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Prospects for the post-pandemic tourism and economic recovery in Vanuatu

Abstract

In many small island developing States (SIDS), tourism is the engine of economic growth, export earnings and formal employment. The COVID-19 pandemic ravaged global tourism, through a major slowdown of international tourism arrivals, billions of dollars of lost revenues and millions of lost jobs. The pandemic's impact was even more severe in highly vulnerable, tourism-dependent SIDS, with many of them closing their borders entirely to protect their populations and health systems.

In this paper, we examine the impacts of the COVID-19 pandemic on economic development prospects in SIDS, through case study of Vanuatu, a tourism-dependent economy that suffered major macroeconomic impacts from the pandemic. We provide a forward look at the prospects for the post-pandemic recovery of tourism and the national economy, with policy recommendations for Vanuatu. We also aim for this case study to be useful to policy makers in other tourism-dependent SIDS and developing countries, as they undertake their post-pandemic recovery.

Key words: Small island developing States (SIDS), tourism, COVID-19, post-pandemic recovery, structural change

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Introduction

In many small island developing States (SIDS), tourism is the engine of the national economy, generating 30 per cent or more of gross domestic product (GDP), the majority of export earnings and a large share of formal employment. As well as jobs and incomes, tourism leads to investments in human capital, transportation and utilities infrastructure, increasing the country's productive capacity and contributing to socioeconomic development around resort areas.

Trade-offs of tourism development in SIDS typically include: increased pollution; stress on freshwater resources and waste management infrastructure; and the degradation of coastal and marine habitat.

Tourism was one of the industries hardest hit by the COVID-19 pandemic. In 2020, the United Nations World Tourism Organization (UNWTO) reported that international tourist arrivals slowed by 73 per cent worldwide from 2019, representing lost receipts of an estimated US$ 0.9 to 1.2 trillion. Arrivals grew modestly by four per cent in 2021, but were still down 72 per cent from pre-pandemic levels.[1]

The impact of COVID-19 on tourism in SIDS was even more severe. By the end of 2021, international tourism arrivals were down from pre-pandemic levels by 90 per cent or more in many SIDS. As a result, SIDS economies contracted by an average of 6.9 per cent in 2020, more than the averages among developing countries, excluding China (-4.6 per cent) and the least developed countries (LDCs, -0.03 per cent).[2]

According to the ILO modelled estimates, the employment impact of the pandemic was more moderate and varied by region. In Caribbean SIDS, for example, the average unemployment rate rose from eight per cent in 2019 to 10 per cent in 2020. Over the same period, the average rate among Indian and Atlantic Ocean SIDS rose from 9.8 to 11 per cent, while the rate in Pacific SIDS rose only slightly, from 2.9 to 3.1 per cent.[3]

These figures may underestimate the pandemic's full impact on employment. Many SIDS offered COVID-19 assistance packages to employers and workers, which likely reduced job losses in 2020. As the pandemic continued to undercut economic activity into 2022, pressure mounted on government spending on these assistance packages, as well as on employers, meaning more job losses may be recorded in 2021.

Furthermore, official data records formal employment and may not capture informal, casual and contract-based jobs, which represent an important part of real employment in SIDS and the tourism industry. Indeed, anecdotal evidence suggests that the slowdown in tourism led to tens of thousands of lost jobs, especially among casual workers and small businesses that supply the industry, with women and youth overrepresented among these groups. These lost livelihoods represent serious risks to socioeconomic development in SIDS, with consequences, for example, to poverty rates and access to nutritious food, education and medical services.

[1] UNWTO, https://www.unwto.org/international-tourism-and-covid-19.
[2] UNCTADStat, https://unctadstat.unctad.org.
[3] ILOStat, https://ilostat.ilo.org/.

Overall, the impacts of the COVID-19 pandemic on tourism threatens to unravel socioeconomic progress SIDS achieved over the last decade or more and complicates their pursuit of the Sustainable Development Goals (SDGs). As global tourism resumes in 2022 and beyond, questions remain about how consumption patterns will change – for example in high-density tourism segments, such as cruise ships and beach resorts – with consequences for the viability of SIDS' development strategies.

In this paper, we examine the impacts of the COVID-19 pandemic on economic development prospects in SIDS, through case study of Vanuatu, a tourism-dependent economy that suffered major macroeconomic impacts from the pandemic.[4] We provide a forward look at the prospects for the post-pandemic recovery of tourism, with policy recommendations for Vanuatu.

At the time of writing in early 2022, the COVID-19 pandemic remained a global threat, despite some early signs of relenting. Some countries had reopened to international tourism; others remained closed. All countries were still measuring the health and economic impacts of the pandemic. In this fluid situation, with limited data and perspective on the full impact of the pandemic, we focussed this paper on the prospects for Vanuatu's post-pandemic recovery. We provide recommendations on how the country can adjust its tourism strategy in the post-pandemic landscape, while diversifying its economy and building productive capacities.

As well as providing specific policy analysis and recommendations on Vanuatu, we also aim for this case study to be useful to policy makers in other tourism-dependent SIDS and developing countries, as they undertake their post-pandemic recovery.

[4] Annex 2 outlines our selection of Vanuatu as a representative case study of tourism-dependent SIDS.

1. Tourism, COVID-19 and economic development in SIDS

In many small island developing States (SIDS), tourism is the engine of the economy, generating economic activity, government revenue and formal wage employment (Pratt, 2015). Prior to the COVID-19 pandemic, tourism generated approximately US$ 30 billion per year for SIDS, representing their main source of foreign exchange and more than 30 per cent of GDP, on average.[5]

Tourism-driven strategies respond to the significant barriers that SIDS face in entering manufacturing industries, such as their small size, geographic isolation and narrow resource base. Tourism contributes to economic development by generating foreign exchange, business income and formal employment. In low-income SIDS, these business and employment opportunities are typically more lucrative than alternatives in other local sectors, often small-scale agriculture and informal wage employment. Given SIDS' limitations, tourism- and other service-driven strategies often represent the only feasible avenue to these benefits.

In this way, tourism makes vital contributions to SIDS' pursuit of the Sustainable Development Goals (SDGs), including SDGs 1 (poverty reduction), 8 (decent work and economic growth) and 9 (industry, innovation and infrastructure).

The importance of tourism as a "driver of sustainable economic growth and decent job creation"[6] is enshrined within a dedicated subsection of the 2014 SIDS Accelerated Modalities of Action (SAMOA) Pathway, which is intended to guide international action towards sustainable development in SIDS. In its vision for sustainable tourism, the Pathway includes recommendations to: diversify the service offering to include eco- and agritourism; enhance the participation of local communities in decision-making; increase employment opportunities for women, youth and persons with disabilities; and preserve cultural, built and natural heritage, particularly ecosystems and biodiversity.

By contrast, tourism is predominantly a low-technology service, employing mostly low-skill, low-wage workers. With limited potential to improve labour productivity, wages and technology transfer – important levers and benefits of industrial development – tourism-driven strategies may offer fewer opportunities for long-term improvements in productive capacity and structural transformation (McCausland & Theodossiou, 2012; Haraguchi, Cheng, & Smeets, 2016).

International tourism can also lead to negative environmental and social consequences. For example, dense resort areas, cruise ships and large numbers of tourists can exacerbate pollution and overburden sanitation and transportation infrastructure. Over-visitation of sensitive ecosystems, such as mangroves, coral reefs and beaches, can lead to their

[5] UNCTAD, (2020). Impact of COVID-19 on tourism in small island developing states. Blog entry. Available at: https://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=2341. Accessed: 2 November 2021.

[6] See, paragraph 30: United Nations General Assembly (2014). Resolution 69/15: Small Island Developing States Accelerated Modalities of Action (SAMOA Pathway). Available at: https://sustainabledevelopment.un.org/sids2014/samoapathway. Retrieved 23 February 2022.

erosion and destruction. Tourists' purchasing power can inflate the cost of living around resort zones, forcing local residents to move away. And limited opportunities to earn above-average wages in the tourism industry can widen inequality in local communities. Furthermore, in some countries, weak governance and a high share of foreign ownership of tourism assets leads to perceptions that profits flow out of the country, leaving too few benefits for host countries and communities (MacNeill & Wozniak, 2018; Rasoolimanesh, Noor, & Jaafar, 2019).

In early 2020, travel restrictions related to the COVID-19 pandemic halted the flow of international visitors and tourism in SIDS stalled, leaving governments, business owners and employees scrambling to make ends meet (UNCTAD, 2021; UNTWO, 2021). As the pandemic and the interruptions to international travel endure, the shock to SIDS economies amplifies, threatening an extended loss of income and employment among the population, fiscal and debt crises in some countries, and years of lost progress towards national objectives and the Sustainable Development Goals (SDGs).

Among the most vulnerable economies in the world (Encontre, 1999; Scandurra, Romano, Ronghi, & Carfora, 2018; Guillaumont, 2010), many SIDS are grimly accustomed to enduring and recovering from external shocks. Relative to other developing countries, they typically suffer more severe impacts and take longer to recover from acute shocks, such as the 2008-09 global financial crisis, or extreme weather events, such as Hurricane Maria in the Caribbean in 2017, or Tropical Cyclone Harold in the Pacific in 2019. SIDS are also among the countries most threatened by chronic and mounting climate change risks, such as sea level rise and the warming and acidification of oceans (IPCC, 2014; Wong, et al., 2014; Nurse, et al., 2014; Oppenheimer, et al., 2019).

This cycle of recovering from one shock, before the next one strikes, undercuts SIDS' efforts to realise long-term sustainable development. Scarce resources spent on recovering from shocks are unavailable to spend on infrastructure and productive assets, or to diversify into new industries. Governments and businesses must often borrow to finance rebuilding costs and weather business interruptions, for example when natural disasters shut down tourism operations or agriculture in affected areas (Slany, 2020). Even if SIDS succeed in recovering from each shock, this costly cycle limits their capacity to invest in the productive transformation of their economies.

Despite SIDS' experience with recovering from shocks, the COVID-19 crisis represents a new kind of challenge. Natural disasters can cause deplorable loss of life and destruction of livelihoods, requiring a humanitarian response, with economic recovery concentrated on rebuilding supply-side capacity, including infrastructure, productive assets and supply chains. By contrast, economic shocks tend to hit supply-side capacity through financial channels, such as tighter credit markets and reduced investment flows. Economic shocks also impact demand – in SIDS, for example, this manifests as fewer foreign tourists, or reduced demand for export goods and services.

Whether the effects of these familiar types of shocks are big or small, long- or short-term, they are typically temporary, meaning that recovery involves an expectation of a return to some form of "business as usual". By contrast, the COVID-19 crisis threatens to permanently change consumption patterns in many sectors, including tourism, which would preclude a return to "business as usual" in SIDS.

As just one example, the tourism sector in many SIDS is structured around mass tourism segments, such as beach resorts and cruise ships. The economics of these segments are based on gathering thousands of tourists in a resort or cruise ship. So long as social distancing measures remain in force, to slow the spread of COVID-19, the economics of mass tourism are likely to change, especially in smaller markets like SIDS. And, to the degree that the practice of social distancing endures post-COVID-19, either through changing consumer preferences or public health policies, mass tourism may no longer be economically viable in smaller-scale, higher-cost markets like SIDS.

Other, larger tourism destination markets – many of them advanced economies – have weathered the pandemic with a boost from domestic tourism. Even before the pandemic, in 2019, domestic travel represented 70 per cent of global tourism spending, led by markets such as China, the USA, Germany, India and Japan (Goretti, et al., 2021). Throughout 2020, when international travel was complicated, risky or impossible, consumers in these countries travelled to domestic destinations, providing tourism businesses and employees with much-needed income.

By contrast, lower income levels and costly internal transportation in most SIDS mean that there is not enough purchasing power to justify a domestic tourism market. As a result, tourism services in most SIDS cater almost exclusively to the preferences and purchasing power of international visitors and are therefore priced beyond the reach of locals (Vanzetti & Valensisi, 2021). Faced with the total suspension of international tourism during the pandemic, some SIDS belatedly attempted to promote domestic tourism. Anecdotal evidence suggests that, to accommodate the few locals who were able to respond to these calls, participating hotels and restaurants offered reduced services and rates, in an effort to cover some costs and keep some employees.[7]

Due to the risk that COVID-19 will permanently alter consumption patterns for mass tourism, SIDS face a high degree of uncertainty about how to approach a recovery from the pandemic. In the current context, while COVID-19 continues to circulate worldwide, how will SIDS governments finance the business interruptions caused by the near-total halt in tourist arrivals? Looking forward, once borders reopen and sanitary measures ease, can they continue to attract enough visitors to maintain the economic viability of their mass-travel tourism services, such as beach resorts and cruise ships? And, over the long term, can SIDS continue to rely on tourism as the engine of their economies?

Faced with these uncertainties, should SIDS focus their pandemic recovery efforts on reopening and marketing their existing mass-travel services? Should they anticipate changes in consumption patterns by concentrating their recovery on developing alternative forms of tourism? Or should they concentrate their recovery on a mixed strategy, by developing manufacturing or other services alongside tourism?

Adjusting economic strategies and developing new industries is particularly challenging for SIDS. In general, their small size, lack of productive capacities and geographic isolation complicates their competing in manufacturing and the export of physical goods. Although most SIDS depend heavily on trade, their lack of productive capacities means that they

[7] See, for example: https://www.abc.net.au/radio-australia/programs/pacificbeat/van-tourism-impact-covid-19/13488182

typically have a low ratio of domestic value added in their exports. As a result, their trading profile is dominated by imports of staples and intermediate goods, and the export of raw materials and services (McGillivray, Naudé, & Santos-Paulino, 2010; UNCTAD, 2014). Outside of formal wage employment in tourism and other service sectors, small-scale agriculture remains the main source of livelihood for the population in most SIDS.[8]

The resulting industrial profile offers limited opportunities to improve labour productivity, wages and technology transfer, and thus the potential for long-term improvements in productive capacity and structural transformation.

Despite these challenges, most SIDS do not have access to concessional finance or preferential trade measures, such as the package of international support measures (ISMs) available to least developed countries (LDCs).[9] SIDS have argued that they require a similar package of support measures, given their extreme vulnerability and the structural challenges to their economic development. But consensus remains elusive on a formal classification of SIDS and the mechanisms needed to support them.

As a result, external debt levels in SIDS represent an average of 62 per cent in 2019, considerably higher than the average of 29 per cent among all developing countries. SIDS are therefore among the countries most at risk of debt distress.[10]

Hampered by these constraints, policy makers in SIDS face limited options on how to respond to COVID-19 and adjust their tourism-driven strategies to the post-pandemic context, either by pivoting from mass tourism into alternative forms of tourism, or by diversifying into other industries.

2. Pre-pandemic situation in Vanuatu

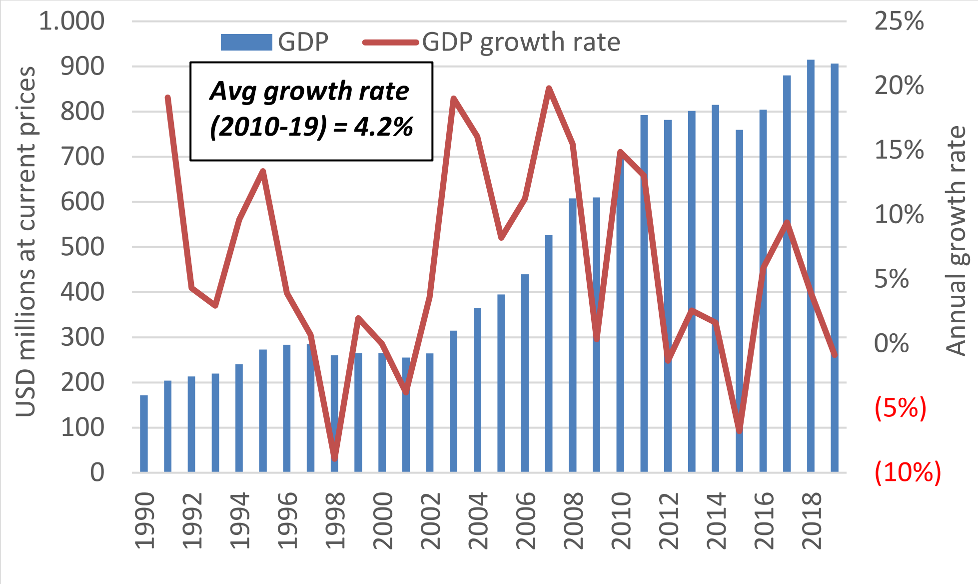
In this section, we outline key characteristics of Vanuatu's economy and tourism subsector in 2019, as a baseline to measure the subsequent effects of the COVID-19 pandemic in Section 2.

1.1. National economy

On the eve of the COVID-19 pandemic, Vanuatu's 2019 gross domestic product (GDP) was approximately 907 million United States dollars (US$), calculated in current prices.[11] As shown in Figure 1, GDP growth in Vanuatu averaged 4.2 per cent from 2010 to 2019, which was slightly higher than the world average of 3.8 per cent.

[8] Source: ILO-STAT. Employment by sector, 2018.
[9] UNCTAD. UN recognition of the least developed countries. Available at: https://unctad.org/topic/least-developed-countries/recognition.
[10] Bouhia, R., Wilkinson, E., 2021. Small island developing states need urgent support to avoid debt defaults. Blog entry, 21 April. Available at: https://unctad.org/news/small-island-developing-states-need-urgent-support-avoid-debt-defaults. Accessed: 29 November 2021.
[11] Source: UNCTADStat.

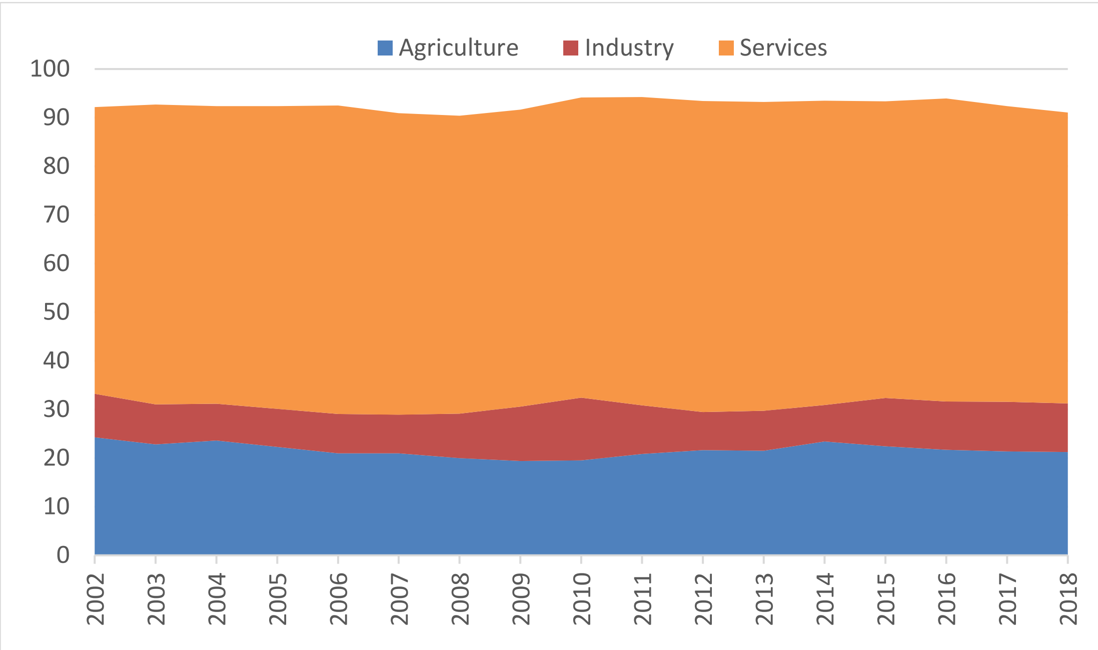
Figure 1 – Vanuatu gross domestic product, 1990-2019



Source: UNCTADStat

In 2018, services accounted for approximately 63 per cent of GDP, agriculture 18 per cent and industry 11 per cent. Although these shares have fluctuated slightly, year-to-year, they have remained roughly constant, as illustrated by Figure 2, underlining the established predominance of services in Vanuatu's economy.

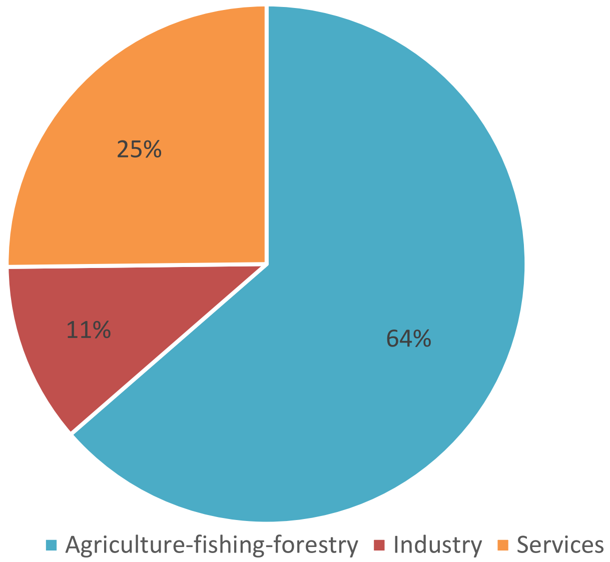
Figure 2 - Share of GDP (%), by sector, 2002-2018



Source: World Bank national accounts data

While services contributed the majority of Vanuatu's GDP, agriculture remained the main source of employment. According to the last Household Income and Expenditure Survey in 2010, 64 per cent of the population was employed in the agriculture-fishing-forestry sector, as compared to 25 per cent in services and 11 per cent in industry, as shown in Figure 3.

Figure 3 - Employment share, by sector, 2010

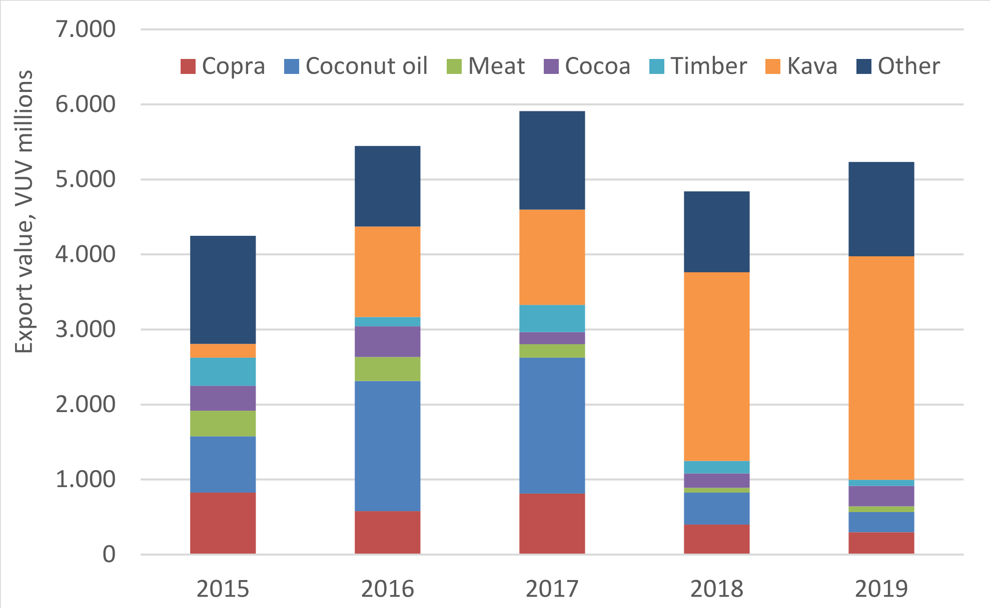


Source: (VNSO, 2012)

More recent data on income suggests the 2010 employment data remained relatively constant over recent years: according to the mini-census conducted in 2016 (VNSO, 2017), the agriculture-forestry-fishing sector remained the main source of income for 42 per cent of households, ahead of wages (28 per cent), business ownership (16 per cent) and remittances (7 per cent). Moreover, the majority of households derived some part of their livelihood from primary production: 88 per cent engaged in subsistence farming, 69 per cent raised livestock, 57 per cent grew cash crops, 49 per cent fished and 44.5 per cent engaged in forestry.

Agricultural products are also Vanuatu's main export goods. As illustrated in Figure 4, kava became the principal export as of 2016, essentially replacing coconut products (i.e., copra and oil), with cocoa the third most valuable export throughout the 2015-19 period.

Figure 4 - Principal export goods, by value, 2015-19



VUV: Vanuatu Vatu
Source: (VNSO, 2020)

Services remain Vanuatu's most important export, generating an average annual surplus of US$ 182 million from 2016 to 2019 and, together with important surpluses in remittances, largely balancing the country's persistent deficit in goods trade, as shown in Table 1.

Table 1 - Current account balance, by component, 2016-19

Balance (US$)	2016	2017	2018	2019
Goods	(270)	(256)	(240)	(276)
Services	156	168	211	194
Goods and services	(115)	(88)	(29)	(82)
Primary income	17	2	27	74
Secondary income (remittances)	124	47	113	158
Current account	26	(39)	110	150

Source: IMF, Balance of Payments and International Investment Position Statistics (BOP/IIP)

1.2. Productive capacity and value added

Economic development in SIDS, including Vanuatu, is often constrained by a lack of productive capacity. For example, inadequate human capital, infrastructure and institutional capacity complicates the development or adoption of new, more productive industries or technologies, slowing the structural transformation of the economy.

UNCTAD's Productive Capacities Index (PCI) is a useful indicator, measuring productive capacities in 195 economies in a multidimensional and country-specific index, from 2000 to 2018. The PCI comprises eight subindices: information and communication technologies (ICTs), structural change, natural capital, human capital, energy, transport, the private sector and institutions (UNCTAD, 2020b). As shown in Table 2, Vanuatu had an overall PCI score of 29.4 in 2018, which ranks 125th among the 195 economies in the index.

Table 2 – Productive Capacity Index, 2018

Subindex	2018
Human capital	41.2
Natural capital	46.2
Energy	23.1
Transport	24.2
ICT	6.7
Institutions	55.5
Private sector	80.4
Structural Change	17.7
Overall PCI	*29.4*

Source: UNCTAD

Among the subindices, Vanuatu scored well for the ease of cross-border trade and doing business (Private sector – 80.4) and relatively well for: the quality and effectiveness of its institutions (55.5); the availability and exploitation of its natural resources (Natural capital – 46.2); and the quality of its human capital (41.2). Meanwhile, Vanuatu scored poorly on infrastructure categories such as ICT (6.7), energy (23.1) and transport (24.2), as well as on its ability to reallocate resources from low- to high-productivity activities (Structural change – 17.7).

In practice, a country's level of productive capacities should be reflected in measurements such as factor productivity and value added. For example, the UNCTAD-Eora Global Value Chain Database computes the level of foreign and domestic value added in a country's exports. Typically, a higher share of domestic value added is preferable, as it indicates that local industries capture a greater share of the total export value of a good or service. According to the database, Vanuatu generated an average of approximately US$ 163 million in domestic value added, equivalent to 20.9 per cent of GDP over the period, which was higher than the world average of 17.6 per cent over the same period[12] and seemingly outperformed its relatively low PCI score.

[12] Sources*: Domestic value added* - UNCTAD-Eora Global Value Chain Database. Available at: https://worldmrio.com/unctadgvc/. Accessed: 23 November 2021. *GDP* – UNCTADStat.

1.3. Tourism subsector

Vanuatu is known for its unique geography and cultural diversity. The islands have rainforests, lagoons, accessible active volcanoes, as well as beautiful sandy beaches and consistently warm and sunny weather. The archipelago culturally diverse, with 113 distinct languages and countless dialects. These features make Vanuatu an attractive destination for cultural and so-called “sun and sand” tourism.

In addition, Vanuatu is a prime diving destination for its marine environment, which includes caverns, abundant marine life, coral reefs and the wrecks of the US ocean liner and converted troop carrier President Coolidge off Espiritu Santo Island (Garrod & Gössling, 2008).

During the post-World War II colonial period, the British and French developed tourism as one of the pillars of the economy of Vanuatu, then called the New Hebrides. When it obtained its independence in 1980, Vanuatu therefore had an existing tourism market and infrastructure that the new government continued to exploit (Hall, 1994).

Some policies have helped tourism grow in Vanuatu, in particular the deregulation of the aviation industry in the 2000s, which lowered the cost of travel and allowed low-cost carriers such as Jetstar and Virgin to bring more tourists from the main source markets of Australia and New Zealand (Cheer, et al., 2018).

Vanuatu has a relatively low minimum wage of VUV 220, or US$ 2 per hour.[13] Land is also relatively inexpensive, including for coastal lots, which fuelled a minor real estate and construction boom in the years leading up to the pandemic, especially among buyers from Australia and New Zealand.

As a result of these factors, Vanuatu’s tourism subsector has developed steadily. Since the mid-1990s, international tourist arrivals by air have more than doubled, from approximately 44,000 in 1995 to 121,000 in 2019.[14]

Since the early 2000s, cruise ship tourism has also grown quickly in the Pacific region. Vanuatu is well positioned to capitalize on this growth segment, given its relative proximity to the main cruise ship ports in Brisbane and Sydney, Australia.

As shown in Figure 1, Vanuatu attracted a total of approximately 220,000 to 350,000 international tourist arrivals annually from 2009 to 2019. Cruise ships were the growth segment during this period, with arrivals increasing from 124,000 in 2009 to 234,000 in 2018, albeit with significant contractions in 2015 and 2019, due to Cyclones Pam and Harold, respectively. Meanwhile, air arrivals stayed relatively constant at between 90,000 and 120,000 per year over the same period. Prior to the COVID-19 crisis, Vanuatu had not developed a domestic tourism market.

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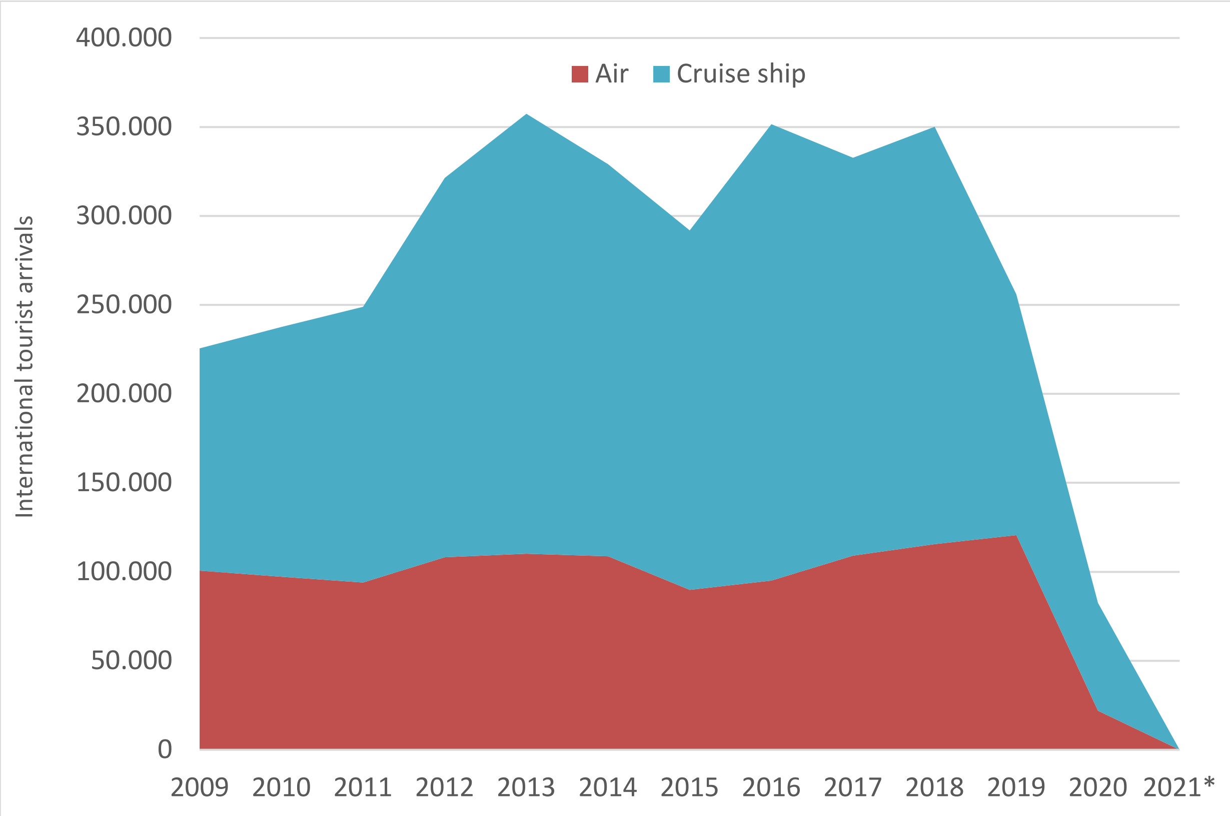
[13] Massing, Adorina, 2019. “New minimum wage is Vt 220”. Daily Post, 6 September. Available at: https://dailypost.vu/news/new-minimum-wage-rate-is-vt220/article_54c96ce7-b1d2-5028-abe3-956e27324ae8.html. Accessed: 17 February 2021.

[14] Source: VNSO.

From April 2020 until June 2021, during the COVID-19 pandemic, Vanuatu reported zero international tourist arrivals. With its borders slated to remain closed until the end of the year, no arrivals were projected in 2021.

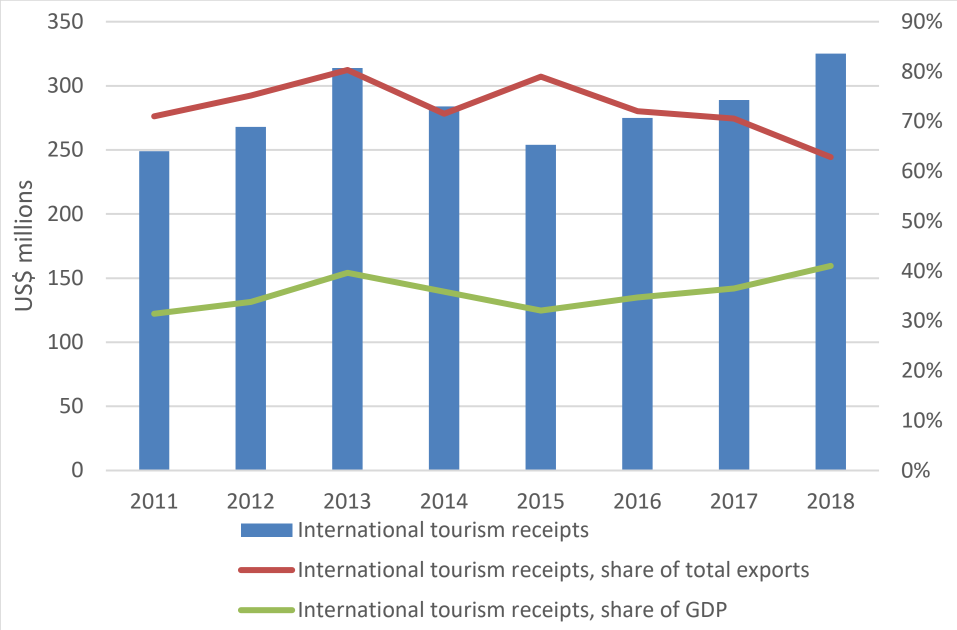
Figure 5 - International tourist arrivals in Vanuatu, by mode, 2009-2021



Note: *2021 figures projected based on provisional data reported up to 30 June*
Source: *VNSO*

The most recent available data on international tourism receipts in Vanuatu is from 2018. Figure 6 shows that international tourism generated an average of US$ 282 million per year from 2011 to 2018, equivalent to an average of 72.8 per cent of total exports and 35.6 per cent of GDP over the period, underlining the economy's dependence on tourism.

Figure 6 - International tourism receipts, 2011-2018



Source: *World Bank, World Development Indicators*

According to the most recent survey, tourism directly employed approximately 10,000 people, or 11 per cent of the total workforce (VNSO, 2012). More recently, the World Travel and Tourism Council estimated that tourism supported a total of 29,000 direct and indirect jobs in Vanuatu in 2019.[15]

1.4. Vulnerability to shocks and climate change

Vanuatu is one of the world's most vulnerable countries to natural disasters. From its first edition in 2011 until the most recent one in 2020, the World Risk Report has ranked Vanuatu as having the highest natural disaster risk of all the 173 countries analysed, routinely followed by Tonga (2[nd]) and the Philippines (3[rd]) (Behlert, et al., 2020). This is based on the country's location: along the Pacific Ring of Fire of volcanoes; and at the centre of the Southwest Pacific basin, one of the world's seven cyclogenesis zones. These features result in a high frequency of earthquakes, volcanic eruptions, cyclones, tsunamis, storm surges, droughts, coastal flooding, and landslides.

According to the International Disaster Database, Vanuatu experienced 49 natural disasters from 1940 to 2020, of which eight earthquakes (16 per cent of the total) and 27 tropical cyclones (55 per cent). Other recorded disasters include landslides, floods, ash falls from volcanoes and a tsunami in 1997.[16]

Tropical storms and cyclones threaten the archipelago during the hot season from November to April. Occurrences outside this period are rare. Vanuatu experiences among

[15] World Travel and Tourism Council, 2020. Vanuatu: 2020 Annual Research Key Highlights. Available at: https://wttc.org/Research/Economic-Impact. Accessed: 15 February 2021.

[16] Source: EM-DAT. The International Disaster Database. Centre for Research on the Epidemiology of Disasters (CRED) and the Université Catholique de Louvain, Belgium. Available at: https://public.emdat.be/. Accessed: 19 February 2021.

the highest incidence of cyclones among Pacific countries, experiencing around two to three per year.[17] However, there is considerable annual variability in the occurrence of cyclones: several may occur in one year, none in others. Similarly, the frequency of severe cyclones varies: Category-4 Tropical Cyclone (TC) Uma hit Vanuatu in 1987, followed by TC Prema (Cat. 4) in 1993; and, after 22 years, TC Pam (Cat. 5) struck in 2015, followed shortly by TC Harold (Cat. 5) in 2020.

Impacts of tropical cyclones on SIDS, including Vanuatu, can be severe. They cause injuries and death, and damage housing, schools, roads, as well as water, electrical and communications infrastructure. Staple and cash crops, such as yam, kava and coconut, can be destroyed, impacting livelihoods, food security and exports. Typically, for months after an event, an immediate external supply of food is required to compensate for the loss of staple crops in affected areas.

Tourism is the engine of Vanuatu's economy and its main source of foreign exchange. Reliant on weather and a healthy marine and coastal environment, Vanuatu's tourism subsector is therefore among the world's most vulnerable to climate change risks (Simpson, Gössling, Scott, Hall, & Gladin, 2008; Goretti, et al., 2021).

Climate change risks may manifest as gradual erosions of the weather and natural environment on which Vanuatu's tourism depends, such as: sea level rise encroaching on beaches and coastal habitat; rising ocean temperature and acidity harming biodiversity or the health of coral reefs; or more extreme weather events damaging infrastructure and interrupting travel and transport links.

For the tourism industry, natural disasters are nonetheless the most visible and destructive manifestation of climate change risks. For example, from 12 to 14 March 2015, the Category-5 Tropical Cyclone Pam caused 11 deaths and displaced 75,000 people. The Government estimated total economic damages at VUV 48.6 billion (US$ 450 million), equivalent to 64 per cent of Vanuatu's GDP.

Due to the interruptions and damage to tourist infrastructure, many hotel and restaurants closed for three to six months and total tourist arrivals fell 11 per cent in 2015,[18] year on year. The tourism subsector sustained an estimated 20 per cent of the total damages and losses caused by TC Pam, or VUV 9.5 billion (US$ 88 million), second only to those in the housing sector (Government of Vanuatu, 2015).

In addition, the environmental cost of TC Pam was high. The destruction of coral reefs and beaches significantly impacted the tourism industry, while not being accounted for in financial calculations of damages and lost income.

Only five years later, in April 2020, shortly after the onset of the COVID-19 pandemic, Category-5 TC Harold struck Vanuatu, inflicting three deaths, displacing 18,358 people and causing economic damage of VUV 56 billion (US$ 503 million) (Government of Vanuatu, 2020).

[17] Vanuatu Meteorology and Geo-Hazards Department. Tropical cyclone. Available at: https://www.vmgd.gov.vu/vmgd/index.php/forecast-division/tropical-cyclone. Accessed: 24 February 2021.
[18] Source: VNSO.

In terms of economic vulnerability, Vanuatu, like many SIDS, relies on imports of staples, including food and fuel. In the tourism subsector, for example, a study by the International Finance Corporation (IFC, 2015) found that, in 2014, tourist hotels and restaurants Port Vila spent a total of US$ 15.6 million on fresh food, of which 54 per cent was imported. Meat and dairy comprised 79 per cent of these imports, but they also included many vegetables and fruits grown in Vanuatu.

Trade interruptions therefore represent a significant risk to tourism in Vanuatu. As the country contemplates reopening to tourism sometime in 2022, this risk is likely to manifest in difficulties for hotels, restaurants and other operators in importing sufficient food, fuel and soft supplies to operate at full capacity, due to the continued disruptions to international shipping and global supply chains, caused by the COVID-19 pandemic.

On the demand side, Vanuatu's tourism subsector relies entirely on international travellers. The border closure in response to COVID-19 laid bare this vulnerability, as the flow of international travellers stopped and the industry had no domestic tourists to cushion the blow.

As a result of these vulnerabilities, Vanuatu scored 39.6 on the 2021 Economic and Environmental Vulnerability Index (EVI). This ranked 39th most vulnerable among the 143 countries in the index, level with Fiji and less vulnerable than other SIDS, such as Cabo Verde (39.9), Seychelles (40.5), Maldives (42.7), Tonga (43.7), Solomon Islands (45.1), the Federated States of Micronesia (50.1), Kiribati (51.7) and the two most vulnerable countries in the EVI – both SIDS: Tuvalu (57.1) and Marshall Islands (59.9).[19]

2. COVID-19 impacts

In mid-March 2020, Vanuatu closed its borders to international travel, to prevent importing the SARS-CoV-2 coronavirus (COVID-19) into the country. From a public health perspective, Vanuatu's bold action succeeded: as of 3 November 2021, the country reported a cumulative total of only six COVID-19 infections, with no active cases or deaths.[20]

In early autumn 2021, the Delta variant continued to drive new waves of infections in countries throughout the world. In this context, and despite selected other SIDS reopening and easing restrictions for international travel – mainly for fully vaccinated visitors – Vanuatu announced no firm plans to reopen to international travel.[21]

With a zero-tolerance policy designed to insulate its public health system, vaccinating its population against COVID-19 is likely to be a major consideration in Vanuatu's plan to reopen to international travel.

Table 3 summarises the status for international tourism in nine selected SIDS, including Vanuatu, along with the share of the population fully vaccinated against COVID-19. The

[19] Secretariat of the Committee on Development Policy. LDC Data. Available at: https://www.un.org/development/desa/dpad/least-developed-country-category/ldc-data-retrieval.html. Accessed 1 November 2021.
[20] Source: Our World in Data. Available at: https://ourworldindata.org/coronavirus. Accessed: 4 November 2021.
[21] In an update on 11 November 2021, the Vanuatu Department of Tourism indicated that borders may reopen in early- to mid-2022, but without mentioning any firm dates, conditions or steps. Available at: https://tourism.gov.vu/index.php/en/news/covid-19-updates/84-working-towards-a-safe-reopening-of-borders

three SIDS still closed to international tourism were also those with lower vaccination rates: Cabo Verde (39 per cent), Vanuatu (11 per cent) and the Solomon Islands (five per cent).

Table 3 – International travel status and vaccination rates in selected SIDS

Country	Status	As of date	Conditions	Fully vaccinated share of population (%)
Mauritius	Open	01-Oct-21	Quarantine for unvaccinated travellers	67
Maldives	Open	15-Jul-21	Quarantine for unvaccinated travellers	66
Fiji	Open	01-Dec-21	Vaccinated travellers only	63
Antigua and Barbuda	Open	20-Aug-21	Quarantine for unvaccinated travellers	52
Barbados	Open	27-Oct-21	Quarantine for unvaccinated travellers	45
Cabo Verde	Closed			39
Comoros	Open	07-Sep-21	Quarantine for all travellers	20
Vanuatu	Closed			11
Solomon Islands	Closed			5

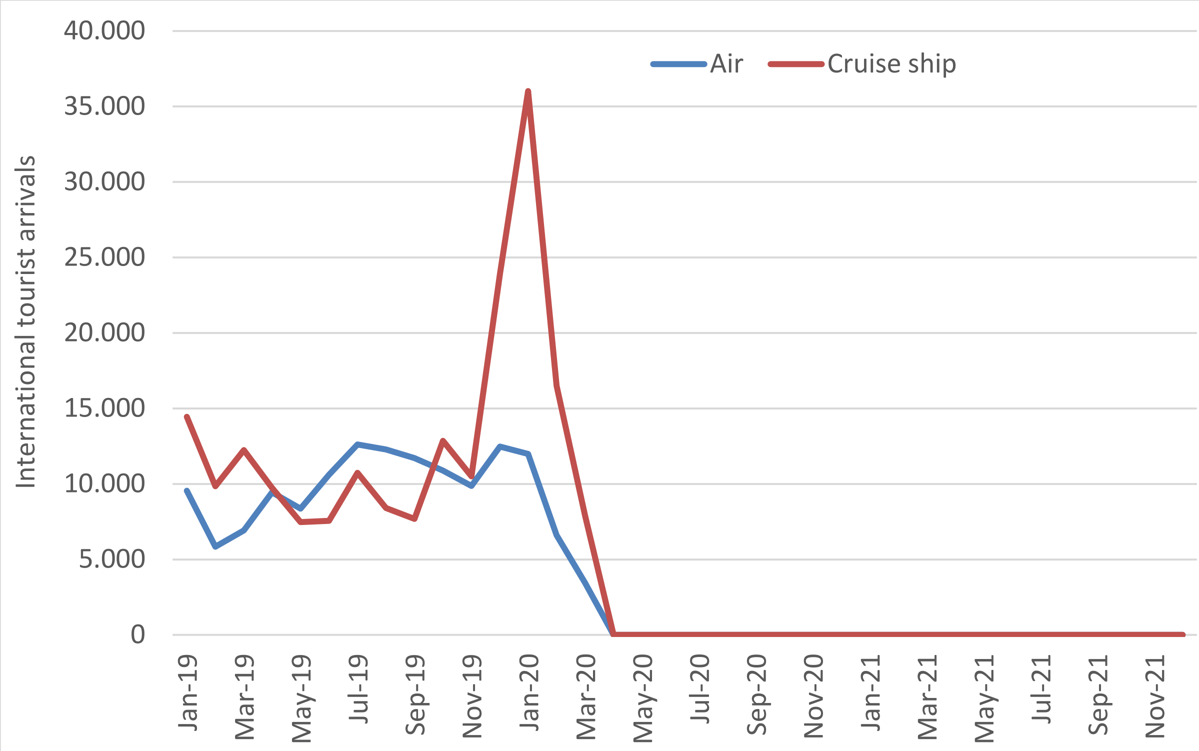
Sources: Travel status: IATA COVID-19 Travel Regulations Map. Available at: https://www.iatatravelcentre.com/world.php. Retrieved: 2 December 2021.
COVID-19 vaccination rates: Our World in Data. Available at: https://ourworldindata.org/coronavirus. Retrieved: 10 November 2021.

Although a public health success, Vanuatu's closure of its borders as of March 2020 incurred an enormous economic cost, by indefinitely suspending tourism.

2.1. Tourism

Figure 1 shows the monthly international tourist arrivals reported by VNSO from 2019 until June 2021 and projected figures until December 2021. With its borders slated to remain closed until the end of the year, no arrivals were projected in 2021.

Figure 7 - International tourist arrivals in Vanuatu, by month, 2019-2021



Note: *2021 figures projected based on provisional data reported up to 30 June*
Source: *VNSO*

Recent data for tourism receipts are scarcer: Vanuatu last reported US$ 325 million in tourism receipts in 2018. Nevertheless, with no international tourist arrivals throughout the COVID-19 pandemic, and without domestic tourism to bolster the subsector, we estimate that Vanuatu will effectively generate zero receipts from tourism from mid-March 2020 until the end of 2021, if not longer.

Prior to the pandemic, domestic tourism was not marketed or tracked in Vanuatu. Faced with an indefinite border closure, the Vanuatu Tourism Office launched its first domestic tourism strategy in mid-2021.[22] Participating hotel and tour operators have lowered their rates, allowing them to remain open, employ staff and cover costs. The domestic tourism strategy is therefore proactive remedy during the pandemic, albeit not sustainable over the long term.[23]

2.2. Growth and trade

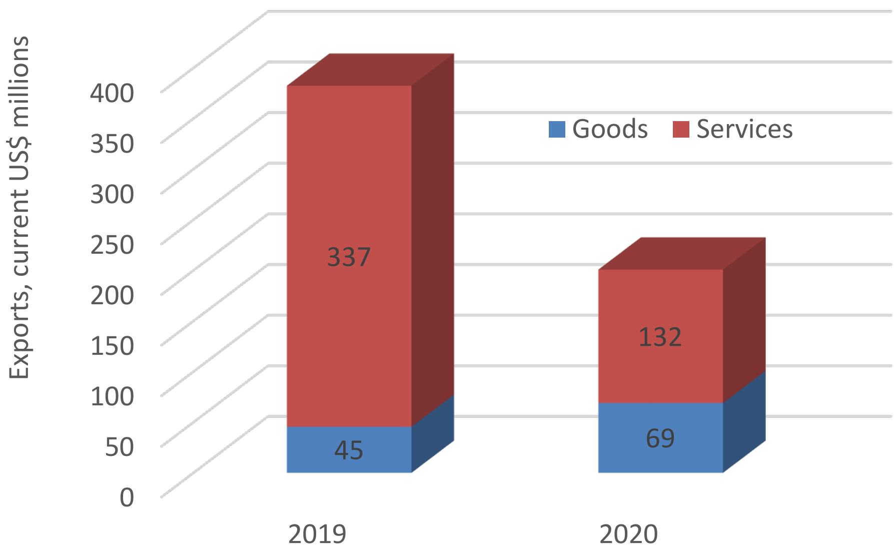
The protracted loss of tourism revenues during the COVID-19 pandemic had predictably major impacts on Vanuatu's economy. In terms of economic activity, Vanuatu's GDP fell approximately seven per cent, from US$ 907 million in 2019 to US$ 844 million in 2020, equating to a reduction in GDP per capita of 9.1 per cent, from US$ 3,023 in 2019 to US$ 2,749 per person in 2020.[24] This is perhaps a smaller contraction than some projected

[22] https://www.vanuatu.travel/en/vto-launches-first-ever-domestic-tourism-marketing-strategy
[23] See, for example: https://www.abc.net.au/radio-australia/programs/pacificbeat/van-tourism-impact-covid-19/13488182
[24] Source: UNCTADStat

earlier in the pandemic, but is nonetheless significant, since Vanuatu's output is unlikely to begin recovering until international tourism resumes in 2022, at the earliest.

The suspension of tourism had a more severe impact on trade. Figure 8 illustrates that total exports crashed by 48 per cent, from US$ 382 million in 2019 to US$ 201 million in 2020. Exports of goods actually increased over the period, meaning that the contraction was due to the US$ 205 million, or 61 per cent, reduction in service exports, mainly from the tourism sector.

Figure 8 - Exports of goods and services, Vanuatu, 2019-2020



Source: UNCTAD

2.3. Macroeconomic indicators

As a result of the erosion of its exports, Vanuatu's current account balance suffered in 2020. Receipts from service exports plummeted by US$ 229 million, from US$ 338.5 million in 2019 to US$ 109.5 million in 2020. This gap was attenuated somewhat by reduced imports of goods, by US$ 67 million and an increase of US$ 22.3 million in secondary credit (i.e., remittances). As a result, the current account balance fell from US$ 150 million in 2019, to US$ 28.3 million in 2020.[25]

On the reassuring side, foreign exchange reserves stood at approximately US$ 614 million at the end of 2020, equivalent to 15 months of imports (IMF, 2021).

Vanuatu attracts relatively small inflows of foreign direct investment (FDI), predominantly flows from Australia invested in Vanuatu's tourism sector. As a result of the COVID-19 pandemic, FDI inflows slowed moderately, by 16 per cent, from US$ 35 million in 2019, to US$ 30 million in 2020.[26]

In terms of spending, shortly after it closed the borders in March 2020, the Government of Vanuatu announced a five-month economic stimulus programme, worth US$ 32 million, or

[25] Source: IMF Data, Balance of Payments and International Investment Position
[26] Source: UNCTADStat.

approximately 3.8 per cent of GDP. At the close of the programme, the IMF estimated that actual disbursements totalled 2.6 per cent of GDP, due to capacity constraints in implementation.[27]

As the pandemic persisted beyond the initial five-month stimulus programme, the Government announced a second one in May 2021, worth an additional US$ 20 million, or 2.3 per cent of GDP, lasting until the end of 2021.[28] The programme allotted 32 per cent of its total budget for small business grants and 26 per cent to a wage subsidy scheme to keep workers employed, with the remaining 42 per cent devoted to underwriting concessional loans through retail banks.[29]

In addition, from March to May 2020, the Vanuatu National Provident Fund (VNPF) extended an extraordinary Hardship Loans programme to support households struggling financially. Under the programme, members could borrow up to VUV 100,000 interest-free over six months. After that, the member could choose a repayment plan or permanently withdraw the amount by paying a penalty. By the end of May, the VNPF had lent approximately US$12.5 million (1.5 percent of GDP) to 15,000 members.[30] It was unclear how many members chose to permanently withdraw funds from their pension accounts, which would reduce their future income.

Revenues fell more dramatically. The Government's stimulus packages cushioned somewhat the contraction in its value added tax receipts in 2020, which fell -20.1 per cent from 2019 due to reduced consumption. Duties and other taxes on trade fell -13.8 per cent over the same period.[31]

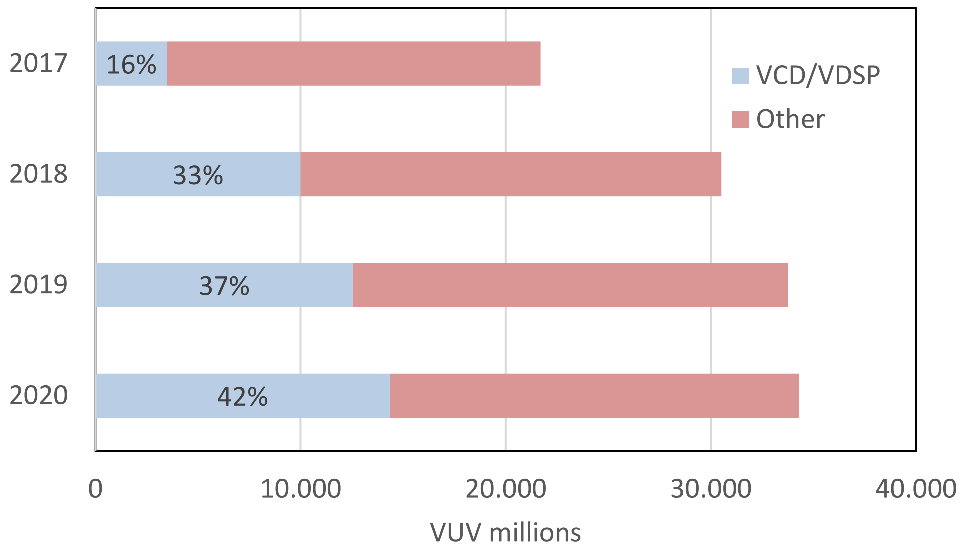
Vanuatu's two so-called "citizenship-for-sale" schemes also cushioned the fall in revenues. These schemes grant citizenship to qualifying high-net-worth applicants in return for a fee of over US$ 100,000. The Vanuatu Development Support Program (VDSP) markets to most nationalities, while the Vanuatu Contribution Program (VCP) is run through Hong Kong and markets to Chinese nationals. The Government launched a third such scheme in 2021: the Real Estate Option Program (REO).[32]

After their launch in 2017, the VDSP and VCP quickly became the main source of government revenue. As shown in Figure 9, the schemes generated VUV 3.5 billion, approximately US$ 32 million, or 16 per cent of total government revenue in 2017, rising steadily to VUV 14.34 billion in 2020, or 42 per cent of total revenues. At the time of writing, the Government had published revenue figures up to February 2021, with the citizenship schemes generating 35 per cent of revenues in the first two months of 2021.33

Although these citizenship schemes pre-dated COVID-19, they proved an invaluable and steady source of revenue as the pandemic undercut consumption-based tax revenues.

[27] https://www.elibrary.imf.org/view/journals/002/2021/208/article-A001-en.xml
[28] The deadline for applications was 30 September 2021.
[29] https://doft.gov.vu/index.php/stimulus
[30] Source: ADB COVID-19 Policy Database. Available at: https://covid19policy.adb.org/policy-measures/VAN. Accessed: 24 November 2021.
[31] Source: Vanuatu Department of Finance and Treasury. Treasury Monthly Budget Reports.
[32] https://vancitizenship.gov.vu/
[33] Source: Vanuatu Department of Finance and Treasury. Treasury Monthly Budget Reports.

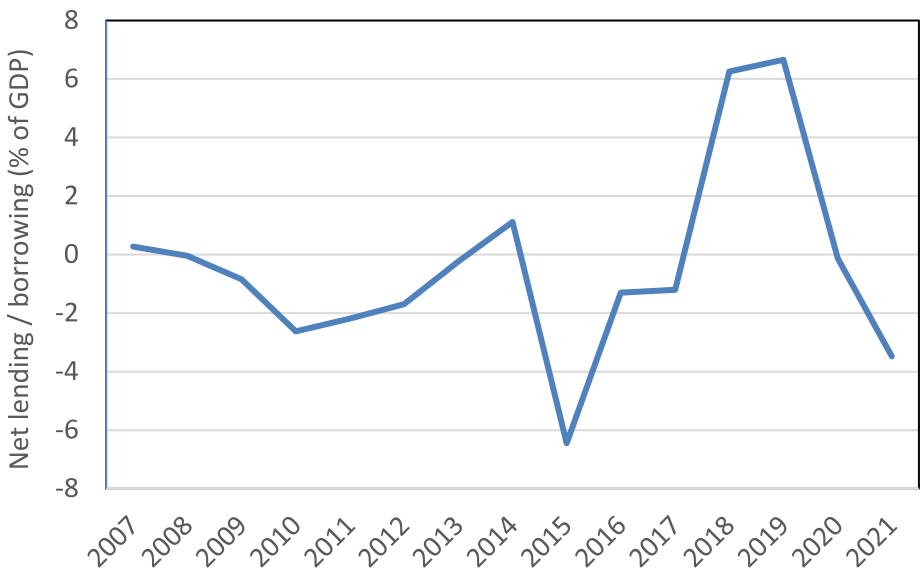
Figure 9 - Citizenship schemes as share of total revenue, Vanuatu, 2017-20



Source: Vanuatu Department of Finance and Treasury. Treasury Monthly Budget Reports.

Figure 10 depicts the IMF's estimated net lending / borrowing by the Government of Vanuatu, as a share of GDP, from 2007 to 2021, representing the net budget balance after operations and financial transactions. According to this indicator, the Government recorded a small deficit of -0.1 per cent of GDP in 2020. This represents a steep drop from the healthy surpluses of over six per cent recorded in 2018 and 2019, but is nearly identical to the 10-year average of 0.1 per cent. The IMF estimates that the balance will erode to a deficit of -3.5 per cent in 2021 and further to -4 per cent in 2022 and beyond.

Figure 10 - Net lending / borrowing, % of GDP, Vanuatu, 2007-21



Source: IMF

2.4. Debt

Despite manageable financial and fiscal positions at the end of 2020, debt represents a greater risk for Vanuatu. External public debt rose moderately from approximately US$ 341 million in 2019, to US$ 354 million in 2020, or 3.8 per cent. Debt service on external debt fell by seven per cent, from US$ 23.4 million in 2019, to US$ 21.7 million in 2020.

Nevertheless, with the contraction of GDP in 2020, Vanuatu's ratio of external-public-debt-to-GDP ratio increased from 38 per cent in 2019 to 39.1 per cent at the end of 2020. This bumps up against the cap of 40 per cent established under the Government of Vanuatu's Debt Management Strategy (2019–2022). Similarly, the crash in tourism receipts and service export earnings means that the ratio of Vanuatu's total external debt service to exports ballooned from 4.8 per cent in 2019 to 8.2 per cent in 2020.[34]

In this context, the IMF and IDA (2021) rated Vanuatu's risk of debt distress as "moderate", unchanged from its 2019 rating, yet warned that there was limited space to absorb further shocks. Given Vanuatu's extreme exposure to natural disasters, this is a looming concern.

Furthermore, although its financial and fiscal positions remained relatively strong at the end of 2020, high external debt levels and servicing costs may render it increasingly difficult for the Government of Vanuatu to obtain additional loans to finance continued stimulus spending as the COVID-19 pandemic endures and the tourism subsector remains closed.

2.5. Employment, livelihoods and coping strategies

As of November 2021, the Government of Vanuatu had yet to report official data on employment in in the country during the COVID-19 pandemic. A comprehensive picture of the impacts of the pandemic on, for example, job losses, labour productivity, the labour market, wages and livelihoods, is therefore difficult to assemble.

Anecdotal evidence suggests that the closure of the border in mid-March 2020 resulted in an initial, major round of layoffs in the tourism subsector. Government assistance to employers and workers then forestalled further layoffs.

For example, results of an April 2020 survey of 267 businesses (Department of Tourism & Vanuatu Tourism Office, 2020) showed that approximately 70 per cent of the 29,000 jobs[35] in the tourism subsector disappeared in the first weeks of the pandemic. A disproportionate share of the lost jobs were informal arrangements.

Women were most severely affected by these job losses, as they represent most employees in the tourism subsector and are more likely to be employed on an informal basis. Faced with the closure of the border, employers kept more managerial or supervisory staff, of which less than a third are women, while laying off line staff, servers, custodial workers and labourers – jobs in which women are overrepresented. The unequal distribution of retrenchment in the tourism subsector is not particular to the COVID-19 crisis, but is consistent with previous downturns resulting from economic shocks and natural disasters (Government of Vanuatu, 2020).

[34] Source: World Bank, World Development Indicators.
[35] Source: World Travel and Tourism Council.

From June to September 2020, Sheyvens and Movono (2020) surveyed 106 respondents in tourism-dependent households in five Pacific island countries: Cook Islands, Fiji, Samoa, Solomon Islands and Vanuatu. They found that approximately half of respondents had lost their jobs in the tourism sector. The other half who retained their jobs had their terms – e.g., hours and wages – significantly reduced. As a result, 73 per cent of respondents had suffered a major reduction in income, while another 16 per cent reported a moderate reduction, for a total of 90 per cent of respondents suffering significant reductions in household income. Although the survey covered five Pacific island countries, its findings roughly correspond with other anecdotal evidence from Vanuatu.

Among those workers who lost their jobs, or those for whom reduced wages or government assistance were insufficient to makes ends meet in the main tourism resort areas of Port Vila and Luganville, anecdotal evidence suggests that a significant number of them chose to move back to their villages, including to other islands in the archipelago. There, they had access to communal lands to grow food and community support.

Responding to the survey conducted by Sheyvens and Movono (2020), returning workers outlined mixed coping strategies, involving some combination of subsistence and remunerative activities, for example:

- Growing food or fishing for their own consumption;
- Growing cash crops;
- Starting a small business;
- Relying on remittances and community support; and
- Bartering goods or labour.

Small groups of temporary workers from Vanuatu and other Pacific SIDS also flew to Australia and New Zealand, to fill shortages of seasonal workers in those countries. There are no indications what proportion of these workers lost jobs or income from the tourism downturn in their countries. But their travel and contracts are organized under the exceptional circumstances of the pandemic.

According to news reports, both employers and employees are grateful for these arrangements, despite the conservable complications involved, such as quarantine on arrival, no family visits and uncertainty about whether the sanitary situation will allow them to fly home at the end of their contracts. [36]

These coping strategies are vital for tourism workers who lost jobs or income due to the pandemic to make ends meet while the sector remains closed in Vanuatu. Nevertheless, from the perspective of the development of the national economy and the operation of the

[36] See, for example: Tucak, Phil (2021). 'Without them we wouldn't exist:' Vanuatu workers offer lifeline for Aussie farmers. SBS News, 1 March. Available at: https://www.rnz.co.nz/international/pacific-news/448447/open-borders-for-seasonal-workers-welcomed-but-solomon-islands-wants-in-too. Accessed: 22 November 2021.
Also: Godfrey, Dominic (2021). Open borders for seasonal workers welcomed, but Solomon Islands wants in too. RNZ Pacific, 4 August. Available at: https://www.rnz.co.nz/international/pacific-news/448447/open-borders-for-seasonal-workers-welcomed-but-solomon-islands-wants-in-too. Accessed: 22 November 2021.

tourism subsector, this is not a viable long-term situation. Tens of thousands of workers returning to subsistence agriculture and informal work deprives them and the economy of a significant portion of the wages and production they generated in their tourism jobs. Moreover, to the degree that their coping strategies involve moving back to their villages or overseas, a return to work represents a considerable challenge for employers in the tourism subsector, to attract enough workers to fill their capacity, and with the immediacy that will prevail once borders reopen.

2.6. Food security and well-being

For the thousands of workers who lost their jobs, saw their income slashed and/or had to move back to their villages due to the suspension of international tourism in Vanuatu from early 2020, the pandemic has provoked major life changes, with consequences for their food security and well-being.

For example, while severe food insecurity remained relatively low in Vanuatu in 2020, Table 4 shows that moderate food insecurity, undernourishment, obesity in adults and stunting in children remained prevalent risks.

Table 4 - Selected indicators of food security and nutrition, % of population

	Period average	Vanuatu	World
Undernourishment	2004-06	6.3	12.3
	2018-20	9.3	8.9
Moderate + severe food insecurity	2014-16	na	23
	2018-20	23.3	27.6
Obesity among adults	2012	22.6	11.8
	2016	25.2	13.1
Stunting in children under 5	2012	27.3	26.2
	2020	28.7	22.0

Source: (FAO, 2021)

The pandemic may have further eroded nutritional outcomes for many families. Typical diets in Vanuatu are rich in calories and deficient in some micronutrients, based on locally produced starches (e.g., yam and taro) and imported processed foods – both of which are affordable and contribute to relatively high levels of obesity in the country. To round out their diets, families with more disposable income can buy more expensive imported fruits, vegetables and foods rich in fat and protein (ACIAR, 2021).

As household incomes contracted due to the pandemic, so too did purchasing power, implying many family were less able to afford the same variety and quality of food they enjoyed prior to the pandemic, especially for imported foods. Consumption trends in 2020 loosely corroborated this hypothesis, with, for example, a five-per-cent contraction in imports of food and live animals, alongside a significant increase in the volume of fish caught for household consumption.[37]

[37] Source: Reserve Bank of Vanuatu. Quarterly Economic Review. December 2020. Available at: https://www.rbv.gov.vu/index.php/en/research-publications. Accessed: 24 November 2021.

In terms of well-being, prior to the pandemic, Vanuatu residents generally considered themselves satisfied with their lives, even happy. For example, the Happy Planet Index combines surveys of life satisfaction with life expectancy data, adjusted for ecological footprint, to score how well 152 countries "are using environmental resources to lead long, happy lives." Vanuatu typically scores among the top 10 countries and, in 2019, it ranked second, behind Costa Rica. Although Vanuatu's score for the 2020 Index is not yet complete, available data for life satisfaction and ecological footprint suggest that the pandemic did not materially erode Vanuatu's score in the Happy Planet Index (Abdallah, Abrar, & Marks, 2021).

At a more detailed level, in their survey of 106 respondents in tourism-dependent households in five Pacific island countries, including Vanuatu, Scheyvens and Movono (2020) found that, while reductions in incomes during the pandemic had overwhelmingly negative impacts on respondents' financial well-being, responses on mental and social well-being were split more evenly between positive and negative impacts. On the positive side, respondents appreciated the greater opportunities to connect with family, friends, community and traditions, as well as having more free time away from work. On the negative side, respondents cited crowded households and increased anxiety and stress about health and financial risks associated with the pandemic.

3. Prospects

UNCTAD (2021) estimated that reduced flows of tourists, caused by the COVID-19 pandemic, resulted in US$ 2.4 trillion in global GDP losses in 2020. For 2021, it estimated further GDP losses of US$ 1.7 to 2.4 trillion, from 2019 levels. In parallel, the UNWTO (2021) estimated that 100 to 120 million tourism jobs remained at risk in 2021.

Looking forward, international tourism, measured in arrivals, is unlikely to recover to pre-pandemic levels until 2023, at the earliest. Key factors in this recovery include: the uptake in vaccines in both source and destination markets, as well as coordination among countries towards the gradual easing of travel restrictions (UNCTAD, 2021).

In this context, international tourist arrivals in Vanuatu are unlikely to recover to pre-pandemic levels before 2024, at the earliest. As of November 2021, the country remained closed to international tourism, with no date set to reopen. Even after it reopens, Vanuatu is not a major international tourism destination, due to its distance from most source markets, apart from Australia and New Zealand. In addition, at the time of writing, Vanuatu's vaccination programme was proceeding slowly, which is likely to slow the resumption of international tourist arrivals.

In this section, we identify some implications for Vanuatu of the recovery of international tourism, with a focus on how the economics of the industry will change after the pandemic.

3.1. Tourism

Even as some countries gradually reopened to international tourism as of mid-2021, health risks proved an enduring concern to which the industry must adapt. For example, travellers were more likely to prefer destinations with lower perceived risks of COVID-19 transmission, as well providers advertising a reassuring set of preventative measures. On the supply side, providers attempted to find a balance, with preventative measures strict enough to meet government requirements and the demands of clients and staff, but not so strict as to dissuade travellers or blow their margins. Meanwhile, governments sought their own balance, with policies that allowed tourism to resume, while ensuring public health and evaluating what measures need to remain to mitigate the risk of future pandemics.

These changes to consumption patterns, business models and government policy are likely to endure, to some degree, after the COVID-19 pandemic, reshaping international tourism industry. Rather than a wholesale reimagining of tourism, the specific changes are likely to impact some market segments more than others, reshuffling the number and types of tourists that flow among the segments that remain viable in the post-pandemic context. In Table 5, we analysed the potential effects of four travel-related trends that are likely to endure.

Table 5 - Effects of post-pandemic trends on tourism markets and segments

Enduring trend	Effect on destinations / models / segments
The use of sanitary measures leads, on average, to more socially distanced travel and greater operating costs.	• Reduced viability of high-density, low-cost models, such as beach, package or charter services and cruise ships. • With greater price elasticity of demand, low-density, higher-end models, such as eco-tourism or small-group tours, can market their sanitary protocols and pass the cost to guests.
Travel restrictions and sanitary measures vary by destination and by travellers' vaccination status.	• Multi-jurisdictional travel, such as multi-country tours or cruises, becomes more complicated and costly, especially for large groups with varying nationalities and vaccination status. • Destination countries able to coordinate travel restrictions and sanitary measures with their main source markets stand to welcome a steadier flow of tourists.
Travellers and industry want reassurance on the safety and continuity of service.	• Destinations with a well-resourced, effective health system mitigate the risk of trip cancellations, travel restrictions and border closures. • Similarly, strong coordination among health authorities and industry stakeholders will allow for a greater degree of proactive, predictable and effective changes to travel restrictions and sanitary measures.

Enduring trend	Effect on destinations / models / segments
Vaccinated travellers and workers pose less overall risk.	• Low-margin segments may be able to minimize the costs of complying with sanitary measures and the business risks associated with infections, by adopting a vaccinated-only strategy. • Destinations unable to secure supplies of vaccines, or with low vaccine uptake rates, may struggle to attract risk-averse travellers and minimize the business risks of infections among guests and workers. • Small destinations may not be able to achieve economies of scale by focussing only on vaccinated travellers.

Source: Author's analysis and (Goretti, et al., 2021)

Vanuatu's tourism model appears particularly vulnerable to these enduring changes. The country' pre-pandemic tourism service offering was based on two high-density, low-margin segments, namely: 1) travellers arriving on long-haul flights with discount or charter carriers, for multi-night stays or package tours at beach resorts; and 2) passengers on cruise ships, which typically spend 2-3 days in the Vanuatu archipelago, landing guests for large-group tours, activities, entertainment and dining.

The long-term viability of the cruise ship segment, in particular, is unclear. From a sanitary perspective, cruise ships were among the most difficult infection clusters to manage early in the pandemic. Individual ships can carry thousands of passengers, making ports wary about letting them dock and offload once infections were present on board – the more so because most of the cruise ship fleet is registered under flags of convenience in countries such as the Bahamas, Panama or the British territory of Bermuda. As a result, passengers and crew on ships such as the Diamond Princess and Grand Princess endured some of the most dramatic experiences early in the pandemic, prohibited from disembarking or travelling home and living in extended quarantine on board, in constant anxiety and worsening conditions.

Because of these experiences, health officials in major markets have imposed strict sanitary conditions for cruise ships to operate in their waters and dock in their ports. In response, the cruise industry has worked hard to comply and implement robust COVID-19 protocols that would quickly identify and contain any infections, avoiding interruptions to the voyage and risks of the harrowing quarantine incidents seen earlier in the pandemic. And demand remains strong – cruise lines reported healthy sales when some lines resumed in mid-2021.[38] Nevertheless, with a business model based on hundreds of passengers, who arrive for their cruise from a different of jurisdictions on various modes of transportation, the task of preventing COVID-19 from boarding the ship is daunting and, in the event of an outbreak,

[38] Yeginsu, C., Chokshi, N., 2021. The cruise ship stages a comeback. The New York Times, Travel, 9 August. Available at: https://www.nytimes.com/2021/07/28/travel/cruise-industry-comeback.html. Accessed: 29 November 2021.

a repeat of the earlier quarantine events would be a major blow to the industry's post-pandemic recovery prospects (da Silva, 2021).

From a business perspective, sanitary measures and social distancing will inevitably reduce the maximum capacity on cruise ships, putting more pressure on margins. As a result, the industry might be forced scale down or cancel less profitable routes, to focus on higher margin ones. The routes that call in Vanuatu typically leave from Sydney or Brisbane, Australia are not among the most popular routes in the world, in terms of passenger numbers. They also sail long distances – fuel being the main variable cost that isn't based on days at sea[39] – between ports of call in, for example, New Caledonia, Vanuatu, New Zealand and Fiji. To the degree that post-pandemic economics forces the cruise industry to cut costs, these routes could be among those scrutinised first.

Taken together, post-pandemic trends in the tourism industry suggest that, for Vanuatu:

- Recovery to pre-pandemic flows of tourists is unlikely before 2024, at the earliest;
- The resulting changes in consumer preferences, business models and government policies pose a risk to the economic viability of businesses that depend on mass-travel market segments, in particular cruise ships; and
- With the long recovery ahead and risks to the existing high-density tourism strategy, pressure will mount to diversify into other lower-density segments, requiring new investments and marketing strategies.

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[39] Cruise Market Watch, 2021. Financial breakdown of a typical cruiser. Available at: https://cruisemarketwatch.com/financial-breakdown-of-typical-cruiser/. Accessed: 29 November 2021.

3.1.1. Recommendations

Table 6 - Recommended policy actions, tourism

Policy action	Timing	Commentary
1. Provide income assistance to affected businesses and workers	ST	• The Government's rapid implementation and renewals of its stimulus packages and the VNPF's Hardship Loans scheme need to continue, to minimise economic hardship and keep productive capacity intact for the eventual reopening. • Dependent on fiscal and debt sustainability.
2. Accelerate vaccination against COVID-19, especially among tourism workers	ST	• Progress on vaccination has lagged in Vanuatu, which could delay and complicate its reopening to international tourism. • To undertake the universal vaccination of its population, Vanuatu, like other SIDS and vulnerable countries, requires international assistance to obtain supplies of the vaccine and finance its rollout. • Australia, as the major source of aid, investment and tourist arrivals in Vanuatu, and with its successful COVID-19 vaccination campaign, could be a suitable partner in assisting with Vanuatu's vaccination campaign.
3. Coordinate travel and sanitary measures among health authorities and industry stakeholders	ST	• The Department of Tourism has a strong recent track record of convening stakeholders to develop forward-looking plans that address challenges facing the industry, such as climate change or natural disasters, for example in the 2019-2030 Vanuatu Sustainable Tourism Policy. • The DoT employed the same multi-stakeholder approach in compiling a Phase 1 of the Vanuatu Tourism Crisis Response and Recovery Plan (VTCRRP),[40] to guide the initial recovery from COVID-19. • These continued efforts should include health authorities, to avoid conflicting between industry and health officials on their expectations for the reopening and recovery of the tourism subsector.

[40] Department of Tourism, 2021. Immediate Safety, Response and Economic Recovery Effort - Phase 1: Response. Available at: https://tourism.gov.vu/index.php/en/about/reports-plans-policies/reports/recovery-plan-p1. Accessed: 29 November 2021.

Policy action	Timing	Commentary
4. Allot additional resources and build capacity of the public health system	MT	• When it closed Vanuatu's borders in March 2020, the Government cited protecting its vulnerable public health system as a primary objective. • Reopening to international tourism – and remaining open – in the post-pandemic era will likely require a public health system robust enough to respond effectively in an epidemic. • A robust public health system represents a more general value to Vanuatu's population, and act as the foundation for future responses to COVID-19 variants and other epidemics or pandemics.
5. Provide working capital assistance and debt relief to SMEs	MT	• Since borders closed in 2020-21, small businesses have carried their debts, relying on government assistance to meet some of their ongoing obligations. • When borders reopen, these businesses will need to rebuild their working capital to operate. • With a gradual reopening, a return to profitability will not be immediate, leaving businesses to balance to meet their working capital needs and service accumulated debt. • The Government needs to anticipate working capital and debt relief assistance to ensure small businesses survive the reopening
6. Coordinate travel and sanitary measures with Australia, New Zealand and Pacific neighbours	MT	• The tourism subsectors in Vanuatu and its South Pacific neighbours –Fiji, New Caledonia, Samoa, Solomon Islands and Tonga – all rely, to an extent on visitors from Australia, New Zealand and, to a lesser extent, China and Japan. • Cruise lines from Australia, in particular, group several of these countries into a single itinerary. • Vanuatu should therefore pursue coordination of travel and sanitary measures with Australia, New Zealand and its neighbours. • Establishing COVID-19 travel corridors among these countries could form part of their cooperation.

Policy action	Timing	Commentary
7. Transform and diversify the tourism service offering towards segments with lower density, higher margins, improved environmental sustainability and more decent work opportunities	LT	• For example, eco-, adventure, luxury, health, wellness and spiritual tourism. • With the prevalence of teleworking arrangements for some types of jobs, mainly in advanced economies, short- or long-stay teleworking visitors may be a new travel segment to develop. • These services are typically more costly than mass-travel ones, targeting different guests, so a shift would need to include revised tourism marketing campaigns. • As a small economy, Vanuatu likely can't raise sufficient domestic capital to invest in a full restructuring of its tourism sector, away from high-density segments, so would need to attract financing from international partners and investors. • Along with marketing and investment considerations, the political economy for such a restructuring must be pragmatically negotiated among political, business and labour leaders.

Note: *ST – short term, MT – medium term, LT – long term*
Source: *Author's analysis and (Bauer, et al., 2021; Goretti, et al., 2021; Gounder, 2020; Government of Vanuatu, 2020; Figueroa & Rotarou, 2021; Sheyvens & Movono, 2020)*

3.2. Productive capacity

The COVID-19 pandemic was initially understood as an acute shock, from which countries could recover back to a “normal”, pre-pandemic state. As the pandemic persisted and new variants emerged and as governments imposed, sometimes stricter, sometimes more lenient sanitary measures to combat the virus, it has become increasingly clear that the pandemic has, and will permanently transform the global economy.

For example, by late 2021, roughly a year after vaccines against COVID-19 became available, continued disruptions to production and transportation left supply chains in disarray. Many industries – including automotive, food, textiles and tourism – do not anticipate resolving their supply chain difficulties before 2023, if not later. In the meantime, firms are rushing to reorganise and de-risk their supply chains, by reducing complexity, “re-shoring” key production activities and accelerating the adoption of automation and other technologies.

These changes are likely to endure into the post-COVID era, permanently altering how firms and countries compete for opportunities and, by extension, the strategies available for countries to build productive capacity and transform their economies.

This changing structure of production and transportation represents a disproportionate threat to developing countries with poor integration in global value chains (GVCs) and low technology adoption rates, including SIDS. Protracted disruptions to supply chains pose a major risk to the functioning of their economies, which depend on imports of food, energy and intermediate goods. Even prior to the pandemic, most SIDS struggled to compete in higher-value industries, especially those based on exporting physical goods, due to their limited productive capacity, small size, narrow resource base and geographic isolation. As a result, SIDS are poorly integrated in global value chains and rely on external aid and borrowing to finance public investments and spending.

Many SIDS, including Vanuatu, a large proportion of existing productive capacity – including human capital, institutions, infrastructure and transport – is devoted to the tourism subsector, as the engine of the economy. With changes in the post-pandemic competitive landscape in the tourism industry, including those described in the previous section, there is a risk that tourism-dependent SIDS, like Vanuatu, will endure long-term contractions in the number of international tourist arrivals, with a resulting fall in the capacity utilization of the productive resources they have mobilized over time in the tourism subsector.

From this perspective, the post-pandemic competitive landscape risks reversing in SIDS the classic development trajectory, by which factors of production are steadily reallocated to more productive activities, for example from agriculture to industry. As observed in Vanuatu, thousands of skilled workers who lost relatively productive tourism jobs were forced to return to their villages to subsist on agriculture, fishing and informal work. Should those tourism jobs not reappear, it is difficult to see where these skilled workers might be used as productively.

In countries with larger productive bases and domestic markets, a policy solution could be to create incentives for diversification into other industries, accompanied by programmes to retrain, retool and reallocate existing productive capacity for use in the new industries.

By contrast, SIDS' small economies and resource bases severely restrict the choice of new industries to develop on a scale that would compensate for a long-term contraction in the tourism business. In Vanuatu's case, for example, there is perhaps some scope to expand its "citizenship-for-sale" schemes to include a wider range of related services, such as offshore business, financial or legal services. But the country has little existing productive capacity in these fields that would help it thrive in this competitive – and risky – industry.

3.2.1. Recommendations

For Vanuatu's vulnerable economy, planning for the resumption of international tourism and the post-pandemic recovery needs to consider how best to remobilize and expand productive capacity, towards greater resilience. To this end, we recommend the policy actions described in Table 7.

Table 7 - Recommended policy actions, productive capacity

Policy action	Timing	Commentary
8. Support employers with advance planning, logistics and wage support to re-employ workers quickly when international tourism resumes.	ST	• As observed when other destination markets reopened to tourism, significant labour shortages and time lags to re-employ workers hurt operators' ability to reopen to full capacity and profitability. • To the degree that the Government is able to formulate an advance plan, with support programmes, to bring people back to work, both employers and workers will draw maximum benefit from a reopening to tourism.
9. Invest in training programmes for new tourism market segments	MT	• As with any service sector, Vanuatu's ability to compete in higher-margin, more specialised market segments – such as eco-, adventure, luxury, health, wellness and spiritual tourism – will depend on workers having the necessary skills. • The Government can support this transition by working with industry to establish training programmes for the specialised skills required. • These programmes need not be limited to service delivery skills, but could also include research on applying more productive and innovative methods and technologies in these services.

Policy action	Timing	Commentary
10. Invest in programmes and infrastructure to build linkages between local farmers, fishers and the tourism subsector.	MT	• Hotels and restaurants import the majority of the fresh food they serve. • Local farmers and fishers struggle to enter this market, due to a variety of factors, including: a mismatch between the main growing and tourism seasons in Vanuatu; insufficient cold storage and transportation infrastructure; and local producers being unable to meet the quality and consistency standards. • Beginning with the most feasible products – for example starches and fish – the Government should invest in programmes to build the capacity of producers to meet buyers' standards, and invest in a sufficient cold chain infrastructure.
11. Retrain workers for other service sectors	MT	• Tourism workers who returned to subsistence livelihoods in their villages and are not rehired when the industry reopens represent a major net loss in labour productivity. • To the degree possible, the Government should invest in retraining programmes that mobilise these skilled workers elsewhere in the economy, including in new, non-tourism service sectors identified for development.
12. Invest in ICT, energy and transportation infrastructure	LT	• To improve the country's competitiveness in new service sectors it hopes to develop, the Government of Vanuatu needs to redress its relative deficiencies in important infrastructure areas: ICT, energy and transportation.

Note: *ST – short term, MT – medium term, LT – long term*
Source: *Author's analysis, UNCTAD Productive Capacity Index (https://unctad.org/topic/least-developed-countries/productive-capacities-index)*

3.3. Debt

After closing its borders in March 2020, the Government of Vanuatu followed up quickly with a stimulus package, since renewed twice, to assist businesses and workers who lost income as a result of the closure and to prop up consumption. These important programmes were possible because of the country's relatively strong fiscal position leading up to the pandemic.

Nevertheless, even as other destination countries have reopened, Vanuatu remains closed to international tourism, due, in part, to its slow progress in vaccinating its population against COVID-19.

So long as Vanuatu's borders remain closed, stimulus spending will remain crucial to cushion businesses, families and their livelihoods from the full shock of the pandemic. Even after Vanuatu eventually reopens to international tourism, the recovery will likely be gradual, meaning that government assistance will remain essential to smooth the return to full capacity.

After a negligible budget deficit of -0.1 per cent in 2020, the Government of Vanuatu faces widening deficits in 2021 and beyond. Financing these deficits may become problematic, since Vanuatu's external-debt-to-GDP ratio reached 39.1 per cent at the end of 2020,[41] just shy of its 40-per-cent cap.

The IMF and IDA (2021) rated Vanuatu in moderate debt distress in 2021, which is not immediately worrisome. But a new shock, in the form of a natural disaster or renewed border closures, could push the country into a debt crisis.

Balancing public debt levels, the government's external borrowing cap and continued COVID-19 stimulus spending while borders remain closed, is a looming challenge for the Government.

At the time or writing, there existed no financing facility dedicated to COVID-19 recovery in lower-income countries. With advanced economies preoccupied with their own spending on COVID-19 response and recovery, such a facility remains unlikely. Vanuatu and other countries whose pandemic stimulus spending has raised their risk of debt distress must therefore rely on existing channels to finance their deficits.

From May 2020 until it closed at the end of 2021, the G20 Debt Service Suspension Initiative (DSSI) relieved low-income countries of their payments on bilateral public debt. Forty-eight (48) of the 73 eligible countries participated. Vanuatu did not participate in the programme, foregoing an estimated US$ 14.4 million in potential savings on its debt service in 2021.[42]

In August 2021, the IMF approved an extraordinary US$ 650 billion allocation of special drawing rights (SDRs) to Member States, to bolster global liquidity during the pandemic. SDRs being distributed in proportion to each State's quota in the IMF, only a small fraction of the total allocation flowed to low-income countries, including 22.8 million SDRs for Vanuatu.[43]

For advanced economies to use the 2021 allocation of SDRs to assist developing economies, they would need to agree on the mechanisms by which they could channel additional SDR reserves in the form of, for example, grants, budget support, ODA or climate finance.

Although unrelated to COVID-19, climate finance is another potential source for SIDS. At the 2009 United Nations Climate Change Conference (COP15) in Copenhagen, donor countries pledged to increase their annual contributions to financing climate change

[41] Source: World Bank, World Development Indicators.

[42] World Bank, 2021. COVID 19: Debt Service Suspension Initiative. Brief, 8 December. Available at: https://www.worldbank.org/en/topic/debt/brief/covid-19-debt-service-suspension-initiative. Accessed: 3 March 2022.

[43] IMF, 2021. 2021 General SDR Allocation. Available at: https://www.imf.org/en/Topics/special-drawing-right/2021-SDR-Allocation. Accessed: 3 March 2022.

mitigation and adaptation efforts, to US$ 100 billion per year in 2020. SIDS figure prominently as recipient countries, since they generate an insignificant portion of global greenhouse gas emissions, yet among the countries most at risk from climate change effects.

Contributions reached approximately $80 billion in 2019 and, although 2020 figures were not yet finalised at the time of writing, there was general agreement that the US$ 100 billion goal was not achieved.[44]

In addition to a shortfall in contributions, capacity constraints have prevented many developing countries from responding to the complex requirements of the various climate finance facilities, meaning they were unable access and/or spend all of the funds potentially available to them.

In the context of the COVID-19 crisis, many SIDS, LDCs and low- and middle-income countries share similarly urgent fiscal and debt service challenges. Similarly, they share difficulty in accessing sufficient financing through the various existing facilities – debt relief, SDRs, climate finance, etc. The following policy recommendations therefore encourage Vanuatu to join with other SIDS and similarly affected countries in pushing for increased levels of assistance from existing donors and facilities.

3.3.1. Recommendations

Table 8 - Recommended policy actions, debt

Policy action	Timing
13. G20 countries to extend the Debt Service Suspension Initiative (DSSI) well beyond the end of 2021 and to include private sector creditors.	ST
14. IMF Member Countries to agree on mechanisms for advanced economies to channel SDRs to developing countries, for example as grants, budget support or ODA – without replacing existing commitments.	ST
15. Establish a formal category for SIDS, accompanied by concessional finance and other support measures, similar to what exists for LDCs.	MT
16. Donor countries must top up their climate finance commitments, reduce the complexity of accessing funds and provide capacity-building to recipient countries.	MT
17. Vanuatu to explore with creditor governments so-called "debt-for-nature" swaps.	MT

Source: Author's analysis

[44] OECD, 2021. Statement by the OECD Secretary-General on future levels of climate finance. Available at: https://www.oecd.org/newsroom/statement-by-the-oecd-secretary-general-on-future-levels-of-climate-finance.htm. Accessed: 3 March 2022.

Appendix 1 United Nations list of SIDS

United Nations Member States (38)	Non-UN Members/Associate Members of the Regional Commissions (20)
1. Antigua and Barbuda	1. American Samoa
2. Bahamas	2. Anguilla
3. Bahrain	3. Aruba
4. Barbados	4. Bermuda
5. Belize	5. British Virgin Islands
6. Cabo Verde	6. Cayman Islands
7. Comoros	7. Commonwealth of Northern Marianas
8. Cuba	8. Cook Islands
9. Dominica	9. Curacao
10. Dominican Republic	10. French Polynesia
11. Fiji	11. Guadeloupe
12. Grenada	12. Guam
13. Guinea-Bissau	13. Martinique
14. Guyana	14. Montserrat
15. Haiti	15. New Caledonia
16. Jamaica	16. Niue
17. Kiribati	17. Puerto Rico
18. Maldives	18. Sint Maarten
19. Marshall Islands	19. Turks and Caicos Islands
20. Federated States of Micronesia	20. U.S. Virgin Islands
21. Mauritius	
22. Nauru	
23. Palau	
24. Papua New Guinea	
25. Saint Kitts and Nevis	
26. Saint Lucia	
27. Saint Vincent and the Grenadines	
28. Samoa	
29. São Tomé and Príncipe	
30. Singapore	
31. Seychelles	
32. Solomon Islands	
33. Suriname	
34. Timor-Leste	
35. Tonga	
36. Trinidad and Tobago	
37. Tuvalu	
38. Vanuatu	

Appendix 2 Vanuatu as representative of SIDS

There exists no agreed definition of SIDS, so the group includes a heterogeneous mix of countries. For example, they include a mix of archipelagos, single islands and low-lying continental countries. Eighteen of the 38 SIDS are classified as high-income, including a handful of advanced, diversified economies, while the group also includes some of the poorest, least developed countries in the world.

Nevertheless, Vanuatu is representative several of the typical, informal characteristics shared by a majority of SIDS. For example, in their research paper, MacFeely et al. (2021) profiled the various SIDS according to these typical informal characteristics, illustrating each one with new or existing statistical indices. The paper profiled SIDS according to the four criteria-based characteristics described in Table 9.

Table 9 – Criteria-based characteristics of SIDS

Characteristic	Description of index used
Smallness	The authors constructed a "smallness index" comprising: land area, GDP and population.
Development and/or vulnerability	The United Nations Committee for Development Policy (CDP) is responsible for reviewing the category of Least Developed Countries (LDCs), including recommending the inclusion and graduation of eligible countries. The CDP assesses countries using three criteria: human assets, income and vulnerability. LDCs are recommended for graduation if they meet the threshold in two of the three criteria. The CDP compiles and uses the Economic and Environmental Vulnerability Index (EVI), composed of eight indicators, for the vulnerability criterion.
Islands and "islandness"	The authors constructed a two-step screen: 1) the "islands" characteristic of SIDS was embodied by those countries composed of islands, excluding mainland countries and islands connected to the mainland; and 2) the authors constructed a remoteness index using five sub-indices – distance to markets, distance to trading partners, marine connectivity, air connectivity and digital connectivity – to represent the "islandness" characteristic.
States or economies?	Since the SIDS moniker is linked to the intergovernmental process to assist these countries, the authors applied "statehood", meaning full independence and self-government, as a criterion for SIDS. By this standard, this characteristic echoes the list of 38 United Nations Member States classified as SIDS (see Appendix 1).

Source: (MacFeely, Peltola, Barnat, Hoffmeister, & Hopp, 2021)

We compared Vanuatu with other SIDS, according to the first two characteristics / indices elaborated by MacFeely et al. (2021). We omitted the "island / islandness" and "states or economies" characteristics, since Vanuatu passes both of these binary "yes-no" characteristics.

For this comparison, we also included two additional indices, described in Table 10, which illustrate other distinct characteristics of SIDS:

Table 10 - Additional characteristics of SIDS

Characteristic	Description of index used
Lack of productive capacity	As a result of their small size, SIDS tend to have low productive capacities, which undermines their efforts to transform their economies and achieve sustainable development. UNCTAD's Productive Capacity Index (PCI) uses 46 indicators to measure productive capacity across 193 economies.
Extreme vulnerability to natural disasters	More so than for other countries, natural disasters can cripple SIDS economies. In recent years, for example, major cyclones, hurricanes, tsunamis or earthquakes have caused physical damage and business interruptions whose total cost exceeds a year or more of GDP in affected SIDS, as well as humanitarian crises that exceed governments' budgetary capacity to respond. In this context, we included the World Risk Index (WRI), which comprises the exposure and vulnerability to natural disasters for 173 countries.

Sources: *UNCTAD Productive Capacity - https://pci.unctad.org*
World Risk Index - https://reliefweb.int/report/world/worldriskreport-2021-focus-social-protection

As shown in Table 11, Vanuatu exemplifies all four of the selected informal characteristics SIDS, ranked the most vulnerable country to natural disasters and being among the smallest countries in the world. For economic and environmental vulnerability (EVI) and productive capacities (PCI), Vanuatu's scores were comparable to those of LDCs, despite the country having graduated in 2020.

Table 11 - Vanuatu, according to typical characteristics of SIDS

Characteristic	Index (year)	Coverage	Threshold	Vanuatu score (rank)
Smallness	Smallness index	38 SIDS	Small < 35.6	2 (21)
Development and/or vulnerability	EVI (2021)	143 developing countries	LDC status eligibility: Inclusion > 36 Graduation < 32	39.6 (graduated from LDC status in 2020)[1]
Lack of productive capacity	PCI (2018)	195 countries		29.4 (125)
Vulnerability to natural disasters	World Risk Index (2021)	181 countries	Very high risk > 10.72	47.73 (1)

Note: *1 – Despite scoring below the graduation threshold on the EVI, Vanuatu graduated from LDC status by meeting the thresholds for the human assets and income criteria.*

Sources: *Smallness - (MacFeely, Peltola, Barnat, Hoffmeister, & Hopp, 2021)*

EVI - https://www.un.org/development/desa/dpad/least-developed-country-category/ldc-data-retrieval.html
UNCTAD Productive Capacity - https://pci.unctad.org
World Risk Index - https://reliefweb.int/report/world/worldriskreport-2021-focus-social-protection

On the basis of these informal characteristics, we considered Vanuatu a representative case study for SIDS.

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