of civil servants should Palau be forced to undergo a fiscal compression of the magnitude required. The major impact is felt on payroll costs, the major component of expense. Cuts are also incurred through reductions in use of goods and services and other expenses. However, the area where the largest impact incurs is transfers to the private and household sectors, which are no longer sustainable without extended donor support. Figure 19 indicates a possible picture of the size of the reductions required of the civil service. The exact distribution of the cuts over the services provided would obviously be for the Palauan authorities to determine. However, the projections assume that given the nature of the crisis, the government would wish to protect essential health services. The required magnitude of the cuts would then be distributed proportionately over the remaining services.

Figure 17 - Government Expenditures

Extended donor support enables government to maintain basic services

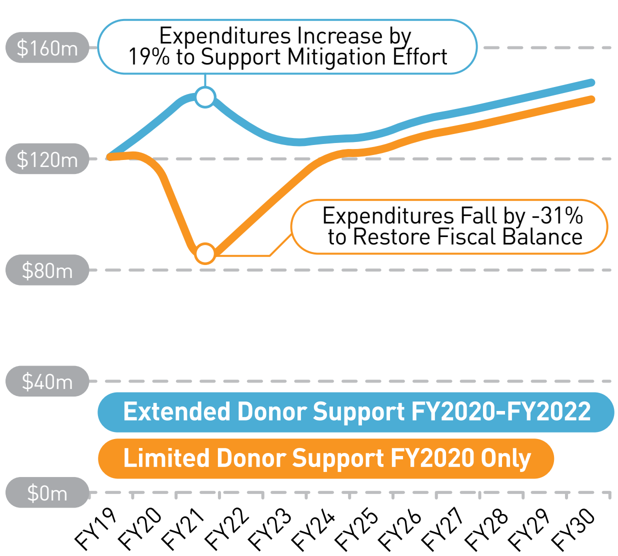


Figure 18 - Expenditures by Type

Extended donor support avoids deep cuts

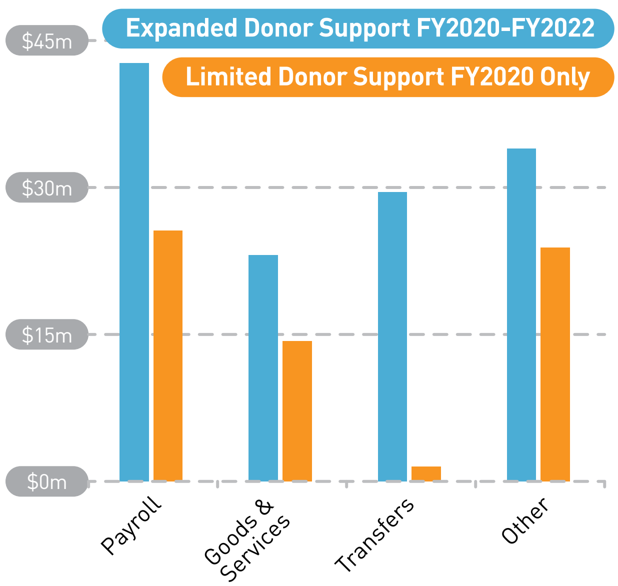
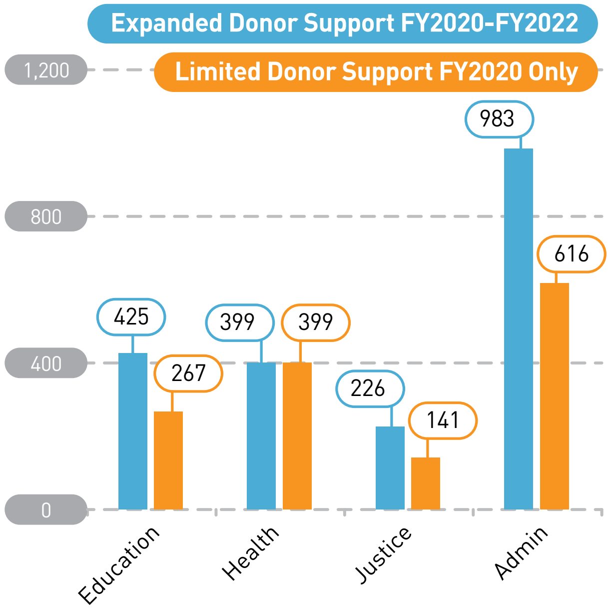


Figure 19 - Civil Service Employment in FY2021
Extended donor support avoids unprecedented job losses



Adding a Limited Donor Support Scenario

Table 2 compares the impact of limited donor support to earlier estimates. All measures in the fourth column are adversely and strongly affected, indicating the beneficial impact of the mitigation efforts, or conversely, indicating the loss to Palau under a limited donor support scenario. In such a scenario, GDP contracts further reflecting the layoff of public servants needed to restore fiscal balance. The private sector is further affected by the general reduction in demand in the economy, employment falls further and household incomes drop disastrously. The entire table summarizes the beneficial impact potential of the donor community in supporting Palau through the entirety of the COVID-19 pandemic.

Conclusion

This *Technical Note* has reexamined a variety of issues relating to the impact of COVID-19 on the Republic of Palau, including:

i. economic and fiscal impact on Palau, including the offsetting impact of mitigation efforts under the CROSS and CARES acts;

ii. financing implications and impact on the public sector, including the national government, public entities and Koror State;

iii. the affordability and impact of extended donor support, primarily through loan financing;

iv. reforms needed over time to manage the additional debt burden in a sustainable way;

v. two examples to re-open the economy to tourism: (i) a high-risk versus modest-reward tradeoff of unlimited re-opening without a 14-day quarantine prior to the availability of an effective vaccine in Palau; and (ii) opening of a "bubble" to allow travel between Taiwan and Palau; and

vi. the large negative fiscal and economic impacts if donor support is not extended from FY2021 onwards.

Table 2 - Earlier Economic Indicators Compared with Limited Donor Support

	Original impact paper	Updated information	Extended donor support	Limited donor support
GDP	-22%	-27%	-25%	-34%
Private sector	-33%	-42%	-39%	-46%
Employment	-28%	-29%	-27%	-36%
Household incomes	-22%	-25%	-12%	-44%

From the analysis presented a path forward can be constructed. Palau has been fortunate that its policies to-date have enabled the nation to remain COVID-19-free. The nature of Palau society, culture, and limited health services argue for a cautionary approach, such as those adopted by Palau's neighbors in the Pacific region. The economic analysis suggests that the benefits to be gained from a limited and failed attempt to re-open are small. On the other hand, the costs could be extremely high.

Under such circumstances, it seems prudent for Palau to maintain its current policy of limited re-opening, adhering to a strict 14-day quarantine period. This limited approach could be extended to the "bubble" concept, as recently proposed to the Palauan leadership with Taiwan, when proven to be a safe option and subject to agreement of mutually beneficial protocols. However, while there is initial interest much work needs to be done as recent experience between the Cook Islands and New Zealand proves.

The global experiences during the COVID-19 pandemic are providing useful evidence for policy-makers to consider. Countries that have re-opened their economies prematurely are enduring wide-scale human suffering and are being forced to lock-down again as predicted by epidemiologists. Palau should learn from the experiences of other nations and await a proven level of demand reflecting the confidence of visitors to travel to Palau. When the time is right, Palau can manage its re-opening process incrementally and safely.

It is certainly understandable that operators in the tourism sector are impatient and would like to re-open the economy as soon as possible. To the extent that specific stakeholder demands are strong, there may be a need to revisit the mitigation program—seeking improvements in targeting and sizing of support to affected individuals and businesses to cover the cost of a potentially long period without visitor arrivals. Under any scenario, the demands to re-open need to be carefully evaluated against the capacity of Palau's health care system to respond to and manage a COVID-19 outbreak.

Limiting entrants to those able to undertake a 14-day quarantine period will be costly in fiscal and economic terms, as shown by this analysis. Implementing a "bubble" arrangement with one or more partner countries, once proved safe, could reduce the cost of mitigation efforts significantly but will not eliminate the need for loan-financed donor support. A key finding of this analysis is that the borrowing undertaken to mitigate the fiscal and economic impacts of the COVID-19 pandemic—even with no tourist arrivals through the end of FY2021—will not pose an unacceptable financial burden on future generations, provided Palau adopts appropriate reforms and future pro-growth policies. While the debt-to-GDP ratio will rise sharply in the near-term, the longer-term projection is for it to settle around 40 percent of GDP.

The debt projections will require an additional fiscal effort of about 2.5 percent of GDP from Palau's preferred combination of reforms to reduce expenditures, increase tax effort, or increase economic growth. This would entail a substantial effort but such an effort would quickly return Palau to an admirable and sustainable level of external debt.

Finally, this *Technical Note* has indicated the impact of not receiving extended donor assistance into FY2021 and beyond. The cost would be massive, and the required fiscal adjustment if Palau were forced to "go it alone" would require a 50 percent cut in non-health payroll and expenditures. Essential services in education, public safety and other areas would need to be drastically reduced in order to restore fiscal balance. The social cost and stress on Palauan communities would be extreme. The case for extended donor assistance—even with the attendant debt burden undertaken by Palau—is strong.

Given the circumstances facing Palau, a comprehensive program utilizing donor grant and loan finance is the best way forward to adjust to the cyclical component of the COVID-19 fiscal shock. Similarly, the fiscal and economic reforms accompanying policy-based loans to Palau would serve to fully address the smaller but substantial structural deficit component of Palau's medium-term fiscal operations.

A key finding of this analysis is that the borrowing undertaken to mitigate the fiscal and economic impacts of the COVID-19 pandemic—even with no tourist arrivals through the end of FY2021—will not pose an unacceptable financial burden on future generations, provided Palau adopts appropriate reforms and future pro-growth policies.

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The Economic Monitoring and Analysis Program (EconMAP) provides professional expertise to support statistical development and economic analysis in the three Freely Associated States (FAS) of the Republic of the Marshall Islands (RMI), the Federated States of Micronesia (FSM) and the Republic of Palau (ROP). Annual program outputs for each FAS include the development of economic statistics, the publication of Economic Reviews, and the delivery of economic presentations. Occasional topical reports and technical notes are also published occasionally.

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