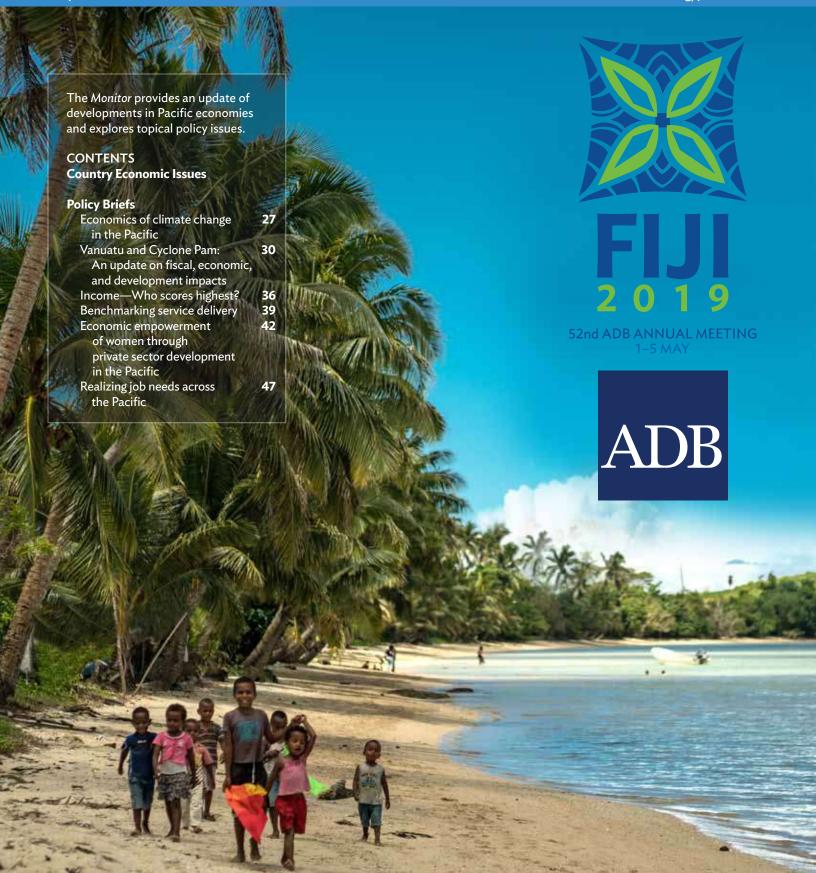
# Pacific Economic Monitor

SPECIAL 10TH ANNIVERSARY ISSUE

May 2019 www.adb.org/pacmonitor



# 2 Pacific Economic Monitor



Creative Commons Attribution 3.0 IGO license (CC BY 3.0 IGO)

© 2019 Asian Development Bank 6 ADB Avenue, Mandaluyong City, 1550 Metro Manila, Philippines Tel +63 2 632 4444; Fax +63 2 636 2444 www.adb.org

Some rights reserved. Published in 2019.

ISBN 978-92-9261-602-1 (print), 978-92-9261-603-8 (electronic) ISSN 2521-6066 (Print), 2521-6074 (e-ISSN) Publication Stock No. TCS190129-2 DOI: http://dx.doi.org/10.22617/TCS190129-2

This edition of the *Monitor* was prepared by Ananya Basu, Robert Boumphrey, Jacqueline Connell, Prince Cruz, Noel Del Castillo, Edward Faber, David Freedman, Rommel Rabanal, Shiu Raj Singh, and Cara Tinio of the Pacific Department. Publishing production assistance was provided by Cecil Caparas.

The views expressed in this publication are those of the authors and do not necessarily reflect the views and policies of the Asian Development Bank (ADB) or its Board of Governors or the governments they represent.

ADB does not guarantee the accuracy of the data included in this publication and accepts no responsibility for any consequence of their use. The mention of specific companies or products of manufacturers does not imply that they are endorsed or recommended by ADB in preference to others of a similar nature that are not mentioned.

By making any designation of or reference to a particular territory or geographic area, or by using the term "country" in this document, ADB does not intend to make any judgments as to the legal or other status of any territory or area.

This work is available under the Creative Commons Attribution 3.0 IGO license (CC BY 3.0 IGO) https://creativecommons.org/licenses/by/3.0/igo/. By using the content of this publication, you agree to be bound by the terms of this license. For attribution, translations, adaptations, and permissions, please read the provisions and terms of use at https://www.adb.org/terms-use#openaccess.

This CC license does not apply to non-ADB copyright materials in this publication. If the material is attributed to another source, please contact the copyright owner or publisher of that source for permission to reproduce it. ADB cannot be held liable for any claims that arise as a result of your use of the material.

Please contact pubsmarketing@adb.org if you have questions or comments with respect to content, or if you wish to obtain copyright permission for your intended use that does not fall within these terms, or for permission to use the ADB logo.

Corrigenda to ADB publications may be found at http://www.adb.org/publications/corrigenda.

#### Notes:

In this publication, "\$" refers to United States dollars unless otherwise stated.

ADB recognizes "Fiji Islands" as Fiji; "Hong Kong" as Hong Kong, China; "Solomon" as Solomon Islands, and "Timor" as Timor-Leste.

On the cover: Children enjoying a day at the beach in Fiji (photo by ADB).

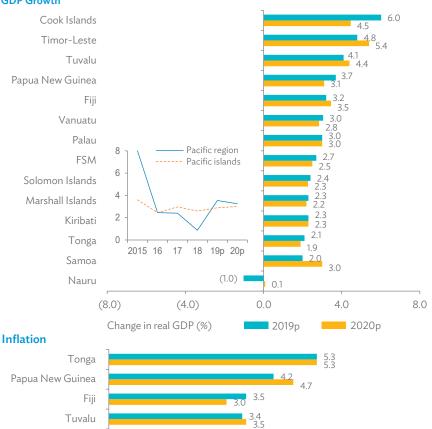
Cover design by: Cecil Caparas and Rommel Rabanal.

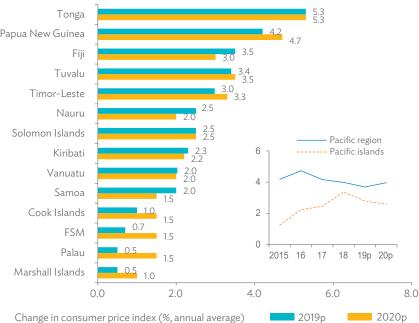
#### **Abbreviations**

**APTC** Australia-Pacific Technical College DMC developing member country Federated States of Micronesia FSM **GDP** gross domestic product **IMF** International Monetary Fund **PNG** Papua New Guinea PRC People's Republic of China Republic of the Marshall Islands RMI SOE state-owned enterprise

### **Asian Development Bank Projections**

#### **GDP Growth**





FSM = Federated States of Micronesia, GDP = gross domestic product, p = projection. Notes: Projections are as of December 2018 and refer to fiscal years. Regional averages of GDP growth and inflation are computed using weights derived from levels of gross national income in current United States dollars following the World Bank Atlas method. Averages for Pacific islands exclude Papua New Guinea and Timor-Leste. Timor-Leste's GDP is exclusive of the offshore petroleum industry. Source: ADB estimates.

#### **Notes**

This Monitor uses year-on-year (y-o-y) percentage changes to reduce the impact of seasonality, and 3-month moving averages (m.a.) to reduce the impact of volatility in monthly data.

Fiscal years end on 30 June for the Cook Islands, Nauru, Samoa, and Tonga; 31 July for Fiji (starting 2017); 30 September for the Marshall Islands, the Federated States of Micronesia, and Palau; and 31 December elsewhere.

This special issue of the *Pacific Economic Monitor* celebrates the 52nd ADB Annual Meeting (1–5 May 2019) in Fiji—the first time this yearly gathering is held in the Pacific. The first section on Country Economic Issues contains the latest near-term economic outlook for the Pacific, as well as medium- to long-term policy challenges, as presented in *Asian Development Outlook 2019*.

Further, from its first edition published in May 2009, the Monitor has explored topical policy issues critical to development discourse in the subregion. The second section features a selection of Policy Briefs from the first 25 regular issues of the Monitor published over the past decade, with short updates highlighting latest trends and developments. Selected briefs examine climate change, disasters, high cost structures, social service delivery, gender, and labor—topics that remain highly relevant to Pacific development today.

# COUNTRY ECONOMIC ISSUES

# Fiji

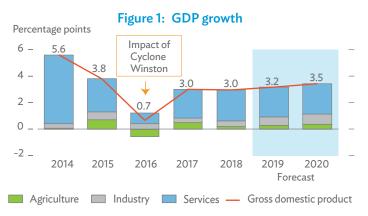
# Lead author: Shiu Raj Singh

Note: Shortly after the data cutoff for Asian Development Outlook 2019, the Fiji Bureau of Statistics released a new national accounts series, with data rebased to 2014. This new series will be used as the basis for ADB's projections for the Fiji economy starting with the next regular issue of the Pacific Economic Monitor in July 2019.

Estimated growth in 2018 is unchanged from 2017, sustained by continued expansion in visitor arrivals, increased agricultural production, and continuing reconstruction of cyclone damage incurred in 2016. Inflation rose and the current account deficit expanded. Growth will accelerate in 2019 and 2020 as inflation and the current account deficit ease. Government policies supporting tourism growth need to ensure that development is appropriate and sustainable.

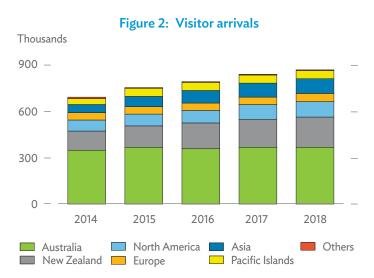
#### **ECONOMIC PERFORMANCE**

The economy grew by 3.0% in 2018 with contributions from agriculture, forestry, and construction, and particularly with continued growth in tourist arrivals (Figure 1). Despite two cyclones that caused flooding, sugarcane production increased to 1.7 million tons, up by 4.0% from 2017, though cane quality suffered and milling efficiency declined. Timber harvested from pine and mahogany plantations increased substantially for higher forestry output. Gold production declined, but food, beverages, tobacco, sawmilling, and the manufacture of wood products all experienced growth.



Sources: Fiji Bureau of Statistics; ADB estimates.

Private construction grew strongly in 2018 with increased new construction augmenting maintenance and repair. Visitor arrivals grew by 3.3%, bringing tourism earnings to the equivalent of 20% of GDP and boosting employment in the industry (Figure 2). Japan contributed the most to this increase with the resumption of direct flights. Visitor arrivals were higher as well from Europe, New Zealand, and parts of Asia, notably the People's Republic of China.



Source: Fiji Bureau of Statistics.

Despite frequent disasters, economic growth in Fiji has been uninterrupted since 2010. In 2018 the national statistics office increased its estimate of growth for 2016 but reduced the estimate for 2017.

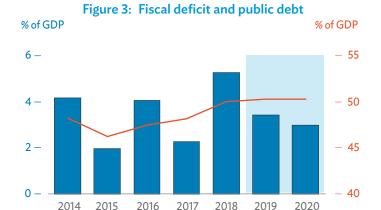
Consumption continued to grow in 2018, with new vehicle sales up by 7.2%, second-hand vehicle sales up by 11.5%, and collections of value-added tax up by 6.1%. Commercial bank lending for consumption grew by 9.2%.

Inflation rose to 4.1% in 2018, the largest category increase being beverages, tobacco, and other intoxicants mainly because of higher duties on alcohol and tobacco but also because production of kava declined. Prices for food and nonalcoholic beverage rose by 3.4%. Prices fell for household goods and health care.

The fiscal deficit in fiscal year 2018 (FY2018, ended 31 July 2018) was equal to 5.3% of GDP, more than double the deficit of 2.3% in FY2017, as operating and investment expenditures both rose (Figure 3). Government debt increased from the equivalent of 46.4% of GDP in FY2017 to 50.0%.

Monetary policy remained accommodative, with the policy interest rate unchanged at 0.5%. Financial system liquidity declined in 2018 along with foreign exchange reserves as imports expanded but remain adequate because the Reserve Bank of Fiji, the central bank, eased controls on external flows. Broad money increased by 3.1%. Average rates for time deposits of more than 36 months remained stable at 3.73%, just 1 basis point lower than 12 months earlier. The weighted average lending interest rate charged by commercial banks was also stable despite lower liquidity, increasing only marginally from 5.66% to 5.68%.

The current account deficit fell from the equivalent of 5.8% of GDP in 2017 to an estimated 5.2% as the surplus in services expanded on record visitor arrivals. Foreign currency reserves stood at \$1.0 billion at the end of the year, sufficient to cover 4.5 months of retained imports of goods and nonfactor services.



Note: Calendar year data for 2014; new fiscal year (August-July) data for 2015 onward.

Fiscal Deficit

**Forecast** 

Public debt

Source: Fiji Ministry of Economy.

#### **ECONOMIC PROSPECTS**

Growth is projected to improve to 3.2% in 2019. All sectors are expected to grow, with tourism in the lead, but construction will likely contribute substantially, considering high bank lending for real estate and the number of projects in progress. Tourism will continue to drive growth higher to 3.5% in 2020, with other contributors also strong. Growth forecasts assume that public resources will go into productive investments in infrastructure, but growth is unlikely to reach the trend that existed before Cyclone Winston in 2016 because the government plans to ensure that public debt does not exceed the government-set ceiling equal to 50.0% of GDP.

Planned investments in transportation and in water supply and sanitation in the greater Suva area are expected to contribute to growth in construction over the medium term. In addition, public investment in flood control structures in urban areas of Nadi should improve confidence in the tourism industry and encourage more investment.

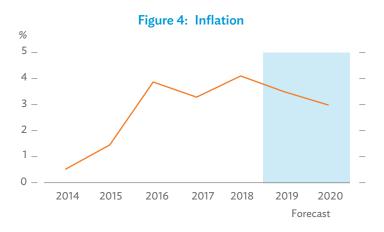
Table 1: Selected economic indicators (%)

	2019	2020
GDP growth	3.2	3.5
Inflation	3.5	3.0
Current account balance (share of GDP)	-4.7	-4.2

Source: ADB estimates.

Agriculture and forestry are important suppliers of exports with significant domestic value added. They are expected to continue growing, assuming no weather shocks, and contribute to economic growth. Fiji's largest sawmill has undertaken significant upgrades that promise to boost timber and wood chip production. Government policies supporting the sugar industry and mill improvements should encourage sugar output. Mining and quarrying are also expected to contribute to growth. A new iron sand mine slated to become operational this year has invested in dredgers and port facilities toward extracting 750,000 tons of magnetite concentrate annually to be sold to steel mills in the People's Republic of China. Tourism is on track for another record year and likely to benefit from reduced travel costs as fuel prices fall. Expanded private investment in tourism will contribute to continued growth in construction. Inward remittances are expected to continue growing in 2019 on increased seasonal employment in Australia and New Zealand.

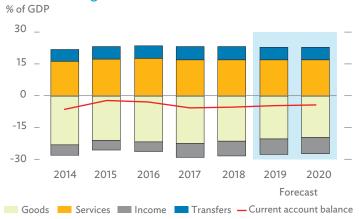
Inflation is expected to ease to 3.5% in 2019 and 3.0% in 2020 as international prices remain low, but domestic tax measures and strengthening demand will prevent further deceleration (Figure 4).



Sources: Fiji Bureau of Statistics; ADB estimates.

Exports of goods are expected to grow as shipments of magnetite concentrate commence, and as the sugar and timber industries continue to recover. This, together with higher earnings from tourism, is expected to result in a narrowing of the current account deficit by 0.5 percentage points in 2019 and again in 2020 (Figure 5).

Figure 5: Current account balance



Source: Reserve Bank of Fiji.

# POLICY CHALLENGE—ENSURING A SUSTAINABLE TOURISM INDUSTRY

Like many other Pacific island nations, Fiji depends increasingly on tourism to drive growth and provide employment. Visitor arrivals increased from 2010 to 2018 at an average annual rate of 5.5%. With tourism earnings now providing a fifth of GDP, the business is central to employment, incomes, and poverty reduction. More tourists now insist on authentic cultural experiences and pristine nature, which is likely to continue benefiting Fiji in the future.

Fiji's tourism industry depends crucially on the environment, and any degradation threatens to undermine it. Tourism growth needs to be managed to minimize its environmental impacts. As the industry matures and moves into a more complex phase of development, greater coordination of policy and the regulatory environment will become necessary to ensure both maximal development impact and continuing sustainability. Fijian Tourism 2021, which provides a cohesive tourism strategy and plan, is a step in the right direction. However, the formulation and implementation of a broader sustainable development framework is still critically needed, as is the implementation of Fiji's Green Growth Framework and better compliance with existing environmental laws and policies.

In addition to public sector efforts to improve planning and regulations, Fiji needs a business environment conducive to appropriate private investment and commitment to sustainable tourism initiatives. Finally, public infrastructure must do more than facilitate private investment. It must be able to withstand the impacts of climate change and heightened weather variability.

# Papua New Guinea

#### Lead author: Edward Faber

An earthquake disrupted production from major resource projects in 2018, slowing growth. However, economic circumstances improved with higher commodity prices, easier access to foreign exchange, and the government's continued commitment to fiscal consolidation. Inflation eased, and the current account posted another large surplus. Sustained adoption of market-oriented policies and ongoing structural reform are needed to attract foreign capital.

#### **ECONOMIC PERFORMANCE**

A large earthquake in February 2018 undermined growth, but the impact was somewhat mitigated by higher commodity prices, activity associated with the Asia-Pacific Economic Cooperation (APEC) summit in Port Moresby in November 2018, and reconstruction in the earthquake-affected zone. Accordingly growth for the year remained positive at 0.2%. Credit to the private sector picked up by about 7% in 2018, and employment ceased to decline. The availability of foreign currency improved with greater inflows, though private businesses continued to be stymied by delays in accessing it.

The oil and gas industry, which constitutes 20.2% of GDP, contracted in 2018 primarily because of damaged facilities and lost output caused by the earthquake. Output of liquefied natural gas (LNG), which provides an estimated 14.9% of GDP, fell by 8.8% in 2018. Production of oil and condensate, which together account for more than 4% of GDP, were also lower (Figure 6).

Figure 6: Contributions to growth

Percentage points 15 \_ 12 \_ 9 \_ 6 \_ 3.7 3 \_ 0 -3 \_ 2014 2015 2016 2017 2018 2019 2020 Estimate Forecast Mining & petroleum Agriculture Services Electricity, gas, & water Construction Manufacturing Gross domestic product

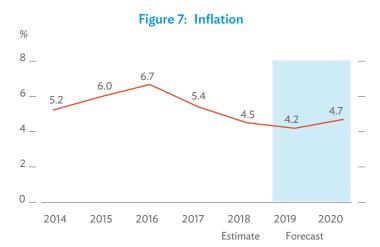
Sources: Papua New Guinea national budget documents, various years; ADB estimates.

Gold production from Porgera, a large mine in the highlands, was hit by the earthquake, but this loss was largely offset by increased production from the country's largest gold mine on the island of Lihir, New Ireland. Production from the Lihir mine, which has the third-largest reserves of gold in the world, grew by 6.2% in 2018, with total output equal to 5.0% of GDP. Production from some mediumsized mines, including the Kainantu gold mine, was also higher in 2018. An estimated 80,000 small-scale alluvial miners increased production by over 7% in 2018, earning combined revenues of about \$120 million.

The economy apart from mining and petroleum is estimated to have grown by 3.1% in 2018. The APEC summit in 2018 boosted growth to some extent, channeling business to hotels, restaurants, and transportation providers, and accelerating growth in construction. Higher government spending and the improved availability of foreign exchange also supported growth.

The agriculture, forestry, and fisheries sector, which makes up about 17.0% of GDP, had mixed results in 2018. Farm production, including vegetables and fruit for the domestic market, continued to expand steadily on increased demand from population growth and with improved access to markets thanks to new infrastructure such as roads and bridges. Palm oil is the largest agricultural export, providing 1.3% of GDP, but export volume in 2018 fell below that of 2017 because of a carryover effect from the 2016 El Niño event. Cocoa production was lower in 2018, but coffee production was higher. Forest products, largely logs for export, increased in 2018.

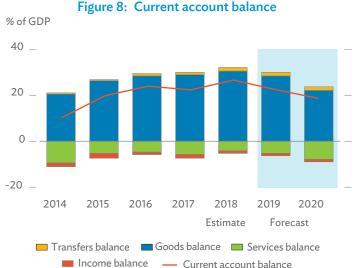
Inflation eased to 4.5% in 2018 as foreign exchange became more readily available and the money supply contracted (Figure 7). Prices for food, betel nut, and beverages, which had earlier spiked due to drought, increased only slightly in 2018. However, higher oil prices pushed up transportation costs. Prices for health care increased by 9.0%, and for clothing and footwear by 8.3%, in 2018. Hotel and restaurant prices rose by 8.2%, largely because of the APEC summit.



Sources: Bank of Papua New Guinea Quarterly Statistical Tables; ADB estimates.

The Bank of Papua New Guinea, the central bank, maintained a neutral monetary policy in 2018, with the main policy rate, called the kina facility rate, maintained at 6.25%, a slight premium over the rate of inflation. There is no transmission of the policy rate to banks' lending or deposit rates because commercial banks can source cheap local currency deposits. This is largely due to excess liquidity, arising in part from a tough lending environment. Although there is ample liquidity in the system, broad money contracted by 8% in 2018 as statutory authorities transferred their deposits from banks into government coffers in accordance with revenue reform measures.

The current account posted a large surplus in 2018 equivalent to 26.7% of GDP in 2018 (Figure 8). Oil and gas prices lifted the surplus and helped to overcome the effects of the earthquake. LNG exports were the largest contributor to the surplus. Foreign currency reserves increased by 33.6% to \$2.3 billion at the end of 2018, providing cover for 11.6 months of imports. The main source was \$940 million in new external sovereign borrowing.

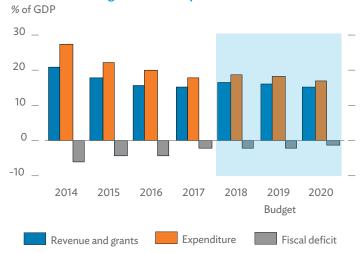


GDP = gross domestic product. Sources: Bank of Papua New Guinea Quarterly Statistical Tables; ADB

estimates.

Government revenue increased by 16.3% in 2018, benefiting from improved tax compliance and higher collections of mining and petroleum taxes and dividends with the rise in commodity prices (Figure 9). Taxes and dividends from the Papua New Guinea (PNG) LNG project were \$267 million, according to the Department of Treasury, equal to 1.1% of GDP. Expenditure almost kept pace with revenue growth, however, increasing by about 15% in 2018, brought higher by arrears carried over from 2017 and a steeper public sector wage bill. In a supplementary budget, the Department of Treasury projected the 2018 fiscal deficit at the equivalent of 2.3% of GDP, in line with the government's strategy to reduce the fiscal deficit, but the final outcome is expected to be slightly higher.

Figure 9: Fiscal performance



GDP = gross domestic product.
Sources: Papua New Guinea national budget documents, various years.

#### **ECONOMIC PROSPECTS**

Growth is projected to rebound in 2019 with a return to a full year of production of gold, LNG, oil, and condensate (Table 2). LNG production is forecast to expand by 9%–16% in 2019. If production reaches the higher end of this range, the growth forecast may need to be revised upward. Condensate and oil production are similarly expected to rebound in 2019, though oil production is on a declining trend and condensate production is forecast to start falling by 2020. Gold output should expand in 2019 as the Porgera mine enjoys a full year of uninterrupted production.

Table 2: Selected economic indicators (%)

	2019	2020
GDP growth	3.7	3.1
Inflation	4.2	4.7
Current account balance (share of GDP)	22.5	18.5

Source: ADB estimates.

Agriculture should also expand in 2019 assuming oil palm rebounds to the kind of output achieved in 2017. Fisheries are expected to grow steadily, and forestry may also expand, though a proposed ban on log exports may be introduced in 2020, causing production to fall. Coffee, cocoa, and copra will continue to experience volatility in production year-on-year because of weather variation and changes in global commodity prices.

A number of major resource projects are set to drive growth in the medium term. The Papua LNG project and the PNG LNG expansion project together are forecast to attract foreign direct investment in excess of \$10 billion, with construction expected to commence in 2020. The forecast period should also see construction start on the \$2.8 billion Wafi-Golpu gold and copper mine project. A telecommunication fiber-optic cable connecting Port Moresby with

Sydney is scheduled for completion toward the end of 2019 and has the potential to significantly increase internet speed and reduce costs, which should facilitate business growth.

Inflation is expected to ease slightly in 2019 as foreign exchange becomes more available and following the recent contraction in the money supply. In 2020, inflation is expected to pick up again with the commencement of new resource projects.

The current account surplus is expected to shrink somewhat as oil and gas prices sink below those of 2018. Imports should pick up with the greater availability of foreign exchange. In 2020, imports should rise even more rapidly as construction begins on new projects, further shrinking the current account surplus. The new resource projects will attract significant inflows of foreign exchange, finally ending the era of foreign currency shortages.

The 2019 budget targets a fiscal deficit equal to 2.1% of GDP, which aligns with the government's fiscal consolidation strategy. Targets become progressively lower, with the 2022 deficit intended to equal 1.0% of GDP. Revenue including grants is forecast at 16.1% of GDP in the 2019 budget and is seen to increase by 6.5% largely through ongoing reform, including the recent establishment of an office dedicated to handling large tax payers. Mining and petroleum taxes and dividends, which are forecast to equal 2.1% of GDP, assume an oil price of \$68 per barrel, meaning that a lower average oil price would cause revenue to fall below expectations, possibly widening the fiscal deficit or forcing cuts to expenditure, which is forecast to equal 18.2% of GDP. The government's expenditure strategy would reallocate spending from current to capital expenditure, which aligns with the government's Medium Term Development Plan 3, 2018-2022 to increase spending on infrastructure. The 2019 budget seeks to reduce current expenditure, including the public sector wage bill, but this may prove to be challenging.

The deficit will be financed by external borrowing, including budget support loans from multilateral institutions and proceeds from a 2018 sovereign bond. External debt has been on the rise in recent years, projected by the Department of Treasury to reach the equivalent of 13.6% of GDP by 2020, when it will be 44.8% of total central government debt (Figure 10).

Figure 10: Public debt outstanding



Sources: Papua New Guinea national budget documents, various years.

# POLICY CHALLENGE—RESOLVING FOREIGN CURRENCY SHORTAGES

Shortages of foreign currency have been a key constraint on the private sector in recent years, with importers having to queue to receive foreign currency, sometimes for several weeks until it becomes available. These circumstances have dragged on the economy. Business surveys found foreign currency shortages to be among the worst impediments to doing business.

From January 2010 to June 2012, during the construction of PNG LNG and a period of buoyant commodity prices, large inflows of foreign currency caused significant appreciation of the kina, by 33% in real terms (Figure 11). Central bank reserves grew accordingly, from \$2 billion in 2007 to over \$4 billion in 2012.

Figure 11: Real and nominal exchange rates
January 2000 = 100

Nominal Effective Exchange Rate

Real Effective Exchange Rate

Note: January 2010=100.

Sources: Bank of Papua New Guinea; International Monetary Fund.

AUS\$ per Kina
US\$ per Kina

This trend reversed in 2012 as PNG LNG construction ended and commodity prices began to slide. This put significant downward pressure on the kina and on international currency reserves. The central bank intervened to stem the pace of depreciation by introducing in July 2014 a trading band and a policy of rationing foreign exchange. These interventions prevented the exchange rate and currency trading from adjusting to market conditions, finally appearing as shortages of foreign exchange.

Managing the foreign exchange imbalance has been a challenge for the authorities, who fear that significant inflation could result if the market determined the exchange rate.

The foreign currency environment improved in 2018. Whereas there was only minimal kina depreciation in 2017, in 2018 the kina depreciated about 4% against the US dollar, which is seen as having helped to ameliorate the foreign exchange imbalance. The central bank intervened further in 2018, supplying \$695.2 million to the market, more than three times the \$227.0 million it supplied in 2017. This was enabled by higher commodity prices that improved earnings in the form of taxes, dividends, and royalties from resource

projects, including from PNG LNG. In addition, a portion of foreign currency was released from the \$940 million of new sovereign borrowing in 2018. The central bank reported that the waiting time to clear foreign exchange orders was shortened in 2018 as pending foreign exchange orders fell by 48% from K2.5 billion in January 2018 to K1.3 billion in January 2019.

In 2019, the foreign currency backlog should continue to shrink as the central bank injects more foreign exchange into the system at the same rate as 2018 or higher thanks to proceeds from its 2018 sovereign borrowing and up to \$450 million of new sovereign borrowing planned for 2019 (Figure 12). The central bank has increased its monthly allocations to up to \$60 million in recent months. Continued allocations will allow the rolling up of another backlog, this one composed of undeclared dividends estimated by market participants at about \$500 million. These are retained profits held by foreign companies operating in PNG and heretofore unable to remit currency overseas. In the longer term, observers predict, new plans for large resource projects expected to begin in 2020 will bring significant inflows of foreign exchange, helping to restore the market to equilibrium.

Figure 12: Gross international reserves



SDR = special drawing rights.

Note: Data on monetary gold, SDR holdings, and imports for the December 2018 quarter are not yet available. Imports are based on free-on-board values. Source: Bank of Papua New Guinea. *Quarterly Statistical Bulletins*.

While a market-determined exchange rate allows equilibrium that puts an end to foreign exchange shortages and removes distortions that can hurt exporters and industries that compete with imports, ongoing structural reform is just as critical for attracting foreign capital and helping to build an economy that is more diversified and shock resilient. Many such reforms are outlined in the Medium Term Development Plan 3, 2018–2022, recently released by the government. They include increasing investment in infrastructure to facilitate business and trade, expanding access to investable land, continuing revenue-raising reform, and improving the management of public finances.

# Solomon Islands

# Lead authors: Jacqueline Connell and Prince Cruz

Despite rising exports of timber, fish, and minerals, growth decelerated in 2018 as government spending slowed and cash crop yields declined. Inflation rose on higher taxes but will ease this year and next. Growth will likely slow in 2019 and 2020 as new construction only partly offsets lower logging output. The current account deficit is expected to return to deficit, reversing last year's surplus. A tax review shows progress, but broadening the revenue base remains a challenge.

#### **ECONOMIC PERFORMANCE**

Economic growth is estimated to have slowed slightly to 3.0% in 2018 (Figure 13). Log output continued to outperform expectations and increased by 2.6% in 2018 to a record 2.7 million cubic meters (Figure 14). Higher volume and global prices sent the value of log exports up by more than 25.0%. Exports of minerals, notably bauxite and nickel, rose by 29.9%. Fish exports grew 15.1%, in line with growth in the previous year. However, the export value of most crops declined in 2018, with copra and coconut oil falling the most. The exception was cocoa, which reversed a plunge by 47.5% in 2017 with a rebound by 42.7% in 2018.

Figure 13: Supply-side contributions to growth Percentage points

4\_ 1.8 3.0 2.3 -2 \_ 2014 2015 2016 2017 2018 2020 Estimate Forecast Industry Agriculture Services

Sources: Solomon Islands National Statistics Office; ADB estimates.

Growth in services slowed to 3.5% in 2018. Wholesale and retail trade decelerated, due to lower cash crop output and higher taxes, and as growth in government spending slowed. Industry expanded 1.2% in 2018, mainly on higher mining.

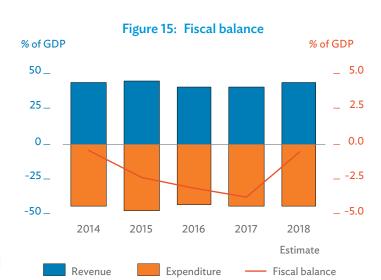
Gross domestic product

Figure 14: Logging output and exports



Sources: Solomon Islands National Statistics Office; ADB estimates.

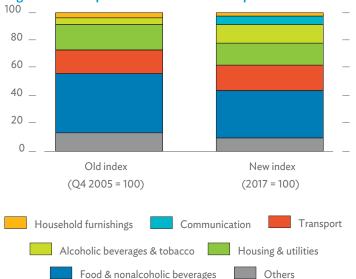
The government made a concerted effort to restore fiscal stability after several years of widening deficits, which had significantly reduced its cash reserves, undermining their usefulness as a buffer against shocks. The fiscal deficit narrowed from the equivalent of 3.8% of GDP in 2017 to 0.6% in 2018 (Figure 15). Growth in government spending slowed with substantial reductions in development expenditure. Revenue rose on higher log export duties, estimated to be up from 2017 by more than a fifth, and budget support from development partners. A domestic development bond helped to capitalize a new state-owned enterprise to lay an undersea telecommunications cable.



Sources: Solomon Islands Ministry of Finance and Treasury budget documents; ADB estimates.

A new price index introduced in 2018 showed inflation accelerating to 3.3% in 2018, mainly on higher prices for domestic goods; partly reflecting hikes in the goods tax, excises on alcohol and tobacco, and import duties on fuel. The new price index lowered the share for food mostly in favor of alcohol and tobacco, based on the results of the 2012–2013 Household Income and Expenditure Survey (Figure 16).

Figure 16: Components of the consumer price index basket

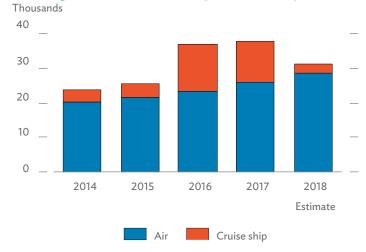


Q = quarter.

Source: Central Bank of Solomon Islands.

The current account turned into a surplus equal to 3.9% of GDP in 2018, mainly on a 21.2% rise in exports of goods that exceeded import growth at only 8.8%. Tourism receipts jumped by a fifth. Arrivals by air grew by about 10% in 2018, and the average length of stay rose from 13 days in 2017 to 15 days in 2018. Fewer cruise ships visited, though, dragging down arrivals by sea to a fifth of 2017 arrivals (Figure 17).

Figure 17: Visitor arrivals by mode of transport



Sources: Solomon Islands National Statistics Office; ADB estimates.

Gross international reserves rose by 8.3%, providing import cover for 15 months. Monetary policy remained relatively accommodative in 2018 as the money supply rose by 6.0% and bank loans by 7.8%

#### **ECONOMIC PROSPECTS**

Growth is projected to slow to 2.4% in 2019 as logging tapers but is partly offset by construction on large infrastructure projects, with growth slowing a bit more to 2.3% in 2020. The Forestry Sustainability Policy, approved in 2018, aims to reduce log production to a more sustainable rate by introducing export caps. The economic impact is potentially large, given that logging supplied some 72% of exports in 2018 and is the country's largest employer after the government. With El Niño weather disturbances expected in 2019, the fish catch will likely suffer, and recovery in cash crops may sputter.

Growth will depend on infrastructure investments in roads, airports, and the undersea telecommunications cable financed by development partners. Construction of the Tina River Hydropower Project is expected to commence in 2020, after delays in signing the electric power purchase agreement.

The government aims to balance the budget in 2019 by further cutting government development expenditure, which is nearly a third lower than in 2018. Partly offsetting this, the payroll budget is projected to increase by 15% from 2018 to accommodate new staff positions and increased allowances, including a 3.5% boost to cost of living allowances for all public servants. A national election scheduled for April 2019 may put additional pressure on government spending and the budget, including an increase for police security.

The Forestry Sustainability Policy is expected to weigh on government revenues in the medium term. The government projects logging export duties to fall in 2019 by 16% from 2018. It hopes to claw back some revenue by raising logging license fees and improving compliance, while recent amendments to the withholding tax and the goods tax should also increase collections. The fiscal deficit is expected to widen in 2020 as government investment in the Tina River Hydropower Project begins.

Table 3: Selected economic indicators (%)

	2019	2020
GDP growth	2.4	2.3
Inflation	2.5	2.5
Current account balance (share of GDP)	-1.4	-2.6

Source: ADB estimates.

Lower inflation is expected as a base effect from higher taxes in 2018 dissipates and as global commodity prices fall, in particular for oil. However, the increased cost of living allowances for public servants threaten to stoke inflation in 2019.

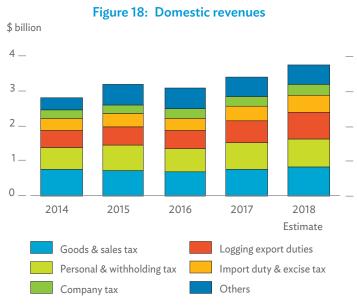
As logging exports taper and imports for construction projects rise, the current account balance is expected to turn back into deficits to the equivalent of 1.4% of GDP in 2019 and 2.6% in 2020. On the other hand, visitor arrivals by air are expected to continue to grow, boosting exports of services.

The reopening of the country's sole gold mine, Gold Ridge, poses an upside risk to the forecast. Rehabilitating the mine, which closed in 2014 following flashfloods, could possibly spur growth. This prospect is a reminder that the government needs to continue strengthening its regulation and taxation of mining to maximize its benefits and encourage inclusive growth.

Any delays in infrastructure projects, particularly Tina River, would weigh on growth. The only domestic bank in Solomon Islands provides key services to the logging industry but lost its correspondent bank relationship for US dollars in 2018. The problem was resolved by yearend, but it highlights the challenge to the economy and government financing posed by heavy reliance on revenue from the logging industry.

### POLICY CHALLENGE—SUSTAINING TAX REFORM

The current tax structure of Solomon Islands is complex, outdated, and expensive to administer. It is heavily biased toward consumption taxes, partly reflecting dependence on imports and the relatively small proportion of people in formal employment and business (Figure 18). By relying on high rates applied to a narrow base, the tax system discourages compliance.



Sources: Solomon Islands Ministry of Finance and Treasury budget documents; ADB estimates.

Getting the tax system right is important in light of expected declines in logging revenue in the medium term. In November 2017, the Ministry of Finance and Treasury began a system review with the aim of making revenue collection more efficient, fair, and equitable.

The first phase of the tax review has focused on tax administration and consumption taxes. The next phase will address income tax with

the aim of lowering marginal tax rates and expanding the tax base. Currently, the highest marginal tax rate is 40% for taxable annual incomes higher than SI\$60,000, which is five times GDP per capita in 2017. In 2016, only 4.6% of registered income tax payers filed an income tax return.

In 2018, Parliament enacted amendments to the Goods Tax Act that increased excise taxes on alcohol and tobacco and changed procedures for collecting withholding taxes to improve compliance and bring them in line with international practice. These measures will generate more revenue and fiscal space with which to respond to shocks.

# Timor-Leste

#### Lead author: David Freedman

The economy contracted as political uncertainty disrupted and reduced public spending. Inflation revived, and the current account narrowed. The formation of a new government and approval of the 2019 budget pave the way for fiscal stimulus that will drive growth in 2019 and 2020. While the government plans to play a more active role in developing onshore oil and gas processing, diversification into hardwood forestry could, if sustainably managed, offer valuable benefits.

#### **ECONOMIC PERFORMANCE**

Reductions in public spending caused GDP excluding the large offshore petroleum sector (hereafter GDP) to contract by 0.5% in 2018 (Figure 19). Following a sharp decline in 2017, public expenditure excluding grants from development partners, which are off budget, fell by a further 2.8% in 2018 to \$1.16 billion. While public capital investment increased significantly, it was more than offset by lower recurrent spending. Payments for salaries and wages fell by 2.2%, purchases of goods and services by 9.3%, and transfer payments by 23.9%, reflecting lower payments to the Special Administrative Region of Oe-Cusse Ambeno (Figure 20).

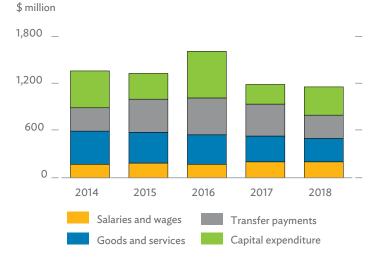
% 12 8 5.4 5.1 4.8 3.5 4 -0 5 -4 2014 2015 2016 2017 2018 2019 2020 Agriculture Services Industry Gross domestic product

Sources: Statistics Timor-Leste; ADB estimates.

Figure 19: Supply-side contributions to growth

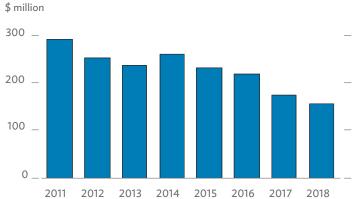
Public spending problems reflected political uncertainty that continued through much of 2018. Parliament was dissolved in March without approving a budget. This left the government to operate in the first part of the year under a duo-decimal budget regime, which allowed monthly budget appropriations of up to one-twelfth of the 2017 budget. In September, a budget for the remainder of 2018 was approved. It called for rapidly scaling up expenditure, but implementation was constrained by its late approval. The resulting decline in public spending was compounded by a reported 10.3% drop in grants from bilateral and multilateral development partners to \$156.0 million, equal to 9.5% of GDP (Figure 21).

Figure 20: Public expenditure components



Source: Timor-Leste Budget Transparency Portal.

Figure 21: Grant inflows



Source: Timor-Leste Budget Transparency Portal.

Tighter fiscal policy constrained demand for a range of consumption and investment goods. Merchandise imports declined by 11.5% on lower imports of foods, consumer goods, construction materials, and equipment and machinery. With new vehicle registrations down by 19.4%, the value of vehicle imports fell by 48.1%. Shifts in the aviation market saw a reduction in the number of international flights and large increases in ticket prices on key routes. These developments and reduced demand from business travelers saw growth in international visitor arrivals plunge from 12.0% in 2017 to 1.1% in 2018.

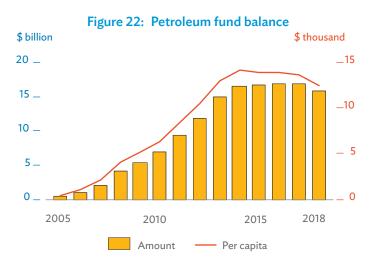
Production of maize and rice, the two largest staple crops, posted large gains in 2018 on expanded planting area and a modest increase in productivity. Cash crop production was also strong, with coffee exports up by 34.3% and rising exports of niche products such as cloves and vanilla.

The consumer price index rose by 2.1% in 2018 despite weak consumer demand, with food up by 1.5%, tobacco up by 17.1%, and transportation up by 3.9% because of higher fuel prices. While inflation was driven largely by higher prices for imported goods, prices for non-tradable items also increased, by 2.0%. Conditions in the finance sector reflected the challenges caused by tighter fiscal policy. Bank deposits reversed average growth of 20.5% per annum during 2013–2017 to fall by 1.6% in 2018. Separately, one bank closed its retail operations. Lending to the private sector increased by 3.6% with reduced lending to construction firms and private individuals, being offset by increased lending to businesses in other sectors.

Tasi Mane, a government project to develop oil and gas processing on the south coast, gained momentum in 2018. The government has agreed to purchase the equity of two existing stakeholders in the Greater Sunrise gas field. This will give the government a 56.6% majority share in the joint venture, which may remove key obstacles to developing the field and the onshore processing of gas at a new liquefied natural gas plant at Beacu, a town on the south coast. Investments to support this plan moved forward in 2018 with the opening of a new international airport in Suai and the completion of the first phase of a new highway linking Suai to Beacu.

Taxes and royalties from the Bayu-Undan oil field rose by 21.0% in 2018 and accounted for 48.2% of government revenues. Petroleum Fund investments generated \$365.1 million in cash income, but overall return on assets posted a loss of 2.63%, largely because of a sharp decline in the fund's equity portfolio in the final quarter. The fund ended the year with a balance of \$15.8 billion, or \$12,500 per capita (Figure 22).

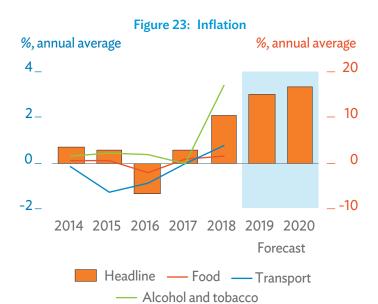
Income from petroleum production that beat expectations, and a narrowing of the trade deficit in goods and services, narrowed the current account deficit from the equivalent of 17.5% of GDP in 2017 to 11.8%.



Source: Timor-Leste national budget documents, various years.

#### **ECONOMIC PROSPECTS**

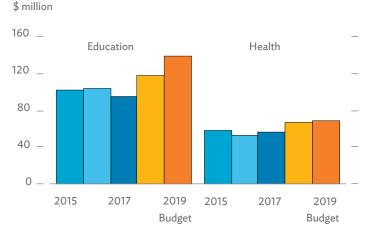
The economy is projected to grow by 4.8% in 2019, and 5.4% in 2020 on fiscal stimulus and renewed investor confidence. Inflation is projected to accelerate to 3.0% in 2019 as domestic demand recovers and to 3.3% in 2020 with higher prices for imported food (Figure 23).



Sources: Statistics Timor-Leste; ADB estimates.

The 2019 state budget will provide strong fiscal stimulus. Approved in February 2019, the budget plans \$1.48 billion in expenditure, and a further \$162.6 million in grants from development partners spent off budget. Full execution would see public spending rise by 22.3% over 2018. Planned increases are concentrated in recurrent spending, budgeting 6.8% more for salaries and wages, 13.4% more for goods and services, and 35.6% more for transfer payments. These increases are partly driven by a budgeted 17.8% increase over the 2015–2018 average allocated for health programs and a 32.1% increase allocated for education (Figure 24).

Figure 24: Expenditure on education and health

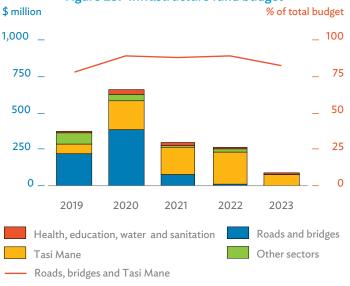


Source: Timor-Leste national budget documents, various years.

The budget includes \$2.0 billion for capital investment from 2019 to 2023, with 82.9% of it implemented through the Infrastructure Fund, an autonomous agency mandated to coordinate the preparation and financing of major projects. Public capital investment is set to increase by 27.6% in 2019 and a further 64.5% in 2020. Upgrading roads and bridges accounts for 59.4% of capital investment in 2019 and 2020, with investment in the Tasi Mane project accounting for a further 16.2% (Figure 25). Several other large investment projects are expected to move forward this year and next with government support. Construction on the new Tibar Bay port formally commenced in August 2018 and will ramp up in 2019. The initial investment to develop the project is estimated at \$280 million, of which the government contributed \$129.5 million. Separately, the government has contributed \$50 million for equity investment and other support to develop limestone mining and cement manufacturing in the Baucau region.

Rising capital investment will stimulate demand for construction services and boost employment. In agriculture, coffee production is expected to increase in 2019 with favorable weather so far, and the government will seek to consolidate recent increases in the area planted with maize and rice. Prospects for further growth in tourism hinge on a sustained reduction in the cost of travel to and from Timor-Leste, which rose sharply in 2018. Two separate groups of investors are developing plans for hotel and resort complexes close to Dili, and these projects will move ahead in 2019 and 2020 if they can secure the required financing and government support.

Figure 25: Infrastructure fund budget



Sources: Timor-Leste State Budget 2019; ADB estimates.

The revenue the government collects from domestic sources is projected to grow by an average of 5.0% annually during 2019–2023, but the bulk of public spending will be financed using withdrawals from the Petroleum Fund. The fund is currently invested in relatively low-risk foreign assets, with 60% invested in high-quality bonds and the remaining 40% in equities. The investment strategy is expected to change in 2019 following equity investment in the Greater Sunrise gas joint venture. In February the government adjusted the Petroleum Fund's investment rules to enable up to 5% to be invested

in new petroleum operations in Timor-Leste. These investments will be channeled through the national oil company, Timor Gap, and be structured as interest-bearing debt securities with a yield of 4.5% per annum. Once implemented, these changes will reduce to 35% the share of the portfolio that is allocated to international equities.

Table 4: Selected economic indicators (%)

	2019	2020
GDP growth	4.8	5.4
Inflation	3.0	3.3
Current account balance (share of GDP)	-12.0	-12.0

Source: ADB estimates.

The Petroleum Fund's sustainable income, or the amount that can be withdrawn from the fund each year without depleting it, is estimated at \$529.0 million in 2019. Given planned spending, actual withdrawals are projected at \$1.19 billion in 2019 and \$1.24 billion in 2020. Inflows to the fund from taxes and royalties from the Bayu-Undan field are projected to fall to \$343.7 million in 2019 (equal to 19.3% of GDP), rise modestly in 2020, and come to an end in 2023. Planned withdrawals in 2019 and 2020 mean that the Petroleum Fund balance is now projected to decline to \$15.1 billion at the end of 2020.

The fiscal stimulus that is planned for 2019 and 2020 will affect the current account balance. Increased imports of goods and services offset gains from higher petroleum income and grants, leaving the current account deficit at the equivalent of 12.0% of GDP in 2019 and 2020.

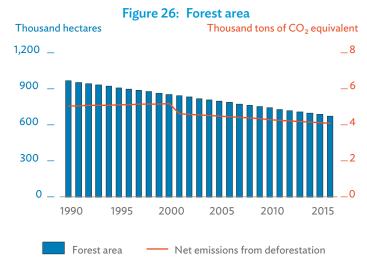
# POLICY CHALLENGE—DEVELOPING A SUSTAINABLE FORESTRY INDUSTRY

The development of forestry could make an important contribution to growth and job creation in the medium term. However, this would be sustainable only with well-coordinated policies to strengthen forest management and encourage tree planting.

The climate and soils in Timor-Leste are well suited to growing a range of valuable tropical hardwoods, and forests still cover an estimated 58% of Timor-Leste's land area (Figure 26). Sandalwood, which is prized for its fine fragrance, was the largest export for much of the colonial period. However, the overharvesting of wild stocks in the years before independence steadily undermined production, prompting a current moratorium on exports. Deforestation from population growth and the expansion of subsistence farming is an issue and one of the largest emitters of greenhouse gases in the country.

The government is committed to halting deforestation and developing new plantation forests. It has begun to establish sandalwood plantations in some areas, and many households plant

small numbers of trees close to their homes. Recent analysis of satellite data found 2,400 hectares of teak growing in stands of 0.1 hectares or larger. These stocks support a local furniture industry, but current production volumes would not support significant exports.



Source: Food and Agriculture Organization of the United Nations.

Developing forestry exports would require a significant increase in the area that is planted with teak and other valuable tree species. Analysis of satellite data has identified around 32,500 hectares of suitable land that is not currently forested, protected, or used to grow food. Preliminary estimates suggest that the development of a 30,000-hectare plantation estate could support the production of \$100 million worth of teak per year, equal to 6.3% of current GDP. The bulk of this production would be exported, and the establishment, maintenance, and harvesting of tropical hardwoods could create employment equal to 2,000 full-time jobs. Potential also exists to increase the value of wood generated in and harvested from natural forests by restocking selected native species such as sandalwood.

Developing a successful plantation sector is a long-term undertaking, requiring first the strengthening of forest management. In the short term, the key priorities include building human resources, developing an integrated forest information management system, and establishing long-term research and trial plots across the main agroecological zones. While some stakeholders may wish to see tree planting increased very rapidly, doing so without first establishing a strong knowledge base would pose an unnecessary risk that new plantations perform poorly or fail.

New plantations could be established using various models focused on smallholders and communities, or ranging up to government-managed planting on state land or larger-scale private investment. Uncertain land tenure is likely to deter private investment, but the government should try to leverage private sector capacity by developing a model for public-private partnership or using other mechanisms to mitigate risks and incentivize tree planting.

### Vanuatu

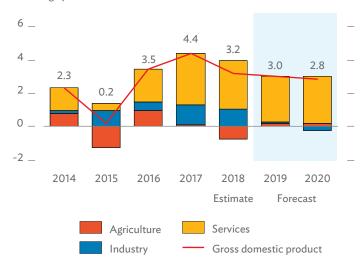
# Lead authors: Jacquelline Connell and Prince Cruz

Strong growth in construction and tourism sustained economic expansion in 2018 despite a disaster-induced contraction in agriculture. Inflation slowed, and the current account moved into surplus. Growth is expected to remain stable in 2019 and 2020 as tourism benefits from the completion of major infrastructure projects. With increased tourist arrivals, policies must ensure that benefits are broadly enjoyed and sustainable.

#### **ECONOMIC PERFORMANCE**

Economic recovery continued in 2018 as growth in services and industry supported expansion at 3.2% (Figure 27). This was down, however, from 4.4% growth in 2017 because of a sharp decline in the large agriculture sector caused by Cyclone Hola in March 2018 and a volcanic eruption on Ambae Island in Penama Province (Figure 28). Low prices for copra exacerbated a decline in output.

Figure 27: Supply-side contributions to GDP growth Percentage points

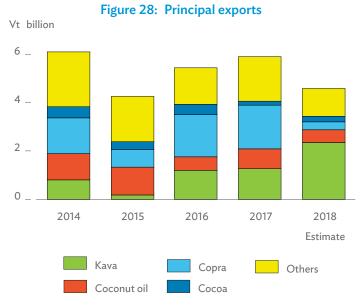


Sources: Vanuatu National Statistics Office; ADB estimates.

Growth in services increased from 2.9% in 2017 to 3.6% as tourism accelerated. Visitor arrivals rose by 7.8% to 358,000 visitors. This topped the previous record of 357,400 set in 2013. Arrivals by air rose by 4.7% in 2018, while cruise ship arrivals almost doubled that rate with growth of 9.2% (Figure 29). Slightly more than half of air travelers were from Australia, 13% from New Caledonia, and 12% from New Zealand. Travel and tourism are estimated to have contributed 45.0% of GDP in 2018.

Growth in industry remained strong as construction continued on major infrastructure projects: facilities to complement newly upgraded wharves in Port Vila and Luganville, rehabilitation of the main airport in Port Vila and other airports on outer islands, and road projects on multiple islands. Government capital expenditure doubled from 2017, most of it financed by development partners.

Renewable energy projects and private investment into touristoriented facilities and other businesses contributed to industry growth.



Sources: Vanuatu National Statistics Office; ADB estimates.

Figure 29: Visitor arrivals by mode of transport **Thousands** % change 400\_ 40 200\_ 20 -200 -20 2014 2015 2016 2017 2018 Estimate Cruise ship Air (% change)

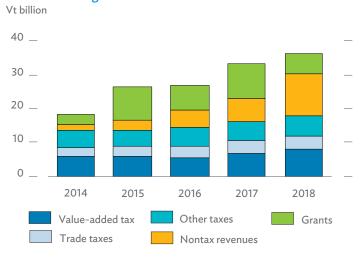
Sources: Vanuatu National Statistics Office; ADB estimates.

Government recurrent expenditure fell by 2.8% despite employee compensation rising by more than a quarter following a Government Remuneration Tribunal ruling in favor of higher public service salary scales. Although grants from development partners declined by 39.4% with the completion of major projects, total revenue rose by 9.5%. Nontax revenue, derived mainly from the sale of secondary citizenship, rose by 79.5% from 2017 and provided a third of all revenue. Nontax revenue has surpassed the value-added tax (VAT) as the biggest single source of domestic revenue despite a

Cruise ship (% change)

higher VAT following a rate increase in January 2018. Excise taxes and taxes on international trade were also higher (Figure 30). With expenditure rising by only 4.4%, the fiscal surplus expanded from the equivalent of 5.1% of GDP in 2017 to 6.8%. This allowed for early repayment of approximately 6% of government debt at the end of 2018.

Figure 30: Government revenues



Source: Vanuatu Department of Finance and Treasury.

The higher VAT rate notwithstanding, inflation eased from 3.1% in 2017 to 2.2% last year. While food prices rose by 4.1%, prices for clothing and for housing and utilities increased by less than 2.0%. The price index for education fell by 11.1%.

A fall in merchandise exports was offset by higher exports of services in the form of tourism and lower imports of goods and services, allowing the current account to climb to a small surplus equivalent to 0.5% of GDP. Higher exports of kava and cocoa only partly offset large drops in the export value of fish, copra, beef, and timber. Meanwhile, higher fuel imports only partly offset lower imports by value of food, basic manufactured products, and machinery and transport equipment.

### **ECONOMIC PROSPECTS**

Growth is expected to moderate to 3.0% in 2019 and 2.8% in 2020. Tourism looks set to remain strong, but construction will likely contract with the completion of major infrastructure projects. The performance of agriculture is anticipated highly uneven because it will take several years to grow replacements for livestock and damaged coconut and other crops.

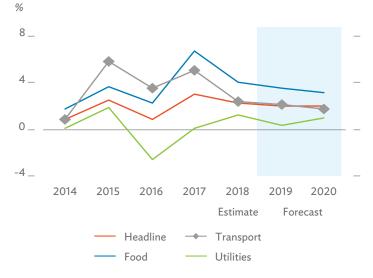
After several years of rapid growth fueled by reconstruction and infrastructure upgrading in the aftermath of Cyclone Pam, construction is expected to return to levels prevailing in earlier years. However, this reduction should be partly offset by expansion in retail trade, transportation, and accommodation and restaurants as these service areas benefit from higher tourist arrivals. Growth in public administration is expected to continue as the government implements various projects

to promote education and tourism, enhance disaster resilience, and implement higher wages mandated by the Government Remuneration Tribunal.

Spending under the 2019 budget is 40.9% higher than actual expenditure in 2018, though realizing expenditure in 2019 depends on a high level of grants from development partners. The government anticipates a fiscal deficit equal to 6.4% of GDP in 2019.

Inflation is expected to ease slightly to 2.0% in 2019 and 2020 as supply constraints caused by the recent disasters are resolved, bringing price stability for food and beverages (Figure 31). Transport inflation is also forecast to remain subdued with the completion of roads and other major infrastructure projects, and as international oil prices remain low. The current account surplus is expected to widen to the equivalent of 1.0% of GDP in 2019 and 1.5% in 2020 as tourism continues to grow and imports of goods and services decline with the completion of reconstruction projects (Figure 32).

Figure 31: Headline inflation and components



Sources: Vanuatu National Statistics Office; ADB estimates.

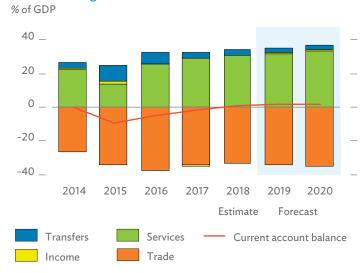
**Table 5: Selected economic indicators (%)** 

	2019	2020
GDP growth	3.0	2.8
Inflation	2.0	2.0
Current account balance (share of GDP)	1.0	1.5

Source: ADB estimates.

There are several risks to the forecast. As in most Pacific island economies, disasters pose an ever-present threat. The sustainability of the economic citizenship program also poses a risk to fiscal sustainability.

Figure 32: Current account balance



Sources: Reserve Bank of Vanuatu; ADB estimates.

# POLICY CHALLENGE—TOURISM AS A DRIVER OF SUSTAINABLE, INCLUSIVE GROWTH

Visitor arrivals are expected to continue rising in Vanuatu with the completion of major infrastructure projects geared for tourism, including airport rehabilitation, wharf upgrades, and waterfront development in Port Vila and Luganville. Air Vanuatu is exploring prospects for increasing flight frequency and introducing new destinations in Australia and New Zealand. The increase in flights is part of the Vanuatu Tourism Market Development Plan 2030, which targets holiday visitor arrivals by air reaching 300,000 by 2030 which is about three times the 2018 level.

As a key generator of employment and income in Vanuatu, tourism is pivotal to poverty reduction. However, the industry is vulnerable to disaster and, is currently concentrated in Port Vila and Luganville. Vanuatu faces a challenge in maximizing the positive benefits of tourism toward creating jobs and supporting inclusive, sustainable growth.

The government has made some progress in climate proofing new public infrastructure. This enhances the resilience of a tourism industry confronting frequent disasters and climate change. Improving facilities for water supply and sewage treatment outside Port Vila may encourage more tourists to venture into new areas, whilst providing benefits to local communities from improved water and sanitation. The expansion of technical and vocational training could help increase local employment in better-paid positions in growing hospitality and transport industries. Preserving Vanuatu's cultural and environmental assets will be crucial to the sustainability of tourism.

The benefits of tourism could be made more inclusive by enhancing links with suppliers in local communities of agriculture goods and services. Around 80% of the population depends on agriculture for livelihood, and an established network of farmers and traders already exists to provide services to hotels and other tourism facilities. The capacity and scope of these networks are limited, however, and many hotels and restaurants favor imported produce over local supplies. Ways to address these issues are proposed in the Vanuatu Agritourism Action Plan, which the government finalized in 2016.

# **North Pacific economies**

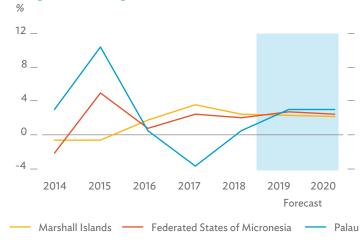
#### Lead authors: Rommel Rabanal and Cara Tinio

Growth last year weakened in the storm-hit Federated States of Micronesia (FSM) and in the Marshall Islands as construction slowed, but Palau achieved modest recovery on higher public and private investment. Reconstruction of damaged infrastructure is expected to boost growth this year in the FSM, as is recovering tourism in Palau, but capacity constraints will continue to slow expansion in the Marshall Islands. Trust funds can provide necessary fiscal buffers, smoothen government expenditure, and minimize growth volatility.

#### **ECONOMIC PERFORMANCE**

Although GDP growth trajectories diverged, fiscal year 2018 (FY2018, ended 30 September 2018) generally saw weak expansion across the North Pacific (Figure 33). The FSM weathered a disaster that temporarily slowed growth, which is resuming under subsequent reconstruction and recovery. The Marshall Islands grew more slowly as capacity constraints impeded infrastructure construction. In Palau, public and private investments drove recovery from steep contraction in FY2017.

Figure 33: GDP growth in the North Pacific economies



Note: Years are fiscal years ending on 30 September of that year. Sources: ADB estimates using data from the Republic of the Marshall Islands, Federated States of Micronesia, and Republic of Palau FY2017 *Economic Briefs*.

In March 2018, Tropical Depression Jelawat brought flooding and landslides to Pohnpei State in the FSM, damaging roads and other critical infrastructure. A state of emergency was declared, and following a joint damage assessment, the US approved in July a disaster funding under its Compact of Free Association with the FSM.

Stimulus from reconstruction partly offset the adverse economic impact of the disaster, keeping FY2018 growth fairly solid at 2.0%, albeit down from 2.4% in FY2017. Administrative support from the US helped to overcome some constraints on implementation capacity. This assistance supplements transitional arrangements that have been in place since July 2017, with the US Army Corps

of Engineers supporting compact-funded projects and helping to resolve project implementation issues.

In the Marshall Islands, growth slowed from 3.6% in FY2017 to 2.5%, and the economy remains dependent on infrastructure investment projects funded by development partners and US compact grants. Continuing capacity constraints in the Marshall Islands have stifled project implementation. As projects nevertheless reach completion, economic stimulus diminishes.

Palau's economy recovered to 0.5% growth FY2018, reversing 3.7% contraction in FY2017. Growth would have been stronger if a nascent rebound in tourism had not been cut short when two flight services were discontinued. Visitor arrivals grew by a solid 6.6% in the first half of FY2018 following a cumulative 29.9% drop in tourist numbers over the previous 2 years. However, the termination of Delta Airlines flights from Tokyo in May and the indefinite suspension of Palau Pacific Airways charter flights from Hong Kong, China in July drove visitor arrivals sharply down in the second half. For the whole year, tourist arrivals from Palau's two main sources dropped, from Japan by 5.4% and from the People's Republic of China (PRC) by 9.5% after it restricted tour groups transiting to Palau through Hong Kong, China. Consequently, total visitor arrivals fell by 5.0% in FY2018, the third consecutive year of decline (Figure 34).

Figure 34: Visitor arrivals in Palau by source

Thousands

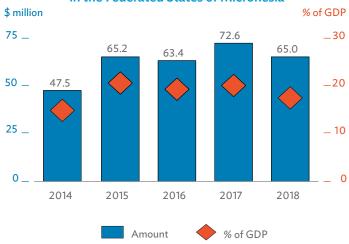
Note: Years are fiscal years ending on 30 September of that year. Source: Palau Bureau of Labor and Immigration.

Robust construction nevertheless supported economic growth. Public infrastructure projects funded by development partners proceeded in earnest, and some private hotel projects were completed.

Fiscal positions continued to weaken across the North Pacific in FY2018. Preliminary estimates show that the FSM consolidated fiscal surplus eroded from the equivalent of 15% of GDP in FY2017 to 10%. Revenue from fishing license fees fell from their historic high but still equaled 17% of GDP (Figure 35). However, public wages continued to expand along with government expenditure on services it contracts to implement projects funded by development partners.

Capital expenditure built on increases recorded in FY2017, when several project management bottlenecks were cleared.

Figure 35: Fishing license revenue in the Federated States of Micronesia



Note: Years are fiscal years ending on 30 September of that year. Sources: Federated States of Micronesia Department of Finance and Administration and Division of National Statistics.

Likewise, the Marshall Islands is estimated to have realized a smaller fiscal surplus, equal to 3.0% of GDP, down from 4.5% in the previous fiscal year. However, the FY2017 surplus reflected record fishing license fee revenues worth 19.4% of GDP that came, not from significantly higher collections in the period, but mostly from a large, one-time appropriation of receipts previously undisbursed by the agency responsible for collecting them. In FY2018, fishing license revenues plunged by 37.7%, reverting to the norm before FY2017 and driving total revenue down by 16.5%.

Palau also saw its fiscal surplus narrow, from 4.8% of GDP in FY2017 to 4.3% as expenditure increased to fund transfers including to the civil service pension fund. Steady deterioration in the government's fiscal position also reflected continuing delays in implementing much-needed tax reform that would facilitate higher domestic revenue mobilization.

Inflation in the North Pacific is driven largely by import costs. Higher international prices for food and fuel, and their spillover on prices for other consumer goods, stirred inflation in two of the three economies but were countered by subdued economic activity. Inflation therefore remained very low in FY2018, rising from 0.1% to 1.0% in the FSM, from 0.0% to 0.7% in the Marshall Islands, and from 0.9% to 1.1% in Palau.

Higher import bills and lower fishing license revenue in the primary income account further narrowed the FSM current account surplus from the equivalent of 7.5% of GDP in FY2017 to 2.0%. Palau's large current account deficit narrowed only slightly, from 17.9% of GDP to 17.5%, as a larger surplus in the transfers account offset lower tourism receipts. The Marshall Islands current account surplus widened from 3.7% of GDP to 7.0% as, despite higher international commodity prices, imports slowed due to project implementation delays.

**Table 6: Selected economic indicators (%)** 

	2019	2020
Federated States of Micronesia	,	
GDP growth	2.7	2.5
Inflation	0.7	1.5
Current account balance (share of GDP)	1.0	1.5
Marshall Islands		
GDP growth	2.3	2.2
Inflation	0.5	1.0
Current account balance (share of GDP)	8.0	7.5
Palau		
GDP growth	3.0	3.0
Inflation	0.5	1.5
Current account balance (share of GDP)	-16.3	-16.0

Source: ADB estimates.

#### **ECONOMIC PROSPECTS**

The outlook for the North Pacific economies is mostly positive. In the FSM, growth is projected to rise to 2.7% in FY2019 as recent steady progress in ramping up capital spending is seen to continue in the near term. Current arrangements for managing and implementing compact-funded projects appear to address capacity constraints. The capital spending program will proceed in accordance with the Infrastructure Development Plan, FY2016–FY2025, which prioritizes energy, water supply and sanitation services, and broader climate change adaptation. More growth promises to stem from potentially greater consumption stirred by expectations of lower fuel prices and stable prices for imported food. Growth is projected to taper slightly to 2.5% in FY2020 as some capital projects near completion.

Growth in Palau is similarly projected to increase with expectations of some recovery in tourism and further increases in capital expenditure thanks to greater financial assistance from the US. Visitor arrivals last year were already below the number recorded in FY2012—before the influx of tourists from the PRC gathered momentum—so no further sharp reductions are likely. Skymark, a low-cost airline in Tokyo, plans to commence regular flights to Palau by mid-2019, which should stem recent declines in arrivals from Japan, Palau's highest-spending tourist market. A recent rebound in tourist numbers from Taipei, China—the fourth-largest tourist market—also bodes well for a recovery in tourism.

In September 2018, Palau and the US agreed to amend their Compact of Free Association. The agreement offers Palau more than \$120 million in financial assistance to FY2024. Although most funds are allocated to Palau's Compact Trust Fund, \$20 million will be available to finance agreed infrastructure projects that could boost annual capital spending by a quarter—plus \$2 million annually for infrastructure maintenance. A further \$22 million in

direct economic assistance promises further economic stimulus. Growth is thus seen to accelerate to 3.0% in FY2019 and FY2020.

Growth in the Marshall Islands, by contrast, is projected to continue slowing to 2.3% in FY2019 and 2.2% in FY2020 as project implementation and persistent implementation constraints spell less stimulus from infrastructure investment. The outcome of national elections at the end of 2019 will better shape economic projections for FY2020 and beyond.

The Government of the Marshall Islands plans to issue a cryptocurrency called the sovereign in mid-2019, posing potentially significant downside risks to growth: inflationary pressures if the sovereign causes excessive growth in the money supply, observed volatility in cryptocurrency values, and the threat of quarantine from the international financial system.

Inflation in all three economies is projected to ease slightly in FY2019 before reaccelerating in FY2020 in line with international food and fuel price trends (Figure 36). Commodity prices are likewise expected to be reflected in import bills, but other factors are seen to drive divergent trends in current account positions in the North Pacific. The FSM current account surplus will likely narrow further to the equivalent of 1.0% of GDP in FY2019 and recover somewhat to 1.5% in FY2020, reflecting the effect of El Niño on tuna migration and thus on fishing license revenue. By contrast, the Marshall Islands current account surplus is expected to widen to 8.0% of GDP in FY2019 as capital equipment imports decline with project completion, and then narrow by half a percentage point in FY2020 with rising commodity import prices. In Palau, the current account deficit is projected to narrow to 16.3% of GDP in FY2019 and 16.0% in FY2020 as tourism receipts recover from the recent slump.

Figure 36: Inflation in the North Pacific economies \$ per barrel 6 . 120 60 -3 -60 2020 2014 2015 2016 2017 2018 2019 Forecast Marshall Islands inflation Palau inflation Federated States of Brent crude price

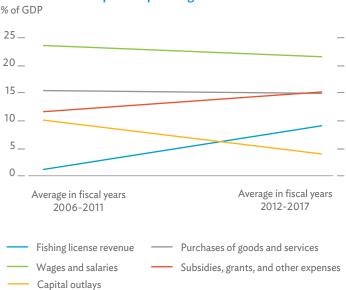
Note: Years are fiscal years ending on 30 September of that year. Sources: ADB estimates using data from the Republic of the Marshall Islands, Federated States of Micronesia, and Republic of Palau FY2017 *Economic Briefs*.

Micronesia inflation

With fishing license revenue in the FSM at risk of falling, the fiscal surplus is forecast to narrow to the equivalent of 7.0% of GDP in FY2019 before bouncing back to 10.0% in FY2020.

In the Marshall Islands, fiscal surpluses are forecast to narrow further to the equivalent of 2% of GDP in FY2019 and then edge back to 3% in FY2020. High recurrent spending, including subsidies to state-owned enterprises and continued social security transfers, will remain unchecked if necessary reform is not implemented (Figure 37). Tax reform languished, stifling domestic revenue collection.

Figure 37: Fishing license revenues and components of public spending in the RMI



RMI = Republic of the Marshall Islands.

Note: Fiscal years end on 30 September of that year.

Source: ADB estimates using data from the Republic of the Marshall Islands FY2016 Economic Review.

In Palau, the fiscal surplus is expected to increase to the equivalent of 8.9% of GDP in FY2019 with a surge in grants and then fall back to 1.9% in FY2020 as grant inflows ease.

The parties to the Nauru Agreement, who manage fishing rights in most of the Pacific, have announced plans to expand their vessel day scheme to cover other forms of fishing. If successful, this could boost fishing license fee revenue for the Marshall Islands and the FSM.

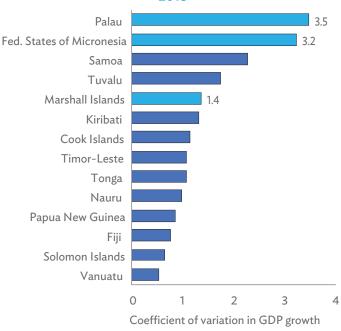
# POLICY CHALLENGE—MANAGING VOLATILITY

Like most of their island peers, the North Pacific economies are subject to large growth swings year to year stemming from narrow economic bases and vulnerability to external shocks (Figure 38).

In the FSM, stagnant growth in the private sector has left economic activity determined largely by public infrastructure construction. To illustrate, growth accelerated from FY2009 to FY2011 on a series of airport upgrades, then contracted for 3 consecutive years as public investment stagnated. Economic growth in the Marshall Islands has similarly depended on public investment projects, as well as on

grant-supported government operations. Fiscal constraints caused by variation in grant inflows contributed to contractions in FY2008 and FY2009, then the airport upgrade in Majuro drove expansion from FY2010 until its completion in FY2013. Contractions in the next few years reflected delays in implementing new projects, and subsequent recovery accompanied project resumption.

Figure 38: Coefficient of variation in GDP growth, 2009-2018



Note: The coefficient of variation is the ratio of the standard deviation to the mean, where values exceeding 1.0 indicate high variance.

Source: Asian Development Outlook database.

In recent years, fishing license fees have stimulated finances and growth in both the FSM and the Marshall Islands. However, ADB analysis has shown volatility driven by El Niño weather patterns, as detailed in the December 2017 Pacific Economic Monitor. In Palau, volatility derives mainly from tourism peaks and troughs that often mirror global financial and economic crises or even more localized events, such as a collapse in arrivals from Taipei, China caused by a downturn there in FY2013, or an influx of tourists from the PRC in FY2015 followed by the recent policy-induced decline.

Trust funds can help minimize economic volatility by smoothing government revenue otherwise subject to large fluctuations. Higher revenues earned during peak periods can be stored in these instruments to build fiscal buffers for use in subsequent downturns. This allows governments to smooth their annual expenditure and, given the public sector's outsize impact on economic activity in the North Pacific, tamp down volatility in GDP growth.

Further, as disasters and extreme weather can exacerbate volatility, disaster risk management and climate change adaptation need to be emphasized. Climate-proofing can be incorporated into comprehensive strategies to strengthen public investment planning and implementation, yielding more sustainable infrastructure development.

# **South Pacific economies**

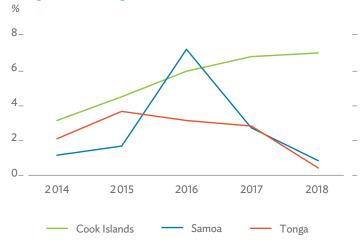
# Lead authors: Shiu Raj Singh and Noel Del Castillo

The South Pacific economies of the Cook Islands, Samoa, and Tonga all grew in 2018. The Cook Islands expanded strongly on record visitor arrivals. Samoa also saw strong growth in visitor arrivals but slower GDP growth because of substantial declines in manufacturing and fishing. Tonga was severely affected by Cyclone Gita in February. South Pacific economies must keep tourism sustainable to ensure that this remains an important source of growth into the future.

#### **ECONOMIC PERFORMANCE**

The Cook Islands economy grew by 7.0% in fiscal year 2018 (FY2018, ended 30 June 2018), supported by continued strong growth in tourism (Figure 39). Visitor arrivals increased by 6.2% with a notable 23.4% increase from Canada and 23.7% from French Polynesia. Benefiting from expansion in tourism were related sectors: retail trade, hotels and restaurants, and transport and communications. Aside from these sectors, the implementation of projects for renewable energy on outer islands and water supply and sanitation pushed growth in construction to 25.0%. Small declines were recorded in fishing, finance, and health care.

Figure 39: GDP growth in the South Pacific economies



Note: Years are fiscal years ending on 30 June of that year. Sources: Cook Islands Ministry of Finance & Economic Management; Samoa Bureau of Statistics; Tonga Department of Statistics; ADB estimates.

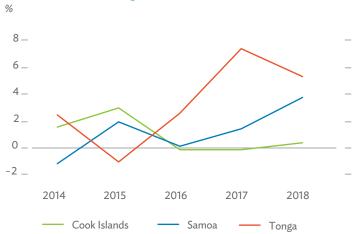
Growth of 0.9% in Samoa in FY2018 was considerably slower as a large manufacturing enterprise closed and fishing declined. A steep fall in nonfood manufacturing was, however, offset by growth in hotels and restaurants, construction, and communications and business services. Visitor arrivals grew by 11.5%, a sixfold improvement on average annual tourism growth in FY2010–FY2017 at 1.9%. Agriculture, transport, and finance all declined.

The vulnerability of Tonga to disasters was evident from damage inflicted on the economy by Cyclone Gita in February 2018. The destruction of crops, public infrastructure, and buildings limited

growth to 0.4% in FY2018, well below the 3.2% average posted from FY2015 to FY2017. Only rapid recovery efforts soon after the cyclone saved the Tongan economy from contraction.

In the Cook Islands, prices rose in FY2018 by 0.4% as increases for food and transportation more than offset falling prices for housing and household operation (Figure 40). In Samoa, higher domestic and import prices in FY2018 pushed inflation to 3.7%, with substantially higher prices for food and for nonalcoholic beverages and education and lesser rises for alcoholic beverages and for transport and communications. Somewhat offsetting these higher prices were price declines from housing and household operation. Tonga's inflation averaged higher by 5.3% in FY2018, with food prices increasing substantially as a result of the damage and losses caused by Cyclone Gita. Contributing to inflation were higher prices for transportation and beverages, including kava, a local relaxant.

Figure 40: Inflation



Note: Years are fiscal years ending on 30 June of that year. Sources: Cook Islands Ministry of Finance & Economic Management; Samoa Bureau of Statistics; Tonga Department of Statistics; ADB estimates.

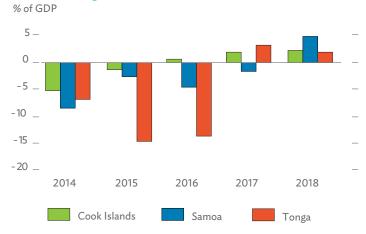
The Cook Islands' fiscal surplus shrank by more than half from the equivalent of 9.2% of GDP in FY2017 to 4.1% a year later. Although revenue increased in FY2018, even higher operating and capital expenditure narrowed the surplus. Net public debt, all of it external, fell from the equivalent of 17.3% of GDP in FY2017 to 16.8% only because of strong GDP growth, as debt was higher in nominal terms. In any case, debt remains comfortably below the government ceiling of 35% of GDP. The government maintained a debt-service reserve equal to 3.6% of GDP in FY2018 and held additional cash reserves equal to 20.6% of GDP.

Samoa had a small fiscal surplus in FY2018, reversing a deficit equal to 1.1% of GDP in FY2017. This first surplus in 9 years was achieved through rigorous expenditure control and higher external grants received after the International Monetary Fund assessed Samoa to be at high risk of debt distress because of its exposure to disasters. At the end of FY2018, external debt equaled 49.4% of GDP, slightly higher than a year earlier because exchange rate movements were unfavorable and contracted loans continued to be disbursed for ongoing projects.

Tonga's fiscal balance ended FY2018 in a surplus equal to 1.6% of GDP as budget support from development partners, and the postponement of investment projects following Cyclone Gita, more than offset higher spending on emergency response and rehabilitation. External debt increased from the equivalent of 39.5% of GDP at the end of FY2017 to 41.8% a year later.

The Cook Islands updated and substantially revised in FY2018 data on the balance of payments. The result was sharply lower estimates for past current account surpluses, which followed from revised estimates for tourism inflows. The surplus in FY2017 was revised down from the equivalent of 25.5% of GDP to 1.6%, rising in FY2018 to 2.2% on a higher surplus in trade in services. In Samoa, a current account surplus equal to 4.7% of GDP in FY2018 reversed a 1.8% deficit in the previous year thanks to strong growth in visitor arrivals and a 24.3% increase in remittances. In Tonga, higher imports offset huge grant flows from development partners for cyclone relief to narrow the current account surplus to the equivalent of 1.8% of GDP in FY2018 (Figure 41). Meanwhile, remittances remained robust as Tongans living overseas provided support to their families back home, particularly after the disaster, with inward private transfers rising by 8.9%.

Figure 41: Current account balance



Note: Years are fiscal years ending on 30 June of that year. Sources: Cook Islands Ministry of Finance & Economic Management; Samoa Bureau of Statistics; Tonga Department of Statistics; ADB estimates.

# **ECONOMIC PROSPECTS**

Growth is seen to moderate in the Cook Islands and pick up in Samoa and Tonga during the forecast period.

The Cook Islands economy is projected to grow by 6.0% in FY2019. Tourism and large infrastructure projects for water supply and sanitation, renewable energy, and improved internet connectivity will continue to contribute significantly to economic expansion. Growth is projected to slow further in FY2020 as tourism is constrained by availability of accommodation.

In Samoa, growth is expected to accelerate in FY2019, driven up as higher visitor arrivals boost growth in commerce, hotels, transport, and other activities ancillary to tourism. Growth is forecast to increase further to 3.0% in FY2020 on continued growth in tourism

but also strengthening growth in communications. The 2019 Pacific Games, which Samoa will host in July 2019, are expected to provide further impetus.

Table 7: Selected economic indicators (%)

	2019	2020
Cook Islands		,
GDP growth	6.0	4.5
Inflation	1.0	1.5
Current account balance (share of GDP)	2.8	3.4
Samoa		
GDP growth	2.0	3.0
Inflation	2.0	1.5
Current account balance (share of GDP)	-3.5	-3.0
Tonga		
GDP growth	2.1	1.9
Inflation	5.3	5.3
Current account balance (share of GDP)	-12.2	-11.2

Note: Years are fiscal years ending in 30 June of that year. Source: ADB estimates.

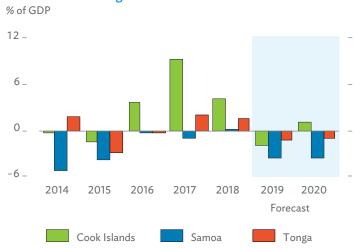
Following slow growth in FY2018 as a result of losses from Cyclone Gita, Tonga is expected to enjoy higher economic growth in FY2019 and FY2020 thanks to reconstruction and infrastructure projects in the pipeline.

Inflation expectations are mixed across the three economies in the forecast period. Prices are seen to grow by 1.0% in the Cook Islands and 2.0% in Samoa in FY2019, and inflation in both would converge at 1.5% in FY2020 as higher global food prices affect these import-dependent island economies. In Tonga, inflation is expected to continue to hover at 5.3% in both FY2019 and FY2020 as the government ramps up construction projects.

The Government of the Cook Islands projects a fiscal deficit equal to 1.9% of GDP in FY2019 to pay for an ambitious investment plan for water supply, renewable energy, and communications (Figure 42). In FY2020, these projects will have progressed substantially, so a surplus equal to 1.0% of GDP is projected. With improved tax collection and a growing economy, the government does not intend to finance projects with loans except when it needs technical assistance for implementation. Continued economic growth and available cash balances should keep net public debt below target. Cash reserves are expected to continue rising over the forecast

Samoa's fiscal deficit is budgeted to equal 3.5% of GDP in both FY2019 and FY2020, in line with the government's fiscal strategy to stimulate the economy with expansionary fiscal and monetary policies. Meanwhile, it intends to keep its focus on revenue collection through measures to improve compliance.

Figure 42: Fiscal balance



Note: Years are fiscal years ending on 30 June of that year. Sources: Cook Islands Ministry of Finance & Economic Management; Samoa Ministry of Finance; Tonga Ministry of Finance and National Planning.

Tonga is forecast to post a deficit in both FY2019 and FY2020 on increased spending on infrastructure and reconstruction, which are expected to remain substantial components of expenditure. Higher projected tax revenue in FY2020 is expected to narrow the fiscal deficit slightly.

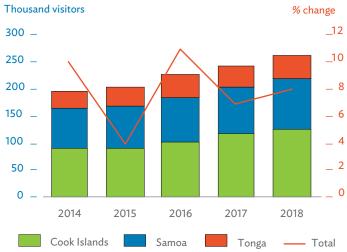
The Cook Islands' current account surpluses are expected to expand to the equivalent of 2.8% of GDP in FY2019 and 3.4% in FY2020. Growing tourism earnings are likely to offset higher imports of goods and services for public investment projects implemented during the period. Samoa's current account is expected to fall into deficit equal to 3.5% of GDP in FY2019, in part because of imports for the 2019 Pacific Games, the deficit easing to 3.0% in FY2020. Increased imports of goods for reconstruction are projected to push Tonga's current account into deficit in FY2019. The deficit is expected to persist in FY2020 with the forecast resurgence in global food prices.

# POLICY CHALLENGE—ENSURING SUSTAINABLE GROWTH IN TOURISM

The South Pacific economies depend on tourism to drive economic growth (Figure 43). The Cook Islands' exports of services, largely tourism receipts, provided 49.6% of GDP on average from FY2012 to FY2018. Growth in the Cook Islands economy mirrors visitor arrivals. In Samoa as well, tourism is growing in importance despite challenges encountered in the aftermath of a tsunami in September 2009. Tourism earnings in Samoa averaged 18.1% of GDP from FY2012 to FY2018, the latter of which was a record year for tourism in Samoa with earnings rising to 20.6% of GDP. The contribution of tourism in Tonga has grown steadily, albeit from a small base of only 7.0% in FY2010, reaching 11.5% in FY2017. All three economies face similar issues in their tourism industries: First is a need to improve infrastructure to ensure that the benefits of tourism spread across

the country. Second is to ensure that infrastructure for tourism is sufficiently resilient, able to withstand the cyclones to which these economies are prone. Third is to keep tourism environmentally friendly and sustainable.

Figure 43: Visitor arrivals from Australia and New Zealand to the South Pacific



Note: Years are fiscal years ending on 30 June of that year. Sources: Australian Bureau of Statistics; Statistics New Zealand.

Tourism is constrained in the South Pacific economies by underdeveloped infrastructure, which confines and concentrates these industries in accessible areas. Consideration should be given to policies that use infrastructure development to encourage industry diversification. Appropriate infrastructure development will catalyze private sector investment as it is attracted to new locations around the country. The Cook Islands in particular is in a favorable fiscal position to support infrastructure development to spread tourism to outer islands. Samoa and Tonga should incorporate facilitative infrastructure investments in their longer-term tourism development plans.

Although diversification supports resilience in industry, long-term sustainability across the South Pacific economies demands additional considerations, notably factoring disaster resilience into investments in buildings and other infrastructure. The Cook Islands has not had a major disaster recently, but Samoa struggled to expand its tourism industry after the 2009 tsunami, which pushed earnings to as low as the equivalent of 16.6% of GDP in the years that followed. This highlights the country's vulnerability to natural disasters and the need for tourism to remain sustainable over the long run. Tourism was the industry second most affected in Tonga after the onslaught of Cyclone Gita. The government intends to adopt the policy in its reconstruction and recovery plan to "build back better" with the emphasis on resilient physical infrastructure.

The growing importance of tourism and its expanding scale mean that its environmental and social impacts should not be overlooked. Here, too, there is a need to embrace opportunities for sustainability. Governments can consider enhancing legislation to better address issues that threaten the sustainability of the tourism industry and

policies promoting sustainable tourism practices. The Vava'u island group in Tonga, for example, is one of the country's popular destinations, well known for watching whales and swimming with them. While the government has passed laws regulating these activities, increased demand has greatly increased the number of whale-watching operators. Industry leaders have expressed concern over the increase in activity as noise and other environmental pollutants adversely affect whale populations.

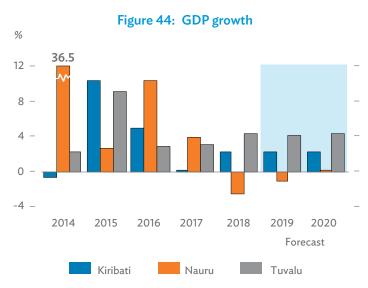
# Small island economies

# Lead authors: Jacqueline Connell, Prince Cruz, and Noel Del Castillo

Economic performance in the three small island economies diverged, with growth accelerating in Tuvalu and stable in Kiribati as GDP contracted in Nauru. Infrastructure projects will play a dominant role in economic activity in Nauru and continued growth in Kiribati and Tuvalu. Inflation is expected to be fairly stable while current accounts weaken, with Tuvalu going into deficit. Improving public service delivery while stemming fiscal drain is necessary as reform to stateowned enterprises continues.

#### **ECONOMIC PERFORMANCE**

The economy of Kiribati grew by 2.3% in 2018 but at a bit less than half the average growth rate of 5.2% from 2015 to 2017 (Figure 44). Public spending and projects financed by development partners continue to be the main drivers of economic growth. And, while growth in fishing revenue slowed from 10.0% in 2017 to 0.7% in 2018, fisheries remain an important source of national revenue, providing 71.7% of total revenue in 2018.



Note: Years are fiscal years ending on 30 June of that year for Nauru and coinciding with the calendar year for Kiribati and Tuvalu. Sources: Kiribati budget documents; Nauru budget documents; Tuvalu budget documents; Asian Development Outlook database; ADB estimates.

In Nauru, the economy is estimated to have contracted as the Regional Processing Centre (RPC), an Australian-funded facility for asylum seekers, scaled down and an overseas refugee resettlement program commenced. Meanwhile, phosphate exports remained weak. The RPC scale-down was, however, slower than initially expected. The facility has been the principal source of economic activity in recent years, driving revenue growth, including from visa fees and income taxes paid by expatriate workers, and from consequent demand for local services, as well as infrastructure investment.

Growth in Tuvalu accelerated to 4.3% in 2018, driven by higher government spending on large infrastructure projects and new housing in preparation for hosting of the Polynesian Leaders Group Summit, which was held in June 2018, and the upcoming Pacific Islands Forum, to be held in September 2019. Increased spending was supported by recovery in fishing license revenue, which posted an 84.8% jump in 2018 with the receipt of a one-off payment from a subregional pooling scheme last year.

Inflation rose in Kiribati in 2018 on a pick-up in economic activity brought about by sustained public spending and higher wages. However, muted global food prices have kept price growth in check. Meanwhile, inflation in Nauru continued to slow under economic contraction. Inflation in Tuvalu also decelerated to 1.8% in line with global food price movements.

The current account surplus in Kiribati narrowed further as imports rose and fishing revenue moderated. The current account balance of Tuvalu also remained in surplus in 2018. Higher inflows of fishing license fees offset increased imports of goods to supply government infrastructure investments (Figure 45).

% of GDP 100 -80 60 40 20

Figure 45: Fishing license revenue

Sources: Kiribati budget documents; Nauru budget documents; Tuvalu budget documents; Asian Development Outlook database

2016

Nauru

2017

Tuvalu

2018

2015

2014

Kiribati

The fiscal balance in Kiribati posted a deficit in 2018 equal to 20.1% of GDP (Figure 46). Increased spending on wages by 33.9% and the acquisition of aircraft for Air Kiribati more than offset higher revenue from fishing licenses and 4.2% higher revenue from taxes, which showed up as a surplus in the recurrent budget.

In Nauru, total revenues collected in fiscal year 2018 (FY2018, ended 30 June 2018) were 1.2% higher than in the previous year, mainly reflecting higher tax and nontax revenue collected from operations associated with the RPC. This contrasted with earlier government projections of lower revenue based on the assumed faster scaling-down of RPC operations. This income supported higher expenditure, including capital spending, as well as contributions to the Nauru Intergenerational Trust Fund. The fiscal surplus nevertheless shrank by half from the equivalent of 19.3% of GDP in FY2017 to 8.8%, including trust fund contributions. By year-end, the government's cash buffer was above the International Monetary Fund recommendation of cover for 2 months of spending not associated with the RPC.

Note: Years are fiscal years ending on 30 June of that year for Nauru and coinciding with the calendar year for Kiribati and Tuvalu. Sources: Kiribati budget documents; Nauru budget documents; Tuvalu budget documents; Asian Development Outlook database.

Tuvalu saw tax revenue decline by 20.5% from 2017 but still had a fiscal surplus equal to 33.9% of GDP in 2018 thanks to strong recovery in fishing license revenue and lower operating expenditure.

### **ECONOMIC PROSPECTS**

The pace of growth in Kiribati is expected to be sustained in the next 2 years as continued infrastructure spending offsets the slowdown in fishing revenue. In October 2018, Kiribati secured a grant from development partners that will provide to South Tarawa, the capital, a seawater desalination plant and a solar photovoltaic plant, as well as rehabilitate and expand the water supply network.

Nauru is expected to experience less severe economic contraction in FY2019 than in FY2018, with the Nauru Port project having commenced construction in January 2019 and able to cushion the slowdown caused by the continued scaling down of the RPC and resettlement of refugees. Growth will remain stagnant in FY2020. The government has approved three supplementary budgets so far in FY2019 because higher revenue, including windfall fishing license revenue from pooled days in prior years, allowed for increases in expenditure alongside the building up of cash buffers. Fiscal discipline will be critical in FY2020 as RPC-derived revenue is uncertain and revenue from fishing license fees is projected to drop from the exceptionally elevated receipts in FY2019.

Tuvalu's economy is projected to accelerate in the next 2 years with the implementation of infrastructure projects supported by development partners. In September 2018, it received additional grant for an ongoing project to climate-proof a harbor in Niutao, a reef island in the north.

**Table 8: Selected economic indicators (%)** 

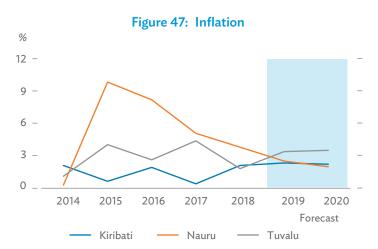
	2019	2020	
Kiribati			
GDP growth	2.3	2.3	
Inflation	2.3	2.2	
Current account balance (share of GDP)	7.6	4.0	
Nauru			
GDP growth	-1.0	0.1	
Inflation	2.5	2.0	
Current account balance (share of GDP)			
Tuvalu			
GDP growth	4.1	4.4	
Inflation	3.4	3.5	
Current account balance (share of GDP)	-0.9	-11.0	

Note: Years are fiscal years ending on 30 June of that year for Nauru, and coinciding with the calendar year for Kiribati and Tuvalu. Source: ADB estimates.

Inflation is forecast to accelerate in Kiribati in 2019 and 2020 with expected increases in food prices (Figure 47). It is likewise projected higher in Tuvalu over the next 2 years, pushed up by increased public sector wages and by ongoing and future infrastructure projects. In Nauru, inflation is expected to continue easing as the economy contracts and global commodity prices, especially for oil, remain low.

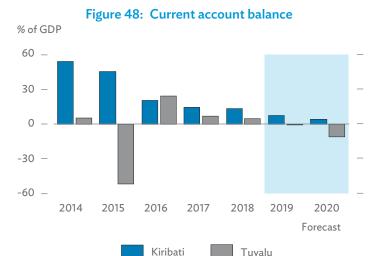
The fiscal deficit in Kiribati is expected to persist, equal to 23.2% of GDP in 2019 and 20.8% in 2020, as recent unexpected bounty from fishing revenue is expected to revert to slower growth or decline under less favorable weather. Further, the government's commitment to support Air Kiribati as it establishes its own international operations will incur substantial fiscal costs. Tuvalu will fall into a fiscal deficit equal to 1.1% of GDP in 2019 as spending continues on infrastructure for the regional summit and as fishing revenue declines significantly, as projected. However, higher tax revenue and lower spending in 2020 are expected to restore government finances to a surplus equal to 1.4% of GDP.

The volatility in fishing license revenues will be significant for the current account balance of Kiribati, with the surplus shrinking further in 2019 and 2020 (Figure 48). Similarly in Tuvalu, weaker fishing revenue inflows in the next 2 years and sustained growth in imports of goods will push the current account into deficit in 2019 and widen the deficit in 2020.



Note: Years are fiscal years ending on 30 June of that year for Nauru, and coinciding with the calendar year for Kiribati and Tuvalu. Sources: Kiribati budget documents; Nauru budget documents; Tuvalu budget documents; Asian Development Outlook database; ADB estimates.

Risks to the outlook include delays in implementing infrastructure projects. For Nauru, any change in expected arrangements for the RPC could significantly affect economic activity in either direction. Fiscal sustainability remains a challenge as the main sources of revenues remain narrow and are highly volatile.



Sources: Asian Development Outlook database; ADB estimates.

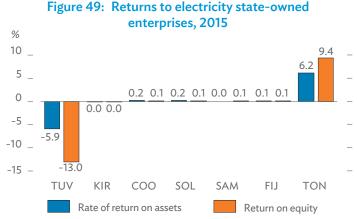
# POLICY CHALLENGE—PURSUING REFORM TO STATE **ENTERPRISES**

State-owned enterprises (SOEs) provide essential services such as water supply and energy utilities, especially in remote areas. However, the high operating costs of SOEs typical in small island economies pose serious concerns for their fiscal sustainability, especially as some SOEs rely heavily on continuous subsidies and repeated capital infusions from the national government. SOE reform to promote fiscal sustainability and responsiveness must ensure the continued provision of essential services while minimizing the fiscal burden on the government.

Maintaining fiscal sustainability is a long-standing challenge for Kiribati. Part of the recent increase in recurrent government expenditure has been to fund higher subsidies for SOEs. The government has made strides in consolidating and downsizing SOEs involved in copra production and trade, and it managed to sell its telecom SOE, but there is a need to continue pursuing improvement in the quality and relevance of SOE financial reports. Further, the government should lay out a plan to enhance the sustainability of its SOEs by improving SOE governance and also, for example, recalibrating tariffs for water supply and sanitation services. Finally, SOEs should not be exempted from the value-added tax to better level the playing field for the private sector and encourage its growth.

In Nauru, SOEs play important roles in the economy and are significant employers. However, weak SOE governance puts at risk the sustainability of the large portion of public assets and infrastructure that SOEs manage. Poorly performing SOEs can absorb large amounts of scarce capital and divert government resources away from critical social investments into health care and education. The government has started to tackle these challenges. Reform to the state-owned power utility has reduced fiscal costs and made electricity supply more reliable. The average electricity outage duration dropped to around 2 days per year at the end of 2017, compared with 47 days in 2015. The government is also strengthening the policy framework for SOE governance.

Although Tuvalu's outlook remains generally optimistic, the weak balance sheets of its SOEs pose risks to the fiscal balance because SOEs rely heavily on government subsidies (Figure 49). The latest forecast from the International Monetary Fund indicates that fiscal support to SOEs will increase to equal about 4% of GDP in the medium term. This makes it imperative that SOEs strengthen their financial performance and so mitigate their drag on the national budget. Specific reforms would require the government to pay its outstanding obligations to SOEs; introduce differential electricity tariffs for public and commercial entities to increase the revenue of Tuvalu Electricity Corporation, an SOE; adopt a more transparent approach to annual fiscal transfers to SOEs; and closely monitor any joint ventures that SOEs join.



COO = Cook Islands Te Aponga Uira O Tumu-Te Varovaro (power authority), FIJ = Fiji Electricity Authority, KIR = Kiribati Public Utilities Board, SAM = Samoa Electric Power Corporation, SOL = Solomon Power, TON = Tonga Power Limited, TUV = Tuvalu Electricity Corporation. Note: The figures for Solomon Islands and Tonga are 2016 data. Source: Pacific Power Association. 2015 and 2016. Pacific Power Utilities: Power Benchmarking 2015 and 2016 Fiscal Years.

# **POLICY BRIEFS**

Climate change remains one of the top challenges faced by Pacific developing member countries. Their geographical location and topographical characteristics make their populations and economies vulnerable to rising sea levels, increase in the frequency and intensity of extreme weather and climatic events, and ocean warming. The onslaught of several strong cyclones in recent years resulted in loss of lives, destruction of properties and infrastructure, and adverse impact on economic growth. Understanding the impacts and economic costs of climate change—as highlighted in this policy brief from the December 2013 issue of the Monitor—is vital to better appreciate the need for long-term solutions that will ensure the survival of current and future generations of Pacific Islanders as well as the sustainability of their respective economies.

# **Economics of climate change in the Pacific**

Climate change has emerged as a significant global challenge. Sharp increases in average temperatures worldwide, melting polar ice caps, rising sea levels, and more frequent and extreme weather events are likely to result in adverse environmental, social, and economic impacts. The Pacific, in particular, is already experiencing the effects of climate change: for instance, rising sea levels have been observed in the atoll economies of Kiribati, the Republic of the Marshall Islands (RMI), and Tuvalu, among others. Sea levels in Kiribati are reportedly rising at about 2.9 mm per year, significantly above the observed global average of 1–2 mm per year. This is contributing to overcrowding in the main islands, as lower-lying outer islands are slowly being inundated or losing their freshwater supply.

While the region has always been highly vulnerable to natural disasters the most direct damage from climate change can be seen through the increasing occurrence of intense rainfall events. Extreme climate events lead to damage and loss of property including public infrastructure (e.g., roads and bridges, school and hospital facilities, and power generation and transmission lines) and productive sectors (e.g., agriculture and tourism). These events also lead to lower economic growth, higher inflation (particularly in the short run), and deterioration of fiscal and current account balances. They also result in employment and personal income losses and, in some cases, increased poverty incidence. In early 2005, five cyclones (four of which were classified as Category 5 severe tropical cyclones) hit the Cook Islands in 5 weeks. In 2008, Severe Tropical Cyclone Gene was estimated to have caused \$32 million worth of damage in Fiji, mainly to roads and power infrastructure. Tropical depressions also caused severe flooding in Fiji in 2009 and 2012, damaging the sugar and tourism sectors. Most recently, Severe Tropical Cyclone Evan hit the South Pacific in December 2012, causing damages valued at over \$100 million in Fiji. Its impact was even more severe and widespread in Samoa, where total damage was estimated to be over \$200 million—equivalent to about 30% of the country's GDP. It was the worst cyclone to hit the country in 20 years. It is estimated that the Samoan economy will continue to feel the negative effects of Cyclone Evan until 2015.

Pacific economies will continue to be affected by the impacts of climate change. Food production, freshwater supply, coastal and marine resources, infrastructure, and human health are increasingly at risk, with corresponding adverse impacts on the region's development prospects. ADB's Strategy 2020 identifies climate change as a priority concern, driving ADB to work to build knowledge and increase general understanding of possible climate

change impacts and risks, as well as enhance its developing member countries' (DMCs) capacities to integrate climate change concerns in their policy and decision making.

This policy brief draws on a forthcoming report by the Economics and Research Department and the Pacific Department of ADB on the economics of climate change in the Pacific, summarizing the report's projections of economic costs of climate change on specific sectors and countries in the region, estimating resource requirements to finance adaptation strategies in the coming decades, and discussing the policy implications of climate change for Pacific governments.

### Methodology

Projections of climate change impacts and their resulting economic costs are based on a modeling approach involving (i) dynamic downscaling of a regional climate model to analyze future climate conditions at the country level, (ii) physical and sectoral impact assessments for sea level rises, rainfall, agriculture and fisheries, tourism, coral reefs, and human health, and (iii) economic assessment of vulnerable sectors and potential future losses. A downscaled regional climate model was applied to six Pacific DMCs: Fiji, Papua New Guinea (PNG), Samoa, Solomon Islands, Timor-Leste, and Vanuatu.

The analysis considers a medium emission scenario (the "A1B scenario" of the Intergovernmental Panel on Climate Change Special Report on Emission Scenarios (SRES)) to project future local climate conditions and impacts on sea-level rise, rainfall, and agriculture. This scenario assumes rapid world economic growth, global population that peaks at about 9 billion by 2050, a rapid introduction of new and more efficient technologies, and a balanced use of fossil fuel and alternative sources of energy. A high-emission scenario (SRES A2 scenario) is also used to project economic impacts on specific sectors and countries to fully gauge the potential costs of climate change across the Pacific. This more pessimistic scenario assumes slow world economic growth, high population growth, and a more gradual technological shift towards more efficient energy sources.

# **Projected climate extremes and impacts**

In the Pacific, average annual mean temperatures are projected to increase, although there is high variation across countries. Temperatures are projected to rise by 2.0°C by 2070 in Fiji and

Samoa, and by more than 2.5°C in PNG, Solomon Islands, Timor-Leste, and Vanuatu relative to the 1990 level. The frequency of El Niño and La Niña weather patterns in the Pacific is also seen to increase by more than 40%, increasing the likelihood of more severe droughts and intense rainfall.

By 2100, rises in sea level across the Pacific are projected to be significantly higher than the anticipated global average increase of 0.21–0.48 m. At high estimates, sea levels could rise by as much as 1.74m in Solomon Islands and 0.92m in Kiribati. Coastal areas, where densely populated communities, business centers, and major infrastructure such as seaports and airports tend to be located, will be at greater risk of flooding or inundation.

Erratic weather, higher temperatures that slow down crop growth in tropical climates, and saltwater intrusion are the main channels through which climate change would impact agricultural production. Yields of Pacific staple foods and commercial crops are projected to decline significantly over the long term due to climate change. For example, sweet potato cultivation is projected to decline by as much as 59% in PNG and by 15% in Solomon Islands by 2050. Over the same period, sugarcane yield in Fiji is seen to fall by 9%, while maize yields could decrease by as much as 10% in Timor-Leste and by as much as 14% in Vanuatu. Such declines will adversely affect the future earning potential of farmers and farming communities in the Pacific.

Most low-lying islands and atolls depend on groundwater or rain capture for freshwater. Climate change can reduce the availability of drinking water in these areas through saltwater intrusion of groundwater sources due to rising sea levels, and through more erratic rainfall patterns. In many areas of the Pacific, surface water supply is already insufficient to meet residential, agricultural, and industry/service sector demand. With climate change and rising demand for water, even areas of Fiji, Timor-Leste, and Vanuatu with current water surpluses are expected to suffer water shortages.

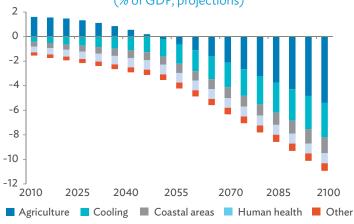
### Climate change costs in the Pacific

Based on estimates of climate change impacts at a low geographic scale, the research developed an integrated economic assessment model to measure the potential costs attributable to climate change. The model projects climate change impacts at the sector level and identifies the most economically vulnerable sectors based on potential future losses.

Under a high-emission scenario with slow growth and technological change (the A2 scenario), costs to the Pacific region attributed to climate change are projected to rise from 0.2% of its annual GDP in 2015 to 3.5% in 2050, and to as much as 10.9% by 2100.

Agriculture is seen to be the sector likely to be hit hardest by climate change. Relatively mild increases in temperature could benefit crop yields in coming years, with highest net gains (equivalent to 1.6% of Pacific GDP) projected in 2015. However, these gains are expected to dissipate when temperatures rise by over 2°C by 2050. Afterward, the agricultural sector is seen to realize increasing net economic losses, which could reach an equivalent of 5.4% of Pacific GDP by 2100.

Figure 1: Climate change impact in the Pacific, by sector (% of GDP, projections)



Source: ADB. 2013. The Economics of Climate Change in the Pacific.

Energy demand for air conditioning in residential and commercial buildings is expected to rise rapidly in the Pacific due to temperature rises. By 2100, the additional energy costs are projected to reach around 2.8% of the region's GDP—the second-largest projected sectoral impact of climate change in the Pacific. This will adversely impact both the trade and fiscal balances of many Pacific countries for whom expenditures on imported energy represent a significant share of total imports and total government expenditures.

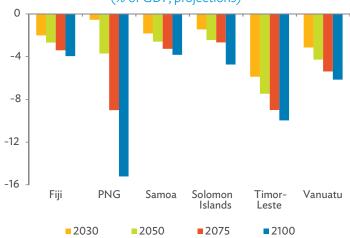
An additional economic cost that emerges from rising sea levels takes the form of losses of dry- and wetlands and resulting forced migration. Sea level rise is expected to lead to significant loss of land, and costs of displacement and relocation from climate-induced migration are expected to rise sharply toward 2100 as low-lying coastal areas become inundated. Total economic losses arising from these are projected to rise from 0.4% of annual Pacific GDP in 2015 to 0.7% in 2050, to 1.3% by 2100.

Climate change can also adversely affect human health. The incidence of respiratory disorders from increased air pollutants brought by a warmer and more erratic climate, as well as mold from water damage in the aftermath of more frequent floods, is seen to increase significantly. The risk of malaria is also expected to spread as warmer temperatures and increased precipitation expand breeding areas for disease-bearing mosquitoes. More severe tropical storms will also lead to increased fatalities and injuries from the storms themselves. Mortality and morbidity costs, measured by the value of forgone income and additional expenditure for treatment, are projected total losses equivalent to 0.5% of Pacific GDP in 2015. This will increase to about 0.8% of GDP annually by 2050.

Tourism to the Pacific will also likely be affected by climate change. For example, with warmer climates in the northern hemisphere, the Pacific may become a less attractive option for tourists from Europe and North America, particularly given international travel costs. Thus, potential tourism revenues could decline by over 30% by 2100. When the potentially large thermal stress-induced decline in the Pacific's coral reef cover—one of the region's main tourist attractions—is considered, projected losses could be substantially greater.

At the country level, PNG is projected to experience the largest economic losses in the Pacific. Absent adaptation and mitigation measures, the annual economic burden of climate change is expected to rise sharply, from an equivalent of 0.6% of PNG's GDP in 2030 to 15.2% by 2100. Losses are also projected to be high in Timor-Leste, increasing from 5.9% of the country's annual GDP to 10.0% during the comparable period. By 2100, substantial adverse impacts amounting to 6.2% of GDP in Vanuatu, 4.7% of GDP in Solomon Islands, 4.0% of GDP in Fiji, and 3.8% of GDP in Samoa are projected.

Figure 2: Climate change costs in the Pacific, by country (% of GDP, projections)



GDP = gross domestic product, PNG = Papua New Guinea Source: ADB. 2013. The Economics of Climate Change in the Pacific.

# Economics of adaptation in the Pacific

Given the size of potential losses, climate change adaptation measures will be crucial moving forward. Such measures could include policies and initiatives to enhance the capacity of businesses and households to adapt to anticipated changes stemming from climate change, and climate proofing in key sectors to move toward climate-resilient development.

On average, adaptation to a high-emission scenario could require substantial funding. The research estimates that financing equivalent to 0.97% of annual Pacific GDP, or \$284.3 million per year, will be needed up to 2050. The funding requirements are expected to rise as climate changes become more severe, and could reach as much as 1.52% of the region's annual GDP (or about \$446.7 million) over this period with uncertainties involved, under the study's high-emission scenario.

According to the research, estimated adjustment will depend crucially on global progress in reducing greenhouse gas emissions. Should the global economy manage to stabilize carbon dioxide concentration under 450 parts per million, the investment requirement is seen to drop by about half, with accompanying reductions in climate variability and risk as well as in uncertainty about adaptation needs. Without any successful global mitigation efforts, however, funding requirements for full preparation for low-probability but high-impact climate events will likely rise substantially.

#### **Policy implications**

Along with significant investment requirements, a forward-looking strategy is also necessary for the Pacific to adapt to climate change and sustain long-term economic growth. A key component of such a strategy is integrating climate change objectives and agendas into existing national or multisector programs and policies in order to help reduce vulnerabilities and promote sustainable development. Adaptation planning is also needed to identify feasible cost-effective adaptation options. Early climate action and preparedness plans, developed through a risk-based approach, will be among the most economical and cost-effective means of disaster risk management. The quality of climate risk assessments, and resulting plans and policy responses, will depend on Pacific DMCs' capacity to develop and use relevant climate information.

Climate-proofing infrastructure will raise initial investment costs, but will also enhance sustainability and generate returns to investment in the long run. This is because the value of savings from potential costs of repairing damage to non-climate-proofed infrastructure is seen to be greater than the additional investment. Greater access to climate finance and technical assistance will facilitate essential investments and technical support to operationalize climate change-calibrated development plans aimed at building climate resistance while sustaining economic growth. Finally, a general shift toward a more resource-efficient and environmentally sustainable mode of economic development would contribute to mitigation of climate change impacts over the long term.

**2019 Update:** Since the publication of this policy brief and the full study on the economics of climate change in the Pacific, several articles on climate change in the Pacific have appeared in subsequent issues of the Pacific Economic Monitor. In particular, the December 2017 issue focused on the climate change adaptation efforts adopted by several Pacific DMCs. It also featured policy briefs discussing ADB's role in supporting such efforts as well as looking at policy tools available to build financial resilience amid the sub-region's vulnerability to climate change. To get access to past issues of the Pacific Economic Monitor, please visit our site: https://www.adb.org/publications/series/pacific-economic-monitor.

Lead authors: Robin Boumphrey, Christopher Edmonds, Isabel Ferino, Joel Hernandez, Rommel Rabanal, and Cara Tinio.

This article summarizes results from a just released ADB study "The Economics of Climate Change in the Pacific," a collaborative output of ADB's Economic Research Department and the Pacific Department. The authors gratefully acknowledge the inputs and guidance of Robert Guild and Cyn-Young Park in the preparation of this brief.

# References:

ADB. 2013. The Economics of Climate Change in the Pacific. Mandaluyong City, Philippines.

Government of Samoa. 2013. Samoa Post-disaster Needs Assessment Cyclone Evan 2012. March.

Pacific economies are among the most vulnerable to impacts of natural hazards, including cyclones, volcanic eruptions, earthquakes, and tsunamis. With enough preparation and the right infrastructure in place, hazards can be prevented from turning into what we call 'disasters', i.e. marked with massive loss of lives, damages to property, and destruction of livelihoods. Recovery from the devastating impacts of hazards depends on the resiliency of infrastructure and institutions, such as preparing protocols for the distribution of relief aid and for the restoration of water and power. In the case of Vanuatu, a category 5 cyclone devastated the country and surrounding islands in March 2015 in what was described as one of the most powerful cyclones to hit the Pacific. This policy brief from the July 2015 issue of the Monitor notes that damage to property was high, resulting in significant challenges for rebuilding and recovery.

# Vanuatu and Cyclone Pam: An update on fiscal, economic, and development impacts

#### Introduction

During March 2015, Tropical Cyclone Pam charted a course of destruction through the southwest Pacific. The effects of the storm were felt in Kiribati, Solomon Islands, and Tuvalu. But the greatest impact was in Vanuatu, many of whose islands were battered by the Category 5 system.

It is still too early to know the full economic, fiscal, and developmental impacts of Cyclone Pam on Vanuatu. As data come to hand, they will add to existing literature on the economic impacts of disasters. Cross-country econometric studies have produced mixed and often contradictory findings when examining the impacts of disasters. This is not unexpected given that disasters come in many forms and affect both economic sectors (e.g., agriculture and services) and geographic areas differently. Cyclone Pam was unique given the breadth of its impact, but even in this case, some islands in Vanuatu such as Santo were not severely affected.

In this article, we provide an update on estimated fiscal, economic, and development impacts of the cyclone on Vanuatu. We commence by establishing projections for the Vanuatu economy before the onset of the storm and move on to an examination of the immediate and short-term impacts. We then consider the medium- to longer-term impacts of this event, including risks and opportunities associated with reconstruction efforts whether by government or development partners. We conclude with some recommendations for the future.

# **Background**

The Vanuatu government's budget policy statement for 2015, prepared prior to Cyclone Pam, predicted economic growth of 5.3% in 2015 and 2016, which was expected to level out at 3.6% in 2017 (Government of Vanuatu 2015a). ADB forecasts for 2015 were lower, at 4% growth, given concerns about capacity constraints (ADB 2014).

Much of the anticipated growth was linked to the expected implementation of significant infrastructure projects including the Port Vila Urban Development Project and the construction of a multipurpose terminal building at the Port Vila wharf. The two other

significant pillars of the Vanuatu economy continue to be agriculture and tourism.

Although more than 70% of Vanuatu's population is engaged in agriculture, whether for subsistence purposes and/or to generate a cash income, there are relatively few formal jobs in this sector (approximately 5,000 for a population of around 270,000). Agriculture has long been neglected in Vanuatu in terms of government expenditure, and the 2015 budget intended to start addressing this by increasing the allocations to relevant agencies with particular focus on improving extension and outreach services. The Reserve Bank of Vanuatu, in its quarterly economic review for the quarter ending December 2014, predicted growth of 2.4% in the agriculture sector for the period 2014 to 2016. Table 1 shows the change in value of four of the most significant exports as compared with the fourth quarter of 2013.

Table 1: Indicative agricultural exports for Q4 of 2014

Export commodity	Estimated value of exports in Q4 of 2014 (\$)	% change over Q4 of 2013
Copra	839,415	-81.6
Coconut oil	3,574,839	77.4
Kava	2,339,688	5.1
Beef	1,085,758	14.7

Source: Reserve Bank of Vanuatu.

Tourism is the most significant economic sector in terms of job creation, with the majority of those opportunities located in Port Vila. The importance of tourism has risen in the last decade. Tourism expenditure as a percentage of GDP has increased from 26% in 2002 to 33% in 2010. Tourism has also driven growth in the infrastructure and agriculture sectors, leading the World Travel and Tourism Council to estimate that tourism contributes 64.8% to Vanuatu's GDP, both directly and indirectly (World Travel and Tourism Council 2014).

However, there are signs that tourism growth has slowed in recent years. Total visitor arrivals declined in 2014 as compared with 2013 (Table 2). In the first 2 months of 2015, accommodation providers in Port Vila reported that forward bookings for the middle of the year (traditionally a peak period) were the lowest they had been for a number of years.

Table 2: Comparison of visitor arrivals to Vanuatu, 2013–2014

	2013	2014	% change
Air arrivals	110,045	108,656	-1.3
Cruise ship arrivals	233,097	220,205	-5.5
Total arrivals	343,142	328,861	-4.2

Source: Vanuatu National Statistics Office.

Immediate and short-term impacts Tropical Cyclone Pam is the largest cyclone ever to have hit Vanuatu and is one of the most severe storms experienced in the Pacific. It directly affected 22 of the 63 inhabited islands, destroying and damaging housing, crops, businesses, and critical public infrastructure including schools, medical facilities, roads, and bridges. The official death toll of 11 is astonishingly low given the strength of the cyclone and its widespread impact. This is a credit to both the disaster preparedness of the Vanuatu government and the resilience of Ni-Vanuatu, who have long been accustomed to cyclonic activity.

The most immediate need in the aftermath of Cyclone Pam was for a humanitarian response to address needs for water, shelter, and food. The government of Vanuatu and the UN Office for the Coordination of Humanitarian Affairs launched a flash appeal to raise funds to provide humanitarian assistance for a 3-month period until the end of June. Subsequently, a humanitarian action plan to run until the end of July was prepared and the combined requested funding is \$38 million.

Given the importance of subsistence agriculture to the population of Vanuatu, food security has been a matter of great importance in the immediate and short term. The government has led the distribution of food aid, largely in the form of rice, tinned fish, noodles, and high-energy biscuits, with the assistance of humanitarian partners including the World Food Program. With each issue of food aid, rural communities have received seeds, seedlings, and gardening tools so that food gardens could be reestablished as soon as possible. On 1 June the government launched the Urban Gardens project to promote the use of state land and undeveloped leased land as food gardens for a 12-month period in recognition of the need to address urban food security issues (Newton Cain 2015).

It became very clear very quickly that the logistical implications and associated costs associated with meeting the humanitarian needs are many and varied. In the very early stages of the response, these difficulties were exacerbated by a lack of communications,

particularly with rural and remote areas. There was no shortage of offers of help from near and far, from governments, NGOs, the private sector, and others. From the start, the government of Vanuatu made it clear that it intended to lead the response (and subsequent activities related to recovery), and this caused some tension between the government and NGOs. A number of senior officials were seconded to work within and with the National Disaster Management Office on aid distribution, placing additional strain on a small bureaucracy with limited across-the-board capacity.

In the immediate aftermath and as a way of promoting early recovery efforts, the government made a number of decisions with fiscal and economic implications.

#### They were:

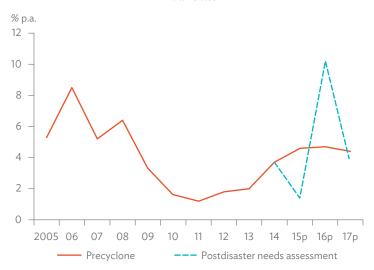
- (i) waiver of VAT and duty on imported seeds, gardening tools, and building materials;
- (ii) release of \$9,124 to each of the country's 52 members of Parliament (i.e., a doubling of the constituency allowance for 2015); and
- (iii) direction to the Vanuatu National Provident Fund (the national pension fund) to facilitate members to withdraw 20% of their retirement accounts to fund rebuilding and/or
- (iv) livelihood restoration.

These measures supported households in the aftermath of the cyclone. However, they also adversely affected the fiscal position of the government, which is under considerable pressure (and is likely to remain so for some time) given the expected downturn in two of the most significant sectors, agriculture and tourism, as a consequence of the cyclone. During the recent extraordinary sitting of Parliament, a supplementary budget of \$437,956 was approved.

Government estimates of economic growth in Vanuatu have been modified considerably to take into account the effects of Cyclone Pam. Figure 1 shows economic growth estimates both prior to and after the passage of Cyclone Pam. In its postdisaster needs assessment, the Government of Vanuatu estimates that Cyclone Pam had a substantial negative impact on GDP, but the impact will be mitigated to some extent by economic activity associated with recovery and reconstruction. Growth in 2015 is now projected at 1.4% (Government of Vanuatu 2015b). This is 3.2% lower than expectations prior to Cyclone Pam, but higher than initial forecasts in the immediate aftermath of the cyclone (a preliminary assessment by ADB projected a contraction of –0.5%, and the recent IMF Article IV Consultation projects growth of –2.0%).

Economic activity is expected to rebound in 2016 due to reconstruction and recovery activity, as well as the commencement of a number of large infrastructure projects conceived prior to Cyclone Pam. The government's postdisaster needs assessment predicts GDP growth of 10.3% in 2016. It should be noted that this estimate is affected by the availability of finance and capacity constraints and is therefore subject to a high degree of uncertainty. ADB estimates made in the initial aftermath of Cyclone Pam predicted significantly lower growth of 4%. The recent IMF Article IV Consultation projects growth of 5% in 2016.

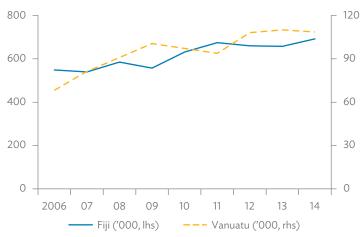
Figure 1: Impact of Cyclone Pam on projected GDP growth in Vanuatu



GDP = gross domestic product, p = projection.
Source: Dornan, M. 2015. Vanuatu after Cyclone Pam: the economic impact.
Devpolicy Blog. http://devpolicy.org/vanuatu-after-cyclone-pam-the-economic-impact-20150410

Future growth rates will depend on how quickly tourism recovers. This sector is of particular concern, given its overwhelming importance to the economy as a whole. While cruise ship calls resumed in a short space of time, a number of properties in and around Port Vila had to close for repairs and both Air Vanuatu and Virgin Australia reduced their flight schedules, reflecting a drop in demand. Many properties have now reopened, but two of the biggest will be closed until the end of 2015.

Figure 2: Comparison of visitor arrivals to Fiji and Vanuatu



Ihs = left-hand scale, rhs = right-hand scale.
Source: ADB. 2014. Pacific Economic Monitor database. www.adb.org/pacmonitor

Experience in other countries suggests that there is reputational damage associated with large-scale disasters such as Cyclone Pam, and that it can take years for the tourism sector to fully recover from such events. This stresses the importance of a new campaign promoting Vanuatu as a holiday destination in the largest source markets (Australia, New Zealand, and New Caledonia). Vanuatu's most significant competitor in the tourism market, Fiji, is likely to benefit from the expected downturn in Vanuatu in the meantime (Figure 2 shows the substitution effect between these two destinations).

#### Medium- to longer-term outlook

As Vanuatu moves from the humanitarian response stage to recovery and reconstruction, the enormity of the task has become apparent. Again, experience from elsewhere may give some indication about how this event could affect economic activity and growth in Vanuatu. Loayza et al. (2009) determined that a "typical" (median) disaster has a negative impact on medium-term future economic growth, although the effects vary according to the type of disaster experienced and the sector under consideration. In some cases, disasters are found to have positive economic impacts, such as where the industrial sector increases output further after floods, earthquakes, and storms (including cyclones)—no doubt as a result of subsequent reconstruction activities. However, this should not be equated with economic welfare or well-being.

In Vanuatu, household spending on rebuilding and rehabilitation is already making it difficult for families to maintain or increase investment in nonrecovery activities such as education (Dornan and Newton Cain 2015a). The economic literature suggests that severe disasters such as Cyclone Pam have effects that are considerably more pronounced than 'median' disasters. In these cases, there is a clear negative impact on future GDP and future output in agricultural, industrial, and service sectors. The extent of these impacts depends on a range of factors. Cavallo and Noy (2010) found after reviewing the literature that the medium- to longer-term economic impacts are affected by a country's "ability to mobilize significant funding for reconstruction." They argue that, as a result, poor countries suffer more in the medium and longer term owing to disasters.

The Vanuatu government's postdisaster needs assessment, prepared with support from development partners, notes that the economic value of the impacts of Cyclone Pam amounts to \$449.4 million (Government of Vanuatu 2015b). This equates to 64.1% of GDP (based on the 2013 fi gures). By comparison, the costs of reconstruction in Samoa after Cyclone Evan in 2012 equated to 30% of GDP. The assessment report cautions that the estimates of damage and loss are likely to be underestimates as a result of limitations to the data that were available at the time. Table 3 provides more detail as to damage and loss in selected sectors of the Vanuatu economy, as reported in the postdisaster needs assessment.

Table 3: Estimates of economic value of impact on selected sectors of the Vanuatu economy

	Disaster effects (\$ million)		Share of disaster effects (%)		
	Damage	Losses	Total	Private	Public
Productive sectors	78.9	96.3	175.2	98.0	2.0
Agriculture	13.2	43.0	56.1	93.0	7.0
Commerce and industry	11.1	19.9	31.0	100.0	0.0
Tourism	54.7	33.4	88.1	100.0	0.0
Social sectors	132.7	5.8	138.6	67.0	33.0
Housing (private)	87.5	40.7	128.2	100.0	0.0
Education	36.2	0.7	36.9	0.0	100.0
Infrastructure sectors	59.3	27.1	86.3	51.0	49.0
Transport	27.9	19.8	47.7	43.0	57.0
Communication	20.9	3.6	24.5	67.0	33.0
TOTAL	270.9	178.5	449.4	69.0	31.0

Notes: Damage (or direct impacts) refers to the economic and financial impacts resulting from damaged infrastructure and physical assets. Losses (or indirect impacts) refers to economic and financial impacts resulting from changes in economic activities, such as reduced tourism numbers or higher prices for certain inputs to production. Exchange rate used is \$1 = 108.04 vatu.

Source: Government of Vanuatu. 2015c. Budget Policy Statement 2016. Port Vila.

In terms of estimated recovery costs, the postdisaster needs assessment is equally sobering. The total estimated cost of recovery over a 4-year period is \$328.2 million (43.3% of GDP), with 52% of this relating to the public sector.

These costs are far beyond the government's ability to meet from domestic revenue even without the extra pressures on the current account referred to earlier. The need for external funding is undeniable. The previous Council of Ministers was considering a 2-year reconstruction and recovery plan that will set out the priorities for reconstruction and rehabilitation of public assets such as schools and health facilities. We have yet to see how this will progress given the change of government on 12 June. There has already been recognition that there will need to be prioritization of which assets are to be replaced and/or repaired. Managing community and political expectations is likely to prove tricky, not least because the country will go to general elections in 2016.

There are a number of ways that this work will be financed. While a surge in aid will cover some of the reconstruction costs, previous experience from around the world indicates that it will fall well short of what is required (Becerra, Cavallo, and Noy 2012). Closer to home, past disasters in Vanuatu (three cyclones during 1985) and Samoa (Cyclone Evan in 2012) generated an increase in aid that amounted to around 5% of GDP, well short of what was required (Dornan and Newton Cain 2015a).

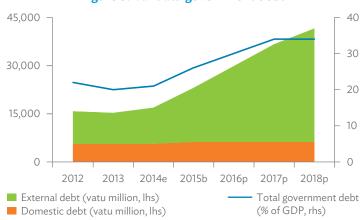
Development partners, in providing support, should be striving to harmonize their processes and absorb more of the transaction costs involved in getting projects approved. The Vanuatu government has become increasingly vocal about the need for donors to use government systems since Cyclone Pam. With an inflow of large sums of aid, there is a real risk that parallel systems will be created, and that the best and brightest Ni-Vanuatu will seek employment with donor agencies and/or NGOs at the expense of government institutions.

Use of government systems is low in Vanuatu, partly due to donor perceptions of poor governance, and partly due to limited capacity in line areas of government that could otherwise implement donor funded projects. In 2010, less than 30% of aid provided to Vanuatu was directed through government mechanisms (Vanuatu Peer Review Team 2010). It is in this context that the previous prime minister has specifically requested budget support, and has asked that development partners make greater use of government systems and processes.

The Vanuatu government will also need to borrow funds for reconstruction, as did the Government of Samoa after Cyclone Evan. Access to finance for reconstruction is an essential element of recovery, and one that influences the severity of the economic impacts of a disaster (Cavallo and Noy 2010). Vanuatu is currently in a sound fiscal position, with public debt equivalent to only 21% of GDP, well below the 40% threshold recommended by the International Monetary Fund. On the face of it, the Vanuatu government is in a position to borrow money for reconstruction. However, closer inspection reveals a somewhat different story. It currently has a significant pipeline of infrastructure investments forecast, which is to be funded through a combination of grants and concessional loans from donors. These projects would result in a considerable increase in public debt (Figure 3).

It would be preferable to cancel or postpone some of these projects in order to provide greater flexibility for borrowing to finance reconstruction. However, the political realities are likely to make that very difficult (Dornan and Newton Cain 2015a). Debt management is therefore going to be a crucial element in Vanuatu's longerterm recovery, with careful attention required to what projects are approved and on what terms. This will also need to be an important concern among development partners.

Figure 3: Vanuatu government debt



Ihs = left-hand scale, rhs = right-hand scale. Source: Dornan and Newton Cain. 2015a. Vanuatu after Cyclone Pam: how will reconstruction be financed? Devpolicy Blog. http://devpolicy.org/vanuatuafter-cyclone-pam-how-will-reconstruction-be-financed-20150507/

### **Conclusions and recommendations**

Vanuatu faces significant challenges as it seeks to rebuild and recover from Cyclone Pam. The recovery of the tourism sector will be a crucial determinant of Vanuatu's medium-term economic prospects. A proactive strategy to rebuild the sector is needed, including promotional activities that have in the past received limited government attention and funding. As part of "building back better," efforts will need to extend beyond Port Vila to ensure that all communities affected by the cyclone benefit (Dornan and Newton Cain 2015b). The reconstruction of infrastructure linking these communities to Port Vila should be a priority for the same reason.

Access to finance and the way in which capacity constraints are managed will also be important. Both have the potential to undermine reconstruction and recovery activities—a point emphasized in the economic literature on disasters. Damage from Cyclone Pam, estimated at the equivalent of 64.1% of GDP, means that very significant funding is required for reconstruction. The government will be expected to finance over half of this amount, both for repair of government infrastructure and services and in support of private sector recovery efforts.

Development partners can be expected to, and are already, assisting with this eff ort. However, development assistance is unlikely to fund more than a modest proportion of the total expenditure required. This highlights the importance of ensuring that assistance is well targeted, with partners coordinating their assistance and working closely with the Vanuatu government—measures also important for management of capacity constraints.

The Government of Vanuatu will also need to borrow to fund the reconstruction and recovery eff ort. It is currently in a position to do so; however, a pipeline of new infrastructure partially funded through concessional loans means that care will need to be taken to avoid excessive borrowing. The terms of new debt will need to be scrutinized closely to ensure that the quality of future loans is given due consideration. Prioritization of infrastructure projects will also be required. There is no doubt that this will be politically challenging. The resilience shown by Ni-Vanuatu in recent months, together with a commendable response by the Vanuatu government, should nevertheless be cause for optimism.

2019 Update: In the aftermath of the cyclone, Vanuatu embarked on a massive reconstruction and infrastructure upgrading. Some of the projects that were in the pipeline where pushed forward due to the damages done by the typhoon. Major projects included the upgrading and rehabilitation of the main airport in Port Vila and the wharves in Port Vila and Luganville. Reconstruction of roads, bridges, schools, and public infrastructure was also implemented. With the rapid growth in the construction industry, Vanuatu managed to avoid economic contraction in 2015. Growth was slowed down to 0.2% before rising to an average of 3.7% from 2016 to 2018. Building-back better, the upgraded infrastructure is climate- and disaster-proofed. Reconstruction, however, pushed the national debt at around 46% of GDP in 2017, higher than the projected 35% in the article. The debt does not include the \$23.8 million International Monetary Fund (IMF) Rapid Credit Facility/ Rapid Financing Instrument (RCF/ RFI) disbursed in 2015 to prevent a balance-of-payments crisis. The IMF debt would increase the debt by 5.7%.

Lead authors: Matthew Dornan, Development Policy Centre, Australian National University, and Tess Newton Cain, Visiting Fellow to the Development Policy Centre (based in Vanuatu).

#### References:

ADB. 2014. Pacifi c Economic Monitor database. December.

Becerra, O., E. Cavallo, and I. Noy. 2012. Foreign Aid in the Aftermath of Natural Disasters. *IDB Working Paper Series*. 333. Inter-American Development Bank.

Cavallo, E. and I. Noy. 2010. The Economics of Natural Disasters: A Survey. *IDB Working Paper Series*. 124. Inter-American Development Bank.

Dornan, M. 2015a. Vanuatu after Cyclone Pam: the economic impact. *Devpolicy Blog*. http://devpolicy.org/vanuatu-aftercyclone-pam-the-economic-impact-20150410

Dornan, M. and T. Newton Cain. 2015a. Vanuatu after Cyclone Pam: how will reconstruction be financed? *Devpolicy Blog.* http://devpolicy.org/vanuatu-after-cyclone-pam-howwill-reconstruction-be-fi nanced-20150507

Dornan, M. and T. Newton Cain. 2015b. 'Tourism and economic diversifi cation in Vanuatu' http://devpolicy.org/tourism-and-economic-diversifi cation-in-vanuatu-20150616

Government of Vanuatu. 2015a. Budget 2015. Volume 1. Port Vila.

Government of Vanuatu. 2015b. Draft Post-Disaster Needs Assessment—Tropical Cyclone Pam. March.

Government of Vanuatu. 2015c. Budget Policy Statement 2016. Port Vila.

Loayza, N. et al. 2009. Natural Disasters and Growth—Going Beyond the Averages. Washington, DC: World Bank.

Newton Cain, T. 2015. Food security responses in Vanuatu should include urban gardens. http://tncpacificconsulting.com/2015/03/31/food-security-responses-in-vanuatushould-include-urban-gardens

Reserve Bank of Vanuatu. 2015. Quarterly Economic Review. December 2014. 115(4).

Vanuatu Peer Review Team. 2010. Vanuatu Peer Review Report. Pacific Islands Forum Secretariat.

World Travel and Tourism Council. 2014. Travel and Tourism Economic Impact 2014: Vanuatu. London.

The twin challenges of smallness and remoteness drive up costs-of-living in the Pacific. Small markets translate to diseconomies of scale and limited competition that result in elevated prices for locally produced goods, while high transportation costs similarly raise prices of imported commodities. This policy brief from the July 2010 issue of the Monitor highlights that although average incomes may appear relatively high for most Pacific economies, high cost structures effectively restrict purchasing power, thereby limiting welfare gains derived from household earnings. Nearly a decade since, latest available data shows this analysis' main message—that real incomes in the Pacific are in fact still lower than those of most comparators in Asia—remains relevant for development policy.

# Income—Who scores highest?

#### **Purchasing power parity**

Average incomes in the Pacific, measured by per capita gross national income, compare favorably to those in developing Asia. Many Pacific island nations report a higher per capita gross income than much of developing Asia. But the comparison is potentially misleading. This is because it ignores the disadvantage that arises from the Pacific's very high cost structure and the resulting high price levels. A similar argument can be made when comparing incomes within the Pacific. Comparisons within the Pacific will be most meaningful if they factor in the consequences of different cost structures and price levels.

More meaningful comparisons are made when undertaken in purchasing power parity terms. A dollar equivalent (i.e., \$1 worth of local currency) in one country can have a very different purchasing power to a dollar equivalent held in another country. Specifically, a dollar equivalent held in a lower income country will normally buy more goods and services than a dollar equivalent held in a higher income country. This is because prices in a lower-income economy are normally lower than prices in higher-income economies.

Purchasing power parities can be thought of as conversion factors that ensure a common purchasing power over a given set of goods and services (see the special chapter on Comparing Poverty Across Countries: The Role of Purchasing Power Parities in the ADB publication Key Indicators 2008.)

# Methodology

The International Comparison Program led by the World Bank, provides the key source of purchasing power parity adjustment factors. The most recent estimates from the program are for 2005, which fortunately included the Fiji Islands, This was the first time a Pacific Island economy was included in the program.

The purchasing power parity index for the Fiji Islands was estimated at 208 when expressed relative to Asia (i.e., the average index for Asia is 100). That is, \$2.08 in the Fiji Islands was found to have the same purchasing power, on average, as \$1 in Asia. When expressed relative to the US (i.e., the average index for the US is 100), the Fiji Islands' index was 85. This means the Fiji Islands is a lower-cost economy than the US. This compares with a typical index for Asian economies of around 50 when expressed relative to the US.

It is possible use to the index for the Fiji Islands as a benchmark for preparing estimates of the purchasing power parity index for other Pacific economies. This is done by using detailed price information from the consumer price index. Specifically, prices in a typical year are compared (in the levels) for a selection of goods that are in the consumer price index basket for the Fiji Islands and another Pacific Island economy. This comparison is used to estimate the aggregate difference in price levels between the two economies.

Such estimates can only be considered illustrative. The comparison is undertaken for a sample of goods, and this sample varies across countries. Ideally the estimates would be based on comparisons of goods that are the same across countries. A further limitation is that the goods being compared may not be strictly comparable (e.g., because of differences in quality).

### Results

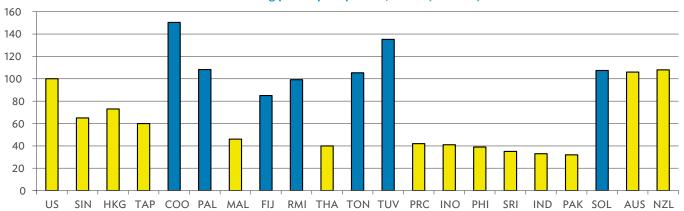
Illustrative purchasing power indexes were prepared for the Cook Islands, the Marshall Islands, Palau, Solomon Islands, Tonga, and Tuvalu. Each had a higher index than the Fiji Islands.

Thus most Pacific island economies are found to be higher price economies than the US. Most are found to have a price level comparable to or above Australia and New Zealand, that are slightly higher price economies than the US. The much higher cost structures in the Pacific compared to Asia stand out from the international comparisons.

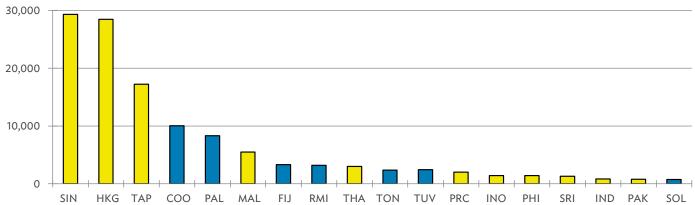
Of this group, the Cook Islands was found to be the highest-cost economy, with an index of 150 expressed relative to the US. Tuvalu's index was estimated at 135, and the remaining countries between 100 and 110.

The purchasing power parity index is used to prepare adjusted estimates of per capita gross national income. When income levels are expressed in purchasing power parity terms, lower-income countries will normally appear better off relative to higher-income countries (in contrast to measuring incomes in standard terms). The opposite applies to the Pacific island countries, which are high-cost economies. Importantly, the data suggest real incomes in the Pacific are, on average, below that of most of developing Asia.

# Purchasing power parity index, 2005 (US=100)

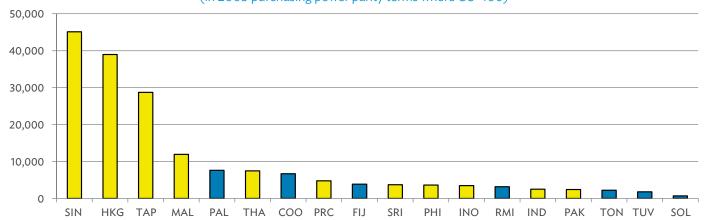


# Per capita gross national income, 2006 (US\$)



# Per capita gross national income in purchasing power parity terms, 2006

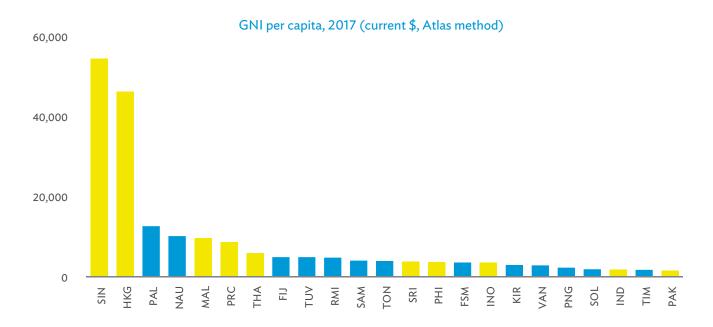
(in 2005 purchasing power parity terms where US=100)

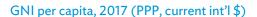


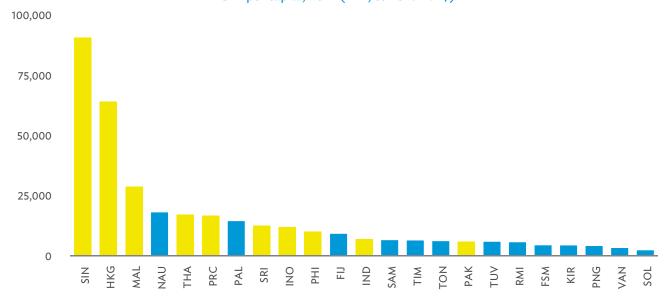
\$=US dollar, AUS=Australia, COO=Cook Islands, FIJ=Fiji Islands, HKG=Hong Kong, IND=India, INO=Indonesia, MAL=Malaysia, NZL=New Zealand, PAK=Pakistan, PAL=Palau, PHI=Philippines, PPP=purchasing power parity, PRC=People's Republic of China, RMI=Republic of the Marshall Islands, SIN=Singapore, SOL=Solomon Islands, SRI=Sri Lanka, TAP=Taipei, China, THA=Thailand, TON=Tonga, TUV=Tuvalu, US=United States Note: Estimates for the Pacific islands are illustrative only.

Sources: ADB estimates based on World Bank. 2005. Global Purchasing Power Parities and Real Expenditures. Washington D.C.; and ADB. 2008. Asian Development Outlook 2008. Manila.

**2019 Update:** Since the original publication of this policy brief, estimates of per capita GNI in PPP terms have become available for 13 of ADB's 14 Pacific developing member countries (DMC) through World Bank's World Development Indicators database. Data confirms that 2017 per capita gross national income (GNI) in half of the Pacific DMCs is higher than those of comparators in South Asia and Southeast Asia in nominal terms. However, purchasing power parity (PPP) adjustments reveal that 10 Pacific DMCs effectively have lower real per capita incomes than India, highlighting continuing challenges of living in island economies with high cost structures.







\$=US dollar, FIJ=Fiji, HKG=Hong Kong, FSM=Federated States of Micronesia, IND=India, INO=Indonesia, KIR=Kiribati, MAL=Malaysia, NAU=Nauru, PAK=Pakistan, PAL=Palau, PHI=Philippines, PNG=Papua New Guinea, PPP=purchasing power parity, PRC=People's Republic of China, RMI=Republic of the Marshall Islands, SAM=Samoa, SIN=Singapore, SOL=Solomon Islands, SRI=Sri Lanka, THA=Thailand, TIM=Timor-Leste, TON=Tonga, TUV=Tuvalu, VAN=Vanuatu.

Sources: World Bank World Development Indicators online database.

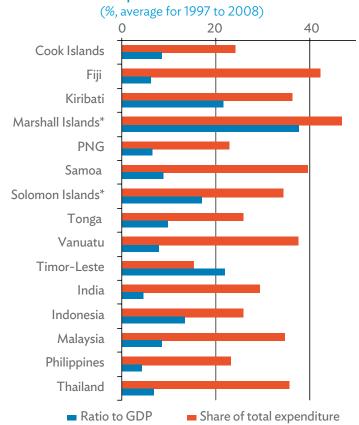
Although the Pacific's high cost structure can hamper governments' efforts to expand access to basic services and improve development outcomes, operating inefficiencies in service delivery are also evident. As noted in this policy brief from the February 2010 issue of the Monitor, most Pacific economies tend to spend higher amounts on education and health services only to achieve similar outcomes as comparators in Asia. However, a few Pacific economies have managed to deliver services with costs at par with Asian counterparts—a clear indication that there remains room for efficiency gains even amid the subregion's high cost structure. A quick view of latest available data shows that even more Pacific economies have become efficient in delivering social services, highlighting the effectiveness of reforms that have been ongoing since the original publication of this policy brief almost a decade ago.

# Benchmarking service delivery

Pacific countries have long recognized the importance of investing in health and education. This is reflected in the relatively high share of budgets allocated to these areas. For example, from 1997 to 2008, government expenditures on health and education averaged around 15% of GDP in the Pacific. This compared with an average of 8% across some of Asia's major developing countries. Over the same period, Pacific countries allocated on average 32% of their budgets to the social sectors, compared with an average of 30% across some of Asia's major developing countries.

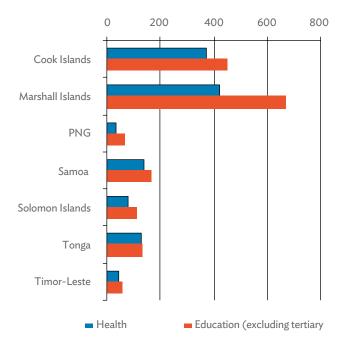
But is the Pacific's funding for health and education used efficiently? Expenditure levels and development conditions vary considerably across the region. Even with this diversity, however, there are objective ways to assess whether social sector services are being provided efficiently.

# Government expenditure on health and education



PNG = Papua New Guinea, \* 2008 data Sources: ADB 2009 Key Indicators and ADB estimates based on government budget documents.

# Government expenditure (US\$ in 2008, per head)



PNG = Papua New Guinea. Sources: ADB staff estimates based on government budget documents and ADB 2009 Key Indicators.

For example, simple cross-country comparisons of expenditure levels against some development indicators offers useful insights, as shown in the charts on the next page. There are some Pacific countries that have key development indicators comparable to those achieved in Asia for similar expenditure levels. This group includes the Fiji Islands (in relation to health), Tonga, and Vanuatu. This suggests these countries may be working reasonably efficiently.

But a number of other Pacific economies lack a favorable comparison. They tend to spend a lot more than Asian economies that are achieving comparable development indicators. These include the Cook Islands and the Marshall Islands (FSM would probably also fall into this group). While this result could be due to higher cost structures in the Pacific—a commonly cited constraint to development in the Pacific—the apparent ability of some Pacific economies to match Asian standards calls this explanation into question.

Much more can be done to benchmark service standards. For example, data envelopment analysis is a widely used technique that can help assesses the productive efficiency of government service delivery. In data envelopment analysis, benchmark operators are identified and the efficiency of other operators is examined relative to this benchmark. The assessment can control for important crosscountry differences. This provides a guide to best practice models that can be studied with a view to adopting some of the better approaches elsewhere. Stochastic frontier analysis is another widely used benchmarking technique that may offer valuable insights to help raise service standards in the Pacific.

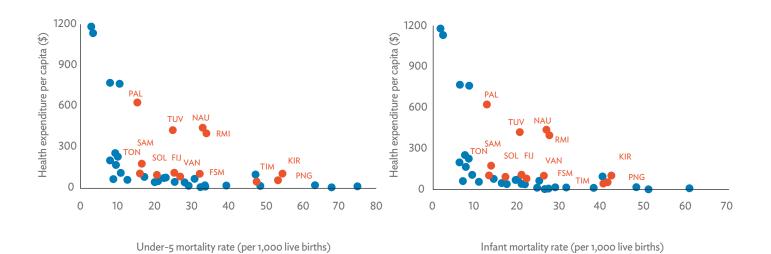
of primary

# Government expenditure versus key development indicators (latest available data)

Health sector 500 Marshall Is Health expenditure (\$ per head) Health expenditure (\$ per head) 600 Cook Is 400 PDMCs Asia Marshall Is. PDMCs Cook Is 300 400 Asia 200 200 Kiribati 100 Kiribati Solomon Timor-Leste Timor-Leste PNG 0 0 20 40 60 80 100 0 20 40 60 80 100 Infant mortality rate (per 1000 births) Under five mortality rate (per 1000 births) **Education sector** 500 Marshall Is. Education expenditure(\$ per head) Education expenditure (\$ per head) PDMCs PDMCs Asia Asia 400 Cook Is. 300 Samoa \_ 200 Kiribati 200 Vanuatu 🕳 Solomon 100 Solomon Is PNG Timor-Les 0 0 20 40 60 80 100 0 20 40 60 100 Net enrollment ratio in primary education (%) % of pupils starting grade 1 who reach last grade

Is.=Islands, PDMC=Pacific developing member country, PNG=Papua New Guinea Sources: ADB 2009 Key Indicators and ADB estimates based on government budget documents.

**2019 Update:** Recent estimates are more widely available for per capita government expenditure on health and key health sector outcomes. Data as of 2017 confirms that in addition to Fiji, Tonga, and Vanuatu—each of which was already relatively efficiently funding health even at the time of the original analysis—nearly all other Pacific economies are moving closer to efficiency levels seen in developing economies in Asia. However, the high cost of health service delivery remains a challenge in a few of the smallest Pacific economies.



\$=US dollar, FIJ=Fiji, FSM=Federated States of Micronesia, KIR=Kiribati, NAU=Nauru, PAL=Palau, PNG=Papua New Guinea, RMI=Republic of the Marshall Islands, SAM=Samoa, SOL=Solomon Islands, TIM=Timor-Leste, TON=Tonga, TUV=Tuvalu, VAN=Vanuatu.

Sources: World Bank World Development Indicators online database.

Lead author: Craig Sugden.

Women have long been recognized as key drivers for socio-economic development and poverty reduction: being both household managers and income earners, they tend to plow their earnings back into their families, helping to realize better child education and health outcomes. As shown by this policy brief from the July 2012 issue of the Monitor, there has been progress in the legal and regulatory reforms needed to support women's economic empowerment. However, they continue to face systemic discrimination that largely confines them to informal employment, which is lower-paying and less secure, and precludes proper recognition of women's contributions to the economy. The accompanying box from the February 2010 issue of the Monitor shows how women in the Pacific are vulnerable, both as workers and household managers, in times of economic downturn and emphasizes that supporting their empowerment is key towards ensuring the economy's resilience to shocks and realizing genuinely inclusive growth.

# Economic empowerment of women through private sector development in the Pacific

Throughout the developing world, women are especially burdened by underdevelopment. They must simultaneously manage their households and generate income despite the lack of support at family, community, and government levels. Since the United Nations (UN) International Women's Year (1975) and the UN Decade for Women (1976-1985), there have been significant changes in thinking regarding the economic issues facing women in developing economies. Now, in both discourse and practice, women are considered an integral component of development strategies (Fonjon 2001). Women are capable of contributing to building the private sector and achieving long-term poverty reduction for their households and communities. Recent economic analysis of the private sector in Pacific developing member countries over the past 5-10 years has highlighted the crucial role that women can play in business. Yet they remain excessively disadvantaged, because many existing laws and regulations in Pacific island economies are outdated, according men legal primacy in many economic activities and discriminating against women. For example, many business name acts require women to obtain signatures of a spouse or male relative. As a result, most women in Pacific island economies remain locked into the informal sector, where economic returns are much lower than they are for formal business activities.

This paper describes the work being done to improve the overall legal and regulatory environment in the Pacific, which will assist in supporting economic empowerment of women. There have been targeted interventions that assist women's entry into the formal economy. ADB works closely with all member countries in the Pacific and women's groups in reforming existing business laws. These reforms are expected to assist women to become increasingly involved in commercial activity. As integral drivers of the development process, women will ultimately underpin the success of the reforms. This paper outlines the constraints faced by women and how reforming business laws will promote women's participation in the formal sector and create significant economic empowerment.

# Women's roles in economic development

The integral role that women play in economic development and poverty reduction is increasingly recognized (International Finance

Corporation 2010). The third Millennium Development Goal of the UN recognizes that women can be key drivers of the development agenda. Women entrepreneurs' earnings generally result in greater poverty reduction because women tend to invest profits directly into their families' well-being (Jalbert 2000). Further, higher incomes through female-run enterprises often result in better control and access to household resources, and better child health and nutrition outcomes (Duflo 2005).

Women are significant private sector participants in developing economies, which are primarily agriculture-based with large informal sectors. Informal economic activities usually range from self-employment in trading activities to small enterprise. Women may also engage in wholesaling and export trading, and sometimes build sizable financial operations. However, in many cases, women prefer to operate microenterprises in the informal economy to avoid excessive and often burdensome expenses of regulatory requirements (e.g., business licensing and registration) while still earning an income. The informal economy allows women to establish businesses with comparative ease, providing the convenience of being able to operate from home and giving access to arrangements that provide short-term solutions to address their families' basic needs. In addition, setting up a business in the informal economy is sometimes deemed more convenient for women because they may face less discrimination and harassment in trying to secure financing from representatives of government and formal institutions, which tend to be male-dominated. In addition, women may not have the proper skills and assets to participate in the formal economy.

However, informality is rarely the route to long-term business success because of the significant challenges faced in expanding business activities and raising income through informal sector activity. Successful informal businesses have difficulty accessing finance—they quickly outgrow the capacity of microfinance institutions but are denied access to the formal banking system. They cannot use the legal system to deal with contract disputes. Formalization of women's businesses can help women secure long-term welfare, reduce poverty, and improve household stability. Simple adjustment mechanisms must be made available to encourage women in the informal sector to make the transition to the formal economy.

# Responses to business law constraints

In the private sector, women are disproportionately constrained relative to men. This is due both to cultural factors existing in patriarchal societies and discriminatory laws. While social and cultural factors must be considered in attempting to remedy the situation, this paper focuses only on business law reforms. Reducing transaction costs in establishing and running businesses can likewise reduce the social constraints of the "double-shift, double-burden" (women working at home and in the business) and ensure that women's already limited time can be used more productively.

The key constraints that women face with regard to business laws include

- unsuitability of present business and company structures, which are not flexible enough to meet the needs of women;
- high transaction costs in setting up a business (which have more impact on women, who do not control the family budget or cash flow);
- lack of knowledge and familiarity with business processes and procedures, and general ignorance of the law; and
- difficulty in accessing financial services and mobilizing collateral (e.g., land is almost always controlled by men, so only movable property is available to women to obtain credit).

The present legal frameworks in most Pacific economies are outdated and unsuited to the local context. More specifically, these legal frameworks weren't drafted with the aim of gender equality. Besides addressing outdated laws, business law reform in the Pacific implemented by ADB addresses the particular constraints faced by women in business. The main objective is to promote private sector-led, inclusive economic growth in the Pacific. Through its Private Sector Development Initiative, ADB is dealing with business law constraints by addressing the thematic nature of the problems inherent in existing business laws. For instance, new laws would remove almost all discretion from the company registration process in order to reduce discrimination and transaction costs. Moreover, these new laws are tailored specifically to suit the local environment, with key stakeholders consulted during the drafting and implementation phases. The rebuilding, or at least improved support, of institutions with a role in administering the new laws would complement the changes to business processes.

The new laws also engender an automated process that significantly reduces additional layers of unnecessary regulations. This sub-layer of regulation was identified as a major impediment in many Pacific economies and was mostly affecting women (who, for example, are deterred by the requirement to physically attend the registry). Automation of business processes improves the accuracy, certainty, and currency of information. In turn, this will be useful for internal administrative purposes and the evaluation of the outcomes of the policy.

# The reform agenda

The new laws have introduced a number of different business structures that support women in managing their businesses independently, without undue influence from men. The laws create alternative ownership options and impose reporting and disclosure requirements that reduce male influence. Under the new laws,

companies are simple to incorporate and easier to manage on an ongoing basis. Hence, the associated transaction costs are minimal.

The current legal frameworks for creating company structures in several Pacific economies were based on the 1948 United Kingdom Companies Act, and remain outdated and inappropriate for the local context: specifically, they do not actively support the participation of women. For instance, they do not permit alternative company structures, such as the formation of community companies.

In addition, under present trust laws, men are invariably the major trustees and control the trusts. This deprives many women of the ability to control and manage community assets for legitimate business purposes. The laws' lack of compulsory disclosure and communities' reluctance to pursue legal remedies make the present structure problematic for community asset holding. There is a crucial need to modify the present entrenched structures in order to create greater flexibility for women wishing to engage in the private sector.

New companies acts have been introduced in Solomon Islands and Tonga; Vanuatu is in the process of enacting a new act. The new and revised companies acts introduce the following benefits for women:

Simplified and automated business incorporation. This has all but eliminated the need to involve a lawyer, and therefore reduces the time and monetary costs associated with incorporation. Furthermore, automation eliminates discretion through an electronic process that does not directly involve the registrar or other staff. These changes make it easier for women, both practically and financially, to engage in businesses while reducing the chances of discrimination. The new laws also provide for an automated enforcement mechanism that directly identifies reporting and disclosure failures on the part of companies. This reduces chances for any illegal interference with registered companies—specifically women-owned companies. Detailed incorporation documents such as memorandums of association and articles of association requirements have been replaced with simple company rules that will provide guidance for women undertaking business activities. This also reduces transaction costs as lawyers do not have to draft incorporation documentation.

Introduction of single shareholder/director and limited liability companies. Single shareholder companies remove the need for a second owner (usually a male), giving women greater control over their businesses. Under previous company structures, women weren't always able to manage the business income and operations adequately because of male interference. Women were often minority shareholders and had no input into decision making. This reform may also involve formalizing the informal sole trader businesses. There are numerous benefits for women in incorporating a business under these more flexible structures, including liability protection through separation of ownership from personal legal identity and greater opportunities to obtain credit and expand business opportunities due to formal recognition under the company law framework.

**Introduction of community companies.** The establishment of the community company structure under the new Solomon Islands Companies Act 2009 opens up greater opportunities for women to participate in business activities. Previously, women had limited

resources, assets, and access to finance. Under the new act, women can now mobilize collectively owned and managed community assets (which could comprise any form of movable property from livestock to crops and general inventory) in order to operate various business activities. The community company entity is more transparent and accountable, providing a generally more attractive alternative to holding and utilizing community assets compared with the present trusts structure.

Flexibility of company meetings and resolutions. Under a more flexible regulatory regime, women can participate in meetings held in more convenient locations and times, and without the need of always physically attending (e.g., attendance by electronic means). This arrangement is more considerate of women's special needs and concerns.

Secured transactions and access to finance. Initially, access to microcredit provides women with opportunities to take out small loans. The availability of credit has enabled many self-employed women and microenterprises to stabilize and modestly increase their incomes. With a succession of loans, some women have been able to expand their businesses and/or move into newer and more profitable lines of work while building up a savings cushion (McKee 1989). Problems arise when business success engenders the need for larger loans. In many Pacific economies, cash or land is the only form of collateral accepted by banks, and women are much less likely than men to have access to land titles. Secured transactions reform provides a path to business growth once the size of microloans can no longer supply sufficient credit. Such reforms would allow women to use movable assets (e.g., equipment, inventory, accounts receivables, crops, livestock, and shares) at their disposal as collateral. This would provide a diverse range of options for women and give banks greater flexibility to support women's businesses.

Women have also benefited from the introduction of secured transactions laws and automated registries in a number of Pacific countries. Recently, new laws have been introduced in the Federated States of Micronesia (2006), Vanuatu (2007), Solomon Islands (2008), Republic of the Marshall Islands (2009), Tonga (2010), PNG (2011), and Palau (2012). These laws will significantly improve the environment for accessing credit by (i) introducing a simple system that provides certainty around loans supported by movable collateral and (ii) significantly reducing associated transaction costs. The system supports lending through an electronic registry that simplifies registration of security interests.

Reform initiatives have not been limited to pursuing the passage of laws, but also include publicity and awareness-raising activities. Besides disseminating information through community education programs, several nationwide radio programs were aired to raise public awareness of the new features of the business laws. Further, beyond simply creating an enabling business environment for women, reforms have also assisted in changing the prevailing attitudes toward women's participation in societal affairs. This was achieved through a project design that included extensive consultations with both women and men, and with organizations that regularly interact with women.

# Importance of data collection to gender mainstreaming

It should be noted that there is a paucity of gender data currently available. There has been some recent research completed on gender and economic empowerment, but much of the data is anecdotal.

Business law reforms have facilitated the collection of reliable data that will be crucial for monitoring and evaluation purposes. Other than rudimentary information about sectoral employment figures, most statistical agencies in the Pacific do not aggregate the nature of women's business involvement in a thorough manner. Without data, it is not possible to adequately ascertain the level of women's involvement or the nature of the constraints women face in business. Hence, it is difficult to assess and track the effectiveness of previous policies and to design new policy instruments. For instance, due to the lack of data, it is often assumed that there is equal opportunity for women to join the formal economy, and the diversity of experiences and situations faced by women is not fully appreciated. Data collected under the new laws will also be important for ascertaining the problems associated with women's access to finance.

Sex-disaggregated data was initially collected prior to the implementation of the laws. The automated company registry processes will continue to collect post-implementation data. For example, the compulsory re-registration of companies under the new companies acts in Solomon Islands, Tonga, and Vanuatu will provide sex-disaggregated data about existing companies. In Solomon Islands, data shows the number of women directors and shareholders are about a third of their male counterparts (i.e., 800 women directors vs. 2,656 men, 839 women shareholders vs. 2,293 men). Data in other Pacific economies will not be readily available until full implementation of automated company registries following the introduction of new laws.

Lead authors: Paul Holden and Terry Reid, ADB Private Sector Development Initiative, Sydney.

# References:

Fonjon, L. 2001. Fostering Women's Participation in Development through Non-Governmental Efforts in Cameroon. *The Geographical Journal*. 167 (3). pp. 223–234.

International Finance Corporation. 2010. *Gender and Investment Climate Reform Assessments*. Report series. World Bank. 2010: 10.

Jalbert, S. 2000. Women Entrepreneurs in the Global Economy. Center for International Private Enterprise. www.cipe.org/pdf/programs/women/jalbert.pdf. p. 19.

Duflo, E. 2005. *Gender Equality in Development*. Department of Economics Papers, Massachusetts Institute of Technology. http://econ-www.mit.edu/files/799

McKee. K. 1989. Microlevel strategies for supporting livelihoods, employment and income generation of poor women in the third world: The challenge of significance. World Development. 17 (7). 993–1006 at 1001.

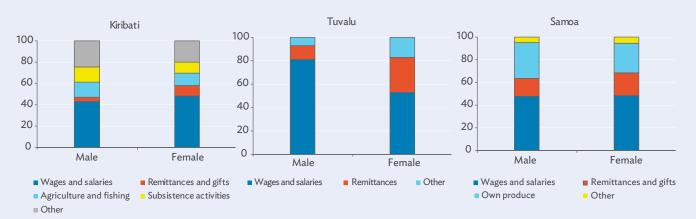
# Box. Are females at higher risk?

- Economic impacts by gender are also potentially important. A key concern is whether the economic slowdown has affected female workers more than males. If so, the response to the global economic crisis should pay extra attention to the needs of women. Again, the likely impacts can only be inferred indirectly. The data point to effects on both women and men.
- Women often carry a higher share of the burden of small-scale activities in the informal sector, such as tending family vegetable gardens, preparing food for sale, and selling at roadside shops, kiosks, and markets. This burden is likely to have risen, as the weakening in formal sector labor markets required people to find alternative sources of livelihood in the informal sector.
- At the same time, men may be required to make a larger contribution through other activities. For example, men have undertaken more agricultural work, such as growing the root crops needed to replace imported staples that are no longer affordable.
- Within the formal sector, women account for a larger share of manufacturing employment in Samoa and Tonga. The latest surveys reported that 61% of working women in Tonga and 34% in Samoa have manufacturing jobs; these include small-scale production activities, many of which would be home-based. These women would have borne the brunt of cutbacks in manufacturing activity, notably at Yazaki's operations in Samoa.
- Men account for a larger share of manufacturing workers in Fiji, where the region's manufacturing activity is concentrated. Construction, another industry highly exposed to the economic slowdown, is also male-dominated. Therefore, some of the impacts of the global economic crisis may have affected male workers more than female workers.
- Significantly, employment in the trade industry, comprising retail and wholesale trade, is reported as distributed fairly evenly among women and men.
- Analysis of income sources for vulnerable households show a similar pattern across households headed by women and men. However, remittances appear to be more important to female-headed households. This is expected, as many remittances are from absent male partners working overseas.
- Where males employed overseas earn less income, the stress of coping with declining remittances would fall on the women at home. The stress is potentially even higher if men put out of work return home to unemployment.

This section prepared jointly by staff of ADB, the Pacific Economic Management Technical Assistance project, and the United Nations Development Programme.

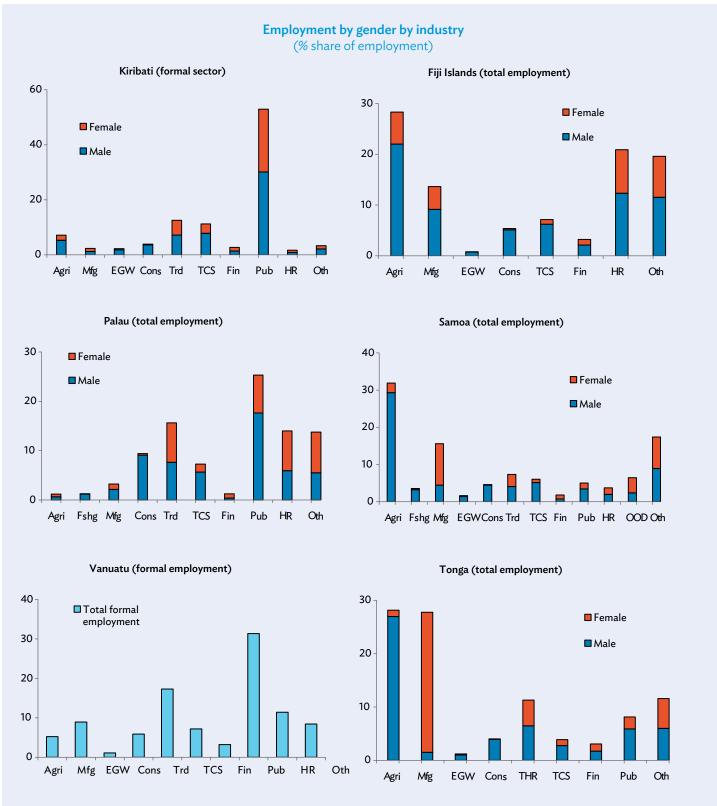
# Sources of income of vulnerable households

(% of total income, latest estimate)



Note: Gender of household head shown. The vulnerable are those living below the national poverty lines.

Sources: ADB estimates based on Kiribati Household Income and Expenditure Survey 2006; Samoa Household Income and Expenditure Survey 2002; and Tuvalu Household Income and Expenditure Survey 2005.



Agri-agriculture, Cons-construction, EGW-electricity, gas and water, Fin-finance, Fshg=fishing, HR=hotel and restaurant, Mfg= manufacturing, OOD=owner-occupied dwelling, Oth=others, Pub=public service, TCS=transport, communications, and storage, Trd=trade. Note: Gender disaggregated data are not available for Vanuatu.

Sources: Kiribati National Statistics Office, Fiji Islands Bureau of Statistics, Palau Office of Planning and Statistics, Samoa Ministry of Finance, Vanuatu National Statistics Office, and Tonga Department of Statistics.

The Pacific faces several challenges to job generation, notably in economies with young and fast-growing populations. There is narrow scope for private sector activities due to a lack of domestic demand arising from small, dispersed markets, and to limited opportunities to export or expand their operations (no economies of scale). Further, public sector employment becomes a de facto social safety net, which dampens productivity and possibly the quality of social services that has serious repercussions for the workforce and economic prospects. This policy brief from the July 2014 Pacific Economic Monitor examines the labor market challenges and conditions prevalent in the Pacific, many of which remain relevant to this day. The policy options to address these challenges, ranging from education and training at the ground level to promoting employment through regional initiatives, also remain worthy of further exploration.

# Realizing job needs across the Pacific

The Pacific region includes countries with high population growth rates as well as countries with declining populations. Labor market issues are therefore diverse, and efforts to address these issues are best developed in country-specific contexts. Nonetheless, this overview highlights some of the dominant labor market challenges faced in the region, considers underlying economic and labor market conditions, and discusses policy options for addressing these challenges.

# **Challenges faced across Pacific labor markets**

Many countries in the Pacific share a number of common labor market characteristics and problems:

First, creating new opportunities for productive employment is arguably the most urgent labor market issue in the Pacific, especially in Papua New Guinea (PNG), Solomon Islands, Timor-Leste, which share a critical need to generate new jobs for their young and rapidly growing populations. These countries have recently achieved relatively high economic growth rates driven by resource export sectors. Other countries in the region share the need to generate new employment, although they generally have both lower rates of population growth and economic growth than the largest Pacific countries. Constraints to job growth in the region are daunting and interrelated.

Second, labor force participation rates—defined as the percentage of working-age persons in an economy who are employed or are unemployed but looking for a job—average 63% (Table 1). However, large proportions of the working-age populations in most Pacific countries continues to be engaged in subsistence-oriented and informal market activities, and have only marginal attachments to the formal labor market. Informal sector workers typically have lower and more unstable incomes, lack access to employment related protection and other public services, and suffer from underemployment as they struggle to find adequate paid work.

Third, the low proportion of workers engaged in formal sector employment explains why the regional average unemployment rate appears moderate at 6.4%. For many people, even if they would like formal sector employment, they view the probability of securing a job so low that they do not actively participate in the formal labor market, which means they are not counted in the unemployment figures.

Fourth, large numbers of Pacific workers (especially more educated workers) seek employment overseas. This alleviates some of the pressure in the domestic labor markets but can constrain domestic growth by possibly creating shortages of skilled workers. Countries with strong links to more advanced and growing economies continue a long-standing pattern of migration, overseas employment, and repatriation of remittances that can make significant contributions to the families and economies back home. Migrant remittances contributed an estimated average of 22.8% of GDP in Tonga and 21.2% in Samoa from 2006 to 2012.

Fifth, for countries where data are available, women's participation in the labor force is generally lower than men's. In Samoa and Timor-Leste, women's labor force participation rates are around 25%, which is about 30 percentage points lower than men's. This is indicative of a much narrower range of employment opportunities for women in the region that reduces their contribution to the economy.

If these challenging labor market conditions persist and recent employment trends continue, the number of unemployed and underemployed persons in the Pacific is likely to rise sharply in coming decades. The region's total population is projected to increase by about 4.1 million by 2030. The working-age population is seen to expand by 3.1 million, with about 2.1 million remaining outside wage employment, assuming there are no changes in labor force participation and formal employment rates. Just to maintain current rates of unemployment, nearly 1 million new formal sector jobs (or an expansion of current jobs by 44%) will be needed over the next 16 years. This does not take into account the need to provide formal employment for a nearly equal number of workers (about 830,000) that would otherwise be added to the subsistence sector.

# **Drivers of current labor market conditions**

The challenges Pacific economies face in competing in global markets result in relatively small private sectors. Small and dispersed markets limit domestic demand, while remoteness constrains export opportunities for private enterprises in the region. Unable to achieve necessary economies of scale, businesses struggle to expand operations and extend employment opportunities. In addition to structural constraints, some policy choices have hindered the development of an enabling environment for private sector investment. Industries where private sector growth has tended to be highest in the region are in capital-intensive sectors, such as

Table 1: Pacific labor market indicators (as of 2014 or latest available year)

	Population ('000)	Working-age population (% of total population)	Labor force participation rate (% of working-age population)		Formal employment (% of labor force)	Public sector workers (% of	Subsistence (% of employed)	<b>Unemployed</b> (% oflabor Force)	
			Male	Female	Total		employed)		
Cook Islands	15.2	62.4	77.0	65.0	71.0	90.2	31.0	1.8	8.2
Fiji	863.1	66.8			68.9	72.1	10.1	22.5	6.9
Kiribati	111.1	61.3	72.4	66.2	59.3	50.2	24.8	27.7	30.6
Marshall Islands	54.5	57.4	66.3	35.4	51.2	66.7	38.0	3.5	30.9
FSM	102.9	63.2	66.1	48.4	57.3	39.9	24.4	52.4	16.2
Nauru	10.7	59.2	78.9	49.3	64.0	73.9	25.3	4.1	23.0
Palau	17.9	72.4			68.1	94.0	34.9	2.0	4.1
PNG	7,570.7	58.2	62.0	62.4	65.8	55.2	22.8	41.0	6.4
Samoa	187.4	55.7	58.3	23.3	41.3	60.7	5.3	35.6	5.7
Solomon Islands	626.2	57.7	63.5	62.2	62.9	21.7	4.2	77.6	3.2
Timor-Leste	1,306.0	54.1	56.1	25.7	41.7	29.1	15.9	69.8	3.6
Tonga	103.3	56.5	62.7	42.3	52.3	70.6	17.6	28.6	1.1
Tuvalu	11.1	61.9			73.3	47.7	42.2	43.0	16.3
Vanuatu	271.1	59.4	80.4	61.4	70.9	38.5	7.7	59.6	4.6
PACIFIC (total/average)	11,251.2	58.4			62.7	52.9	19.5	43.5	6.4
Pacific excluding PNG	3,680.5	59.9			56.5	47.2	11.7	49.5	6.5

<sup>... =</sup> data not available, FSM = Federated States of Micronesia, PNG = Papua New Guinea.

Sources: ADB estimates using data from the Secretariat of the Pacific Community Statistics for Development Division website, Cook Islands 2011 Census; Fiji 2010–2011 Employment and Unemployment Survey; Kiribati 2010 Census; Republic of the Marshall Islands 1999 and 2011 censuses; Federated States of Micronesia 2010 Census; Nauru 2011 Census; Palau 2012 Census; Papua New Guinea 2009 Household Income and Expenditure Survey; Samoa 2011 Census; Solomon Islands 2009 Census; Timor-Leste 2010 Labor Force Survey; Tonga 2011 Census; Tuvalu 2004–2005 Household Income and Expenditure Survey; and Vanuatu 2009 Census.

mineral and petroleum extraction in PNG and Timor-Leste. These industries make significant economic contributions but generate few direct employment opportunities. Further, these industries are characterized by high levels of leakage as a result of repatriation of profits by overseas investors and these industries' reliance on imported skilled labor. The considerable growth generated by the resource sectors, however, does offer domestic opportunities through indirect employment in related retail, transport, and other industries.

Recent developments are opening up new opportunities in the Pacific. Significant investments in infrastructure and in information and communications technology are enabling the development and expansion of private investments in tourism and other services. Better roads and air and maritime services are enabling countries such as the Cook Islands, Fiji, and Palau to engage larger shares of the working-age population in formal, private sector employment. International demand for tourism has been growing and is forecast to continue to expand in the coming decades, which offers Pacific destinations a positive long-term growth outlook.

Given the relatively modest contribution of the private sector to overall employment, the public sector has tended to assume a

dominant role in providing formal sector employment, often as an employer of last resort. But the public sector itself is limited in the extent to which it can provide employment opportunities and there is excess demand for public sector jobs.

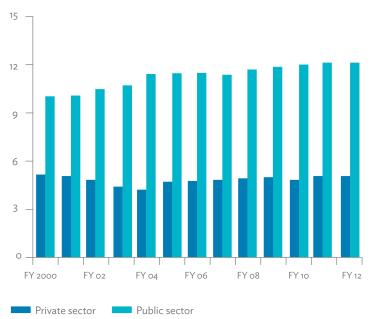
Further, public sector jobs are frequently used for dual purposes. These are not only viewed as inputs into the provision of public services but also as a de facto social safety net. As more labor is employed than required, public sector productivity declines and could result in poor delivery of public services. Weak delivery of public education and health services produces poor education and health outcomes, which in turn, constrain growth and the expansion of new job opportunities—creating a vicious cycle. Use of public sector employment as a de facto social safety net also drives widening public–private wage gaps that hinder businesses in their efforts to attract skilled labor (Figure 1). This, in turn, contributes to the lackluster private sector growth outcomes observed in many Pacific developing member countries (DMCs).

The scope for expanding (or in many cases, merely sustaining) jobs in the public sector is very limited. Without significant resource revenues, most governments tend to rely on overseas development

Note: Working-age population standardized to ages 15-64. Regional averages are weighted averages.

assistance to fund expenditure. Development partners generally share concern about the large and growing public wage bills in the region (Figure 2).

Figure 1: Public vs. private wages and salaries in the RMI (\$'000 per annum)



FY = fiscal year, RMI = Republic of the Marshall Islands. Source: Republic of the Marshall Islands (RMI) FY2012 Economic Review.

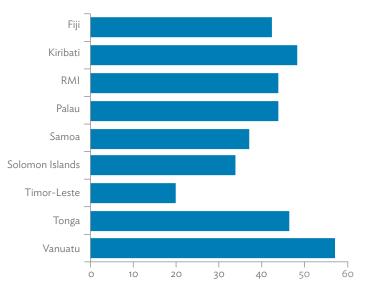
# **Options for generating employment opportunities**

Despite challenges to generating needed employment opportunities, Pacific DMCs have a number of policy and program instruments at their disposal that, if used effectively, can be combined to address job growth constraints and boost regional employment prospects.

Expanding private sector opportunities. Generating more private sector employment opportunities requires policies to entice new investment in relatively labor-intensive businesses and to foster employment growth in existing businesses. Improved infrastructure is a key element in improving connectivity within and between Pacific DMCs, and to creating new business opportunities by lowering transaction costs. Better roads facilitate market access. More and better air and shipping services can help cut transportation costs. Improved information and communications technology can reduce the cost of doing business. Taken together, improved infrastructure can improve business competitiveness and expand markets.

At a sector level, given the variation in the structure of Pacific DMC economies, strategies for expanding private sector opportunities will need to be country specific. The larger resource-based economies could look to train more skilled workers through innovative partnerships between the public and private sectors—models from other Southeast Asian countries may provide useful lessons. Such public–private approaches could also look to expand opportunities for local businesses to provide services.

Figure 2: Public expenditure on wages and salaries (% of total expenditure, 2009–2014 average)



RMI = Republic of the Marshall Islands. Source: ADB estimates based on budget documents.

The relatively small size of many Pacific DMC economies and their labor markets means success in attracting one or two foreign investments can have a large impact on increasing formal sector employment. For example, tourism investments in Fiji, the FSM (particularly on Yap), and Vanuatu have demonstrated some success in generating new jobs. The tuna loining plant in Majuro, the RMI, and the Yazaki wiring factory in Samoa had initial success, but have recently struggled due to market changes. The RMI loining plant now employs far fewer Marshallese and is looking to Kiribati to provide workers. With the closure of Toyota car production in Australia by 2017 the future of the Yazaki wiring factory is now uncertain.

With the large numbers of people engaged in the informal sector, supporting private sector informal activity can also make an important contribution to employment opportunities. Increasing access to affordable financial services for small-scale entrepreneurs can expand the availability of capital at the community level. Fostering the development of micro, small, and medium-sized enterprises (MSME) can spur entrepreneurship and innovation. In environments where formal sector jobs are scarce, policy makers need to carefully assess the implications of new labor market laws and regulations on employment generation. Regulation should take care to avoid inhibiting job creation. But it is also reasonable for Pacific DMCs to aspire to have the same level of legislative protection for their workers as other countries at a similar stage of development.

**Reforming public sector employment.** Enhancing the productivity of Pacific public sector workers is a long-term undertaking. It requires sustained efforts to professionalize the civil service, promote merit-based hiring and promotion, tie incentive-based remuneration to achievement of performance targets, and implement related reforms.

Unfortunately, slow private sector development has led some Pacific governments—often with the support of development partners—to

seek to create jobs directly by establishing state-owned enterprises. Direct job-creating investments by Pacific governments have, at best, had mixed results. The region's growth has suffered from failed government-directed investments in the commercial tuna industry, hotels, airlines, agriculture, and wholesale and retail sectors (ADB 1997; Gillett 2010).

To reduce pressure on the use of public sector employment as a social safety net, development of targeted transfer programs, widely used across the world, provide a better alternative. While costly, especially during the establishment phase, these transfer programs offer a fairer and more transparent way of providing social safety nets without distorting public sector performance. These can also help public sector employment processes become more merit based. Relieving public sector employment of its implicit social safety net role should enable real productivity growth in the public sector and promote a clearer focus on service delivery. State-owned enterprise reform to contract out delivery of public services to the private sector can also lead to efficiency gains and generate new opportunities for local businesses.

Improving education and training systems. The public sector has tended to take the lead role in skills development, especially through the delivery of technical and vocational education and training (TVET) services. Investments in basic education and TVET that equip a growing labor force with skills demanded by domestic, regional, and international markets have shown some success in creating more jobs for Pacific workers, both at home and abroad. However, the modest number of trainees graduating, the quality of the skills developed, and the low retention of postsecondary trainees all point to the need to do more to develop skills more effectively.

Since its establishment in 2007, the Australia-Pacific Technical College (APTC) has produced over 5,000 graduates from training campuses in Fiji, PNG, Solomon Islands, Samoa, and Vanuatu. APTC offers Australian-recognized credentials in fields such as construction and manufacturing, tourism and hospitality, and health and community services.

Expanding opportunities for female students to receive training for nontraditional occupations can address gender bias and help overcome gender-based job discrimination that has hampered the success of education and training efforts.

Job growth through regional cooperation and integration. Regional initiatives, such as the Melanesian Spearhead Group labor scheme, and seasonal employment schemes in Australia and New Zealand have expanded employment opportunities for islanders. Under its Recognised Seasonal Employer (RSE) scheme, New Zealand hosted a total of over 6,000 temporary workers from Pacific DMCs in FY2013. Almost half of these workers were from Vanuatu, where RSE participation is now a significant source of foreign exchange. Australia has likewise seen rapid growth in seasonal worker arrivals. Over 1,000 workers from Pacific DMCs found seasonal employment in Australia in FY2012, with a large majority coming from Tonga.

Regional trade agreements provide an important framework to formalize arrangements for labor mobility. The ongoing discussions around the Pacific Agreement on Closer Economic Relations suggest these issues are not straightforward, but have the potential to form an important part of expanding regional labor market opportunities in the Pacific.

While APTC has succeeded in skills creation, it has yet to achieve any significant progress in fostering labor mobility. Only about 1.5% of APTC graduates have found employment overseas. Graduates generally intend to migrate, particularly to Australia, but opportunities are hampered by administrative issues relating to skills assessment and certification. Mechanisms to match graduates with potential employers in Australia are also lacking (Clemens, Graham, and Howes 2014). Resolving these and other related issues will help facilitate the movement of APTC graduates, and also provide important lessons for the design of future programs targeting regional labor mobility.

# **Conclusion**

To achieve more inclusive growth, Pacific economies will need to ensure that recent improvements in headline growth figures are translated into more and better employment opportunities. Creating enough decent, productive jobs for their citizens requires Pacific DMCs to adopt policy actions that take advantage of the opportunities resulting from a more interconnected regional and global economic system. This brief offers a preliminary analysis of some of the issues seen as defining labor markets in the Pacific. It presages additional research planned by ADB to explore these issues and options for improving job opportunities in the region in coming years

**2019 Update:** In July 2017, the Pacific Economic Monitor again highlighted labor market challenges and briefly discussed the salient points of a report produced jointly by ADB and the International Labour Organization. The report pushes for policies focused on five key areas: (i) creating employment through investments to underserved areas and sectors, and support for subsistence workers; (ii) strengthening labor market institutions and information systems to improve job matching; (iii) improving regional integration and migration policies to create more opportunities for low-skilled workers; (iv) supporting groups facing particular challenges in the labor market, namely women and the youth; and (v) "future-proofing" skills training to keep up with climate change and technological advancement. The final report is available for download at https://www.ilo.org/suva/publications/WCMS\_559066/lang--en/index.htm.

Later in the same year, the Australian government launched Stage 3 of the Australia Pacific Training Coalition, funded by the Department of Foreign Affairs and Trade and running from 2018–2022. This new phase features stronger integration with Pacific TVET systems to improve the quality of training provided in the region, closer coordination with prospective employers to ensure that training meets local and international standards, and increased support for graduates seeking to work in Australia.

Further, the launch of a new Pacific Labour Scheme will support the APTC Stage 3's renewed emphasis on labor mobility. APTC commenced with a labor mobility objective, but only limited APTC graduates have migrated to work in Australia or New Zealand (up to 2016, only 276 out of 10,087 APTC graduates migrated to reside and work overseas). The advent of the Pacific Labour Scheme in July 2018 opens up new opportunities for APTC graduates and others seeking to work overseas. Where labor mobility opportunities exist, all students, male and female, will have the opportunity to opt for a domestic or labor mobility track. APTC will provide eligible students in the labor mobility track with additional training and support to meet migration requirements through the Pacific Labour Facility.

Lead authors: Christopher Edmonds and Andrew Parker.

# References:

ADB. 2005. Remittances in the Pacific. Manila

ADB. 2009. Support for Public Sector Reforms in the Pacific: Enhance Results through Ownership, Capacity, and Continuity. Manila: ADB.

Crocombe, R. 2007. Asia in the Pacific Islands: Replacing the West, Suva: IPS Publications, University of the South Pacific.

Connell, J. 2011. Elephants in the Pacific? Pacific Urbanisation and its Discontents. Asia Pacific Viewpoint Volume 52.

Connell, J. 2013. Islands at Risk?: Environments, Economies and Contemporary Change, Edward Elgar Publishing: Cheltenham.

Clemens, M., C. Graham, and S. Howes. 2014. Skills development and regional mobility: Lessons from the Australia-Pacific Technical College. Center for Global Development Working Paper 370. Washington DC.

Secretariat of the Pacific Community. Statistics for Development Division website. http://www.spc.int/sdd/

World Bank. 2014. Hardship and vulnerability in the Pacific Island Countries. Washington, DC.

World Bank. Health, nutrition, and population statistics website. http://go.worldbank.org/KZHE1CQFA0

Latest Pacific Economic Updates											
	GDP Growth (%, p.a.)			Inflati	on (%, annua	l avg.)	Fiscal Balance (% of GDP)				
	2018e	2019p	2020p	2018e	2019p	2020p	2018e	2019p	2020p		
Cook Islands	7.0	6.0	4.5	0.4	1.0	1.5	4.1	-1.9	1.0		
Fiji	3.0	3.2	3.5	4.1	3.5	3.0	-5.3	-3.4	-3.0		
Kiribati	2.3	2.3	2.3	2.1	2.3	2.2	-20.1	-23.2	-20.8		
Marshall Islands	2.5	2.3	2.2	0.7	0.5	1.0	3.0	2.0	3.0		
FSM	2.0	2.7	2.5	1.0	0.7	1.5	10.0	7.0	10.0		
Nauru	-2.4	-1.0	0.1	3.8	2.5	2.0	8.5	0.1	0.3		
Palau	0.5	3.0	3.0	1.1	0.5	1.5	4.3	8.9	1.9		
PNG	0.2	3.7	3.1	4.5	4.2	4.7	-2.3	-2.1	-1.6		
Samoa	0.9	2.0	3.0	3.7	2.0	1.5	0.1	-3.5	-3.5		
Solomon Islands	3.0	2.4	2.3	3.3	2.5	2.5	-0.6	-1.2	-2.3		
Timor-Leste <sup>a</sup>	-0.5	4.8	5.4	2.1	3.0	3.3	-4.8	-25.9	-26.2		
Tonga	0.4	2.1	1.9	5.3	5.3	5.3	1.6	-1.2	-1.1		
Tuvalu	4.3	4.1	4.4	1.8	3.4	3.5	33.9	-1.1	1.4		
Vanuatu	3.2	3.0	2.8	2.2	2.0	2.0	6.7	4.4	5.0		

FSM = Federated States of Micronesia, GDP = gross domestic product, p = projection, PNG = Papua New Guinea.

Sources: ADB. 2018. Asian Development Outlook 2018 Update. Manila; and statistical releases of the region's central banks, finance ministries and treasuries, and statistical bureaus.

#### Key data sources:

Pacific Department

Data used in the Pacific Economic Monitor are in the ADB PacMonitor database, which is available in spreadsheet form at www.adb.org/pacmonitor.

How to reach us: pacmonitor@adb.org
Asian Development Bank

#### Apia

Apia Level 7 Central Bank of Samoa Building Apia, Samoa Tel: +685 24492

#### Dili

ADB Building
Rua Alferes Duarte Arbiro, Farol
Dili, Timor-Leste
Tel: +670 332 4801

# Honiara

Mud Alley Honiara, Solomon Islands Tel: +677 21444 Fax: +680 775-1990

Majuro P.O. Box 3279, Mieco Beach Front Amata Kabua Boulevard Majuro, MH 96960, Marshall Islands Tel: +692 625-2525

P.O. Box 6011, Koror, PW 96940, Palau

## Manila

#### Nuku'alofa

Fatafehi Street Tonga Development Bank Building Nuku'alofa, Tonga Tel: +676 28290

#### Palikir

P.O. Box PS-158, Palikir, Pohnpei 96941 Federated States of Micronesia Tel: +691 320 2639

## Port Moresby

Level 13 Deloitte Tower Port Moresby, Papua New Guinea Tel: +675 321 0400/0408

### Port Vila

Level 5 Reserve Bank of Vanuatu Building Port Vila, Vanuatu Tel: +678 23610

#### Rarotonga

Ministry of Finance and Economic Management P.O. Box 120, Rarotonga, Cook Islands Tel: + 682 29521

#### Suva

5th Floor, Ra Marama Building 91 Gordon Street, Suva, Fiji Tel: +679 331 8101

#### Sydney

Level 20, 45 Clarence Street Sydney, NSW Australia 2000 Tel: +612 8270 9444

#### Tarawa

Kiribati Adaptation Project-Phase III Office P.O. Box 68, Bairiki Tarawa, Kiribati Tel: +686 22040/22041

# Pacific Economic Monitor: Special 10th Anniversary Issue

This publication provides an update of developments in Pacific economies and explores topical policy issues. The 10th edition features policy briefs focusing on the effects of climate change, impacts of natural hazards, income and purchasing power, service delivery, economic empowerment of women, and labor markets in the region.

# About the Asian Development Bank

ADB is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty. Established in 1966, it is owned by 68 members—49 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

Asian Development Bank 6 ADB Avenue, Mandaluyong City 1550 Metro Manila, Philippines Tel +63 2 632 4444 Fax +63 2 636 2444 pacmonitor@adb.org www.adb.org/pacmonitor

<sup>&</sup>lt;sup>a</sup> Timor-Leste GDP is exclusive of the offshore petroleum industry.