

Is Foreign Development Aid to Pacific Island Countries that Supports Tourism Warranted?

**Mark McGillivray****Director of International Development Research Advisory Services, Australia***Submission:** August 28, 2024; **Published:** August 18, 2026***Corresponding author:** Mark McGillivray, Director of International Development Research Advisory Services, Melbourne, Australia

Abstract

Foreign development aid donor nations have a long history of supporting tourism in Pacific Island countries. Following the very large decline in tourism revenue in Pacific Island countries owing to endogenous policy response to the COVID-19 pandemic, donor nations have or are preparing new programs of support for tourism in them. Recognizing that donors can potentially support many sectors in addition to or instead of tourism, this paper considers whether support for tourism is warranted. It does so by looking at the relative importance of the tourism sector to economic growth in a sample of six Pacific Island countries. It concludes, despite some caveats, that foreign development aid donor support for tourism in the Pacific is warranted, especially if it promotes not only the number of tourist arrivals but the length of their stays. This is of course subject to a further obvious caveat, which is that the donor support is effective in achieving these outcomes.

Keywords: Island countries; Foreign development; Tourism; Pacific island; Economies

Introduction

Pacific Island countries are among the world's last recipient of official development assistance relative to the size of their economies. These inflows have over the last 30 years been more than ten percent of the combined GDPs of these nations as a group [1]. There is a long history of this assistance of aid supporting tourism in the Pacific Island countries. The most engaged donors to these countries, Australia and New Zealand, have been particularly active in this regard. Examples of such assistance from New Zealand include its support for the Government of Vanuatu Agritourism Plan of Action and the Vanuatu Tourism Programme, which was a key component of its bilateral development aid program in Vanuatu [2]. Australia, the largest donor of development aid to the Pacific, announced in 2023 a new program of support for Pacific Island countries, the Australian-Pacific Partnerships for Aviation Program. This program has increased tourism revenue among its intended outcomes [3].

This paper looks at the case for development aid donor support for tourism in Pacific Island countries, asking whether it is warranted. This question has resonance as tourism is one of many sectors that donors can potentially support. It does so

by looking at the relative importance of the tourism sector to economic growth in a sample of six Pacific Island countries. The six countries under consideration are Fiji, Kiribati, Samoa, Tonga, Tuvalu and Vanuatu. These countries were chosen on the basis of them being the partners with Australia in the Australian-Pacific Partnerships for Aviation Program. It concludes, despite some caveats, that foreign development aid donor support for tourism in the Pacific is warranted, especially if it promotes not only the number of tourist arrivals but the length of their stays. This is of course subject to a further obvious caveat, which is that the donor support is effective in achieving these outcomes.

This paper consists of a further four sections. Section 2 looks at the economic performance of the six countries under focus, highlighting variable economic growth and declines in per capita GDP in 2020 and 2021. Section 3 looks at some known (reasonable widely accepted) drivers of economic growth in the six countries. Tourism is highlighted as a particularly important driver. Section 4 looks at the vulnerability of the six countries to exogenous shocks, noting that a reliance on external revenue (including that from tourism) has contributed to this vulnerability. Section 5 concludes.

Economic Performance

Yearly GDP growth and Fiji, Kiribati, Samoa, Tonga, Tuvalu and Vanuatu since 2000 is shown in Figure 1. Growth has been positive, indicating overall economic expansion in most years for most of these six countries. Yet there have been repeated spells

of economic contraction, with all six countries experiencing negative GDP growth in more than one year since 2000. Vanuatu has experienced the least such spells and Kiribati and Tuvalu the most, with three and eight years of negative GDP growth over the period under consideration.

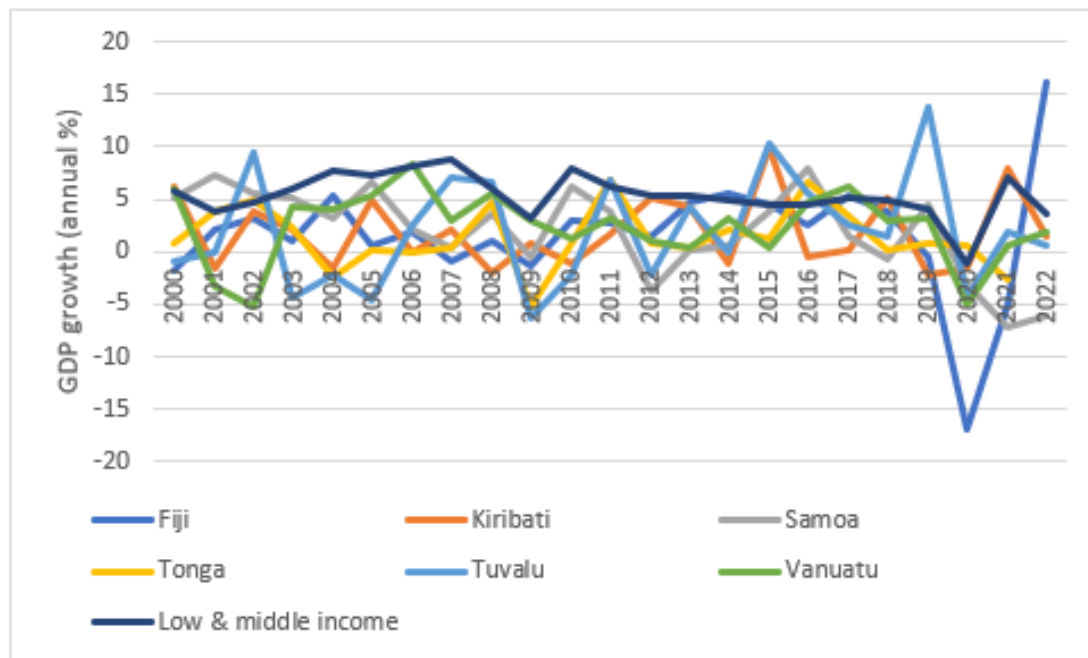


Figure 1: GDP Growth, 2000 to 2022.
Source of data: [30].

The years 2020 and to a lesser extent 2021 were particularly challenging economically. All six countries except Tonga experienced negative GDP growth in 2020, with Fiji recording a massive reduction in GDP of 17 percent in that year. 2021 was a little better but not especially good, with three of the six countries registering negative GDP growth. The impact of this is well known, being the COVID-19 pandemic. The downturn was not so much due to adverse COVID health impacts, but due to endogenous behavioral responses owing to public and private aversion behavior due to the fear of infection, the closure of international borders and its impact on tourism in particular [1] among other studies. This issue will be further examined below in the contexts of the drivers of economic development and vulnerability.

The economic growth performance of all developing countries (defined as the low- and middle-income country group) is also shown in Figure 1. This group includes the six countries that are the focus of this paper. The all developing country group experienced only one year of negative GDP growth since 2000. This was in 2020, when its GDP growth rate was -1.16 percent.

The group's average rate of yearly GDP growth since 2000 is 3.52 percent. That of the six SID countries is much lower, being 2.39 percent. Also evident from Figure is the variability of economic growth among the six Pacific countries. A measure of variability (the coefficient of variation)¹ for the GDP growth of the six countries is more than twice that of all developing countries (0.84 compared to 0.39). This is consistent with the historical economic growth variability of Pacific Islands countries in general, which has been shown to be the highest of all developing country groups [4]. This reflects the vulnerability of these countries to external exogenous shocks, which will be discussed below.

A measure of the economic standard of living (GDP per capita measured in Purchasing Power Parity terms) for the six Pacific Island countries and all developing countries as a group is shown in Figure 2². Fiji has easily the highest economic standard of living (or economic development) of all the six SIDS. Kiribati and Tuvalu have the lowest. Most experienced declines in their Purchasing Power Parity (PPP) GDPs per capita in 2020 and 2021. Fiji experienced easily the largest with a massive decrease in its

¹The coefficient of variation is the standard deviation divided by the mean for the statistical indicator under consideration.

²PPP GNI per capita is a better indicator of economic development in Pacific SIDS as it includes revenue from remittance inflows, whereas GDP per capita does not. Data availability of PPP GNI per capita severely limits its cross-country coverage for Pacific SIDS. It is for this reason that PPP GDP per capita data are presented in this document.

PPP GDP per capita during these years with 17.17 percent decline in 2021. Fiji and Vanuatu with the reopening of their international borders have returned to positive PPP GDP per capita growth in 2022, but the other four SIDS have not. Samoa's PPP GDP per

capita has continued a reasonably sharp downward path in 2022, with PPP GDP per capita growth in -7.55 percent, which compares with its growth in this variable of -4.47 and -8.71 percent in 2020 and 2021, respectively.

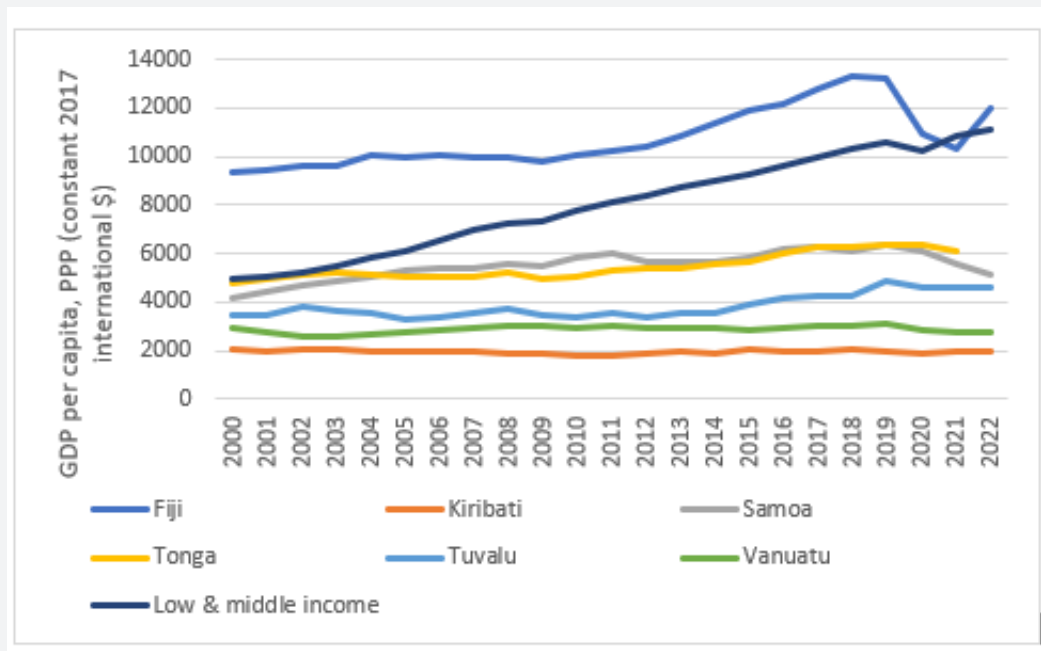


Figure 2: GDP per capita, 2000 to 2022.
Source of data: [23].

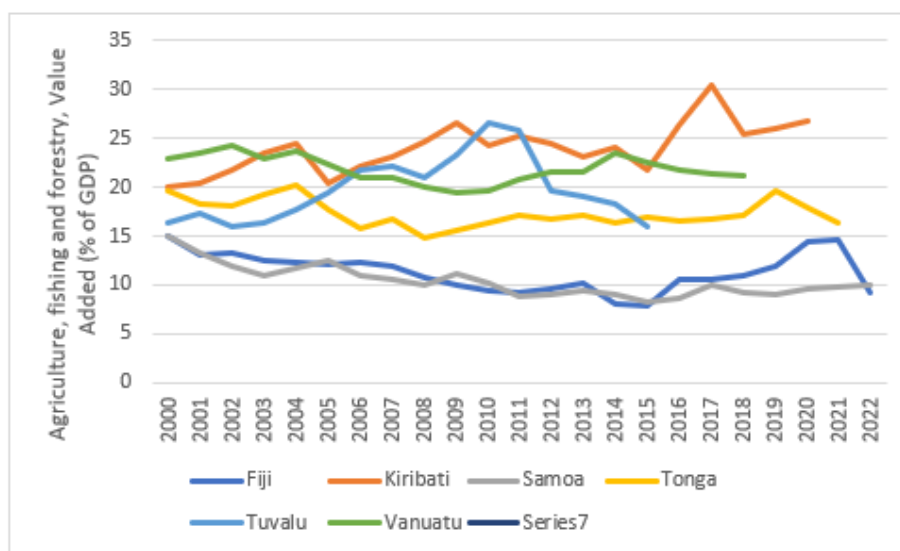


Figure 3: Agriculture, Forestry and Fishing Sector Value Added, 2000 to 2022.
Source of data: [30].

Drivers of Economic Growth and Development

Data on known drivers of economic growth and development in Pacific Island countries are shown in Figure 3-7. Agriculture,

Forestry and Fishing (AFF) Sector value added is shown in Figure 3. It has traditionally been the largest economic sector in most Pacific Island countries. The share of AFF sector value in GDP has trended downward for Fiji and Samoa and is smaller than for

the other six countries Among the six economies in question, it has had the biggest direct contributions to GDP in Vanuatu and Kiribati.

There is an extensive literature on the contribution of FDI to GDP growth and therefore GDP for developing countries, and a smaller literature on this contribution for Pacific Island Countries (PICs). This literature includes [5,6], both of which point to

positive economic impacts of FDI in PICs. Feeny et al. provided a reasonably rigorous empirical analysis of the impact of FDI on economic growth in PICs and for a sample of all host countries for which data where available. The study found that a ten percent increase in the ratio of FDI to host GDP is associated with higher growth of about two percent in all host countries on average but no more than 0.4 percent in the case of the Pacific.

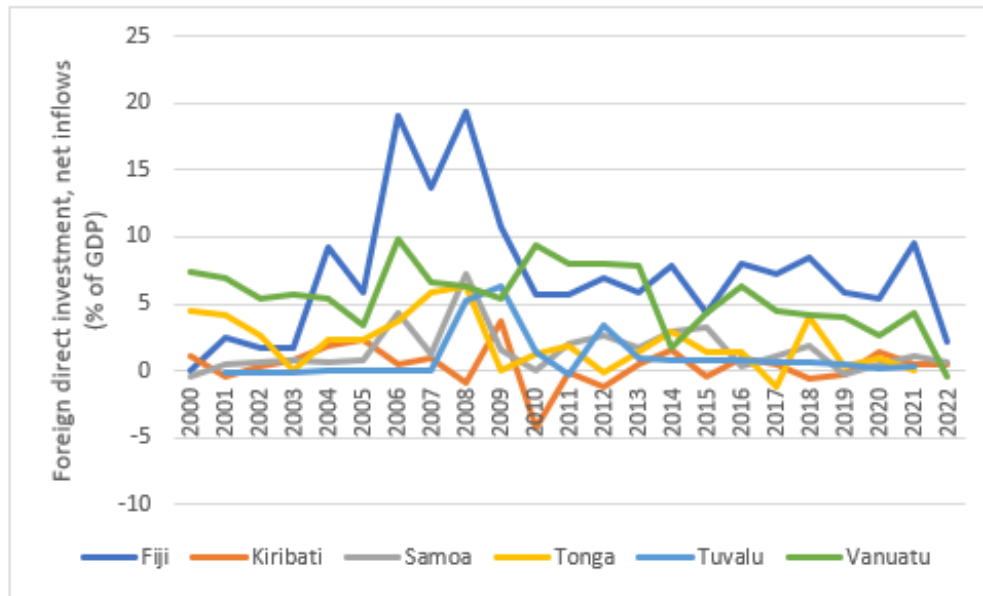


Figure 4: Foreign Direct Investment Inflows, 2000 to 2022.
Source of data: [30].

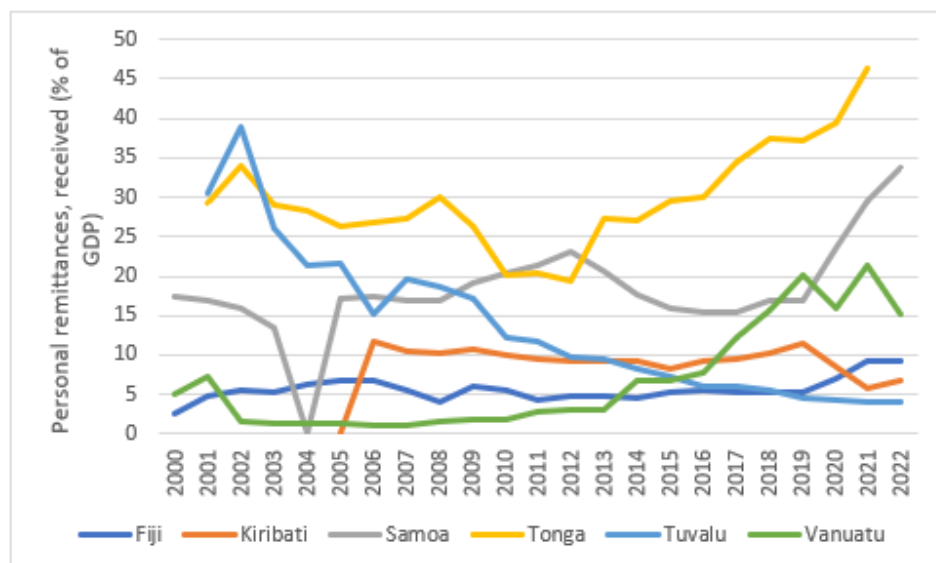


Figure 5: Personal Remittances Receipts, 2000 to 2022.
Source of data: [30].

It is in this context that Foreign Direct Investment (FDI) flows relative to GDP are shown in Figure 4 should be viewed. FDI relative to GDP has been relatively high in Fiji and Vanuatu, exceeding five percent in most of the years in question, considerably so in some years. These levels are high by international standards, with FDI relative to GDP in low- and middle-income countries combined being typically around 2.5 percent per year over the same period [7]. This cannot, however, be said for the other four Pacific countries for which data are shown in Figure 4. FDI relative to GDP is typically less than one percent per year during the period 2000 to 2022.

The literature on FDI and growth and the data in Figure 4 suggest that higher levels of FDI to the Pacific countries under focus would be growth enhancing, that relatively low levels of FDI means that opportunities for higher growth have been lost, that low levels of FDI in some Pacific SIDS need to be addressed, and that the relatively modest incremental contribution of FDI to growth in the Pacific needs to be addressed. The literature on FDI, including [6], point to a number of ways of addressing the last of these points. They include ensuring that FDI does not displace productive domestic investment, improving human capital and private sector development and in particular a more strategic growth enhancing investment focus. The last of these exercises involves investment in sectors and projects that have a larger and more sustained impact on GDP growth.

There is a large and growing literature on the economic impact of remittances on economic growth in developing countries. Studies looking at large and heterogeneous samples of developing countries have been unable to find an association between remittances and economic growth. Yet many studies point to the positive economic impacts of remittances in PICs. They include [6,8-11]³ looked at the average impact of remittances on Pacific SIDS for the period 1971 to 2010 and concluded that remittance inflows play a crucial role in supporting economic growth in these countries. The study observed from World Bank data that Pacific SIDS achieved an average per capita GDP growth rate of 0.94 percent during 1971 to 2010. Based on a rigorous econometric analysis, Feeny et al. found that remittance receipts contributed 1.68 percentage points to this growth, suggesting that growth in the absence of these inflows found that Pacific SIDS average economic growth would have been -0.74 percent.

These findings generally bode well for the data shown in Figure 5. Remittances have been more than five percent of GDP for all six Pacific countries since 2000. This compares to remittance inflows for the developing country group as a whole for this period, which was 1.6 percent of GDP (World Bank, 2023). Remittance inflows are particularly high in Tonga, Samoa and Vanuatu, Tonga and

Samoa in particular. Remittances to these countries have often been well above 15 percent of GDP since 2000. In Vanuatu they have remained above 10 percent of GDP since 2017. The relatively low levels of remittances relative to GDP to Kiribati and Tuvalu and the overall decline in them to Fiji suggest lost opportunities for economic growth in each of these countries.

Figures 6 & 7 show tourism data for the six Pacific countries under consideration. The massive adverse impacts on GDP growth in these countries of international border closures from 2020 owing to responses to the COVID-19 pandemic were noted above. The data in Figures 6 & 7 very clearly mirror these adverse impacts, with international tourism receipts and arrivals plummeting in 2020 (the latest year for which comparable tourism statistics are available for the six countries).

Prior to 2020, the share tourism in GDP was typically above 30 and 20 percent for Vanuatu and Fiji respectively. Of all the drivers of growth discussed in this document, tourism revenue relative to GDP is the largest in these two countries. The share of tourism GDP prior to 2020 in Samoa hovered between 15 and 23 percent, and for Tonga it varied from five to 12 percent. Over the same period, tourism revenue constituted around five percent of GDP in Tuvalu and less than five percent in Kiribati Figure 8.

The share of tourism in GDP should not be interpreted as its overall contribution to GDP. The same applies to the other drivers of growth discussed above. A well-known aspect of tourism is leakage, which primarily occurs when tourist expenditure is allocated to imported goods and foreign owned services. This money leaks out of the economy and is not included in national GDP statistics, which will mean that the share of tourism expenditure in GDP over-states the contribution of tourism to GDP [12] found that approximately 30 percent of tourism expenditure in Vanuatu is on imported goods and services. More generally, this percentage will be larger in countries with limited productive capacities, such as Kiribati and Tuvalu. There will, however, be other indirect positive impacts of tourism expenditure that will not be empirically captured by the share of tourism in GDP. These multiplier type flow on impacts result from tourism expenditure on locally owned goods and services, which spreads to other sectors of the local host country economy⁴.

The final or overall impact of tourism on GDP (and GDP per capita) can be estimated from statistical economic modelling. Many published studies have conducted this modelling for small island developing states (SIDS), including those in the Pacific. All six countries that are the focus of this paper are SIDS. The relevant SIDS literature includes, but is not limited to, [13-19]. While these studies stop short of identifying the actual percentage

³Dorantes A (2010) look at relationships between remittances, the exchange rate, natural disasters and development aid in SIDS, while Brown, Jimenez (2008) look at the impact of remittances on income poverty and income inequality in two Pacific SIDS, Fiji, Tonga. Connell, Brown (2005) provide an overview of remittances to the Pacific Island countries.

⁴Spending by business travelers is also included in the World Bank tourism expenditure data. While this expenditure is typically much less than that of tourists, it does to some extent inflate the data in Figure 6 & 7.

contribution of tourism to GDP, the unanimous finding is that tourism drives economic growth in SIDS. This is a general finding, and the extent of contribution to growth will vary among SIDS, and could be negligible in some countries, including those facing

severe infrastructure constraints. It does though mean that if the share of tourism in GDP increases into the future, above pre-2020 levels, that this will contribute to higher GDP and GDP per capita than was observed during this period.

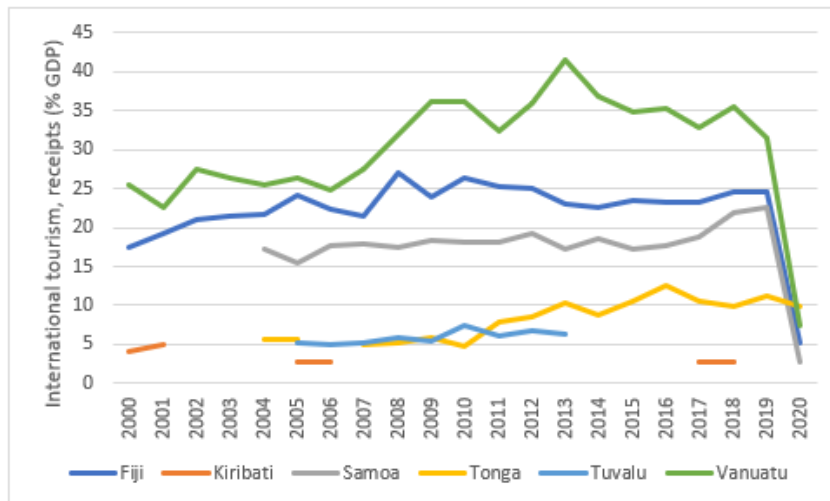


Figure 6: International Tourism Receipts, 2000 to 2020.
Source of data: [30].

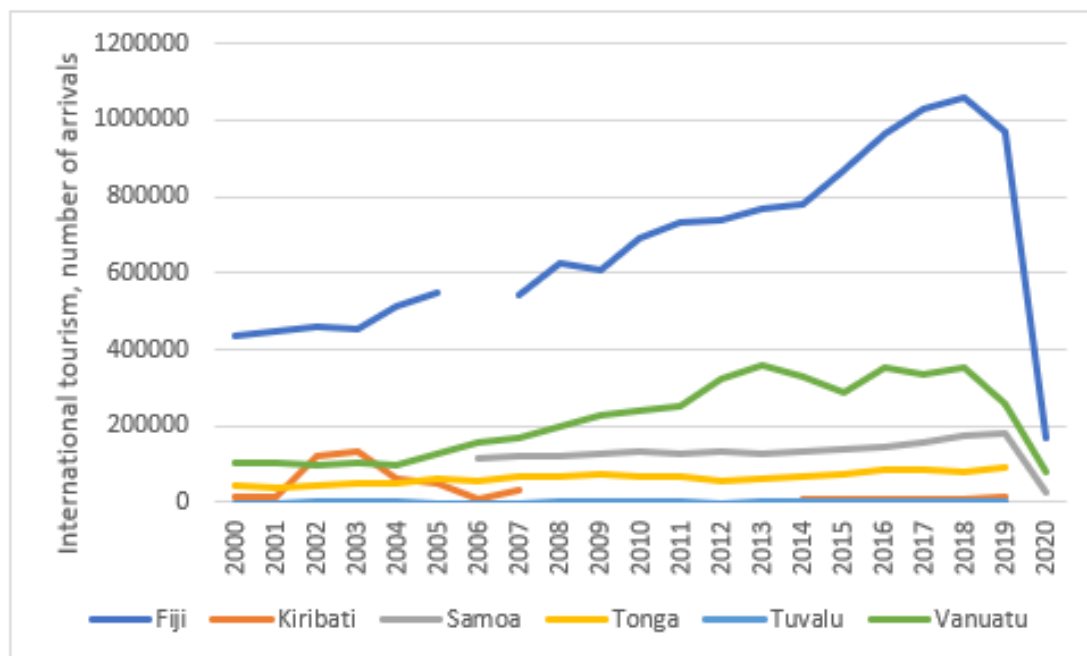


Figure 7: International Tourism Arrivals, 2000 to 2020.
Source of data: [30].



Figure 8: Tourism Visitors and Spending, Vanuatu, 1995 to 2014.
Source: [19].

The contribution of tourism to any economy, to GDP and its growth, boils down to reasonably simple arithmetic. It equals the number of tourists multiplied by the amount of money they spend while in the destination country. It follows that maximizing this contribution is not just about increasing tourist numbers but getting each tourist to spend more when in destination countries. Yet as Figure 8 shows, that while the number of tourist visits to Vanuatu increased substantially between 1995 and 2015, there has been comparatively little growth in tourist spending per visitor in real terms, after adjusting for inflation, over the same period. In 2014, average tourist spending was only \$US377 higher than it was in 1996: \$US2,620, compared to \$US2,243. Over the entire period 1995 to 2015, spending per tourist grew by a relatively modest annual average rate of 2%.

The experience of Vanuatu, highlighted by Figure 8, leads to an obvious caution of caveat. It is that increasing tourism numbers is of diminished economic value unless it leads to increased tourist expenditure per capita over time. In Vanuatu's case the negligible growth in per capita tourism expenditure (receipts) was due to a reliance on cruise ships visits [2]. Tourists arriving on cruise ships tend to spend much less than those arriving by air. The former spends their nights on the cruise ship as opposed to local hotels or other land-based accommodation and spend fewer days in each destination country. Getting tourists to spend more Vanuatu involved getting more of them to visit by air. Similar challenges are

faced in the other five countries under consideration, especially those with airports that struggle with severe capacity constraints.

There is one further caution that emerges from the empirical literature on tourism. [20-23] point to a tourism Dutch Disease. This disease can be observed if foreign inflows, such as tourism revenue (but also development aid, remittances and extractive industry revenues), push upward the host country's domestic currency foreign exchange rate. This can limit the positive impact of the inflow in question by reducing the price competitiveness of domestically produced goods. It should be emphasized that this disease tends to limit but not deem the impact of the inflow on GDP growth as negative. As such it needs to be monitored but does not provide a case against further stimulation of the inflow in question.

Vulnerability to Exogenous Shocks

The vulnerability of small island developing states to exogenous shocks is well recognized in research and policy circles [4,24-26]. The recent experience of the COVID-19 pandemic, and its many adverse impacts, including decreases in economic growth and broader development, serves to reinforce this prior recognition. The volatility of GDP growth of the six countries under focus is rightly thought to be a function of vulnerability to external shocks. There have been many attempts to construct composite indices that highlight the vulnerability of these states

⁵Despite being labelled an economic vulnerability index, the EVI also includes measures of what are interpreted as financial, geographic and environmental vulnerability. These measures are export concentration, share of agriculture in GDP, instability of agricultural production, instability of exports of goods and services, share of total population living in drylands, share of total population living in lowly elevated coastal zones, remoteness and number of victims of disasters. The financial instability measures added to the EVI to form the MVI are tourism revenues as share of exports, remittances as percentage of GDP and foreign direct investment (FDI) as a percentage of GDP [30].

[27-30] extend and update this research with arguably a more comprehensive Multidimensional Vulnerability Index (MVI) that is particularly relevant to SIDS. The MVI augments the Economic Vulnerability Index [28], with measures of financial vulnerability⁵.

The MVI was calculated for 126 mainly low- and middle-income countries using the latest available data available in late 2020. The results for Pacific countries under focus are extremely revealing, emplacing just how vulnerable they are to exogenous

shocks. MVI scores for these and selected other countries are shown in Table 1. The other countries that are selected are the three nations with the lowest MVI scores calculated by [30]. Using MVI scores, [30] divide countries into four groups: very high vulnerability (those with MVI scores above 43), high vulnerability (with an MVI score in the range of 32 to less than 43), medium vulnerability (MVI score in the range of 21 to less than 32) and low vulnerability (score of less than 20).

Table 1: Multidimensional Vulnerability of Selected Pacific Island Countries and Selected Other Countries, 2021.

	MVI Score	MVI Rank	Vulnerability Classification
Kiribati	52.7	1	Very High
Tonga	47.3	5	Very High
Tuvalu	46.5	6	Very High
Vanuatu	39.1	13	High
Fiji	37.5	26	High
Samoa	33	49	High
Turkey	16.3	124	Low
Saudi Arabia	16.1	125	Low
Korea, Republic of	14.3	126	Low

MVI scores for the Pacific countries under consideration range from 52.7 to 33.0, for Kiribati and Samoa, respectively. Strikingly, four of these six of these countries are ranked among the top twenty most vulnerable countries of those assessed by [30]. What has driven the high and very high vulnerability assessments of the six Pacific SIDS is a reliance on to tourism and/or remittances, together with remoteness and proportion of people living in lowly elevated coastal areas [30].

That a reliance on tourism has driven higher levels of vulnerability in Pacific Island countries is an issue for additional investments in it. Keep in mind, however, that the share of agriculture in GDP is also associated with higher vulnerability. It follows that increasing the share of tourism in GDP will, by definition, decrease the share of agriculture in GDP, thus offsetting any increase in vulnerability owing to the former increase. It also needs to be kept in mind that increasing revenues from tourism will increase economic growth and therefore GDP and GDP per capita. Higher GDPs and GDPs per capita sustained over time mean that the impacts of a given vulnerability exogenous shock will have a lower impact on economic and social prosperity, further offsetting increases in vulnerability. That said, however, there is still risk associated with promoting tourism. Given the limited choices of Pacific Island countries with respect to sources of economic growth, it is a risk worth taking but will need to be monitored and managed.

Conclusion

This paper examined whether development aid donor support for tourism in Pacific Island countries has been and remains warranted. It focused on six Pacific Island countries: Fiji, Kiribati,

Samoa, Tonga, Tuvalu and Vanuatu. The question addressed has resonance given that tourism in these countries has long been supported by foreign aid donor nations, Australia and New Zealand in particular, and that Australia is currently extended its tourism support through the Australian-Pacific Partnerships for Aviation Program.

The paper found that tourism is in general an especially important driver of economic growth and development in the six countries, albeit to varying degrees. The experience of the COVID-19 pandemic very clearly illustrates this point. It pointed to the very high vulnerability to external exogenous shocks of these countries, noting that a source of such vulnerability is a reliance on tourism. The vulnerability issue notwithstanding, the conclusion that emerges from this paper is that foreign aid donor support has been and remains warranted. Yet there is an obvious caveat: ongoing support needs to be effectively delivered, contributing to higher economic growth and development. Important to this effectiveness is getting tourists to spend more in each country, through among other things having them stay for longer periods of time. Improving aviation and increasing the number of tourists that arrive by air, is crucial in achieving these outcomes. The Australian-Pacific Partnerships for Aviation Program is on face value a positive development, therefore. Time will tell as to whether it is effective in increasing tourism numbers and expenditure.

References

- McGillivray M (2023) COVID-19 Impacts in Pacific Island Countries: Making an Already Bad Situation Worse. In: Jukapec V, Kelly M, de Percy M (Eds.), COVID-19 and Foreign Aid: Nationalism and Global Development in a New World Order, Routledge, Abingdon.

2. McGillivray M, Poppelwell E, Niemi M, Salong J, Vira H (2017) Evaluation of New Zealand's Aid Program in Vanuatu, Report prepared for the New Zealand Ministry of Foreign Affairs and Trade, Sapere Research Group, Wellington, p. 58.
3. Department of Foreign Affairs and Trade (DFAT) (2023) Australian-Pacific Partnerships for Aviation Program. Department of Foreign Affairs, Canberra.
4. McGillivray M, Naudé W, Paulino AUS (2010) Vulnerability, Financial Flows and State Failure in Small Island Developing States. *Journal of Development Studies* 46(5): 815-827.
5. Jayaraman TK, Singh B (2007) Impact of Foreign Direct Investment on Employment in Pacific Island Countries: An Empirical Study of Fiji. *Economia International* 60(1): 57-74.
6. Feeny S, Iamsiraroj S, McGillivray M (2014) Growth and Foreign Direct Investment in the Pacific Island Countries. *Economic Modelling* 37: 332-339.
7. World Bank (2023) World Development Indicators 2023, World Bank, Washington DC, USA.
8. Dorantes CD, Pozo S, Silva CV (2010) Remittances in Small Island Developing Atates. *Journal of Development Studies* 46(5): 941-960.
9. Brown RPC, Jimenez E (2008) Estimating the Net Effects of Migration and Remittances on Poverty and Inequality: Comparison of Fiji and Tonga. *Journal of International Development* 20(4): 547-571.
10. Connell J, Brown RPC (2005) Remittances in the Pacific: An Overview, Asian Development Bank, Manilla, Philippines.
11. Feeny S, McGillivray M, Iamsiraroj S (2013) Remittances and Economic Growth: Larger Impacts in Smaller Countries. *Journal of Development Studies* 50(8): 1055-1066.
12. Scheyvens R, Russell M (2013) Sharing the Riches of Tourism in Vanuatu. School of People, Environment and Planning, Massey University, Auckland.
13. Brau R, Lanza A, Pigliaru F (2007) How Fast are Small Tourism Countries Growing? Evidence from the data for 1980-2003. *Tourism Economics* 13(4): 603-614.
14. Durbarry R (2002) The Economic Contribution of Tourism in Mauritius. *Annals of Tourism Research* 29(3): 862-865.
15. Kumar RR, Stauvermann PJ (2023) Tourism and Economic Growth in the Pacific Region: Evidence from Five Small Island Economies. *Journal of the Asia Pacific Economy* 28(3): 894-921.
16. Narayan PK (2004) Economic Impact of Tourism on Fiji's Economy: Empirical Evidence from the Computable General Equilibrium Model. *Tourism Economics* 10(4): 419-433.
17. Narayan PK, BC Prasad (2003) Does Tourism Granger-Cause Economic Growth in Fiji. *Economics*.
18. Narayan PK, Narayan S, Prasad A, Prasad BC (2010) Tourism and Economic Growth: A Panel Data Analysis for Pacific Island Countries. *Tourism Economics* 16(1): 169-183.
19. Narayan PK, Sharma SS, Bannigidadmath D (2013) Does Tourism Predict Macroeconomic Performance in Pacific Island Countries. *Economic Modelling* 33: 780-786.
20. Sintes FI (2015) Tourism: Economic Growth, Employment and Dutch Disease. *Annals of Tourism Research* 54: 172-189.
21. Holzner M (2011) Tourism and Economic Development: The Beach Disease. *Tourism Management* 32(4): 922-933.
22. Nowak J, Sahli M (2007) Coastal Tourism and 'Dutch Disease' in a Small Island Economy. *Tourism Economics* 13(1): 49-65.
23. Ojaghlou M (2019) Tourism-Led Growth and Risk of the Dutch Disease: Dutch Disease in Turkey. *International Business Research* 12(7): 103-120.
24. Briguglio L (1995) Small Island Developing States and their Economic Vulnerabilities. *World Development* 23(9): 1615-1632.
25. Turvey R (2007) Vulnerability Assessment of Developing Countries: The Case of Small-Island Developing States. *Development Policy Review* 25(2): 243-264.
26. Guillaumont P (2010) Assessing the Economic Vulnerability of Small Island Developing States. *Journal of Development Studies* 46(5): 828-854.
27. Briguglio L, Cordina G, Farrugia N, Vella S (2009) Economic Vulnerability and Resilience: Concepts and Measurements. *Oxford Development Studies* 37(3): 229-247.
28. United Nations Committee for Development Policy (UNCDP) (2024) Handbook on the Least Developed Country Category: Inclusion, Graduation and Special Support Measures, United Nations department of Economic and Social Affairs, New York, USA, p. 114.
29. Guillaumont P (2009) An Economic Vulnerability Index: Its design and Use for International Development Policy. *Oxford Development Studies* 37(3): 193-228.
30. Asso J, Meddeb R (2021) Towards a Multidimensional Vulnerability Index, Discussion Paper, United Nations Development Program Human Development Report Office, New York, USA.



This work is licensed under Creative Commons Attribution 4.0 License
DOI: [10.19080/GJTLH.2026.04.555649](https://doi.org/10.19080/GJTLH.2026.04.555649)

Your next submission with Juniper Publishers
will reach you the below assets

- Quality Editorial service
- Swift Peer Review
- Reprints availability
- E-prints Service
- Manuscript Podcast for convenient understanding
- Global attainment for your research
- Manuscript accessibility in different formats
(Pdf, E-pub, Full Text, Audio)
- Unceasing customer service

Track the below URL for one-step submission
<https://juniperpublishers.com/online-submission.php>